

**A QUANTITATIVE EXPLORATION OF  
JUDICIAL DECISION MAKING IN CANADIAN INCOME TAX CASES**

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## Abstract

The dissertation explores the influences of socio-demographic characteristics of judges on their decision making in Canadian income tax cases. In analyzing historical data on judges and judicial decision making in income tax cases decided by the Supreme Court of Canada in 1920-2003 and Tax Court of Canada in 1983-2004, socio-demographic characteristics of judges are found to have influenced their decision making in income tax cases. However, the decision-influencing socio-demographic characteristics are found to steer judges to vote in different directions in the two courts. The differences are interpreted to be hints of the presence of influences other than those from socio-demographic variables on decision making in the two courts. Based on the findings on the influences of socio-demographic characteristics on the historical voting patterns, voting scenarios are constructed to show different and varied propensities to vote for taxpayers of judges of the two courts. The voting scenarios suggest that taxpayers may be more likely to win in the current Supreme Court of Canada than in the current Tax Court of Canada.

The dissertation adds to the understanding of judicial decision making in income tax cases with three ideas. First, socio-demographic characteristics of judges are decision-influencing variables. Thus, a court with judges sharing similar socio-demographic characteristics are expected to exhibit similar judicial behavior and thus in the deliberation of cases in which a wider range of perspectives is needed such a court may not be able to deliberate issues as comprehensively as a more diverse court could have

done so. Second, the socio-demographic variables behave differently in the two courts, signaling the presence of influences of variables other than socio-demographic characteristics of judges on judicial decision making. The interpretation of the finding suggests that neither socio-demographic variables nor non-socio-demographic variables alone can paint the complete picture of judicial decision making. Both types of variables are needed for a deeper understanding of judicial decision making. Third, quantitative analysis can generate findings that can advance knowledge on judicial decision making. However, future qualitative analysis is required to understand more of the empirical findings generated by the exploratory data analyses in the dissertation. Therefore, a mixed approach of research is proposed to capitalize on the strengths of quantitative and qualitative analysis.

In sum, the dissertation finds that not having socio-demographic diversity on the bench may cause problems in judicial decision making, socio-demographic characteristics can provide partial explanations of judicial decision making and a mixed approach of quantitative and qualitative analyses may shed more light on judicial decision making in future research.

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## 1 Judges and Judicial Decision Making

What are the factors that influence judges in judging? The question continues to spark heated debates among legal scholars. Until the early 20th century, Anglo-American legal thought was dominated by the legal formalists, who assumed that judges mechanically deduce the law from abstract legal norms. In the early 20th century, such legal formalism was attacked by American legal realists, who argued that judges decide cases based on extra-legal factors including social, political and economic dimensions of the cases as well as the idiosyncratic views on politics and policies of the judges themselves.

The legal realists' claim that judges are influenced by extra-legal factors in deciding cases can be tested empirically. Since the late 1940s, American political scientists have used quantitative methods to examine judicial decision making in the U.S., especially that of the U.S. Supreme Court. Over the years these quantitative researchers have used increasingly advanced quantitative techniques, and they have developed a substantial body of knowledge on judicial decision making in the U.S. In contrast, researchers have only made sporadic attempts in producing quantitative studies on Canadian judicial decision making. Most of these studies focus on judicial decision making in the Supreme Court of Canada.

So far, quantitative research on whether extra-legal factors influenced judicial decision making has found no universally applicable answers as some variables can explain certain judicial behavior in some situations but not in others. Still, the body of

past research has shed light on Canadian judicial decision making such as judicial decision making in *Charter* cases.<sup>1</sup> But influences of extra-legal factors in judicial decision making in Canadian income tax cases have not been thoroughly examined.

Building on prior quantitative research on judicial decision making, this dissertation examines the influences of selected socio-demographic characteristics of judges in their decision making in Canadian income tax cases. The dissertation aims to explore the judicial behavior of judges as socio-demographic groups rather than the judicial behavior of individual judges. To do that, the dissertation focuses on judicial decision making in the Supreme Court of Canada and the Tax Court of Canada. The reason why the Federal Court of Appeal is left out of the mix is mainly because of the setup of the data analysis, which is in turn a function of the constraints of time and resources. The data analysis was first performed on Supreme Court of Canada data and then the modeling approach used was tested on Tax Court of Canada data. The idea is to develop a modeling approach and then test its applicability in a different dataset, and so only two datasets from two courts are needed for the dissertation. Using only data from two instead of three courts saves a lot of time in original dataset development and data analysis. But for the next step in quantitative research on judicial decision making in Canadian income tax cases the Federal Court of Canada should be included.

The examination of judicial decision making in the two courts was conducted in the form of exploratory data analysis. The main objective of an exploratory approach is to

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<sup>1</sup> *Canadian Charter of Rights and Freedoms*, part I of the *Constitutional Act*, 1982, being schedule B to the *Canada Act 1982* (U.K.), 1982, c.11.

determine what kind of information can be obtained from the data. That may sound very similar to what data analysis does. But an exploratory approach is different from the standard approach followed in the bulk of social science research. In many social science quantitative empirical studies, data analysis is used as proof. For example, data analysis is conducted to prove the validity or applicability of theories or both. The starting point for such a study is the theory. This is not to say that data play no role in the study because the availability of data and the nature of the data ultimately drive all data analyses. But the main objective of this type of theory-driven study is to put the theory to a test. An exploratory approach is different from this standard practice as the data analysis centers on the data. The starting point for such a study is the data. This is not to say that theory plays no role in the study because the study is nonetheless built on prior research studies that tested or generated theories concerning the data. But the objective of the data-driven study is to discover what can be found in the data. The data, instead of the theory, dictate the setup and the implementation of a data-driven study. If a theory-driven study is a focused search, a data-driven study will be a wide-open search. In other words, the data-driven nature of an exploratory study is to put aside as many preconceived notions of what can be found in the data as possible and let the data tell the story. Daniel Schneider, who will be cited extensively later in the dissertation, alluded to the mindset for this kind of exploration in one of his articles.<sup>2</sup>

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<sup>2</sup> Even though Schneider did not say explicitly that he set out to conduct an exploratory data analysis, his approach is exploratory in nature. In his 2002 article, he said: “Lack of expectation about results of the research is one way in which to reduce bias, and so I began without a preconceived idea about the outcome

Due to the data-driven nature of exploratory data analysis, the issue of data availability places limits on the questions that can be asked. As no suitable dataset on Canadian income tax cases and the socio-demographic characteristics of judges who decided the cases was found, original datasets were compiled by converting textual information from cases and official judicial biographies into numbers in datasets for data analysis. As answers to questions that can be provided by quantitative data analysis is limited by the information contained in the dataset, it is not feasible to ask questions that cannot be answered by the numerical data available. Thus the questions are a function of the kind of information that can be represented in numbers in the datasets developed specially for this dissertation.

The exploration in this dissertation is of a two-stage process. First, statistical models on judicial decision making based on the historical data of Tax Court of Canada and Supreme Court of Canada were developed. Second, the models were applied to develop judicial decision making scenarios based on data of the current judges of the two courts. According to the analyses of historical data, Tax Court of Canada judges who are more likely to vote for taxpayers may include those who went to universities outside Canada, served on the bench prior to their appointment to the Tax Court of Canada and taught law on a part-time basis before. Tax Court of Canada judges who are more likely to vote against taxpayers may include those who were appointed by prime ministers from the Liberal Party and taught law on a full-time basis. As a crude summary, Supreme Court of Canada justices who are more likely to vote for taxpayers may include those

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of my analysis.” See Assessing and Predicting Who Wins, *infra*, note 106 at 493.

who taught law before, and in cases with a lot of legal ambiguity, those who worked outside Ontario and Quebec. Supreme Court of Canada justices who are more likely to vote against taxpayers may include those who attended universities outside Canada and those who served as trial judges. One of the broad findings of the dissertation is that taxpayers are found to be more likely to win in the current Supreme Court of Canada than in the current Tax Court of Canada based on simulated voting scenarios built on the socio-demographic characteristics of judges. As the simulated voting scenarios are built on past voting records of judges, the implicit assumption is that the past provides a partial glimpse of the future. According to the exploratory data analyses in this dissertation, the same socio-demographic traits led to different voting behavior in different courts, signaling that other non-socio-demographic variables are at work. That calls for future research.

The rest of the dissertation proceeds as follows. Section 2 reviews the literature on prior quantitative research on judicial decision making. Section 3 presents the findings of an exploratory data analysis of the influences of selected socio-demographic characteristics of justices in their decision making in the Supreme Court of Canada in 1920-2003. The reason why the Supreme Court of Canada data were modeled first partly because each case was decided by a panel of justices and the associated complexity informed the modeling process. Section 4 applies the modeling approach used in Section 3 to explore the influences of selected socio-demographic characteristics of judges in their decision making in the Tax Court of Canada in 1983-2004. Section 5 reflects on the research outcomes of the exploratory data analyses on judicial decision making.

## 2 Review of Quantitative Research on Judicial Decision Making

Five ways of explaining judicial decision making have emerged in past quantitative research. One way to explain judicial decision making is that judges decide cases only based on the law. In this dissertation this precedent-driven explanation of judicial decision making is called the legal model. Other explanations of judicial decision making have emerged from research by American political scientists, and I divide them into four models – the attitudinal model, the personal attributes model, the strategic model and the institutional model.

As a legal realist's challenge to the legal model, the attitudinal model claims that judges make decisions based in part on their personal policy preferences rather than solely according to the law. Building on the attitudinal model, the personal attributes model asserts that judges make decisions under the influences of their personal backgrounds, which influence their personal policy preferences. Framing judicial decision making as a more dynamic process than that implied by the attitudinal and personal attributes models, the strategic model claims that judges make decisions under the influences of the strategic interactions among the judges. Shifting the focus from judges to the institutional environment in which they interact with each other, the institutional model asserts that judges make decisions under the influences of the institutional environmental factors such as policies and procedures of the courts.

The judicial decision making models are used only as an aid to think about prior quantitative research on judicial decision making. That is to say, there is no concrete

division among the five ways of explaining judicial decision making. The five models are not mutually exclusive and collectively exhaustive.

The rest of this section unfolds as follows. Section 2.1 highlights selected quantitative studies on judicial decision making in the U.S. Section 2.2, Section 2.3 and Section 2.4 present an overview of past quantitative analyses of judicial decision making in the Supreme Court of Canada. These quantitative studies can be divided into three groups, identified by the work of three principal investigators. Section 2.2 highlights the work of Sidney Peck, an Osgoode Hall Law School professor, and others who used scalogram analysis to map voting patterns of Supreme Court of Canada justices in terms of their personal policy preferences. Section 2.3 highlights the work of Peter Russell, a University of Toronto political scientist, and others who used descriptive statistics to depict the institutional workings of the Supreme Court of Canada. Section 2.4 highlights the work of Neal Tate and other U.S.-based political scientists who used multiple regressions to explain the voting patterns of Supreme Court of Canada justices with variables including the socio-economic attributes of the justices, the parties involved in the cases and their lawyers. Section 2.5 highlights prior quantitative research on judicial decision making in U.S. and Canadian tax cases.

## **2.1 Five Models of Judicial Decision Making**

Five models of judicial decision making can be constructed based on different explanations of judicial behavior. They are the legal model, the attitudinal model, the

personal attributes model, the strategic model and the institutionalist model. The groundbreaking scholarship of C. Herman Pritchett spurred the development of the models in the United States.<sup>3</sup> Observing that dissents started appearing in U.S. Supreme Court opinions in the 1930s and 1940s, the American political scientist conducted quantitative analysis of dissents and voting blocs in the Court. One of Pritchett's representative studies is *The Roosevelt Court: A Study in Judicial Politics and Values, 1937–1947*.<sup>4</sup> In the 1948 book, Pritchett argued against the orthodox explanation of judicial decision making under the traditional legal model. Starting with Chapter One entitled “At the Center of the Tornado” with subheadings including “The Nine Old Men” and “Justices Without Halos,” Pritchett argued that the judges decide cases based on their personal policy preferences rather than legal precedents, laying the foundation for the development of the attitudinal model.<sup>5</sup>

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<sup>3</sup> Lee Epstein, Jack Knight, and Andrew Martin argued that the work of Pritchett blazed the trail for quantitative research on judicial decision making in the U.S., even though he is not well known outside political science. See Lee Epstein, Jack Knight, and Andrew D. Martin, “The Political (Science) Context of Judging” (2003) 47 Saint Louis U.L.J. 783 at 786–788 [hereinafter Context of Judging]. For a recent overview of quantitative research on judicial decision making in the U.S., see Michael Heise, “The Past, Present, and Future of Empirical Legal Scholarship: Judicial Decision Making and the New Empiricism” (2002) U. Ill. L. Rev. 819.

<sup>4</sup> C. Herman Pritchett, *The Roosevelt Court: A Study in Judicial Politics and Values, 1937–1947* (New York: Macmillan, 1948).

<sup>5</sup> For recent descriptions of the legal model, see John M. Scheb II and William Lyons, “Judicial Behavior and Public Opinion: Popular Expectations Regarding the Factors That Influence Supreme Court Decisions” (2001) Political Behavior 181 at 182; Frank B. Cross, “Political Science and the New Legal Realism: A Case of Unfortunate Interdisciplinary Ignorance” (1997) 92 Nw. U.L.Rev. 251 at 255 and Frank B. Cross, “Decision-making in the U.S. Circuit Courts of Appeals” (2003) 91 Cal. L. Rev. 1457 at 1463. In the 2003

In addition to Pritchett, other American political scientists started testing the legal realists' idea of judicial decision making in the late 1940s. Among them were Glendon Schubert and Harold Spaeth, who did research on the attitudinal model.<sup>6</sup> Schubert advocated for the use of quantitative methods – notably scalogram analysis – in analyzing judicial decision making in his 1959 book *Quantitative Analysis of Judicial Behavior*.<sup>7</sup> Applying the technique to analyze U.S. Supreme Court justices' votes in his 1965 book *The Judicial Mind*, Schubert asked this question about the judges: “To what extent are their public acts influenced by their personal beliefs?”<sup>8</sup> In general, Schubert categorized the attitudes of judges by whether they voted for or against legal outcomes that might

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article, Frank Cross said he found both legal and political factors determined judicial decision making in his quantitative analysis, with the legal factors wielding stronger influences than the political factors.

<sup>6</sup> For profiles of pioneer researchers of judicial behavior, see Nancy Maveety, ed., *The Pioneers of Judicial Behavior* (Ann Arbor: University of Michigan Press, 2003). In addition to Pritchett, Schubert and Spaeth, the book profiles Sidney Ulmer, Joseph Tanenhaus, Beverly Blair Cook, Walter Murphy, Woodward Howard, David Danelski, David Rohde, Edward Corwin, Alpheus Thomas Manson, Robert McCloskey, Robert Dahl and Martin Shapiro.

<sup>7</sup> See Glendon A. Schubert, *Quantitative Analysis of Judicial Behavior* (Glencoe, Ill.: Free Press, 1959) [hereinafter *Quantitative Analysis*]. Neal Tate said: “The most substantial influence on the use of quantitative methods in judicial behavior came initially from *Quantitative Analysis of Judicial Behavior*.” Although Tate said the quantitative techniques proposed by Schubert in the book were not statistical methods in the strictest sense, he said “each does involve the systematic analysis of quantitative data.” See C. Neal Tate, “The Methodology of Judicial Behavior Research: A Review and Critique” (1983) *Political Behavior* 51 at 71 [hereinafter *Methodology*]. Tate said, “Perhaps no method is more closely associated with the development of judicial behavior research than cumulative or Guttman scaling, frequently called scalogram analysis” (at 65).

<sup>8</sup> Glendon Schubert, *The Judicial Mind: The Attitudes and Ideologies of Supreme Court Justices 1946–1963* (Evanston: Northwestern University Press, 1965) at 15 [hereinafter *Judicial Mind*].

reflect political liberalism and economic liberalism.<sup>9</sup> Based on consistent judicial voting patterns, Schubert characterized some U.S. Supreme Court justices as liberals (Justices Murphy, Black, Douglas, Rutledge, Brennan and Warren); some as pragmatic conservatives who were relatively liberal on political issues but conservative on economic issues (Justices Goldberg, Frankfurter, Jackson and Stewart); some as conservatives (Justices Harlan, Whittaker and Burton); and some as dogmatic conservatives (Justices Clark, White, Minton, Vinson and Reed).<sup>10</sup>

While Schubert was establishing himself as the main proponent of the use of quantitative methods in judicial behavioral analysis, Spaeth was developing an extensive database for quantitative research on judicial decision making. Spaeth's database project has become part of the S. Sidney Ulmer Project for Research in Law and Judicial Politics, now housed in University of Kentucky's Department of Political Science.<sup>11</sup> In the past decade, Spaeth, along with Jeffrey Segal, argued forcefully for their attitudinal explanations of voting patterns of judges in three books.<sup>12</sup> Spaeth and Segal conducted

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<sup>9</sup> Later in his 1974 book *The Judicial Mind Revisited*, Schubert noted that the general question asked in the 1965 book was about "the relationship between political belief systems and political behavior. Indeed, my title for the original book was originally, and remained until the book was in an advanced stage of publication, *The Liberal Mind*." See Glendon Schubert, *The Judicial Mind Revisited: Psychometric Analysis of Supreme Court Analysis* (New York: Oxford University Press, 1974) at 17.

<sup>10</sup> See *Judicial Mind*, *supra* note 8 at 270, Table 41.

<sup>11</sup> See <http://www.as.uky.edu/polisci/ulmerproject/UlmerProject/index.htm>.

<sup>12</sup> See Harold J. Spaeth and Jeffrey A. Segal, *Majority Rule or Minority Will: Adherence to Precedence on the U.S. Supreme Court* (Cambridge; New York: Cambridge University Press, 1999). Also, see Jeffrey A. Segal and Harold J. Spaeth, *The Supreme Court and the Attitudinal Model* (Cambridge; New York: Cambridge University Press, 1993); and Jeffrey A. Segal and Harold J. Spaeth, *The Supreme Court and the*

quantitative analysis of judicial votes to test the legal model with the use of data on dissents in the U.S. Supreme Court. They used the patterns of dissents to approximate violations of *stare decisis* based on the rationale that judges who had dissented in cases that became precedents will not agree with such precedents used in later cases if the attitudinal model correctly depicts judicial decision making.<sup>13</sup> Spaeth and Segal found support for the attitudinal model in the U.S. Supreme Court data.

A spin-off from the attitudinal model is the personal attributes model. According to the explanations of judicial decision making under the personal attributes model, judges are influenced by their socio-economic backgrounds including regional ties and political affiliations in deciding cases.<sup>14</sup> Among researchers who tested the personal attributes model with U.S. data was Tracey George. She found that former law professors who were appointed to the U.S. appellate bench exhibited stronger propensities than other judges to write opinions and to reverse lower court opinions in order to advance new

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*Attitudinal Model Revisited* (Cambridge; New York: Cambridge University Press, 2002). For a recent critical analysis of the attitudinal model, see Lawrence Baum, *The Puzzle of Judicial Behavior* (Ann Arbor: University of Michigan Press, 1997).

<sup>13</sup> For a recent comment on the Spaeth-Segal approach, see Howard Gillman, "What's Law Got to Do With It? Judicial Behavioralists Test the 'Legal Model' of Judicial Decision Making," review essay of *Majority Rule or Minority Will* by Harold J. Spaeth and Jeffrey A. Segal, in (2001) *Law & Soc. Inq.* 465 at 477–479.

<sup>14</sup> The list of personal attributes that might influence judicial decision making include age, gender, race, religion, education, prior judicial experience, prior prosecutorial experience, prior public/elected office, appointing president and political party affiliation. See Tracey E. George, "Court Fixing" (2001) 43 *Ariz. L.Rev.* 9 [hereinafter *Court Fixing*]. Neal Tate explained the use of variables such as appointing presidents and regional affiliation in building personal attributes model in Neal Tate and Roger Handberg, "Time Binding and Theory Building in Personal Attribute Models of Supreme Court Voting Behavior" (1991) 35 *Am. J. Political Science* 460.

legal ideas.<sup>15</sup> In addition, she found that former law professors who were appointed to the U.S. appellate bench because of their ideological leanings exhibited strong propensities to act consistently with their prior scholarly positions.<sup>16</sup> James Brudney, Sara Schiavoni, and Deborah Merritt also tested the personal attributes model on U.S. data, and they found that Democratic judges tended to vote for unions more than Republican judges, while female Republican judges tended to vote for unions more than male Republican judges.<sup>17</sup>

In addition to his attitudinal insight, Pritchett realized that judges may agree to support their brethren on rulings that are close to but not exactly in line with their personal policy preferences in order to advance at least part of their personal policy agenda. Such judicial actions constitute the basis of the strategic model, which had not been fully developed until Pritchett's student Walter Murphy produced a seminal analysis of strategic judicial behavior.<sup>18</sup> A recent authoritative work on strategic judicial behavior was written by Lee Epstein and Jack Knight. In *The Choices Justices Make*, Epstein and Knight analyzed two sets of U.S. Supreme Court case data to show how law evolves from

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<sup>15</sup> See Court Fixing, *ibid.* at 53.

<sup>16</sup> *Ibid.* at 59.

<sup>17</sup> James J. Brudney, Sara Schiavoni, and Deborah J. Merritt, "Judicial Hostility Toward Labor Unions? Applying the Social Background Model to a Celebrated Concern" (1999) 60 Ohio St. L.J. 1675.

<sup>18</sup> Walter F. Murphy, *Elements of Judicial Strategy* (Chicago: University of Chicago Press, 1964). For recent descriptions of the strategic model, see H.W. Perry, "Taking Political Science Seriously" (2003) 47 Saint Louis U.L.J. 889 at 894; Lee Epstein, Nancy Staudt, and Peter Wiedenbeck, "Judging Statutes: Thoughts on Statutory Interpretation and Notes for a Project on the Internal Revenue Code" (2003) 13 Wash. U.J.L. & Pol'y 305 at 314–315; and Context of Judging, *supra* note 3 at 798.

judicial action.<sup>19</sup> The two datasets were (1) cases in Justice Brennan's register in the 1983 term and (2) landmark cases decided under the Burger Court from 1969 to 1985. Using the data, Epstein and Knight argued that U.S. Supreme Court justices such as Brennan advanced their personal policy goals by voting strategically to determine whether certiorari was granted and building majority coalitions after certiorari was granted. As the justices acted strategically in the institutional process of judging, Epstein and Knight also referred to the institutional context of judicial decision making in their book.

The institutionalist model is closely tied to the strategic model. Under the institutionalist model, routine policies and standard procedures concerning the operation of the court influence judicial decision making. They include policies and procedures for the selection of cases to be heard and the assignment of opinion writing responsibilities by the Chief Justice.<sup>20</sup> Although the institutionalist and strategic models can be seen as cousins if not siblings, one can adopt the institutionalist model but reject the strategic model. Judge Harry Edwards, who has propounded on the importance of institutional influences on judicial decision making, doubts the usefulness of quantitative analysis of judicial decision making and dismisses both the strategic model as well as the attitudinal model.<sup>21</sup> Under his own theory of collegiality, judges work together in a collegial

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<sup>19</sup> Lee Epstein and Jack Knight, *The Choices Justices Make* (Washington, D.C.: CQ Press, 1998).

<sup>20</sup> For a recent description of the institutionalist model, see Kevin T. McGuire, "The Institutionalization of the U.S. Supreme Court" (2004) 12 *Political Analysis* 128 at 129.

<sup>21</sup> Harry T. Edwards, "The Effects of Collegiality on Judicial Decision Making" (2003) 151 *U. Pa. L. Rev.* 1639 at 1662—1664 [hereinafter *Collegiality*]. He is a Circuit Judge at the United States Court of Appeals for the D.C. Circuit. He served as Chief Judge of the D.C. Circuit from October 1994 to July 2001. For his

environment, which institutionalizes them to work for the common interest in getting the law right by pursuing principled agreement with uncensored expression and sincere consideration of different views in the judicial decision making process.<sup>22</sup>

In sum, the five models of judicial decision making represent a broad range of explanations of judicial behavior. Offering an alternative to the legal model, the attitudinal model focuses on judges instead of the law in explaining judicial decision making. Building on the attitudinal model, the personal attributes model expands the list of decision-influencing factors from personal policy preferences of judges to include social backgrounds of judges. As judges decide cases amidst their brethren in the institutional setting of courts, the strategic model captures the effects of strategic interactions among judges, and the institutionalist model highlights the impact of policies and procedures of the courts.

## 2.2 Mapping Voting Patterns of Supreme Court of Canada Justices

Sidney Peck is the first Canadian legal scholar to use a quantitative technique to map Canadian judicial voting patterns in accordance with the attitudinal model. Influenced by U.S. attitudinal pioneers such as Schubert, Peck adapted scalogram analysis, also called cumulative scaling, to analyze judicial decision making in the

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challenge of the usefulness of quantitative analysis of judicial decision making, see *infra* note 247.

<sup>22</sup> See Collegiality. *ibid.* at 1644–1645.

Supreme Court of Canada.<sup>23</sup> The objective of scalogram analysis is to explore whether judges voted consistently in terms of their personal policy preferences. The way scalogram works can be illustrated by the use of a simple hypothetical example.<sup>24</sup>

In this hypothetical example, five nonunanimous cases involving the Canadian federal government and a nuclear energy company are used to construct a scale. In all five cases the legal dispute is whether the government should allow a nuclear plant to be built near densely populated areas. In Case A the location in dispute was Yellowknife, in Case B it was Regina, in Case C it was Winnipeg, in Case D it was Vancouver, while in Case E it was Toronto. The research question is whether Judge X or Judge Y tended to give the nuclear company more freedom in placing its nuclear plant.

In the scalogram analysis, the cases might be ranked in an ascending order by the size of the population of the locations in dispute. Therefore, Case A is ranked first, Case B second, Case C third, Case D fourth and Case E fifth. A judicial voting pattern would be deemed consistent if a judge who voted in favor of the nuclear energy company in Case C also voted in favor of it in Cases A and B while a judge who voted against the

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<sup>23</sup> Peck referred to Schubert extensively in his three articles on judicial decision making in the Supreme Court of Canada. See Sidney Raymond Peck, "A Behavioural Approach to the Judicial Process: Scalogram Analysis" (1967) 5(1) Osgoode Hall L.J. 1 [hereinafter Behavioural Approach]; S. R. Peck, "The Supreme Court of Canada, 1958–1966: A Search for Policy through Scalogram Analysis" (1967) 45 Can. Bar. Rev. 666 [hereinafter Supreme Court of Canada]; and Sidney R. Peck, "A Scalogram Analysis of the Supreme Court of Canada, 1958–1967" in Glendon Schubert and David J. Danelski, eds., *Comparative Judicial Behavior: Cross-Cultural Studies of Political Decision-Making in the East and West* (New York: Oxford University Press, 1969), 314–316 [hereinafter Scalogram].

<sup>24</sup> Peck used an example of attitudes toward foreigners to illustrate how scalogram analysis works. See Behavioural Approach, *supra* note 23 at 5.

nuclear energy company in Case C also voted against it in Cases D and E. A nuclear energy company win in Case C means that the company is allowed to build a nuclear plant in Winnipeg. As Winnipeg has a larger population than Regina (Case B) and Yellowknife (Case A), a nuclear energy company win in Case C means that the company should be allowed to build a nuclear plant in the two less densely populated cities too. A nuclear energy company loss in Case C means that the company is not allowed to build a nuclear plant in Winnipeg. As Winnipeg has a smaller population than Vancouver (Case D) and Toronto (Case E), the nuclear energy company should not be allowed to build a nuclear plant in the two more densely populated cities too.

One objective of ordering the cases is to map visually identifiable voting patterns of judges. In the current example, the voting patterns of Judge X and Judge Y would be presented in a five-by-two matrix with cases as row headings and the judges as column headings. A vote in favor of the nuclear energy company is recorded as a plus sign, while a vote against it is recorded as a minus sign. Assuming that Judge X voted in favor of the nuclear energy company in Cases A and B, while Judge Y voted in favor of it in Cases A, B, C and D, the scale would show clearly that Judge Y recorded more plus signs near the top of her column. Therefore, Judge Y can be viewed as having given the nuclear energy company more freedom in placing its nuclear plant.

In scalogram analysis, only nonunanimous cases are used because they suggest that the answers to the legal questions raised in the cases were uncertain and thus personal policy preferences of judges might have influenced judicial decision making. Scalogram analysis is based on the assumption that judges decide a certain category of

cases with legal uncertainty based on one dominant attitude. Peck realized from the outset that judges do not make decisions based on only one dominant attitude even in similar cases.<sup>25</sup> Moreover, Peck knew that simply ordering the cases according to the researchers' subjective rankings does not prove anything objectively. According to Schubert, Peck accepted "the method of cumulative scaling while rejecting its theory."<sup>26</sup> Still, Peck saw the usefulness of scalogram analysis as a descriptive device of the factors that influence judicial decision making in nonunanimous cases but not as an explanatory tool of judicial behavior.<sup>27</sup>

As ordering cases is of such importance in scaling, and whether an order fits the requirement of scaling is more subjective than objective, Peck avoided the uncertainty by devising a classification system of voting tendencies to turn scalogram analysis into descriptive statistics of judicial votes in terms of judicial preferences.<sup>28</sup> For example, assuming that the research question is whether judges tended to vote for "big" business, a scale is constructed to rank a number of cases about disputes between government and corporations based on the valuation of the corporations. As valuation could be performed in many different ways, a corporation that is ranked first in terms of valuation based on free cash flow may not be ranked first in terms of valuation based on earnings. Under

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<sup>25</sup> See Behavioural Approach, *supra* note 23 at 19–20.

<sup>26</sup> See Glendon Schubert & David J. Danelski, eds., *Comparative Judicial Behavior: Cross-Cultural Studies of Political Decision-Making in the East and West* (New York: Oxford University Press, 1969) at 14.

<sup>27</sup> See "Supreme Court of Canada", *supra* note 23 at 679.

<sup>28</sup> *Ibid.*

Peck's classification system, judges who voted for big business in 80% or more of all nonunanimous cases they decided are classified as "strongly in favour of" big business, those who voted for big business in 60%–79% of all nonunanimous cases are classified as "in favour of" big business, those who voted for big business in 41%–59% of the cases are classified as "neutral", those who voted for big business in 21%–40% of the cases are classified as against big business, while those who voted for big business in 20% or less cases are classified as strongly against big business.

Adapting Schubert's approach, Peck used data from nonunanimous Supreme Court of Canada cases from 1958 to 1966 to construct scales for taxation, negligence and criminal law cases.<sup>29</sup> He divided judicial votes into two groups – voting for or against one party (e.g. voting for the government or voting against the government). Based on the scales, Peck found that Justice Cartwright sided with individuals most of the time because he voted in favor of taxpayers in tax appeals, in favor of plaintiffs in negligence appeals and strongly in favor of the accused in criminal appeals.<sup>30</sup> Casting Justice Abbott as the mirror image of Cartwright, Peck found that he voted in favor of the government in tax appeals, in favor of defendants in negligence appeals and in favor of the Crown in criminal law appeals. With respect to Justices Ritchie and Martland, Peck found that they were the neutral justices.<sup>31</sup> Ritchie was neutral on all three scales, while Martland was neutral in tax and negligence appeals but in favor of the Crown in criminal law appeals.

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<sup>29</sup> *Ibid.* at 682.

<sup>30</sup> *Ibid.* at 723.

<sup>31</sup> *Ibid.* at 725.

Donald Fouts, a Northern Illinois University political scientist, supported Peck's general finding on the existence of consistent judicial voting patterns.<sup>32</sup> Like Schubert, Fouts divided the nonunanimous Supreme Court of Canada cases from 1950 to 1960 into cases about civil liberties and economic liberalism. He defined civil liberties cases as those with conflicts between (1) personal rights and liberty claims and (2) governmental authority.<sup>33</sup> In addition, he defined economic liberalism cases as those with conflicts between (a) "underprivileged economic interests" such as the general public and (b) "those of affluence and monopoly power" such as private corporations.<sup>34</sup> Fouts found that Justice Rand exhibited strong support for civil liberties and economic regulation, and he labeled him a liberal and equated him to the likes of Justices Douglas, Black, Warren and Brennan in the 1960–1962 term of the U.S. Supreme Court.<sup>35</sup> Furthermore, Fouts found that highly consistent voting records of Quebec justices as a group – Abbott, Rinfret, Fauteux and Taschereau – infused the Supreme Court of Canada in the 1950s with "a pro-economic liberalism orientation and slight anti-civil liberties tendencies."<sup>36</sup> In general, Fouts found that Supreme Court of Canada justices were twice as likely to

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<sup>32</sup> Donald E. Fouts, "Policy-Making in the Supreme Court of Canada, 1950–1960" in Glendon Schubert & David J. Danelski, eds., *Comparative Judicial Behavior: Cross-Cultural Studies of Political Decision-Making in the East and West* (New York: Oxford University Press, 1969) 257. Fouts may be the only U.S. political scientist who has published scalogram analysis of judicial decision making in the Supreme Court of Canada.

<sup>33</sup> *Ibid.* at 268.

<sup>34</sup> *Ibid.* at 273.

<sup>35</sup> *Ibid.* at 279.

<sup>36</sup> *Ibid.* at 283.

disagree on public policy cases as in private law cases from 1950 to 1960, suggesting the presence of an attitudinal variable in judicial decision making for such cases.<sup>37</sup>

Peck's findings of consistent judicial voting patterns were also supported by the scalogram analysis of judicial decision making in the Supreme Court of Canada in an earlier period performed by two of his students at Osgoode Hall Law School. Mapping voting patterns in Chief Justice Strong's court from 1892 to 1902, Michael Bader and Edward Burstein scaled voting patterns in five types of cases: negligence, petition of right (compensation claims for injuries made by government acting in a quasi-private capacity), railways, insurance and jurisdiction (whether the Supreme Court of Canada in its early days had jurisdiction to decide a case).<sup>38</sup> Bader and Burstein found that Justice Fournier, who was a member of the federal Liberal Party that sought to distinguish itself from MacDonald's Conservatives by attacking influences of railways and business in the government and standing by farming interests, voted in favor of individuals most of the time.<sup>39</sup> They also found that Chief Justice Strong exhibited similar voting patterns.<sup>40</sup> Moreover, Bader and Burstein found that Justice Gwynne, who was a successful businessman, voted in favor of railway and insurance companies as well as the government but did not vote in favor of individuals.<sup>41</sup> Justice King, who once was the

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<sup>37</sup> *Ibid.* at 267.

<sup>38</sup> Michael Bader and Edward Burstein, "The Supreme Court of Canada 1892–1902: A Study of the Men and the Times" (1970) Osgoode Hall L.J. 503.

<sup>39</sup> *Ibid.* at 540–541.

<sup>40</sup> *Ibid.* at 542.

<sup>41</sup> *Ibid.* at 542–544.

leader of the Conservative Party and prime minister of New Brunswick, along with Justices Taschereau, Sedegwick and Girouard recorded mixed voting patterns that could not be interpreted to be clearly for or against individuals or the government most of the time.<sup>42</sup>

In sum, the studies by Peck and Fouts, as well as Bader and Burstein, contributed to the empirical testing of the attitudinal model in Canada. They took the first collective step to empirically test the idea that Canadian judges voted consistently in terms of their personal policy preferences and confirmed the existence of consistent judicial voting patterns. Also, Peck and others paved the way for future studies by collecting the data, which were used in the multiple regression studies by Panu Sittiwong as outlined later in Section 2.4.<sup>43</sup>

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<sup>42</sup> *Ibid.* at 544–545.

<sup>43</sup> See *infra* note 73. One notable study at the time of Peck that did not involve scalogram was conducted by George Adams and Paul Cavalluzzo. The two Osgoode students of Peck produced a classification system of social backgrounds of judges, and the variables they produced look similar to those used in regression analysis of judicial decision making in Canada years later as depicted in Section 2.4. Adams and Cavalluzzo divided the years from 1867 to 1963 into seven periods and further broke down the make-up of the court by regional representation (Quebec, Ontario, Maritimes, West); ethnicity (French, English, Scottish, Irish, bi-cultural); religion (Roman Catholic, Anglican, Presbyterian, Methodist, Huguenot, Baptist, Protestant, unknown); political party affiliation (Liberal, Conservative, unknown); prior office (prior political office, prior public office, no public office, unknown); prior judicial office (justices with prior judicial experience and their years of experience, justices with no prior judicial office); and father's occupation (clergyman, politician, lawyer, judge, doctor, landowner-farmer, ship captain, shipbuilder, druggist, merchant, architect, unknown). See George Adams and Paul J. Cavalluzzo, "The Supreme Court of Canada A Biographical Study" (1969) 7(1) Osgoode Hall L.J. 61.

### 2.3 Describing Judicial Decision Making in the Supreme Court of Canada

Peter Russell, one of Canada's premier political scientists, did not focus only on the relationships between judicial votes and personal policy preferences; instead, Russell described the workings of the Supreme Court of Canada, of which judicial decision making is an integral part. His work can be seen as part of institutionalist/strategic studies. In the quantitative portion of his work Russell relied on descriptive statistics. One way to highlight the quantitative work of Russell is to review two of his studies on the Supreme Court of Canada together; one was done before and one was done after the introduction of the *Charter*.<sup>44</sup> In both studies, Russell found, among other things, tension between justices from Quebec and justices from other parts of Canada as reflected in their voting patterns. In Russell's 1969 study of the Supreme Court of Canada, in which he analyzed 1,031 reported cases from 1950 to 1964, he found that, among other things, "there was a greater tendency for the Supreme Court to reverse Quebec appellate court" in cases "when common-law judges constituted a majority or wrote the Court's judgment."<sup>45</sup> Analyzing 100 *Charter* cases from 1984 to 1989, Russell, F. L. Morton and

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<sup>44</sup> Russell has also produced a lot of non-quantitative work on the Supreme Court of Canada. See e.g. Peter H. Russell, *The Judiciary in Canada: The Third Branch of Government* (Toronto: McGraw-Hill Ryerson, 1987). For Russell's scholarly contributions in law and political science, see Joseph F. Fletcher, ed., *Ideas in Action: Essays on Politics and Law in Honour of Peter Russell* (Toronto: University of Toronto Press, 1999) [hereinafter *Ideas*].

<sup>45</sup> Peter H. Russell, *The Supreme Court of Canada as a Bilingual and Bicultural Institution* (Ottawa: Queen's Printer, 1969) at 216. Russell listed his research questions as follows: "What is the nature of the Court's work? How often is it concerned with provincial law or Civil Code cases? Are there significant

Michael J. Withey found in their 1992 study that, among other things, 11 of 19 appeals from Quebec were reversed, while 17 of 19 appeals from British Columbia and 25 of 31 appeals from Ontario were upheld.<sup>46</sup> They found that the *Charter* “was promoted as an instrument of national unity” but it has become “a source of disunity with respect to Quebec”.<sup>47</sup> Russell and company also found increased conflicts among Supreme Court of Canada justices. Based on their data, the percentage of unanimously decided *Charter* cases per year dropped from 100% (4 of 4) in 1984 to slightly over 60% in 1989 (16 of 26).<sup>48</sup> Russell and his colleagues attributed the rise of dissents to the schism in the Court between Justices Wilson and Lamer on one side and Justices McIntyre and L’Heureux-Dubé on another side since 1986.<sup>49</sup> According to Russell, Morton and Withey, “such division was more or less inevitable given the inescapably contentious character of modern judicial review.”<sup>50</sup>

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differences in its disposition of appeals from different sources? Is there any evidence of cultural alliances of judges on different issues? To what extent have common-law judges participated in Quebec appeals dealing with civil law?” See page 114. Joseph Fletcher pointed out that Russell first used quantitative analysis in his preparation of the report. “In preparing his report for the B & B Commission, he virtually lived at the court for more than a year, making his first use of quantitative methods to describe the court’s decision-making procedure.” See Ideas, *supra* note 44 at 171.

<sup>46</sup> F. L. Morton, Peter H. Russell, and Michael J. Withey, “The Supreme Court’s First One Hundred Charter of Rights Decisions: A Statistical Analysis” (1992) 30(2) Osgoode Hall L.J. 1. at 17.

<sup>47</sup> *Ibid.* at 48.

<sup>48</sup> *Ibid.* at 37. Russell and company also found that *Charter* claimants won a total of 35 of the 100 cases in 1984–1989, with the winning percentage of *Charter* claimants per year falling from 75% in 1984 (3 of 4) to 31% in 1989 (8 of 26). *Ibid.* at 9.

<sup>49</sup> *Ibid.* at 48.

<sup>50</sup> *Ibid.*

Russell's quantitative approach is best summarized in a description of the strengths and weaknesses of descriptive statistics as an analytical tool in his joint 1992 paper with Morton and Withey. Descriptive statistics, they said, can be used to construct a narrative of the patterns of the Supreme Court of Canada's work flow, nature of the work of the court, sources of its cases, distribution of cases among the justices and their relationships with each other.<sup>51</sup> Using *Charter* cases as examples, they said that "by identifying patterns not discernible through the study of leading *Charter* cases, quantitative analysis can generate empirically supported generalizations – that is, new understandings – of how the *Charter* is affecting the Supreme Court and how the Court is shaping the *Charter*."<sup>52</sup> However, Russell and company cautioned that the use of descriptive statistics cannot replace the study of individual cases because descriptive statistics only captures the bottom-line outcomes of the cases but not their subtleties.<sup>53</sup> They said: "A decision that upholds a *Charter* claim might do so through opinions that actually narrow the meaning of the *Charter* right involved."<sup>54</sup>

Ian Greene, who was a doctoral student of Russell, and Peter McCormick followed Russell's quantitative approach and found more empirical support for Russell's finding of a divided Supreme Court of Canada.<sup>55</sup> In the 1998 book *Final Appeal*:

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<sup>51</sup> *Ibid.* at 3.

<sup>52</sup> *Ibid.*

<sup>53</sup> *Ibid.* at 3–4.

<sup>54</sup> *Ibid.*

<sup>55</sup> Greene is a political scientist at York University. McCormick is a political scientist at University of Lethbridge and was a colleague of Greene while he was teaching there in the 1980s.

*Decision-Making in Canadian Courts of Appeal*, Greene, McCormick and their collaborators found, among other things, differences in the patterns of dissents between Justices Iacobucci and Cory as a group and Justices L’Heureux-Dubé and McLachlin as another in nonunanimous cases.<sup>56</sup> For example, based on data on voting patterns of Supreme Court justices from 1990–1997, Greene, McCormick and others found that Iacobucci and Cory dissented 10% of the time in all cases they presided over while L’Heureux-Dubé dissented 29% of the time and McLachlin dissented 24% of the time.

McCormick, one of the more prolific researchers who use descriptive statistics to examine judicial decision making in Canada, provided more examples of such institutional/strategic knowledge on dissents and voting coalitions in his work on the Supreme Court of Canada.<sup>57</sup> In further exploring the topic of dissents, McCormick found that the practice has grown in the past 25 years, rising from an average of about seven per year before 1970 to an average of over 40 per year since 1980.<sup>58</sup> Since the end of World

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<sup>56</sup> Ian Greene, Carl Baar, Peter McCormick, George Szablowski, and Martin Thomas, *Final Appeal: Decision-Making in Canadian Courts of Appeal* (Toronto: James Lorimer & Co., 1998). The Supreme Court of Canada is only one of the appellate courts analyzed in the book. The total vote counts for the Supreme Court of Canada justices in reported cases from 1990 to 1997 were: Iacobucci (612), Cory (648), L’Heureux-Dubé (588) and McLachlin (640). Calculations are based on data in Table 10.1 at page 208. Another Greene-McCormick project is Peter McCormick and Ian Greene, *Judges and Judging: Inside the Canadian Judicial System* (Toronto: James Lormier & Co., 1990).

<sup>57</sup> Since the 1980s, McCormick has written dozens of articles and books on various aspects of courts in Canada. Selected publications of McCormick are cited in note 56-62 and note 89-90.

<sup>58</sup> Peter McCormick, “Second Thoughts: Supreme Court Citation of Dissents & Separate Concurrences, 1949–1999” (2002) 81 Can Bar. Rev. 369 at 393–394 [hereinafter *Second Thoughts*]. He did other work on citations including Peter McCormick and Tammy Praskach, “Judicial Citation, the Supreme Court of Canada, and the Lower Courts: A Statistical Overview and the Influence of Manitoba” (1996) 24 Man. L.J.

War II the justice who cited minority opinions the most was Lamer, who recorded 137 citations of minority opinions, of which 36 were his own minority decisions or a self-citation rate of about 26%. L'Heureux-Dubé topped the list of those who cited one's own minority opinions, with 67 out of 103 times or a self-citation rate of about 65%.<sup>59</sup>

In terms of voting blocs, McCormick found that Justices Iacobucci and Major were committed to the Lamer voting bloc, but Justice McLachlin was not, so the post-Lamer stability in the McLachlin Court partly hinges on the actions of newer justices.<sup>60</sup> On the Lamer Court, McCormick found that Justices Lamer, Sopinka and Major formed the trio who voted as a bloc and also appeared in many differently configured voting coalitions of four and five judges. Therefore, the three justices can be seen to have had more power than others because of their coalition-building capability.<sup>61</sup> On the Laskin Court, McCormick found that Chief Justice Laskin did not exert greater influence on the Supreme Court of Canada until his later years because he was first opposed by a coalition of Justices Martland, Judson, Ritchie, Pigeon and de Grandpre and then a coalition of

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335; Peter McCormick, "Judicial Citation, the Supreme Court of Canada, and the Lower Courts: the Case of Alberta" (1996) 34 Alta. L. Rev. 870; and Peter McCormick, "The Supreme Court Cites the Supreme Court: Follow-Up Citation on the Supreme Court of Canada, 1989–1993" (1995) 33 Osgoode Hall L.J. 453.

<sup>59</sup> See Second Thoughts, *ibid.* at 388–389.

<sup>60</sup> Peter McCormick, "'With Respect ...'—Levels of Disagreement on the Lamer Court 1990–2000" (2003) 48 McGill Law Journal 89 at 115. See also Peter McCormick, "Birds of a Feather: Alliances and Influences on the Lamer Court 1990–1997" (1998) 36 Osgoode Hall L.J. 339. Four years after Lamer's retirement, Iacobucci retired from the Supreme Court of Canada at the end of June 2004.

<sup>61</sup> Peter McCormick, "The Most Dangerous Justice: Measuring Judicial Power on the Lamer Court 1991–1997" (1999) 22 Dal. L.J. 93.

Justices Martland, Pigeon and Ritchie.<sup>62</sup>

In sum, the collective work of Russell, Greene and McCormick contributed to the empirical testing of the institutionalist/strategic models in Canada. In addition to gathering more evidence in support of the Peck group's general finding that judges voted differently on a consistent basis, they used the data to paint a detailed portrait of the workings of the Court as a policy-making institution. In highlighting the different voting patterns exhibited by Quebec and non-Quebec justices as well as the various patterns of dissents and different configurations of voting coalitions, they advanced the institutionalist/strategic knowledge of decision making in a divided Supreme Court of Canada in the post-World War II era.

## **2.4 Explaining Judicial Voting Patterns of Supreme Court of Canada**

Neal Tate, who had conducted his personal attributes studies at the University of North Texas before moving to Vanderbilt University, and other U.S.-based political scientists used multiple regressions to explain rather than describe voting patterns of Supreme Court of Canada justices. The use of personal attributes variables in multiple regression analyses could solve one methodological problem – the lack of reliable external evidence of personal policy preferences of Supreme Court of Canada justices – with scalogram and descriptive statistics analyses. Personal attributes can be used as

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<sup>62</sup> Peter McCormick, "Follow the Leader: Judicial Power and Judicial Leadership on the Laskin Court, 1973–1984" (1998) 24 *Queen's L.J.* 237.

proxies for personal policy preferences of judges as all people are shaped by their social backgrounds to a certain degree. Personal attributes are the most accessible external evidence of personal policy preferences of judges on which researchers can rely, unless the judges publicly and openly declare their personal policy preferences.<sup>63</sup> In the late 1980s and early 1990s, Tate and Panu Sittiwong, his graduate student, used multiple regressions to test the personal attributes model in three studies.

The first of the Tate-Sittiwong trilogy of studies was Sittiwong's 1985 master's thesis.<sup>64</sup> Adopting Schubert's categorization of cases, Sittiwong classified justices' votes in three ways. First, those who voted for civil rights claimants in civil liberties cases were counted as casting liberal votes. Second, those who voted for what he called "underdogs" – unions or governments in his study – instead of business monopolies in economics cases were counted as casting liberal votes. Third, those who voted for business instead of government in fiscal claims cases were counted as casting liberal votes.<sup>65</sup>

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<sup>63</sup> Spaeth and Segal used newspaper reporting of U.S. Supreme Court justices to construct an indicator of personal policy preferences of the justices in their attitudinal analyses. For details see the three books by Spaeth and Segal, *supra* note 12.

<sup>64</sup> Panu Sittiwong, "Canadian Supreme Court Decision-Making: The Personal Attribute Model in Explaining Justices' Patterns of Decision-Making, 1949–1980" (M.A. Thesis, North Texas State University, Department of Political Science, 1985). He used ordinary least squares in the study.

<sup>65</sup> *Ibid.* at 28–29. The fiscal claims cases Sittiwong referred to were about monetary conflicts between individuals and government. The classification of voting for business such as corporate taxpayers in fiscal claims cases as a "liberal" vote could be problematic, as the social background reasons for siding with civil rights claimants and corporate taxpayers might not be of the same type. For example, a working-class upbringing might have steered a justice to vote for civil rights claimants, while a private school education might have steered a justice to vote for corporate taxpayers. Constructing a dependent variable by such a classification of "liberal" votes could run the danger of distorting the regression results.

Using a dataset of 737 nonunanimous cases from 1949 to 1980, Sittiwong regressed voting records of Supreme Court justices as the dependent variable against four social background independent variables – region (from Quebec or not), political party of appointing Prime Minister (Liberal Party or Conservative Party), previous judicial experience (number of years) and tenure on the Supreme Court of Canada (number of years).

Sittiwong found that justices who tended to cast liberal votes were those who were not from Quebec, who were judges before serving on the Court, who were on the Court for a relatively short period and who were appointed by Liberal Prime Ministers.<sup>66</sup>

In 1989, Tate and Sittiwong extended Sittiwong's work in the first published article that used multiple regressions to test for linkages between voting records of Supreme Court of Canada justices and their social backgrounds.<sup>67</sup> Like Schubert, Tate and Sittiwong divided cases into civil rights and liberties cases as one type and cases concerning economics issues as another type.

Using a dataset of 606 nonunanimous decisions from 1949 to 1985, Tate and Sittiwong regressed the dependent variable of justices' voting percentages for liberal case outcomes against five independent variables – indicators of region and religion

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<sup>66</sup> *Ibid.* at 81–82. The regression model generated an adjusted R-square of 0.52, meaning that the model explained more than half of the variations of the voting patterns of the justices. The region variable was significant at a one-percent level, while the tenure variable was significant at a five-percent level. The remaining two variables were not statistically significant.

<sup>67</sup> C. Neal Tate and Panu Sittiwong, "Decision Making in the Canadian Supreme Court: Extending the Personal Attributes Model across Nations" (1989) 51(4) *The Journal of Politics* 900. At that time Sittiwong was a doctoral student of Tate.

affiliations of justices (using an index of non-Quebec/Catholic attributes), political party of Prime Ministers who appointed the justices (Liberal Party or not), the prime ministers who appointed the justices (Liberal Party Prime Minister Mackenzie King on one hand and others on another), political experience of justices (some political experience or none) and judicial experience of justices (number of years as a judge).<sup>68</sup>

For civil rights and liberties cases as well as economics cases, Tate and Sittiwong found that the region-religion variable influenced justices' voting percentages positively, suggesting that justices who were not from Quebec and not Catholics tended to cast liberal votes.<sup>69</sup> In addition, Tate and Sittiwong found that the variable of whether the political party of prime ministers who appointed the justice was the Liberal Party influenced the casting of liberal votes positively in both types of decisions, while the variable of whether the Prime Minister was Mackenzie King influenced the casting of such votes negatively.<sup>70</sup>

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<sup>68</sup> The voting percentages of justices were based on the number of decisions they decided. Weighted least squares regression was used. A case outcome was regarded as "liberal" when (1) the claimants of a right or liberty won in civil rights and liberty cases or (2) the "less economically privileged" party won in conflicts of economic interests between non-government parties or (3) the government won in cases pitting the government against business on regulations of business. Almost half of the outcomes of the cases in the study were "liberal" (*ibid.* at 908-909). The dependent variable was logged because the distribution of individual justice's voting percentages was positively skewed (*ibid.* at 902-903).

<sup>69</sup> *Ibid.* at 911. Both models – one for civil liberties cases and another for economics cases – reported an adjusted R-square of over 60%. The region-religion variable and the political party variable were significant at the one-percent level, while the King appointee variable was significant at the five-percent level. The prior political experience variable was significant at the one-percent level for the civil rights and liberties cases only.

<sup>70</sup> *Ibid.* Tate and Sittiwong also found that political experience was a variable that had positive influence

Together the two findings suggested that justices who were appointed by Liberal Prime Ministers except Mackenzie King tended to cast liberal votes in both types of decisions. Tate and Sittiwong pointed out: “The conservatizing effect of the Quebec political and legal culture comes through clearly for Canadian justices.”<sup>71</sup> Based on their findings, Tate and Sittiwong concluded that “decision making in the Canadian Supreme Court reflects the same influences that shape Canadian politics outside that court.”<sup>72</sup>

To continue his work on the personal attributes model, Sittiwong embarked on an ambitious data collection project for his doctoral dissertation.<sup>73</sup> For his analysis of Supreme Court of Canada cases from 1875 to 1990, Sittiwong compiled a dataset using data from Peck, Russell, Tate, his 1985 M.A. thesis and his 1989 joint article with Tate.<sup>74</sup> Compiling the longitudinal dataset from various datasets was not easy, as Sittiwong said that “the original data for 1875–1969 collected by Peck and Russell were still in the form of computer punch cards, and it turned out that numerous cards were missing.”<sup>75</sup>

Using the data, Sittiwong built regression models for nonunanimous individual claims cases (individual v. government) and economic claims cases (such as individual v.

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on the casting of liberal votes in civil and liberties cases, suggesting judges who were politicians tended to cast liberal votes in such decisions.

<sup>71</sup> *Ibid.* at 913.

<sup>72</sup> *Ibid.* at 914.

<sup>73</sup> Panu Sittiwong, “Canadian Supreme Court decision-making, 1875–1990: Institutional, group, and Individual level perspectives” (Ph.D Dissertation, University of North Texas, Department of Political Science, 1994).

<sup>74</sup> *Ibid.* at 31-33.

<sup>75</sup> *Ibid.* at 32.

corporations and labor v. management). To analyze the two types of cases, Sittiwong tried a new approach by dividing the study period from 1875 to 1990 into three segments – from 1875 to 1949, from 1949 to 1990 and from 1875 to 1990.<sup>76</sup> He used similar dependent and independent variables that he had used in his M.A. thesis. The dependent variable was a liberal score.<sup>77</sup> The independent variables were religion and region (Quebec non-Catholic, Quebec Catholic, non-Quebec non-Catholic or non-Quebec Catholic), prior political experience (some political experience or none), party of appointing Prime Minister (Liberal or Conservative), prior judicial experience (number of years), prior private practice experience (number of years) and Prime Minister Mackenzie King appointee (yes or no).<sup>78</sup>

Even though the regression models did not exhibit strong explanatory power, they did not provide strong statistical evidence to contradict the prior findings that judges who were Catholic but not from Quebec and judges who were Liberal appointees tended to cast liberal votes. Therefore, Sittiwong argued that region and religion as well as political party of appointing Prime Minister were “consistent predictors in explaining the justice’s voting behavior.”<sup>79</sup>

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<sup>76</sup> For each type of cases, Sittiwong ran multiple regressions in ordinary least squares on the three time segments.

<sup>77</sup> *Supra* note 73 at 76. Sittiwong coded a government win in fiscal claims cases as a liberal vote. The coding is different from what he did in his M.A. thesis (*supra* note 65).

<sup>78</sup> *Ibid.* at 158, 160, 162 and 163.

<sup>79</sup> *Ibid.* at 168. For six of the regression models, only the models for individual claims cases and economic claims from 1949 to 1990 generated an adjusted R-square of about 50%, with most of the variables statistically significant at a five-percent level in a one-tailed test. The region-religion variable and the

In recent years, some American political scientists have produced quantitative tests of findings of previous studies on judicial decision making in the Supreme Court of Canada. Testing the 1989 Tate-Sittiwong personal attributes model, Donald Songer and Susan Johnson divided Supreme Court of Canada nonunanimous decisions from 1949 to 2000 into three types of cases: civil rights and liberties cases; criminal cases (a subset of civil rights and liberties cases); and economic cases.<sup>80</sup> They classified a vote as liberal when the vote was cast for “the party asserting the denial of a civil right or liberty, the defendant in a criminal case, the government in [an] economic regulation case, unions or workers in a labor case, or the economic underdog in a private economic dispute.”<sup>81</sup>

Songer and Johnson confirmed some of the findings by Tate and Sittiwong but cast doubts on others. Two groups of justices – those from Quebec and those who were Liberal appointees – tended to cast conservative votes in criminal cases but liberal votes in economic cases. This is partly in line with the Tate-and-Sittiwong finding that Quebec judges tended to cast conservative votes but raised questions on the finding that judges appointed by Liberal Party tended to cast liberal votes. In addition, Songer and Johnson found that Quebec justices who were Liberal appointees tended to cast liberal votes in

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variable of the political party of appointing Prime Minister were at a five-percent level in a one-tailed test in three out of the six models.

<sup>80</sup> Donald R. Songer and Susan W. Johnson, “Attitudinal Decision Making in the Supreme Court of Canada” (University of South Carolina, U.S., 2002), in 2002 meeting of the Midwest Political Science Association of Chicago (available on the web at [www.cla.sc.edu/poli/faculty/songer/Songer-Johnson.pdf](http://www.cla.sc.edu/poli/faculty/songer/Songer-Johnson.pdf)). The authors did not disclose the exact size of their dataset. The unit of analysis for the dependent variable is Supreme Court justices, ranging from 23 to 33 in their models. They used ordinary least squares.

<sup>81</sup> *Ibid.* at 13.

criminal cases but conservative votes in economic cases. The voting behavior of Quebec justices who were Liberal appointees was the opposite of the behavior of judges who were from Quebec as an individual group and judges who were Liberal appointees as an individual group.<sup>82</sup> The combined group behaved differently than the two groups that made up the combination.

C. L. Ostberg, Matthew Wetstein and Craig Ducat tested two sets of components of prior modeling on judicial decision making in the Supreme Court of Canada and found that ideological variables reflecting the dichotomy of liberalism and conservatism can capture the attitudes of Supreme Court of Canada justices in *Charter* cases but regional and political party variables had no impact on the justices' voting patterns in search and seizure cases.

Examining 58 nonunanimous Charter cases in the first half of the Lamer years of the Supreme Court of Canada from 1991 to 1995, they found that “traditional notions of liberalism and conservatism probably go a long way to explain attitudinal differences between Canadian justices in the post-Charter Lamer Court.”<sup>83</sup> Analyzing a dataset of

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<sup>82</sup> *Ibid.* at 22, Table 3. The models on the three types of cases reported an R-square of over 50%. But the region variable, political party variable and the interaction variable of region and party were only significant at the five-percent level in the criminal case model and economic case model.

<sup>83</sup> See C. L. Ostberg, Matthew E. Wetstein and Craig R. Ducat, “Attitudinal Dimensions of Supreme Court Decision Making in Canada: The Lamer Court, 1991–1995” (2002) 55(1) *Political Research Quarterly* 235. Factor analysis was used to slot factors considered to be influential in judicial decision making in groupings such as liberalism and conservatism. C. L. Ostberg is a political scientist at University of the Pacific, while Matthew E. Wetstein is a political scientist at San Joaquin Delta College. Craig R. Ducat is a political scientist at Northern Illinois University.

279 observations generated from 41 search and seizure cases from 1984 to 1994, Ostberg and Wetstein found that personal attributes such as prior judicial experience (years), region (Quebec or not), gender, political party of appointing Prime Ministers (Liberal or Conservative) and personal ideology of the justices were not the main explanatory variables for case outcomes. Ostberg and Wetstein said: “In deciding search and seizure cases in Canada in the post-Charter years, the dimensions of prime importance are judicial attitudes toward factual circumstances rather than the personal ideology and values of justices.”<sup>84</sup>

In recent years, U.S.-based political scientists have also used multiple regressions to test the Canadian applicability of theories related to judicial decision making that were previously tested in the U.S. One of the theories tested was Marc Galanter’s theory that the haves will come out ahead.<sup>85</sup> Testing the applicability of Galanter’s theory to the Supreme Court of Canada, Roy Flemming and Glen Krutz investigated whether lawyers who argued repeatedly before the Supreme Court of Canada tended to win more than other lawyers.<sup>86</sup>

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<sup>84</sup> See C. L. Ostberg and Matthew Wetstein, “Dimensions of Attitudes Underlying Search and Seizure Decisions of the Supreme Court of Canada” (1998) 31(4) *Canadian Journal of Political Science* 767. They performed logistic regression analysis.

<sup>85</sup> Marc Galanter, “Why the “Haves” Come Out Ahead: Speculations on the Limits of Legal Change” (1974) 9 *Law & Soc. Rev.* 160. The theory states that the rich and the powerful will more likely win in courts than the poor and the weak.

<sup>86</sup> Roy B. Flemming and Glen S. Krutz, “Repeat Litigators and Agenda Setting on the Supreme Court of Canada” (2002) 35(4) *Can. J. of Pol. Sci.* 811. Flemming is a political scientist at Texas A&M University, while Krutz is a political scientist at University of Oklahoma. They performed multivariate analysis in

Analyzing data derived from a total of 1,265 applications from 1993 to 1995, they found that the repeat players did not necessarily come out ahead in the Supreme Court of Canada. They offered two reasons to explain their findings based on the institutional environment at the Supreme Court of Canada. The first one is about the procedure dealing with applications: “The amount of attention an application receives in Canada may well dilute the value of a well-known name as a shortcut to identifying a worthy application; alternatively, this attention increases the chances that a solid case made by a lesser-known name will be recognized.”<sup>87</sup> The second reason is about law clerks: “Another reason why the experience or reputation of repeat players may be discounted in the Canadian Court is that the law clerks lack the knowledge about repeat players that their American counterparts have. Law clerks in Canada are recruited during their senior year in law school to serve the justices. Law clerks in the US Supreme Court typically have clerked for a year or two in the lower courts, where they are likely to see and learn more about lawyers through observation and through the grapevine that winds through the legal system.”<sup>88</sup>

The Flemming-and-Krutz findings seem to contradict the findings by McCormick on repeat players almost a decade ago. In a 1993 study of almost 4,000 Supreme Court of Canada decisions from 1949 to 1992, McCormick found that the government won more often than businesses, which won more often than unions, and unions won more often

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logistic regressions and bivariate analysis in cross-tabulations.

<sup>87</sup> *Ibid.* at 832.

<sup>88</sup> *Ibid.*

than individuals.<sup>89</sup> He said: “The reported decisions of the Supreme Court of Canada since 1949 show a persistent pattern of advantage between various categories of litigants, patterns so strong and so internally consistent that we can statistically ‘predict’ the probability of appellate success from a knowledge of the relative status of the two parties.”<sup>90</sup> However, as Flemming and Krutz examined the propensity to win of repeat players who are lawyers rather than the parties represented by the lawyers as specified by McCormick, more studies are needed to clarify the applicability of Galanter’s theory to explain judicial decision making in Supreme Court of Canada.

Lori Hausegger and Stacia Haynie tested a theory about the use of panel assignments by chief justices to further their personal policy preferences in a comparative study of Canadian and South African courts.<sup>91</sup> The importance of panel assignments was tested on U.S. data before, but the study by Hausegger and Haynie is the first multiple

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<sup>89</sup> Peter McCormick, “Party Capability Theory and Appellate Success in the Supreme Court of Canada, 1949–1992” (1993) 26(3) *Can. Jl. of Pol. Sci.* 523. McCormick said his theory does not mean to downplay “the independence or the impartiality of judges by predicting in advance the general direction of their decisions.” Instead, he said he merely pointed out the winning attributes of parties in cases. He said that such examination is like “suggesting that the taller basketball team will usually win” and the referees will not take that as an insult.

<sup>90</sup> *Ibid.* at 540. McCormick regressed the dependent variable of winning percentage of the parties against an independent variable of what he called “advantage differential,” which represents the advantage of certain parties over others. He said he found a “perfect fit” in his regression based on an unlabelled number of 0.7971. On the assumptions that he ran an ordinary least squares regression and the number was either an  $R^2$  or adjusted  $R^2$ , the one-variable regression result produced the explanatory power he claimed.

<sup>91</sup> Lori Hausegger and Stacia Haynie, “Judicial Decisionmaking and the Use of Panels in the Canadian Supreme Court and the South African Appellate Division” (2003) 37(3) *Law & Soc. Rev.* 635. Both authors are political science professors at Louisiana State University. They conducted conditional logit regression analysis.

regression analysis of panel assignments in the Supreme Court of Canada.

Analyzing data from published Supreme Court of Canada decisions from 1986 to 1997, Hausegger and Haynie found that “[w]hile ideologically distant judges may be assigned to more cases, those closer to the chief justice may be assigned disproportionately to the more salient cases.”<sup>92</sup> They explained the moves by Canadian Chief Justices Dickson and Lamer at least partly as a strategy to maintain a balance of perspectives on panels: “The Canadian chief justices have larger panel sizes and may appoint both extremely conservative and extremely liberal judges to the panels alongside members who are more closely aligned with the chief justice. The ideologues will then be marginalized, and the panel median will remain closer to the chief justice.”<sup>93</sup>

In the same study on panel assignments, Hausegger and Haynie also found evidence for freshman effects in the Supreme Court of Canada. They found that “while both countries assign freshman judges less frequently to panels, Canadian chief justices do so significantly less than their South African counterparts” so “it appears that a judge’s first year on the bench in Canada is regarded very differently than are subsequent years.”<sup>94</sup>

The finding seems to contradict an earlier finding by Ostberg, Wetstein and Ducat of the absence of freshman effect in the Supreme Court of Canada.<sup>95</sup> Ostberg and her

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<sup>92</sup> *Ibid.* at 651.

<sup>93</sup> *Ibid.* at 655.

<sup>94</sup> *Ibid.* at 653.

<sup>95</sup> C. L. Ostberg, Matthew E. Wetstein and Craig R. Ducat, “Acclimation Effects on the Supreme Court of

colleagues used data derived from Supreme Court of Canada cases from 1973 to 1999 to examine the workload of the first 12 months of 15 new justices appointed to courts under Chief Justices Laskin, Dickson and Lamer. The three researchers found no discernible freshmen effects overall, but they said that Canadian chief justices helped ease the transition of newly appointed judges by assigning them fewer cases: “If a justice is eased on the Court in the way we suggest, freshman justices are necessarily afforded more time to establish their voting and opinion voice earlier in their careers than their U.S. counterparts .... As such, they exhibit fewer signs of uncertainty and unease, and establish consistent patterns of judicial behavior early on.”<sup>96</sup> As Hausegger and Haynie and Ostberg, Wetstein and Ducat used different multivariate techniques to analyze different datasets, more studies are needed to determine whether freshmen effects exist in the Supreme Court of Canada.<sup>97</sup>

In sum, the collective work of Tate, Sittiwong, Songer, Johnson, Ostberg, Wetstein, Ducat, Flemming, Krutz, Hausegger and Haynie contributed to the empirical testing of the personal attributes and the institutionalist/strategic models. The use of

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Canada: A Cross-Cultural Examination of Judicial Folklore” (2003) 84(3) *Social Science Quarterly* 704. Variance analysis was used in the study. Basically, the analysis of variance in this case focuses on whether the means of the variables representing the behavior of freshman justices are different from those of other justices in a statistically significant way. The results are by and large negative.

<sup>96</sup> *Ibid.* at 719. The reasoning fits what McCormick offered in 1994. See Peter McCormick, “Judicial Career Patterns and the Delivery of Reasons for Judgment in the Supreme Court of Canada, 1949-1993” (1994) 5 *Sup. Ct. L. Rev.* 499 at 520-521.

<sup>97</sup> Hausegger and Haynie conducted conditional logit regression analysis, while Ostberg and company conducted variance analysis, which is described in note 95.

multiple regressions enabled the researchers to test causal relationships between judicial votes and personal attributes of judges as well as the institutional process of judging. These multivariate analyses showed that repeated tests are required to advance knowledge. For example, the Tate-and-Sittiwong findings about Quebec judges and judges appointed by Liberal prime ministers were tested by Songer and Johnson, while the explanatory power of personal attributes was tested by Ostberg, Wetstein and Ducat. Some of these findings are the same but some are different, so more quantitative tests are required to clarify the findings on the explanatory power of these two personal attributes.

## **2.5 Explaining Judicial Decision Making in U.S. and Canadian Tax Cases**

Not many Canadian and American researchers have published quantitative research that examined whether personal backgrounds of judges influenced their decision making in U.S. and Canadian tax cases. Among the researchers who published such research, American researchers make up the majority. Among the American researchers, Daniel Schneider, a U.S. tax law professor, has done more in examining the correlations between socio-demographic characteristics of U.S. judges and their voting records in U.S. tax cases than anyone else. Therefore, Section 2.5 highlights the work done by Schneider. One way to have a sense of the contributions of Schneider's work is to take a look at the work of others on tax cases first and then take a look at Schneider's work. The other researchers are Sydney Peck; Mark Altieri and his collaborators; and Cindy Ostberg and Matthew Wetstein.

### **2.5.1 Peck on Consistent Patterns in Judicial Decision Making in Supreme Court of Canada Tax Cases**

Sydney Peck, a law professor in Canada introduced earlier in Section 2, is the first to publish quantitative research on judicial decision making in Canadian tax cases. As reviewed in Section 2.2, he conducted scalogram analysis on judicial decision making in the late 1960s. As a part of his bigger project on judicial decision making of the Court, he scaled 28 nonunanimous Supreme Court of Canada tax decisions in 1958-1966.<sup>98</sup> In his scalogram analysis, Peck showed that some Supreme Court of Canada justices voted for taxpayers more often than others in tax cases. In particular, he found that Cartwright was pro-taxpayer, while Taschereau, Ritchie, Spence, Martland and Hall were neutral, but Abbott, Fauteux and Judson were pro-government (or against taxpayers). But the Peck research did not show that the voting outcomes were caused by personal backgrounds or personal policy preferences of the justices because the scalogram analysis can only describe the voting records.

### **2.5.2 Altieri and Company on Ideology and Personal Backgrounds in Judicial Decision Making in U.S. Tax Cases**

Mark Altieri, Jerome Apple, Penny Marquette and Charles Moore, all accounting professors in the U.S., raised the possibility that personal backgrounds may be decision-

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<sup>98</sup> See Supreme Court of Canada, *supra* note 23.

influencing variables in U.S. tax cases. In a short 2001 article, they presented the findings in their chi-square analysis of the voting records of 29 judges in 902 U.S. Tax Court cases in 1993-1996.<sup>99</sup> The accounting professors found that judges appointed by Republican Presidents would more likely rule for taxpayers than those appointed by Democratic Presidents.<sup>100</sup> Although they found that judges with different ideological outlooks would likely vote differently, they cautioned that “[i]t is unclear, however, whether this difference is an ideological one or one based on the different populations from which Republican and Democratic administrations select Tax Court appointees.”

### **2.5.3 Ostberg and Wetstein’s Recent Attempt in Analyzing Judicial Decision Making in Supreme Court of Canada Tax Cases**

In a 2004 working paper, Cindy Ostberg and Matthew Wetstein, both political scientists in the U.S., conducted logistic regression analyses on 134 judicial votes cast in Supreme Court of Canada nonunanimous tax cases in 1984-2002 to determine whether ideology of the Supreme Court of Canada justices and other variables influenced their choice of winners.<sup>101</sup> As part of their 2004 working paper on Canadian union-related

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<sup>99</sup> Mark P. Altieri, Jerome E. Apple, Penny Marquette, and Charles K. Moore, “Political Affiliation of Appointing President and the Outcome of Tax Court Cases” (2001) 84 *Judicature* 310.

<sup>100</sup> *Ibid.* at 313. They conducted a Chi-square difference of means test.

<sup>101</sup> C. L. Ostberg and Matthew E. Wetstein, “Economic Cases and the Attitudinal Model in the Canadian Supreme Court” (Annual Meeting, Midwest Political Science Association, April 15-18, 2004) <<http://www.deltacollege.edu/emp/mwetstein/ostbergwetsteinecon2004.pdf>> (date accessed: 14 February 2005). Both Ostberg and Wetstein are political scientists. Ostberg is a professor at University of the Pacific,

cases and income tax cases, Ostberg and Wetstein regressed votes (dependent variable) against an ideology proxy based on news coverage and other variables (independent variables). The other variables include party of prime minister who appointed the justice, prior private practice of justices, gender, prior trial court ruling, whether a case involved a dispute between national government and a company, an income tax deduction, a tax on stocks or estates, and bankruptcy claims.

The ideology variable is the most interesting variable in the Ostberg-Wetstein analysis. Relying on *Globe and Mail* commentaries on Supreme Court of Canada justices when they were appointed, Ostberg and Wetstein calculated a score that approximates the liberal leanings of each of the justices. Their hypothesis is that “justices scoring higher on the newspaper liberalism score will be more prone to support the taxation power of government than their conservative counterparts.”<sup>102</sup> Under the Ostberg-Wetstein coding scheme based on the *Globe and Mail* commentaries, “justices labeled as most liberal (+2) were Justices La Forest, L'Heureux-Dubé, Lamer, Wilson, Bastarache, and Beetz; justices labeled as moderate-liberals (+1) were Justices Dickson, McLachlin, Le Dain, and LeBel; justices coded as moderates were Justices Iacobucci, Stevenson, Gonthier, Cory, McIntyre, Estey, Arbour, and Binnie; one justice was labeled as a moderate-conservative (-1 – Justice Sopinka); while justices scored as most conservative (-2) were Justices Major and Chouinard.”<sup>103</sup>

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while Wetstein is a professor at San Joaquin Delta College.

<sup>102</sup> *Ibid.* at 13.

<sup>103</sup> *Ibid.* at 35.

Ostberg and Wetstein reported that ideologies of justices influenced their voting patterns in the income tax cases in their logistic regression analysis of Supreme Court of Canada income tax cases after the enactment of the *Charter*. Ostberg and Wetstein said that “there is clear evidence that the newspaper liberalism score of judicial ideology provides a powerful predictor of judicial voting behavior in Canadian tax cases.”<sup>104</sup>

In sum, Peck showed that the voting records of some Supreme Court of Canada justices in tax cases in the 1950s and 1960s exhibited consistently different voting patterns. Altieri, Apple, Marquette and Moore said that voting records of U.S. judges in tax cases in the 1990s hinted that personal backgrounds in addition to ideologies may be the causes of differences in judicial voting patterns in tax cases. Ostberg and Wetstein attributed differences in voting patterns of Supreme Court of Canada justices in tax cases in the 1980s and 1990s to differences in their ideological outlook, like past studies reviewed earlier in Section 2. In Section 2.5.4 below, it is shown that Schneider has demonstrated that a lot more could be done on quantitative empirical research on judicial decision making in U.S. tax cases.

#### **2.5.4 Schneider on the Importance of Personal Backgrounds of Judges in Judicial Decision Making in U.S. Tax Cases**

Schneider seeks to answer two main research questions. The first question is whether socio-demographic characteristics of judges influence their choice of statutory

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<sup>104</sup> *Ibid.* at 23.

interpretation approaches in tax cases. The second question is whether socio-demographic characteristics of judges influence their choice of winners in tax cases. In order to answer the two questions, Schneider conducts his research in a step-wise process, examining the choice of statutory interpretation approaches of judges first and then the choice of winners by these judges.

The sequence of the publication of his research findings reflects this step-wise process. In 2001, he published “Empirical Research about Judicial Reasoning: Statutory Interpretation in Federal Tax Cases,” the first of his quantitative research articles on judicial decision making in tax cases.<sup>105</sup> The article answers his first main question using U.S. trial court data. In 2002, Schneider published “Assessing and Predicting Who Wins Federal Tax Trial Decisions,” which answers his second main question using the same U.S. trial court data he used in the 2001 article.<sup>106</sup> In 2003, Schneider published “Statutory Construction in Federal Appellate Tax Cases: The Effect of Judges' Social Backgrounds and of Other Aspects of Litigation,” which answers his first main question but in the context of U.S. appellate court.<sup>107</sup> In 2005, Schneider published “Using the Social Background Model to Explain Who Wins Federal Appellate Tax Decisions: Do

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<sup>105</sup> Daniel Schneider, “Empirical Research about Judicial Reasoning: Statutory Interpretation in Federal Tax Cases” (2001) 31 *New Mexico Law Review* 325 [hereinafter *Empirical Research About Judicial Reasoning*].

<sup>106</sup> Daniel Schneider, “Assessing and Predicting Who Wins Federal Tax Trial Decisions” (2002) 37 *Wake Forest Law Review* 473 [hereinafter *Assessing and Predicting Who Wins*].

<sup>107</sup> Daniel Schneider, “Statutory Construction in Federal Appellate Tax Cases: The Effect of Judges' Social Backgrounds and of Other Aspects of Litigation” (2003) 13 *Washington University Journal of Law & Social Policy* 257 [hereinafter *Statutory Construction in Federal Appellate Tax Cases*].

Less Traditional Judges Favor the Taxpayer?”<sup>108</sup> His latest installment on judicial decision making in U.S. tax cases aims to answer his second main question using the same U.S. appellate court data he used in his 2003 article.

Although Schneider examined an array of social-demographic characteristics of judges and their decision making, he did not find any significant causal relationships between socio-demographic characteristics of judges and their decision making in tax cases. However, he did find some correlations between some socio-demographic characteristics of judges and their decision making in tax cases in various parts of his studies. One theme that emerges from his studies is that education correlates with judicial decision making in tax cases. Therefore, the following presentation of Schneider’s work focuses more on education than other socio-demographic characteristics. Below is a brief look at Schneider’s four articles.

In his 2001 article, Schneider used descriptive statistics and logistic regressions to analyze a dataset of 488 cases decided by the U.S. tax court and selected federal district courts in 1979-1998.<sup>109</sup> The cases represent a 15% sample of all official Tax Court decisions plus all federal tax decisions of federal district courts in Los Angeles, Chicago and part of New York City in the study period.

Data about the social backgrounds of judges and their choices of statutory interpretation approaches were collected and coded. The statutory interpretation

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<sup>108</sup> Daniel Schneider, “Using the Social Background Model to Explain Who Wins Federal Appellate Tax Decisions: Do Less Traditional Judges Favor the Taxpayer” (2005) 25 Virginia Tax Review 201 [hereinafter Using the Social Background Model].

<sup>109</sup> See “Empirical Research About Judicial Reasoning,” *supra* note 105.

approaches were strict construction (reading the text of the Internal Revenue Code literally), regulations (deferring to regulations promulgated by the Treasury Department), structure (viewing the purpose of a part of the Code as part of the structure of the entire Code), legislative history (interpreting the Internal Revenue Code in the context of legislative history) and practical reasoning (considering statutory text, legislative history, judicial and administrative precedents, current values, consequences of alternate interpretations and public policy).

The social background variables were the gender of the judges (male or female), their race (white or nonwhite), primary professional experience before becoming judges (private practice or government or others), the political party of the U.S. President who appointed the judges (Democrat or Republican), law school education (elite or non-elite), the number of years on the bench when a decision was rendered and the eliteness of college education that was based on a scale developed by Alexander Austin in 1965.

Schneider found that district court judges with more elite education relied on practical reasoning (considering statutory text, legislative history, judicial and administrative precedents, current values, consequences of alternate interpretations and public policy) more than district court judges with less elite education, but Tax Court judges with less elite education relied on practical reasoning more than Tax Court judges with more elite education.<sup>110</sup>

As a companion piece to his 2001 statutory interpretation article, Schneider used

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<sup>110</sup> *Ibid.* at 348-349.

descriptive statistics and regression analysis to examine same dataset and social background variables he used in the 2001 article to determine whether social backgrounds of judges influenced their choice of winners in tax cases.<sup>111</sup> A case outcome was coded as either a taxpayer win or a government win. Schneider recognized the problem posed by multiple-issue cases because which party is the winner is not clear. In such cases, he said he resolved it “cautiously” and “a party that had won on the more important issue (or issues) but lost on a lesser issue (or issues) was still coded as the winner.”<sup>112</sup>

As in the 2001 article, social background variables consisted of the gender of the judges (male or female), their race (white or nonwhite), primary professional experience before becoming judges (private practice or government or others), the political party of the U.S. President who appointed the judges (Democrat or Republican), law school education (elite or non-elite), the number of years on the bench when a decision was rendered and the eliteness of college education. In his logistic regression analysis, Schneider regressed the winner of cases as the dependent variable against all the above social background variables as independent variables.

Using descriptive statistics to describe the outcomes of the sampled cases, Schneider said that the government won 71 percent of the sampled tax cases in 1979-1998 while the taxpayer won 29 percent. He also said the government won more in the district courts than the Tax Court. Reporting on his findings in correlations, Schneider

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<sup>111</sup> See “Assessing and Predicting Who Wins,” *supra* note 106.

<sup>112</sup> *Ibid.* at 493-394.

said “[t]axpayers won more before some types of judges than others, e.g., judges who were women, had more elite college educations, sat for less time when making the decision, and had come from private practice. Finally, several social background factors had an effect on who won. Correlations existed between who won and, respectively, gender, education, tenure, and, to a lesser extent, prior work experience, politics, and race.”<sup>113</sup>

Elaborating on his finding on education, Schneider said “[l]itigation before a judge who had an elite law school degree was associated with decisions in the taxpayer’s favor slightly more than litigating before a judge who did not have such a degree. A judge who lacked an elite law school or college education (or, indeed, who lacked both) could be identified with a blue-collar, working class, background, not a privileged one. Thus, likening a nonelite education with an anti-establishment point of view becomes feasible and renders the correlations about education understandable.”<sup>114</sup>

In his 2003 article, Schneider used descriptive statistics and multinomial logistic regressions to analyze the influence of socio-demographic characteristics of appellate judges on their choice of statutory interpretation approaches in tax cases.<sup>115</sup> The 419-case dataset represents a 10% sample of all listed circuit decisions regarding federal tax during 1996-2000 based on cases in Westlaw. The coding for statutory interpretation approaches and social background variables are similar to his 2001 article. He said “[t]he explanatory

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<sup>113</sup> *Ibid.* at 524.

<sup>114</sup> *Ibid.* at 521.

<sup>115</sup> See “Statutory Construction in Federal Appellate Tax Cases,” *supra* note 107.

(independent) variables in the database include the judge's gender, race, eliteness of college and law school, primary pre-judicial professional experience, the appointing President's economic liberalism, years on the bench when the sampled case was decided, religious preference, whether the case was deemed by the court to have precedential value, whether the taxpayer was represented by a lawyer, and the taxpayer's legal status. The outcome (dependent) variable was the method the court used to interpret the Internal Revenue Code in justifying its decision."<sup>116</sup>

Schneider reported that elite education could be the most promising independent variable in terms of its potential in explaining the choice of statutory interpretation approaches. In the early part of his 2003 article, he said "[m]y earlier work concluded that some aspects of background – most notably education – were in fact closely associated with the judges' methods of justification."<sup>117</sup> In the later part of the article he said "judges who had gone to less elite colleges tending to justify their decisions with the less sophisticated approaches and judges who had gone to more elite schools relying on the more technical approaches."<sup>118</sup> Schneider divided statutory interpretation approaches into less or more "sophisticated" or theoretical methods of interpreting the Internal Revenue Code. The mere reliance on precedent; and total absence of interpretation revealed due to summary dispositions are deemed less sophisticated than strict construction of a statute, deference to the Internal Revenue Service, deference to the

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<sup>116</sup> *Ibid.* at 274-275.

<sup>117</sup> *Ibid.* at 258.

<sup>118</sup> See "Statutory Construction in Federal Appellate Tax Cases," *supra* note 107 at 286.

Code's structure and deference to a Code section's legislative history.

However, finding correlation does not mean finding causation. Schneider expressed doubt on the predictive power of socio-demographic characteristics in judicial decision making. He said “the results in this Article are consistent with my earlier article regarding methods of construction used to interpret the Internal Revenue Code. Social background factors are not highly predictive of how judges justify their tax decisions in the databases I assembled about recent appellate decisions, nor are aspects of the litigation themselves, such as whether the taxpayer was represented by a lawyer.”<sup>119</sup>

In his 2005 article, Schneider used descriptive statistics and multinomial logistic regressions to analyze the same dataset of 419 appellate cases in 1996-2000 used in his 2003 article to determine whether socio-demographic characteristics of appellate judges influence their selection of winners in tax cases.<sup>120</sup> The coding is similar to that in the 2002 article. He said “[t]he independent variables examined were aspects of a judge's background, including gender, race, eliteness of undergraduate education, eliteness of law school education, the judge's primary prior professional service before being appointed to the judgeship from which the judge had rendered the decision, the party of the President who appointed the judge to the appellate bench, the length of the judge's tenure when rendering the opinion, and the judge's religion. The dependent variable in all cases was the party in whose favor a judge ruled.”<sup>121</sup>

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<sup>119</sup> *Ibid.* at 289.

<sup>120</sup> See Using the Social Background Model, *supra* note 108.

<sup>121</sup> *Ibid.* at 227-228.

Schneider reported that “[t]he only independent variable with a result even approaching statistical significance was the eliteness of a judge's law school. Judges with elite law school educations could be predicted to decide more cases in favor of the government.”<sup>122</sup> On a more general note, Schneider said “[t]his article and the earlier trial-level article offer a platform for further qualitative work about the meaning of judges' decisions in favor of the government or the taxpayer. Future researchers should note the evidence presented in these two articles, which reveals that the traditional observations about judges' social backgrounds do not hold true in tax cases. The traditional observations simply cannot explain associations of seemingly "liberal" groups (e.g., judges appointed by Democratic Presidents or black judges), with decisions in the taxpayer's favor.”<sup>123</sup> The traditional notion he referred to is that Republican judges would vote for taxpayers while Democrat judges would vote for the government.

In sum, Schneider is a pioneer in the sense that he is the first legal scholar to use logistic regressions to test the explanatory power of socio-demographic variables in their choice of statutory interpretation approaches and their choice of winners in U.S. tax cases in recent years. As pointed out earlier in Section 2, most quantitative projects on judicial decision making focused on political affiliations of the judges. The move to go beyond the political affiliations of judges in analysis of tax cases marks a major milestone. The move is a step forward because it includes a broader variety of relevant life-influential variables in the modeling.

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<sup>122</sup> *Ibid* at 230.

<sup>123</sup> *Ibid* at 240.

However, Schneider appears to be willing to concede that socio-demographic characteristics of judges do not influence their decision making in tax cases. The tipping point for Schneider could have occurred in the research process for his 2003 article. In his 2001 and 2002 articles, he appeared to be wide open on whether social backgrounds of judges can explain their judicial behavior. In the 2003 article he said that he “wanted to test the hypothesis that federal appellate judges’ rationale in justifying their decisions is fairly unaffected by social backgrounds, both in patterns seen in descriptive statistics and in predictions suggested by regressions,” and he found that “social background is a poor indicator of the methods of statutory construction judges use in justifying their decisions.”<sup>124</sup>

One motivation for this dissertation is to determine whether socio-demographic characteristics of judges are decision-influential variables in judicial decision making in Canadian tax cases, and the exploratory data analyses presented in Section 3 and Section 4 show that quantitative analysis can capture some of the influences of socio-demographic characteristics of Canadian judges in their decision making.

### **3 Linking Socio-demographic Characteristics of Supreme Court of Canada Justices to their Decisions**

Judges are expected to suppress the influences of their personal experiences in the performance of their judicial duties. Retired Justice La Forest wrote that “a judge brings

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<sup>124</sup> See “Statutory Construction in Federal Appellate Tax Cases,” *supra* note 107 at 258-259.

to the task his or her own personal philosophy based on his or her total life experience” but “it is the duty of judges, as much as possible, to discount their own personal feelings or idiosyncratic values and attempt to grasp where the law and society have been, where they are now, and where on the basis of long term social values they should be going.”<sup>125</sup> During the 1982 swearing-in ceremony of Justice Wilson, the first female Supreme Court of Canada justice in Canada, then Minister of Justice Jean Chrétien attributed Wilson’s “wisdom and knowledge” to her “life experiences” but said that she should balance “influences of such things as place of birth, residence, age, sex, religion” with her legal training so she can stay “above the concerns of special interest groups or governments of the day.”<sup>126</sup>

How successfully do judges suppress the influences of their personal backgrounds in judging? One way to find out is to ask the following empirical question: To what extent have personal backgrounds of judges influenced the performance of their judicial duties? Using an extension of the personal attributes model and the Schneider model reviewed in Section 2, this section of the dissertation explores the influences of socio-demographic characteristics of Supreme Court of Canada justices on their income tax decisions in 1920-2003. The data analysis was performed on originally compiled datasets

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<sup>125</sup> G. V. La Forest, “Judicial Lawmaking, Creativity and Constraints” in Rebecca Johnson, John P. McEvoy, Thomas Kuttner, H. Wade MacLauchlan and DeLloyd J. Guth, eds., *Gérard V. La Forest at the Supreme Court of Canada, 1985-1997* (Winnipeg: Published for the Supreme Court of Canada Historical Society by the Canadian Legal History Project, Faculty of Law, University of Manitoba, 2000), 6.

<sup>126</sup> The ceremony was held on March 30, 1982. See Ellen Anderson, *Judging Bertha Wilson: Law as Large as Life* (Toronto: Published for The Osgoode Society for Canadian Legal History by University of Toronto Press, 2001), 128 [hereinafter Wilson].

on Supreme Court of Canada income tax cases and socio-demographic characteristics of the judges who decided the cases. The quantitative analytical approach is an exploratory one as explained in Section 1.

The exploratory data analysis of judicial decision making in Supreme Court of Canada income tax cases finds that social-demographic characteristics of Supreme Court of Canada justices will likely influence their decision making in income tax cases, if the past could offer a peek of the future. The socio-demographic characteristics examined in the exploratory data analysis include political ties of the justices, their regional ties, their careers prior to their appointment to the Supreme Court of Canada such as prior law teaching experience, prior judicial experience and prior law practice in the private sector and their education. According to the exploratory data analysis performed on the data of Supreme Court of Canada income tax cases, the influences of the justices' political ties do not fall along party lines neatly. That means not all justices who were appointed by Liberal Party prime ministers will likely vote for taxpayers or against taxpayers all the time. The influences of regional ties and prior careers are mixed, with some variables exerting influences in some situations. In contrast, the influences of justices' education outside Canada are decidedly one-sided. In general, justices who went to universities outside Canada are more likely to vote against taxpayers than justices who went to universities in Canada in cases with a lot of legal ambiguity, holding all other variables constant.

The rest of Section 3 unfolds as follows. Section 3.1 describes the data used for analysis. Section 3.2 presents the results of bivariate analysis. Section 3.3 presents the

results of multivariate analysis. Section 3.4 presents simulated voting patterns of justices based on the results of the multivariate analysis.

### **3.1 An Initial Look at the Data Available for Analysis of Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Two original Supreme Court of Canada datasets were compiled for the analysis of the influences of socio-demographic characteristics of judges on their decision making in income tax cases. One is a case dataset, while another is a judge dataset.

The dataset on cases contains information of income tax cases decided by the Supreme Court of Canada from 1920 to 2003. The information includes the name of the cases, the year of the cases when they were decided, the outcome of the cases, the individual votes cast by justices on the panel for the cases and the ruling of the prior court. The dataset on cases is based on published judicial opinions in law reports in Quicklaw, especially Dominion Tax Cases, and law reports in eCarswell.

The dataset on judges contains biographical information on the justices who decided the cases based on official Supreme Court of Canada biographies.<sup>127</sup> The biographical information provides socio-demographic information covering the prime ministers who appointed the justices, where the justices were born and where the justices spent the bulk of their careers, the prior professional careers of the justices and their

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<sup>127</sup> The dataset on judges is based on official biographies of justices on [http://www.scc-csc.gc.ca/AboutCourt/judges/index\\_e.asp](http://www.scc-csc.gc.ca/AboutCourt/judges/index_e.asp).

education. The use of the official biographies is to ensure that similar information is available for each justice.

In the case dataset development, conscious efforts were made to divide the cases into unanimous cases and nonunanimous cases. Prior analyses of judicial behavior often focus on nonunanimous cases, which reflect disagreements among judges over legal issues in dispute. Such disagreements are viewed as providing an opening for influences of extra-legal variables such as personal backgrounds to seep into judicial decision making. That is why data analysis in this dissertation adopts the convention and divides up the cases into unanimous and nonunanimous cases, with special attention paid to nonunanimous case data. But such analysis is not a stand-alone exercise. The analysis of data derived from nonunanimous cases is always conducted in comparison with unanimous cases. Therefore, the same data analysis performed on data derived from nonunanimous cases is also performed on data derived from unanimous cases, as shown in the exploratory data analyses later in this section and Section 4.

Some information was not included in datasets used for this dissertation to simplify the dataset development process. The yet-to-be-coded case information includes the nature of cases such as whether the issues in disputes were related to a particular topic such as interest deductibility. As such case-related information could be useful in future data analysis of judicial decision making, such information should be included in the next round of judicial decision making dataset development. Other case-related data for Canadian tax cases that are not coded include the choice of statutory interpretation approaches of judges, whether the issues in the cases were related to General Anti-

Avoidance Rule (GAAR) and whether the cases were related to Generally Accepted Accounting Principles (GAAP).

Like the case dataset, the coverage of the judge dataset is not exhaustive. The judge dataset does not contain data on, for example, the parents and family members of the Supreme Court of Canada justices. Arguably the income of the parents of the judges, for instance, could be a good proxy of the social class and thus upbringing of the judges and an informative variable in the modeling. Such data should be added in future editions of the dataset.

The case dataset and the judge dataset are combined to produce a merged dataset of 1,932 judicial votes cast by 57 Supreme Court of Canada justices in 356 income tax cases decided from 1920 to early 2003. Methodologically, the transformation of the case data into voting data accomplishes three things. First, it increases the number of observations. Second, it changes the unit of analysis to individual justices' votes from cases decided by votes cast by panels made up by the justices. Third, it shifts the focus of analysis to individual action of justices from group action of justices. However, it should be emphasized that the focus of the data analyses of this dissertation remains group behavior of judges. That means the purpose of the dissertation is to determine judicial behavior of different groups of judges – Supreme Court of Canada justices with different socio-demographic characteristics – rather than to unearth information about individual justices.

### 3.1.1 Case Data

The merged dataset is described as follows. According to the merged dataset, the Supreme Court of Canada decided 356 income tax cases, which are estimated to amount to roughly 4% of all cases decided by the Court from 1920 to early 2003.<sup>128</sup> Unanimous cases account for 77% or 273 of all cases, while nonunanimous cases account for 23% or 83 of all cases. The Court did not decide any income tax cases in 1921, 1927, 1928, 1945, 1951, 1989 and 1991. In the remaining years of the study period, the number of cases decided per year ranges from 1 case in 11 different years to 22 cases in 1967.

Chronologically, the first case listed in the merged dataset is *Union Natural Gas Co. of Canada v. Dover (Township)* of 1920.<sup>129</sup> It was the first income tax case decided by the Supreme Court of Canada, about three years after the first introduction of federal income tax in Canada as a war-time revenue-raising measure for the federal government in 1917. The last case listed in the merged dataset is *Markevich v. Canada* of March 2003.<sup>130</sup> It was the last case coded for this round of the judicial decision making dataset development project.

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<sup>128</sup> As no official and definite total case count is found, the following estimation procedure is followed. Assuming that the Supreme Court of Canada rendered an average of 100 judgments a year, the number of judgments rendered over 84 years would total 8,400. Dividing 356 by 8,400 would yield 0.04. In other words, judgments on income tax cases accounted for roughly 4% of total number of judgments rendered.

<sup>129</sup> [1920] 60 S.C.R. 640.

<sup>130</sup> 2003 SCC 9.

**Figure 1: Number of Income Tax Cases Decided by Supreme Court of Canada by Year, 1920-2003**

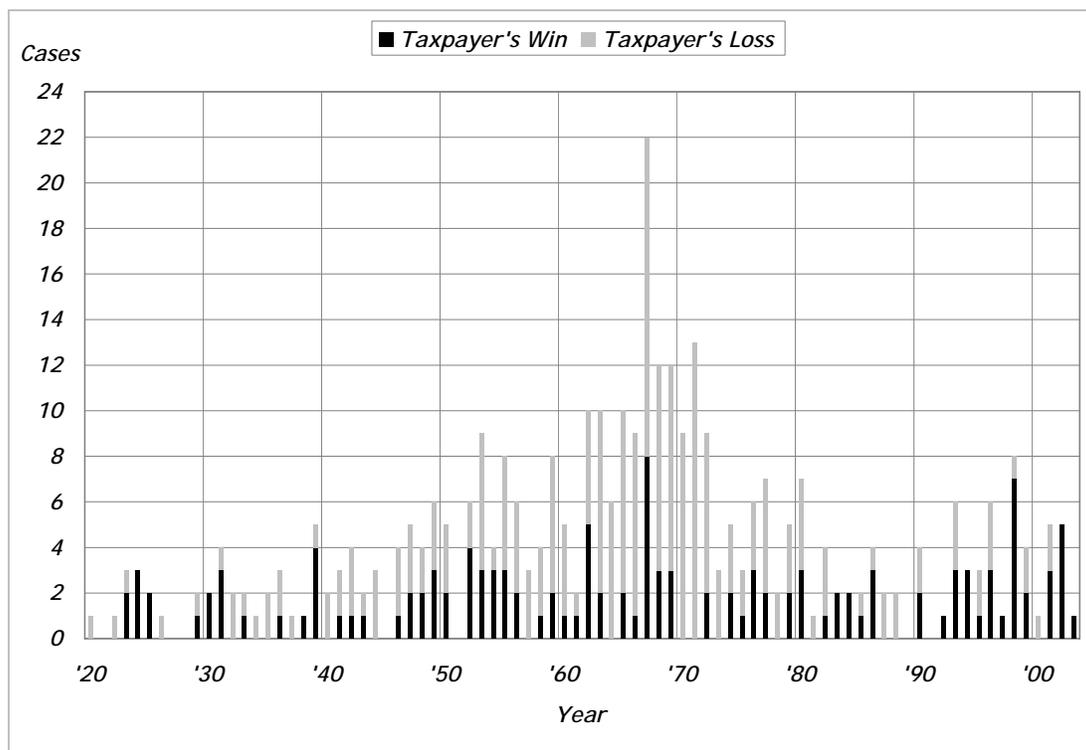


Figure 1 shows a spike in the annual number of income tax cases decided in the late 1960s and early 1970s. The number rose from the 1950s to the 1960s from 53 to 98 or an 85% hike and fell from the 1960s to the 1970s from 98 to 62 or a 37% slide. One reason for the fall is that by 1975 the automatic right of appeal to the Supreme Court of Canada of non-criminal cases was by and large taken away. The automatic right of appeal could be one of the reasons behind the fact that taxpayers appeared to be losing more in the 1960s and 1970s. As anyone could have mounted an appeal at that time, the Supreme Court of Canada had to deal with a lot of cases that might not have merit.

In the study period 1920-2003, the Supreme Court of Canada decided for taxpayers in only 37% or 133 of all cases, but decided against taxpayers in 63% or 223 of

all cases.<sup>131</sup> In addition, 35% or 96 of the unanimous cases were decided for taxpayers, compared with 45% or 37 of the cases in nonunanimous cases.<sup>132</sup>

### 3.1.2 Vote Data

The vote data mirror the win-loss split for taxpayers of the case data.<sup>133</sup> In the study period, 57 justices cast 1,932 votes, of which only 39% or 750 were cast for taxpayers but 61% or 1,182 were cast against taxpayers. Among the votes, 76% or 1,465 votes were cast in unanimous cases, while 24% or 467 of votes were cast in nonunanimous cases. Between the two types of cases, 37% or 547 of votes in unanimous cases were cast for taxpayers, compared with 43% or 203 of votes cast in nonunanimous cases.<sup>134</sup>

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<sup>131</sup> Case outcomes are coded 1 to represent taxpayer wins and 0 to represent taxpayer losses.

<sup>132</sup> Outcomes of the unanimous and nonunanimous cases are not that different. A chi-square test result is not significant at a five-percent level. In other words, the chi-square test result says that it is by chance that cases of a particular type (unanimous or nonunanimous cases) had particular outcomes (for or against taxpayers). The case data are tabulated in a 2 x 2 contingency table, with case outcomes for taxpayers and case outcomes against taxpayers as the rows and unanimous cases and nonunanimous cases as the columns.

<sup>133</sup> Votes are coded 1 to represent outcomes for taxpayers and 0 to represent outcomes against taxpayers.

<sup>134</sup> Voting records in unanimous cases are different from voting records in nonunanimous cases. A chi-square test result is significant at a five-percent level. The voting records are tabulated in a 2 x 2 contingency table, with votes cast for taxpayers and votes cast against taxpayers as the rows and unanimous cases and nonunanimous cases as the columns.

**Figure 2: Voting Records of 57 Supreme Court of Canada Justices in Income Tax Cases, 1920-2003**

Justices	All Votes	Votes in Unanimous Cases		Votes in Nonunanimous Cases			
		Total	For Taxpayers	Against Taxpayers	Total	For Taxpayers	Against Taxpayers
Abbott (1954-1973)	103	85	11	74	18	2	16
Anglin (1909-1933)	13	10	6	4	3	1	2
Arbour (1999-2004)	8	7	6	1	1	1	0
Bastarache (1997-Present)*	24	20	16	4	4	0	4
Beetz (1974-1988)	37	33	17	16	4	0	4
Binnie (1998-Present)	16	14	11	3	2	2	0
Brodeur (1911-1923)	4	2	1	1	2	1	1
Cannon (1930-1939)	12	11	5	6	1	1	0
Cartwright (1949-1970)*	83	59	17	42	24	18	6
Chouinard (1979-1987)	16	14	8	6	2	1	1
Cory (1989-1999)*	25	15	11	4	10	3	7
Crocket (1932-1943)	17	10	3	7	7	4	3
Davies (1901-1924)	5	3	1	2	2	2	0
Davis (1935-1944)	18	10	4	6	8	4	4
de Grandpré (1974-1977)	13	9	4	5	4	2	2
Deschamps (2002-Present)	1	1	1	0	0	0	0
Dickson (1973-1990)	39	35	13	22	4	2	2
Duff (1906-1944)	40	29	14	15	11	7	4
Estey, J. (1944-1956)	37	24	12	12	13	2	11
Estey, W. (1977-1988)	19	16	9	7	3	2	1
Fauteux (1949-1973)	80	64	14	50	16	5	11
Gonthier (1989-2003)	41	31	23	8	10	5	5
Hall (1962-1973)*	61	52	8	44	9	5	4
Hudson (1936-1947)	21	13	4	9	8	3	5
Hughes (1933-1935)	3	2	0	2	1	0	1
Iacobucci (1991-2004)*	42	31	24	7	11	4	7
Idington (1905-1927)	10	7	4	3	3	1	2
Judson (1958-1977)	110	85	17	68	25	1	24
Kellock (1944-1958)	37	21	7	14	16	7	9
Kerwin (1935-1963)	77	49	14	35	28	3	25
La Forest (1985-1997)*	27	18	10	8	9	1	8
Lamer (1980-2000)	22	18	9	9	4	2	2
Lamont (1927-1936)	13	11	6	5	2	1	1
Laskin (1970-1984)*	37	31	5	26	6	4	2
Le Dain (1984-1988)	1	1	0	1	0	0	0
LeBel (2000-Present)	11	10	8	2	1	0	1
L'Heureux-Dubé (1987-2002)	40	29	20	9	11	7	4
Locke (1947-1962)*	66	42	13	29	24	17	7
Major (1992-Present)	35	26	19	7	9	5	4
Malouin (1924)	3	2	2	0	1	0	1
Martland (1958-1982)	108	86	20	66	22	9	13
McIntyre (1979-1989)	23	21	10	11	2	1	1
McLachlin (1989-Present)	36	26	21	5	10	8	2
Mignault (1918-1929)	11	8	5	3	3	2	1
Newcombe (1924-1931)	10	10	7	3	0	0	0
Nolan (1956-1957)	2	1	0	1	1	0	1
Pigeon (1967-1980)*	66	56	15	41	10	7	3
Pratte (1977-1979)	4	4	1	3	0	0	0
Rand (1943-1959)	44	27	6	21	17	4	13
Rinfret (1924-1954)	51	33	13	20	18	9	9
Ritchie (1959-1984)	105	84	24	60	21	9	12
Smith (1927-1933)	10	9	5	4	1	0	1
Sopinka (1988-1997)	20	12	9	3	8	5	3
Spence (1963-1978)*	89	77	14	63	12	8	4
Stevenson (1990-1992)	2	2	2	0	0	0	0
Taschereau (1940-1967)*	66	44	9	35	22	14	8
Wilson (1982-1991)	18	15	9	6	3	1	2
<b>Total</b>	<b>1,932</b>	<b>1,465</b>	<b>547</b>	<b>918</b>	<b>467</b>	<b>203</b>	<b>264</b>

\* Differences between votes in unanimous and nonunanimous cases statistically significant at five-percent level

At first glimpse, the voting patterns in unanimous cases and nonunanimous cases do not look that different from each other, as each has a four-to-six split. For the 1,465 votes cast in unanimous cases, the for-and-against-taxpayers split is roughly four to six, with 37% or 547 of the votes cast for taxpayers, while 63% or 918 of them cast against taxpayers. For the 460 votes cast in nonunanimous cases, the for-and-against-taxpayers split is again roughly four to six, with 44% or 202 of the votes cast for taxpayers, while 56% or 258 of them cast against taxpayers.<sup>135</sup> But delving deeper into the voting records of judges provides more information about possible voting patterns. The following is a series of rank-order breakdowns of Supreme Court of Canada justices by vote count categories to see what kind of information can be unearthed in the tabulations of the vote data by individual justices. Figure 2a shows top ten justices ranked by the number of votes cast and the bottom ten justices ranked by the number of votes cast.

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<sup>135</sup> For example, some judges exhibited consistently voting patterns in unanimous cases that are different from those in nonunanimous cases. One way to illustrate that point is that the differences between voting patterns in unanimous and nonunanimous cases of 11 justices did not occur by chance. The Fisher's exact test results of the voting records of these justices are significant at a five-percent level. The voting records are tabulated in a 2 x 2 contingency tables. One table is set up for each justice, with vote counts (for and against taxpayers) as rows and case types (unanimous and nonunanimous) as columns. The justices are Bastarache, Cartwright, Cory, Hall, Iacobucci, La Forest, Laskin, Locke, Pigeon, Spence and Taschereau. Their names are marked with an asterisk in Figure 2. However, the point being made here is not to name the judges who exhibited consistently different voting patterns in two different case types because there are data constraints such as the small number of votes cast by some judges. The point is just that it is worth examining the voting records of judges in addition to looking at tabulations of the votes, as shown in the rest of the dissertation.

**Figure 2a: Top Ten and Bottom Ten Justices Ranked by Number of Votes Cast in All Income Tax Cases in the Study Period**

<i>Rank</i>	<i>Justices</i>	<i>Total Votes</i>	<i>For Taxpayers</i>	
1	<i>Judson (1958-1977)</i>	<b>110</b>	18	16%
2	<i>Martland (1958-1982)</i>	<b>108</b>	29	27%
3	<i>Ritchie (1959-1984)</i>	<b>105</b>	33	31%
4	<i>Abbott (1954-1973)</i>	<b>103</b>	13	13%
5	<i>Spence (1963-1978)*</i>	<b>89</b>	22	25%
6	<i>Cartwright (1949-1970)*</i>	<b>83</b>	35	42%
7	<i>Fauteux (1949-1973)</i>	<b>80</b>	19	24%
8	<i>Kerwin (1935-1963)</i>	<b>77</b>	17	22%
9	<i>Locke (1947-1962)*</i>	<b>66</b>	30	45%
10	<i>Taschereau (1940-1967)*</i>	<b>66</b>	23	35%
48	<i>Arbour (1999-2004)</i>	<b>8</b>	7	88%
49	<i>Davies (1901-1924)</i>	<b>5</b>	3	60%
50	<i>Brodeur (1911-1923)</i>	<b>4</b>	2	50%
51	<i>Pratte (1977-1979)</i>	<b>4</b>	1	25%
52	<i>Malouin (1924)</i>	<b>3</b>	2	67%
53	<i>Hughes (1933-1935)</i>	<b>3</b>	0	0%
54	<i>Stevenson (1990-1992)</i>	<b>2</b>	2	100%
55	<i>Nolan (1956-1957)</i>	<b>2</b>	0	0%
56	<i>Deschamps (2002-Present)</i>	<b>1</b>	1	100%
57	<i>Le Dain (1984-1988)</i>	<b>1</b>	0	0%

As shown in Figure 2a, top seven of the top ten justices who recorded the most votes served part of their tenure on the Supreme Court of Canada in the mid-1960s. That resonates with the distribution of cases over time as shown in Figure 1. Among the bottom ten justices in terms of the number of votes cast in income tax cases, Brodeur stood out as he only sat on four income tax cases in his over a dozen years of service on the Court. Figure 2b below shows top ten and bottom ten justices ranked by pro-taxpayer votes cast as percent of total votes cast.

**Figure 2b: Top Ten and Bottom Ten Justices Ranked by Voting Percentages for Taxpayers in Income Tax Cases in the Study Period**

<i>Rank</i>	<i>Justices</i>	<i>Total Votes</i>	<i>For Taxpayers</i>	
1	<i>Stevenson (1990-1992)</i>	2	2	100%
2	<i>Deschamps (2002-Present)</i>	1	1	100%
3	<i>Arbour (1999-2004)</i>	8	7	88%
4	<i>Binnie (1998-Present)</i>	16	13	81%
5	<i>McLachlin (1989-Present)</i>	36	29	81%
6	<i>LeBel (2000-Present)</i>	11	8	73%
7	<i>Sopinka (1988-1997)</i>	20	14	70%
8	<i>Newcombe (1924-1931)</i>	10	7	70%
9	<i>Major (1992-Present)</i>	35	24	69%
10	<i>Gonthier (1989-2003)</i>	41	28	68%
48	<i>Laskin (1970-1984)*</i>	37	9	24%
49	<i>Fauteux (1949-1973)</i>	80	19	24%
50	<i>Rand (1943-1959)</i>	44	10	23%
51	<i>Kerwin (1935-1963)</i>	77	17	22%
52	<i>Hall (1962-1973)*</i>	61	13	21%
53	<i>Judson (1958-1977)</i>	110	18	16%
54	<i>Abbott (1954-1973)</i>	103	13	13%
55	<i>Hughes (1933-1935)</i>	3	0	0%
56	<i>Nolan (1956-1957)</i>	2	0	0%
57	<i>Le Dain (1984-1988)</i>	1	0	0%

As shown in Figure 2b, justices in recent decades voted for taxpayers more often than justices in earlier years. Among the top ten justices, Binnie, Sopinka, Major and Gonthier joined the Court after the late 1980s. Three recent justices who voted for taxpayers 67% of the times are ranked 11 to 13: L'Heureux-Dubé (1987-2002), Iacobucci (1991-2004) and Bastarache (1997-Present). In contrast, Judson and Abbott, two of the bottom ten justices, served on the Court from the 1950s to the 1970s. Figure 2b resonates with the Peck findings as shown in Section 2.5.1. Figure 2c below shows top ten and bottom ten justices ranked by the number of votes cast in unanimous cases.

**Figure 2c: Top Ten and Bottom Ten Justices Ranked by Number of Votes Cast in Unanimous Income Tax Cases in the Study Period**

<i>Rank</i>	<i>Justices</i>	<i>Votes in Unanimous Cases</i>	<i>For Taxpayers</i>	
1	<i>Martland (1958-1982)</i>	86	20	23%
2	<i>Judson (1958-1977)</i>	85	17	20%
3	<i>Abbott (1954-1973)</i>	85	11	13%
4	<i>Ritchie (1959-1984)</i>	84	24	29%
5	<i>Spence (1963-1978)*</i>	77	14	18%
6	<i>Fauteux (1949-1973)</i>	64	14	22%
7	<i>Cartwright (1949-1970)*</i>	59	17	29%
8	<i>Pigeon (1967-1980)*</i>	56	15	27%
9	<i>Hall (1962-1973)*</i>	52	8	15%
10	<i>Kerwin (1935-1963)</i>	49	14	29%
48	<i>Idington (1905-1927)</i>	7	4	57%
49	<i>Pratte (1977-1979)</i>	4	1	25%
50	<i>Davies (1901-1924)</i>	3	1	33%
51	<i>Malouin (1924)</i>	2	2	100%
52	<i>Stevenson (1990-1992)</i>	2	2	100%
53	<i>Brodeur (1911-1923)</i>	2	1	50%
54	<i>Hughes (1933-1935)</i>	2	0	0%
55	<i>Deschamps (2002-Present)</i>	1	1	100%
56	<i>Nolan (1956-1957)</i>	1	0	0%
57	<i>Le Dain (1984-1988)</i>	1	0	0%

As shown in Figure 2c, eight of the top ten justices in terms of votes cast in unanimous cases served on the Supreme Court of Canada during the peak of cases heard in the mid-1960s. As unanimous cases account for the majority of cases decided, the top seven justices in Figure 2c and Figure 2a are the same set of justices, and the only differences are their rankings on the two lists. Similarly, the bottom nine justices in both lists comprise the same set of justices. Figure 2d below shows top ten and bottom ten justices ranked by pro-taxpayer votes cast as percent of votes cast in unanimous cases.

**Figure 2d: Top Ten and Bottom Ten Justices Ranked by Voting Percentages for Taxpayers in Unanimous Income Tax Cases in the Study Period**

<i>Rank</i>	<i>Justices</i>	<i>Votes in Unanimous Cases</i>	<i>For Taxpayers</i>	<i></i>
1	<i>Malouin (1924)</i>	2	2	100%
2	<i>Stevenson (1990-1992)</i>	2	2	100%
3	<i>Deschamps (2002-Present)</i>	1	1	100%
4	<i>Arbour (1999-2004)</i>	7	6	86%
5	<i>McLachlin (1989-Present)</i>	26	21	81%
6	<i>Bastarache (1997-Present)*</i>	20	16	80%
7	<i>LeBel (2000-Present)</i>	10	8	80%
8	<i>Binnie (1998-Present)</i>	14	11	79%
9	<i>Iacobucci (1991-2004)*</i>	31	24	77%
10	<i>Sopinka (1988-1997)</i>	12	9	75%
48	<i>Fauteux (1949-1973)</i>	64	14	22%
49	<i>Taschereau (1940-1967)*</i>	44	9	20%
50	<i>Judson (1958-1977)</i>	85	17	20%
51	<i>Spence (1963-1978)*</i>	77	14	18%
52	<i>Laskin (1970-1984)*</i>	31	5	16%
53	<i>Hall (1962-1973)*</i>	52	8	15%
54	<i>Abbott (1954-1973)</i>	85	11	13%
55	<i>Hughes (1933-1935)</i>	2	0	0%
56	<i>Nolan (1956-1957)</i>	1	0	0%
57	<i>Le Dain (1984-1988)</i>	1	0	0%

As shown in Figure 2d, justices who served on the Supreme Court of Canada in recent decades populate the top ten justices ranked by voting percentages for taxpayer in unanimous cases. There are also other recent justices who recorded voting percentages for taxpayers of over 60%: Gonthier (1989-2003) – 74%; Cory (1989-1999) – 73%; Major (1992-Present) – 73%; L'Heureux-Dubé (1987-2002) – 69%; and Wilson (1982-1991) – 60%. In contrast, only two out of the bottom ten justices in terms of voting percentage for taxpayers in unanimous cases ended their tenure on the Court after 1980. Deschamps, Malouin and Stevenson did not vote against taxpayers in unanimous cases,

while Hughes, Le Dain and Nolan did not vote for taxpayers in unanimous cases.

One interesting thing that is not shown in Figure 2b is that Cartwright, who was considered a pro-taxpayer justice by Peck, recorded only a 29% voting percentage for taxpayers in unanimous cases. But his voting percentage for taxpayers in nonunanimous cases is what caught Peck's attention, as shown later in Figure 2f. But before that, Figure 2e below shows top ten and bottom ten justices ranked by the number of votes cast in nonunanimous cases first.

**Figure 2e: Top Ten and Bottom Ten Justices Ranked by Number of Votes Cast in Nonunanimous Income Tax Cases in the Study Period**

Rank	Justices	Votes in		
		Nonunanimous Cases	For Taxpayers	
1	Kerwin (1935-1963)	28	3	11%
2	Judson (1958-1977)	25	1	4%
3	Cartwright (1949-1970)*	24	18	75%
4	Locke (1947-1962)*	24	17	71%
5	Taschereau (1940-1967)*	22	14	64%
6	Martland (1958-1982)	22	9	41%
7	Ritchie (1959-1984)	21	9	43%
8	Rinfret (1924-1954)	18	9	50%
9	Abbott (1954-1973)	18	2	11%
10	Rand (1943-1959)	17	4	24%
48	LeBel (2000-Present)	1	0	0%
49	Smith (1927-1933)	1	0	0%
50	Malouin (1924)	1	0	0%
51	Hughes (1933-1935)	1	0	0%
52	Nolan (1956-1957)	1	0	0%
53	Newcombe (1924-1931)	0	0	n/a
54	Pratte (1977-1979)	0	0	n/a
55	Stevenson (1990-1992)	0	0	n/a
56	Deschamps (2002-Present)	0	0	n/a
57	Le Dain (1984-1988)	0	0	n/a

As shown in Figure 2e, the top ten justices in terms of votes cast in nonunanimous

cases recorded vote counts that are about one third of those of the top ten justices in the unanimous cases. Top ten justices who recorded relatively more votes in nonunanimous cases served before the Lamer years. The list of bottom ten justices does not mean much because of low vote count. Figure 2f shows top ten and bottom ten justices ranked by pro-taxpayer votes cast as percent of votes cast in nonunanimous cases.

**Figure 2f: Top Ten and Bottom Ten Justices Ranked by Voting Percentages for Taxpayers in Nonunanimous Cases in the Study Period**

<i>Rank</i>	<i>Justices</i>	<i>Votes in Nonunanimous Cases</i>	<i>For Taxpayers</i>	
1	<i>Binnie (1998-Present)</i>	2	2	100%
2	<i>Davies (1901-1924)</i>	2	2	100%
3	<i>Cannon (1930-1939)</i>	1	1	100%
4	<i>Arbour (1999-2004)</i>	1	1	100%
5	<i>McLachlin (1989-Present)</i>	10	8	80%
6	<i>Cartwright (1949-1970)*</i>	24	18	75%
7	<i>Locke (1947-1962)*</i>	24	17	71%
8	<i>Pigeon (1967-1980)*</i>	10	7	70%
9	<i>Spence (1963-1978)*</i>	12	8	67%
10	<i>Laskin (1970-1984)*</i>	6	4	67%
43	<i>La Forest (1985-1997)*</i>	9	1	11%
44	<i>Kerwin (1935-1963)</i>	28	3	11%
45	<i>Judson (1958-1977)</i>	25	1	4%
46	<i>Beetz (1974-1988)</i>	4	0	0%
47	<i>Bastarache (1997-Present)*</i>	4	0	0%
48	<i>LeBel (2000-Present)</i>	1	0	0%
49	<i>Smith (1927-1933)</i>	1	0	0%
50	<i>Malouin (1924)</i>	1	0	0%
51	<i>Hughes (1933-1935)</i>	1	0	0%
52	<i>Nolan (1956-1957)</i>	1	0	0%

As shown in Figure 2f, Cartwright recorded a 75% voting percentage for taxpayers in nonunanimous cases. Iacobucci notably misses the top ten cut because he

only recorded a 36% voting percentage for taxpayers in nonunanimous cases. Beetz, Bastarache, LeBel, Smith, Malouin, Hughes and Nolan did not vote for taxpayers in nonunanimous cases.

Among the bottom ten justices in terms of voting percentages for taxpayers in nonunanimous cases, Judson and Kerwin stood out as they almost never voted for taxpayers in nonunanimous cases. Only 52 justices are ranked because five did not vote in nonunanimous cases. Deschamps, Le Dain, Newcombe, Pratte and Stevenson did not vote in any nonunanimous cases in the study period. Binnie, Davies, Cannon and Arbour did not vote against taxpayers in nonunanimous cases.

The rank-order analysis of voting records by individual justices unearths some interesting information. For example, the tabulations show that Cartwright appears to be pro-taxpayer as described by Peck but only in nonunanimous cases while Iacobucci appears to be quite pro-taxpayer but only in unanimous cases. However, the knowledge that could be gleaned from an analysis of the above tabulated form of the voting records is limited because of the following factors. First, as shown in the above discussions of the tables, not all justices voted at least once for taxpayers and at least once against taxpayers in both unanimous and nonunanimous cases. Second, as some of the vote counts are low, percentages of voting for taxpayers and against taxpayers do not mean much so no extensive meaningful percentage analysis can be undertaken. For example, Arbour voted in one nonunanimous case, and she voted for the taxpayer. Her percentage of voting for taxpayers is 100%. Of course, that does not mean she is pro-taxpayer. For judges who cast only a few votes, quantitative analysis could not yield meaningful analysis of their

judicial decision making. Close reading of their decisions becomes the only viable analytical option. Third, more importantly, the tabulations do not tell the whole story about possible voting patterns because the tables do not connect the votes to possible explanations of judicial behavior. To do that, more nuanced data analysis is required.

### **3.2 Bivariate Analysis of Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

In Section 3 the main research question is whether the socio-demographic characteristics of Supreme Court of Canada justices would influence their decision making in income tax cases. The preliminary data analysis in Section 3.1 sets the scene for the following bivariate analysis. The Section 3.1 analysis reveals that (a) the relationship between case outcomes and the case types – unanimous and nonunanimous – were chance occurrences, but (b) the relationship between voting records of justices as a group and case types were not chance occurrences, and the relationship between voting records of some individual justices and case types were also not chance occurrences. Further investigations of the voting patterns are warranted to determine the possible causes of (b). As the first step to answer that, questions about partial explanations of judicial decision making are formulated in light of the data contained in the merged dataset and the findings of prior studies, especially the work of Schneider. I call the questions bivariate questions.

The bivariate questions ask whether the votes cast by the Supreme Court of Canada justices in income tax cases are associated with (1) the outcomes of the cases in

the prior court; (2) the time when they cast their votes; (3) the justices' political ties; (4) their regional ties; their professional experience such as (5) judicial experience, (6) law teaching experience and (7) lawyering experience; and (8) their education. The bivariate questions deal with the relationship between judicial votes and one set of variables only.

Among the bivariate questions, the first two questions provide the context for the rest of the questions. As explained later in this part of the section, (1) is a proxy for the legal model, while (2) provides the temporal context for judicial decision making. The rest deals with the relationships between socio-demographical characteristics of judges and their decisions.

The bivariate questions do not include some questions that prior researchers asked. One is whether votes and gender are associated, while another is whether votes and race are associated. In terms of gender, only five out of the 57 Supreme Court of Canada justices in the merged dataset are female. In the study period, the five justices – Arbour, Deschamps, L'Heureux-Dubé, McLachlin and Wilson – accounted for only about 5% of all votes cast. As the vote count is low, the gender influences are not explored in the exploratory data analysis in this section. However, in the future, gender should definitely be included in data analysis of judicial decision making of the Supreme Court of Canada once more votes from female justices are recorded.

In terms of race, none of the 57 justices are visible minorities. Class is often mentioned along with gender and race. All of the justices could be considered to be pillars in their upper-class communities in society, and the homogeneity is not conducive to quantitative analysis. However, their family backgrounds could be an interesting socio-

demographic variable, and as discussed earlier, data about the parents of judges are on the wish list of data for future dataset development.

The bivariate analysis proceeds as follows. The bivariate questions basically ask whether justices voted in ways as depicted in each question. To answer that, data analysis is performed to find out whether voting patterns examined in each question occurred by chance in the study period. If the voting patterns were chance occurrences, the voting patterns would be unlikely to be caused by the factors specified in the questions. If the voting patterns were not by and large chance occurrences, multivariate analysis will have the possibility to uncover some relationships between the voting outcomes and the factors specified in the questions, holding all variables constant.

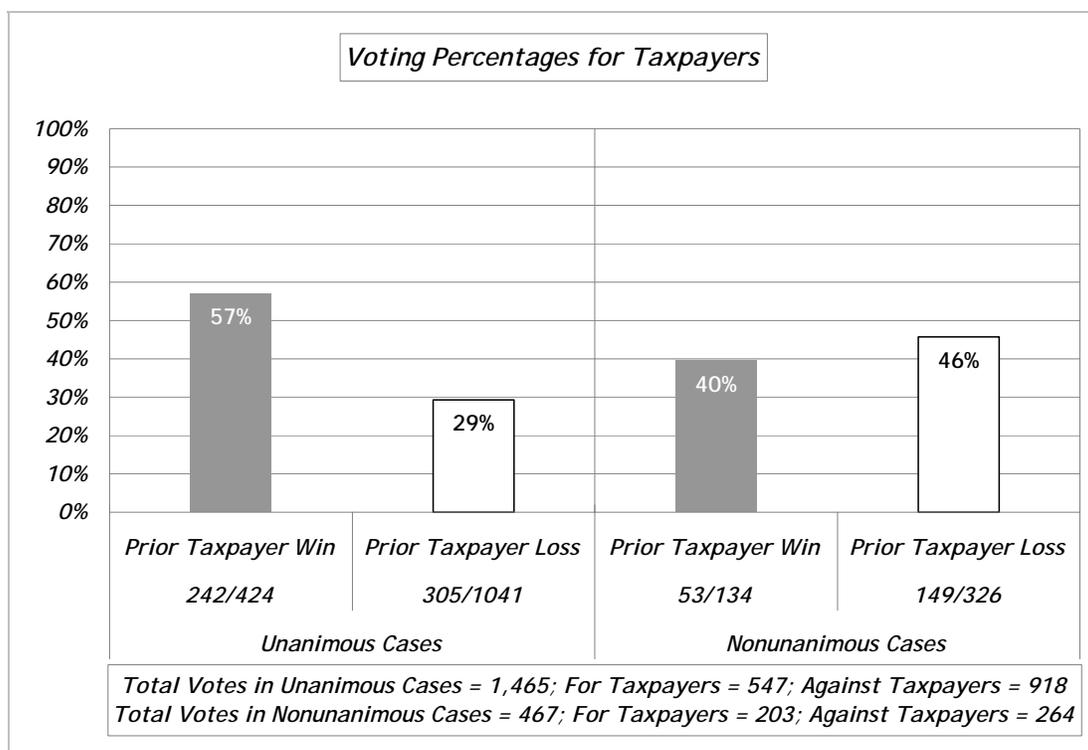
### **3.2.1 Votes Cast by Justices and Prior Taxpayer Wins**

Judges interpret the law in deciding cases. One possible proxy of the influences of the law on judicial decision making is the outcomes of the cases decided by other courts. Although the Supreme Court of Canada does not need to follow the rulings of lower courts, the prior rulings still provide a usable proxy of the influences of the law in judicial decision making. As Schneider said, “[o]ne characterization of judicial decision-making is that judges engage in traditional legal reasoning, applying the law to the facts, and, implicitly, that any judge should arrive at the same result if presented with the same law

and factual situation.”<sup>136</sup> Therefore, the bivariate question is whether the relationship between the votes cast by Supreme Court of Canada justices and the prior court rulings occurred by chance.<sup>137</sup>

Figure 3 shows votes cast in cases that taxpayers had won in the prior court and cases that taxpayers had lost in the prior court in unanimous and nonunanimous cases.

**Figure 3: Voting Records of Justices in Cases With and Without Prior Taxpayer Win**



<sup>136</sup> See Using the Social Background Model, *supra* note 108 at 205.

<sup>137</sup> A taxpayer win in the prior court is coded 1, while otherwise is coded 0. Strictly speaking, the cases that are coded 0 should be cases that taxpayers had not won rather than lost. For the purpose here, it is good enough to call these “cases that taxpayers had lost in the prior court.”

In Figure 3, the numbers inside the bars are the voting percentages for taxpayers, while information about the voting percentages is under the bar. As shown by the first bar to the left, justices voted for taxpayers 57 out of 100 times in unanimous cases that taxpayers had won in the prior court. The bar represents the fact that justices cast 242 of the 424 votes for taxpayers in such cases. The second bar to the left shows that justices voted for taxpayers 29 out of 100 times in unanimous cases that taxpayers had lost in the prior court. The bar represents the fact that justices cast 305 of the 1,041 votes for taxpayers in such cases.

The interpretation of the chart is the same for the two bars representing votes cast in nonunanimous cases. The second bar to the right shows that justices voted 40 out of 100 times for taxpayers in nonunanimous cases that taxpayers had won in the prior court. That represents the fact that justices cast 53 of the 134 votes for taxpayers in such cases. The bar to the right shows that justices voted 46 out of 100 times for taxpayers in nonunanimous cases that taxpayers had lost in the prior court. That represents the fact that justices cast 149 of 326 votes for taxpayers in such cases.

Figure 3 illustrates the finding that the voting percentages for taxpayers are quite different between cases with prior taxpayer win and cases with prior taxpayer loss in unanimous cases but the voting percentages are not as different in nonunanimous cases. In fact, the difference in voting behavior in unanimous cases did not occur by chance.<sup>138</sup>

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<sup>138</sup> The chi-square test of the voting records and outcomes of prior court decisions in unanimous cases is significant at a five-percent level. That means the maximum likelihood for the differences between the patterns of the two sets of data to be chance occurrences is only five out of 100 times. The chi-square tests

### 3.2.2 Votes Cast by Justices and When the Votes Were Cast

Justices might act in ways that are in tune with the times in which in live. One way to capture some impact of time on judicial decision making is to divide the study period into segments and compare judicial behavior in one against another. As Ostberg and Wetstein claimed that Supreme Court of Canada justices were prone to vote for taxpayers in post-*Charter* years,<sup>139</sup> the year of the enactment of the *Charter* – 1982 – is chosen as the dividing line. Therefore, the bivariate question is whether the relationship between votes cast by Supreme Court of Canada justices and the time period – pre-*Charter* era or post-*Charter* era – the votes were cast occurred by chance.<sup>140</sup>

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are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows while cases that taxpayers who had won in the prior court and cases that taxpayers who had lost in the prior court as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

<sup>139</sup> *Supra*, note 101. The *Charter* effect is discussed in more details in the multivariate analysis later in this section.

<sup>140</sup> A vote cast in the post-*Charter* era is coded 1, while otherwise is coded 0.

**Figure 4: Voting Records of Justices in Pre-Charter and Post-Charter Years**

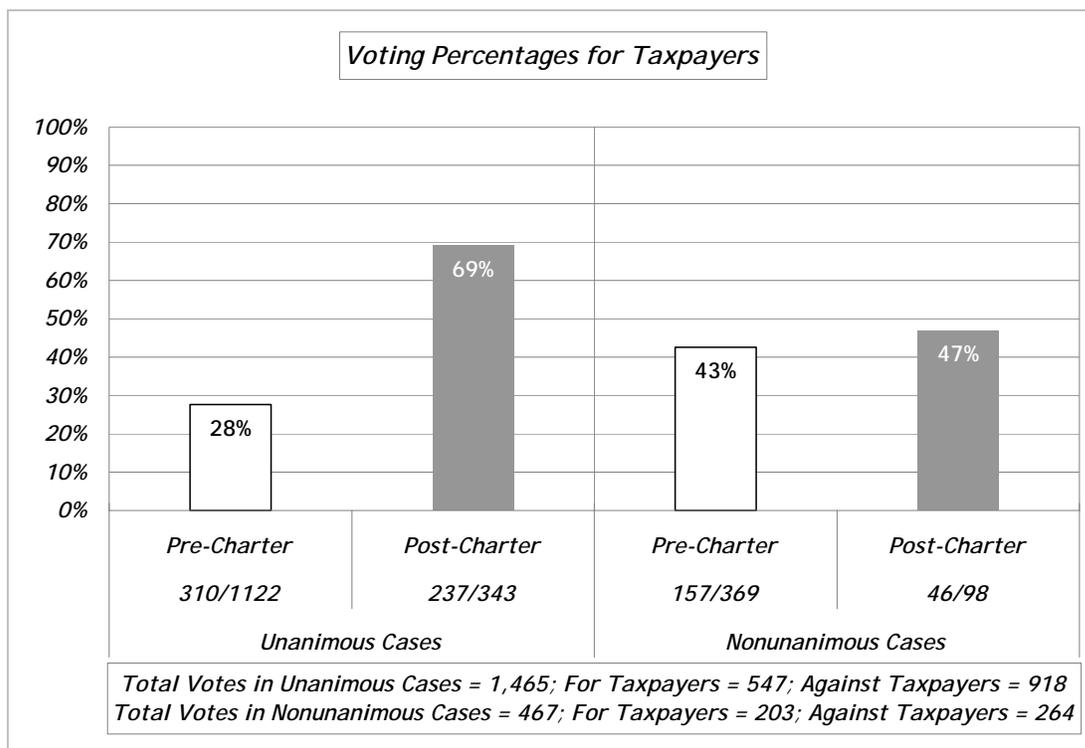


Figure 4 shows voting records of justices before and after 1982, illustrating the finding that the voting percentages for taxpayers are quite different between unanimous cases in the pre-Charter era and cases in the post-Charter era but not so different between nonunanimous cases in the two time periods. In unanimous cases, 28% or 310 of the 1,122 votes in pre-Charter cases were cast for taxpayers but 69% or 237 of the 343 votes in post-Charter cases were cast for taxpayers. In nonunanimous cases, 43% or 157 of the 369 votes in pre-Charter cases were cast for taxpayers, while 47% or 46 of the 98 votes in post-Charter cases were cast for taxpayers. In fact, the difference in voting

behavior in unanimous cases did not occur by chance.<sup>141</sup>

### **3.2.3 Votes Cast by Justices and Political Party of Prime Ministers Who Appointed the Justices**

A possible explanation of judicial decision making is the political leanings of judges. However, unlike their American counterparts, Canadian judges seldom declare their political leanings in public, and Supreme Court of Canada justices are no exception. Therefore, a proxy is needed to represent their political leanings.

The political party of the Canadian prime ministers who appointed the justices could serve as a proxy. The underlying idea is that Canadian prime ministers are supposed to be more likely to appoint those who share similar views in politics to the Supreme Court of Canada than those who do not to the Court. The choice of the proxy is in line with the modeling practice in prior quantitative research on judicial decision making in the U.S., where the political parties of the presidents who appointed the U.S. Supreme Court justices are used as the proxy variable. As reviewed in Section 2.5, Altieri, Apple, Marquette and Moore as well as Schneider used the political party of U.S.

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<sup>141</sup> One possible reason for the difference is that, as mentioned earlier in Section 3.1.1, the Supreme Court of Canada needed to hear any case someone brought forward in most of the pre-*Charter* era. In the mid-1970s the Court stopped the practice of hearing almost all appeals. The chi-square test result for the unanimous cases is significant at a five-percent level. The chi-square tests are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows and pre-*Charter* and post-*Charter* cases as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

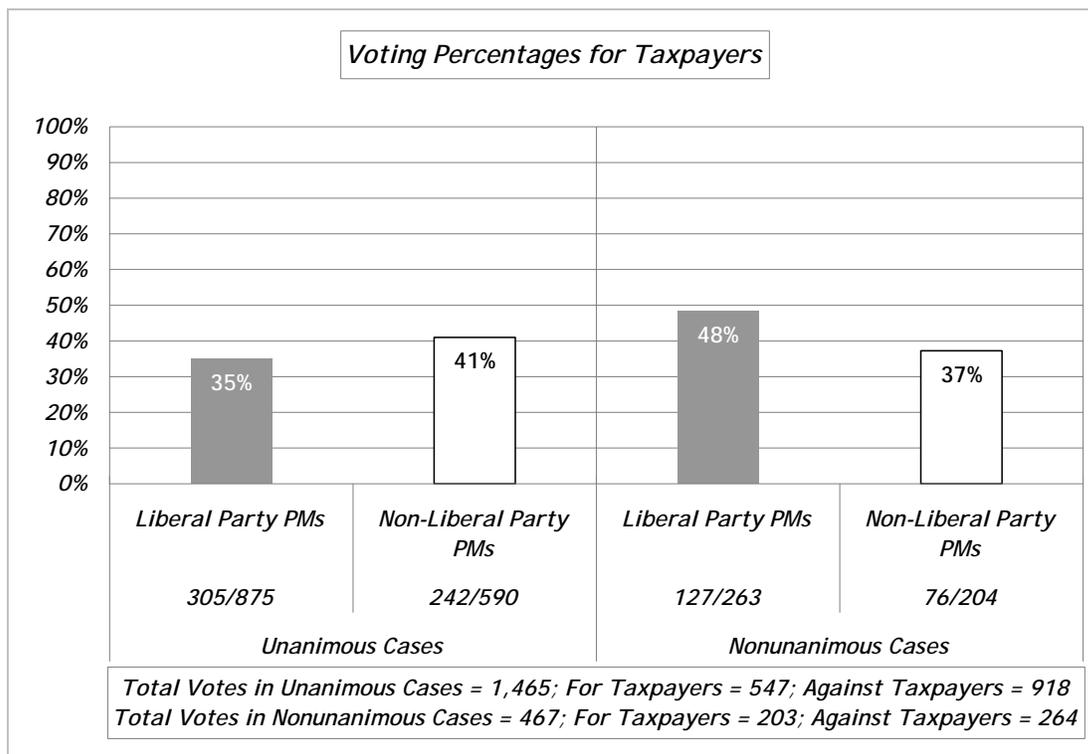
presidents who appointed the judges as the proxy in their respective analyses of U.S. tax cases. Therefore, the bivariate question is whether the relationship between votes cast by Supreme Court of Canada justices and the political affiliation of the prime ministers who appointed by the justices occurred by chance, and justices are divided into those appointed by Liberal Party prime ministers and others.<sup>142</sup>

Figure 5 shows voting records of justices by the political parties of the prime ministers who appointed them. In 1920-2003, a total of 13 prime ministers formed 17 governments in Canada. Among these prime ministers, only 11 who formed 16 governments appointed justices to the Supreme Court of Canada. Among these prime ministers, six were from the Liberal Party.

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<sup>142</sup> Appointed by Liberal Party prime ministers is coded 1, while otherwise is coded 0.

**Figure 5: Voting Records of Justices Appointed by Two Groups of Prime Ministers**



As shown in Figure 5, justices appointed by Liberal Party prime ministers voted for taxpayers less than justices appointed by non-Liberal Party prime ministers in unanimous cases, but the pattern is in reverse in nonunanimous cases. The differences between voting percentages for taxpayers of justices appointed by Liberal Party prime ministers and other prime ministers were not chance occurrences.<sup>143</sup> As the study period covers a long stretch of time, it could be informative to see whether the percentages of voting for taxpayers of 41% in unanimous cases and 37% in nonunanimous cases by

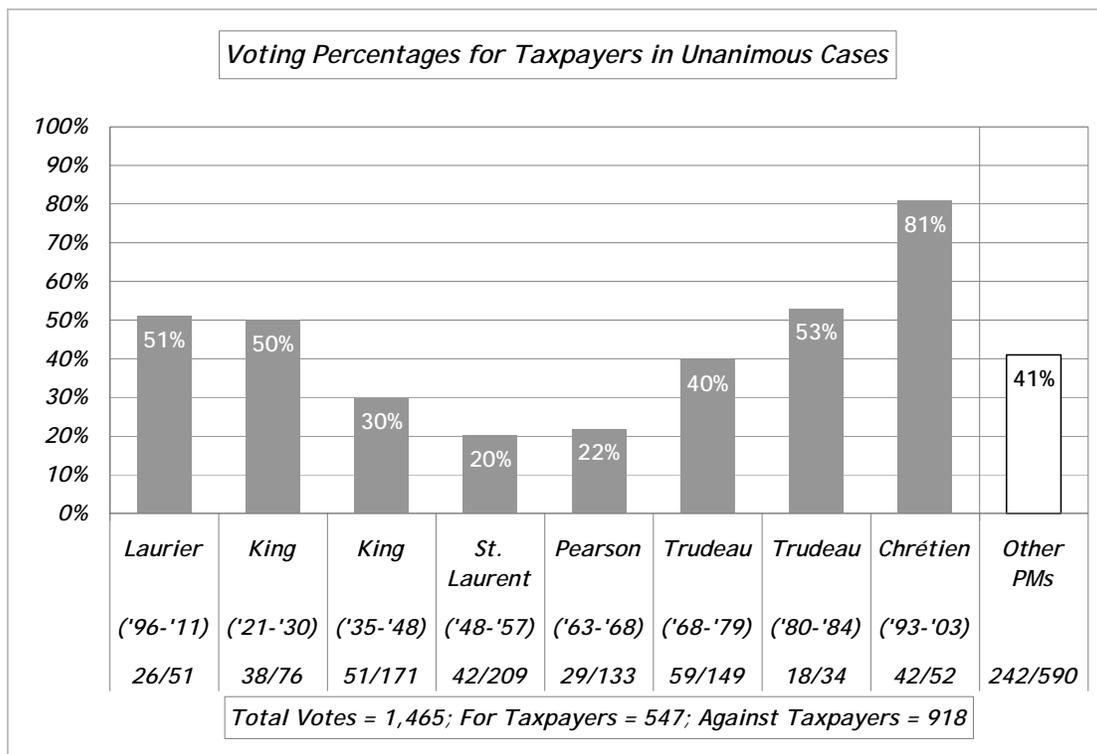
<sup>143</sup> The chi-square tests are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows and the political parties of appointing prime ministers as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases. The chi-square test results are significant at a five-percent level for both unanimous and nonunanimous cases.

judges appointed by Liberal Party prime ministers are representative of all these judges over time. Thus, the political ties variable is broken down by each Liberal Party prime minister, with non-Liberal Party prime ministers as one category, as shown in Figure 6 and Figure 7. In other words, the two figures break down the columns representing the votes of Liberal appointees in Figure 4 and Figure 5 by individual prime ministers.

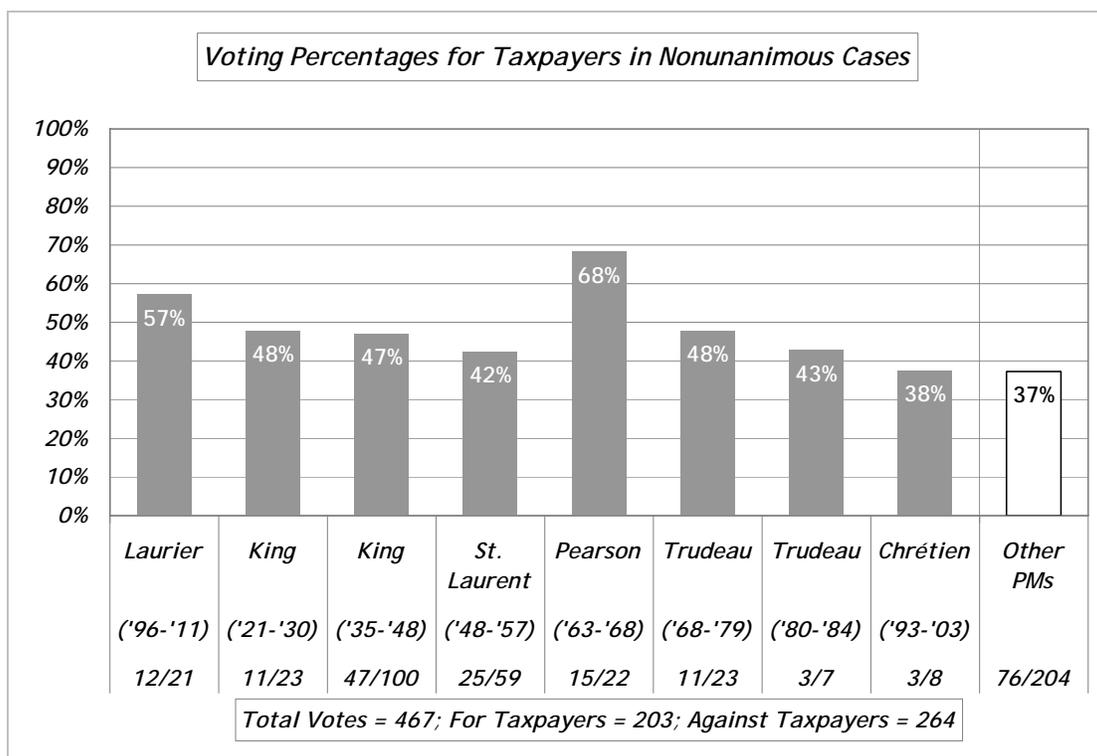
The Liberal Party appointees are (1) Wilfrid Laurier in his term from July 11, 1896 to October 6, 1911; (2) Mackenzie King in his first term from December 29, 1921 to June 28, 1926 and his second term from September 25, 1926 to August 7, 1930; (3) King in his third term from October 23, 1935 to November 15, 1948; (4) Louis St. Laurent in his term from November 15, 1948 to June 21, 1957; (5) Lester Pearson in his term from April 22, 1963 to April 20, 1968; (6) Pierre Trudeau in his first term from April 20, 1968 to June 3, 1979; (7) Trudeau in his second term from March 3, 1980 to June 30, 1984; and (8) Jean Chrétien in his term from Nov. 4, 1993 to Dec. 12, 2003. The lone Liberal Party appointee in the study period excluded is John Turner, who did not appoint any Supreme Court justice in his term from June 30, 1984 to September 17, 1984.

The non-Liberal Party prime ministers are grouped into one category. They were Robert Borden (Unionist: October 12, 1917 – July 10, 1920); Richard Bennett (Conservatives: August 7, 1930 – October 23, 1935); John Diefenbaker (Progressive Conservatives: June 21, 1957 – April 22, 1963); Joe Clark (Progressive Conservatives: June 4, 1979 – March 2, 1980); Brian Mulroney (September 17, 1984 – June 25, 1993). Kim Campbell (Progressive Conservatives: June 25, 1993 – November 4, 1993) was excluded because she did not appoint any Supreme Court of Canada justices.

**Figure 6: Votes in Unanimous Cases of Justices by Prime Ministers Who Appointed Them**



**Figure 7: Votes in Nonunanimous Cases of Justices by Prime Ministers Who Appointed Them**



The two figures show that the variability of the voting percentages for taxpayers in unanimous cases by Liberal Party prime ministers over time is higher than those in nonunanimous cases. The variability leads to the modeling decision to use the finer categories of the political ties variable in Section 3.3, as in modeling judicial voting patterns over time an aggregate may not represent the attributes of its components.

### 3.2.4 Votes Cast by Justices and Where Justices Built Their Careers

Justices from different parts of the Canadian cultural mosaic might have been influenced by practices, customs and cultures of where they are from. Currently, the *Supreme Court Act* ensures that three Supreme Court of Canada justices must be hailed from Quebec.<sup>144</sup> Among the remaining six, three are usually from Ontario, two from the West, and one from Atlantic Canada. As shown in the literature review in Section 2, Quebec justices voted differently as a group on a consistent basis in comparison with other justices. Thus, the bivariate question is whether the relationship between votes cast by justices and their regional ties occurred by chance, and justices are divided into those from Quebec and others.<sup>145</sup> Figure 8 shows the voting records of justices with ties to Quebec and those without ties to Quebec.

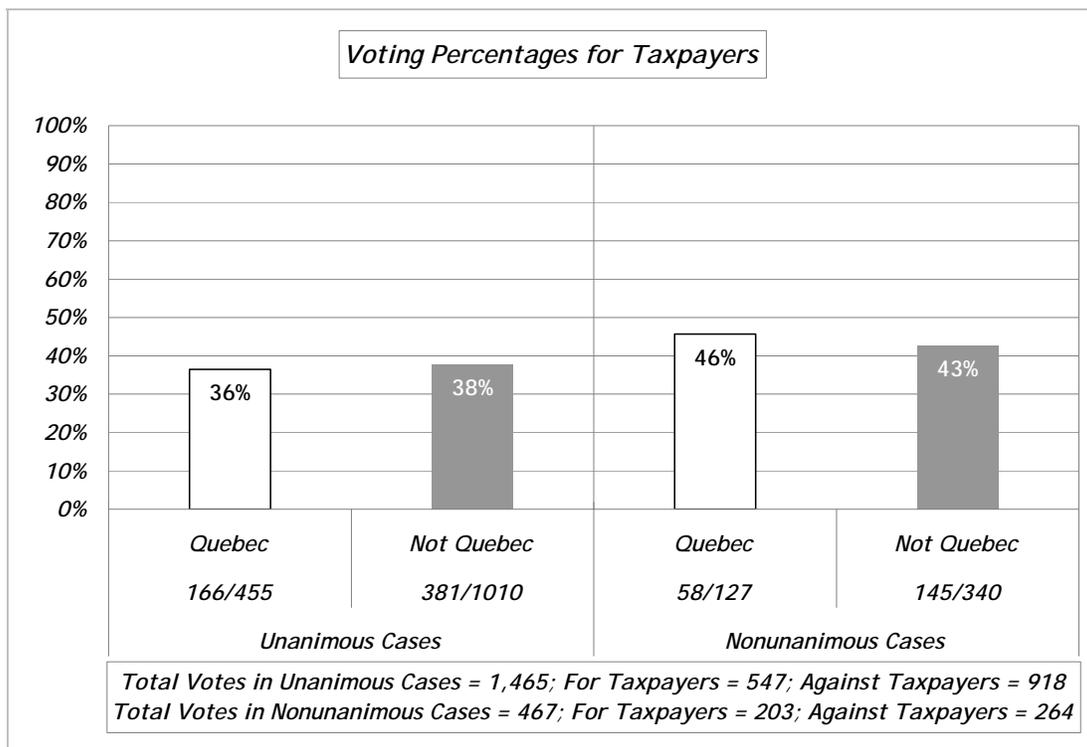
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<sup>144</sup> *Supreme Court Act*, [R.S. 1985, c. S-26], s.6:

At least three of the judges shall be appointed from among the judges of the Court of Appeal or of the Superior Court of the Province of Quebec or from among the advocates of that Province.

<sup>145</sup> Having Quebec ties is coded 1, while otherwise is coded 0.

**Figure 8: Voting Records of Justices With and Without Ties to Quebec**



The definition of regional ties needs to be clarified. Although the convention in quantitative analysis of judicial decision making is to consider the birthplace of the judge as the place to which he had ties, such a convention may not accurately capture the regional influences on judges. The judicial appointment process to the Supreme Court of Canada at times regards the place where the judge built her or his career as the place the judge “represents.” For example, Justice McIntyre, who was appointed as a justice from British Columbia, was born in Quebec but practiced law as well as served both as a trial judge and an appellate judge in British Columbia for a total of over 20 years.<sup>146</sup> In this

<sup>146</sup> See McIntyre, *infra* note 191. Incidentally, the appointment of McIntyre to replace Justice Spence, who was from Ontario rather than British Columbia, was said to be a strategic move by Trudeau to “placate the

dissertation, the place where a justice spent a large part of her or his working lives is considered the region to which she or he had ties.

Figure 8 illustrates the finding that the voting percentages for taxpayers by justices with and without ties to Quebec are not that different in unanimous and nonunanimous cases.<sup>147</sup> To further examine that, two questions on regional ties are added: one question concerning Ontario and one question concerning anywhere other than Ontario and Quebec.<sup>148</sup> One is whether the relationship between votes cast by justices and their tie to Ontario occurred by chance.<sup>149</sup> The other is whether the relationship between votes cast by justices and their tie to anywhere other than Ontario and Quebec occurred by chance.<sup>150</sup> Figure 9 shows voting records of justices with ties to Ontario, Quebec and anywhere other than Ontario and Quebec. The figure illustrates the finding that the voting percentages of the non-Quebec justices are not that different from Quebec justices in unanimous cases and nonunanimous cases.<sup>151</sup>

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British Columbia bar which thought the province had been ignored.” See Dickson, *infra* note 188, at 186-187.

<sup>147</sup> The chi-square tests are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows and with and without ties to Quebec as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases. The chi-square test results are not statistically significant at a five-percent level for both unanimous and nonunanimous cases.

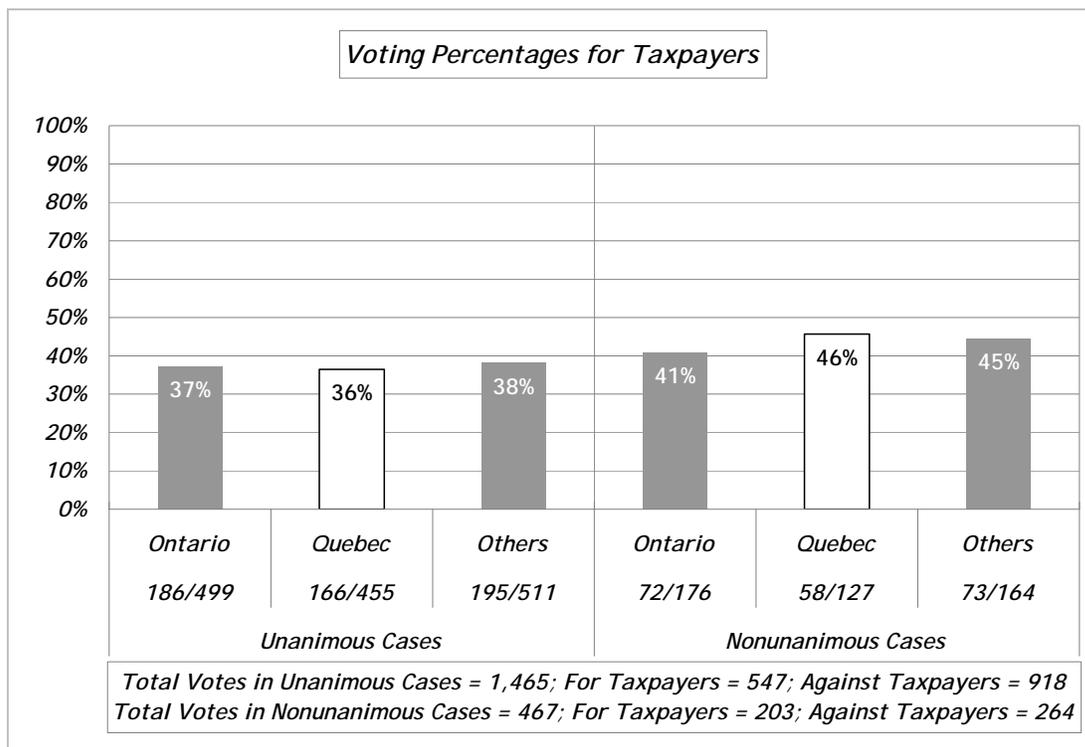
<sup>148</sup> Thus the set of two dummy variables represents three categories – whether justices spent a large part of their working lives in Ontario, Quebec or somewhere other than Ontario and Quebec.

<sup>149</sup> Justices with ties to Ontario are coded 1, while others are coded 0.

<sup>150</sup> Justices with ties to areas other than Ontario and Quebec are coded 1, while others are coded 0.

<sup>151</sup> The chi-square test results are not statistically significant at a five-percent level for both unanimous and nonunanimous cases. The chi-square tests are set up as a 2 x 3 contingency tables, with votes cast for

**Figure 9: Voting Records of Justices with Different Regional Ties**



The upcoming Section 3.2.5, Section 3.2.6 and Section 3.2.7 present bivariate findings on votes cast by justices and their professional careers prior to their appointment to the Supreme Court of Canada. Prior professional experiences of Supreme Court of Canada justices are assumed to have shaped their thought process and thus influenced their decision making in income tax cases as justices spent a large part of their lives doing what they did as judges or law teachers or lawyers before they became successful enough to be appointed to the Court. Therefore, three particular types of professional experiences covering aspects of the justices' prior careers in judging, teaching and lawyering are

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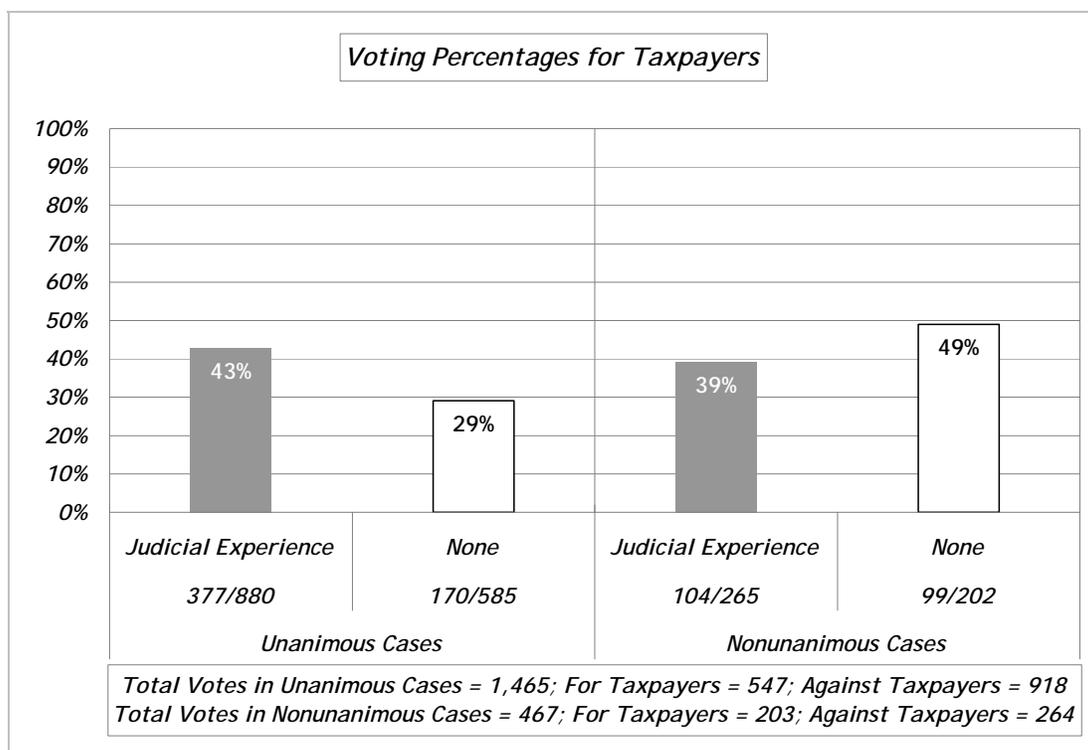
taxpayers and votes cast against taxpayers as the rows while having ties to Ontario, Quebec and other areas as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

explored in relation to judicial decision making.

### 3.2.5 Votes Cast by Justices and Their Prior Judicial Experience

The general bivariate question in terms of judicial experience is whether the relationship between votes cast by the justices and their prior judicial experience occurred by chance.<sup>152</sup> Figure 10 shows the voting records of justices by their prior judicial experience.

**Figure 10: Voting Records of Justices With and Without Prior Judicial Experience**



<sup>152</sup> Having judicial experience is coded 1, while otherwise is coded 0.

The figure illustrates the finding that the voting percentages for taxpayers of justices who were judges before are quite different from those who were not judges before in both unanimous cases and nonunanimous cases. Justices with prior judicial experience voted for taxpayers more than justices without prior judicial experience in unanimous cases, but the pattern is in reverse in nonunanimous cases. In fact, the differences did not occur by chance.<sup>153</sup>

To further examine the judicial experience variable, the general bivariate question on judicial experience is broken down further into three questions.<sup>154</sup> The first question is whether the relationship between votes cast by justices and their trial court experience occurred by chance.<sup>155</sup> The second question is whether the relationship between votes cast by justices and their appellate court experience occurred by chance.<sup>156</sup> The third question is whether the relationship between votes cast by justices and their trial and appellate court experiences occurred by chance.<sup>157</sup>

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<sup>153</sup> The chi-square test results are statistically significant at a five-percent level for both unanimous and nonunanimous cases. The chi-square tests are set up as a 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows while having prior judicial experience and having no prior judicial experience as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

<sup>154</sup> A set of three dummy variables is coded to represent whether justices sat on the bench at the trial court, appeal court or both courts.

<sup>155</sup> Justices who were trial judges are coded 1, while others are coded 0.

<sup>156</sup> Justices who were appellate judges are coded 1, while others are coded 0.

<sup>157</sup> Justices who were trial and then appellate judges are coded 1, while others are coded 0.

**Figure 11: Voting Records of Justices Divided by Types of Prior Judicial Experience**

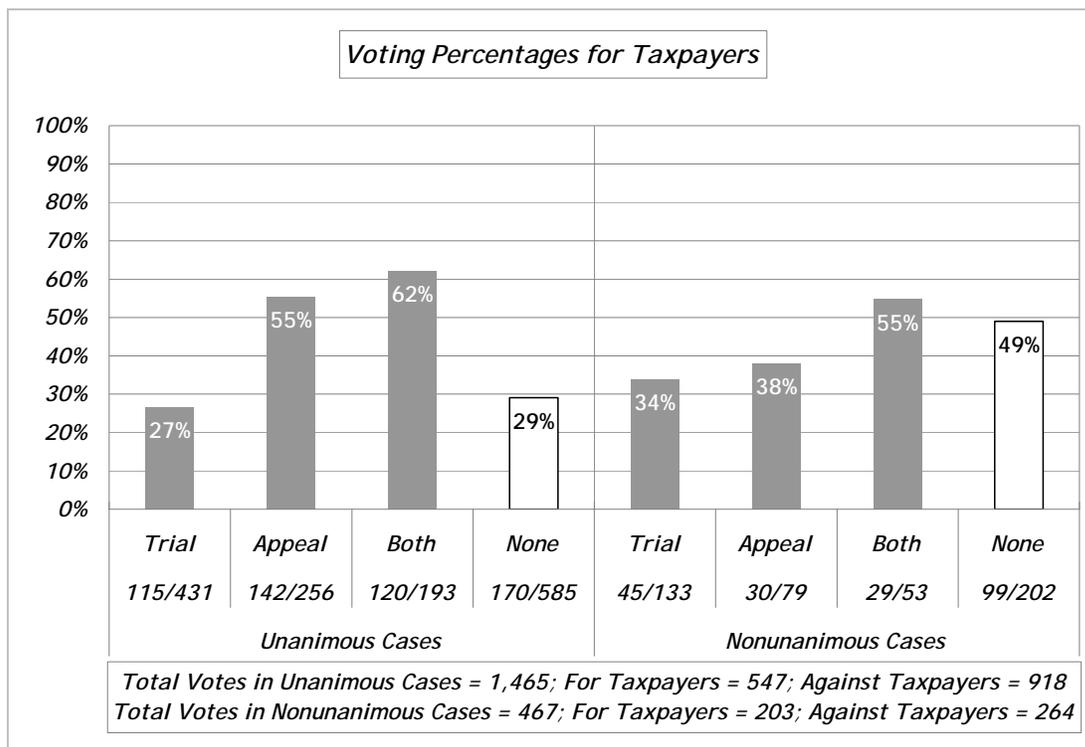


Figure 11 illustrates the finding that the voting percentages for taxpayers of justices who had prior judicial experience as a group are quite different from those of justices who had no prior judicial experience in both unanimous and nonunanimous cases. In unanimous cases, justices with trial court experience voted for taxpayers less than justices without prior judicial experience, but justices with appellate court experience and with experiences in both trial and appellate courts voted for taxpayers more than justices without prior judicial experience. However, in nonunanimous cases, justices with trial or appellate court experiences voted for taxpayers less than justices without prior judicial experience, but justices with experiences in both trial and appellate courts voted for taxpayers more than justices with no prior judicial experience. In fact,

the differences did not occur by chance.<sup>158</sup>

### 3.2.6 Votes Cast by Justices and Their Law Teaching Experience

The general bivariate question on law teaching experience is whether the relationship between votes cast by justices and their law teaching experience occurred by chance.<sup>159</sup> Figure 12 shows votes by justices divided by their prior law teaching experience. In both unanimous and nonunanimous cases, justices who taught law before voted for taxpayers more than justices who did not teach law before. In fact, the differences in the voting percentages between the two groups of justices did not occur by chance.<sup>160</sup>

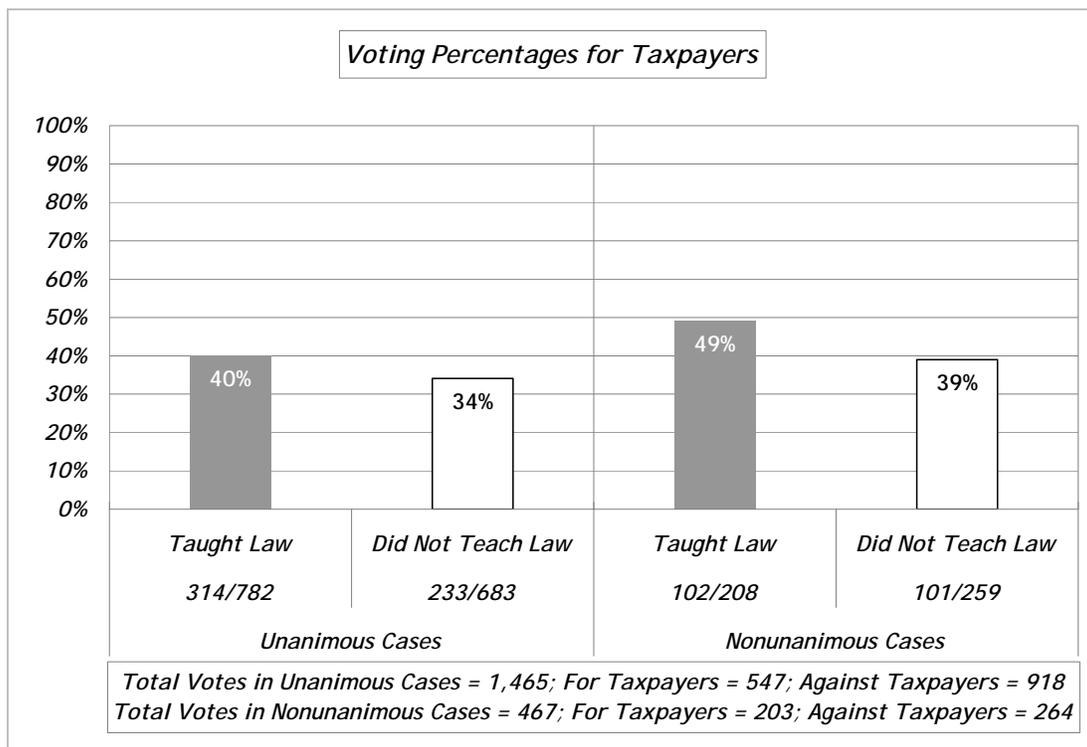
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<sup>158</sup> The chi-square test results are statistically significant at a five-percent level for both unanimous and nonunanimous cases. The chi-square tests are set up as 2 x 4 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows while having judicial experience on a trial court, an appellate court, in both levels of courts and none of the above as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

<sup>159</sup> Having law teaching experience is coded 1, while otherwise is coded 0.

<sup>160</sup> The chi-square test results are statistically significant at a five-percent level for both unanimous and nonunanimous cases. The chi-square tests are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows while having prior law teaching experience and having no prior law teaching experience as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

**Figure 12: Voting Records of Justices With and Without Law Teaching Experience**



To further examine the differences, the general question is broken down into two questions.<sup>161</sup> The first question is whether the relationship between votes cast by justices and their full-time law teaching experience occurred by chance.<sup>162</sup> The second question is whether the relationship between votes cast by justices and their part-time law teaching experience occurred by chance.<sup>163</sup> Figure 13 shows the voting records of justices divided by the types of law teaching experience.

<sup>161</sup> A set of two dummy variables for three categories is coded to represent whether justices were full-time law teachers or part-time law teachers.

<sup>162</sup> Justices who were full-time law teachers are coded 1, while others are coded 0.

<sup>163</sup> Justices who were part-time law teachers are coded 1, while others are coded 0.

**Figure 13: Voting Records of Justices Divided by Types of Law Teaching Experience**

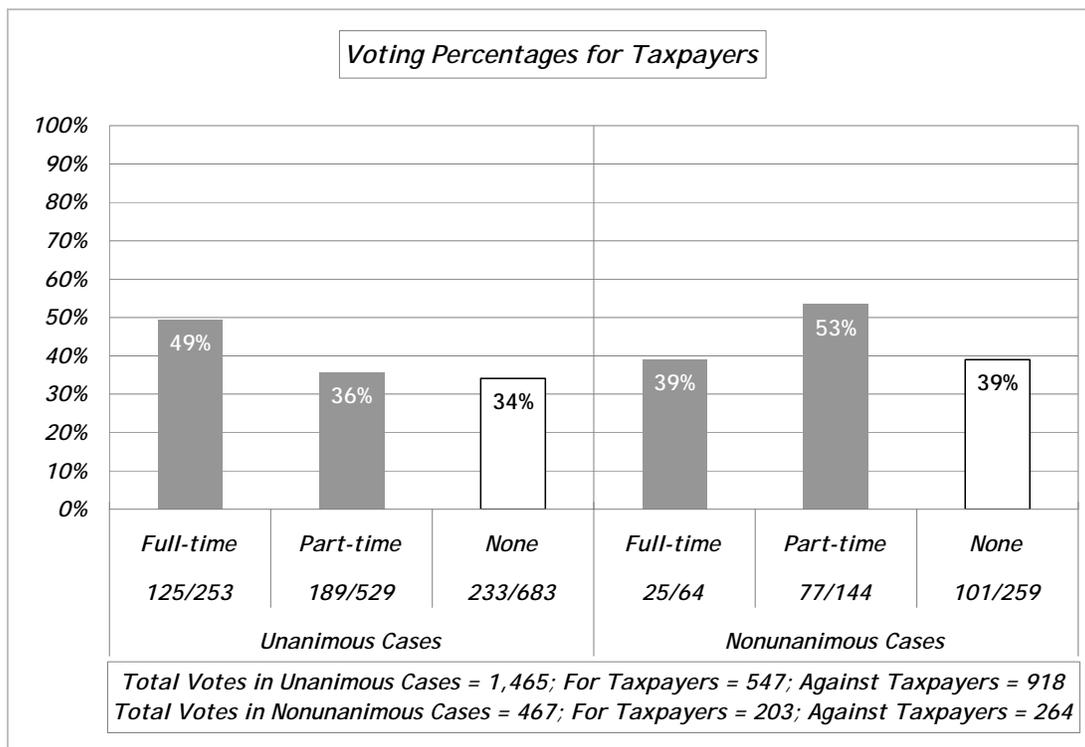


Figure 13 illustrates the finding that the voting percentages for taxpayers of justices with different types of law teaching experiences are quite different from each other. In unanimous cases, justices with full-time or part-time law teaching experience voted for taxpayers more than justices with no law teaching experience. In nonunanimous cases, justices with full-time law teaching experience and justices with no law-teaching experience voted for taxpayers in similar frequencies, but justices with part-time law teaching experience voted for taxpayers more than others. In fact, the differences did not occur by chance.<sup>164</sup>

<sup>164</sup> The chi-square test results are statistically significant at a five-percent level for both unanimous and nonunanimous cases. The chi-square tests are set up as 2 x 3 contingency tables, with votes cast for

### 3.2.7 Votes Cast by Justices and Their Experience in Founding Their Own Law Firms

The formulation of questions about the influences of the justices' experiences in practicing law is slightly more complicated. As most justices practiced law for some length of time prior to their appointment to the Supreme Court of Canada, asking questions concerning whether the justices practiced law before may not be very informative. Instead, the question on whether justices founded their own law firms is chosen as a proxy to represent the nature of the justices' careers as lawyers before their appointment to the Supreme Court of Canada. The underlying idea is that justices who founded their law firms were likely to be more entrepreneurial than others who did not found their own law firms, and such entrepreneurial justices might decide cases in a different way compared with their brethren. Therefore, the bivariate question is whether the relationship between votes cast by Supreme Court of Canada justices and their entrepreneurial lawyering experience, or the lack of it, occurred by chance.<sup>165</sup> Figure 14 shows the voting records of justices who founded their law firms and justices who did not do so.

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taxpayers and votes cast against taxpayers as the rows while having full-time law teaching experience, part-time law teaching experience and having no prior law teaching experience as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

<sup>165</sup> A dummy variable is set up to represent whether the justices founded their own law firms. An affirmative answer is coded 1. Otherwise it is coded 0.

**Figure 14: Voting Records of Entrepreneurial Justices and Others**

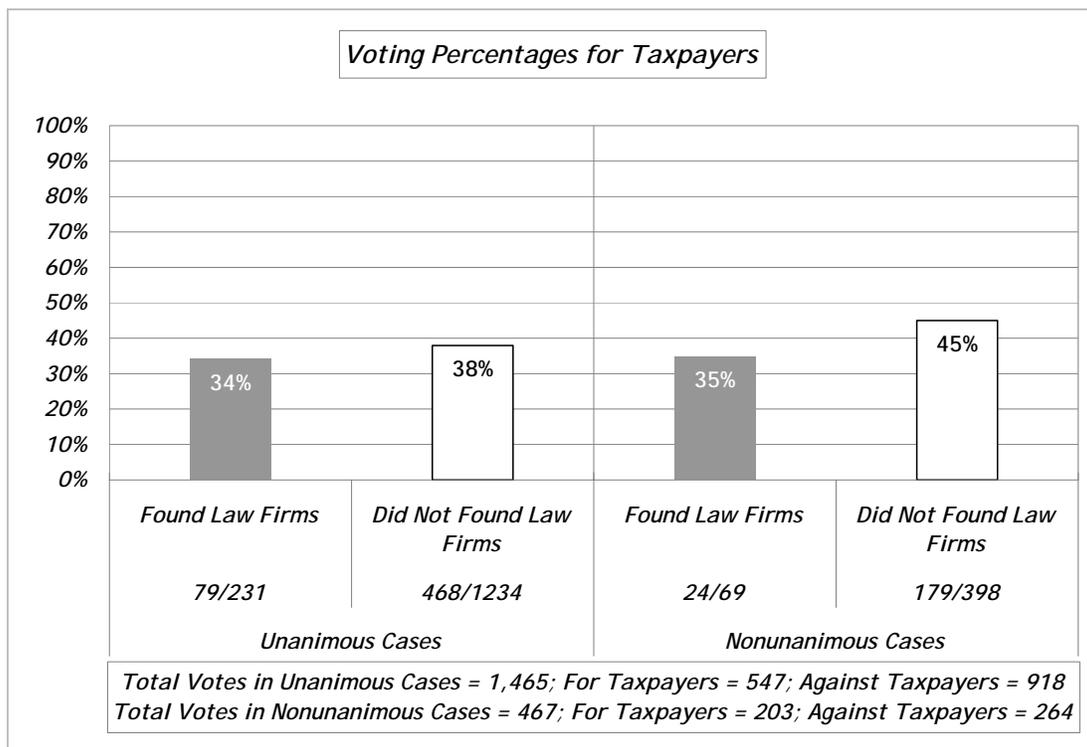


Figure 14 shows that the difference in voting percentages for taxpayers between justices who founded their law firms and justices who did not start their law firms does not look very different in unanimous cases. In fact, the voting percentages of the two groups of justices in unanimous and nonunanimous cases were chance occurrences.<sup>166</sup>

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<sup>166</sup> The chi-square test results are not statistically significant at a five-percent level. The tests are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows and justices who founded their own law firms and other justices as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

### 3.2.8 Votes Cast by Justices and Their International Education

Education influences one's decision making. As shown in the literature review in Section 2, Schneider found that appellate judges who went to nonelite law schools were more likely to vote for taxpayers. However, it is difficult to determine the eliteness of Canadian law schools the justices attended. In light of the data available, the direction of the inquiry is shifted a little bit. The fact that some justices went to universities outside Canada for part of their legal education gives rise to the conjecture that justices who were educated outside Canada might have behaved differently than those who were educated in Canada because the former might have picked up influences in other countries that others might not have the opportunities to be exposed to in Canada. Therefore, the bivariate question is whether the relationship between votes cast by Supreme Court of Canada justices and their international education occurred by chance.<sup>167</sup>

Figure 15 shows the voting records of justices divided by whether they went to universities outside Canada.<sup>168</sup> The figure illustrates the finding that the voting percentages between the two groups of justices are quite different. In fact, the differences did not occur by chance.<sup>169</sup>

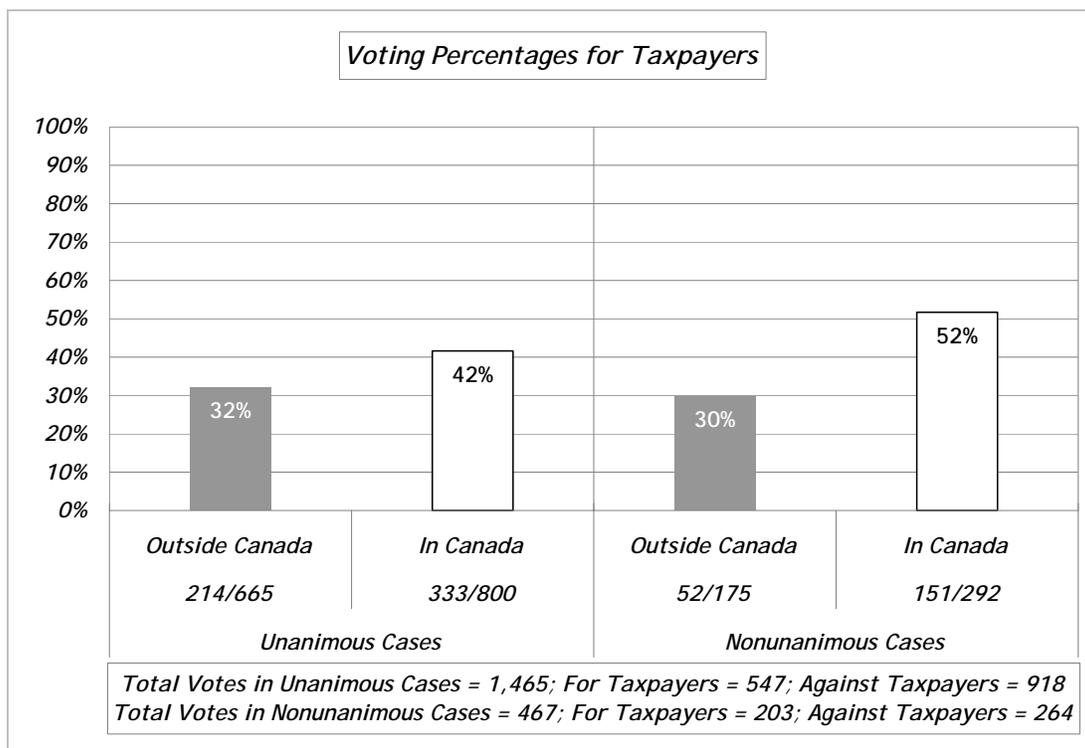
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<sup>167</sup> Having international education is coded 1, while otherwise is coded 0.

<sup>168</sup> This refers to justices who received graduate training/second degree or the equivalent outside Canada.

<sup>169</sup> The chi-square test results are statistically significant at a five-percent level for both the unanimous cases and the nonunanimous cases. The tests are set up as 2 x 2 contingency tables, with votes cast for taxpayers and votes cast against taxpayers as the rows and justices who went to universities in Canada and justices who went to universities outside Canada as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

**Figure 15: Voting Records of Justices With and Without International Education**



To further examine the differences, the general question is broken down into three questions.<sup>170</sup> The first question is whether the relationship between votes cast by justices and their education in the U.S. occurred by chance.<sup>171</sup> The second question is whether the relationship between votes cast by justices and their education in the U.K. occurred by chance.<sup>172</sup> The third question is whether the relationship between votes cast by justices

<sup>170</sup> A set of three dummy variables for four categories is coded to represent whether justices went to universities in the U.S., the U.K. or France.

<sup>171</sup> Justices educated in the U.S. are coded 1, while others are coded 0.

<sup>172</sup> Justices educated in the U.K. are coded 1, while others are coded 0.

and their education in France occurred by chance.<sup>173</sup>

**Figure 16: Voting Records of Justices Divided By Locales of Education**

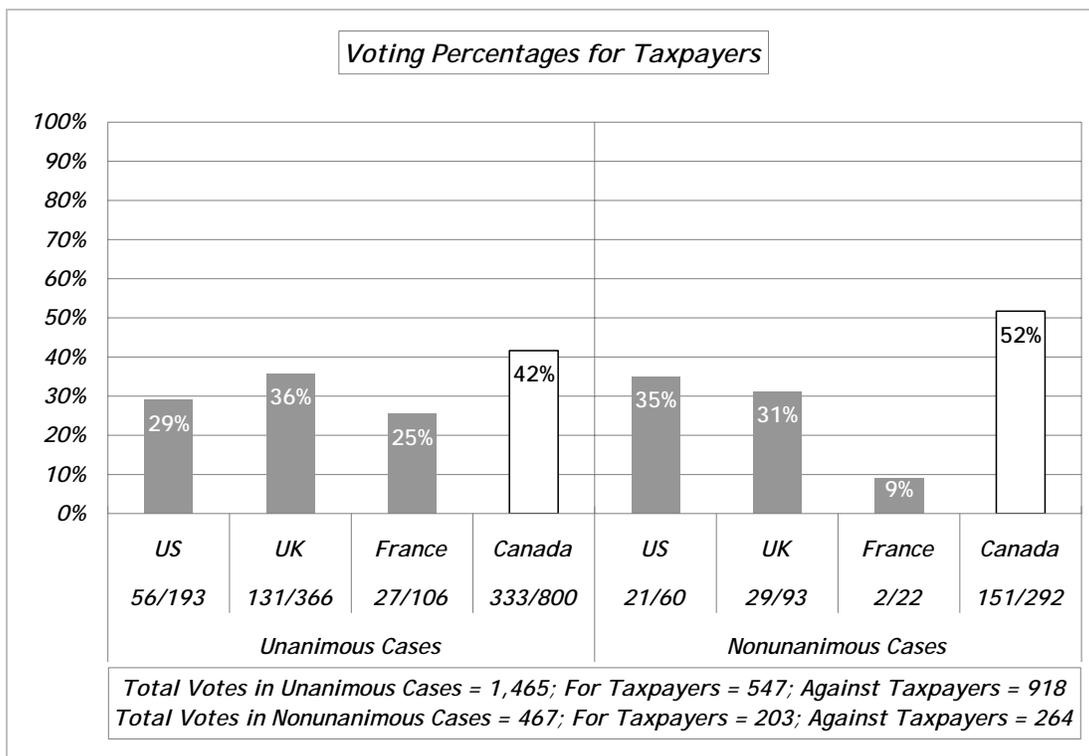


Figure 16 illustrates the finding that percentages of voting for taxpayers of justices who were educated in different geographical locales are quite different in both unanimous and nonunanimous cases. In both types of cases, justices who were educated only in Canada voted for taxpayers more than justices who undertook at least part of their education outside Canada. In fact, the differences did not occur by chance.<sup>174</sup>

<sup>173</sup> Justices educated in France are coded 1, while others are coded 0.

<sup>174</sup> The chi-square test results are statistically significant at a five-percent level for both the unanimous cases and the nonunanimous cases. The tests are set up as 2 x 2 contingency tables, with votes cast for

### 3.2.9 Summary of Findings of Bivariate Analysis

The bivariate analysis uncovers voting patterns that were not chance occurrences.<sup>175</sup> Figure 17 summarizes the findings of the bivariate data analysis. The left column shows the bivariate relationships under investigation. The right column shows whether the relationships were chance occurrences in unanimous cases, nonunanimous cases or both.

**Figure 17: Summary of Findings of the Bivariate Analysis**

Relationship Between Votes Cast by Justices and	Not Chance Occurrences in
Prior Court Rulings [taxpayer wins or losses]	<i>Unanimous cases</i>
The Time of the Votes [post- <i>Charter</i> or pre- <i>Charter</i> ]	<i>Unanimous cases</i>
The Political Party of the Prime Ministers who Appointed the Justices [Liberal Party or others]	<i>Unanimous cases</i>
The Region where the Justices Spent the Bulk of Their Pre-Supreme Court Careers [Ontario, Quebec, areas other than Ontario and Quebec]	
Judicial Experience in Lower Courts [trial, appellate, trial and appellate]	<i>Both unanimous and nonunanimous cases</i>
Law Teaching Experience [full-time, part-time]	<i>Both unanimous and nonunanimous cases</i>
Entrepreneurial Experience [justices founded their own law firms, others]	
International Education [U.S., U.K., France]	<i>Both unanimous and nonunanimous cases</i>

taxpayers and votes cast against taxpayers as the rows and justices who went to universities in the U.S, U.K. and France as the columns. One table is set up for unanimous cases, while another is set up for nonunanimous cases.

<sup>175</sup> In a way, the chi-square analysis is used as a very rough index of the nature of the relationship, even with the availability of the data of the entire population in the study period.

Among the bivariate relationships, only two were chance occurrences in the study period. The finding that voting patterns did not occur by chance raises the possibility that more nuanced data analysis could shed more light on the voting patterns. That paves the way for the multivariate regression analysis in Section 3.3.

### **3.3 Multivariate Analysis of Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

The multivariate analyses pick up where the bivariate analyses left off. The questions concerning the same variables asked in the bivariate analyses are asked, but the exploratory data analysis is performed in a multivariate context in this second step in determining the influences of socio-demographic characteristics of Supreme Court of Canada justices on their tax decisions. The questions are answered using the same merged dataset used in the bivariate analysis, but the questions are set up to identify causal explanations of judicial decision making. I call the questions multivariate questions.

Unlike the bivariate questions that ask whether voting patterns occurred by chance, the multivariate questions ask whether one variable is likely to influence the casting of the votes for taxpayers by justices, holding all other variables constant. Specifically, the multivariate questions ask:

- (1) whether the Supreme Court of Canada justices are more likely to vote for taxpayers in cases that were won by taxpayers in the prior court than in cases that were not won by taxpayers in the prior court, holding

all other variables constant;

- (2) whether the Supreme Court of Canada justices are more likely to vote for taxpayers in the post-*Charter* era than in the pre-*Charter* era, holding all other variables constant;
- (3) whether the Supreme Court of Canada justices who were appointed by Liberal Party prime ministers are more likely to vote for taxpayers than justices who were not appointed by Liberal Party prime ministers, holding all other variables constant;
- (4) whether the Supreme Court of Canada justices who spent a large part of their careers in Quebec are more likely to vote for taxpayers than justices who did not spend a large part of their careers in Quebec, holding all other variables constant;
- (5) whether the Supreme Court of Canada justices who were judges before their appointment to the Supreme Court of Canada are more likely to vote for taxpayers than justices who were not judges before, holding all other variables constant;
- (6) whether the Supreme Court of Canada justices who taught law before their appointment to the Court are more likely to vote for taxpayers than justices who did not teach law before, holding all other variables constant;
- (7) whether the Supreme Court of Canada justices who founded their own law firms are more likely to vote for taxpayers than justices who did

not found their own law firms, holding all other variables constant; and (8) whether the Supreme Court of Canada justices who went to universities outside Canada are more likely to vote for taxpayers than justices who did not go to universities outside Canada, holding all other variables constant.

Like the setup of the bivariate questions, the first two of the multivariate questions provide the context for the rest of the questions, with (1) serving as a proxy for the legal model, while (2) providing the temporal context for judicial decision making. The remaining multivariate questions deal with the relationships between socio-demographical characteristics of judges and their decisions.

The phrasing of the multivariate questions needs to be explained. The questions are phrased in the present tense, and it is in the “more likely or not” format. Although the answers to the questions are derived from multivariate analysis of historical data – records of what happened in the past, the assumption is that what happened in the past can provide hints on what will happen in the future, despite the fact that history does not repeat itself perfectly. That is why the questions are phrased as whether the Supreme Court of Canada justices *are more likely to* vote for taxpayers rather than whether the justices *will* vote for taxpayers as likelihood does not equate certainty. Phrasing the question in the “more likely or not” format signals the need for a basis for comparison. Therefore, all questions are phrased to include a comparative basis. For example, the last multivariate question is not simply whether Supreme Court of Canada justices who went to universities outside Canada are more likely to vote for taxpayers but whether justices

who went to universities outside Canada are more likely to vote for taxpayers *than justices who did not go to universities outside Canada*. It should be emphasized that the multivariate analysis examines one variable at a time while *holding all other variables constant*. The design is to examine the effect of one explanatory variable on the variable that needs to be explained in the presence of all other explanatory variables. The design is a better approximate to reality than the bivariate analysis, which only examines the relationship between two variables without acknowledging the presence of all other variables.

To conduct the multivariate analysis, probit regression analysis is used to analyze the merged dataset used in the bivariate analysis.<sup>176</sup> It is more convenient to think about the probit regression analysis in terms of the variables examined in the multivariate questions rather than the questions themselves as the variables are like shorthand versions of the questions. Like the bivariate questions, the eight multivariate questions examine the relationships between votes cast by Supreme Court of Canada justices and eight explanatory variables. They are (1) **Prior Taxpayer Win** – whether taxpayers won the cases in the prior court; (2) **Post-Charter Era** – whether the cases were decided in the post-*Charter* era; (3) **Political Ties** – whether the justices were appointed by Liberal

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<sup>176</sup> Probit regression, like other multiple regressions, allows the testing of the power to explain a dependent variable by an independent variable while keeping all other independent variables unchanged. The `dprobit` procedure in Stata 8 is used with the `cluster` option for the analyses. The `dprobit` procedure produces probit regression for categorical variables with the `margins`, while the `cluster` option in a way identifies the voting records by each judge while generating robust standard errors. The use of the `cluster` option is to account for the fact that each judge voted more than once over a number of years and thus each judge's votes cast over time are assumed not to be independent. See Appendix I for `dprobit`'s outputs.

party prime ministers; (4) **Regional Ties** – whether the justices spent a large part of their careers in Quebec; (5) **Judicial Experience** – whether the justices were judges before they were appointed to the Supreme Court of Canada; (6) **Law Teaching Experience** – whether the justices taught law before; (7) **Entrepreneurial Experience** – whether the justices founded their own law firms before they were appointed to the Court; and (8) **International Education** – whether the justices went to universities outside Canada. Although two control variables – Prior Taxpayer Win and Post-*Charter* Era – are used, the focus of the modeling remains the exploration of the power of socio-demographic characteristics of Supreme Court of Canada justices in explaining their decision making in income tax cases. Similar to the explanation concerning the first two questions earlier, the two control variables are used to situate the analysis in the context of prior rulings and time. They are not the focus of the analysis.

The multivariate analysis is designed to generate three sets of information. First, the analysis shows how each explanatory variable fares as a possible explanation of judicial decision making in Supreme Court of Canada income tax cases. To do that, a **Full Model** is developed. Second, the analysis shows the relative importance of each decision-influencing variable in comparison with other decision-influencing variables. To do that, a **Reduced Model** is developed. Third, the analysis sketches out voting scenarios of the current Supreme Court of Canada. To do that, **Voting Scenarios** are developed.

The three sets of information generated by the Full Model, Reduced Model and the Voting Scenarios are designed to be viewed as one packet of information with three parts. The Full Model is to provide a sense of the influences of socio-demographic

characteristics of justices, the Reduced Model is to offer some caveats about the use of socio-demographic characteristics of justices as explanatory variables of judicial decision making, while the Voting Scenarios put the explanatory power of the socio-demographic variables to use. The main point here is that the findings of any of the three parts *alone* do not fully represent the contributions in advancing knowledge in judicial decision making that are made in this exploratory data analysis. Of course, the Voting Scenarios may provide the most revealing information about judicial decision making, but they are built on the information generated by the Full Model, and in evaluating the Full Model, the information generated by the Reduced Model has to be taken into consideration.

### **3.3.1 Full Model: Influences of Socio-demographic Characteristics of Supreme Court of Canada Justices on Decision Making in Income Tax Cases**

The Full Model determines to what extent each of the eight explanatory variables influenced judicial decision making in Supreme Court of Canada income tax cases in 1920-2003, while taking into account the presence of all the other seven explanatory variables.<sup>177</sup> Figure 18 displays the outputs of the Full Model.

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<sup>177</sup> Two probit regressions were run, one on votes in unanimous cases, while another on votes in nonunanimous cases. The y variable is the votes, while the x variables are the decision-influencing variables. The analysis takes into consideration that one Supreme Court justice voted more than once. The focus of the probit regression analysis is on the marginal change in probabilities – the change in probabilities as a result of a change in status of not having one socio-demographic characteristic to having the characteristic. See information on  $dF/dx$  in Appendix I.

**Figure 18: Full Probit Model of Influences of Judicial Decision Making in Income Tax Cases**

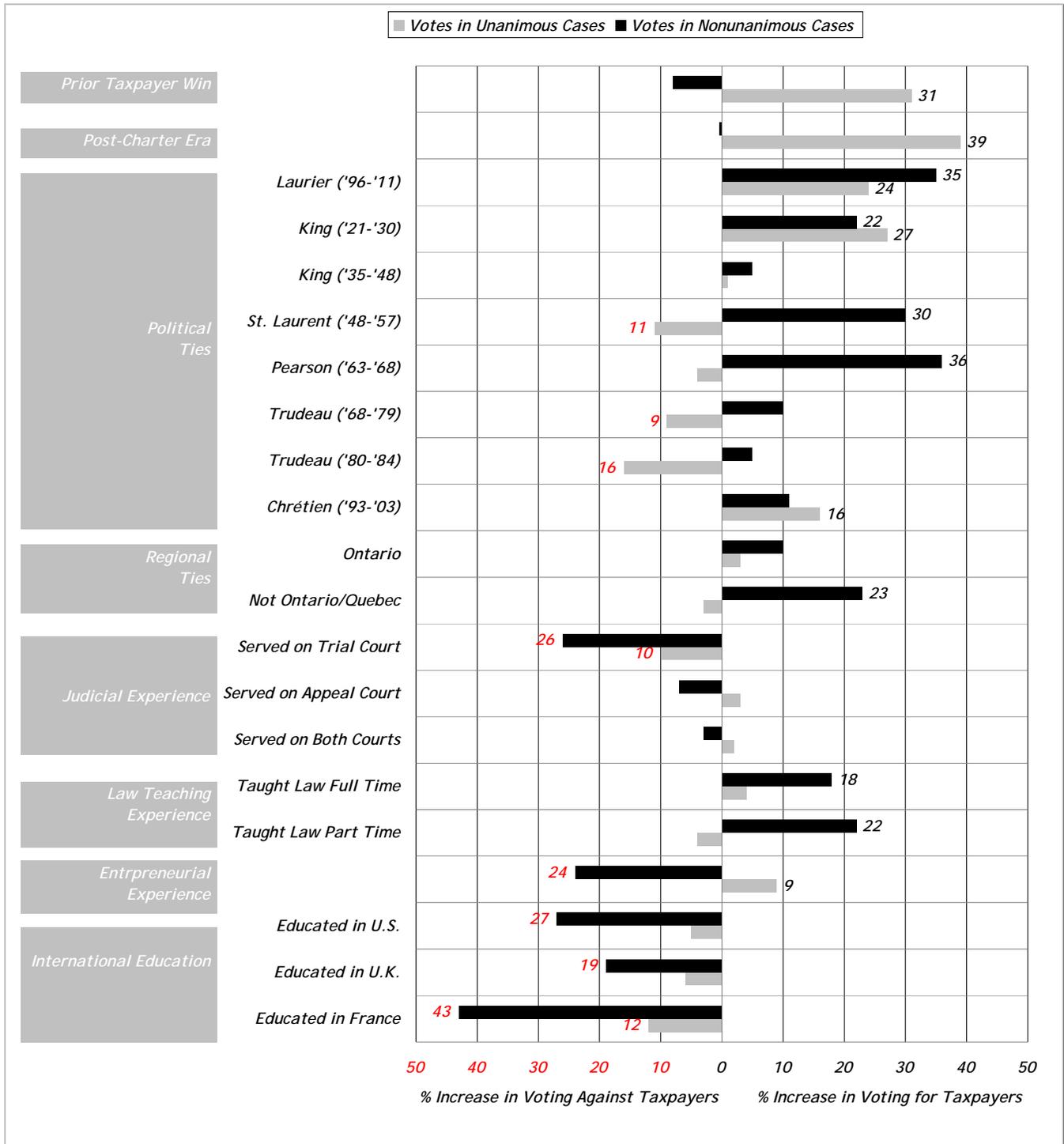


Figure 18 can be interpreted from left to right and then from top to bottom. The figure has a column of variable names on the far left and two grid-panels to the right of the column. The left column lists the main categories of the explanatory variables in grey shading, with the sub-categories, if any, next to them. Adjacent to the left column are the two grid-panels. The left grid-panel shows the percentage increase in voting against taxpayers and the right grid-panel shows the percentage increase in voting for taxpayers. The increases are shown in grey and black horizontal bars. The percentage increase refers to a change in the propensity to vote for taxpayers given a change in the status of a variable, for example, from a prior taxpayer loss to a prior taxpayer win as illustrated below. The grey horizontal bars represent votes cast in unanimous cases, while the black horizontal bars represent votes cast in nonunanimous cases. The length of the bars represents the magnitude of the percentage increases, with the data labels at the outside end of the bars showing the percentage changes that did not occur by chance.<sup>178</sup>

The following parts of Section 3 from 3.3.1.1 to 3.3.1.9 present the findings as illustrated in Figure 18. To be clear, the findings of the multivariate exploratory data analysis should be interpreted as information to be used to refine future research questions. As the findings represent just another step in learning more about judicial decision making, future research is required to be performed based on the findings.

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<sup>178</sup> The numbers represent marginal probabilities of variables that are significant at a five-percent level.

### **3.3.1.1 Prior Taxpayer Win and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Prior Taxpayer Win, one of the two control variables, represents whether taxpayers had won the cases in the prior court. As explained in Section 3.2.1, the variable serves as a proxy of the influence of the law in judicial decision making. The multivariate question for this variable is whether the Supreme Court of Canada justices are more likely to vote for taxpayers in cases that were won by taxpayers in the prior court than in cases that were not won by taxpayers in the prior court, holding all other variables constant.

The Full Model expands on the bivariate finding. The bivariate analysis shows that the relationship between votes cast by Supreme Court of Canada justices in unanimous cases and the prior rulings of the cases did not occur by chance but the relationship between votes in nonunanimous cases and prior rulings were chance occurrences. According to the Full Model, justices were about 31% more likely to vote for taxpayers in unanimous cases that taxpayers had won in the prior court than in unanimous cases that taxpayers had lost in the prior court in the study period, holding all other variables constant. The bivariate analysis hints that prior case outcomes did not have much influence on judicial decision making in nonunanimous cases. The Full Model confirms that.

In short, the Full Model suggests that the Supreme Court of Canada justices are more likely to vote for taxpayers in unanimous cases that were won by taxpayers in the

prior court than in unanimous cases that were not won by taxpayers in the prior court, holding all other variables constant. Even though the Supreme Court of Canada does not need to follow any precedent set by a lower court, the finding suggests that judges, even from different levels of courts, may be more likely to interpret the law in similar ways on legal issues that have less ambiguity in them. The finding makes sense because a proxy of the legal model is supposed to have an impact on judicial decision making in cases that Supreme Court of Canada justices did not find any legal ambiguity of the issues at hand. However, as *Prior Taxpayer Win* does not fully represent the legal model, more research in exploring the relationship between the legal model and judicial decision making is needed in the future.

### **3.3.1.2 Post-Charter Era and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Post-*Charter* era, the other control variable, represents whether the cases were decided after the enactment of the Charter in 1982. The multivariate question for this variable is whether the Supreme Court of Canada justices are more likely to vote for taxpayers in the post-*Charter* era than in the pre-*Charter* era, holding all other variables constant. As mentioned in Section 3.2.2, Ostberg and Wetstein have alluded to a possible *Charter* effect on judicial decision making in Canadian Tax cases.<sup>179</sup> Ostberg and

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<sup>179</sup> *Supra note 101.*

Wetstein found that judges would likely be more pro-taxpayer in cases concerning income tax deductions and stock/estate taxes than in cases concerning sales tax. In explaining the finding, Ostberg and Wetstein said that “it appears that the justices on the post-Charter Canadian Court are more prone to favor the economic liberty claims of taxpayers who seek to protect their current income from taxation as opposed to taxation on future economic gains.”<sup>180</sup> The distinction between current and future income was not elaborated in detail.

The Full Model expands on the bivariate finding. The bivariate analysis shows that the relationship between votes cast by Supreme Court of Canada justices in unanimous cases and whether the cases were decided before or after the enactment of the *Charter* did not occur by chance but the relationship between votes in nonunanimous cases and the timing of the cases decided were chance occurrences. According to the Full Model, justices were about 39% more likely to vote for taxpayers in unanimous cases in the post-*Charter* era than in unanimous cases in the pre-*Charter* era in the study period, holding all other variables constant. However, there was little *Charter* effect on nonunanimous cases.

In short, the Full Model suggests that the Supreme Court of Canada justices are more likely to vote for taxpayers in unanimous cases that were decided in the Post-*Charter* era than in unanimous cases that were decided in the pre-*Charter* era, holding all other variables constant. The finding suggests that Supreme Court of Canada justices may

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<sup>180</sup> *Ibid.* at 20-21.

be more likely to vote for taxpayers on legal issues with less ambiguity in recent decades than in earlier years. The finding is of a temporal nature. But whether there is indeed a *Charter* effect as suggested by Ostberg and Wetstein requires future research because there could be alternative explanations that are not included in this model. One example is that maybe the Ostberg-Wetstein *Charter* effect is just a reflection of the effects of the elimination of cases that lack merit since the mid-1970s.

### **3.3.1.3 Political Ties and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Political Ties, one of the socio-demographic variables, represents whether the Supreme Court of Canada justices were appointed by Liberal Party prime ministers. The multivariate question is whether the Supreme Court of Canada justices who were appointed by Liberal Party prime ministers are more likely to vote for taxpayers than justices who were not appointed by Liberal Party prime ministers, holding all other variables constant. In prior quantitative research on judicial decision making in the Supreme Court of Canada, the political ties to the Liberal Party were found to have influenced some justices to cast “liberal” votes for the government in a conflict between business and government at times but not all the time, as shown in the literature review in Section 2.

Like in the bivariate analysis, the variable is broken down into eight dummy variables, each represents a period of Liberal government. The details of the dummy

variables are presented earlier in Section 3.2.3. The use of the set of dummy variables allows the multivariate analysis to answer questions on justices appointed by a particular prime minister. For example, the use of the dummy variable on Chrétien can answer the question on whether Chrétien-appointed justices were more likely to vote for taxpayers than justices who were appointed by non-Liberal Party prime ministers.

The Full Model expands on the bivariate finding. The bivariate analysis shows that the relationship that votes cast by justices and their political ties did not occur by chance. According to the Full Model, justices appointed by some Liberal Party prime ministers were more likely to vote for taxpayers than justices appointed by other prime ministers. Justices appointed by Laurier were about 24% more likely to vote for taxpayers in unanimous cases than justices appointed by non-Liberal Party prime ministers and were about 35% more likely to vote for taxpayers in nonunanimous cases than justices appointed by non-Liberal Party prime ministers, holding all other variables constant. Justices appointed by King in his first two terms were about 27% more likely to vote for taxpayers in unanimous cases than justices appointed by non-Liberal Party prime ministers and were about 22% more likely to vote for taxpayers in nonunanimous cases than justices appointed by non-Liberal Party prime ministers, holding all other variables constant. Justices appointed by Chrétien were about 16% more likely to vote for taxpayers in unanimous cases than justices appointed by non-Liberal Party prime ministers, holding all other variables constant. Justices appointed by Pearson were about 36% more likely to vote for taxpayers in nonunanimous cases than justices appointed by

non-Liberal Party prime ministers, holding all other variables constant.

However, according to the Full Model, the fact that the justices were appointed by a Liberal Party prime minister did not necessarily mean that the justices were more likely to vote for taxpayers than justices appointed by other prime ministers in the study period, holding all other variables constant. Justices appointed by St. Laurent were about 11% more likely to vote against taxpayers in unanimous cases than justices appointed by non-Liberal Party prime ministers, even though these St. Laurent justices were 30% more likely to vote for taxpayers in nonunanimous cases than justices appointed by non-Liberal Party prime ministers. Justices appointed by Trudeau in his first term were about 9% more likely to vote against taxpayers in unanimous cases than justices appointed by non-Liberal Party prime ministers, while justices appointed by Trudeau in his second term were about 16% more likely to vote against taxpayers in unanimous cases than justices appointed by non-Liberal Party prime ministers.

In short, the Full Model suggests that it is inaccurate to say categorically that justices appointed by Liberal Party prime ministers are definitely more likely to vote one way or another, even though some prior findings said justices appointed by Liberal Party prime ministers tend to rule for the government in legal disputes between business and the government. As different justices appointed by different Liberal Party prime ministers may vote differently, no sweeping conclusion should be made on the influences of the political ties of the justices. The finding resonates with Schneider's finding. He said "appointment to the bench by Democratic Presidents was correlated to decisions in the

taxpayer's favor in both the appellate and trial level data sets. This finding contradicts the traditional expectation that judges appointed by Republican Presidents, which judges are generally more conservative than those appointed by Democratic Presidents, are more likely to render pro-taxpayer decisions."<sup>181</sup>

One data issue arises from the multivariate analysis on Political Ties. One wonders whether there is another variable better representing the political affiliations of Supreme Court of Canada justices. As the political agenda of a political party evolves over time, grouping all Liberal Party prime ministers under the umbrella of one political banner may not be appropriate. Also, the use of the political party of the prime ministers who appointed Supreme Court of Canada justices as a proxy of the political leanings of the justices may not be entirely appropriate in Canada. As Canadian justices do not need to undergo essentially open political vetting in the equivalent of a Congressional hearing, there is no way to verify whether the political leanings of the justices and the prime ministers who appointed them match. Thus, more research is required to identify another variable to approximate Political Ties of the justices in the future.

#### **3.3.1.4 Regional Ties and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Regional Ties, another socio-demographic variable, represents whether Supreme

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<sup>181</sup> See Using the Social Background Model, *supra* note 108 at 204.

Court of Canada justices built her or his careers in Ontario, areas other than Ontario and Quebec or Quebec, as explained in Section 3.2.4. The multivariate question for the variable is whether the Supreme Court of Canada justices who spent a large part of their careers in Quebec are more likely to vote for taxpayers than justices who did not spend a large part of their careers in Quebec, holding all other variables constant. Prior research found Quebec justices to be more likely to vote for the government in economic cases than others at times but not all the time.

Although the bivariate analysis on Regional Ties indicates that the relationship between votes cast by Supreme Court of Canada justices and their Regional Ties are chance occurrences, the variable is not excluded from the multivariate analysis for two reasons. First, it is hard to make the sweeping conclusion that Supreme Court of Canada justices were not influenced to any extent by where they spent the bulk of their careers before being appointed to the Court just based on the bivariate analysis alone. Second, considering Regional Ties together with other variables may find something that is not found in the bivariate analysis. Indeed, the Full Model finds something that the bivariate analysis has not found. According to the Full Model, justices who built their careers in areas other than Ontario and Quebec were about 23% more likely to vote for taxpayers in nonunanimous cases than justices who built their careers in Quebec in the study period, holding all other variables constant. Regional ties to Ontario had little influence.

In short, the Full Model suggests that Supreme Court of Canada justices who spent a large part of their careers in areas other than Ontario and Quebec are more likely

to vote for taxpayers in nonunanimous cases than justices who did not spend a large part of their careers in those areas, holding all other variables constant. The finding is somewhat consistent with prior findings that Quebec judges may be more likely to vote for the government than non-Quebec judges in economic-related cases. But the question on the use of regional division arises. Future research is required to determine whether finer geographical division may generate more insights in the multivariate analysis.

### **3.3.1.5 Judicial Experience and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Judicial Experience, one of three socio-demographic variables about prior professional experience, represents whether Supreme Court of Canada justices sat on any or both levels of the lower courts – the trial courts and appellate courts. The multivariate question for the variable is whether the Supreme Court of Canada justices who were judges before their appointment to the Supreme Court of Canada are more likely to vote for taxpayers than justices who were not judges before, holding all other variables constant.

The Full Model expands on the bivariate finding of Section 3.2.5. The bivariate analysis shows that the relationship between votes cast by Supreme Court of Canada justices and their prior judicial experience, or the lack of it, did not occur by chance. According to the Full Model, justices who were trial judges before were about 10% more likely to vote against taxpayers in unanimous cases than justices who had no prior

judicial experience in the study period and about 26% more likely to vote against taxpayers in nonunanimous cases than justices who had no prior judicial experience in the study period, holding all other variables constant. Other types of judicial experience had little significant impact on judicial decision making.

In short, the Full Model suggests that the Supreme Court of Canada justices who were trial judges before their appointment to the Supreme Court of Canada are more likely to vote against taxpayers than justices who were not judges before, holding all other variables constant. As judges on the trial level mainly resolve questions of fact, one conjecture based on the multivariate finding is that having such prior training in resolving questions of fact may lead judges to focus on the facts in the income tax cases and subsequently more likely to rule against taxpayers. But the reasoning of the conjecture seems strained. As there could be other reasons behind the finding, more research on the linkage between voting pattern and judicial experience is needed.

### **3.3.1.6 Law Teaching Experience and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Law Teaching Experience, one of three socio-demographic variables about prior professional experience, represents whether Supreme Court of Canada justices taught law on a full-time basis or part-time basis. The multivariate question for the variable is whether the Supreme Court of Canada justices who taught law before their appointment to the Court are more likely to vote for taxpayers than justices who did not teach law

before, holding all other variables constant.

The Full Model expands on the bivariate finding of Section 3.2.6. The bivariate analysis shows that the relationship between votes cast by Supreme Court of Canada justices and their prior law teaching experience did not occur by chance. According to the Full Model, justices who taught law on a full-time basis before were about 18% more likely to vote for taxpayers in nonunanimous cases than justices who did not teach law before, while justices who taught law on a part-time basis before were about 22% more likely to vote for taxpayers than justices who did not teach law before.

In short, the Full Model suggests that the Supreme Court of Canada justices who taught law before their appointment to the Court are more likely to vote for taxpayers than justices who did not teach law before, holding all other variables constant. The finding resonates with Schneider's finding. He said appellate "[j]udges who had come from teaching law were associated with decisions in the taxpayer's favor unless they were Protestant."<sup>182</sup> One conjecture based on the finding is that law teaching focuses on questions of law, and having such prior training may lead judges to focus on questions of law in the income tax cases, and when such cases have a lot of legal ambiguity in them, these judges may be more willing to interpret the law in favor of the taxpayers. This finding and the previous finding on Judicial Experience raise intriguing unanswered questions. More research is needed to understand why Supreme Court of Canada justices who were trial judges are more likely to vote against taxpayers but Supreme Court of

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<sup>182</sup> See Using the Social Background Model, *supra* note 108 at 238.

Canada justices who were law teachers are more likely to vote for taxpayers.

### **3.3.1.7 Entrepreneurial Experience and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

Entrepreneurial Experience, one of three socio-demographic variables about prior professional experience, represents whether Supreme Court of Canada justices founded their own law firms before their appointment to the Supreme Court of Canada. The multivariate question for the variable is whether the Supreme Court of Canada justices who founded their own law firms are more likely to vote for taxpayers than justices who did not found their own law firms, holding all other variables constant.

Although the bivariate analysis in Section 3.2.7 indicates that the relationship between votes cast by Supreme Court of Canada justices and whether they founded their law firms were chance occurrences, the variable is not dropped from the modeling. As the entrepreneurial experience variable serves as a proxy for the successful legal career of the justices, albeit only one aspect of it, excluding it would render the multivariate analysis without any representation of a career path that most justices had undertaken.<sup>183</sup> Moreover, considering the variable with other variables may uncover something that is not found in the bivariate analysis. Indeed, the Full Model finds something that is not

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<sup>183</sup> Using a dummy variable to represent whether the justices were lawyers before is not an option as most justices were lawyers. The one-sided pattern is of little statistical use because of a lack of variation, especially in multivariate analysis.

found in the bivariate analysis. According to the Full Model, justices who founded their own law firms were about 9% more likely to vote for taxpayers in unanimous cases than other justices but about 24% more likely to vote against taxpayers in nonunanimous cases than other justices.

In short, the Full Model suggests that the Supreme Court of Canada justices who founded their own law firms are more likely to vote for taxpayers than justices who did not found their own law firms in unanimous cases but are less likely to vote for taxpayers than others in nonunanimous cases, holding all other variables constant. The conflicting outcome definitely requires more probing. One conjecture is that justices with entrepreneurial experience may be more likely to have subscribed to ideas of free market economics than other justices. As justices with such entrepreneurial experience might have preferred less state interference in individual affairs, the question is whether justices who founded their own law firms were more likely to vote for taxpayers than other justices. But the above idea does not explain the pro-government attitude of justices with entrepreneurial experience in nonunanimous cases. More research is required to understand the apparently conflicting results.

### **3.3.1.8 International Education and Judicial Decision Making in Supreme Court of Canada Income Tax Cases**

International Education, a socio-demographic variable, represents whether Supreme Court of Canada justices went to universities in the U.S., U.K. or France. The

multivariate question for the variable is whether the Supreme Court of Canada justices who went to universities outside Canada are more likely to vote for taxpayers than justices who did not go to universities outside Canada, holding all other variables constant.

The Full Model expands on the bivariate finding of Section 3.2.8. The bivariate analysis shows that the relationship between votes cast by Supreme Court of Canada justices and their international education, or their lack of it, did not occur by chance. According to the Full Model, justices who were educated outside Canada were more likely to vote against taxpayers than justices who only went to universities in Canada in the study period, holding all other variables constant. Justices who went to universities in the U.S. were about 27% more likely to vote against taxpayers in nonunanimous cases than justices who only went to universities in Canada. Justices who went to universities in the U.K. were about 19% more likely to vote against taxpayers in nonunanimous cases than justices who only went to universities in Canada. Justices who went to universities in France were about 43% more likely to vote against taxpayers in nonunanimous cases than justices who only went to universities in Canada. In addition, justices who went to universities in France were also about 12% more likely to vote against taxpayers in unanimous cases than justices who only went to universities in Canada.

In short, the Full Model suggests that the Supreme Court of Canada justices who went to universities outside Canada are more likely to vote against taxpayers than justices who did not go to universities outside Canada, holding all other variables constant. One

conjecture is that justices who went to universities outside Canada are more sympathetic to the welfare state and thus government spending because of their exposure in Europe and the U.S.; as one goal of taxation is to raise government revenue and another goal of taxation is to redistribute income justices who are more sympathetic to the idea of having a welfare state are more likely to vote against taxpayers.

However, a lot more data are required to confirm the extent of such influences of education outside Canada on judicial decision making. For example, the strong showing on the influences of a French education raises a data issue. Only three justices went to universities in France – Abbott, Bastarache and Le Dain. Among the three, Abbott's voting records dominated because he cast the most votes among all 57 justices in the study. Of his 103 votes, Abbott cast 90 votes against taxpayers but only 13 votes for taxpayers. Comparing that record against Bastarache's and Le Dain's shows that the French connection may well only be the Abbott connection. Bastarache cast eight of his 24 against taxpayers, while Le Dain cast his one vote against taxpayers.

Still, rerunning the probit regressions without Abbott does not change the outcome that International Education is a variable that could explain justices' propensity to vote for the government. As a result, despite the limited availability of data, it is still considered informative to break down the International Education variable into three geographical groups in the current analysis with hopes that future studies may indeed find more clues about the presence or absence of influences of International Education on judicial decision making.

### 3.3.1.9 Summary of the Outcomes of the Full Model

In sum, the Full Model generates information on voting propensities of Supreme Court of Canada justices based on income tax cases decided in 1920-2003. Figure 19 summarizes the findings. The left column shows the variable under examination, the middle column points out the voting propensities, while the right column shows in what type of cases the voting propensities are likely to occur.

**Figure 19: Summary of Findings of the Probit Regression Analysis**

Variable	Voting Propensity	Case Type
<b>Prior Taxpayer Win</b>	<i>More likely to vote for taxpayers who had won in the prior court than taxpayers who had lost in the prior court</i>	<i>Unanimous</i>
<b>Post-Charter Era</b>	<i>More likely to vote for taxpayers in the post-Charter era than in the pre-Charter era</i>	<i>Unanimous</i>
<b>Political Ties</b>	Justices appointed by Liberal Party prime ministers <i>may be more likely to vote for or against taxpayers</i> than those appointed by other prime ministers	<i>Unanimous &amp; Nonunanimous</i>
<b>Regional Ties</b>	Justices from areas other than Ontario and Quebec are <i>more likely to vote for taxpayers</i> than justices from Quebec	<i>Nonunanimous</i>
<b>Judicial Experience</b>	Justices who were trial judges are <i>more likely to vote against taxpayers</i> more than justices who were not judges	<i>Unanimous &amp; Nonunanimous</i>
<b>Law Teaching Experience</b>	Justices who taught law before are <i>more likely to vote for taxpayers</i> than justices who did not teach law before	<i>Unanimous &amp; Nonunanimous</i>
<b>Entrepreneurial Experience</b>	Justices who founded their own law firms are <i>more likely to vote for/against taxpayers</i> than justices who did not do so	<i>Unanimous/ Nonunanimous</i>
<b>International Education</b>	Justices who attended universities outside Canada are <i>more likely to vote against taxpayers</i> than justices who were educated only in Canada	<i>Unanimous &amp; Nonunanimous</i>

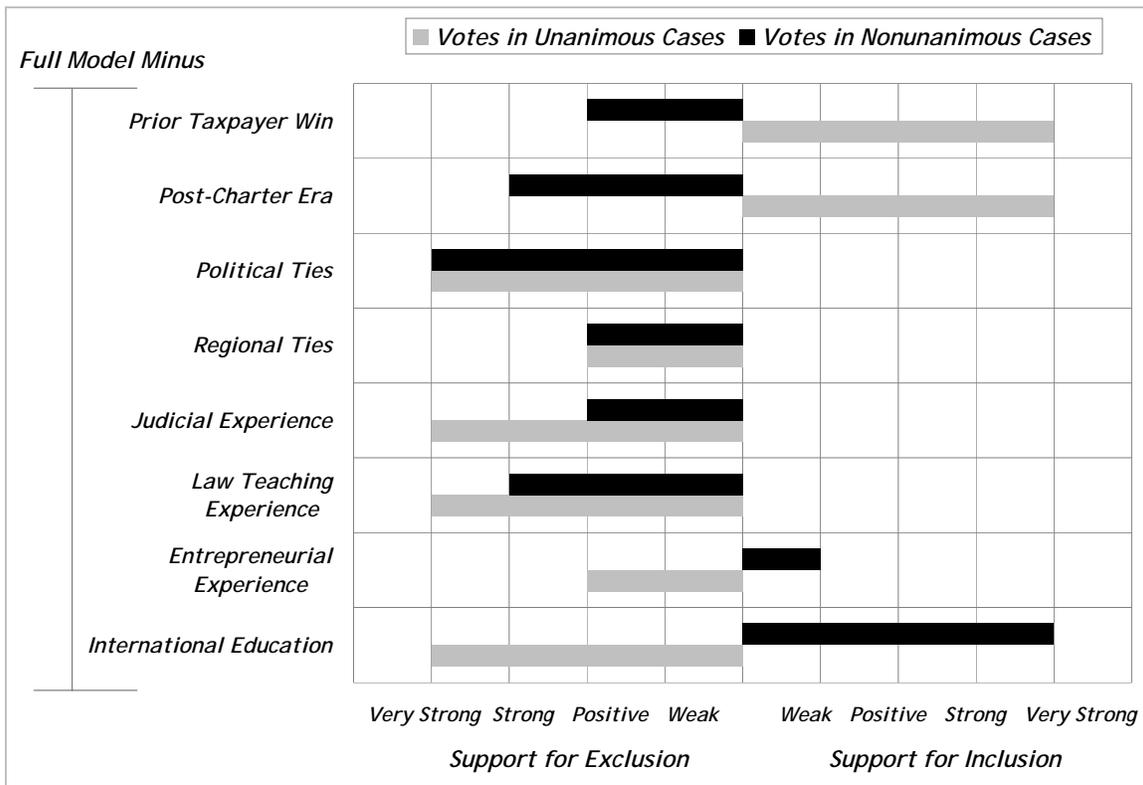
As a crude summary, Supreme Court of Canada justices who are more likely to vote for taxpayers may include those who taught law before, and in cases with a lot of

legal ambiguity, those who worked outside Ontario and Quebec. Supreme Court of Canada justices who are more likely to vote against taxpayers may include those who attended universities outside Canada and those who served as trial judges.

### **3.3.2 Reduced Model: How Important Was Each of the Decision-Influencing Variables?**

The Full Model explores the influences on judicial decision making by all the explanatory variables together, and the model does not treat one variable differently from another. Knowing the relative importance of the variables in influencing judicial decision making is useful. One way to have a sense of that is to fit two models for each variable – one with the variable and one without the variable – and compare the two. Figure 20 shows the findings of the comparison between the Full Model (that has all the variables) and the Reduced Models (that has one less variable in each run).

**Figure 20: Importance of Explanatory Variables**



In terms of layout, the absent variable in a particular run is identified on the left side of the figure. For modeling purpose, variables that feature sub-categories like Political Ties or Regional Ties, are collapsed into one main category/variable.<sup>184</sup> To the

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<sup>184</sup> The fitstat procedure in Stata 8 is used in comparing the Full Model and the Reduced Models. Two issues arose. First, fitstat uses the mean of all variables other than the one in comparison in each individual run. The mean of categorical variables coded in 0 or 1 does not make a lot of sense. For example, as Post-Charter Era is coded 1 for cases decided in the post-Charter era and 0 for cases decided in the pre-Charter era, a mean of 0.5 does not make sense for the categorical variable because no case was decided between the post-Charter era and the pre-Charter era. To avoid the 0.5 problem, each categorical variable has to be specified as 1 or 0 in each individual run. Second, and more importantly, some variables are represented by a set of dummy variables. Specifying all combinations of them can make the model comparison quite

right of the variable names are two grid-panels with horizontal bars in grey and black. The outcomes of each run of a Reduced Model for unanimous cases are represented by grey horizontal bars, while those of nonunanimous cases are represented by black horizontal bars. The left grid-panel shows the level of support for excluding the variable from the Full Model, while the right grid-panel shows the level of support for including the variable in the Full Model. There are four different levels of support for inclusion or exclusion, ranging from weak to very strong.<sup>185</sup>

In terms of interpretation, a variable that is tagged with very strong support for exclusion could be seen as having less impact in the Full Model but it does not mean that the variable should be dropped from the modeling. All variables are needed to build a model that captures some aspects of the complexity of judicial decision making. In a sense, all variables are important. The labels of “Support for Exclusion” and “Support for Inclusion” only refer to outcomes of a hypothetical comparison between a Full Model and a Reduced Model that explores the relative degree of importance of each variable. The findings can be listed as follows:

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cumbersome. For a cleaner look at the comparison between a Full Model and each Reduced Model, a strategic decision was made to collapse the sub-categories into the main category, and the collapsed variable is used.

<sup>185</sup> The levels of support for exclusion and inclusion are based on Bayesian Information Criterion. Adrian Raftery is widely cited as the proponent of the model selection approach. See Adrian Raftery, *Bayesian Model Selection in Social Research* (1995) 25 *Sociological Methodology* 111. Scott Long operationalizes it in Stata. See J. Scott Long and Jeremy Freese, *Regression Models for Categorical Dependent Variables Using Stata*. Revised Edition (College Station, TX: Stata Press, 2003) at 94-95.

- Prior Taxpayer Win is very important in modeling voting patterns in unanimous cases but is not important in modeling voting patterns in nonunanimous cases;
- Post-*Charter* Era is very important in modeling voting patterns in unanimous cases but is even less important than Prior Taxpayer Win in modeling voting patterns in nonunanimous cases;
- Political Ties is very unimportant in modeling voting patterns in both unanimous and nonunanimous cases;
- Regional Ties is unimportant in modeling voting patterns in both unanimous and nonunanimous cases;
- Judicial Experience is not important at all in modeling voting patterns in unanimous cases while it is less unimportant in modeling voting patterns in nonunanimous cases. The only difference between Law Teaching Experience and Judicial Experience is the level of unimportance in modeling voting patterns in nonunanimous cases;
- Entrepreneurial Experience is unimportant in modeling voting patterns in unanimous cases but has some importance in modeling voting patterns in nonunanimous cases; and
- International Education, which has extreme behavior, is not important at all in modeling voting patterns in unanimous cases but is very important in modeling nonunanimous cases.

Figure 19 makes four points. First, the variables that could be also called legal variables because of the presence of a legal dimension of what they represent – Prior Taxpayer Win and Post-*Charter* Era – are a lot more important in modeling voting patterns in unanimous cases than voting patterns in nonunanimous cases. Second, socio-demographic characteristics of Supreme Court of Canada justices are a lot less important in modeling voting patterns in unanimous cases than in nonunanimous cases. Political Ties, Judicial Experience, Law Teaching Experience and International Education are not important in modeling voting patterns in unanimous cases. Third, International Education is very important in modeling voting patterns in nonunanimous cases. Fourth, Political Ties as an explanatory variable may not be as important as what prior studies said it is.

### **3.3.3 Voting Scenarios of Supreme Court of Canada Justices in Income Tax Cases Based on the Full Model and Reduced Model**

One weakness of prior quantitative studies on judicial decision making is that they were mainly retrospective rather than prospective in nature as they were designed mainly to explain judicial behavior in the past rather than to predict judicial behavior in the future.<sup>186</sup> To counter the weakness, the outcomes of the Full Model and the Reduced

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<sup>186</sup> For a recent discussion on the retrospective nature of quantitative studies on judicial decision making in the U.S., see Theodore W. Ruger, Pauline T. Kim, Andrew D. Martin, and Kevin M. Quinn, “Essay: The Supreme Court Forecasting Project: Legal and Political Science Approaches to Predicting Supreme Court Decisionmaking” (2004) 104 Colum. L. Rev. 1150 at 1153–1154.

Model are used to develop simulated voting scenarios of Supreme Court of Canada justices.

Two conclusions of the Full Model and the Reduced Model drive the development of simulated voting scenarios. First, the legal variables – Prior Taxpayer Win and Post-*Charter* Era – are very important in modeling voting patterns in income tax cases with less legal ambiguity. Second, one particular socio-demographic characteristic of Supreme Court of Canada justices – International Education – is very important in modeling voting patterns in income tax cases with more legal ambiguity. Putting the two conclusions together yields the following proposition: Understanding the legal environment could shed light on decision making in cases with less legal ambiguity, but in order to examine cases with more legal ambiguity understanding the intellectual formation years of justices could be a fruitful start.

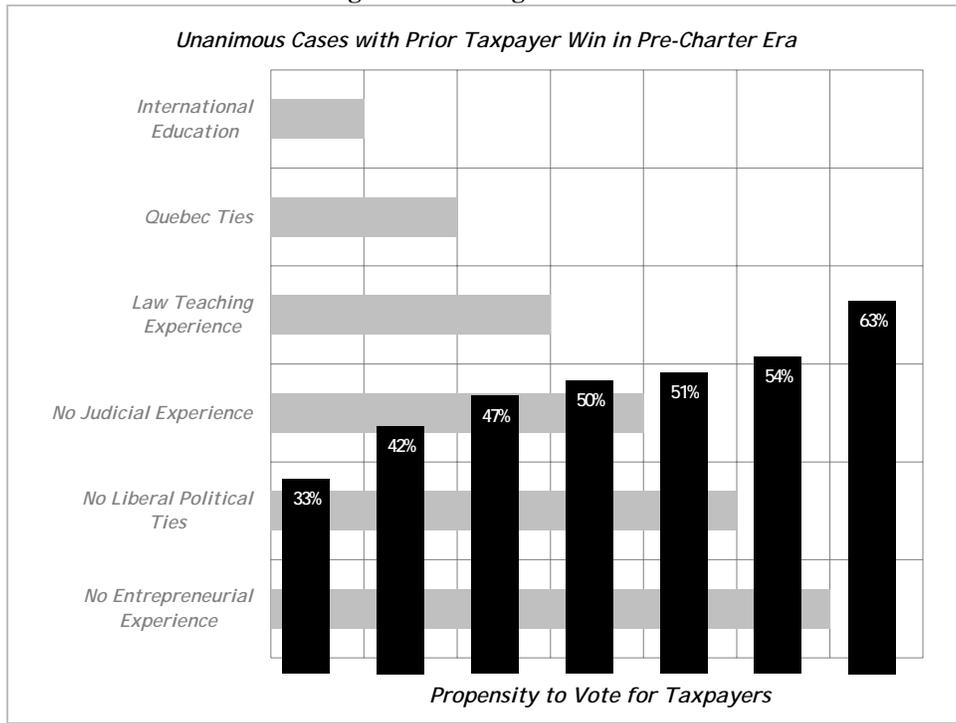
In accordance with the proposition, two sets of simulated voting scenarios are developed. First, socio-demographic composites of justices ranging from the most pro-government to the most pro-taxpayer are used to generate eight voting scenarios. Second, the socio-demographic profiles of the Supreme Court of Canada justices as of 2005 are used to generate four voting scenarios. The simulated voting patterns only show how justices with certain socio-demographic backgrounds may vote rather than how they will vote.

### 3.3.3.1 Voting Scenarios of Composite Supreme Court of Canada Justices

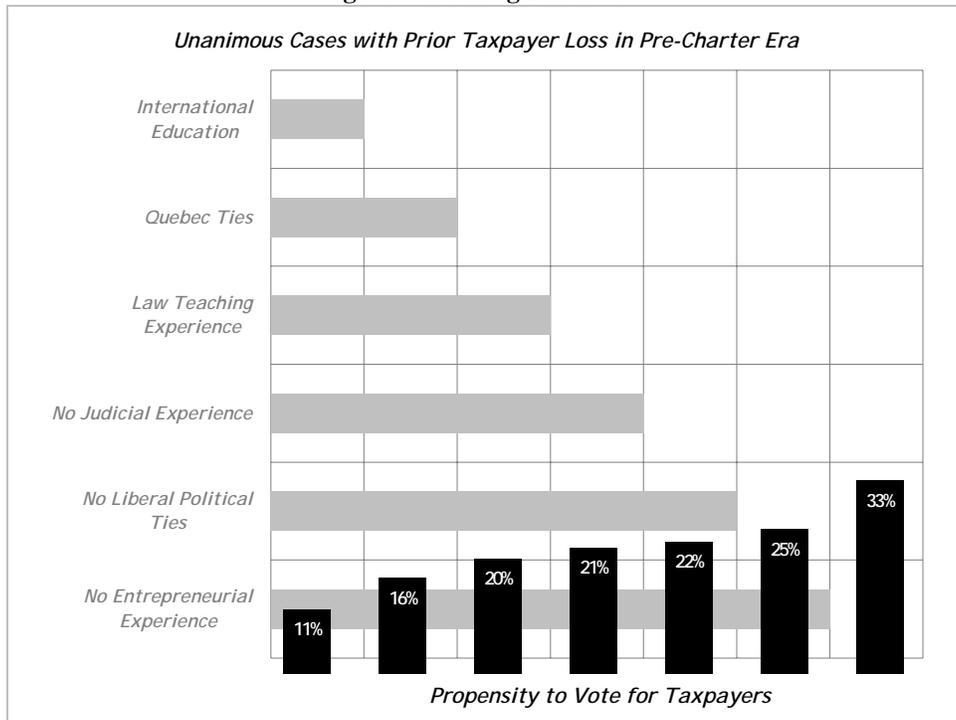
The purpose in generating voting scenarios of composite Supreme Court of Canada justices is to illustrate a wide range of possible voting patterns of justices with different hypothetical socio-demographic characteristics. The voting scenarios provide a sense of how justices with widely varied socio-demographic profiles may behave. It is important to stress that the justices appeared in the voting scenarios are composites. Therefore, their profiles may not fit the actual justices depicted in the merged dataset used for analysis in this section. In fact, few composite profiles match the profiles of real Supreme Court of Canada justices in the study period. The voting scenarios for composite Supreme Court of Canada justices are generated for unanimous cases and nonunanimous cases with and without prior taxpayer win in pre-*Charter* era and post-*Charter* era.

Figure 21 shows simulated voting patterns in unanimous cases with prior taxpayer win in pre-*Charter* era, while Figure 22 shows simulated voting patterns in unanimous cases with prior taxpayer loss in pre-*Charter* era. For these two figures the key of interpretation is to compare them in light of their different case types.

**Figure 21: Voting Scenario I**



**Figure 22: Voting Scenario II**



In terms of the layout of a voting scenario chart, the left side of the chart lists the names of six socio-demographic characteristics of justices. To the right of the list is a grid-panel with six rows and seven columns. In the grid-panel, the grey horizontal shading of the rows represents the presence of a socio-demographic characteristic, while the black vertical bars of the columns represent the propensity to vote for taxpayers, with the percentage in white placed at the inside end of the vertical bars. If the focus is placed on the first column to the left, a move to the adjacent column to its right will represent the elimination of one socio-demographic variable as representing by the elimination of the grey shading in the top cell, and the change leads to a change in the voting propensity to vote for taxpayers as represented by a taller black vertical bar.

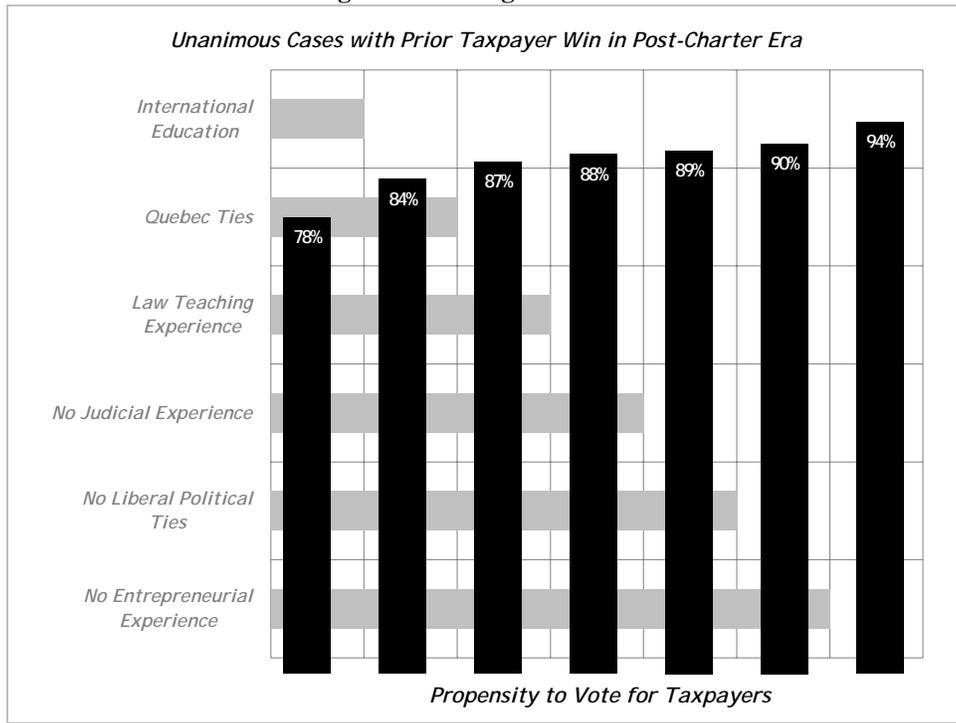
In Figure 21 the first black vertical bar to the left represents a 33% propensity to vote for taxpayers for composite justices who went to universities outside Canada, built their careers in Quebec, taught law before, were not judges, were not appointed by Liberal Party prime ministers and did not found their own law firms. The adjacent black vertical bar represents a 42% propensity to vote for taxpayers for a different group of composite justices. The increase in voting propensity to vote for taxpayers is due to the different socio-demographic profiles of the composite justices.

The two groups of composite justices differ in one regard – International Education. Therefore, the interpretation is based on that. The two groups of justices have many socio-demographic characteristics in common. They all built their careers in Quebec, taught law before, were not judges, were not appointed by Liberal Party prime

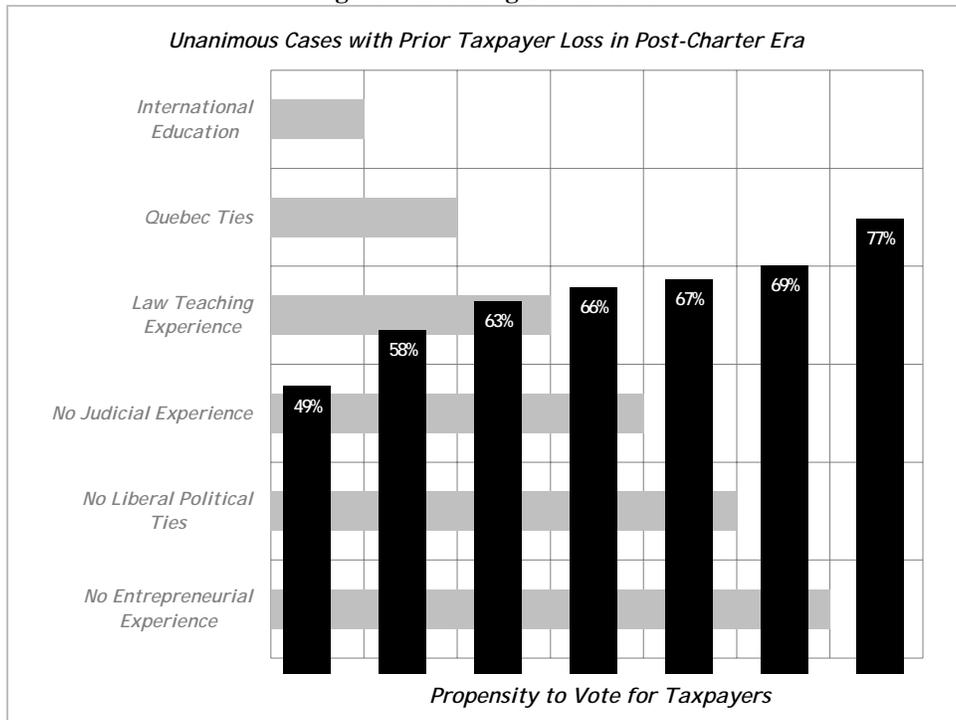
ministers and did not found their own law firms. The only difference is that one group of justice went to universities outside Canada, while another group did not do so. The difference led to different voting propensities to vote for taxpayers. Of the two groups of justices, the group who did not go to universities outside Canada is more likely to vote for taxpayers than the group who went to universities outside Canada. According to Voting Scenario I, the former group of justices has a 42% probability of voting for taxpayers, compared with 33% of the latter group.

Comparing Voting Scenario I and Voting Scenario II, both are about unanimous cases in the pre-*Charter* era, shows that composite justices are a lot more likely to vote for taxpayers in cases that taxpayers had won in the prior court than in cases that taxpayers had lost in the prior court. The highest propensity to vote taxpayers in cases that taxpayers had won in the prior court is 63% for composite justices who went to universities only in Canada, built their careers in areas outside Quebec, did not teach law, were judges, were appointed by Liberal Party prime ministers and founded their law firms. The highest propensity to vote taxpayers in cases that taxpayers had lost in the prior court is only 33% for the same composite justices. The propensity to vote for taxpayers ranges from 33% to 63% in cases that taxpayers had won in the prior court but 11% to 33% in cases that taxpayers had lost in the prior court. Figure 23 and 24 tell the story in the post-*Charter* era.

**Figure 23: Voting Scenario III**



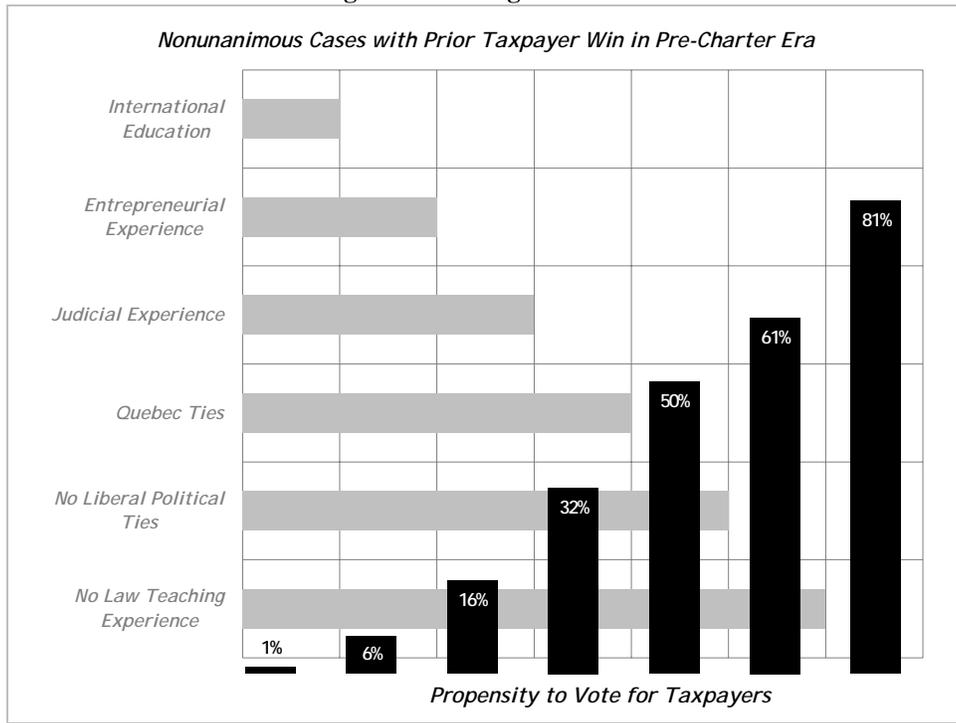
**Figure 24: Voting Scenario IV**



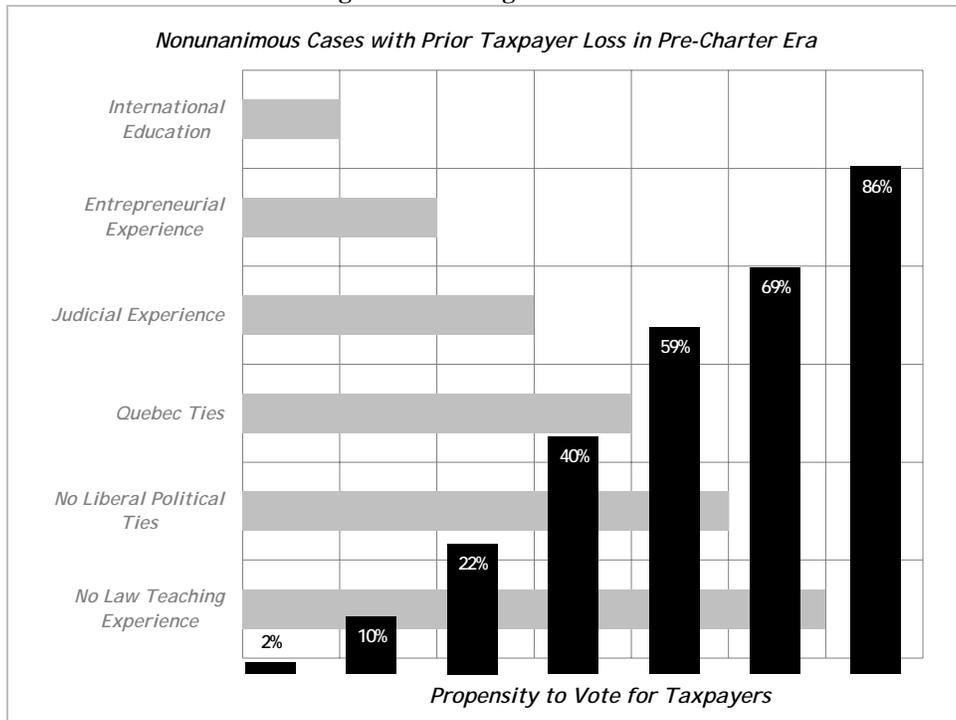
Comparing Voting Scenario III and Voting Scenario IV, both of which deal with unanimous cases in the post-*Charter* era, shows that composite justices are also a lot more likely to vote for taxpayers in cases that taxpayers had won in the prior court than in cases that taxpayers had lost in the prior court. The highest propensity to vote taxpayers in cases that taxpayers had won in the prior court is 94% for composite justices who went to universities only in Canada, built their careers in areas outside Quebec, did not teach law before, were judges, were appointed by Liberal Party prime ministers and founded their own law firms. The highest propensity to vote taxpayers is 77% for the same composite justices in cases that taxpayers had lost in the prior court. The propensity to vote for taxpayers ranges from 78% to 94% in cases that taxpayers had won in the prior court and 49% to 77% in cases that taxpayers had lost in the prior court. It is informative to note that in general the propensity to vote for taxpayers in unanimous cases is higher in the post-*Charter* era than in the pre-*Charter* era.

In addition to comparing simulated voting scenarios in cases that taxpayers had won and lost in the prior court and simulated voting scenarios in cases in the pre-*Charter* and post-*Charter* era, comparisons should be made between voting patterns in unanimous cases and nonunanimous cases. Given the spurious link between whether a case is decided unanimously and what the voting pattern looks like, the terms “unanimous cases” and “nonunanimous cases” are used here to denote the nature of the cases – with less or more legal ambiguity – rather than their outcomes. Figure 25-28 show simulated voting patterns in nonunanimous cases in the pre-*Charter* era and the post-*Charter* era.

**Figure 25: Voting Scenario V**



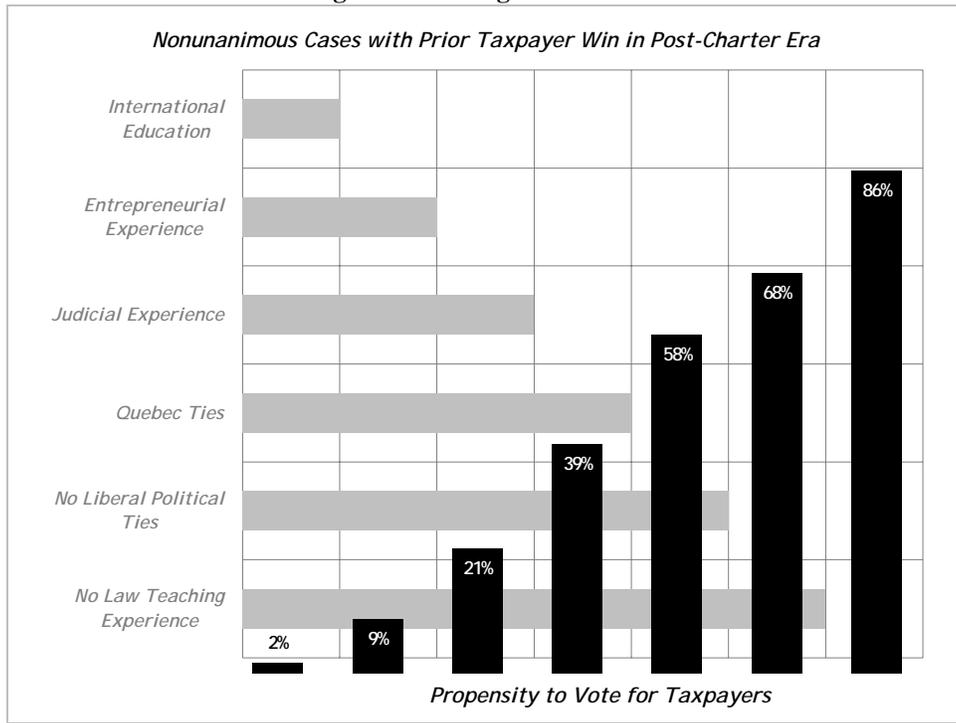
**Figure 26: Voting Scenario VI**



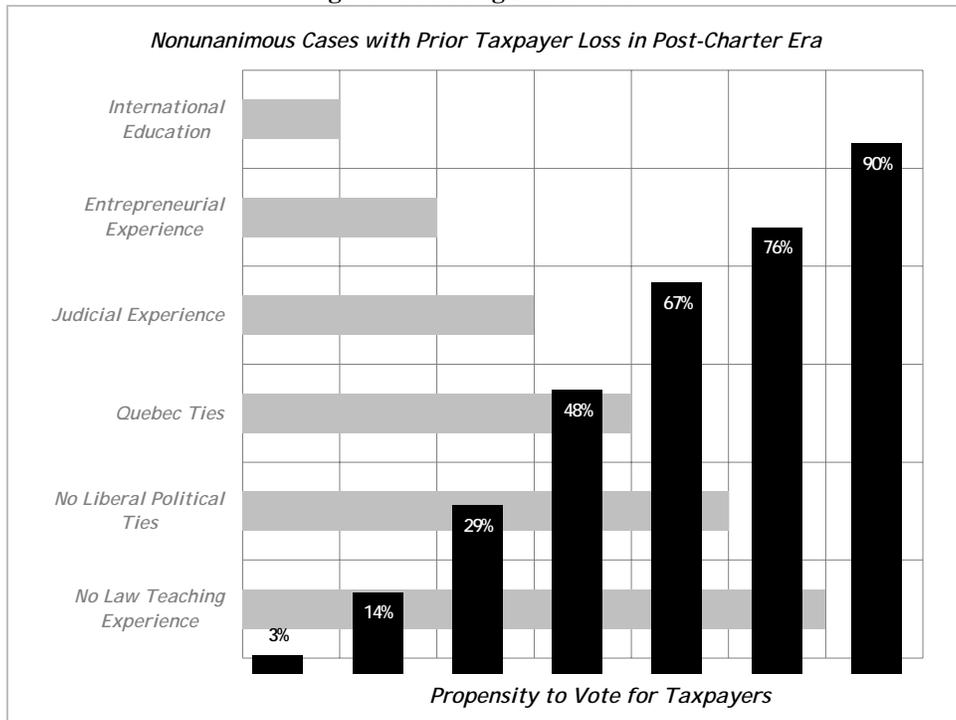
Comparing Voting Scenario V and Voting Scenario VI, both are about nonunanimous cases in the pre-*Charter* era, shows that composite justices are not much different in their propensity to vote for taxpayers between cases that taxpayers had won in the prior court and cases that taxpayers had lost in the prior court. In nonunanimous cases in the pre-*Charter* era, the highest propensity to vote taxpayers in cases that taxpayers had won in the prior court is 81% for composite justices who went to universities only in Canada, did not found their own law firms, were not judges, built their careers in areas outside Quebec, were appointed by Liberal Party prime ministers and taught law before. The highest propensity to vote taxpayers is 86% for the same composite justices in cases that taxpayers had lost in the prior court. The propensity to vote for taxpayers ranges from 1% to 81% in cases that taxpayers had won in the prior court and 2% to 86% in cases that taxpayers had lost in the prior court.

Comparing the simulated voting scenario in the nonunanimous cases in the pre-*Charter* era with that in unanimous cases in the pre-*Charter* era shows that the rise in the propensity to vote for taxpayers from the most pro-government composite justices to the most pro-taxpayer composites is a lot steeper in the nonunanimous cases. That can be interpreted as illustrating that socio-demographic characteristics of justices may exert more influences on judicial decision making in nonunanimous cases than unanimous cases. As shown in the voting scenarios, the change from not having a certain socio-demographic characteristic to having the characteristic induces a higher increase in propensity to vote for taxpayers in nonunanimous cases than in unanimous cases.

**Figure 27: Voting Scenario VII**



**Figure 28: Voting Scenario VIII**



Comparing Voting Scenario VII and Voting Scenario VIII, both are about nonunanimous cases in the post-*Charter* era, shows that composite justices are also not much different in their propensity to vote for taxpayers between cases that taxpayers had won in the prior court and cases that taxpayers had lost in the prior court. In nonunanimous cases in the post-*Charter* era, the highest propensity to vote taxpayers in cases that taxpayers had won in the prior court is 86% for composite justices who went to universities only in Canada, did not found their own law firms, were not judges, built their careers in areas outside Quebec, were appointed by Liberal Party prime ministers and taught law before. The highest propensity to vote taxpayers is 90% for the same composite justices in cases that taxpayers had lost in the prior court. The propensity to vote for taxpayers ranges from 2% to 86% in cases that taxpayers had won in the prior court and 3% to 90% in cases that taxpayers had lost in the prior court.

Similar to the pre-*Charter* comparison earlier, comparing the simulated voting scenario in the nonunanimous cases in the post-*Charter* era with that in unanimous cases in the post-*Charter* era shows that the rise in the propensity to vote for taxpayers from the most pro-government composite justices to the most pro-taxpayer composites is a lot steeper in the nonunanimous cases.

In sum, an exploration of the composite judicial profiles illustrates three things in some detail with the Voting Scenarios. First, Supreme Court of Canada justices may be more likely to vote for taxpayers in cases that taxpayers had won in the prior court than in cases that taxpayers had lost in the prior court, but such a tendency is only limited to

cases with less legal ambiguity. Second, Supreme Court of Canada justices may be more likely to vote for taxpayers in the post-*Charter* era than in the pre-*Charter* era, but such a tendency is also only limited to cases with less legal ambiguity. Third, Supreme Court of Canada justices may be more susceptible to the influences of their socio-demographic backgrounds in cases with more legal ambiguity.

### 3.3.3.2 Voting Scenarios of Current Supreme Court of Canada Justices

The analytical procedure used to generate the composite judicial profiles is used to produce simulated voting scenarios for current Supreme Court of Canada justices. To be clear, the voting patterns are merely possibilities because the probit regression model is only an abstract model of the real world, and it obviously cannot incorporate all the nuances of the real world.<sup>187</sup> Given that the Supreme Court of Canada is in the post-*Charter* era, four different scenarios are generated to illustrate possible judicial behavior when the current justices face cases that taxpayers had won or lost in the prior court with different degrees of ambiguity on the legal issues in the post-*Charter* era. The scenarios are constructed based on the socio-demographic characteristics of the current justices, as shown in Figure 29.

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<sup>187</sup> The modelling may appear to be unrealistic as no interactive terms are included. In the beginning of the modelling process, interactive terms were included but no meaningful contribution of them was found so for the purpose of keeping the modelling as parsimonious as possible and limiting the use of degrees of freedom the interactive terms were dropped in later rounds of modelling.

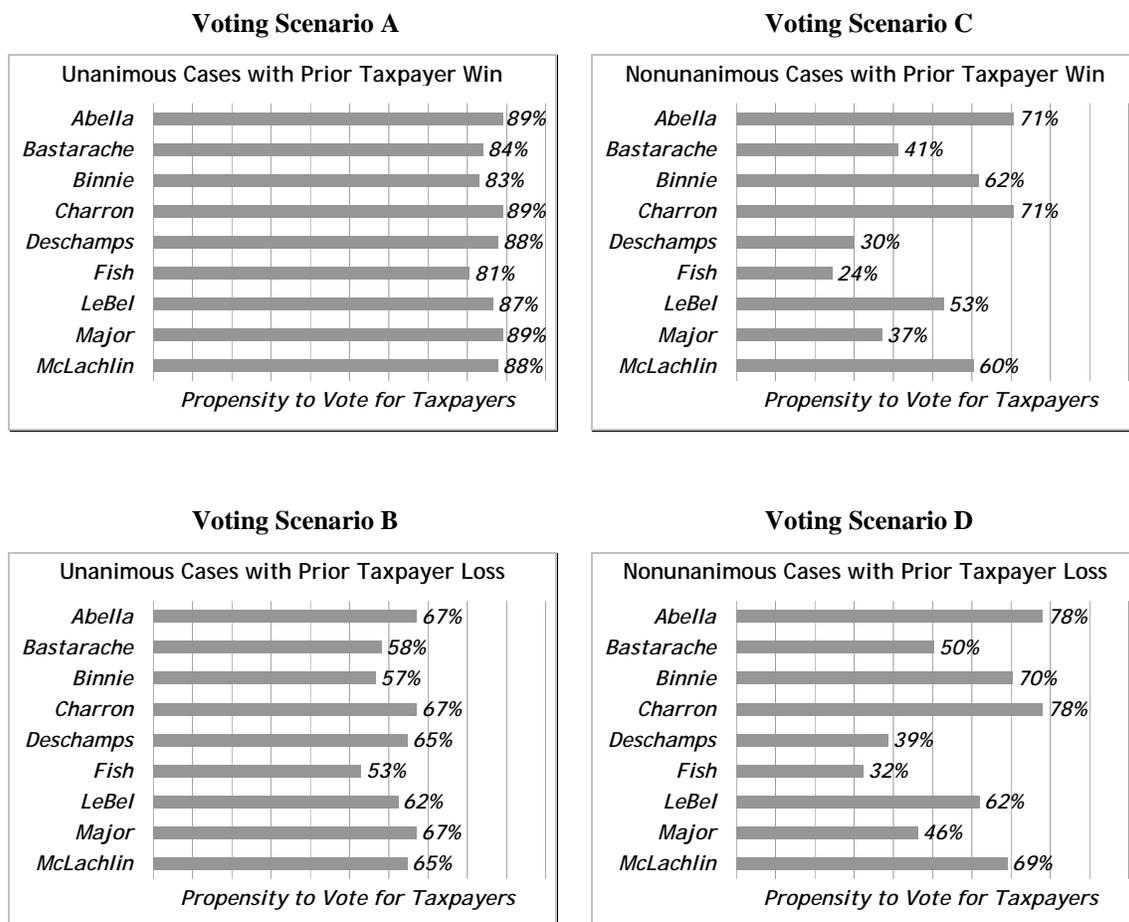
**Figure 29: Socio-demographic Characteristics of Supreme Court of Canada Justices as of 2005**

	<i>Liberal Political Ties</i>	<i>Quebec Ties</i>	<i>Judicial Experience</i>	<i>Law Teaching Experience</i>	<i>Entrepreneurial Experience</i>	<i>International Education</i>
<i>Abella</i>	■		■	■		
<i>Bastarache</i>	■		■	■		■
<i>Binnie</i>	■			■		■
<i>Charron</i>	■		■	■		
<i>Deschamps</i>	■	■	■			
<i>Fish</i>	■	■	■	■		■
<i>LeBel</i>	■	■	■	■		
<i>Major</i>			■			
<i>McLachlin</i>			■	■		

In Figure 29, the last names of the nine justices as of 2005 are listed as row headings, while the socio-demographic characteristics are listed as column headings. The presence of a characteristic is marked with a black square bullet. For example, Abella was appointed by a Liberal Party prime minister, built her career in areas outside Quebec, was a judge, taught law, did not found her own law firm and went to universities in Canada only.

Voting scenarios are generated based on the socio-demographic profile of the justices, as shown in Figure 30. As an example of interpretation, in Voting Scenario A for unanimous cases with prior taxpayer win, Abella is predicted to have an 89% chance of voting for taxpayers, compared with a 67% of voting for taxpayers in unanimous cases with prior taxpayer loss in Voting Scenario B.

**Figure 30: Propensity to Vote for Taxpayers of Supreme Court of Canada Justices as of 2005**



In Voting Scenario A for unanimous cases with prior taxpayer win, the propensity to vote for taxpayers is over 80% for all justices. The propensity to vote for taxpayers is the highest among the four scenarios. In Voting Scenario B for unanimous cases with prior taxpayer loss, the propensity to vote for taxpayers hovers in a narrow range from 50% to 70%. The range of the propensity to vote for taxpayers widens to a range from 20% to 80% in Voting Scenario C for nonunanimous cases with prior taxpayer win. In Voting Scenario D for nonunanimous cases with prior taxpayer loss the propensity to

vote for taxpayers ranges from 30% to 80%.

Examining the simulated voting scenarios finds that taxpayers may have the greatest chance to win in cases of less legal ambiguity if they had won in the prior court (as in Voting Scenario A for unanimous cases with prior taxpayer win). Assuming a propensity to vote for taxpayers that is higher than 50% may lead to a pro-taxpayer vote, taxpayers may still win a case with less legal ambiguity even if taxpayers had lost in the prior court (as in Voting Scenario B for unanimous cases with prior taxpayer loss).

For cases with a lot of legal ambiguity, the outcome is only slightly less clear cut. Taxpayers may win or lose such a case with a five-to-four split even if they had won in the prior court (as in Voting Scenario C for nonunanimous cases with prior taxpayer win). The only variable in Voting Scenario C is LeBel, whose propensity to vote for taxpayers is estimated to be only three percentage points over 50%. Interestingly, the chance for taxpayers to win a case with a lot of legal ambiguity is higher when taxpayers had lost in the prior court (as in Voting Scenario D for nonunanimous cases with prior taxpayer loss).

In other words, taxpayers have a very good chance to win in the Supreme Court of Canada in the post-*Charter* era. The only relatively adverse scenario for taxpayers is in cases with more legal ambiguity that they had won in the prior court as represented by Voting Scenario C, in which Fish, Deschamps, Bastarache and Major are estimated to be more likely to vote against taxpayers, and LeBel is estimated to be the swing justice.

Based on the four simulated voting scenarios, Abella and Charron, and McLachlin

to a certain extent, are more likely to vote for taxpayers, while Fish is more likely to vote against taxpayers.

### **3.3.4 An Interim Report of the Exploratory Data Analysis of Judicial Decision Making in Canadian Income Tax Cases**

Different judges performed their judicial duties differently. Biographies of Supreme Court of Canada justices take note of their different judicial decision making approaches. According to the biographers, Justice Bora Laskin followed a sociological and policy-oriented approach in judging,<sup>188</sup> while Justice Brian Dickson preferred to stick to the strict deliberation of legal matters.<sup>189</sup> As the biographers reported, if Justice Emmett Hall considered an injustice had been done he would find a way to correct it,<sup>190</sup> but Justice William McIntyre espoused judicial restraint in the pursuit of a fair result since he “feared that an overzealous bench would, in effect, usurp the government’s legislative role, thereby weakening the institutional credibility of the Supreme Court.”<sup>191</sup> The exploratory data analysis conducted in Section 3 aims to add to the understanding of

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<sup>188</sup> Robert J. Sharpe and Kent Roach, *Brian Dickson: A Judge's Journey* (Toronto: Published for the Osgoode Society for Canadian Legal History by University of Toronto Press, 2003), 149 [hereinafter Dickson].

<sup>189</sup> *Ibid.* at 150.

<sup>190</sup> Frederick Vaughan, *Aggressive in Pursuit: The Life of Justice Emmett Hall* (Toronto: Published for the Osgoode Society for Canadian Legal History by University of Toronto Press, 2004), 174 [hereinafter Hall].

<sup>191</sup> W.H. McConnell, *William R. McIntyre: Paladin of the Common Law* (Montreal: Published for Carleton University by McGill-Queen's University Press, 2000), 93-94 [hereinafter McIntyre].

why different judges act differently under the same legal regime.

In the exploratory data analysis, some socio-demographic variables are examined to see whether their influences on judicial decision making of Supreme Court of Canada justices can be detected. So far the exploratory data analysis has confirmed the existence of the influences of socio-demographic characteristics of Supreme Court of Canada justices on their decision making in income tax cases in 1920-2003. But the findings of the exploratory data analysis need to undergo repeated tests to confirm their usefulness in explaining judicial behavior in the future. The requirement for repeated examinations of findings in empirical inquiries is a given. As often said in statistical analysis, a finding is never proven true; it is only not proven false temporarily. The underlying idea is that all empirical discoveries may sooner or later be proven false when previously hidden information is uncovered.

In Section 4 of the dissertation, the socio-demographic variables that were found to have exerted influences in judicial decision making in the exploratory data analysis of Supreme Court of Canada data are examined using data on judicial decision making in income tax cases decided by the Tax Court of Canada. Again, the results of the following exploratory data analysis are not presented as the discovery of the truth. Rather, they are merely an addition to the body of test results that is required to be examined in the future in order to enhance the understanding of judicial decision making in tax cases.

#### **4 Linking Socio-demographic Characteristics of Tax Court of Canada Judges to their Decisions**

In Section 3, the exploratory data analysis has shown that Supreme Court of Canada justices decided cases differently partly because of their different socio-background characteristics. Section 4 is an application of the modeling approach in Section 3 to explore judicial behaviour of Tax Court of Canada judges in income tax cases in 1983-2004.

Unlike the Supreme Court of Canada, Tax Court of Canada mainly hears tax cases, and its role in the justice system in Canada is not as well known as the Supreme Court of Canada. Established in 1983<sup>192</sup> and given exclusive original jurisdiction over income tax appeals filed on or after January 1, 1991,<sup>193</sup> the Tax Court of Canada has the responsibility to adjudicate a wide range of disputes affecting all Canadians including income tax, G.S.T., Canada Pension Plan, employment insurance, and other matters. Judge David Beaubier of the Court said “if you pay a cheque to the federal government [concerning these matters] ... the Tax Court of Canada has jurisdiction over that matter .... Therefore, the Tax Court of Canada has jurisdiction over approximately 50% of the Gross

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<sup>192</sup> *Tax Court of Canada Act*, R.S.C 1985 c.T-2, as amended.

<sup>193</sup> For an analysis of the 1991 change, see J.E. Fulcher, "Is the "New" Tax Court of Canada Absolutely Bound by Decisions of the Federal Court – Trial Division?" (1992) 40 *Canadian Tax Journal* 99. In 2003, the court was made a superior court of record, i.e. it was given powers such as witness examination of a superior court. For a history of the Tax Court of Canada provided by the Court, see [http://www.tcc-cci.gc.ca/main\\_e.htm](http://www.tcc-cci.gc.ca/main_e.htm).

Domestic Product of Canada.”<sup>194</sup> In describing the wide range of cases heard by the Court, Alban Garon, then Chief Justice of the Tax Court of Canada, said in 2003 that the Court “hears every type of appeal, from high-stakes rollovers by large Toronto-, Montreal-, or Vancouver-based corporations, to employment insurance claims by fishermen in Newfoundland, to claims by injured workers in Manitoba for the disability tax credit. The court also decides issues relating to social policy, such as the Canada child tax benefit.”<sup>195</sup> As “one of the priorities for the Tax Court of Canada is that it be accessible to all Canadians,”<sup>196</sup> Garon said the Tax Court of Canada hears the cases in all kinds of places in 68 Canadian cities.<sup>197</sup> To be sure, he said “[t]he court has even sat in a taxpayer’s kitchen when the taxpayer could not otherwise attend the hearing.”<sup>198</sup>

The importance of the Tax Court of Canada isn’t lost on tax scholars. For example, Brian Arnold asked rhetorically: “Can you imagine what life would be like without a forum for ordinary people, employees, the divorced, the disabled, and even,

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<sup>194</sup> The Honourable David W. Beaubier, "DOs and DON'Ts in Tax Court," 2000 Prairie Provinces Tax Conference, (Toronto: Canadian Tax Foundation, 2000), 1. In illustrating the reach of the Court, Judge Beaubier said that the Court also has jurisdiction over the Harmonized Sales Tax imposed in Nova Scotia, New Brunswick and Newfoundland and Labrador. The Court hears two types of cases: cases under the General Procedure and the Informal Procedure. Beaubier said, “At present 50% of the income tax cases heard by the Court are under the General Procedure and 50% are under the Informal Procedure. This is because of the Informal Procedure maximum limit of \$12,000 of federal tax in an appeal. (See Section 18.1, Tax Court of Canada Act).” See p. 6.

<sup>195</sup> “Tax Court of Canada 20th Anniversary Symposium” (2005) 53 Canadian Tax Journal 135 at 138.

<sup>196</sup> *Ibid.*

<sup>197</sup> *Ibid.*

<sup>198</sup> *Ibid.*

occasionally, the desperate and the delusional to have their day in court to challenge the sometimes arbitrary decisions of a huge government bureaucracy?”<sup>199</sup> He answered emphatically: “If the Tax Court did not exist, we would have to invent it.”<sup>200</sup>

Such an important burden of adjudication falls on the shoulders of the Tax Court of Canada judges, who currently comprise Chief Justice Donald Bowman, 20 other judges plus five supernumerary judges.<sup>201</sup> The position of Associate Chief Justice is vacant at the time of writing. Asked in 2002 about the importance of the role of Tax Court of Canada judges in judging tax cases, Bowman, then Associate Chief Justice of the Court, underscored the “crucial importance”<sup>202</sup> of the role played by these judges in judicial decision making of tax cases in the following way: “Cases can be decided one way by one judge and quite differently by another; I can probably predict how a case is going to go, depending upon who the judge ... hears it.”<sup>203</sup>

To add to the understanding of decision making of Tax Court of Canada judges, this section explores the influences of socio-demographic characteristics of Tax Court of

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<sup>199</sup> *Ibid.* at 140.

<sup>200</sup> *Ibid.*

<sup>201</sup> The Tax Court of Canada said that these judges are judges who elected to hold part-time judicial duties according to s. 10 of the *Tax Court of Canada Act*, *supra* note 192, See [http://www.tcc-cci.gc.ca/judges/current\\_judges\\_e.htm#super](http://www.tcc-cci.gc.ca/judges/current_judges_e.htm#super).

<sup>202</sup> The Honourable Donald George Hugh Bowman, Ian MacGregor, QC, Al Meghji, The Honourable Karen R. Sharlow, Elaine S. Sibson, FCA, Joanne E. Swystun, "Tax Tales: A Conversation with Judger and Counsel," Report of Proceedings of Fifty-Fourth Tax Conference, 2002 Tax Conference (Toronto: Canadian Tax Foundation, 2003), 8-9.

<sup>203</sup> *Ibid.*

Canada judges on their income tax decisions from 1983 through early 2004. The exploratory data analysis approach used in this section is an extension of the approach used in Section 3, and the differences between the two approaches are highlighted in appropriate juncture of the following presentation.

The rest of Section 4 proceeds as follows. Section 4.1 describes briefly the data used for analysis. Section 4.2 outlines specific questions that are set in light of the literature review and the available data and presents the results of the data analysis. Section 4.3 presents simulated voting patterns of current Tax Court of Canada judges based on the results of data analysis in Section 4.2.

#### **4.1 An Initial Look at the Data Available for Analysis of Judicial Decision Making in Tax Court of Canada Income Tax Cases**

The dataset used for the exploratory data analysis in this section contains 3,867 votes cast by 34 judges in 1983-2004 and 13 sets of socio-demographic characteristics of the judges. Unlike the Supreme Court of Canada merged dataset, no control variables such as Prior Taxpayer Win and Post-*Charter* Era are used. The Prior Taxpayer Win variable is not applicable as Tax Court of Canada was the first court that heard income tax cases in the study period. The Post-*Charter* era variable is unnecessary as the first case Tax Court of Canada decided was in 1983, after the enactment of the *Charter*. Section 4.1.1 presents the data on the voting records of the judges first, followed by the data on the socio-demographic characteristics of the judges in Section 4.1.2.

### 4.1.1 Votes Cast by Tax Court of Canada Judges

The Tax Court of Canada judges voted more often against taxpayers than for taxpayers in the study period 1983-2004. Among the votes cast, 30% or 1,152 votes were cast for taxpayers, but 53% or 2,043 were cast against taxpayers, while 17% or 672 were cast partially for taxpayers and partially against taxpayers.

Unlike in the Supreme Court of Canada exploratory study, the votes in this dataset are coded in three instead of two categories. In the Supreme Court of Canada dataset, the votes are coded as either for taxpayer (1) or against taxpayer (0). In the Tax Court of Canada dataset, the in-between category is introduced. The votes are coded as for taxpayer (1), against taxpayer (0) and partially for taxpayer/partially against taxpayer (2). The coding leads to the use of multinomial logistic regression rather than probit regression as the analytical tool.<sup>204</sup>

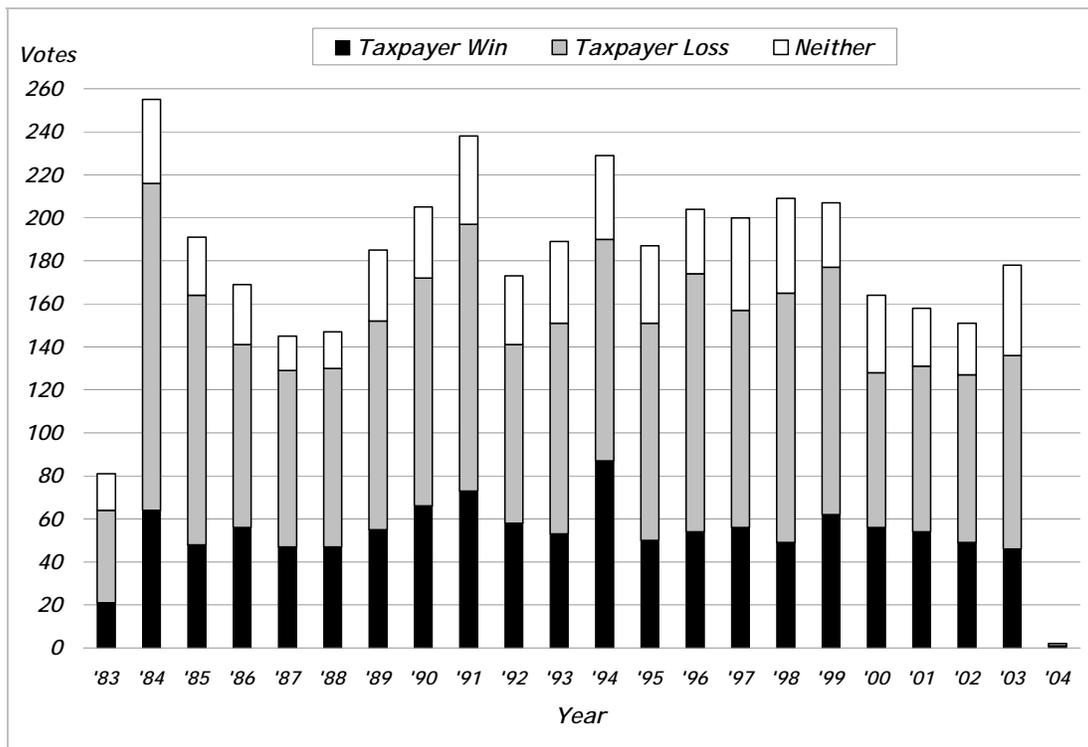
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<sup>204</sup> Multinomial logistic regression, like other multiple regressions, allows the testing of the power to explain a dependent variable by an independent variable while holding all other independent variables constant. Unlike probit or logit regression, multinomial logistic regression examines categorical dependent variable with more than two categories. The mlogit procedure in Stata 8 is used with the cluster option for the analyses. The mlogit procedure produces multinomial logistic regression for categorical dependent variable with more than two categories, while the cluster option in a way identifies the voting records by each judge while generating robust standard errors. The use of the cluster option is to account for the fact that each judge voted more than once over a number of years and thus each judge's votes cast over time are assumed not to be independent. As a check, an OLS was run on Stata 8 using the following scale as the dependent variable: for taxpayers (3), partially for and partially against taxpayers (2) and against taxpayers (1). Some results on some variables are similar to the mlogit outputs under Stata 8, while others are different. Although the mlogit is a lot more difficult to interpret, it provides more nuances than the OLS in

#### 4.1.1.1 Votes Cast by Tax Court of Judges Per Year

Analyzing the voting records by years reveals that the voting percentages of an average year can be seen as an adequate representation of the study period because the average, median and mode are very similar. Figure 31 shows the votes cast by the judges by year, illustrating that votes against taxpayers outnumbered votes for taxpayers in all years.

Figure 31: Votes Cast by Tax Court of Canada Judges, 1983-2004



In 1983-2004, votes for taxpayers averaged 31% per year. The median was 30%,

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this case. See Appendix II for the mlogit outputs.

while the mode was 32%, as recorded in 1987, 1988, 1990 and 2002. Other than in 2004, when only two votes/cases were included in this dataset, the number of votes cast for taxpayers range from a high of 38% or 87 of 229 votes in 1994 to a low of 23% or 49 of 209 votes in 1998.

In the study period, votes against taxpayers averaged 53% per year. The median was 52%, while the mode was 52%, as recorded in 1989, 1990, 1991, 1993 and 2002. In the study period, the number of votes cast against taxpayers range from a high of 61% or 116 of 191 votes in 1985 to a low of 44% or 72 of 164 votes in 2000.

In the same study period, votes partially for and against taxpayers averaged 17% per year. The median was 17%, while the mode was 17%, as recorded in 1986, 1991, 1994 and 2001. Other than in 2004, the number of votes cast partially for and against taxpayers range from a high of 24% or 42 of 178 votes in 2003 to a low of 11% or 16 of 145 votes in 1987.

#### **4.1.1.2 Votes Cast by Individual Tax Court of Canada Judges**

On average, a Tax Court of Canada judge cast 114 votes in the study period 1983-2004. The median was 94 votes. Among the 34 judges, the number of votes per judge range from a high of 266 cast by Tardif (appointed to Tax Court of Canada in 1994) and a low of 7 by Angers (appointed in 2001). In the study period, an average Tax Court of Canada judge voted 30% of the time for taxpayers but 53% of the time against taxpayers. The average judge voted 17% of the time partially for taxpayers and partially against

taxpayers. Figure 32 shows the voting records of individual judges.

**Figure 32: Votes Cast by Each of the 34 Tax Court of Canada Judges, 1983-2004**

<i>Judges</i>	<i>Taxpayer Win</i>		<i>Taxpayer Loss</i>		<i>Neither</i>		<i>Total</i>
<i>Angers</i>	1	14%	5	71%	1	14%	7
<i>Archambault</i>	17	18%	46	49%	30	32%	93
<i>Beaubier</i>	51	29%	88	49%	39	22%	178
<i>Bell</i>	57	53%	34	31%	17	16%	108
<i>Bonner</i>	31	16%	144	72%	25	13%	200
<i>Bowie</i>	19	25%	40	53%	16	21%	75
<i>Bowman</i>	89	42%	82	38%	42	20%	213
<i>Brulé</i>	69	36%	89	47%	32	17%	190
<i>Campbell</i>	6	40%	8	53%	1	7%	15
<i>Cardin</i>	11	20%	36	64%	9	16%	56
<i>Christie</i>	38	21%	125	69%	17	9%	180
<i>Couture</i>	29	34%	44	52%	12	14%	85
<i>Dussault</i>	25	24%	61	58%	19	18%	105
<i>Garon</i>	35	35%	40	40%	25	25%	100
<i>Goetz</i>	21	28%	48	64%	6	8%	75
<i>Hamlyn</i>	33	37%	43	48%	14	16%	90
<i>Hershfield</i>	10	53%	8	42%	1	5%	19
<i>Kempo</i>	41	39%	37	36%	26	25%	104
<i>Lamarre</i>	26	33%	43	55%	9	12%	78
<i>Lamarre Proulx</i>	52	25%	116	56%	41	20%	209
<i>Little</i>	2	13%	10	67%	3	20%	15
<i>Margeson</i>	15	22%	38	55%	16	23%	69
<i>McArthur</i>	32	28%	65	57%	17	15%	114
<i>Miller</i>	11	44%	9	36%	5	20%	25
<i>Mogan</i>	52	28%	98	53%	36	19%	186
<i>O'Connor</i>	42	45%	34	37%	17	18%	93
<i>Rip</i>	70	29%	124	51%	47	20%	241
<i>Sarchuk</i>	30	15%	135	69%	32	16%	197
<i>Sobier</i>	26	33%	42	54%	10	13%	78
<i>St.-Onge</i>	7	18%	27	68%	6	15%	40
<i>Tardif</i>	15	31%	27	55%	7	14%	49
<i>Taylor</i>	82	31%	142	53%	42	16%	266
<i>Teskey</i>	29	31%	55	58%	11	12%	95
<i>Tremblay</i>	78	36%	100	46%	41	19%	219
<b>Total</b>	<b>1,152</b>	<b>30%</b>	<b>2,043</b>	<b>53%</b>	<b>672</b>	<b>17%</b>	<b>3,867</b>

The voting percentage for taxpayers range from a high of 53% or 57 of 108 votes

cast by Bell (appointed in 1991) and 53% or 10 of 19 votes cast by Hershfield (appointed in 2000) to a low of 13% or 2 of 15 votes cast by Little (appointed in 2002). Voting percentages against taxpayers range from a high of 72% or 144 of 200 votes cast by Bonner (appointed in 1983) and to a low of 31% or 34 of 108 votes cast by Bell. Only six of 34 judges voted for taxpayers more often than against taxpayers. The voting records of the six judges – Bell, Bowman, Hershfield, Kempo, Miller and O'Connor – are shaded in grey. Actually, the gap between their voting percentages for taxpayers and voting percentages against taxpayers are very narrow, except for those of Bell and Hershfield.

#### **4.1.2 Socio-demographic Characteristics of Tax Court of Canada Judges**

The dataset contains 13 sets of socio-demographic characteristics of Tax Court of Canada judges. As shown in Figure 33, they are (1) the justices' **Political Ties**; (2) their **Regional Ties**; (3) their **Prior Judicial Experience**; (4) their **Prior Law Teaching Experience**; (5) their **Entrepreneurial Experience**; and (6) their **International Education**; (7) the **Gender** of the judges; (8) **Social Networking**; (9) their number of years on the Tax Court of Canada when cases were decided – **Tenure**; (10) their **Government Law Practice Experience**; (11) the number of years as a government lawyer – **Years in Government Law Practice**; (12) their **Private Law Practice Experience**; and (13) the number of years as a lawyer outside government – **Years in Private Law Practice**. Figure 33 lists the variables.

Figure 33: Socio-demographic Characteristics of Tax Court of Canada Judges, 1983-2004

Socio-demographic Characteristics	Coding Scheme	Distribution of Votes
<b>Political Ties</b>	<ul style="list-style-type: none"> <li>▪ Appointed by Liberal Party prime minister = 1; otherwise = 0</li> </ul>	53%; 47%
<b>Regional Ties</b>	<ul style="list-style-type: none"> <li>▪ Worked in Ontario = 1; otherwise = 0</li> </ul>	57%; 43%
	<ul style="list-style-type: none"> <li>▪ Worked outside Ontario and Quebec = 1; otherwise = 0</li> </ul>	21%; 79%
<b>Prior Judicial Experience</b>	<ul style="list-style-type: none"> <li>▪ Was a judge before = 1; otherwise = 0</li> </ul>	5%; 95%
<b>Prior Law Teaching Experience</b>	<ul style="list-style-type: none"> <li>▪ Taught law on a full-time basis = 1; otherwise = 0</li> </ul>	3%; 97%
	<ul style="list-style-type: none"> <li>▪ Taught law on a part-time basis = 1; otherwise = 0</li> </ul>	24%; 76%
<b>Entrepreneurial Experience</b>	<ul style="list-style-type: none"> <li>▪ Helped founded a law firm = 1; otherwise = 0</li> </ul>	21%; 79%
<b>International Education</b>	<ul style="list-style-type: none"> <li>▪ Went to university in the U.S. = 1; otherwise = 0</li> </ul>	10%; 90%
	<ul style="list-style-type: none"> <li>▪ Went to university outside Canada and U.S. = 1; otherwise = 0</li> </ul>	4%; 96%
<b>Gender</b>	<ul style="list-style-type: none"> <li>▪ Female = 1; male = 0</li> </ul>	8%; 92%
<b>Social Networking</b>	<ul style="list-style-type: none"> <li>▪ Was active in social networking; otherwise = 0</li> </ul>	35%; 65%
<b>Tenure</b>	<ul style="list-style-type: none"> <li>▪ Number of years as a Tax Court of Canada judge when decision rendered – from less than a year to 34 years</li> </ul>	See Figure 42 below.
<b>Government Law Practice Experience</b>	<ul style="list-style-type: none"> <li>▪ Practiced law in government = 1; otherwise = 0</li> </ul>	61%; 39%
<b>Years in Government Law Practice</b>	<ul style="list-style-type: none"> <li>▪ The number of years as a government lawyer</li> </ul>	See Figure 44 below.
<b>Private Law Practice Experience</b>	<ul style="list-style-type: none"> <li>▪ Practiced law in government = 1; otherwise = 0</li> </ul>	84%; 16%
<b>Years in Private Law Practice</b>	<ul style="list-style-type: none"> <li>▪ The number of years as a lawyer outside government</li> </ul>	See Figure 46 below.

The first six socio-demographic variables are similar to those used in the Supreme Court of Canada exploratory data analysis, but there are some nuanced differences. The remaining seven socio-demographic variables are variables that were not examined in the Supreme Court of Canada exploratory data analysis. Section 4.2 below presents the results of the analysis of the influences of the 13 socio-demographic characteristics of Tax Court of Canada judges on their decision making in income tax cases.

#### **4.2 Exploratory Data Analysis of Judicial Decision Making of Tax Court of Canada Income Tax Cases**

In exploring the voting records of the Tax Court of Canada judges, 13 questions are formulated to explore the relationships between the votes cast by the judges and their socio-demographic characteristics in multinomial logistic regression analysis.<sup>205</sup> Like in the Supreme Court of Canada exploratory study, the dependent variable is the votes cast by the judges. The independent variables are the socio-demographic characteristics. The objective is to determine whether a judge who has a certain socio-demographic characteristic is more likely to vote in a particular way, holding all other variables constant.

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<sup>205</sup> The multinomial regression results are presented in the form of odd ratios. Only results that are at a five-percent significant level are reported. The multinomial logistic regression model used here meets the assumption of independence of irrelevant alternatives (IIA). See Appendix III for the mlogit model generated by Stata 8.

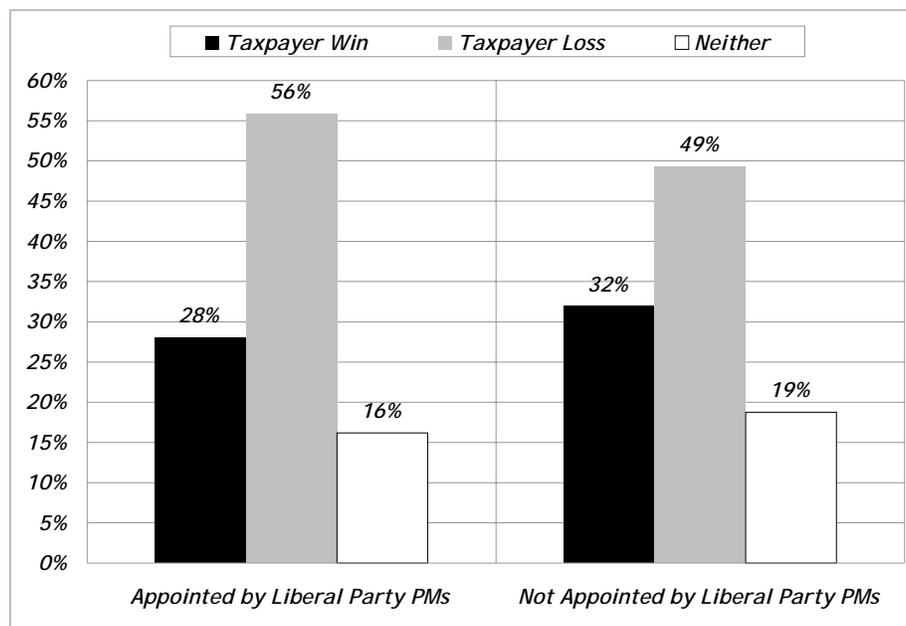
### 4.2.1 Political Ties

In examining the Political Ties variable, the question is whether Tax Court of Canada judges who were appointed by Liberal Party prime ministers are more likely to vote for taxpayers than other judges, holding all other variables constant. Like in the Supreme Court of Canada exploratory study, the Political Ties variable represents whether the judges were appointed by Liberal Party prime ministers.

Unlike in the Supreme Court of Canada exploratory data analysis, the Political Ties variable is not broken down by votes cast by judges appointed by different prime ministers because most of the judges were appointed by either Prime Minister Brian Mulroney of the Progressive Conservative Party (September 17, 1984 – June 25, 1993) or Prime Minister Jean Chrétien of the Liberal Party (Nov. 4, 1993 to Dec. 12, 2003). A total of 15 judges were appointed by Mulroney, while 8 were appointed by Chrétien. Among the remaining 11 judges, 3 were appointed by Pierre Trudeau (Liberal Party) in his first term from April 20, 1968 to June 3, 1979, while 6 were appointed by Trudeau in his second term from March 3, 1980 to June 30, 1984. John Diefenbaker (Progressive Conservatives; June 21, 1957 – April 22, 1963) and Lester Pearson (Liberal Party; April 22, 1963 – April 20, 1968) each appointed one judge. Judges appointed before 1983 were appointed to the Tax Appeal Board and the Tax Review Board. The Tax Appeal Board was started as the Income Tax Appeal Board in 1946, and it was renamed the Tax Appeal Board in 1958. The Board was subsequently transformed into the Tax Review Board in 1970 before the Tax Court of Canada came into being in 1983. As shown in the

discussion on coding above, 18 of the 34 judges were appointed by Liberal Party prime ministers. Figure 34 shows the voting records of the judges divided by their political ties, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and their political ties did not occur by chance.<sup>206</sup>

**Figure 34: Voting Percentages of Tax Court of Canada Judges and Political Ties, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges appointed by Liberal Party prime ministers are more likely to vote against taxpayers than other judges,

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<sup>206</sup> The difference between the voting records of the two categories of judges is statistical significant at a five-percent level. The grouping of judges by political parties aims to explore the idea as established by work by other researchers that the political party that appointed judges could be used as an explanatory variable of judicial decision making.

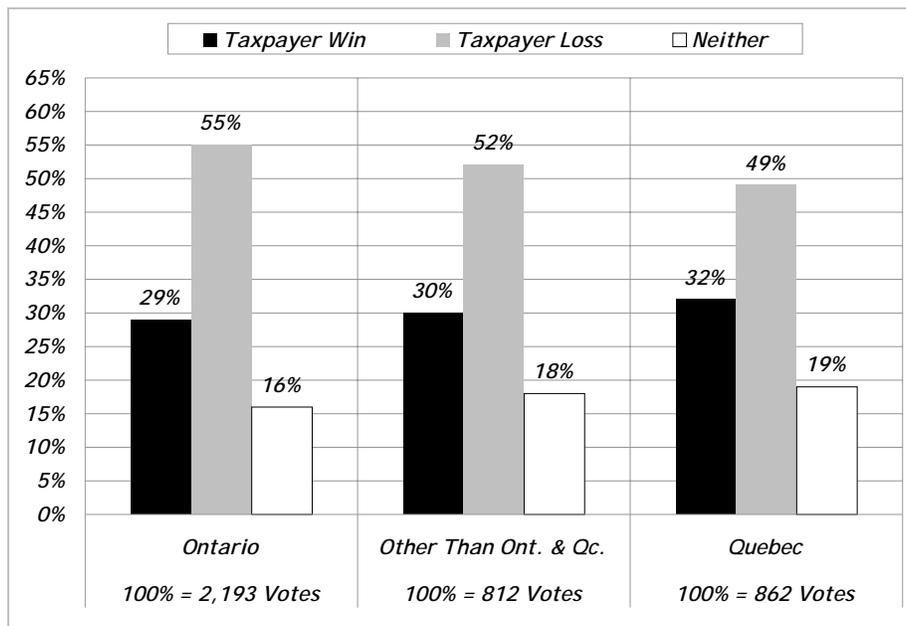
holding all other variables constant. According to the multinomial logistic regression analysis of Tax Court of Canada judges' voting records, the odds of voting against taxpayers relative to voting for taxpayers are 1.5 times greater for judges appointed by Liberal Party prime ministers than other judges, holding all other variables constant. The odds of voting against taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.7 times greater for judges appointed by Liberal Party prime ministers than other judges, holding all other variables constant. The finding offers a different look at the behavior of the political ties variable in the Supreme Court of Canada exploratory study, which finds that judges appointments by Liberal Party prime ministers do not necessarily mean that the judges are more likely to vote for taxpayers than other justices, holding all other variables constant. As the Tax Court of Canada heard a lot more cases than the Supreme Court of Canada, and the two different courts heard different cases most of the time, more research is needed to flesh out the explanatory power of the political ties variable of judicial decision making.

#### **4.2.2 Regional Ties**

In examining the Regional Ties variable, the question is whether Tax Court of Canada judges who built their careers in Ontario or areas other than Ontario and Quebec are more likely to vote for taxpayers than judges who built their careers in Quebec, holding all other variables constant. The Regional Ties variable is broken down in the same way as in the Supreme Court of Canada analysis in Section 3 – Ontario, Quebec as

well as areas other than Ontario and Quebec. Among the 34 Tax Court of Canada judges, 14 built their careers in Ontario, 11 built their careers in areas other than Ontario and Quebec, while nine built their careers in Quebec. Figure 35 shows the voting records of the judges divided by their regional ties, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and their regional ties occurred by chance.<sup>207</sup>

**Figure 35: Voting Percentages of Tax Court of Canada Judges and Regional Ties, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges who built

<sup>207</sup> The difference between the voting records of the three categories of judges is not statistically significant at a five-percent level.

their careers in Ontario or areas other than Ontario and Quebec are neither more or less likely to vote for taxpayers than judges who built their careers in Quebec, holding all other variables constant. According to the multinomial logistic regression analysis, Tax Court of Canada judges' voting records does not find Regional Ties influential in judicial decision making in the Court.<sup>208</sup> In comparison, the Supreme Court of Canada exploratory study found that judges who built their careers in Quebec are more likely to vote against taxpayers than other judges, holding all other variables constant.

#### **4.2.3 Prior Judicial Experience**

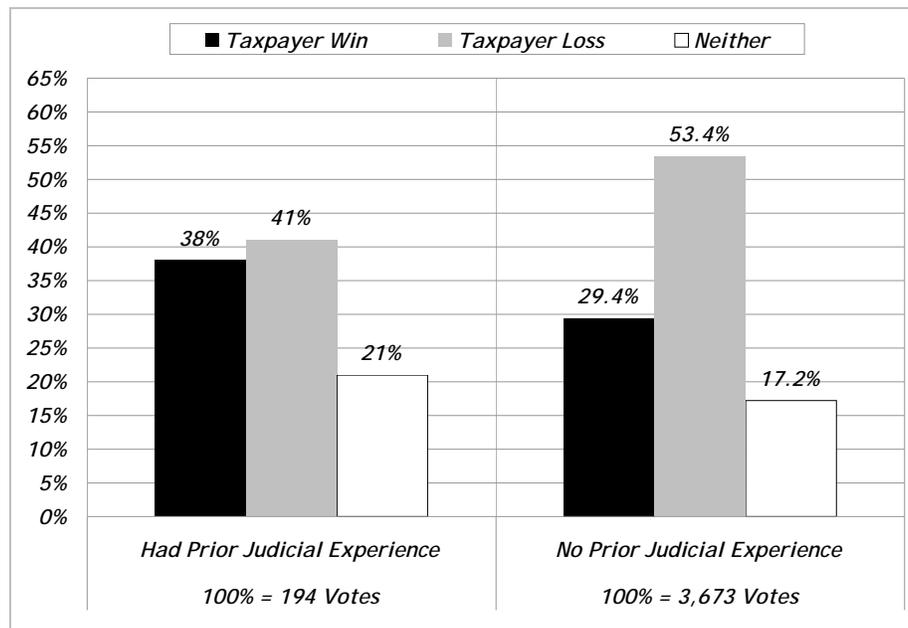
In examining the Prior Judicial Experience variable, the question is whether Tax Court of Canada judges who had prior judicial experience are more likely to vote for taxpayers than other judges, holding all other variables constant. As not many Tax Court of Canada judges had judicial experience prior to their appointment to the Court, the Prior Judicial Experience variable is not broken down into three sub-categories like in the Supreme Court of Canada exploratory study – trial court experience, appellate court experience and no prior judicial experience. Among the 34 Tax Court of Canada judges, only Kempo and Hamlyn had prior judicial experience. Figure 36 shows the voting records of the judges divided by whether they had prior judicial experience, illustrating

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<sup>208</sup> The multinomial regression results of the Regional Ties variable are not statistically significant at a five-percent level.

that the bivariate relationship between votes cast by Tax Court of Canada judges and Prior Judicial Experience did not occur by chance.<sup>209</sup>

**Figure 36: Voting Percentages of Tax Court of Canada Judges and Prior Judicial Experience, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges who had prior judicial experience are more likely to vote for taxpayers than other judges, holding all other variables constant. According to the multinomial logistic regression analysis, the odds of voting for taxpayers relative to voting against taxpayers are two times greater for judges who had prior judicial experience than other judges, holding all other variables

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<sup>209</sup> The difference between the voting records of the two categories of judges is statistically significant at a five-percent level.

constant. That is different from the finding of the Supreme Court of Canada exploratory study that judges who were trial judges before are more likely to vote against taxpayers than other judges, holding all other variables constant.

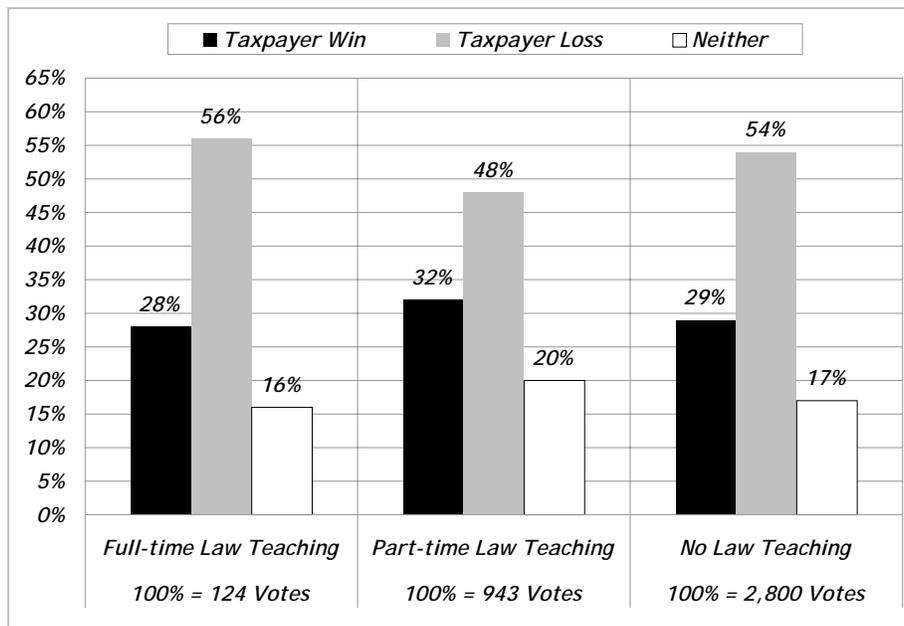
#### **4.2.4 Prior Law Teaching Experience**

In examining the Prior Law Teaching Experience variable, the question is whether Tax Court of Canada judges who taught law before are more likely to vote for taxpayers than other judges, holding other variables constant. The variable is coded the same way as that in the Supreme Court of Canada analysis, with three sub-categories of judges – those who taught law on a full-time basis, those who taught law on a part-time basis and those who did not teach law before. Among the 34 Tax Court of Canada judges, two – Dussault and Hershfield – taught law on a full-time basis before their appointment to the Court. Seven Tax Court of Canada judges – Rip, Tremblay, Brulé, Garon, Archambault, Goetz and Miller – taught law on a part-time basis before. Figure 37 shows the voting records of judges divided by whether they had prior law teaching experience, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and Prior Law Teaching Experience did not occur by chance.<sup>210</sup>

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<sup>210</sup> The differences among the voting records of the three categories of judges are statistically significant at a five-percent level.

**Figure 37: Voting Percentages of Tax Court of Canada Judges and Law Teaching Experience, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges who taught law on a full-time basis before are more likely to vote against taxpayers, but judges who taught law on a part-time basis before are more likely to vote for taxpayers, holding all other variables constant. According to the multinomial logistic regression analysis of the voting records of Tax Court of Canada judges, the odds of voting against taxpayers relative to voting for taxpayers are two times greater for judges who taught law on a full-time basis than judges who did not teach law before, holding all other variables constant. The odds of voting against taxpayers relative to voting partially for taxpayers and partially against taxpayers are three times greater for judges who taught law on a full-time basis than judges who did not teach law before, holding all other variables constant.

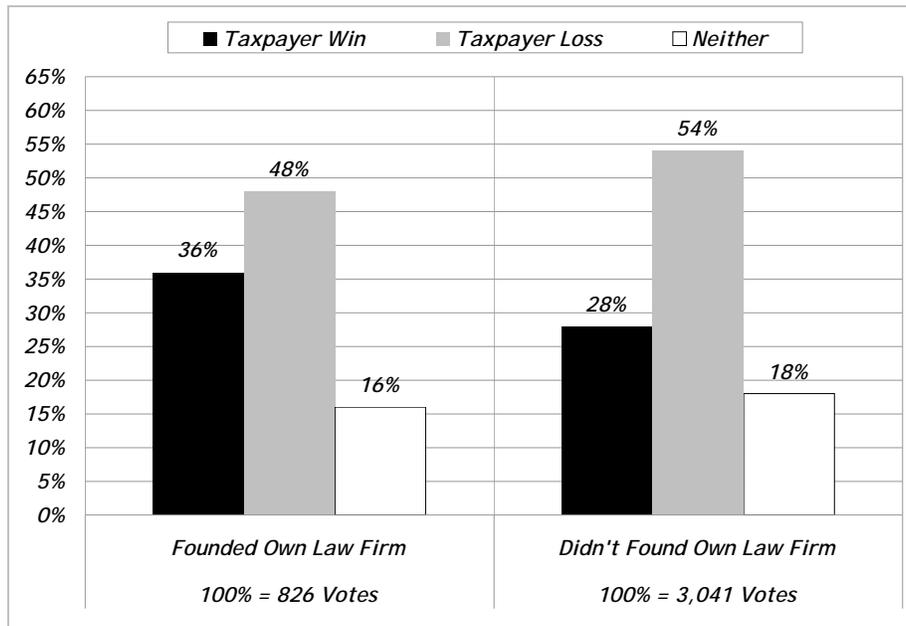
In terms of judges who had part-time law teaching experience, the odds of voting for taxpayers relative to voting against taxpayers are 1.6 times greater for judges who taught law on a part-time basis than judges who did not teach law before, holding all other variables constant. The odds of voting against taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.4 times greater for judges who taught law on a part-time basis than judges who did not teach law before, holding all other variables constant. The finding on part-time law teaching is in line with the finding of the Supreme Court of Canada exploratory study that judges who taught law before are more likely to vote for taxpayers, holding all other variables constant.

#### **4.2.5 Entrepreneurial Experience**

In examining the Entrepreneurial Experience variable, the question is whether Tax Court of Canada judges who founded their own law firms before are more likely to vote for taxpayers than other judges, holding all other variables constant. The coding is similar to that in the Supreme Court of Canada exploratory study in Section 3 – judges who founded their law firms and judges who did not found their law firms. Among the 34 Tax Court of Canada judges, six judges – Taylor, Bowman, Bell, Teskey, Goetz and Margeson – helped found their own law firms. Figure 38 shows the voting records of the judges divided by whether they had entrepreneurial experience, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and their

Entrepreneurial Experience did not occur by chance.<sup>211</sup>

**Figure 38: Voting Percentages of Tax Court of Canada Judges and Entrepreneurial Experience, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges who founded their own law firms are more likely to vote for taxpayers than other judges in some instances, holding all other variables constant. According to the multinomial logistic regression analysis, the odds of voting for taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.5 times greater for judges who founded their own law firms, holding all other variables constant. In the Supreme Court of Canada

<sup>211</sup> The difference between the voting records of the two categories of judges is statistically significant at a five-percent level.

exploratory study, justices who founded their own law firms did not exhibit one clear voting pattern in all cases.

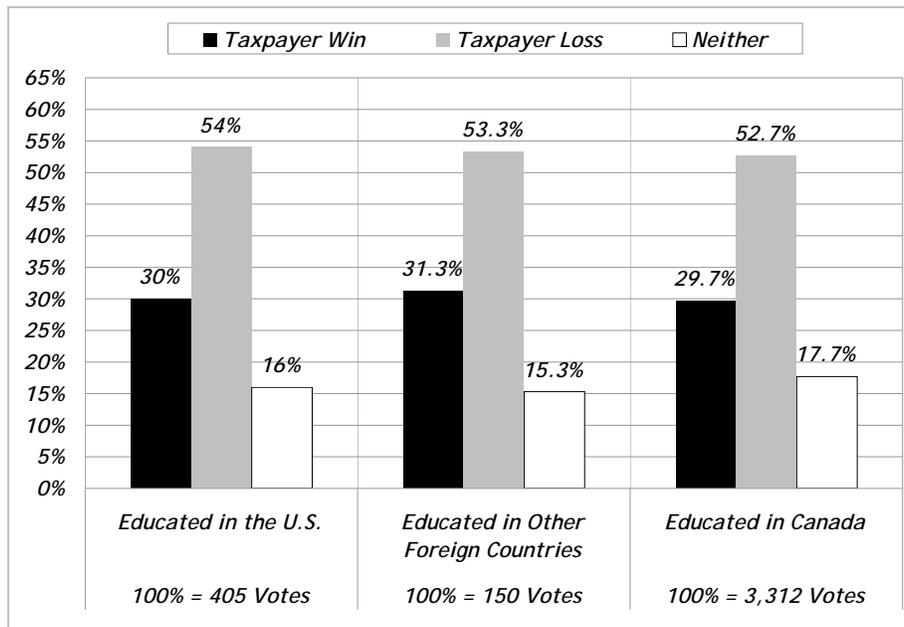
#### **4.2.6 International Education**

In examining the International Education variable, the question is whether Tax Court of Canada judges who went to universities outside Canada are more likely to vote for taxpayers than other judges, holding other variables constant. The coding is different than that in the Supreme Court of Canada analysis in Section 3. In the exploratory data analysis here the variable is broken down into three sub-categories – judges who went to the U.S. universities, judges who went to universities outside the U.S. and Canada and judges who went to universities in Canada. Figure 39 shows the voting records of the judges divided by whether they went to universities outside Canada, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and their International Education occurred by chance.<sup>212</sup>

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<sup>212</sup> The differences among the voting records of the three categories of judges are not statistically significant at a five-percent level.

**Figure 39: Voting Percentages of Tax Court of Canada Judges and Education, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges who went to universities outside Canada are more likely to vote for taxpayers than other judges, holding other variables constant. According to the multinomial logistic regression analysis of Tax Court of Canada judges' voting records, the odds of voting for taxpayers relative to voting against taxpayers are 2.8 times greater for judges who went to universities in the U.S. than judges who went to universities in Canada, holding other variables constant. The odds of voting for taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.8 times greater for judges who went to universities outside the U.S. and Canada than judges who went to universities in Canada, holding other variables constant. That offers a different look at the international education variable that that in the Supreme Court of Canada analysis, which finds that

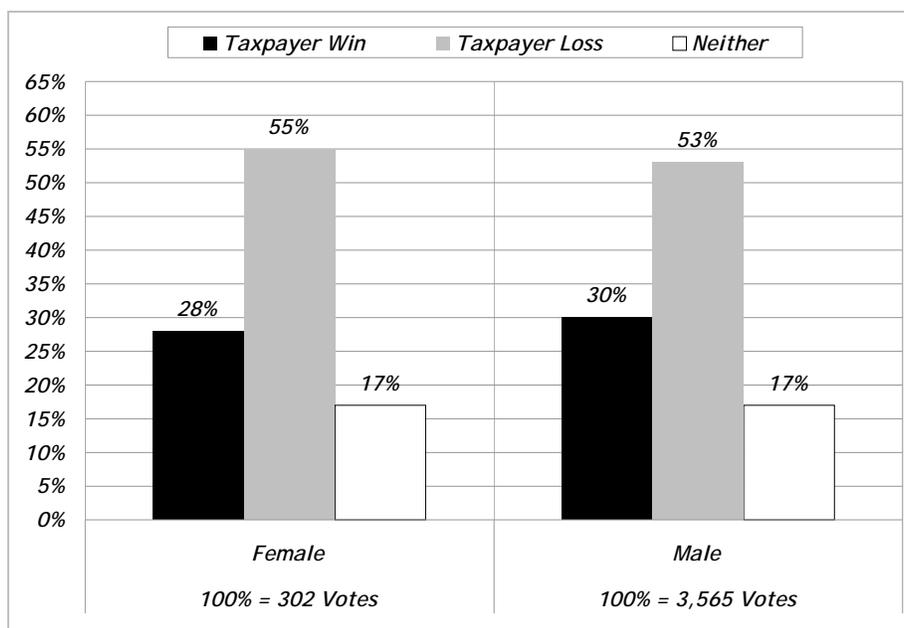
judges who went to universities outside Canada are more likely to vote against taxpayers, holding other variables constant. The reason why the bivariate and multivariate findings yield different results could be due to the fact that the multivariate analysis took into account the behavior of one independent variable in explaining the dependent variable amidst a group of independent variables, while the bivariate analysis limited the attention to the behavior of the relationship between two variables. The difference could be a hint that further analysis may be able to uncover what lies beneath the relationships among the independent variables, and the information could be useful modeling judicial decision making. Again, as in the case of the behavior of the political ties variable, more research is required as the behavior of the international education variable is different in the context of the two courts.

#### **4.2.7 Gender**

The Gender variable is not examined in the Supreme Court of Canada exploratory data analysis. In examining the Gender variable, the question is whether female Tax Court of Canada judges are more likely to vote for taxpayers than male judges, holding all other variables constant. Among the 34 Tax Court of Canada judges, three are women. They are Lamarre (appointed in 1983), Lamarre Proulx (appointed in 1988) and Campbell (appointed in 2000). The three judges accounted for 8% or 302 votes of 3,867 votes in the study period. Figure 40 shows the gender distribution of voting percentages, illustrating that the bivariate relationship between votes cast by Tax Court of Canada

judges and Gender occurred by chance.<sup>213</sup>

**Figure 40: Voting Percentages of Tax Court of Canada Judges by Gender**



Schneider found in his bivariate analysis that taxpayers won more before female U.S. tax and district judges in U.S. tax and district courts. He commented on his finding in the following way: “One possible explanation is that if women generally take less traditional, rule-bound, approaches to law, they will decide in favor of the taxpayer more. Arguably, a male judge would be more likely to perceive the existence of a rule in a tax case being litigated before him and, because he would apply that rule, the government should win. In turn, a female judge would be less likely to abide by the rule, more willing

<sup>213</sup> The difference in the voting records between female and male judges is not statistically significant at a five-percent level.

to distinguish it, and thus more likely to decide in the taxpayer's favor. This rationale, however, seems strained. Judges of both genders can equally claim that they have "rules" on their side."<sup>214</sup>

As an extension of Schneider's observation on gender, the multivariate analysis in this section suggests that female Tax Court of Canada judges are more likely to vote for or against taxpayers than partially for and partially against taxpayers than male judges, holding all other variables constant. According to the multinomial logistic regression analysis of the voting records of Tax Court of Canada judges, the odds of voting for taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.8 times greater for female judges than male judges, holding all other variables constant. The odds of voting against taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.7 times greater for female judges than male judges, holding all other variables constant.

#### **4.2.8 Social Networking**

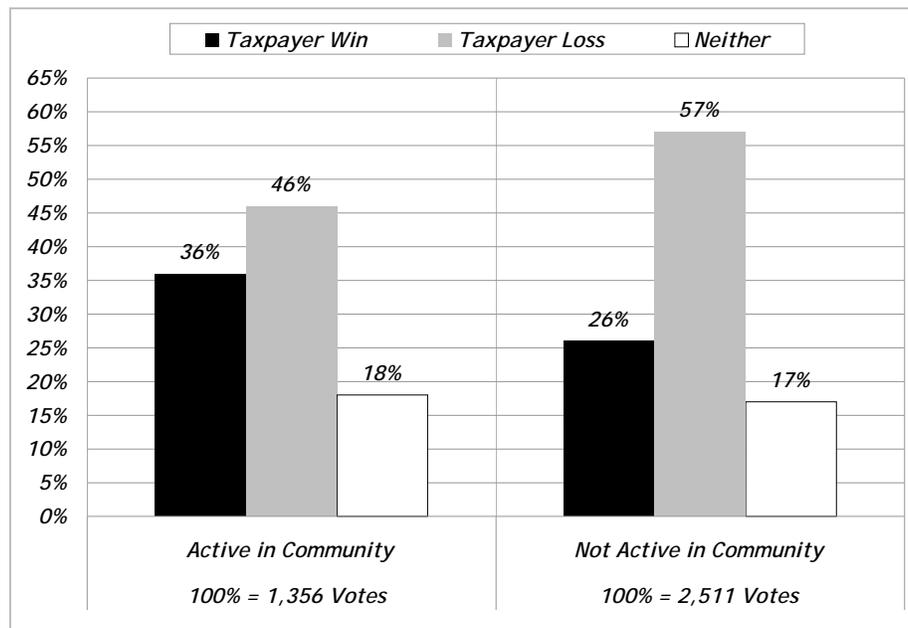
The Social Networking variable is not examined in the Supreme Court of Canada exploratory data analysis. In examining the Social Networking variable, the question is whether Tax Court of Canada judges who were active in their communities are more likely to vote for taxpayers than other judges, holding all other variables constant. The

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<sup>214</sup> Assessing and Predicting Who Wins, *supra* note 106 at 519.

Social Networking activities used in the coding is limited to those mentioned in the judges' official biographies such as involvement in the Canadian Tax Foundation, the Albany Club, university governance, hospital board, arts organization, legal aid clinic and history society. Figure 41 shows the voting records of the judges divided by whether they were active in their communities, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and Social Networking did not occur by chance.<sup>215</sup>

**Figure 41: Voting Percentages of Tax Court of Canada Judges and Social Networking, 1983-2004**



The multivariate analysis suggests that Tax Court of Canada judges who

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<sup>215</sup> The difference between voting records of the two categories of judges is statistically significant at a five-percent level.

participated in Social Networking activities as set forth above are less likely to vote against taxpayers than other judges, holding all other variables constant. According to the multinomial logistic regression analysis of the voting records of Tax Court of Canada judges, the odds of voting for taxpayers relative to voting against taxpayers are 1.7 times greater for judges who participated in their communities than other judges, holding all other variables constant. The odds of voting against taxpayers relative to voting partially for taxpayers and partially against taxpayers are 1.5 times greater for judges who participated in their communities than other judges, holding all other variables constant.

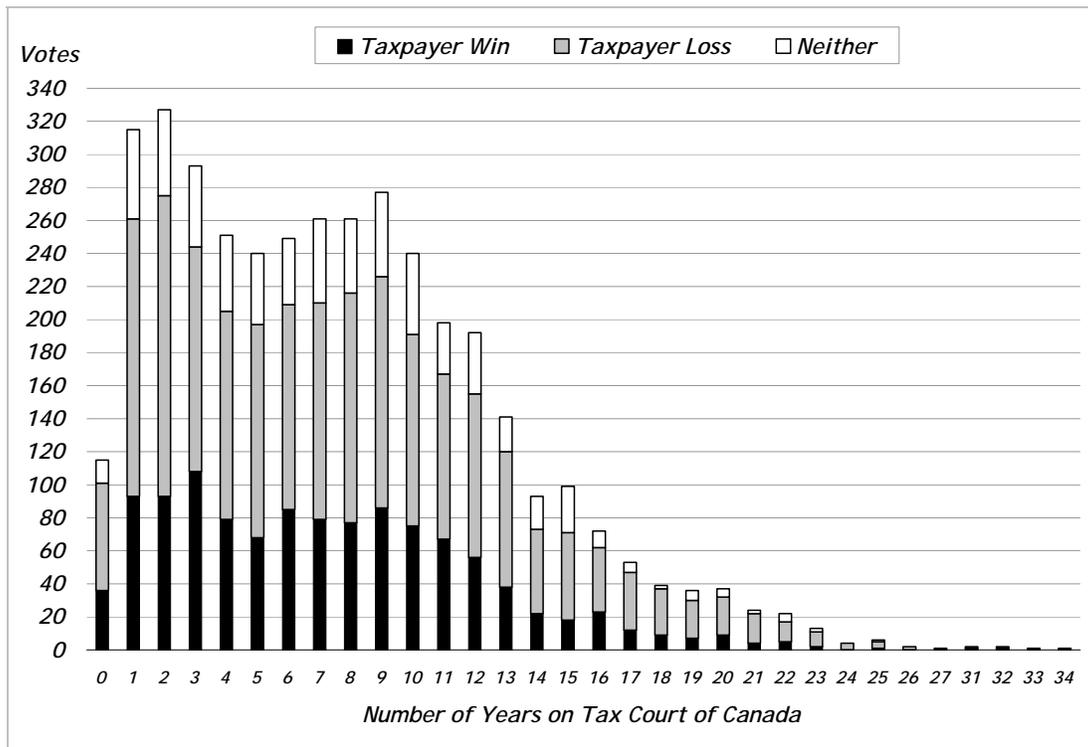
#### **4.2.9 Tenure**

The Tenure variable is not examined in the Supreme Court of Canada exploratory data analysis. In examining the Tenure variable, the question is whether Tax Court of Canada judges who served for a longer period on the Tax Court of Canada are more likely to vote for taxpayers than those who served on the Court for a shorter period, holding all other variables constant. The Tenure variable represents the number of years served on the Tax Court of Canada of a judge when a case was decided. Figure 42 shows the votes cast by the judges by the number of years they served on the Court when they cast the votes, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and Tenure occurred by chance.<sup>216</sup>

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<sup>216</sup> The pairwise correlation between the voting records of judges and the Tenure variable is not statistically

**Figure 42: Voting Records of Judges and Tenure, 1983-2004**



As shown in Figure 42, the number of years served on the Court of Tax Court of Canada judges when they decided the cases ranges from less than a year to 34 years. Over 70% of the votes were cast by judges with less than ten years of experience on the Court. The voting percentages for taxpayers range from a high of 37% for three years of experience on the Court to a low of 0% for tenure of over 24 years in many instances. The voting percentages against taxpayers range from a high of 100% for tenure of over 24 years in many instances to a low of 46% for three years of experience on the Court.

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significant at a five-percent level.

The percentages of voting partially for and against taxpayers range from a high of 50% to a low of 0% for tenure of over 31 years in many instances. The extreme values in the ranges of voting percentages should be discounted as the total number of votes cast by very senior judges is very small.

Tax Court of Canada judges appeared to be voting against taxpayers more often the longer they served on the Court as shown in Figure 42. That seems to fit Schneider's observation that taxpayers won more before U.S. tax and district court judges with shorter tenure.<sup>217</sup> However, the multivariate analysis tells a more elaborated story.

The multinomial logistic regression analysis shows that the judges are likely to vote for taxpayers in their early years on the Court but against taxpayers in their later years. The odds of voting for taxpayers relative to voting against taxpayers are greater for judges who served for seven and a half years or less on the Court but the pattern reverses for judges who served for eight years or more. The odds of voting partially for taxpayers and partially against taxpayers relative to voting against taxpayers are greater for judges who served for 11 years or less but the pattern reverses for judges who served for 12 years or more on the Court.

#### **4.2.10 Government Law Practice**

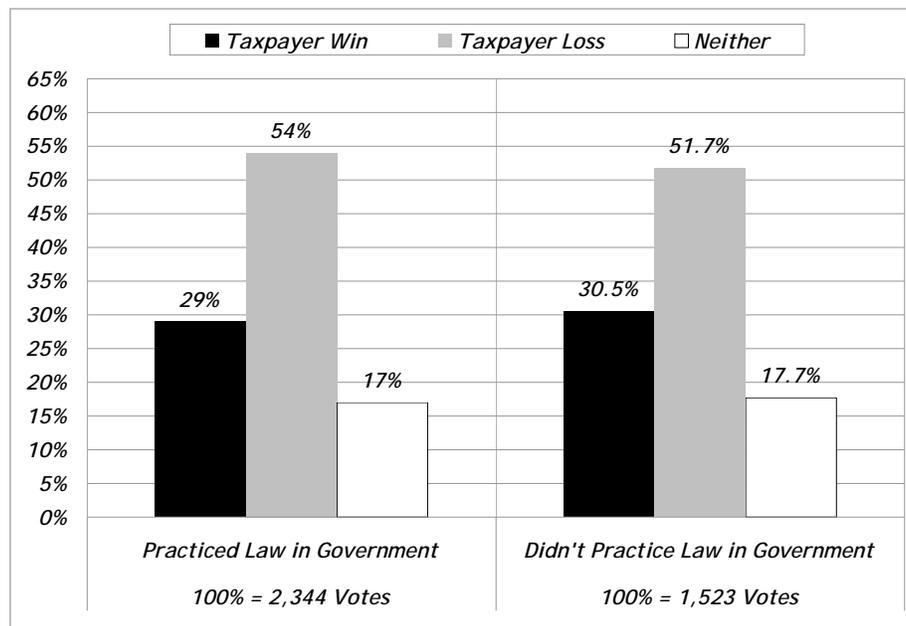
The Government Law Practice variable is not examined in the Supreme Court of

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<sup>217</sup> Assessing and Predicting Who Wins, *supra* note 106 at 524.

Canada exploratory data analysis. In examining the Government Law Practice variable, the question is whether Tax Court of Canada judges who practiced law in government are more likely to vote for taxpayers than other judges, holding all other variables constant. Among the 34 judges, 18 practiced law in government. Figure 43 shows the voting records of the judges divided by whether they practiced law in government before, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and Government Law Practice occurred by chance.<sup>218</sup>

**Figure 43: Voting Percentages of Tax Court of Canada Judges and Government Law Practice, 1983-2004**



<sup>218</sup> The difference between the two categories of judges is not statistically significant at a five-percent level.

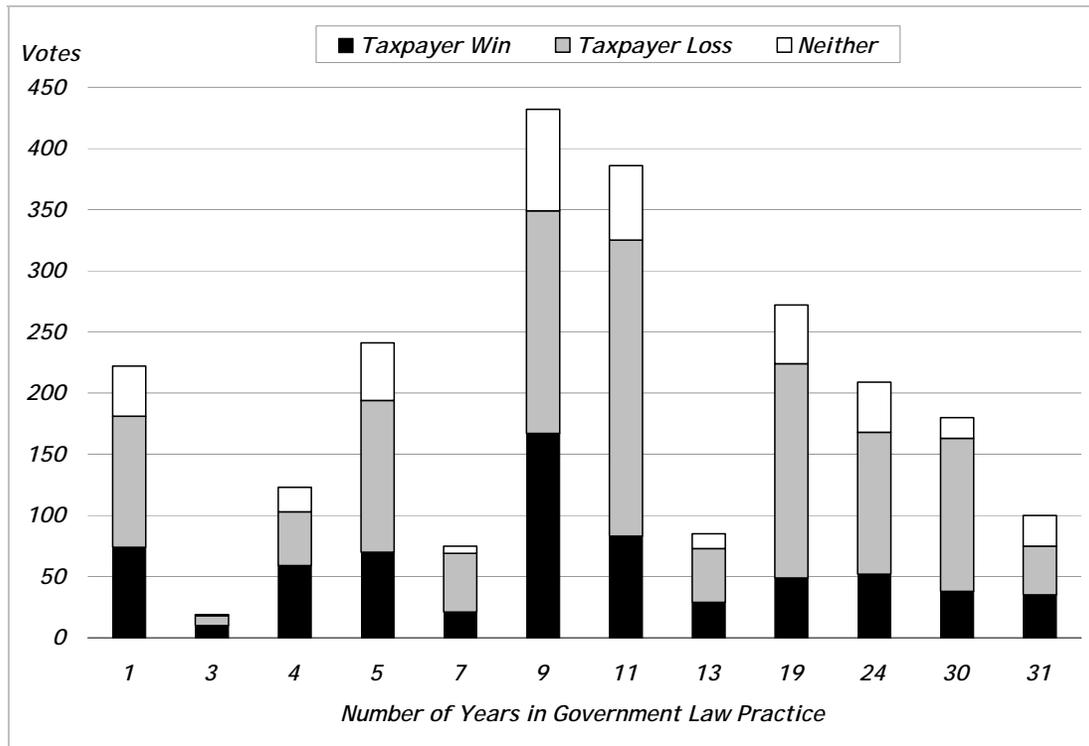
The multivariate analysis suggests that Tax Court of Canada judges who practiced law in government are less likely to vote against taxpayers than other judges, holding all other variables constant. According to the multinomial logistic regression analysis of the voting records of the judges, the odds of voting for taxpayers relative to voting against taxpayers are 1.9 times greater for judges who practiced law in government than other judges, holding all other variables constant. The odds of voting partially for taxpayers and partially against taxpayers relative to voting against taxpayers are 1.5 times greater for judges who practiced law in government than other judges, holding all other variables constant. However, there are nuances about the above claim as revealed in the discussion of the years in Government Law Practice variable below.

#### **4.2.11 Years in Government Law Practice**

The Years in Government Law Practice variable is not examined in the Supreme Court of Canada exploratory data analysis. In examining the Years in Government Law Practice variable, the question is whether Tax Court of Canada judges who practiced law in government for a longer period are more likely to vote for taxpayers than other judges, holding all other variables constant. Figure 44 shows the voting records of the judges divided by their years in government law practice, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and their years in

government law practice did not occur by chance.<sup>219</sup>

**Figure 44: Voting Records of Tax Court of Canada Judges and Years in Government Law Practice, 1983-2004**



As shown in Figure 44, the number of years Tax Court of Canada judges practiced law in government ranges from one to 31 years. Judges who had nine or more years in government law practice account for over 40% of the total votes cast, while judges who had 19 or more years in government law practice account for over 19% of the

<sup>219</sup> The pairwise correlation between the voting records of judges and the years in government law practice is statistically significant at a five-percent level.

total votes cast. The voting percentages for taxpayers range from a high of 53% for three years of experience in law practice in government to a low of 18% for 19 years of such experience. The voting percentages against taxpayers range from a high of 69% for 30 years of experience in law practice in government to a low of 36% for four years of such experience. The percentages of voting partially for and against taxpayers range from a high of 25% for 31 years of experience in law practice in government to a low of 5% for three years of such experience.

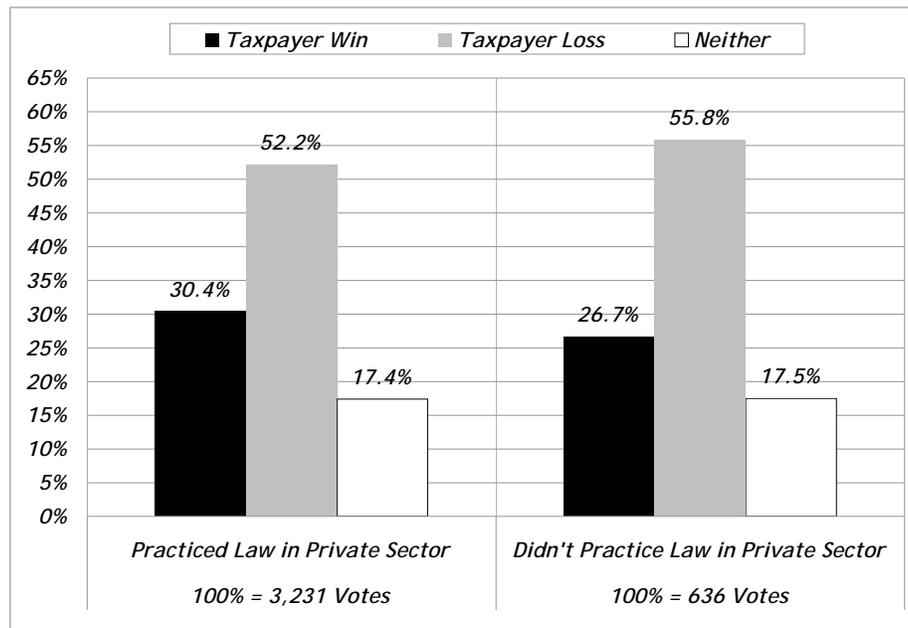
Tax Court of Canada judges appeared to be voting more often against taxpayers the longer they practiced law in government as shown in Figure 44, but the multinomial logistic regression analysis reveals something different. According to the multinomial logistic regression analysis, the odds of voting against taxpayers relative to voting for taxpayers are greater for judges who practiced law in government for six years or less but the odds reverse for judges who practiced law in government for six and a half years and more.

#### **4.2.12 Private Law Practice**

The Private Law Practice variable is not examined in the Supreme Court of Canada exploratory data analysis. In examining the Private Law Practice variable, the question is whether Tax Court of Canada judges who practiced law in the private sector are more likely to vote for taxpayers than other judges, holding all other variable constant. Among the 34 judges in the dataset, only four had not practiced law in the

private sector. They were Cardin, Dussault, Lamarre Proulx and Taylor. Figure 45 shows the voting records of the judges divided by whether they practiced law in the private sector before, illustrating that the bivariate relationship between votes cast by Tax Court of Canada justices and Private Law Practice occurred by chance.<sup>220</sup>

**Figure 45: Voting Percentages of Tax Court of Canada Judges and Private Law Practice**



The multivariate analysis suggests that Tax Court of Canada judges who practiced law in the private sector are less likely to vote partially for taxpayers and partially against taxpayers than other judges, holding all other variables constant. According to the multinomial logistic regression analysis of the voting records of Tax Court of Canada

<sup>220</sup> The difference between the two categories of judges is not statistically significant at a five-percent level.

judges, the odds of voting for taxpayers relative to voting partially for taxpayers and partially against taxpayers are 2.2 times greater for judges who practiced law in the private sector than other judges, holding all other variables constant. The odds of voting against taxpayers relative to voting partially for taxpayers and partially against taxpayers are 2.1 times greater than judges who practiced law in the private sector than other judges, holding all other variables constant.

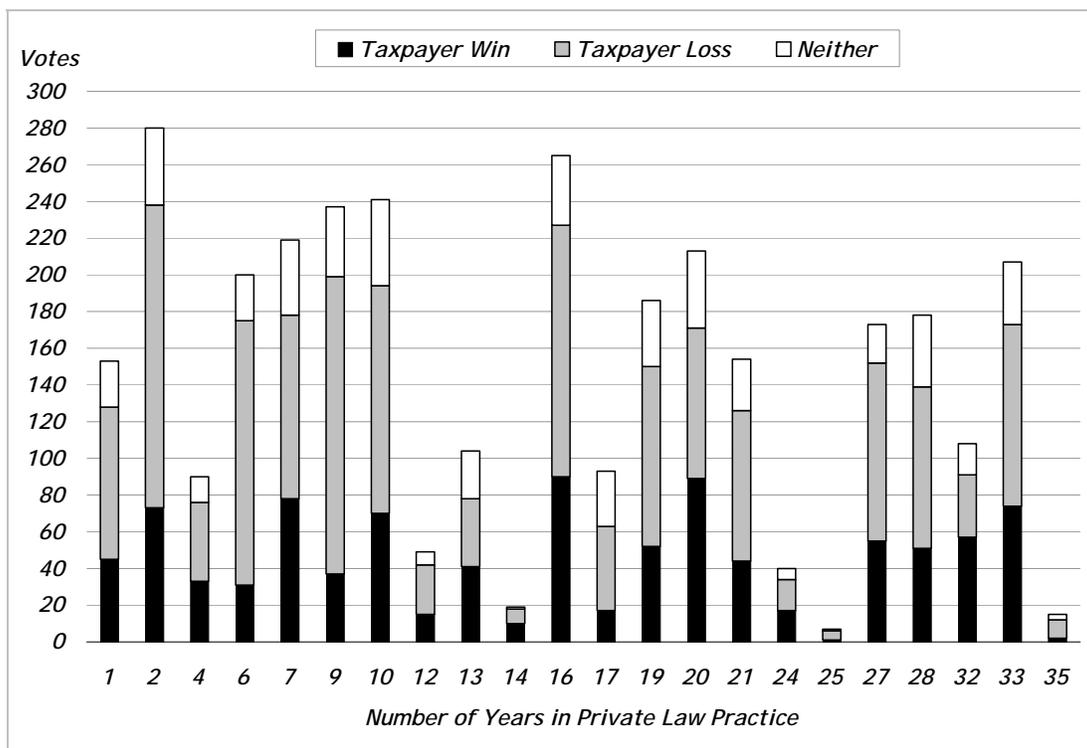
#### **4.2.13 Years in Private Law Practice**

The Years in Private Law Practice variable is not examined in the Supreme Court of Canada exploratory data analysis. In examining the Years in Private Law Practice variable, the question is whether Tax Court of Canada judges who practiced law in the private sector for a longer period are more likely to vote for taxpayers than judges who practiced law in the private sector for a shorter period. Figure 46 shows the voting records of the judges divided by their years in private law practice, illustrating that the bivariate relationship between votes cast by Tax Court of Canada judges and their years in government law practice did not occur by chance.<sup>221</sup>

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<sup>221</sup> The pairwise correlation between the voting records of the judges and their years in private law practice is statistically significant at a five-percent level.

**Figure 46: Voting Records of Tax Court of Canada Judges and Years in Private Law Practice**



The voting percentages for taxpayers range from a high of 53% for 14 and 32 years of experience in private law practice to a low of 13% for 35 years of such experience. The voting percentages against taxpayers range from a high of 72% for three years of experience in private law practice to a low of 31% for 32 years of such experience. The percentages of voting partially for and against taxpayers range from a high of 32% for 17 years of experience in private law practice in government to a low of 5% for 14 years of such experience. The voting percentages of judges who practiced law in the private sector appear to be similar to judges who practiced law in government as shown in Figure 46, but the variable is not influential in judicial decision making in the

Tax Court of Canada, according to the multinomial logistic regression analysis of the voting records of Tax Court of Canada judges.<sup>222</sup>

#### **4.2.14 Interpretation of Multinomial Logistic Regression Results**

The results of the multinomial logistic regression analysis of the voting records of Tax Court of Canada judges and their socio-demographic characteristics can be divided into five groups: variables that increase the likelihood of voting for taxpayers; variables that decrease the likelihood of voting for taxpayers; variables that increase the likelihood of voting against taxpayers; variables that increase the likelihood of voting for or against taxpayers in different times; and variables that increase the likelihood of voting neither totally for nor against taxpayers.

First, three variables that can be seen as increasing the likelihood of voting for taxpayers are International Education, Prior Judicial Experience and Entrepreneurial Experience.

- Judges who went to universities outside Canada are more likely to vote for taxpayers than others;
- Judges who were judges before are more likely to vote for taxpayers than others; and
- Judges who founded their own law firms are more likely to vote for

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<sup>222</sup> The multinomial regression results of the variable are not statistically significant at a five-percent level.

taxpayers than others.

Second, three variables that can be seen as decreasing the likelihood of voting against taxpayers are Private Law Practice, Part-time Law Teaching Experience and Social Networking.

- Judges who practiced law in the private sector are less likely to vote against taxpayers than others;
- Judges who taught law on a part-time basis before are less likely to vote against taxpayers than judges who did not teach law before; and
- Judges who were active in their communities are less likely to vote against taxpayers than others.

Third, two variables that can be seen as increasing the likelihood of voting against taxpayers are Full-time Law Teaching Experience and Political Ties.

- Judges who taught law on a full-time basis before are more likely to vote against taxpayers than judges who did not teach law before; and
- Judges who were appointed by Liberal Party prime ministers are more likely to vote against taxpayers than others.

Fourth, two variables that can be seen as influential in voting propensity in opposite timelines are Tenure and Years in Government Law Practice.

- Judges are more likely to vote for taxpayers in their early years but vote against taxpayers in their later years; and
- Judges who practiced law in government are more likely to vote against

taxpayers in their early years but vote for taxpayers in their later years.

Fifth, the variable that can be seen as decreasing likelihood in voting neither totally for nor totally against taxpayers is Gender.

- Female judges are less likely to vote partially for taxpayers and partially against taxpayers than male judges.

As a very crude summary, Tax Court of Canada judges who are more likely to vote for taxpayers may include those who went to universities outside Canada, served on the bench before and taught law on a part-time basis before. Tax Court of Canada judges who are more likely to vote against taxpayers may include those who were appointed by prime ministers from the Liberal Party and taught law on a full-time basis.

The multinomial regression analysis highlights two points. First, as shown earlier, the six variables that were examined in the Supreme Court of Canada exploratory data analysis – Political Ties, Regional Ties, Prior Judicial Experience, Prior Law Teaching Experience, Entrepreneurial Experience and International Education – generate findings that are different from those in the Supreme Court of Canada exploratory data analysis. The differences could be attributed to the differences between the Tax Court of Canada and the Supreme Court of Canada. More research is required to understand that.

Second, the exploratory data analysis of some variables – Social Networking, Political Ties, Part-time Law Teaching Experience, Private Law Practice and Full-time Law Teaching Experience – generates findings that have some intuitive appeal. Tax Court of Canada judges who were active in their communities were pillars of their

communities, and the nature of the Social Networking activities as disclosed in their official biographies lends to the conjecture that such Social Networking may lead to plenty of opportunities of socializing with the upper echelon of the society, and such socialization may help shape the judges' sympathy towards taxpayers and against taxation and government spending. However, some judges had ties to the Liberal Party, and ties to the Liberals rather than the Conservatives may reflect a little bit more sympathy toward taxation, the financing mechanism of government programs. Tax Court of Canada judges who taught law on a part-time basis were tax law practitioners, and as they often represented taxpayers, perhaps their prior affiliation with taxpayers helped shape their perspectives. Comparatively speaking, academics may be more critical towards claims made by taxpayers. More research is definitely required to make sense of the empirical findings on judicial decision making in Tax Court of Canada judges.

### **4.3 Simulated Voting Patterns of Current Tax Court of Canada Judges**

Based on the multinomial logistic regression analysis, simulated voting patterns of the current 25 Tax Court of Canada judges are generated for the year 2007.<sup>223</sup> Focusing on a specific year takes into consideration of Tenure in the simulation. Fixing the year at 2007 pegs Tenure to be the number of years judges served on the Court until

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<sup>223</sup> See Appendix III for socio-demographic characteristics of the current Tax Court of Canada judges used for the simulation.

2007. Figure 47 shows the simulated voting scenarios.

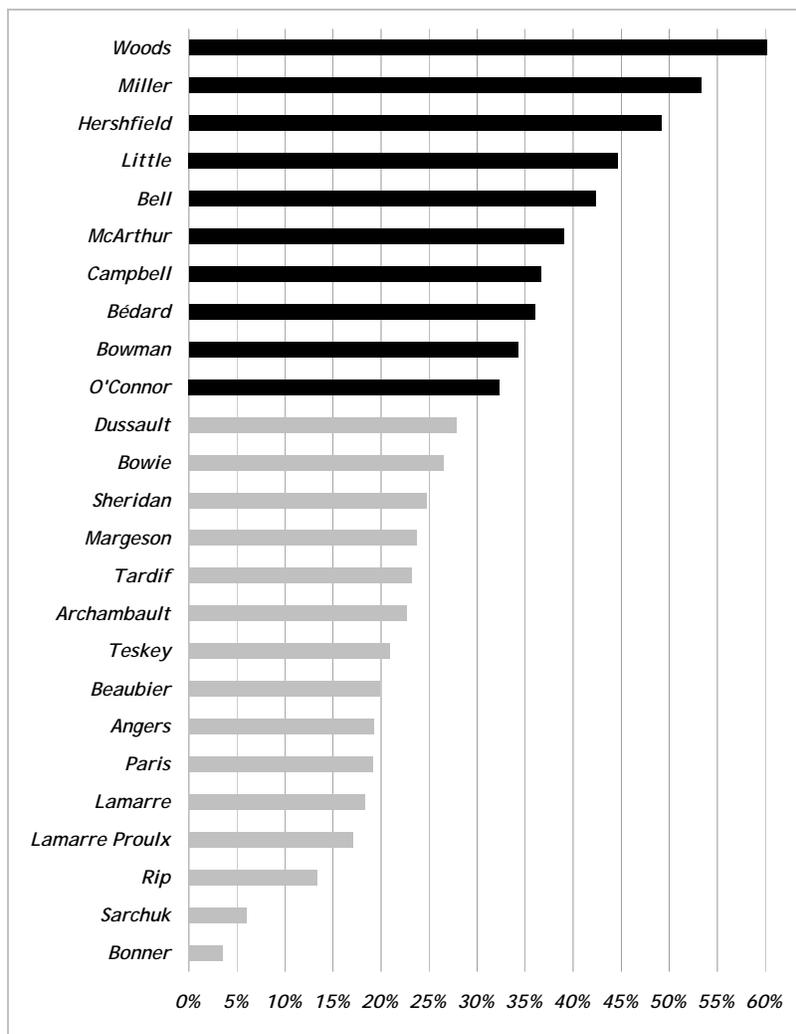
**Figure 47: Simulated Voting Percentages of Current Tax Court of Canada Judges in 2007**

<i>Judges</i>	<i>Taxpayer Win</i>	<i>Taxpayer Loss</i>	<i>Neither</i>
<i>Angers</i>	19%	66%	15%
<i>Archambault</i>	23%	61%	16%
<i>Beaubier</i>	20%	57%	23%
<i>Bédard</i>	36%	53%	11%
<i>Bell*</i>	42%	38%	20%
<i>Bonner*</i>	4%	89%	8%
<i>Bowie</i>	26%	58%	15%
<i>Bowman</i>	34%	47%	19%
<i>Campbell</i>	37%	46%	17%
<i>Dussault</i>	28%	50%	22%
<i>Hershfield</i>	49%	38%	13%
<i>Lamarre</i>	18%	71%	11%
<i>Lamarre Proulx</i>	17%	63%	20%
<i>Little</i>	45%	38%	17%
<i>Margeson</i>	24%	56%	21%
<i>McArthur</i>	39%	47%	14%
<i>Miller</i>	53%	26%	21%
<i>O'Connor*</i>	32%	47%	20%
<i>Paris</i>	19%	52%	29%
<i>Rip</i>	13%	76%	11%
<i>Sarchuk*</i>	6%	81%	13%
<i>Sheridan</i>	25%	65%	10%
<i>Tardif</i>	23%	57%	19%
<i>Teskey*</i>	21%	66%	13%
<i>Woods</i>	60%	31%	9%
<i>Average</i>	29%	55%	16%
<i>* denotes supernumerary judge</i>			

According to the simulation, an average judge is predicted to vote for taxpayers 29% of the times, against taxpayers 55% of the times, and partially for and partially against taxpayers 16% of the times. Rank-order analysis can uncover more information

from the simulated voting patterns. Figure 48-50 show the simulated voting patterns ranked by voting propensity for taxpayers, voting propensity against taxpayers and voting propensity partially for and partially against taxpayers.

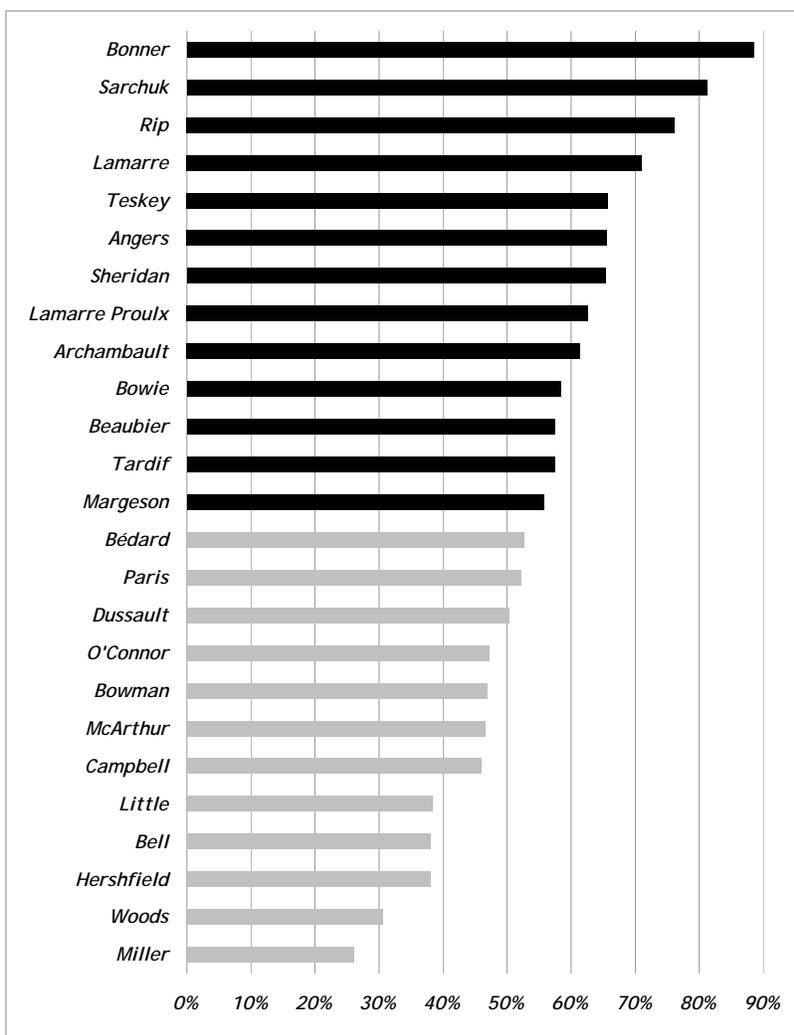
**Figure 48: Simulated Voting Percentages for Taxpayers, 2007**



As shown in Figure 48, the propensity of voting for taxpayers ranges from 60% by Woods to 4% by Bonner. As highlighted with black horizontal bars in Figure 48, ten

judges – Woods, Miller, Hershfield, Little, Bell, McArthur, Campbell, Bédard, Bowman and O'Connor – exhibit above-average propensity in voting for taxpayers.

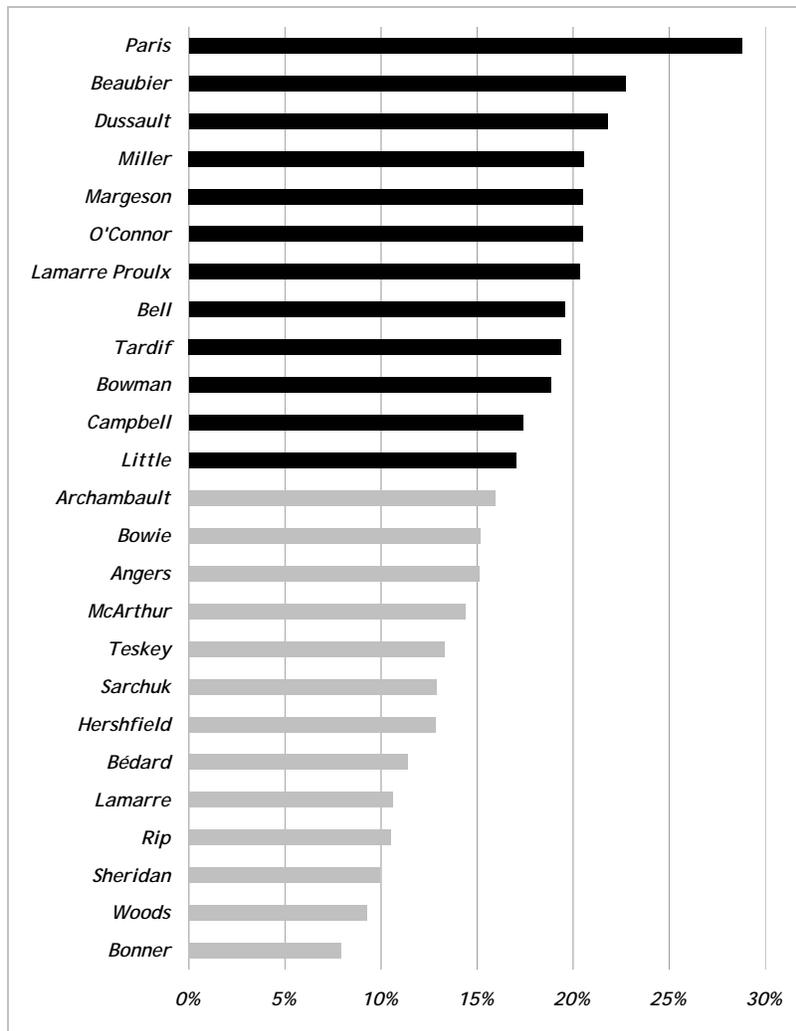
**Figure 49: Simulated Voting Percentages against Taxpayers, 2007**



As shown in Figure 49, the propensity of voting against taxpayers ranges from 89% by Bonner to 26% by Miller. As highlighted with black horizontal bars in Figure 49, 13 judges – Bonner, Sarchuk, Rip, Lamarre, Teskey, Angers, Sheridan, Lamarre Proulx,

Archambault, Bowie, Beaubier, Tardif and Margeson – exhibit above-average propensity in voting against taxpayers.

**Figure 50: Simulated Percentages of Voting Partially For and Partially Against Taxpayers, 2007**



As shown in Figure 50, the propensity of voting partially for taxpayers and partially against taxpayers ranges from 29% by Paris to 8% by Bonner. As highlighted

with black horizontal bars in Figure 50, 12 judges – Paris, Beaubier, Dussault, Miller, Margeson, O'Connor, Lamarre Proulx, Bell, Tardif, Bowman, Campbell and Little – exhibit above-average propensity in voting partially for taxpayers and against taxpayers.

In sum, the simulated voting patterns show that taxpayers have a slightly better chance of having a Tax Court of Canada judge who is likely to vote against taxpayers than otherwise. According to the simulation, half of the 25 sitting Tax Court of Canada judges are likely to vote against taxpayers more often than an average judge, and half of the 25 judges are likely to vote partially for and partially against taxpayers more often than an average judge. In comparison, less than half of the judges are likely to vote for taxpayers more often than an average judge. In terms of individual judges, Bonner has the highest propensity to vote against taxpayers, while Woods has the highest propensity to vote for taxpayers.

Again, I would like to stress that the findings of the exploratory data analysis reaffirm the need for empirical legal research in judicial decision making. Future research is recommended to be performed as a collaborative research enterprise between quantitative and qualitative researchers to explain the empirical findings. For example, the quantitative research finds that voting patterns change over a period as shown in results of the Tenure and Years in Government Law Practice variables, and it would be interesting for qualitative researchers to further examine the findings, for example, via interviewing judges or digging into papers of the judges or both. Section 5.4 expands on the idea of the adoption of such a mixed research approach.

## 5 Reflecting on Quantitative Analysis of Judicial Decision Making in Canada

When Peck published his research in the late 1960s, many in the legal profession did not accept his view of the existence of a political dimension in judicial decision making and his mapping of judicial voting patterns in scalogram analysis. Ian Bushnell said that “the bar’s reaction to Peck’s work bordered on the hysterical.”<sup>224</sup> Peck’s focus on judges’ ideologies, coupled with the use of a quantitative technique, were too unorthodox at the time. Donald Fouts, a contemporary of Peck and a fellow scalogram user, commented in a 1969 book that “Canadian scholars have made few systematic efforts to examine the Court’s voting behavior in various policy areas or to suggest theories to explain what kinds of personal attitudes are operative in particular cases.”<sup>225</sup> The main objection to Peck’s research that linked law and politics then was that such work undermined the public confidence on the integrity of the judiciary.<sup>226</sup> Now few would argue that the law and judicial decision making have nothing to do with the

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<sup>224</sup> Ian Bushnell, *The Captive Court: A Study of the Supreme Court of Canada* (Montreal and Kingston: McGill-Queen’s University Press, 1992) at 373.

<sup>225</sup> See *supra* note 32 at 264.

<sup>226</sup> See Philip Slayton, “A Critical Comment on Scalogram Analysis of Supreme Court of Canada Cases” (1971) 21 U.T.L.J. 393. Slayton toned down his attacks on scalogram analysis after he had talked to Peck. In a subsequent article, Slayton said he agreed with Peck that in his previous article he did not distinguish between the use of scalogram as a descriptive device and the use of scalogram analysis as an explanatory device of judicial attitudes. See Philip Slayton, “Quantitative Methods and Supreme Court Cases” (1972) 10 Osgoode Hall L.J. 429 at 434, footnote 27.

politics of judges, but more work still needs to be done to advance the knowledge on judicial behavior in Canada.

In Section 2, prior quantitative studies in judicial decision making are shown to have contributed to the understanding of the five models of judicial decision making that has emerged from American political science research and paved the way for future studies on judicial decision making in Canada. To be sure, no one model can explain judicial decision making completely. More realistically, a combination of the five models can provide a more nuanced explanation of judicial decision making, and the configuration of such a combination will be a matter of weighting of different components of the five models.

The Canadian quantitative studies reviewed can be seen as different parts of one big empirical research project. The Peck group of studies formulated the research question of whether Supreme Court of Canada justices decided cases based on extra-legal factors and set up the hypothesis that judges voted according to their personal policy preferences. The Russell group of studies offered a description of the nature of data that can be gathered on three things: the operations of the Supreme Court of Canada, the cases decided by the Court and the justices who decided the cases. The Tate group of studies undertook multiple regression analyses of the data to test (1) the hypotheses of the personal attributes model that were similar to the hypotheses of the Peck group; and (2) hypotheses formulated under other theories that explain judicial behavior. Each group of researchers used more sophisticated quantitative techniques than the preceding group. For

example, Fouts, Russell, Tate and Sittiwong all examined some aspects of the difference in voting patterns between Quebec judges and non-Quebec judges, but Fouts used scalogram analysis, Russell used descriptive statistics, while Tate and Sittiwong used multiple regressions. Taken together, the three groups of studies form a lineage of evolution, revealing improvements along the way.

The last part of Section 2 highlights recent quantitative studies on judicial decision making in tax cases. This part of Section 2 reviews, among other research, the pioneer work on the influences of personal backgrounds of judges on their U.S. tax decisions by Daniel Schneider, who has started examining judicial decision making in U.S. tax cases systematically since the late 1990s. Reading his work has led me to believe that an opportunity of making a contribution by conducting similar research exists in the Canadian context. Therefore, I have decided to explore the power to explain judicial decision making in Canadian income tax cases by the judges' personal backgrounds in Section 3 and Section 4.

### **5.1 Reflections on Socio-demographic Characteristics of Supreme Court of Canada Judges and Their Decision Making**

Although some researchers have published quantitative studies on Canadian judicial decision making, the exploratory data analysis in Section 3 is the first of its kind in Canada in three aspects. First, selected socio-demographic characteristics of Canadian judges are tested together for the first time to ascertain their explanatory power of judicial

decision making. Second, the test is conducted for the first time on Canadian income tax decisions. Third, the statistical modeling strategies used in testing the explanatory power of the socio-demographic variables are used for the first time in the analysis of judicial decision making in Canada.

In the study period 1920-2003, Supreme Court of Canada justices were influenced by their socio-demographic characteristics in their decision making in income tax cases, especially in cases with a lot of legal ambiguity. Based on the results of the probit regression analyses of historical data, simulated voting patterns of the nine current Supreme Court of Canada justices are produced, and according to the simulated voting patterns, one thing is clear: Supreme Court of Canada justices with similar socio-demographic characteristics may very well decide cases in similar ways and cast votes that form similar patterns.

The finding lends support to the idea of having socio-demographic diversity in the Supreme Court of Canada. The argument goes as follows. Justices with similar socio-demographic characteristics may be more likely to vote in similar than different ways. It is hard to argue once and for all whether that is a good thing. It all depends on the cases. Having a Supreme Court of Canada with justices with more similar than different judicial philosophies and outlooks in life may not be a problem in cases with not much legal ambiguity. But in cases with a lot of legal ambiguity and thus with more room for influences of socio-demographic backgrounds to seep into judicial decision making, such a Court may not be able to explore all the points of views that may need to be explored

for such complex cases because of its socio-demographic homogeneity.

In other words, having a Supreme Court of Canada formed by justices with homogenous socio-demographic backgrounds may hinder the Court's capability in deciding complex cases. The focus here is not to argue that having socio-demographic diversity on the Supreme Court of Canada may enable the Court to decide complex cases in "better" ways, whatever that means. Instead, the focus here is to argue that not having socio-demographic diversity on the Supreme Court of Canada may prevent the Court from deciding complex cases in the best way that a socio-demographically diverse Supreme Court of Canada may be able to do so.

## **5.2 Reflections on Socio-demographic Characteristics of Tax Court of Canada Judges and Their Decision Making**

In Section 4, the exploratory data analysis of judicial decision making in the Tax Court of Canada explores the explanatory power of six sets of socio-demographic variables that were examined in the Supreme Court of Canada exploratory study and seven sets of socio-demographic variables that were not examined in the Supreme Court of Canada exploration. Using the results of multinomial logistic regression analysis, simulated voting patterns of the 25 current Tax Court of Canada judges are generated. According to the simulated voting patterns, taxpayers may be less likely to win in the current Tax Court of Canada mainly because more than half of the sitting judges are likely to vote against taxpayers more often than for taxpayers.

The exploratory data analysis on judicial decision making in the Tax Court of Canada confirms the general finding of the Supreme Court of Canada exploratory data analysis. There are linkages between the voting records of judges and their socio-demographic characteristics. The most important point is not that whether there is a crystal ball in terms of statistic model in predicting judicial decision making or what variable has more explanatory power. Rather, it is the empirical analytical outcome that such linkages exist. To ignore them in trying to make sense of judicial decision making would be a mistake. Like what I proposed based on the results of the Supreme Court of Canada exploration, the linkages between socio-demographic characteristics of judges and their decision making support the idea that not having diversity in judicial appointment may lead to decisions made without full and comprehensive deliberation.

### **5.3 Limitations of Quantitative Data Analysis of Judicial Decision Making**

Section 3 and Section 4 show that an exploratory approach can help advance knowledge on judicial decision making in Canadian income tax cases. However, there are limitations in quantitative analysis of judicial decision making.

*Dependent variable.* One limitation lies in the proxy for outcomes of judicial decision making. The unit of analysis has been judicial votes rather than rulings in the cases. That begs the question of how accurately judicial votes can reflect complex judicial behavior. Critics of quantitative analysis often say that quantitative analysis of judicial decision making only focuses on outcomes (i.e. judicial votes) and ignore other

important parts of judicial decision making such as the choice of statutory interpretation approach.<sup>227</sup> A group of U.S. researchers have been coding U.S. tax decisions according to the statutory interpretation approaches used by the judges in deciding the cases and developing a dataset for further investigation of questions including whether the choice of statutory interpretation approaches influence the outcomes of the cases.<sup>228</sup> Statutory interpretation should definitely be included as a variable in future datasets on Canadian judicial decision making.

*Independent variables.* Another limitation is about the content of the datasets used. Quantitative analysis of judicial decision making often focuses exclusively on judges and pays little attention to other public policy actors in the judicial decision making process including interest groups, politicians and the news media. A thorough understanding of judicial decision making will not be reached without a detailed understanding of actors in the judicial decision making process other than judges. For example, lawyers play a significant role in the adjudication process. Lawyers are supposed to illuminate the legal issues in disputes with their advocacy skills and facilitate

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<sup>227</sup> For a recent discussion on the focus on the outcomes rather than the laws in cases in quantitative research on judicial decision making in the U.S., see Lee Epstein, Nancy Staudt, and Peter Wiedenbeck, “Judging Statutes: Thoughts on Statutory Interpretation and Notes for a Project on the Internal Revenue Code” (2003) 13 Wash. U.J.L. & Pol’y 305 at 322–323.

<sup>228</sup> See Lee Epstein, Nancy Staudt, Peter Wiedenbeck, “Judging Statutes: Thoughts on Statutory Interpretation and Notes for a Project on the Internal Revenue Code” (2003) 13 Wash. U. J.L. & Pol’y 305. Also, see a forthcoming Loyola-L.A. Law Review article by Nancy Staudt, Lee Epstein, Peter Wiedenbeck, René Lindstädt & Ryan J. Vander Wielen entitled “Judging Statutes: Interpretive Regimes” at <http://www.lawprofessorblogs.com/taxprof/linkdocs/Nancy%20Staudt%20on%20Judging%20Statutes.pdf>.

the court to arrive at a just decision. Lawyers may make or break a case for their clients. Noting that lawyers make “a big difference,” Bowman, then Associate Chief Justice of the Tax Court of Canada, said in 2002 that “[i]n perhaps 20 or 25 percent of cases that can go either way, counsel do make a difference. I can tell you that there are some counsel with winning cases who have managed to snatch defeat from the jaws of victory; that has often happened.”<sup>229</sup> In future quantitative analyses there should be ways to incorporate their role in the dataset, given the availability of more resources for dataset development. One possible way is to use the experience of lawyers as a proxy of the capability of the lawyers and to answer the question on whether more experienced lawyers are more likely to win in courts. But of course, no matter what the lawyers do, the judges decide the cases, and that leads back to the role of judges in judicial decision making. Bowman said “if you're going to get Mr. Justice Jeffrey of the Bloody Assizes or Mr. Justice Ivan the Terrible, you are going to prepare your case one way. If you're going to get Mr. Justice Milquetoast, you're going to prepare it differently. You look up his cases.”<sup>230</sup>

*Modeling.* Another limitation is about the level of details in modeling. The current body of quantitative analyses of judicial decision making is mainly static in nature. As all cases are treated the same way over a period, the modeling cannot capture the differences

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<sup>229</sup> *Supra* note 202 at 5.

<sup>230</sup> *Ibid.* at 14.

in the jurisprudential importance of cases and temporal changes in judicial behavior.<sup>231</sup> For example, all cases are treated the same statistically for data analysis in the exploratory study of judicial decision making in the Tax Court of Canada in this dissertation. In future research, such an analysis can be improved by categorizing the cases that feature self-represented taxpayers differently. Furthermore, cases may be coded on a weighted scale to reflect their relative importance.

*Nature of Quantitative Analysis.* The most glaring limitation of quantitative analysis of judicial decision making is due to the inherent limitation of quantitative analysis itself in examining judicial decision making. Some things can never be learnt by doing quantitative data analysis alone. Here is just a partial list of questions that can be difficult to answer by quantitative analysis alone.

- The Supreme Court of Canada was shorthanded due to illnesses and absences in the 1980s.<sup>232</sup> Did that affect its judicial decision making?

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<sup>231</sup> For a recent discussion on problems with the implicit assumption that all cases are of similar importance in the development of law in quantitative research on judicial decision making in the U.S., see Gregory C. Sisk, Michael Heise, and Andrew P. Morriss, “Charting the Influences on the Judicial Mind: An Empirical Study of Judicial Reasoning” (1998) 73 N.Y.U.L. Rev. 1377 at 1392–1394.

<sup>232</sup> See Wilson, *supra* note 126, at 155:

Part of the difficulty of managing the Court during the Laskin era and even after 1984 when Dickson replaced him as chief justice was related to illness and absences of judges. For a long period of time the Court was not functioning with its full complement.

See Dickson, *supra* note 188, at 375:

In the early 1980s, it was Laskin and Ritchie. Then Chouinard was struck down with cancer in 1987. Estey was absent for a year on the banking inquiry and then, in the spring of 1987, was again out of commission with a blood clot that damaged his ophthalmic nerve. The more serious

- Hall committed to a lot of work on Royal Commissions, but in 1963-1973 he also sat on 582 cases, wrote 118 judgments, of which 28 were dissenting opinions.<sup>233</sup> Did Hall's heavy workload affect his judicial decision making?
- Chief Justice Robert Taschereau struggled with alcoholism.<sup>234</sup> Did that affect his judicial decision making?
- Martland was shocked to learn that Laskin, instead of himself, was appointed the chief in 1973.<sup>235</sup> Did unfulfilled career aspiration get in the way later?
- Hall was not a friend with Judson because of the latter's strict-constructionist approach,<sup>236</sup> while McIntyre is said to be a close friend of W. Estey in law school<sup>237</sup> and close to Beetz and Wilson on the Supreme

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and debilitating illnesses of Beetz and Le Dain followed in the late 1988. As a result, Dickson, Wilson, and Lamer bore a disproportionate burden of the Court's work.

<sup>233</sup> See Hall, *supra* note 190, at 163.

<sup>234</sup> In a section entitled "A Sad Sidebar," Frederick Vaughan described how Taschereau was in a state that prevented him to perform his judicial duties late in his career in the mid-1960s but refused to leave the court. In one episode, Taschereau insisted on going to a conference in Switzerland but never left the hotel room for unstated reasons during the conference. Upon a request to submit a report on the conference to the minister of justice at the time, Pierre Trudeau, Taschereau asked the administrative officer of the court to write a brief report based upon imagined conference activities on his behalf, signed it and sent it to the minister. See Hall, *supra* note 190, at 210-214.

<sup>235</sup> See Dickson, *supra* note 188, at 142.

<sup>236</sup> See Hall, *supra* note 190, at 173-174.

<sup>237</sup> See McIntyre, *supra* note 191, at 12.

Court of Canada.<sup>238</sup> Did these personal relationships affect the judicial decision making of the justices?

- Pigeon was reported as describing the *Income Tax Act* as an example of “unworkable statutes” that contains too many details.<sup>239</sup> Did that affect his judicial decision making in income tax cases in any way?

As some questions are very hard to be answered by quantitative data analysis, I would propose the development of a mixed approach in empirical research in judicial decision making as outlined in Section 5.4 below.

#### **5.4 A Mixed Approach in Empirical Research on Judicial Decision Making**

As Peter Russell was cited saying in Section 2.3, quantitative research cannot substitute for qualitative research, but quantitative and qualitative research approaches can complement each other in knowledge discovery. On one hand, as not all information can be represented in numbers, it would be unrealistic to expect the use of quantitative analysis alone to be able to explain judicial decision making fully. On the other hand, it would be unrealistic to expect the use of qualitative analysis alone to answer all empirical

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<sup>238</sup> *Ibid.* at 83 and 85. See also Wilson, *supra* note 126, at 152-153.

<sup>239</sup> Pigeon was cited in B. Hill, “Court Rule on Bicyclist Reserved” *Ottawa Citizen* (8 June 1978). The story was about the *Moore* case. See Dickson, *supra* note 188, at 338. For the *Moore* case, see *Moore v. The Queen*, [1979] 1 S.C.R. 195. The current Income Tax Act is *Income Tax Act*, RSC 1985, c. 1 (5th Supp.) as amended. The Act in use at the time of the Pigeon comment was *Income Tax Act*, 1970-71-72, c. 63.

research questions completely either because textual information may not capture all the things numerical data can capture. Collaboration between quantitative researchers and qualitative researchers can pool their strengths together. For example, one quantitative analysis may offer clues that are not grasped by other qualitative analyses but will lead to further investigations by yet other qualitative researchers.<sup>240</sup> In this dissertation, the exploratory data analysis aims to do just that – to uncover interesting information from the data available for future qualitative studies.

Without further qualitative investigations, the full meanings of the quantitative findings will not be known. Without the quantitative exploration, no such clues for qualitative inquiries will be provided. I would just like to use one interesting observation on the findings on education in terms of Schneider's findings and my findings as an example. In his 2002 article, Schneider found that U.S. federal district court and Tax Court judges with elite education are associated with taxpayer wins. In his 2005 article, Schneider found appellate judges with elite education are associated with taxpayer losses. My exploratory data analyses in Section 3 and Section 4 of this dissertation resonate with Schneider's findings on the assumption that my variable of education outside Canada is similar to the variable of eliteness in education in Schneider's studies. The assumption is

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<sup>240</sup> Allan Bryman, among other researchers, has offered suggestions on how quantitative and qualitative researchers can work together. See Peter Burnham, Karin Gilland, Wyn Grant and Zig Layton-Henry, *Research methods in Politics* (Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan, 2004), 277. For an example of the Bryman approach, see Alan Bryman and James Teevan, *Social Research Methods*, Canadian ed. (Toronto : Oxford University Press, 2005). Also, see Melissa A. Hardy and Alan Bryman, eds., *Handbook of Data Analysis* (London : SAGE, 2003).

based on the idea that only those who grew up in more well-off economic circumstances are more likely to go to universities outside Canada and go to more elite educational institutions. Although the U.S. and Canadian tax systems are obviously different, the similarity of voting patterns deserves further investigation, and qualitative analysis could bring insights quantitative analysis cannot bring by delving deep into the lives of the judges of the two courts. No matter how many regressions are run, the results will not show the explanations of the findings on education. Qualitative analysis is badly needed to shed light on the intriguing empirical findings.

As research is a social enterprise, quantitative empirical research can play a broader role in research in law and policy rather than just unearth all there is to know about judicial decision making in income tax cases in Canada. However, there are obstacles in the pursuit of a mixed approach.

Quantitative analysis is viewed as a dubious methodology by at least some if not many legal researchers. As quantitative analysis such as statistical analysis can only produce generalized results, one common criticism of the application of statistical analysis is that the methodology cannot produce specific results like qualitative methodology such as ethnography. This criticism is true to the extent that quantitative analysis is imperfect and indeed cannot produce specific research findings produced by qualitative analysis. However, as every research methodology has its inherent flaws, and not every methodology can do everything, the answer to the criticism is that different methodology produces different results and thus different perspectives. Quantitative

analysis is no better or worse than qualitative analysis. The world is big enough for more than one dominant methodology.

Another source of doubt about the value of quantitative analysis such as statistical analysis springs from the fact that analyses of the same data with different regression models with the same variables may generate different results. However, as the regressions are different (e.g. ordinary least squares versus logistic regression), the results are supposed to be different because the data is actually analyzed in a different way. This is analogous to the analysis of the same section of a statue through the lens of two different statutory interpretation approaches.

Another common criticism of quantitative analysis is that it cannot analyze things that cannot be quantified or measured. This criticism is true to the extent that some things are hard to quantify. However, with categorical data analysis, intangible things such as personal attributes can be measured in some ways. Obviously, using a dummy variable of 1 and 0 will capture less information than a continuous variable, if the continuous variable is available. But having dummy variables representing the intangibles makes statistical analysis possible in legal research such as the exploration of influences of socio-demographic characteristics of judges on their decision making in Canada.

Another dimension of the measurement problem is coding. Transforming textual information into usable data in the form of dummy variables is difficult and laborious at times. But it will be rewarding to learn that a lot of information can be squeezed from a few lines of text in, for example, official judicial biographies, and such information can

be captured by dummy variables. Developing datasets from textual information like case law poses a challenge in consistency, as different coders may code the same piece of text in different ways. One possible way to check for consistency is to designate two coders to code the same piece of information and check the coding against each other. Even when data are available, quantitative empirical research will likely take more people and time to produce than non-empirical projects. For example, it takes a long time to develop an original dataset, and the same regression model needs to be modified and refined numerous times in order to arrive at an acceptable parsimonious configuration.

To be sure, quantitative analysis, like qualitative analysis, has limitations. That is why a mixed approach will work in advancing knowledge because it pools the strengths of the two types of analyses. But unless quantitative researchers and qualitative researchers trust each other enough, the outlook for possible collaborations between quantitative and qualitative research in the form of a mixed approach is dim. The following sounds like a chicken-and-egg argument, but unless there is more interest in quantitative empirical research in judicial decision making, I do not see the possibility of the adoption of a mixed approach in research on judicial decision making by Canadian researchers. A critical mass of legal researchers who are interested in quantitative empirical research is required to help cast away doubts on the value of quantitative analysis in legal research. But even if Canadian researchers become more interested in quantitative empirical research on judicial decision making, how to conduct such empirical research remains unsettled. Recent debates in the U.S provide vivid examples.

In 2002, Lee Epstein and Gary King asserted that most of the current empirical legal scholarship in the U.S. did not meet the requirements of the scientific method and offered their framework for conducting sound empirical legal research.<sup>241</sup> The Epstein and King article was published with three rebuttals from law professors and the authors' reply to the rebuttals. In one rebuttal, Frank Cross, Michael Heise and Gregory Sisk said that the rules of inference are all true and good, but they pointed out that Epstein and King did not follow their own rules in the sense that their use of data was poorly documented and thus the study was not easily replicated.<sup>242</sup> In another rebuttal, Richard Revesz said that Epstein and King may have been right in some of their criticisms against the existing body of empirical legal research, but he said Epstein and King should also ask social scientists to learn from the methodological innovations of legal researchers instead of only asking legal researchers to learn from the methodologies of social scientists.<sup>243</sup> In yet another rebuttal, Jack Goldsmith and Adrian Vermeule said that Epstein and King simply tried to impose the political science approach on legal research and such a push for the legal academy to adopt the rules of inference was imperialistic.<sup>244</sup> In response to the three rebuttals, Epstein and King defended their criticisms against the

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<sup>241</sup> Lee Epstein and Gary King, "The Rules of Inferences" (2002) 69(1) U. Chicago L. Rev. 1.

<sup>242</sup> See Frank Cross, Michael Heise and Gregory C. Sisk, "Above the Rules: A Response to Epstein and King" (2002) 69(1) U. Chicago L. Rev. 135.

<sup>243</sup> See Richard L. Revesz, "A Defense of Empirical Legal Scholarship" (2002) 69(1) U. Chicago L. Rev. 169.

<sup>244</sup> See Jack Goldsmith and Adrian Vermeule, "Empirical Methodology and Legal Scholarship" (2002) 69(1) U. Chicago L. Rev. 153.

methodological failures of empirical legal research staunchly, emphasized again the importance of the rules of inference in empirical research and urged the legal academy to develop its own methodological subfield like econometrics in economics and biostatistics in medical sciences.<sup>245</sup> The debates on the proper way of conducting empirical legal research continued, and less than a year later, Richard Neumann and Stefan Krieger offered their own list of attributes essential for all sound empirical legal research in their overview of the virtues and flaws of empirical legal research.<sup>246</sup> Other debates in the U.S. also heightened attention to the explanatory power of extra-legal judicial decision making models and the applicability of quantitative techniques in judicial decision making analysis.<sup>247</sup>

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<sup>245</sup> See Lee Epstein and Gary King, “A Reply” (2002) 69(1) U. Chicago L. Rev. 191.

<sup>246</sup> Richard K. Neumann, Jr. and Stefan H. Krieger, “Empirical Inquiry Twenty-Five Years after the Lawyering Process” (2003) 10 Clin. L. Rev. 349.

<sup>247</sup> Judge Edwards debated Richard Revesz, New York University School of Law professor, on whether personal ideologies and party affiliations of judges affected judicial decision making. For the article that started the debates, see Richard L. Revesz, “Environmental Regulation, Ideology, and the D.C. Circuit” (1997) Va. L. Rev. 1717; for Edwards’ comment on the article, see Harry T. Edwards, “Collegiality and Decision Making on the D.C. Circuit” (1998) 84 Va. L. Rev. 1335; and for the reply by Revesz to Edwards, see Richard L. Revesz, “Ideology, Collegiality, and the D.C. Circuit: A Reply to Chief Judge Harry T. Edwards” (1999) 85 Va. L. Rev. 805. Another recent exchange debating the existence of influences of personal policy preferences of judges on judicial decision making was between Emerson Tiller and Frank Cross, two business professors at University of Texas at Austin on one side and Judge Wald at the United States Court of Appeals for the District of Columbia Circuit on another. She was the Chief Judge of the circuit in 1986–1991. For the professors’ article arguing that judges voted at least partly based on their personal ideologies, see Emerson H. Tiller, and Frank B. Cross, “A Modest Proposal for Improving American Justice” (1999) 99 Colum. L. Rev. 215; for Judge Wald’s reply, see Patricia M. Wald, “A

If more researchers become interested in conducting empirical research on judicial behavior in Canada, more questions may arise on how these studies should be performed, and debates in the legal and political science research communities may help steer the course of quantitative analysis of judicial decision making in Canada. Debates similar to those in the U.S. may occur in Canada, and as exchanges of ideas are crucial in advancing knowledge, such debates in Canada may fuel the engine driving quantitative research of judicial decision making in Canada forward.

However, no optimistic prediction will be made here. In the opening of a 1967

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Response to Tiller and Cross" (1999) 99 Colum. L. Rev. 235; for the professors' reply to Judge Wald, see Emerson H. Tiller and Frank B. Cross, "A Modest Reply to Judge Wald" (1999) 99 Colum. L. Rev. 262; and for Judge Wald's reply to the professors' reply, see Patricia M. Wald, "Last Thoughts" (1999) 99 Colum. L. Rev. 270. Separately, there were debates in the U.S. for the use of quantitative techniques in analyzing judicial decision making. Paul Edelman, a mathematics professor at University of Minnesota, and Jim Chen, a law professor at the university, used their mathematical model to analyze decision making in the U.S. Supreme Court, rating Justice Ginsburg the most dangerous justice under their scheme of measurement of judicial power that is partly based on swing votes. They were criticized for using mathematics that is too complex. For the Edelman and Chen article on the propensity of U.S. Supreme Court Justices to vote at the margins of winning coalitions, see Paul H. Edelman and Jim Chen, "The Most Dangerous Justice: The Supreme Court at the Bar of Mathematics" (1996) 70 S. Cal. L. Rev. 63; for criticism by University of Arizona law professor Lynn Baker, see Lynn A. Baker, "Interdisciplinary Due Diligence: The Case for Common Sense in the Search for the Swing Justice" (1996) 70 S. Cal. L. Rev. 187; for the reply by Edelman and Chen, see Paul H. Edelman and Jim Chen, "'Duel' Diligence: Second Thoughts About the Supremes as the Sultans of Swing" (1996) 70 S. Cal. L. Rev. 219; and for the recent Edelman and Chen article arguing that Ginsberg has become less dangerous because of changed dynamics in the U.S. Supreme Court, see Paul H. Edelman and Jim Chen, "The Most Dangerous Justice Rides Again: Revisiting the Power Pageant of the Justices" (2001) 86 Minn. L. Rev. 131. Another mathematics-oriented article by Edelman is Paul H. Edelman and Suzanna Sherry, "All or Nothing: Explaining the Size of Supreme Court Majorities" (2000) 78 N.C.L. Rev. 1225.

article, Peck predicted that by 1975 research on the Supreme Court of Canada “will be made the object of behavioral studies which will add a new dimension to the lawyer’s understanding of the court’s role in the nation’s political life.” Unfortunately, the surging interest in behavioral studies Peck envisioned never materialized.<sup>248</sup>

The only sure thing is that the mere availability of the necessary tools alone will not lead to more interest in quantitative empirical research. Back in 1983, Tate said: “The development of powerful, flexible computerized data manipulation and statistical analysis techniques has meant that it has become easy for scholars of judicial behavior to apply even the most mathematically complex methods to their data. Under these circumstances, it would be surprising if ‘statistical overkill’ were not characteristic of at least some research. ... More common than statistical overkill, however, has been ‘statistical underkill,’ the failure to use appropriate multivariate methods when analytical purposes would have been much advanced by their use.”<sup>249</sup> Tate’s 1983 statement still applies to quantitative analysis of judicial decision making in Canada, even with the availability of computing power on a single desktop used to be provided by walls of floor-to-ceiling fridge-like machines in rooms with strict temperature controls in 1983.

Like dataset development, time may be the best ally in the growth of a research agenda. Datasets often grow over time. With proper data management, a dataset will mature as existing data are checked and cleaned and new data are added and then more

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<sup>248</sup> See Supreme Court of Canada, *supra* note 23 at 666.

<sup>249</sup> See Methodology, *supra* note 7 at 70.

new insights can be derived even from the old data when the old and new data are examined together. Perhaps over time quantitative empirical research will gain more acceptance among legal researchers in Canada, and maybe the need for a mixed approach will be recognized. It is too early to tell whether that is the fate of a mixed approach in empirical research on judicial decision making in Canada.

## Appendix I: Probit Regression Analysis of Judicial Decision Making of Supreme Court of Canada Income Tax Cases

	<i>Probit Regression Outputs for Judicial Voting Models in</i>			
	<i>Unanimous Cases</i>	<i>Nonunanimous Cases</i>	<i>Unanimous Cases</i>	<i>Nonunanimous Cases</i>
	<i>Coefficient</i>	<i>Coefficient</i>	<i>dF/dx</i>	<i>dF/dx</i>
<i>Prior Taxpayer Win</i>	0.813 (0.629 - 0.998)**	-0.198 (-0.480 - 0.083)	0.309	-0.077
<i>Post-Charter Era</i>	1.026 (0.814 - 1.237)**	-0.010 (-0.471 - 0.450)	0.390	-0.004
<i>Laurier ('96-'11)</i>	0.608 (0.381 - 0.834)**	0.924 (0.411 - 1.437)**	0.238	0.347
<i>King ('21-'30)</i>	0.688 (0.465 - 0.911)**	0.560 (0.089 - 1.030)*	0.269	0.220
<i>King ('35-'48)</i>	0.012 (-0.312 - 0.337)	0.123 (-0.322 - 0.568)	0.005	0.049
<i>St. Laurent ('48-'57)</i>	-0.320 (-0.600 - -0.041)*	0.774 (0.212 - 1.336)**	-0.113	0.300
<i>Pearson ('63-'68)</i>	-0.108 (-0.409 - 0.193)	0.979 (0.048 - 1.910)*	-0.040	0.364
<i>Trudeau ('68-'79)</i>	-0.237 (-0.469 - -0.005)*	0.261 (-0.400 - 0.923)	-0.084	0.104
<i>Trudeau ('80-'84)</i>	-0.492 (-0.710 - -0.275)**	0.131 (-0.357 - 0.619)	-0.162	0.052
<i>Chrétien ('93-'03)</i>	0.411 (0.187 - 0.636)**	0.270 (-0.856 - 1.397)	0.160	0.107
<i>Ontario</i>	0.075 (-0.090 - 0.239)	0.254 (-0.119 - 0.626)	0.028	0.100
<i>Not Ontario/Quebec</i>	-0.080 (-0.255 - 0.094)	0.576 (0.185 - 0.968)**	-0.030	0.226
<i>Served on Trial Court</i>	-0.279 (-0.453 - -0.104)**	-0.704 (-1.109 - -0.300)**	-0.101	-0.261
<i>Served on Appeal Court</i>	0.082 (-0.154 - 0.319)	-0.192 (-0.553 - 0.168)	0.031	-0.074
<i>Served on Both Courts</i>	0.094 (-0.172 - 0.360)	-0.078 (-0.651 - 0.494)	0.035	-0.031
<i>Taught Law Full Time</i>	0.071 (-0.130 - 0.273)	0.443 (0.012 - 0.873)*	0.027	0.175
<i>Taught Law Part Time</i>	-0.099 (-0.246 - 0.049)	0.558 (0.233 - 0.883)**	-0.036	0.219
<i>Entrepreneurial Experience</i>	0.232 (0.024 - 0.439)*	-0.665 (-0.936 - -0.394)**	0.088	-0.239
<i>Educated in U.S.</i>	-0.124 (-0.414 - 0.166)	-0.775 (-1.264 - -0.285)**	-0.045	-0.271
<i>Educated in U.K.</i>	-0.162 (-0.363 - 0.040)	-0.494 (-0.907 - -0.081)*	-0.059	-0.185
<i>Educated in France</i>	-0.346 (-0.537 - -0.155)**	-1.815 (-2.380 - -1.249)**	-0.120	-0.432
<i>Constant</i>	-0.709 (-1.042 - -0.376)**	-0.293 (-0.892 - 0.305)		
<i>Observations</i>	1465	460	1465	460
<i>Robust 95% confidence intervals in parentheses</i>		<i>* significant at 5%; ** significant at 1%</i>		

## Appendix II: Multinomial Logistic Regression Analysis of Tax Court of Canada Income Tax Cases

Socio-demographic Characteristics	Propensity of Voting for Taxpayers	Propensity of Voting Partially for Taxpayers and Partially Against Taxpayers
<i>Political Ties</i>	-0.419 (-0.692 - -0.147)**	-0.555 (-0.905 - -0.205)**
<i>Regional Ties, Ontario</i>	-0.051 (-0.360 - 0.257)	-0.179 (-0.505 - 0.147)
<i>Regional Ties, Areas Other Than Ontario and Quebec</i>	-0.244 (-0.649 - 0.162)	-0.04 (-0.442 - 0.362)
<i>Law-Teaching Experience, Full-time</i>	-0.712 (-1.291 - -0.134)*	-1.082 (-1.743 - -0.421)**
<i>Law-Teaching Experience, Part-time</i>	0.455 (0.252 - 0.657)**	0.342 (0.008 - 0.676)*
<i>Prior Judicial Experience</i>	0.684 (0.294 - 1.074)**	0.421 (-0.036 - 0.879)
<i>Entrepreneurial Experience</i>	-0.045 (-0.332 - 0.242)	-0.461 (-0.965 - 0.042)
<i>International Education, U.S.</i>	1.021 (0.619 - 1.422)**	0.475 (-0.019 - 0.969)
<i>International Education, Outside U.S. and Canada</i>	0.229 (-0.168 - 0.626)	-0.351 (-0.819 - 0.118)
<i>Gender</i>	0.1 (-0.148 - 0.348)	-0.506 (-0.837 - -0.175)**
<i>Community Participation</i>	0.5 (0.282 - 0.719)**	0.417 (0.052 - 0.783)*
<i>Tenure</i>	0.073 (0.029 - 0.117)**	0.056 (0.000 - 0.112)*
<i>Square Term of Tenure</i>	-0.005 (-0.007 - -0.002)**	-0.003 (-0.005 - -0.000)*
<i>Government Law Practice</i>	0.629 (0.378 - 0.880)**	0.375 (0.032 - 0.718)*
<i>Years in Government Law Practice</i>	-0.049 (-0.082 - -0.015)**	-0.026 (-0.082 - 0.031)
<i>Square Term of Years in Government Law Practice</i>	0.001 (0.000 - 0.002)**	0.001 (-0.001 - 0.003)
<i>Private Law Practice</i>	0.071 (-0.228 - 0.370)	-0.735 (-1.200 - -0.271)**
<i>Years in Private Law Practice</i>	-0.008 (-0.040 - 0.024)	0.03 (-0.035 - 0.095)
<i>Square Term of Years in Private Law Practice</i>	0.001 (-0.000 - 0.002)	-0.001 (-0.002 - 0.001)
<i>Constant</i>	-1.254 (-1.873 - -0.636)**	-0.798 (-1.325 - -0.272)**
<i>Observations</i>	3867	3867
<p><i>Notes:</i> The reference category is propensity of voting against taxpayers.  Robust 95% confidence intervals in parentheses.  * significant at 5%; ** significant at 1%.  The square terms are used to calculate the inflection points.</p>		

### Appendix III: Socio-demographic Characteristics of 25 Current Tax Court of Canada Judges, 2007

Judges	pm	won	wnotonqc	tflaw	tplaw	judcode	ownfirm	edoutus	edoutothers	gender	network	tenure	govlaw	govlawyrs	privlaw	privlawyrs
Angers	■		■									6		0	■	25
Archambault							■					14		0	■	17
Beaubier			■									17		0	■	28
Bédard	■						■				■	4		0	■	30
Bell			■				■				■	16	■	4	■	32
Bonner	■	■										29	■	11	■	6
Bowie	■	■									■	12	■	19	■	1
Bowman		■					■				■	16	■	9	■	20
Campbell	■		■					■				7		0	■	24
Dussault				■	■			■				17		0		0
Hershfield	■		■	■	■			■			■	7	■	3	■	14
Lamarre	■									■	■	24	■	1	■	1
Lamarre Proulx		■								■		19	■	24		0
Little	■		■								■	5	■	4	■	35
Margeson			■				■				■	17		0	■	21
McArthur	■	■									■	7		0	■	33
Miller	■		■		■			■			■	6		0	■	24
O'Connor												14		0	■	33
Paris	■		■								■	5	■	19		0
Rip	■	■			■		■					24	■	5	■	10
Sarchuk	■		■									24	■	19	■	9
Sheridan	■	■					■				■	4		0	■	10
Tardif	■										■	13		0	■	12
Teskey		■					■					19		0	■	27
Woods	■	■						■		■	■	7		0	■	27

**Codes for Appendix III**

- pm: Appointing prime ministers – Political Ties variable
- won: Worked in Ontario – Regional Ties variable
- wnotonqc: Worked in areas other Ontario and Quebec – Regional Ties variable
- tflaw: Taught law on a full-time basis – Prior Law Teaching Experience variable
- tplaw: Taught law on a part-time basis – Prior Law Teaching Experience variable
- judcode: Was a judge before – Prior Judicial Experience variable
- ownfirm: Founded own law firm – Entrepreneurial Experience variable
- edoutus: Educated in the U.S. – International Education variable
- edoutothers: Educated outside the U.S. and Canada – International Education variable
- gender: Female – Gender variable
- network: Social Networking variable
- tenure: Number of years sitting on Tax Court of Canada when decisions rendered – Tenure variable; the number reflects Tenure for 2007
- govlaw: Practiced law in government – Government Law Practice variable
- govlawyrs: Years in Government Law Practice variable
- privlaw: Practiced law in the private sector – Practice Law Practice variable
- privlawyrs: Years in Private Law Practice variable

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