

Socio-Economic Determinants of Voting Behaviour in Canadian Provincial Elections
from 1988 to 2006

David McGrane

Ph.D. Candidate and Contract Instructor in Political Science at Carleton University
Paper Presented to the 2007 Canadian Political Science Association Annual Conference
May 30th-June 1st, 2007 in Saskatoon, Saskatchewan, Canada

While there has been extensive research examining the socio-economic determinants of voting behaviour during Canadian federal elections, there is only limited literature which explores the socio-economic determinants of voting in Canadian provincial elections. Using questions from Canadian Election Studies (CES) pertaining to voting in provincial elections, this paper examines the effect of religion, income, gender, and union membership on voting behaviour in provincial elections within two different periods: 1988 to 1997 and 2000 to 2006. In general support of Elkins and Simeon's theory that the Canadian provinces should be viewed as ten separate and unique "small worlds"¹, it is found that the socio-economic determinants of provincial party support are dissimilar among Canadian provinces from 1988 to 2006. However, preliminary evidence was also found which suggests that the impact of socio-economic characteristics on provincial voting varies by region. In particular, Western Canada seems to display deep cleavages based on socio-economic indicators whereas the Atlantic provinces, and to a lesser extent Ontario, displays weaker cleavages based on such indicators. I conclude by suggesting future avenues for research to confirm or disprove the tentative findings contained in this paper.

Literature Review

The socio-economic determinants of voting behaviour in Canadian federal elections have been extensively studied since the first CES was done in 1965.² While some researchers have disagreed³, most studies have found that socio-economic characteristics are an important

¹ See David Elkins and Richard Simeon (eds.), *Small Worlds: Provinces and Parties in Canadian Political Life*, (Toronto: Methuen Publications, 1980).

² For an early example of this type of research see Mildred Schwartz, "Canadian Voting Behaviour" in *Electoral Behaviour: A Comparative Handbook*, Richard Rose (ed.), (New York: The Free Press, 1974).

³ Lawrence Leduc, "Canada: The Politics of Stable Dealignment" in *Electoral Change in Advanced Industrial Democracies: Realignment or Dealignment?*, Russell J. Dalton, Paul Beck and Scott Flanagan (Princeton: Princeton University Press, 1984) & Harold Clarke, Jane Jenson, Lawrence Leduc and Jon Pammett, *Absent Mandate*, 2nd Edition (Toronto: Gage, 1992).

predictor of vote choice in Canadian federal elections.⁴ Indeed, in his 2005 presidential address to the Canadian Political Science Association, André Blais contended that, while some socio-economic characteristics such as class have become less important over time, it is impossible to understand recent Canadian federal elections without looking at region, religion, and ethnicity as important determinants of voting behaviour.⁵

The wealth of research on the socio-economic determinants of voting in Canadian federal elections has produced a number of findings that have almost reached the status of ‘laws’ within the discipline of political science in Canada. For instance, several studies have found that Catholics and those with non-European ethnic origins vote Liberal while Protestants and voters with European ethnic origins are more likely to vote Progressive Conservative, Reform/Canadian Alliance or NDP.⁶ Similarly, it is has been quite consistently found that high-income earners and non-union members vote Progressive Conservative or Reform/Canadian Alliance while low-income earners and union members vote NDP.⁷ Finally, a number of studies have argued that women are more likely to vote Liberal or NDP while men are more likely to vote for the Reform/Canadian Alliance or Progressive Conservative parties.⁸

⁴ For example, see James Bickerton, Alain Gagnon and Patrick Smith, *Ties that Bind: Parties and Voters in Canada* (Oxford: Oxford University Press, 1999).

⁵ André Blais, “Accounting for the Electoral Success of the Liberal Party in Canada” *Canadian Journal of Political Science* 38, no. 4, (December 2005), 821-840.

⁶ John Meisel, “Religious Affiliation and Electoral Behaviour” *Canadian Journal of Economics and Political Science* 22, no. 4, (1956), 481-496, Richard Johnston, “The Reproduction of the Religious Cleavage in Canadian Elections” *Canadian Journal of Political Science* 18, no. 1, (1985), 99-113, Arend Lijphart, “Religion vs. Linguistic vs. Class Voting: The ‘Crucial experiment’ of Comparing Belgium, Canada, South Africa, and Switzerland”, *The American Political Science Review* 73, no. 2, (1979), 422-458 & André Blais, Elisabeth Gidengil, Richard Nadeau and Neil Nevitte, *Anatomy of a Liberal Victory: Making Sense of the Vote in the 2000 Canadian Election* (Peterborough: Broadview Press, 2002), 96.

⁷ Robert Brym, Michael Gillespie and Rhonda Lenton, “Class Power, Class Mobilization, and Class Voting: The Canadian Case” *Canadian Journal of Sociology* 14, (1989), 25-44, Jon Pammett, “Class Voting and Class Consciousness in Canada,” *Canadian Review of Sociology and Anthropology* 24 (1987), 269-89, Elisabeth Gidengil, “The Class Voting Conundrum” in *Political Sociology*, Douglas Baer (ed.), (Don Mills: Oxford University Press, 2002), Elisabeth Gidengil, André Blais, Joanna Everitt, Patrick Fournier and Neil Nevitte, “Back to the Future: Making Sense of the 2004 Canadian Election outside Quebec” in *Canadian Journal of Political Science* 39, no. 1 (March 2006), 9.

⁸ Peter Wearing and Joseph Wearing, “Does Gender Make a Difference in Voting Behaviour” in *The Ballot and its Message: Voting in Canada*, Joseph Wearing (ed.), (Toronto: Copp Clark Pitman, 1991), Elisabeth Gidengil, Andre

While research on Canadian federal elections strongly suggests that socio-economic characteristics are important to understanding voting behaviour, there is only limited literature which explores the socio-economic determinants of voting in Canadian provincial elections. The first study to examine this question was Chapter 3 of Marsha Chandler and William Chandler's *Public Policy and Provincial Politics* using data from the 1974 CES.⁹ Chandler and Chandler found a high level of diversity in the support of parties across provinces based on a voter's occupation, religion, ethnicity, gender, age, and self perception of one's class. They summarized their findings by arguing that some provinces like Quebec and Ontario have "a multiplicity of politically sensitive cleavages" while other provinces, like the Atlantic provinces, have much weaker socio-economic divisions which shape partisanship.¹⁰

Chandler and Chandler's study was followed by a number of studies examining differences in voting patterns in Canadian federal and provincial elections. Some of these studies attempted to shed light on differences and similarities between the socio-economic determinants of federal and provincial partisanship. For instance, Mike Burke in 1980 attempted to compare provincial and federal "electoral coalitions" in Canada.¹¹ Unlike Chandler and Chandler's study, Burke did not try to describe the different socio-economic backgrounds of voters in provincial elections. Rather, through creating an "index of provincial dissimilarity" using pool data from the 1965, 1968 and 1974 Canadian election studies, he illustrated the age, language, religion, class, and rural/urban characteristics of the supporters of Liberals, Conservatives, NDP, and

Blais, Richard Nadeau, and Neil Nevitte, "Women to the Left, Men to the Right? Gender and Voting in the 1997 Canadian Election", Paper prepared for presentation at the 2000 Congress of the International Political Science Association, Quebec City, August 1 to August 5, 2000 & Elisabeth Gidengil, Matthew Hennigar, André Blais, "Explaining the Gender Gap in Support for the New Right: The Case of Canada" *Comparative Political Studies* 38, (2005), 1171-1195.

⁹ Marsha Chandler and William Chandler, *Public Policy and Provincial Politics* (Toronto: McGraw-Hill Ryerson), 1979.

¹⁰ *Ibid.*, 54.

¹¹ Mike Burke, "Dimensions of Variation in Electoral Coalitions, 1965-1974" in *Small Worlds: Provinces and Parties in Canadian Political Life*, David Elkins and Richard Simeon (eds.) (Toronto: Methuen, 1980), 179-210.

Social Credit provincial parties varied substantially by province. However, he also showed that socio-economic determinants of provincial parties are very similar to the socio-economic determinants of federal parties in each Canadian province. Therefore, for example, while the provincial Newfoundland Liberal party and provincial Saskatchewan Liberal party have quite dissimilar socio-economic bases of support, the federal and provincial Conservatives in Alberta have almost identical socio-economic bases of support.

In contrast to Burke, Lambert et al. found that there was significant variation between federal and provincial elections when it comes to socio-economic determinants of vote choice.¹² Using data from the 1984 CES, they authors found that levels of subjective class voting were higher in provincial elections than federal elections, particularly in the provinces of British Columbia, Saskatchewan, and Manitoba. This relationship was substantially strengthened when they added socio-economic indicators such as occupation, income, and education into their model. Both Uslander and Stewart and Clarke have examined voters who ‘split’ their support between different parties on the federal and provincial level but these studies did not test socio-economic indicators as determinants of voters ‘splitting’ their support.¹³

Finally, there have been a several studies on the socio-economic determinants of voting in provincial elections in a single province. Using ecological analysis, Seymour Lipset and Sanford Silverstein examined the socio-economic determinants of CCF support in Saskatchewan provincial elections from 1934 to 1964.¹⁴ They found that the CCF was initially popular among

¹² Ronald Lambert, James Curtis, Steven Brown and Barry Kay, “Social Class, Left/Right Political Orientations and Subjective Class Voting in Provincial and Federal Elections” *Canadian Review of Sociology and Anthropology* 24, no. 4, (1987), 526-549.

¹³ Eric Uslander, “Splitting Image: Partisan Affiliations in Canada’s ‘Two Political Worlds’” *American Journal of Political Science* 34, no. 4 (November, 1990), 961-981 & Harold Clarke and Marianne Stewart, “Dynamics of Party Identification in Federal Systems: The Canadian Case” *American Journal of Political Science* 42, no. 1 (January, 1998), 97-116.

¹⁴ Seymour Lipset, *Agrarian Socialism, Second Edition* (Garden City: Anchor Books, 1968) and Sanford Silverstein, “Occupational Class and Voting Behaviour: Electoral Support of a Left-Wing Protest Movement in a Period Prosperity” in *Agrarian Socialism, Second Edition* (Garden City: Anchor Books, 1968), 405-434.

prosperous farmers, British voters, and Protestants but that its support shifted to urban workers, less prosperous farmers, and Ukrainians and Scandinavians. More recently, Harold Jensen and Lisa Young used ecological analysis to study the socio-economic determinants of party support in the 2004 Alberta election and argued that the Liberals did best in ridings with a high number of Catholics and immigrants and the NDP was strongest in ridings with high percentages of young people, low-income earners, and people with low education while the Conservatives were strongest among high-income earners and farmers.¹⁵ Using a combination of Canadian election studies from the 1970s and surveys taken during the 1979 British Columbia provincial election, Donald Blake found that ethnic and religious differences were not significant in British Columbia provincial elections but that union members, young people, blue collar workers, low-income earners, and public sector professionals tended to vote NDP while private-sector professionals, older people, and middle and high income earners were more likely to vote Social Credit.¹⁶ Evidently, there have been numerous studies on the socio-economic determinants of voting behaviour in Quebec provincial elections since the rise of the PQ in the 1970s.¹⁷ While it is difficult to generalize these studies, they have generally found that the PQ is more popular among Francophone, urban, young, unionized, and highly educated voters while the Liberals are most popular among religious, Anglophone, women, and high-income voters. Finally, using

¹⁵ Lisa Young and Harold Jensen, "An Ecological Analysis of One Party Dominance in Alberta", Paper Presented to the Annual Meeting of the Canadian Political Science Association in London, Ontario, June 2-4, 2005.

¹⁶ Donald Blake, *Two Political Worlds: Parties and Voting in British Columbia* (Vancouver: University of British Columbia Press, 1985).

¹⁷ Maurice Pinard and Richard Hamilton, "The Bases of Parti Québécois Support in Recent Quebec Elections," in *Canadian Journal of Political Science* 9, no. 1 (March 1976), 1-26, Maurice Pinard and Richard Hamilton, "The Bases of Parti Québécois Support in Recent Quebec Elections," in *Canadian Journal of Political Science* 9, no. 1 (March 1976), 3-26, André Blais and Richard Nadeau, "L'appui au Parti Québécois : évolution de la clientèle, 1970-1981" in *Comportement électoral au Québec*, Jean Crête (ed.), (Chicoutimi : Gaeton Morin Éditeur, 1985), 75-89, André Blais and Jean Crête, "La clientèle péquiste en 1985: Caractéristiques et évolution" in *Politique* 10 (1986), 10-31, André Blais and Jean Crête, "Can a party punish hits faithful supporters? The Parti Québécois and public sector employees" in *Canadian Public Administration* 32, no. 4, (Winter, 1989), 623-632, Rejean Pelletier and Daniel Guérin, "Postmaterialisme et clivages partisans au Québec: les partis sont-ils différents?" in *Canadian Journal of Political Science* 29, no. 1, (March 1996), 71-109 & Robert Bernier, Vincent Lemieux and Maurice Pinard, "Les prédispositions de la population québécoise au changement" in *L'État Québécois au XXIe siècle*, Robert Bernier (ed.), (Ste-Foy : Presses de l'Université du Québec, 2004), 513-544.

Canadian and Ontario elections studies between 1977 and 1999, Michael Ornstein shows that union members and low-income earners were more likely to vote NDP in Ontario provincial elections during the 1980s but the NDP lost many of these voters to the Liberals in the 1995 and 1999 provincial elections.¹⁸

As one can see, the articles by Chandler and Chandler, Burke, and Lambert et al. have been the only attempts to test the relationship between socio-economic indicators and voter choice in provincial elections across all ten Canadian provinces. None of these studies used data from surveys completed after 1984. What emerges from these three studies is the common theory that socio-economic determinants of voting in provincial elections vary substantially by province. These authors found very few patterns that could be said to be consistent across all ten Canadian provinces. In many ways, these authors' findings support Elkins and Simeon's broader theory that Canadian federalism has created an institutional framework around which parties, elections, and other political structures and processes are organized. For Elkins and Simeon, the examination of all ten provinces as a group or the examination of regions comprised of several provinces taken together undermines the complexity of provincial politics in Canada. As such, Canadian provinces should be seen as ten "small worlds" with high degrees of inter-provincial dissimilarity and should be studied individual or in comparison with one another.¹⁹

This paper seeks to both update research on the socio-economic determinants of provincial voting and argue in favour of the theory that there is a high level of divergence in the socio-economic determinants of voting in provincial elections among Canada's ten provinces. Therefore, it is my hypothesis that the socio-economic determinants of provincial party support are dissimilar among Canadian provinces from 1988 to 2006. If a high level of divergence is

¹⁸ Michael Ornstein, "Classes sociales et scrutins provinciaux au Canada: le cas de l'Ontario" *Lien social et Politiques* 49, (Spring 2003), 83-100.

¹⁹ David Elkins and Richard Simeon, "Introduction," in *Small Worlds: Provinces and Parties in Canadian Political Life*, David Elkins and Richard Simeon (eds.), (Toronto: Methuen Publications, 1980), x.

found it will lend credence to the broader theory that Canadian provinces are indeed ten ‘small worlds’ that should be studied individually or in comparison to one another. Moreover, the specific ways in which socio-economic determinants of provincial party support differ may aid in explaining the unique political processes and characteristics of individual provinces.

Methods

The results below have been calculated using pooled data from the 1988, 1993, and 1997 CESs in one dataset and pooled data from the 2000, 2004, and 2006 CESs in another dataset. The pooling of data was necessary due to the small sample sizes of each province that are created when I divided the CESs by province.²⁰ While there are a number of socio-economic characteristics which could be chosen, I have decided to limit my examination to religion, union household, gender, and income for the time being. These four socio-economic characteristics are the principle characteristics that have been found to have a substantial impact on partisanship at the Canadian federal level. In future research, I could add such characteristics as age, education, occupation, or rural/urban. Ethnicity would be a particularly interesting characteristic to study. However, it is difficult to operationalize on the provincial level in Canada. A division between ‘European’ and ‘non-European’ would not be useful since provinces besides British Columbia, Ontario, and Quebec do not have substantial ‘non-European’ populations. Further, given the sample sizes that I am working with, categories such as ‘British’, ‘French’, ‘German’, and ‘Ukrainian’ would not produce a large enough number of cases for meaningful analysis.

When it comes to operationalizing the variables of religion, union household, gender, income, and support for provincial parties across several CESs an immediate problem that arises

²⁰ The sample size for each province of the respondents who indicated how they voted in provincial elections was as follows. For the 1988 to 1997 dataset: Newfoundland (N= 242), Prince Edward Island (N= 236), Nova Scotia (N= 225), New Brunswick (N= 295), Ontario (N= 1937), Manitoba (N= 430), Saskatchewan (N= 428), Alberta (N= 936) and British Columbia (N= 827). For the 2000 to 2006 dataset: Newfoundland (N= 191), Prince Edward Island (N= 118), Nova Scotia (N= 172), New Brunswick (N= 163), Ontario (N= 1649), Manitoba (N= 249), Saskatchewan (N= 236), Alberta (N= 554) and British Columbia (N= 622).

is the inconsistency of the questions asked. Appendix A details the exact questions used on each CES between 1988 and 2006 to capture responses on the five variables that I am interested in. As one can see in Appendix A, the inconsistency of the questions poses a number of challenges for the operationalization of my variables. In terms of support for provincial political parties, the 1988 and 1993 CESs ask which provincial party the respondent voted for in the last provincial election while the later CESs ask which provincial party the respondent would vote for if a provincial was held “today”. I have collapsed the responses to these questions together even if the responses have slightly different meanings depending on how the question was asked. Further, another problem is that the question pertaining to provincial partisanship was moved from the campaign-period survey to the post-election survey starting in 2000. This shift decreases my sample sizes for pooled data from 2000 to 2006 compared to pooled data from 1988 to 1997 since number of respondents is always smaller in the post-election survey of the CES. Finally, it should be noted that I coded the Saskatchewan Party as Conservatives because that is the party from which it was primarily formed and the Saskatchewan Party has essentially replaced the Conservatives within Saskatchewan politics.

The CES questions relating to respondents’ association with unions also changed slightly over the period that I am examining. From 1988 to 2000, the CES simply asked if a respondent or anyone in their household belonged to a union. In the 2004 and 2006 CES, respondents were asked if they belonged to a union and if they responded ‘no’ then they were asked if anyone in their household belonged to a union. I have not included the responses to the second half of the 2004 and 2006 question in my calculation which means that some of the respondents that are under the heading ‘non-union household’ for the pooled data from 2000 to 2006 actually live union households but are not union members themselves.

Similarly, while the CESs in 1988, 1993, 2004 and 2006 used categories based on \$10,000 increments to record the household income of respondents, the 1997 and 2000 CESs first asked respondents to estimate their household income to the nearest thousand and if they responded 'I don't know' or 'refused' they were then given a choice of categories based on \$10,000 increments. For my calculations, responses from the second half of the 1997 and 2000 CES question on income were simply excluded which meant they remained as 'I don't know' and 'refused' even though I have some information on their income level. For the respondents which I did use, I simply divided their responses into the categories of high and low income based on median of the distribution. Finally, the slight inconsistency of the questions on religion posed no problems. The CESs from 1988 to 2000 simply used the categories of Catholic, Protestant, Jewish, other, or no religion. For the 2004 and 2006 CESs, which accepted a broader range of responses, I re-coded the responses of Anglican, Baptist, Pentecostal, Presbyterian, United Church, Christian Reform, Lutheran, Salvation Army, Mormon, and Mennonite into the broad category of 'Protestant' and the responses of Roman Catholic and Greek Orthodox/Ukrainian Orthodox were re-coded into 'Catholic.'

The statistical technique used to test my hypothesis that there is a high level of divergence in the socio-economic determinants of voting in provincial elections was logistic regression. However, no attempt was made to fit models at this exploratory stage. Rather, the only regression parameters estimated were the interaction terms between the socio-economic variable in question and province. For this reason, the analysis focuses only on the significance of the parameter and whether the exponentiated parameter indicates that the interaction increases or decreases the estimated odds (the dependent variable).

Results

The tables below use, as the dependent variable, the odds of a respondent voting Conservative versus Liberal and voting NDP versus Liberal in provincial elections from 1988 to 2006. The Liberal Party was used as the baseline for comparison since it is present with some degree of popular support in every province examined. Moreover, Nova Scotia was used as the baseline for comparison among the provinces since it has a three party system where the NDP, Conservatives, and Liberals all receive similar amounts of popular support, hence the cells marked with an ‘a’ in the tables indicate they are determined by this approach and thus of little interest in the analysis.

The table entries are the exponentiated logistic regression parameters. Asterisks (*) indicate those that are significant at the 0.05 level. It is important to remember that, using odds ratios, ‘1 is the new 0.’ That is, the model is multiplicative so multiplying an independent variable effect by 1 has no effect on the estimate of the dependent variable, multiplying by a fraction of 1 has the effect of reducing the estimate, and multiplying by a factor greater than 1 increases the estimate. As such, the odds of a person voting for one party versus another party are decreased in a major way if one finds a coefficient in the table that is 0.1. Conversely, the odds of a person voting for one party versus another are greatly increased if one finds a coefficient in the table that is 11.0.

In order to assess the relative impact of two values of a socio-economic indicator, one is looking for a coefficient that is substantially less than 1 for half of the pair and a coefficient that is substantially more than 1 for the other half of the pair. For example, within the table concerning NDP vote choice versus Liberal vote choice in Manitoba, if one finds a coefficient of 0.2 for non-union and a coefficient of 15.4 for union one can conclude the odds of a person

voting NDP compared to Liberals in Manitoba are significantly greater if the person is a union member, remembering always that the contrast is with the reference category. Alternatively, if both halves of the pair are above 1 or below 1 and there is a large gap between the values of the coefficients of the pair this can be said to illustrate relative strength of impact. For instance, within the table concerning Conservative vote choice versus Liberal vote choice in Newfoundland, if one finds a coefficient of 1.5 for low-income and a coefficient of 13.2 for high-income one can conclude the odds of a person voting for the Conservatives compared to Liberals in Newfoundland are greater if the person has a high-income. In both cases, it is important to only look at pairs of opposing socio-economic indicators which were found to be significant at the 0.05 level.

To simplify my analysis, Québec is omitted due to the presence of different political parties in that province such as the Parti Québécois and the Action Démocratique du Québec. The addition of these parties would have unnecessarily complicated the model and, in any event, the socio-economic determinants of voting in Québec provincial elections have been extensively studied. For similar reasons, the Social Credit Party was omitted in British Columbia which makes the comparison of Conservative versus Liberal in that province meaningless. In British Columbia, the readers' attention should only be focused on the table depicting the likelihood of voting NDP versus Liberal. In future models, Social Credit will be handled differently.

Table 1: Conservative versus Liberal (1988-1997)

Province	Income		Union		Religion		Gender	
	Low	High	Union	Non-Union	Protestant	Catholic	Male	Female
Newfoundland	.6	1.4	.8	.8	1.5	1.4	1.1	.9
Prince Edward Island	.6	.4*	.3*	.6*	.8	1.0	.7	.5*

New Brunswick	.3*	.3*	.3*	.3*	.8	.5*	.2*	.5*
Ontario	.5*	.7	.5*	.7	1.9*	.6	.9	.6*
Manitoba	1.4	2.2*	1.2	1.9*	4.3*	1.4	2.1*	1.8*
Saskatchewan	1.7	2.6*	1.7	1.9*	3.9*	3.0*	2.2*	2.1*
Alberta	2.0*	2.4*	1.6*	2.6*	4.7*	3.0*	3.2*	2.0*
British Columbia	.2*	.1*	.1*	.2*	.3*	.3*	.1*	.3*
Nova Scotia	.9	a	.7	a	2.4*	a	1.1	a

Table 2: NDP versus Liberal (1988-1997)

Province	Income		Union		Religion		Gender	
	Low	High	Union	Non-Union	Protestant	Catholic	Male	Female
Newfoundland	.5	.8	.6	.3*	.9	.5	.2*	.4*
Prince Edward Island	.5	.2*	.2*	.4*	.4	.5	.2*	.2*
New Brunswick	.4*	.5	.5*	.2*	.7	.4*	.1*	.3*
Ontario	1.8	1.7	1.7*	1.0	2.6*	1.4	.9	.8
Manitoba	2.9*	3.5*	3.3*	1.8*	3.3*	3.4	1.8	1.5
Saskatchewan	8.7*	11.0*	9.3*	5.4*	11.0*	10.0*	4.2*	4.9*
Alberta	1.8	1.8	1.6	1.1	2.0	1.5	1.0	.7
British Columbia	5.9*	5.4*	5.3*	2.8*	5.4*	5.0*	2.6*	2.8*
Nova Scotia	1.7	a	1.4	a	2.7*	a	.6	a

Table 3: Conservative versus Liberal (2000-2006)

Province	Income		Union		Religion		Gender	
	Low	High	Union	Non-Union	Protestant	Catholic	Male	Female
Newfoundland	1.3	2.7	1.4	.8	1.7	2.8*	1.1	1.3
Prince Edward Island	2.0	2.2	1.1	2.3*	3.8*	1.6	1.9	1.4
New Brunswick	1.2	1.4	1.2	.9	2.0	1.1	1.2	.6
Ontario	1.3	1.3	.6	1.0	2.4*	1.0	1.1	.7
Manitoba	4.3*	6.8*	1.9	3.0*	8.8*	1.9	3.5*	3.2*
Saskatchewan	5.3*	5.9*	6.1*	3.3*	10.4*	4.7*	4.6*	3.9*
Alberta	4.1*	6.0*	1.6	3.9*	10.0*	2.7*	3.7*	2.9*
British Columbia	.44*	.24*	.2*	.1*	.4*	.3*	.2*	.2*
Nova Scotia	4.2*	a	.8	a	3.7*	a	1.2	a

Table 4: NDP versus Liberal (2000-2006)

Province	Income		Union		Religion		Gender	
	Low	High	Union	Non-Union	Protestant	Catholic	Male	Female
Newfoundland	.3*	.2*	.2*	.2*	.2*	.2*	.2*	.2*
Prince Edward Island	.1*	.2*	-	.3	.1*	-	.1*	.3*
New Brunswick	.2*	.4*	.9	.5	.3*	.2*	.2*	.3*
Ontario	.6	.4*	.6	.4*	.5*	.2*	.4*	.5*
Manitoba	2.9*	8.3*	7.5*	2.9*	4.4*	2.7*	4.5*	4.3*
Saskatchewan	3.5*	6.0*	15.5*	6.0*	5.3*	2.5	3.4*	4.5*
Alberta	.6	.6	.8	.4	.5	.2*	.5*	.4*

British Columbia	1.0	.8	1.7	.5	.5	.4*	.7	.7
Nova Scotia	2.8*	a	3.2*	a	1.3	A	1.3	a

The primary conclusion that can be drawn from the four tables above is that socio-economic characteristics seem to be more effective determinants of voting in provincial elections in Western Canada (Manitoba, Saskatchewan, Alberta, and British Columbia) than in the Atlantic provinces (Newfoundland, Prince Edward Island, Nova Scotia, and New Brunswick). This conclusion is obvious because I find a greater number of significant coefficients in the Western Canadian provinces as opposed to the Atlantic provinces. Perhaps, this finding indicates that I should look for other predictors of voting in Atlantic provinces, such as parents' voting preference, age, or education, instead of concentrating on the four socio-economic determinants that I am analyzing here. In terms of Ontario, socio-economic determinants have more an impact on provincial voting than in the Atlantic provinces but less of an impact than in Western Canada.

However, there is dissimilarity within these two regions of Western Canada and the Atlantic provinces. In Atlantic Canada, socio-economic characteristics generally have more of an impact on provincial voting in Prince Edward Island and New Brunswick than in Nova Scotia and Newfoundland. In Western Canada, socio-economic characteristics in Alberta have different impacts on provincial voting compared to the other three provinces as the NDP versus Liberal analysis is affected by the low popularity of the NDP in that province.

If one looks at the four independent variables that I am testing, one can see that the effect of Protestant affiliation of increasing the odds of choosing the Conservatives over the Liberal remains strong, especially in Western Canada. In Saskatchewan and Manitoba, Protestant affiliation increases the odds of choosing the Conservatives over NDP but in the rest of the country it does not affect or reduces the odds. Therefore, as the Canada modernizes, religion

remains important determinant in provincial voting patterns. It is important to note that I did not test whether Catholics vote more for Liberals versus other parties because Liberals were used as the baseline for comparison. However, the conclusion that Catholics are more likely to vote Liberals seems to be a logical extension of my findings and therefore I could test for this in the future. Interestingly, my analysis found that gender has only a marginal effect on voter choice in provincial elections. For the most part, the odds of gender are either not significant or very close to each other. The only possible exception is Saskatchewan where the odds of voting NDP versus Liberals are moderately increased if the voter is a woman. Similarly, income does not seem to have a large effect on provincial voting patterns as its odds are either not significant or very close to each other. The only exceptions are Saskatchewan and Manitoba where the odds of voting NDP versus Liberal are actually greater for high-income earners. A possible explanation for this counter-intuitive finding is that, during the 1990s and 2000s, the Manitoba and Saskatchewan NDP have been more popular in urban areas where incomes are generally higher and these parties have also adopted 'third way' social democratic policies, such as personal income tax cuts, that appeal to high income voters.

One can see an increase of strengthen of the impact of socio-economic determinants on provincial voting in Western Canada in the later time period compared the earlier time period. Conversely, there was a decrease of the importance of socio-economic indicators to provincial voting in Atlantic provinces in the later period in the Conservative versus Liberal vote choice table (Table 3). However, socio-economic determinants did become more important in the NDP versus Liberal choice in Atlantic Canada in the later period. This may be because of the strengthening of the NDP in the 2000s in Atlantic Canada, particularly Nova Scotia. In Ontario,

like the Atlantic provinces, socio-economic determinants have a greater impact on provincial voting in the earlier period than in the latter period.

Socio-economic indicators generally had a greater impact for the NDP versus Liberal choice than for the Conservative versus Liberal choice. In particular, socio-economic characteristics are very good predictors of NDP versus Liberal vote choice in the latter period. Unsurprisingly, the effect of union membership on vote choice has a larger impact on the choice between NDP and Liberal than on the choice between Conservative and Liberal. In particular, in Manitoba, Saskatchewan, and British Columbia, union membership increases the odds of voting NDP versus Liberal. It is interesting to note that there are a higher number of significant coefficients concerning union membership in the earlier period as opposed to the later period. As such, outside of Manitoba and Saskatchewan, the union-NDP linkage may be declining. Such a conclusion remains true even for British Columbia. However, it should be noted that the latter sample is constructed to emphasize the British Columbia NDP's massive electoral defeat in 2001 and some union members may have since come back to the NDP.

Conclusion

In conclusion, based on the calculations presented above, I accept my hypothesis that the socio-economic determinants of provincial party support are dissimilar among Canadian provinces from 1988 to 2006. Clearly, the impacts of socio-economic characteristics on provincial voting patterns vary by province. However, I have also found preliminary evidence to suggest that the impact of socio-economic characteristics on provincial voting are similar within certain regions. In particular, Western Canada seems to display deep cleavages based on socio-economic indicators whereas the Atlantic provinces, and to a lesser extent Ontario, display weaker cleavages based on such indicators. It is possible that the sharp ideological divisions

between parties in Western Canada (NDP versus the Conservative/Saskatchewan Party/right-wing Liberal parties in Manitoba, Saskatchewan, and British Columbia as well as right-wing Conservatives versus left-wing Liberals in Alberta) create voting patterns based more on socio-economic cleavages as opposed to Atlantic Canada where the ideologies of Liberal and Conservative parties are relatively inter-changeable. In any event, the analysis in this paper lends general support to Elkins and Simeon's theory of treating Canadian provinces as ten unique and separate 'small worlds.' However, the paper also points out the possibility that Canadian political scientists should be examining Canadian provinces within their regions of Atlantic Canada, Western Canada, and Ontario. Such an approach would be similar to the approach taken by Janine Brodie in her writings on regional political economy in Canada.²¹

Evidently, this paper represents only the beginning of my research in this area. This initial analysis reveals only some shadowy patterns concerning the socio-economic determinants of voting in Canadian provincial elections over the last twenty years. Two avenues for future research are likely. First, I may want to add more independent variables into my model such as age, ethnicity, parent's party preference, occupation, rural/urban, or education. I also may want to add Quebec into the model and analyze the datasets using a different province (Ontario?) and/or party (Conservatives?) as the baseline for my comparison. Second, I may want to perform a different statistical analysis on my dataset. For instance, I could a logit-type crosstabulation on each province. Such a statistical analysis may yield enough information to construct what Robert Axelrod refers to as "electoral coalitions" for each party in each province.²² Electoral coalitions form when a members of a socio-economically defined group vote proportionally for one political party. Differences in the electoral coalitions of the same party across different

²¹ See Janine Brodie, *The Political Economy of Canadian Regionalism* (Toronto : Harcourt, Brace and Janonvich, 1990).

²² Robert Axelrod, "Where the Votes Come From: An Analysis of Electoral Coalitions, 1952-1968" *American Political Science Review* 66, no. 1, (March 1972), 11-20.

provinces could more dramatically confirm my hypothesis of significant dissimilarity in the impacts of socio-economic determinants on voting in provincial elections across the ten Canadian provinces. Further, the analysis of such electoral coalitions could confirm the development of some of the interesting possibilities presented in this paper such as a weakening of the union-NDP linkage, higher income earners being attracted to the NDP in provinces where they are contenders to form government, and the apparent lack of importance of gender on provincial voting patterns.

Appendix A- Questions from 1988 to 2006 CESs

Provincial Party Voting

1988 & 1993: And what about the last provincial election held in [date of last provincial election] in [respondent's province]. Did you vote in that election? Which party did you vote for? Conservative, Liberal, NDP, Social Credit (British Columbia only), Parti Québécois (Quebec only) [Categories adjusted in 1993 to include other parties]

1997, 2000, 2004 & 2006: If a provincial election were held today in [Respondents province of residence], which party would you vote for? Conservative, Liberal, NDP, Social Credit (British Columbia only), Parti Québécois (Quebec only) [Categories adjusted in over the years to include other parties]

Responses were not re-coded in any way except that the Saskatchewan Party was re-coded as Conservative in the 2004 and 2006 CESs.

Religion

1988, 1993, 1997 & 2000: What is your religious affiliation? Is it Protestant, Catholic, Jewish, something else or no religion?

2004 & 2006: Please tell me what is your religion, if you have one? Over 20 responses accepted.

Responses were collapsed into two categories: Protestant and Catholic.

Union Membership

1988, 1993, 1997 & 2000: Do you or anyone in your household belong to a labour union? Yes or No?

2004 & 2006: Do you belong to a union? Yes or No? If no, does anyone in your household belong to a union?

Responses were collapsed into two categories: Unionized and Non-Unionized. Responses from the second half of the question used 2004-2006 were not included.

Income

1988, 1993, 2004 & 2006: How much income did you and other members of your family living with you receive in total, before deductions, in the last 12 months, not just from wages but from all sources, including pensions, unemployment insurance, interest from savings, and rental income. We don't need the exact figure, just a broad category. Was it less than \$ 10,000, between \$ 10,000 and \$ 19,000, between \$ 20,000 and \$ 29,000, between \$ 30,000 and \$ 39,000, between \$ 40,000 and \$ 49,000, between \$ 50,000 and \$ 59,000, between \$ 60,000 and \$ 69,000, between \$ 70,000 and \$ 79,000 or \$ 80,000 or more? [Categories adjusted over time]

1997 & 2000: Could you please tell me your total household income, be sure to include income from all sources such as savings, pensions, rent, as well as wages, to the nearest thousand dollars, what was your total household income before taxes and other deductions for 1999? Income to nearest thousand dollars recorded. If don't know or refused, we don't need the exact amount; could tell me which of these broad categories it falls into: less than \$20,000, between \$20,000 and \$30,000(\$29,999.99), between \$30,000 and \$40,000, between \$40,000 and \$50,000, between \$50,000 and \$60,000, between \$60,000 and \$70,000, between \$70,000 and \$80,000, between \$80,000 and \$90,000, between \$90,000 and \$100,000, or more than \$100,000.

Responses were collapsed into the two categories: High and Low Income based on median of the distribution. Responses from the second half of the question used 1997-2000 were not included.

Gender

In all CESs used, the interviewer discerns the respondent's gender from their name and voice.