



The Impact of Attorneys on Judicial Decisions: Empirical Evidence from Civil Cases

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Abstract

This article analyses the impact of attorneys on the outcome of judicial decisions in civil cases. We currently have little quantitative information about the effect of attorneys on the outcome of civil cases due to (i) the nonrandom pairing of attorneys and cases and (ii) the difficulty in accurately defining what a favorable decision in a civil case is. The Office of the Solicitor General of the Union in Brazil presents a unique research opportunity, since it assigns cases among its attorneys on a random basis and has standardized rules to record outcomes of civil cases. We analyzed the work performed by 386 Federal Attorneys and their impact on 30,821 judicial decisions. Significant win-rate differences among attorneys were detected in half of the 70 teams surveyed. The fact that attorneys achieve different outcomes, despite working in the same type of cases, indicates how judicial decisions can be affected by the work of an attorney in the civil area. No statistical correlation between attorney experience and outcome of civil cases was detected.

Keywords: Impact of attorneys. Judicial Decisions. Outcome of civil cases. Empirical evidence. Random assignment.

1. Introduction

In ideal circumstances, court cases should be decided based solely on their merits, analyzing evidence introduced by the parties and the law applicable to the case. However, litigation does not proceed separately from external social factors. Several factors may help to explain a litigation outcome, such as judge or jury bias, regional influence and the nature and resources of plaintiffs and defendants.²

Attorneys also play a key role in the outcome of court proceedings. The lawyer functions as a source of information for the court. It is he who first points out the facts and the law in question. The legal representative makes a legal analysis of the litigation, showing how the legal rules can be applied to the concrete situation. The subsidies brought by lawyers serve as a source for the final understanding of the case. Since 1791, the Sixth Amendment of the U.S. Constitution provides that "in all criminal prosecutions, the accused shall...have the assistance of counsel for his defense". Nowadays, the right to counsel has been widely recognized in virtually all modern civilized countries³.

A fair judgment depends on the work done by lawyers. A legal counselor is essential for an effective defense not just in criminal matters but also in civil cases. Most people live a life without engaging in a criminal problem. However, with the multiplication of economic relations involving people and organizations, it is increasingly common for individuals to participate in a civil suit at some point of their lives. At this point, they will need professional counseling.

However, analyzing the impact of attorneys on case outcomes is not a simple endeavor. The attorney often selects personally the cases he will take, making it difficult to determine whether the results are attributable to that attorney or simply to the characteristics of his cases⁴. Due to attorney matching, an attorney may have a high trial success rate that has nothing to do with his skill⁵. Because of this *case-selection effect*, it is usually impossible to isolate and measure the magnitude of the effect of the attorney on the outcome of the case.

In the civil area, researches using reliable methodology are rare. After reexamining the quantitative literature about how much difference legal representation makes in the outcome of civil cases, Greiner and Pattanayak concluded that we know almost nothing about the effect of representation in civil proceedings⁶.

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2 See T. Eisenberg, Litigation models and trial outcomes in civil rights and prisoner cases. *Cornell Law Faculty Publications* 77 pp. 1567-1602.

3 See Huang, K. C., K. P. Chen, & C. C. Lin "Does the type of criminal defense counsel affect case outcomes?: A natural experiment in Taiwan," *International Review of Law and Economics* 113.

4 See J. Anderson, P. Heaton, How much difference does the lawyer make? The effect of defense counsel on murder case outcomes. *Yale Law Journal* 122 p. 154-217.

5 See J. B. Shinall, Slipping Away from Justice: The Effect of Attorney Skill on Trial Outcomes. *Vanderbilt Law Review* 63 pp. 267-306.

6 See D. J. Greiner, C. W. Pattanayak, Randomized Evaluation in Legal Assistance: What Difference Does Representation (Offer and Actual Use) Make? *The Yale Law Journal* 121 pp. 2118-2214.

The objective of this work is to analyze the impact of attorneys on civil cases outcomes. In this sense, the Office of the Solicitor General of the Union - SGU (Procuradoria-Geral da União - PGU) in Brazil offers a unique research opportunity, which can be characterized as a natural experiment, since cases are assigned to Federal Attorneys in a naturally random basis, i.e., without the need for an artificially-created random assignment by part of the investigators. We investigate if attorneys that work on the same type of cases (randomly assigned) achieve different outcomes. As it will be demonstrated, in many cases judicial decisions varied depending on the attorney who worked on the civil case, which shows how judges can be sensitive to differences in the work done by those professionals.

This article will proceed in the following order. Section 2 brings the theoretical framework of the issue. Section 3 describes the organization where the research was conducted, presents the data used and the statistical analysis applied. Section 4 reports its findings. Section 5 discusses the results. Section 6 concludes.

2. Theoretical framework

The impact of attorneys on judicial decisions has been studied at least since 1974, when Marc Galanter published his classic paper *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, explaining that powerful parties have more chances to achieve a favorable judicial decision than parties without so many resources⁷. One aspect analyzed by him was the fact that powerful parties can hire better and more specialized lawyers.

Galanter's analysis, however, was purely theoretical. During the last decades, many empirical legal studies adopted a quantitative approach, often using the outcome of cases as performance indicator. Although a few surveys have been conducted in countries that use the civil law system, almost all research on lawyers' performance has focused on countries that use the common law system, especially in the United States (Huang, Chen and Lin, 2010).

Hinkle⁸ found no impact of attorneys on American federal appellate courts, where judges have relatively low caseloads and substantial staff assistance. However, in district courts — where judges have less time and resources and depend more on the information brought by expert lawyers — the impact was detected. He concludes that the impact of lawyer expertise on judicial decision would be minimized in institutional contexts where a judge has significant access to neutral information (such as research provided by law clerks), depending less on the information brought by lawyers.

Empirical tests examining the decisions of United States Supreme Court justices support that the salience of the issue before the Court is another aspect that can moderate the influence of a lawyer on the judicial decision⁹. In nonsalient cases the judges have less-intense preferences and therefore are open to the persuasion of lawyers. In salient cases, by contrast, the content of legal policy matters much more to the judges. As a result, they are less amenable to legal argument and adhere more strictly to their personal policy preferences.

Combining the two analyses above, conducted in the United States, we can conclude that the influence of lawyers on the decision-making is not the same in any context - some courts and cases seem to be more susceptible to that. The influence on the judicial decision would be maximum when the lawyer is acting in a case that is not so controversial, before a court that has a high case load and little staff assistance. In the same line, the influence would be minimal when the case is very important and the court have more time and staff support.

In Israel, it was investigated the difference in performance between private lawyers and political lawyers in disputes over the demolition of Palestinian homes between 1990 and 1995 before the Israeli High Court of Justice¹⁰. Political advocates were those whose main, if not exclusive, activity was to dedicate themselves to the cause of the Palestinians, and whose ultimate goal is a change in the policy of demolishing houses, not just the individual case. The results of political lawyers were significantly higher than those of private lawyers, what can be explained mainly as a result of the ability of political lawyers to make better agreements for their clients, avoiding the demolition of their houses.

Another study conducted outside the United States analyzed the outcome of 1209 appeals filed between 1969 and 2003 before the House of Lords of the United Kingdom (sort of High Court attached to the British Parliament)¹¹. The experience of lawyers was pointed out as having statistically significant influence on the appellant's chances of victories: if an appellant has a choice between two lawyers, one of whom has argued in 10 cases before the lords and the other has only one, his chances of winning will be 24% higher if he contracts the first.

7 See Galanter, Marc. *Why the "haves" come out ahead: Speculations on the limits of legal change*. *Law and society review*, p. 95-160.

8 See Hinkle, Rachael K. *Does Advocacy Matter? Examining the Impact of Attorney Expertise in Federal Courts*. Doctoral thesis. University of Toledo.

9 See McAtee, Andrea; McGuire, Kevin T. *Lawyers, Justices, and Issue Salience: When and How Do Legal Arguments Affect the US Supreme Court?* *Law & Society Review*, v. 41, n. 2, p. 259-278.

10 See Dotan, Yoav. *Public Lawyers and Private Clients: An Empirical Observation on the Relative Success Rates of Cause Lawyers*. *Law & Policy*, v. 21, n. 4, p. 401-425.

11 See Hanretty, Chris. *Haves and Have Nots before the Law Lords*. *Political Studies*.

In Canada, it was studied the impact of lawyer capability on the decision making of the Supreme Court of Canada (SCC)¹². Prior litigation experience and litigation team size have a statistically significant and positive relationship with the SCC's decisions in non-reference-question cases from 1988 to 2000. Moreover, this relationship persists even after controlling for party capability, issue area, and judicial policy preferences.

The main methodological question raised by this type of research is: How can one isolate attorney influence from other factors that affect a legal decision, especially with regard to the type of case? To overcome this problem, Ho and Rubin¹³ argue that research design is more important than the method of analysis. According to these authors, the design of a legal empirical research seeking causal inference should create similar groups of cases and submit them to different lawyers, so that any difference in the outcome of cases can plausibly be attributed to the lawyer (like experiments conducted by pharmaceutical industry, that submit similar group of patients to different medicines - a real one and a placebo - and then compare the outcome of each group of patients).

Following this logic, the first step is to identify groups of similar cases. The literature suggests two possible research designs to find groups of comparable cases. One of them, cited by Clermont and Eisenberg¹⁴, is to gather information about each case and use such data as independent variables in a multivariate regression to identify which groups of cases are similar to each other.

Abramowicz, Ayres and Listokin¹⁵ criticize this option and claim that studies based solely on information available may omit important hidden variables. The authors indicate the random experiment as the best research design to ensure similarity between groups, since randomization ensures that all variables are similar. For Greiner¹⁶, when it comes to causal inference, a randomized experiment is the "gold standard" since it would have the power to balance even hidden variables, imperceptible to the analyst. Abrams and Yoon (2007, p. 1154) apply this reasoning to the performance of lawyers stating that "when work assignments are not random, it is difficult, if not impossible, to know whether to attribute differences in performance to individual ability or the work assignment".

In short, researches that use case outcomes as a performance measure should identify environments where distribution of cases is performed randomly. This, however, is not an easy task, since work is not distributed in that manner in many legal units¹⁷, which stands as the first great difficulty in conducting empirical quantitative studies on performance of lawyers. Practically all studies regarding the impact of lawyers that used a random design were conducted in the United States, in the criminal area.

The outcome of judicial decisions was compared in 51 different federal districts in the United States¹⁸. In these districts, the distribution of cases between private lawyers and federal public defenders was done at random. It was identified that defendants represented by federal public defenders received fewer convictions and, when convicted, received shorter sentences than those defended by court-appointed lawyers.

In a very similar study, it was analyzed the difference between the performance of state public defenders and lawyers appointed by the Philadelphia state court¹⁹. The distribution of cases between the two groups also occurred randomly, specifically in cases of prosecution for the crime of murder. The group represented by public defenders had 19% fewer convictions, 62% fewer death sentences and convictions with 24% less time in prison.

In a rare research conducted outside the United States that used a random approach, Huang, Chen and Lin²⁰ tested whether there has been a systematic difference in trial outcomes between criminal defendants with different types of defense counsel in Taiwan. Those who cannot afford to hire a private lawyer in Taiwan are referred to public defenders or to a court-appointed office at random. Data from 3709 criminal trials conducted between 2004 and 2007 show that both groups are equally effective, with those represented by public defenders having higher conviction rates, but shorter incarceration time than those advocated by court-appointed lawyers.

Abrams and Yoon²¹ pursued this further and investigated which attorneys' characteristics could affect case outcomes. Analyzing the dataset provided by the Clark County Office of the Public Defender in Nevada, which randomly assigns criminal cases among

12 See Szmer, John; Johnson, Susan W.; Sarver, Tammy A. Does the lawyer matter? Influencing outcomes on the Supreme Court of Canada. *Law & Society Review*, v. 41, n. 2, p. 279-304.

13 See Ho, Daniel E.; Rubin, Donald B. Credible causal inference for empirical legal studies. *Annual Review of Law and Social Science*, v. 7, p. 17-40.

14 See Clermont, Kevin M.; Eisenberg, Theodore. Do case outcomes really reveal anything about the legal system? Win rates and removal jurisdiction. *Cornell L. Rev.*, v. 83, p. 581.

15 See Abramowicz, Michael; Ayres, Ian; Listokin, Yair. Randomizing Law. *University of Pennsylvania Law Review*, v. 159, n. 4.

16 See Greiner, D. J. "Causal Inference in Civil Rights Litigation," 122 *Harvard Law Review* 533.

17 See Abrams, D. S., & A. H. Yoon "The luck of the draw: Using random case assignment to investigate attorney ability," 74 *The University of Chicago Law Review* 1145.

18 Iyengar, R. "An analysis of the performance of federal indigent defense counsel," 13187 NBER Working Paper Series, Working Paper.

19 Anderson, J., & P. Heaton "How much difference does the lawyer make? The effect of defense counsel on murder case outcomes," 122 *Yale Law Journal*, 154.

20 Huang, K. C., K. P. Chen, & C. C. Lin "Does the type of criminal defense counsel affect case outcomes?: A natural experiment in Taiwan," 30 *International Review of Law and Economics* 113.

21 Abrams, D. S., & A. H. Yoon "The luck of the draw: Using random case assignment to investigate attorney ability," 74 *The University of Chicago Law Review* 1145

public defenders, they found that defendants with more experienced attorneys obtain lower sentences than defendants with less experienced attorneys, while they did not find that the attorney's legal educational background affects case outcomes²².

In the civil area, researches using reliable methodology are rare. Therefore, we currently have little quantitative information about the effect of attorneys on the outcome of civil cases. Greiner and Pattanayak²³ discovered that in spite of this issue having been studied multiple times "almost all such studies suffer from methodological problems so severe as to render their conclusions untrustworthy, which (we hasten to emphasize) is different from wrong"²⁴.

This finding is surprising if we remind ourselves that civil cases are much more present in day-to-day lives than criminal proceedings. In the United States of America, civil cases account for 48% of the total incoming cases in the state courts²⁵. In 2013, approximately 14 million civil cases were filed in Brazil, corresponding to 84% of all new lawsuits in the country²⁶. If civil litigation is so prevalent, what are the reasons for the paucity of knowledge about the impact of attorneys on the outcomes of civil cases?

In the criminal area, the outcome of cases is most evident: the defendant is either convicted or is acquitted; when convicted, the penalty is set mostly in the form of incarceration time. This clarity, however, is not as common in the civil area. According to Schwab and Eisenberg, there are many definitions of success in the civil area, which can range from a pure economic analysis to more subjective approaches²⁷. An economic analysis would involve the calculation of how much has been invested in the case and what his payback is. On the other hand, the subjective analysis seems to be related to the expectations the parties have of the case, which makes it quite difficult to identify the winners and losers in a litigation²⁸. Abrams and Yoon (2007, p. 1155) illustrate this perception with the following example: "If Firm A sues Firm B for \$100 million and they settle for \$30 million, is this a victory for Firm A or Firm B?"²⁹.

Another important reason that renders it difficult to analyze the impact of attorneys on outcomes of civil cases is the difficulty of accessing the outcome itself. In the United States, where most studies are conducted, most civil cases are settled, which, in turn, eliminates the necessity of a judicial decision and significantly reduces access to information, since many settlements are not published.

The difficulty of identifying situations in which cases are randomly assigned, in addition to the challenge of clearly defining and accessing outcomes of civil cases, seems to be relevant for the phenomenon pointed out by Greiner and Pattanayak³⁰, by which the lack of credible quantitative information regarding the effect of representation in civil proceedings is extremely low.

In this context, the Office of the Solicitor General of the Union (SGU), which is responsible for defending the Brazilian Government in civil cases, presents a unique research opportunity, since most of its cases are assigned to lawyers on a random basis. SGU has internal regulations which allow one to conclude whether a court decision was favorable or not. Furthermore, few cases are ever settled.

3. Research

3.1. The Office of the Solicitor General of the Union (SGU)

In Brazil, all legal issues involving the Federal Government are under the responsibility of the Office of the Attorney General of the Union - AGU (*Advocacia-Geral da União - AGU*). Within AGU structure, the division responsible for defending the Federal Government in judicial cases is the Office of the Solicitor General of the Union -SGU (*Procuradoria-Geral da União*), which has 69 units spread over the country and manages three million lawsuits nationwide. Within SGU, each legal act must necessarily be signed by one of its Federal Attorneys. In the year 2015 alone, judicial decisions rendered accounted for almost five billion dollars against the Federal Government.

In Brazil, lawsuits against the Federal Government must be filed in a federal court (each Brazilian state has one or more federal courts). Due to a legal mandate, all Brazilian courts are required to assign cases to judges on a random basis – the distribution of cases is done automatically, with the help of an IT system, and does not consider the complexity, the value or the plaintiff of the

22 See D. S. Abrams, A. H. Yoon, The luck of the draw: Using random case assignment to investigate attorney ability. *The University of Chicago Law Review* 74 (4) pp. 1145-1177.

23 Greiner, D. J., & C. W. Pattanayak "Randomized Evaluation in Legal Assistance: What Difference Does Representation (Offer and Actual Use) Make?," 121 *The Yale Law Journal* 2118.

24 *Ibid*, p. 2123.

25 See National Center for State Courts (2015) "Court Statistics Project" www.courtstatistics.org, access in 03.Aug. 2017.

26 See Brazil, Conselho Nacional de Justiça. *Justiça em números 2014: ano-base 2013*. Brasília: Conselho Nacional de Justiça.

27 See S. J. Schwab, T. Eisenberg, Explaining Constitutional Tort Litigation: The Influence of the Attorney Fees Statute and the Government as Defendant. *Cornell Law Review* 73 pp. 719-784.

28 See J. B. Grossman, H. M. Kritzer, S. Macaulay, Do the "haves" still come out ahead? Resource Inequalities in Ideological Courts: The Case of the Israeli High Court of Justice *Law & Society Review* 33 (4) pp.1059-1080.

29 *Ibid*, p. 1155.

30 Greiner, D. J., & C. W. Pattanayak "Randomized Evaluation in Legal Assistance: What Difference Does Representation (Offer and Actual Use) Make?," 121 *The Yale Law Journal* 2118.

case. Accordingly, when a lawsuit is filed, it is randomly assigned to a federal judge, what ensures a balance in the distribution of cases among the judges of the same federal court.

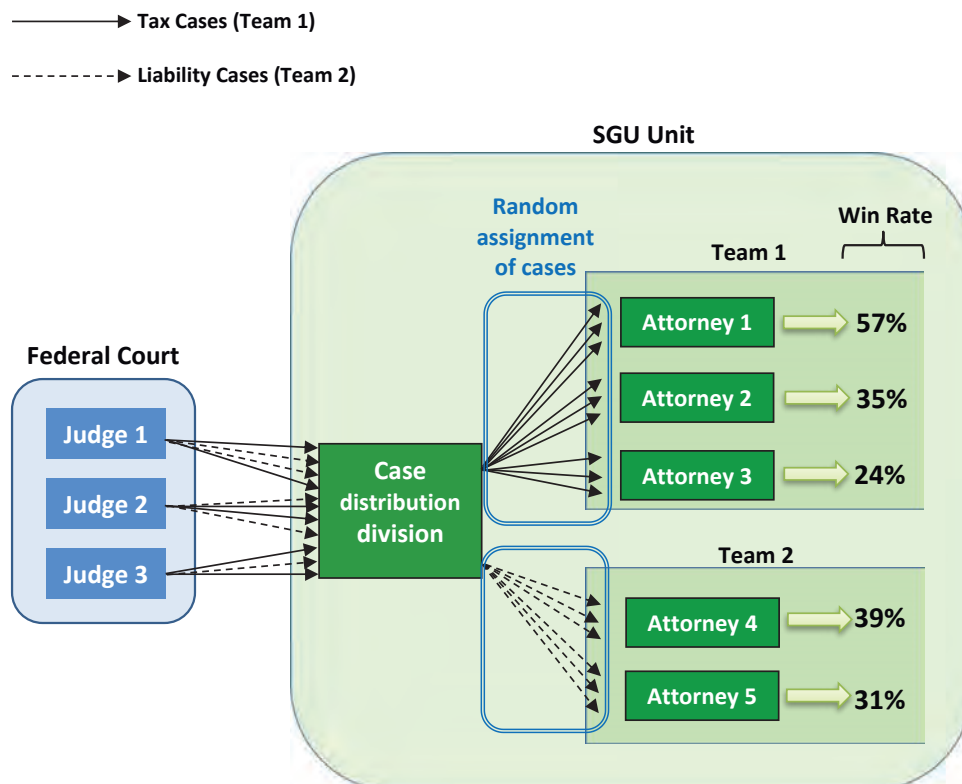
After a first glance, the judge sends the case to the SGU's local unit. The *case distribution division* of the SGU unit assign the case to Federal Attorneys in a mechanical fashion, similarly to the proceeding used in courts. This case assignment among attorneys is random, balancing a number of factors that could affect the court decision: the difficulty of the cases, the judge who will decide the case, the lawyer of the opposing party, and practically all other variables linked to the lawsuit, including hidden variables. It is this system that promotes a balance in the distribution of cases among attorneys of the same unit. If attorneys work on similar cases, their judicial outcomes (outcomes associated with their cases) are comparable and the difference in outcomes can be attributed to the lawyer (and not to the cases, once they are similar).

In small units, all attorneys are assigned all types of cases (there is a single attorney team). In larger units, attorney teams are formed by case type, in order to promote some degree of specialization. In this situation, one more step is needed: when the case enters in the SGU Unit, the *case distribution division* identify the case type and the appropriate attorney team. After this identification, the case is assigned to the federal attorney of the specialized team randomly and directly. Therefore, within each team, lawsuits are distributed randomly. It is worth noting that we can compare the judicial outcomes of attorneys who belong to the same team, but we cannot compare judicial outcomes of attorneys of different teams, because each team works on different type of cases, that are not comparable.

There is a natural stimulus for this mechanical assignment of cases: firstly, it ensures equality in the workload of the lawyers of a given team, and secondly, it spares the group head the task of assigning cases. It should be observed that the case assignment procedure at the court is independent from the one at the SGU.

After receiving a case, the Federal Attorney prepares the defense and submit that to the judge, who renders a judgment. The organization has detailed internal rules governing the way judgment outcomes are recorded and controls the correct registration of this data, which is used for various purposes, including the definition of the units' annual goals. When a court decision is rendered, its outcome is recorded by the support team in the SGU IT System as follows: favorable (judicial decision totally in favor of the Federal Government), unfavorable (judicial decision totally against the Federal Government) or partially favorable (judicial decision concede some request to the Federal Government and some request to the other part). The win rate of a Federal Attorney is the percentage of favorable decisions of his cases (if he worked on 100 cases and achieved 40 favorable decisions, his win rate is 40%). The main concepts described above are shown in Figure 1:

Figure 1 – Case assignment system – Hypothetical Example



Source: authors

In the hypothetical example above, the SGU Unit has two teams. Team 1 works on tax cases. The assignment of tax cases to Federal Attorneys of Team 1 is random. For example: first tax case to Attorney 1, second tax case to Attorney 2, third tax case to Attorney 3, fourth case to Attorney 1 and so on. At the first moment, they can receive cases with different difficulties and values, but these factors tend to balance along the time, allowing a comparison among their win rates (in the example, Attorney 1 achieved 57% of favorable decisions while Attorney 3 got just 24%). The same proceeding occurs with Team 2, that works on liability cases. We should remember that a direct comparison between attorneys of teams 1 and 2 is not possible, because they work on different types of cases.

3.2. Data

The data released by the SGU were the 93,263 defenses made by 953 Federal Attorneys across the country during the year 2011. At the beginning of this study, 190 teams were identified.

The first step in analyzing data was to identify the number of defenses made by each attorney. Some attorneys presented a low number of defenses, which may indicate a short passage in a unit or even a registration error. We deemed it inappropriate to assess the impact of the attorney's performance from a minuscule number of activities. Thus, all attorneys who presented fewer than 20 defenses were eliminated from the dataset.

In sequence, we associate defenses with judicial decisions. Only cases with decisions classified in one of the three basic outcomes (favorable, unfavorable and partially favorable) were considered. As other outcomes do not allow verifying the impact of the attorney in the court decision, such cases were eliminated from the database.

The next step of the research was to calculate the *win rate* per Federal Attorney, i.e., the percentage of favorable decisions connected to their defenses. As we considered defenses produced in 2011 with judgments rendered by February 2014, we had a sufficient time base to access attorneys' performance outcomes. However, in some groups only 20% or 30% of cases have had a court decision rendered. To overcome this problem, a new limit has been set: we considered only attorneys with 15 or more judged cases. In addition, in order to ensure greater comparability among professionals, we considered only teams with at least three attorneys.

After completion of all these steps, several teams were reduced or disappeared from the analysis. The final database is composed of the following numbers: 70 teams, 386 Federal Attorneys and 30,821 defenses with judicial decision.

3.3. Checking the similarity of cases in each team

The procedure used until this point should have been sufficient to identify teams of attorneys that work in cases with the same characteristics, since most SGU units use random assignment of cases within their teams. However, it is necessary to verify if the randomization mechanism is really working, checking the main assumption of a natural experiment: whether cases (units upon which a treatment operates) were really randomly assigned among attorneys (treatment) of each team.

The credibility of this step depends on whether relevant control variables (also called pretreatment covariates) have been collected and whether sufficient balance has been achieved between the treatments³¹. Greiner explains that the control variables are those prior to treatment and that it is important to distinguish the control variables (not affected by treatment) of the outcome variables (affected by treatment)³².

In this verification, the control variable used was the judge appointed to the case. This is a valid control variable because it is not affected by treatment: the judge's appointment predates the attorney assignment to the case. It follows that if an attorney has a higher concentration of cases from a particular judge than another attorney of his team, their outcomes cannot be compared. The balance would be the confirmation that the processes were randomly assigned.

Therefore, a study into the balance of judges in relation to attorneys within each team was performed. An analysis was made, using k-means³³, as to whether each group of attorneys would have its homogeneity improved if divided into subgroups according to the judges of their cases. This was done by determining the number of subgroups (k) that minimizes the standard error of the gap statistic³⁴.³⁵ Computationally, the procedure is performed via bootstrapping, which resamples the data and performs k-means clustering with all possible values of k in an attempt to achieve the lowest gap possible. The smallest gap is observed if k equals to one. This means that there is no advantage in further breaking apart that group, i.e., the group should be indeed treated as one unit. Since the variable used to perform this grouping method is the magistrate judging each case, we can extend this conclusion to mean that the attorneys within a team are uniformly receiving cases from the same judges.

31 See D. E. Ho, D. B. Rubin, Credible causal inference for empirical legal studies. *Annual Review of Law and Social Science* 7 pp. 17-40.

32 See D. J. Greiner, Causal Inference in Civil Rights Litigation. *Harvard Law Review* 122 (2) pp. 533-598.

33 K-means is an iterative statistical method aiming to group observations into clusters. Specifically, k groups are defined so that its members are closer to their group mean than they are to the mean of any other group.

34 See R. Tibshirani, G. Walthier, T. Hastie, Estimating the number of clusters in a dataset via the Gap statistic. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)* 63 (2) pp. 411-423.

35 See R. Tibshirani, G. Walthier, T. Hastie, Estimating the number of clusters in a dataset via the Gap statistic. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)* 63 (2) pp. 411-423.

After applying this methodology, results show that 95.26% of teams can be in fact considered homogeneous, which reinforces the hypothesis of random distribution of cases within the teams. One can note that the procedure adopted does not constitute a hypothesis test, but the findings are consistent with conference call conversations with the heads of SGU units, meaning that cases are randomly assigned within each team of Federal Attorneys.

3.4. The differences among win rates: statistical analysis

Once identified the win rate of each attorney and checked the similarity of cases in each team, we decided to verify if the differences in the outcome of attorneys of a same group were statistically significant, i.e., whether they were not simple coincidences. Each court decision presents a binary result: a favorable decision or not (which includes unfavorable and partially favorable decisions). Given this dichotomous variable, we opted for the use of logistic regression to assess the significance of the results.

Logistic regression is a statistical technique designed to predict the likelihood of the occurrence of an event. In this study, we calculated the probability of an attorney reaching a favorable decision. After that, we compared these probabilities among attorneys of the same team in order to determine if there were statistically significant differences among them. Logistic regression captures the observed data and sets a mathematical model that goes beyond empirical observations. As the parameters of this model are adjusted by the least squares method, they tend not to be biased.

Then we checked if the model as a whole presents solid quality adjustment (goodness of fit). Afterwards, we verified whether the model better predicts the probability of favorable decisions of each attorney than the simple average of the group, and if this improvement is statistically significant. In this sense, we performed an analysis of variance.

3.5. Correlation between attorney experience and win rate

The next step of the research was to investigate a factor that could explain the differences in attorneys' outcomes. Undoubtedly, experience is the most researched predictor of attorney performance. On the one hand, several studies, including those that used the random distribution of cases as research design, indicate the existence of a positive correlation between the attorney's experience and case outcome³⁶. Other studies, however, did not identify this relationship³⁷. Wright & Peebles found a nonlinear relationship: the first years of experience have a positive impact on the results of judgments, but the following years have a negative impact³⁸.

As is common in many public organizations, seniority plays a central role at SGU. In every promotion cycle, half of the vacancies are based on the years since attorneys have joined the organization. Regarding transfers from a unit to another, this is almost the only criterion used. While great importance is given to seniority at SGU, it is not known whether it affects attorneys' outcomes.

To make a fair comparison of attorneys' outcomes, we cannot consider the mere observed outcome of all professionals in the country. As they are part of different units and work on different cases, comparing their percentage of favorable decisions would be unfair. Thus, we decided to standardize the results of the attorneys. Firstly, we considered the mean of each team as zero standard deviation and then we calculated the positive and negative differences between the mean and the attorney outcome in terms of standard deviations (standardized outcome). Once the weighted outcome of each attorney was calculated, we tested possible correlation of this index with the attorney's experience, measured in terms of years since joining the organization (the same criterion used by Abrams and Yoon, 2007). For this test, we considered only the teams that showed a statistically significant difference (<0.05) in outcomes among their members.

4. Results

Table 1 presents the results of the 70 teams surveyed: it shows if the difference between the attorneys with the lowest and the highest percentage of favorable decisions in each team is statistically significant (Column Difference Sig.), the model significance to each of the teams (Column Model Sig.), and the chances the attorney with the highest percentage has in obtaining a favorable decision in relation to the attorney with the lowest percentage (Column Max Odds):

Table 1 shows statistical significance in the results and respective models of approximately half of the 70 groups. If we consider the sig. <0.05 standard level, 30 groups (43%) present a significant difference among the outcomes of their attorneys, a number that increases to 41 groups (59%) if we consider the sig. <0.10 level. Interestingly, there was a statistically significant difference in groups of various sizes (in groups from 3 to 29 attorneys), from all regions of the country and which were in units of all types (Regional Units, State Units and Local Units), even if we consider the stricter sig. <0.05 level.

36 See Abrams and Yoon (note 15), Yiengar (note 5) and R. T. Boylan, C. X. Long, Salaries, Plea Rates, and the Career Objectives of Federal Prosecutors. *Journal of Law and Economics* 48 (2) pp. 627-651.

37 See R. K. Hinkle, *Does Advocacy Matter? Examining the Impact of Attorney Expertise in Federal Courts*. Doctoral thesis, University of Toledo, 2007 and S. F. Norberg, N. S. Compo, Report on an Empirical Study of District Variations, and the Roles of Judges, Trustees and Debtors' Attorneys in Chapter 13 Bankruptcy Cases. *American Bankruptcy Law Journal* 81 pp. 101-158.

38 See R. F. Wright, R. A. Peebles, *Criminal Defense Lawyer Moneyball: A Demonstration Project*. *Washington and Lee Law Review* 70 (2) pp. 1221-1267.

Table 1 – Significance of the Differences in Attorneys’ outcomes per team in 2011

Team	Number of Attorneys	Minimum % of favorable decisions	Maximum % of favorable decisions	Difference Sig.	Model Sig.	Max Odds
1	4	22%	71%	<0.001	<0.001	8.750
2	6	25%	56%	<0.001	<0.001	3.771
3	3	6%	34%	<0.001	0,002	8.469
4	7	20%	48%	<0.001	<0.001	3.630
5	7	36%	57%	<0.001	<0.001	2.322
6	5	4%	17%	<0.001	<0.001	4.975
7	7	22%	54%	0.001	0.002	4.211
8	23	53%	83%	0.001	0.002	4.204
9	7	27%	37%	0.001	0.001	1.607
10	4	10%	48%	0.002	0.010	8.143
11	11	33%	71%	0.002	0.004	5.000
12	6	2%	22%	0.002	0.023	10.980
13	29	34%	70%	0.003	0.004	4.433
14	3	22%	47%	0.003	0.004	3.135
15	4	9%	32%	0.003	0.003	4.603
16	14	33%	78%	0.004	0.006	7.000
17	3	10%	26%	0.004	0.004	3.205
18	4	15%	52%	0.010	0.017	6.233
19	6	28%	68%	0.012	0.017	5.633
20	7	19%	29%	0.013	0.013	1.766
21	7	23%	38%	0.017	0.020	2.048
22	3	21%	57%	0.018	0.024	4.875
23	3	37%	56%	0.021	0.023	2.233
24	4	27%	42%	0.024	0.027	2.018
25	8	24%	49%	0.027	0.034	3.017
26	7	56%	83%	0.030	0.039	4.000
27	3	21%	46%	0.033	0.040	3.228
28	7	33%	64%	0.038	0.043	3.500
29	4	23%	33%	0.040	0.042	1.682
30	6	18%	24%	0.043	0.045	1.447
31	5	42%	73%	0.046	0.051	3.667
32	4	40%	70%	0.050	0.055	3.429
33	10	43%	64%	0.053	0.055	2.333
34	5	23%	31%	0.053	0.052	1.509
35	3	56%	77%	0.063	0.070	2.649
36	3	20%	30%	0.077	0.081	1.802
37	5	19%	44%	0.078	0.082	3.422
38	5	47%	72%	0.080	0.084	2.917
39	5	44%	68%	0.086	0.091	2.656
40	6	11%	26%	0.089	0.096	2.769
41	4	24%	36%	0.095	0.100	1.746
42	5	14%	37%	0.097	0.110	3.500
43	6	25%	41%	0.110	0.109	2.095
44	7	19%	26%	0.121	0.125	1.520
45	4	35%	50%	0.124	0.125	1.846
46	6	33%	45%	0.134	0.137	1.696
47	6	30%	48%	0.140	0.145	2.187
48	4	48%	68%	0.162	0.170	2.311
49	4	11%	16%	0.166	0.172	1.552

Table 1 – Significance of the Differences in Attorneys' outcomes per team in 2011

Team	Number of Attorneys	Minimum % of favorable decisions	Maximum % of favorable decisions	Difference Sig.	Model Sig.	Max Odds
50	3	23%	31%	0.170	0.172	1.502
51	3	44%	52%	0.181	0.182	1.391
52	3	17%	26%	0.187	0.183	1.715
53	4	13%	17%	0.196	0.194	1.421
54	7	22%	34%	0.199	0.208	1.837
55	4	16%	23%	0.226	0.224	1.566
56	4	27%	47%	0.231	0.239	2.444
57	3	26%	42%	0.273	0.276	2.061
58	4	56%	64%	0.293	0.294	1.417
59	4	29%	44%	0.303	0.306	2.000
60	3	27%	40%	0.321	0.324	1.810
61	5	33%	50%	0.333	0.337	2.000
62	3	50%	65%	0.336	0.339	1.857
63	5	18%	25%	0.346	0.349	1.462
64	4	30%	44%	0.356	0.359	1.867
65	3	27%	35%	0.390	0.393	1.394
66	3	21%	24%	0.501	0.501	1.253
67	3	30%	32%	0.598	0.599	1.135
68	3	47%	56%	0.615	0.616	1.406
69	3	80%	82%	0.784	0.783	1.167
70	3	25%	28%	0.819	0.819	1.143

Source: authors using data provided by SGU

The 30 groups in which significant (<0.05) differences were found congregate 212 of the 386 surveyed attorneys (55%), which means that a little over half of SGU attorneys are part of teams in which statistical differences outcomes were found, in a model also statistically significant (sig. <0.05). Considering the sig. <0.10 level, the 41 groups congregate 267 attorneys (69%), in a model also statistically significant (sig. <0.10).

The correlations between the weighted outcome and experience are statistically insignificant, according to Pearson's product-moment correlation test. In other words, attorney seniority does not seem to work as a predictor of performance in the researched organization. This conclusion contradicts most of the literature written so far on the subject and, arguably, common sense.

5. Discussion

Different judges are expected to render similar judgments in similar cases. This is the philosophical basis of Justice. Therefore, attorneys working on similar cases are expected to achieve similar outcomes. In the organization surveyed, additional factors induce attorneys to reach similar judicial decisions.

Each Federal Attorney works in dozens of cases per year. The vast majority of lawsuits filed against the Federal Government are not unprecedented cases and the judges usually follow the precedents set by superior courts. In this context, a competent or mediocre performance by Federal Attorneys should produce low impact on the final case outcome.

The Federal Attorneys are submitted to an extremely rigorous selection process. Generally, less than 1% of applicants are approved, and this small group tend to have a very homogenous professional profile. After entering public service, there are no economic stimulus for an attorney to perform better than his colleagues. The remuneration of all Federal Attorneys is fixed - do not vary in accordance to the individual success rate. Wage differences are small (basically motivated for seniority reasons) and job security is high. Finally, all attorneys work within the same organization environment - the physical structure, support team and access to systems are almost identical. Therefore, it is no surprise that half of the 70 teams presented no significant differences in the outcome of their attorneys.

The surprise is finding significant differences in attorneys' outcomes in the other half of the 70 groups. If virtually all factors induce homogeneous attorney behavior, what are the possible causes for such heterogeneous outcomes? A first hypothesis can be linked to the existing stability in public service, where dismissal for poor performance is virtually nonexistent. This could induce some people to perform poorly, making their results fall below their peers. There is a possibility that the quality of the work done is so poor

that it affects the outcomes even of cases that should be decided in a similar way. This can happen because cases can be decided based not only on the rules of law, but also on the specific facts involving the situation. If legal professionals do not work on the facts properly, they tend to lose the case. On the other hand, it is possible that, despite incentives to the contrary, other professionals still maintain high internal motivation, always seeking the best outcomes, which can result in a high win rate.

We suspect, however, that the impact of attorneys on the outcome of civil cases is higher than that found in this study. The methodology used in this survey focused only on the general outcome of the judicial decision, i.e., if it was favorable or not. However, in many civil cases, the main concern of attorneys is to reduce the monetary award (as sometimes the main concern of a criminal attorney is to reduce incarceration time). In order to measure this effect, it would be necessary to compare the initial amount requested by the plaintiff with the final amount paid by the Federal Government. Unfortunately, these more refined data are not reliably registered, which makes this investigation difficult. In any event, if differences in outcomes of attorneys have been detected using more general data (overall outcome of the judicial decision), these differences would probably become more evident if more refined data were used (such as the reduction in the value paid).

One must remember that this study analyzed attorneys with similar profiles. If it were feasible to investigate attorneys with different backgrounds working in the same kind of cases (like many criminal studies did, comparing private and public defenders), it is possible that a broader variety of outcomes would be found.

One hypothesis to explain the absence of a relation between an attorney's experience and his outcome can be the trade-off between experience and motivation. Usually, during the first years in the organization, motivation is high, but experience is low. Over the years, the experience increases, but motivation diminishes.

6. Conclusion

This article made an empirical investigation about the impact of attorneys on outcome of civil cases. In accordance with what was presented, attorneys can achieve different outcomes, despite working on the same type of cases. This conclusion leads us to some questions about the work done by attorneys and judges.

From the attorney's point of view, why it is important to know that some lawyers make more difference than others? Because this is a strong evidence that their work has some effect. If lawyers working on similar cases always achieve the same outcomes, their work seem not to be taken into account.

In law firms, like SGU, is essential to know that some lawyers make more difference than others for multiple reasons. The case assignment process can be adapted in order to choose the best counselor for each type of case, improving the chances to achieve a favorable decision for the client. Lawyers who achieve the highest win rates could explain to their colleagues what are the legal strategies, information and thesis they are applying, so that the whole firm could achieve a better result. The selection of lawyers can be affected: based on the lawyers' records, the firm can identify the most suitable professional profile for his cases and hire those who have proper skills and attitudes.

From the judges' point of view, why it is important to know that some lawyers make more difference than others? Because it shows how judges can be sensitive to differences in the work done by those professionals. If the judges were impervious to the work done by attorneys, similar cases should bring to very similar judges' decisions. The influence detected, however, is mild. Approximately half of the 70 teams surveyed exhibited no significant differences in the outcome of their attorneys. This means that judges decided similar cases in the same way, regardless of the lawyer. In those cases, judges seems to decide based solely on case's merits, without the influence of lawyers.

However, we caution against broad generalizations. The answer to the question whether counsel affects case outcomes is by nature jurisdiction-based. The fact that counsel affects judicial decisions in one country does not necessarily mean that the same is true in another country. Nevertheless, the results of our study provide certain references for further research, considering it is one of the first to analyze the impact of attorneys on outcomes of civil cases using a solid methodological framework.

The scarcity of empirical studies analyzing the impact of attorneys on the outcome of civil cases evidences the gap to be filled in the construction of scientific knowledge in this field. Identifying the underlying characteristics of high performance attorneys in civil area remains a challenge for future legal empirical research.

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