

The Political Consequences of Value Bundles: Moral and Economic Values in  
Canada

Christopher Cochrane  
Department of Political Science  
University of Toronto

Neil Nevitte  
Department of Political Science  
University of Toronto

Prepared for the Annual Conference of the Canadian Political Science Association  
University of Saskatchewan  
Saskatoon, Saskatchewan  
May 30<sup>th</sup>-June 1<sup>st</sup>, 2007

## **Abstract**

This paper explores the political consequences of “moral” and “economic” values in Canada. Drawing on survey evidence from the 2006 wave of the World Values Surveys (Canada) and panel data from the 2004-2006 waves of the Canadian Election Study, the paper answers an empirical puzzle: why are moral and economic values bundled together for those on “the left”, but not at all for those on “the right”? The answer, this paper argues, is rooted in the effects of formal education on the structure and content of moral and economic values.

## I. Introduction

Public opinion is the accumulation of individual opinions on a wide range of subjects. As the range of subjects widens, the number of possible combinations of opinions increases exponentially (Rokeach 1973).<sup>1</sup> Ecological inferences in the field of public opinion are quite likely to yield "...a portrait of political thinking that is true for the average citizen but false for most citizens" (Sniderman, Brody & Tetlock 1991, 9). It is therefore not only important to know what the public thinks, on average, about a given subject(s). It is at least as important to know how the public organizes that thinking into "patterns" or "bundles" of opinions. The "structure" of public opinion is just as important as the "content" (McClosky and Zaller 1984, 259).

This paper examines the formation and political consequences of "value bundles" among the Canadian public and it does so by answering an empirical puzzle: why are moral and economic values connected for those on the "left", but wholly unconnected for those on the "right"?<sup>2</sup> If one knows the moral location of those on the Canadian left, then one can predict quite accurately what are their market values. For those on the right, however, the "moral right" does not share the economic values of those on the "economic right", and the "economic right" does not share the moral outlooks of those on the "moral right". In that sense, when it comes to moral and economic opinions, there is "one left" and "two-rights" in Canadian politics. Why is this so?

The core theory is grounded in the literature on political socialization (Williams 1963; 1968; Rokeach 1973; McClosky and Zaller 1984; Nevitte 1996). As Converse (1964) put it, "...the shaping of belief systems of any range into apparently logical wholes that are credible to large numbers of people is an act of creative synthesis characteristic of only a miniscule proportion of any population" (211). People adopt the "patterns" or "bundles" of values that are propagated by opinion leaders through the process of "social learning" (McClosky & Zaller 1984, 12). According to McClosky and Zaller (1984), "effective social learning can be said to have occurred only when one has both absorbed the values of a given set of beliefs and also grasped the organizing principle—or structure—that holds those beliefs together" (259). It is the "coherence" of clusters of opinions, rather than the content *per se*, that is the central focus of this paper.

There are two central methodological implications of this theoretical approach. First, the structure of public opinion will likely vary across different segments of the general public. As Sniderman, Brody and Tetlock (1991) observed in their critique of public opinion scholarship, "the mistake was to suppose that the analytic problem was how to characterize the political reasoning of the public as a whole...because the extent to which mass belief systems are organized varies markedly and predictably across mass publics" (3). Second, however, it is not at all clear that all value bundles are acquired at the same time or through exposure to the same opinion leaders. It is plausible, indeed

---

<sup>1</sup> There are about as many possible combinations of answers to as few as twenty-five "yes or no" questions ( $2^{25}$ ), for instance, as there are people living in Canada!

<sup>2</sup> To the extent that moral and market outlooks are connected for those on the right, they run in opposite directions: the correlation between moral and market outlooks is  $-.12$  ( $p = .02$ ) for those on "the right" (defined as those indicating 8 to 10 on the ten-point left-right self-placement scale), and  $+.17$  ( $p = .01$ ) for those on "the left" (1-3 on the same left-right scale). These findings suggest that, for those on the right, their moral values move leftward as their market values move rightward.

likely, that different value bundles are acquired at different stages of socialization and through exposure to the opinions of altogether different “opinion leaders”. People may learn about some values from their parents, others from their teachers, and yet others by paying close attention to elite-level political discourse. As a result, it is important to examine not only different subsets of the population when attempting to characterize the patterns of public opinion, but also to look for predictable and systematic differences in the organization of different “value bundles” themselves.

This paper explores the formation of two types of “value bundles”: “moral values”, or notions of right and wrong, and “economic values”, or orientations toward the free market. These value dimensions feature prominently in daily political discourse and, of all of the values measured in the World Values Survey, none predicts the left-right self-placement or the patterns of party support more effectively than economic and moral outlooks.<sup>3</sup> The hypothesis is that moral values, or notions of “right” and “wrong”, are acquired at relatively early stages of socialization. People learn a coherent set of moral outlooks at a young age from exposure to the opinions of their parents (Williams 1963). The content of their moral outlooks may change, but the basic organizing structure will nonetheless remain.

When it comes to economic values, however, the concept of an “economic market” is more abstract and so the expectation is that it is learned at a comparatively later stage of socialization. The central organizing principle of economic values is orientations toward the “free market”, but the “free market” is an abstract concept that is grasped mainly by those with comparatively high levels of formal education. So while we expect that most Canadians will have acquired a meaningful and organized bundle of “moral values”, only the most sophisticated citizens will have done the same for “economic values”. This asymmetry between the acquisition of moral and economic outlooks, we suggest, may account for the coherence of moral and market outlooks for those on “the left”, and the fragmentation of these values for those on “the right”.

## II. Literature Review

Converse’s (1964) original observation that “...large portions of the electorate do not have meaningful beliefs, even on issues that have formed the basis for intense political controversy among elites for substantial periods of time” (245) was itself controversial in three respects. First, from a theoretical standpoint, Converse attributed the origins of belief systems to “...an act of creative synthesis characteristic of only a minuscule proportion of any population” (211). Individuals learn “what goes with what” (252), he argued, by paying attention to elite opinion. Second, Converse’s conceptual contribution flowed from how he operationalized “belief systems”. Essentially, Converse first examined the extent to which an opinion was “constrained” by other opinions. He then considered the persistence of opinions across time. A belief system is thus a set of stable and inter-connected opinions. Converse’s methodological contribution was the proposal that answering a survey question is not necessarily the same as expressing an

---

<sup>3</sup> These findings are based on an OLS regression of left-right self-placement, and Multinomial Logit analysis of vote-choice. See Appendix C.

actual opinion. A “non-opinion” is characterized by logical inconsistencies between answers to different questions, or by answering the same question in different ways at different moments.

Some argued that Converse’s findings were attributable to an elitist research design: the general public may not have meaningful opinions on issues that are important to the elite, but that does not mean that they have no meaningful opinions at all (McClosky and Zaller 1984). Others argued that public opinion surveys, by their very nature, might yield misleading results about the meaningfulness of citizen beliefs and values. These surveys ask citizens, on short notice, to connect their answers to survey questions with their underlying values (Zaller 1992). The inability to make these connections extemporaneously does not necessarily signify that citizens lack meaningful underlying beliefs; rather they may just need more time to reflect on their answers to the questions (Hochschild 1981). Yet others raised the possibility that sophisticated and unsophisticated citizens may reason differently about the political world. The problem with Converse’s work, they argued, was the holistic focus on “mass publics” (Sniderman, Brody and Tetlock, 1991), a focus which discounts the possibility that different subsets of the public have different ways of making up their mind about politics (Box-Steffensmeier and De Boef 2001).

These objections do not amount to a full field debate between devotees of polar opposite positions. Those opposed to Converse’s findings argue that mass publics—or at least certain subsets of mass publics—have meaningful beliefs about some things, not all things (Sniderman, Brody and Tetlock 1991; Zaller 1992; Gilens 2001; Goren 2000; 2004). Nonetheless, Converse’s critics demonstrate quite persuasively the importance of research designs that examine separate subsets of the population on a wide range of values and beliefs (Hochschild 1981; McClosky and Zaller 1984).

### **III. Data and Research Design**

The analysis draws primarily on data from the 2006 wave of the Canadian World Values Surveys (WVS). The WVS data were collected through face-to-face interviews with a regionally stratified representative random sample of 2148 Canadians. The WVS focus on gauging a wide range of human values and beliefs and they are useful here because they include questions about levels of political interest, left-right self-placement, vote choice and political activism which allow us to examine the linkages between core values and political preferences.<sup>4</sup>

The research strategy has three parts. The first examines the coherence of market and moral values among respondents with high and low levels of formal education (Converse 1964) and political interest (Luskin 1990). Following Converse (1964), the objective is to uncover the extent to which respondents are able to make connections between one opinion and another. Do views about the desirability of increased income equality, for example, “constrain” opinions on government welfare and social assistance? Are assessments of privatization linked with attitudes toward competition? Are opinions on homosexuality connected with views on abortion, euthanasia, or suicide? The core

---

<sup>4</sup> See Appendix B for question wording and scale construction.

assumption is that meaningful orientations are characterized by an internally consistent pattern of answers to survey questions.

But coherence alone is not a perfect proxy for the meaningfulness of economic or moral values: some respondents may simply organize their outlooks differently, rather than less meaningfully, than others (Sniderman, Brody & Tetlock 1991). The second section turns to panel data from the Canadian Election Study (CES) in order to examine the stability of market and moral attitudes: do people give the same answer to the same question when asked at two different points in time? The expectation is that answers that reflect true values and opinions are more stable than cursory “off-hand” answers given without much thought or knowledge (Zaller 1992).

Existing research suggests, however, that the likelihood of changing opinions is in fact connected to levels of education and political sophistication (Iyengar, Peters and Kinder 1982: 854-855). If uneducated and unsophisticated respondents are more easily swayed by exposure to political counter-arguments, then it is important to introduce yet another test in the research design. The third section examines whether respondents are able to align their economic and moral outlooks with their political preferences. Are there differences in the capacities of respondents with high and low levels of formal education to align their economic and moral opinions with their left-right self placement and patterns of party support?

Taken individually, each of these measures of the meaningfulness of economic and moral outlooks might be attributable to a number of alternative explanations. When it comes to *coherence*, perhaps some respondents simply organize their economic and moral outlooks differently than others. In terms of *stability*, there is the possibility that some respondents are more likely to change their minds. And finally, measuring *salience* as the ability to align economic or moral values with political preferences risks tapping ignorance of politics and party platforms, rather than of economics or morality. Taken together, however, these measures collectively provide a reliable estimate of the meaningfulness of opinions: discordant opinions that are unstable and that do not shape political preferences probably indicate that the respondent lacks a meaningful value orientation. Thus, the research design incorporates all three tests when assessing the relative meaningfulness of economic and moral outlooks for respondents with high and low levels of formal education.

#### IV. Coherence

In exploring the coherence of market and moral outlooks, we are interested in sorting respondents by level of formal education (and political interest) and then comparing the consistency of their answers to batteries of market and moral values questions. How well does a respondent’s answer to one question about the economy predict their answer to another question about the economy? Cronbach’s Alpha will indicate whether these questions capture a common underlying component (i.e., market values), and the item-rest correlations (Appendix A) reports more precisely the linkages between these opinions.

##### A. Market Values

The WVS asks respondents their views about income equality, privatization, government welfare and competition (See Appendix B). The findings for market values, illustrated in Table 1, show that there are notable differences in the coherence of economic outlooks between those with high and low levels of formal education and political interest. Both education and political interest have independent effects on the coherence of market values. Notice, for example, that the Cronbach's Alpha among respondents with a university degree and low levels of political interest is much higher (.41) than among respondents with the same level of political interest but with low levels of formal education (.15). Among university-educated respondents, however, the Cronbach's Alpha of those with high levels of political interest (.71) is higher than it is for those with low levels of political interest (.41). Quite simply, respondents with higher levels of formal education have increasingly coherent market outlooks, and the same applies for those with higher levels of political interest.

### **Table 1 About Here**

The data in Table 1 also suggest an interaction effect of education and political interest on the coherence of market outlooks. On the one hand, a coherent set of market outlooks seems to require at least some postsecondary education. Notice that those with less than high school education have incoherent market outlooks regardless of their level of political interest. But coherent market outlooks also seem to require a high level of political interest among respondents with all but the highest level of formal education. Among respondents with "High School" or "Postsecondary" education, the coherence of market outlooks for those with "moderate" levels of political interest is indistinguishable from their counterparts with "low" levels political interest (.22/.23 and .35/.38, respectively). Only the most interested respondents stand out in these educational categories. Among university graduates, the market outlooks for those with "moderate" levels of political interest are as coherent as the market outlooks of those with "high" levels of political interest (.68/.71). Overall, the findings are consistent with the proposition that, when it comes to grasping the concept of an economic market, respondents with a very high level of education can "get by" without paying as much attention to the political world. Those with moderate levels of education, by contrast, may need to pay extra attention to political discourse in order to compensate for their lower levels of formal education.

In short, market values are coherent among those who mix moderate levels of formal education with high political interest, or high levels of formal education with at least moderate political interest. The economic opinions of the uneducated and/or disengaged are almost wholly unconnected.

### **B. Moral Values**

When it comes to moral values, the findings are quite different. As the data in Table 2 show, formal education has no effect whatsoever on the coherence of moral values, and the impact of political interest is nominal. The battery of moral values questions asks about the "justifiability" of homosexuality, abortion, divorce, euthanasia, suicide and prostitution. Unlike market values, answers to the moral values questions are

about as internally consistent for respondents with low levels of formal education and low levels of political interest (.78) as they are for respondents with a university degree and high political interest (.81). The moral values of respondents are highly consistent: virtually all respondents seem to know “what goes with what”, regardless of levels of formal education and political interest.

### **Insert Table 2 About Here**

Why are moral values internally consistent regardless of levels of formal education or political interest, while the internal consistency of market values seems to require higher levels of formal education and political engagement? One possibility is that moral values, or notions of right and wrong, are acquired at elementary levels of socialization to which virtually all Canadians are exposed. Market values, by contrast, are acquired through the kind of high level socialization that accompanies exposure to elite opinion in universities or by paying close attention to elite-level discourse in the political world.

## **II. Stability**

Meaningful market values, regardless of whether they conform to a predictable pattern, should nonetheless be consistent across time. The expectation is that respondents with a meaningful opinion are more likely to give the same answers when asked the same question at two different points in time. Respondents providing superficial answers, by contrast, may well provide different answers to the same question. These latter respondents are simply “answering a question” (Zaller 1992), rather than expressing an actual value or conviction. The assumption is that people are more likely to forget their answers to meaningless questions than their core values. For this analysis, then, the consistency of answers to the same question at different points in time can serve to test the possibility that the market values of educated respondents are more meaningful, rather than simply more organized, than their less educated counterparts. The expectation is that respondents with low levels of formal education are more likely than those with more education to give different answers to the same questions about economic values. But they are no more likely to give different answers to the same questions about moral values.

To test this hypothesis, we turn to panel survey evidence from the 2004-2006 Canadian Election Study (CES). The 2004 and 2006 waves of the CES include a panel survey of 1 994 respondents. Respondents were asked two “market values” and two “moral values” questions in exactly the same way in 2004 and 2006. Respondents were asked whether they thought “everyone benefits when business makes money,” and whether “people who don’t get ahead should blame themselves, not the system.”<sup>5</sup> And

---

<sup>5</sup> Opinions on taxing and spending were included in both waves of the CES, but they are not included in our analysis. The questions prompt respondents to consider taxes when thinking of spending, or consider spending when thinking of taxes, but they do not force respondents to choose between taxes and spending. As a result, the questions allow for “something for nothing” answers insofar as respondents are free to choose lower taxes *and* higher spending. Only the most educated respondents



both waves of the survey also included identical questions about abortion and about feelings toward gays and lesbians. With these data it is possible to compare the 2004 and 2006 answers of individual respondents to identical market and moral values questions.

#### A. Market Values

The consistency of 2004 and 2006 answers to identical market values questions is displayed in Figure 1. The respondents are sorted by level of education (x-axis), and the data points represent the correlations (Pearson's R) between 2004 and 2006 answers to the two market values questions (as well as a simple additive index of both questions combined<sup>6</sup>). Higher correlation coefficients (y-axis) suggest that the answers given in 2004 were more similar to the answers given in 2006. Lower correlation coefficients suggest the opposite.

#### **Insert Figure 1 About Here**

The trend lines in Figure 1 clearly indicate, first, that the answers of highly educated respondents are more consistent than their less educated counterparts. For respondents with less than high school education, the correlation between their 2004 and 2006 answers was .30 ( $p < .000$ ) for the question about whether people who do not get ahead should blame themselves, and .33 ( $p < .000$ ) for the question about whether everyone benefits from the profits of business. For those with a university degree, by contrast, the correlation was .55 ( $p < .000$ ) for the former question and .50 ( $p < .000$ ) for the latter. Each increment of formal education was associated with an increased similarity between the answers given in 2004 and 2006. Simply, well-educated respondents were more likely than less educated respondents to give an answer in 2006 that was the same or similar to the answer they gave in 2004.

#### B. Moral Values

Figure 2 summarizes the relationship between answers to 2004 and 2006 "morals" questions about abortion (red line) and homosexuality (blue line). The moral values of all respondents were very stable between 2004 and 2006. For both abortion (.75) and homosexuality (.67), respondents with less than high school education gave almost precisely the same answers in 2006 that they gave in 2004. Roughly the same pattern applied to all respondents, regardless of levels of formal education: the answers of university-educated respondents were no more consistent (.70 and .69) than the answers of those with less than high school education (.75 and .67). These findings are consistent with the expectation that moral values are widely meaningful, and that formal education is not a prerequisite for meaningful moral outlooks.

#### **Insert Figure 2 About Here**

---

show signs of making a choice between taxation and spending ( $r = -.23$ ,  $p < .000$  in 2004, and  $r = -.14$  and  $p < .000$  in 2006).

<sup>6</sup> The measure of internal consistency (Cronbach's Alpha) for this scale is .35 in 2004 and .34 in 2006.

Figure 3 compares directly the consistency of panel respondents' answers to the market and moral values questions. Note that the values on the y-axis for the moral values questions are different than the values for the market values questions. The gray numbers representing the Pearson's R for the consistency of market values are much lower than the black numbers representing the consistency of answers to the moral values questions. Nonetheless, the correlations for both sets of questions are plotted on the same range (.4) of identical metrics (-1 to +1).

### **Insert Figure 3 About Here**

The findings summarized in Figure 3 show, first, that answers to the moral values questions are much more consistent than answers to market values questions. The correlations for market values range from a low of .30 to a high of .55. The comparable figures for moral values are .59 and .75. The findings also show that the cross-time consistency of answers to the two market values questions is affected by respondents' level of formal education: as education increases, so does the average consistency of answers to these questions. Notice the upward slope for the two shaded lines representing the consistency of answers to market values questions. By contrast, there is no upward slope in either of the trend lines representing the consistency of answers to moral values questions. For moral values, the least educated respondents provide answers that are as at least as consistent as their more educated counterparts. The results suggest that market values are more meaningful for respondents with higher levels of formal education, but that moral values are equally meaningful for the educated and uneducated alike.

## **V. Political Salience**

So far, the findings from two different tests on two different datasets point in the same direction: market values are meaningful principally for those with higher levels of formal education, and moral values are highly meaningful, regardless of levels of formal education. When it comes to political salience, therefore, the expectation is that respondents with higher levels of formal education will connect their market outlooks to their political preferences far more robustly than those with lower levels of formal education. Moral outlooks, by contrast, should shape the political preferences of respondents with low levels of formal education as much they do for respondents with a university degree.

There are a few strategies that could be employed to test the core hypothesis. One possibility is to construct a regression model with "left-right" self-placement as the dependent variable, and market and moral outlooks among the independent variables. The same model could then be tested on respondents with different levels of formal education, and we could compare the *b* coefficients for the different models. The problem, however, is that the categories of "left" and "right" are not equally useful for all respondents. Among disengaged and uneducated WVS respondents, for instance, 41% "don't know" their position on a 10-point left-right scale, compared to only 4% of politically engaged respondents with a university degree. In addition to losing a sizable proportion of less educated respondents to missing data, the results of the regression

could simply reflect the different amounts of error on the dependent variable, rather than different levels of salience for the independent variables.

Another possible approach is to construct a regression model with vote choice as the dependent variable, and with moral and market outlooks among the independent variables. The problem with this approach here is that these multinomial probit models provide measures of the average effect of unit increases in the independent variables on the likelihood of winding up in some nominal category of a dependent variable *relative to some other nominal category of the same dependent variable*. But we are not interested in modeling NDP versus Liberal, or Conservative versus Liberal: the results of these models would tell us more about the position of Liberal party supporters than they would reveal about the salience of moral and market values for different categories of voters.<sup>7</sup>

The simplest strategy adopted here sorts respondents by level of formal education, and then plots the moral and market values of the supporters of the different political parties. The expectation for market values is that the gap between supporters of different political parties will widen as the level of formal education increases. If market values are more coherent for respondents with higher levels of formal education, then we should expect to find that different orientations toward the market will translate more clearly into different political preferences among these respondents than among those with lower levels of formal education. For moral values, by contrast, the expectation is that different orientations will translate just as prominently into different political preferences for respondents with lower levels of formal education as for those with higher levels. To test these hypotheses, we return to evidence from the World Values Survey.

#### A. Market Values

Figure 4 sorts WVS respondents by level of formal education and then plots, for each group, the average market values of supporters of Canada's three main political parties, plus the Bloc Quebecois. The party logos represent the average position of supporters for the different political parties, and the Canadian flag represents the average for all respondents within each category. We treat the NDP as the "leftward" extreme,

---

<sup>7</sup> If, for example, Liberal party supporters were closer to NDP supporters in their moral outlooks and yet closer to Conservative supporters in their market outlooks, then analyses that treat a Liberal vote choice as the reference category would suggest that moral values "matter more" for Conservative supporters and that market values "matter more" for NDP supporters. More to the point, however, is the possibility that Liberal supporters with a certain level of formal education might resemble NDP supporters on some independent variable, whereas Liberal supporters with a different level of formal education might resemble Conservative supporters on the same independent variable. In this scenario, the results of multinomial regression analyses would suggest that the independent variable "matters more" or "matters less" for respondents with different levels of formal education, when in fact the results are attributable to the different positions of respondents in the reference category. We could, of course, model the extremes by examining NDP versus Conservative support, but this imposes an artificial dichotomy that defeats the purpose of multinomial regression analyses and it leaves us with little to say about the patterns of support for the Liberal party. We could also run the analyses and then compare the overall effectiveness of the models for respondents with different levels of formal education, but we are interested in the meaningfulness of moral and market values, rather than predicting the vote choice of respondents. It is the coefficients, rather than the models themselves, in which we are interested.

and the Conservative party as the “rightward” extreme.<sup>8</sup> Figure 4 shows, first, that the gap in market outlooks between NDP and Conservative party supporters widens considerably as level of formal education increases. Notice that Conservative supporters move “rightward” as formal education increases ( $r = +.15$ ,  $p = .000$ ), whereas the opposite pattern is true of NDP supporters ( $r = -.14$ ,  $p = .01$ ). Thus, well-educated Conservatives and well-educated NDP supporters disagree far more profoundly in their market outlooks than do their less educated counterparts. Clearly, the most pronounced pattern in Figure 4 is not a “rightward” or “leftward” trend, but, rather, the increasing divergence of market outlooks between NDP and Conservative party supporters. While the average position on the market values scale of all respondents within each educational category is approximately the same, notice that the standard deviations are different.

### **Insert Figure 4 About Here**

The position of Liberal party supporters in Figure 4 is consistent with the conventional wisdom: Liberals occupy the middle-ground of Canadian politics. On the whole, the market outlooks of Liberal supporters lie in between those of NDP and Conservative supporters. But the data also suggest that the market values of Liberal supporters may vary by level of formal education: the market outlooks of less educated Liberals resemble those of NDP supporters, while the market outlooks of well educated Liberals are closer to Conservative supporters. Indeed, the correlation between education and market values is in the same direction and about as strong for Liberals ( $r = +.13$ ,  $p = .002$ ) as it is for Conservatives. Yet, the market outlooks of Liberals are to the “left of centre” at lower levels of formal education, and to the “right of centre” at higher levels. These results are not particularly perplexing: higher levels of education are associated with higher incomes, and higher incomes are associated with increasingly conservative market outlooks for both Liberals and Conservatives. The outliers here are the NDP supporters.<sup>9</sup>

#### **B. Moral Outlooks**

The results in Figure 5 refer to moral outlooks and sort respondents by their level of formal education. The expectation is that the gap between party supporters will be as prominent for those with less than high school education as for those with a university degree. The most important finding, therefore, is that this expectation is not confirmed when the NDP, rather than the BQ, is taken to signify “the left” of Canadian politics.

---

<sup>8</sup> It is difficult to compare other parties with the Bloc Quebecois because the Bloc Quebecois do not contest elections outside of Quebec. Also, there are very few respondents in Quebec who have completed only “High School”; most either quit earlier or continued to CEGEP and thus ended up in the “some postsecondary” category.

<sup>9</sup> We note that income predicts the market values of respondents with postsecondary education much more effectively than those with lower levels of formal education. Among the university educated, by contrast, income is a much weaker predictor of market attitudes, and yet market attitudes are a stronger predictor of vote choice, as well as left-right self-placement. These findings may reflect a dichotomy between a “politics of ideas” that divides university graduates, on the one hand, and a “politics of self-interest” that divides other Canadians.

University-educated NDP and Conservative supporters are more divided in their moral outlooks than are their counterparts with lower levels of education. Notice, however, that only university-educated respondents are distinctive in this regard: the gap between NDP and Conservative supporters is at least as large among those with less than High School education as it is for those who have completed High School or some postsecondary schooling.

### **Insert Figure 5 About Here**

An equally important finding revealed in Figure 5 concerns the across-the-board leftward trend in moral outlooks that accompanies each increase in formal education: respondents with higher levels of formal education are more “left-leaning” in their moral outlooks than respondents with lower levels of formal education. The relationship is particularly pronounced among university-educated NDP supporters, thus single-handedly accounting for the increased size of the gap between university-educated NDP and Conservative partisans. The Liberals, once again, occupy the middle ground; they are slightly closer to the Conservatives than to the NDP.

Figure 6 compares the effects of moral and market values on the patterns of support for the NDP and the Conservative party. The average moral values of NDP and Conservative supporters are represented by the shaded lines. The solid lines represent market values. Notice that, for those with less than High School education, the gap between the solid lines is smaller than the gap between the shaded lines. For those with more than High School education, however, the gap is actually somewhat larger between the solid lines than between the shaded lines. One implication is that moral values are a deeper cleavage than market values among those with less than High School education. The opposite applies to those with higher levels of formal education. Nonetheless, the most notable contrast is that education is associated with a leftward trend in moral values for both NDP and Conservative supporters, but, when it comes to market values, the NDP supporters move leftward and Conservatives move rightward. Formal education, it seems, affects the meaningfulness, but not the content, of market values. And it affects the content, but not the meaningfulness, of moral values.

## **VI. Discussion**

The accumulated evidence suggests that higher levels of formal education are associated with a better understanding of the concept of an economic market. Respondents with higher levels of formal education demonstrate greater interconnectedness in their market values, their economic opinions are more stable across time, and their economic values play a major role in shaping their political preferences. This finding is consistent with existing research (Converse 1964; Nie, Junn, Stehlik-Barry 1996) Indeed, of all the value dimensions measured in the WVS, none predicts the left-right self-placement, or the patterns of party support among university-educated respondents, more effectively than orientations towards the economy (See Appendix C). For those with less than High School education, by contrast, economic outlooks are incoherent, unstable and virtually unconnected to patterns of party support. For these respondents the notion of free markets resonates hardly at all. So while formal education

may not move market values to “the left” or to “the right”, market values, whether “left” or “right”, are much more salient for respondents with higher levels of formal education.

Moral values, by contrast, are coherent, stable and politically salient for educated and uneducated respondents alike. Almost all respondents, it seems, have a clear conception of “right” and “wrong”. Formal education may not play a role in shaping the meaningfulness of moral outlooks, but the evidence strongly suggests that level of formal education affects the content of these values: respondents with higher levels of formal education are much more left-leaning in their moral outlooks than their less educated counterparts. This same pattern persists regardless of partisan affiliation; it applies to NDP and BQ supporters, as well as Conservatives and Liberals. Formal education shapes the content, but not the meaningfulness, of moral outlooks. Moral values matter for virtually everyone, but well-educated respondents are more “left-leaning” in their moral outlooks than their less educated counterparts.

## VII. Implications

There are at least three kinds of implications of these findings. At a theoretical level, these findings underscore the need to inspect more closely the process of value formation. First, as Brody, Sniderman and Tetlock note, it is a mistake “...to suppose that the analytic problem [is] how to characterize the political reasoning of the public as a whole: It [is]...misconceived to argue that the average citizen could, or could not, pull his political ideas together, because the extent to which mass belief systems are organized varies markedly and predictably across mass publics” (3). We agree. Second, in addition to variations between different subsets of the mass public in terms of the coherence of their value systems, there are also variations between different value systems themselves. Moral values, for instance, are almost universally coherent, whereas market values are coherent principally for those with higher levels of formal education. Consequently, there are differences between different subsets of the population when it comes to market values that simply do not apply when it comes to moral values. And third, it is clearly important to distinguish the “structure” of belief systems from the “content” of belief systems (McClosky & Zaller 1984, 259). This analysis focused almost exclusively on the explanatory power of one independent variable (formal education) and two dependent variables (market and moral values). The findings were nonetheless sufficient to suggest that the factors affecting the “structure” of belief systems are not necessarily the same as those affecting the “content” of belief systems. In particular, formal education affects the structure but not the content of market values, and the content but not the structure of moral values.

Together, these findings also suggest that we may need to revisit our conceptualization of the “left” and “right” of Canadian politics. As Blais et. al. (2002) and others (Laponce 1981; Nevitte and Gibbins 1990; Nevitte and Cochrane 2007) have noted, it is misleading to speak of a singular “left” and “right” in Canadian politics. The evidence points to a social (i.e. moral) “left” and “right”, on the one hand, and an economic “left” and “right” on the other (Blais et. al. 2002). The evidence presented here suggests a somewhat more nuanced conclusion. Namely, that when it comes to moral and market values, there is *one* left and *two* rights. If coherent and meaningful market outlooks are contingent on higher levels of formal education, and if higher levels of

formal education are associated with “leftward” moral outlooks, then “left-wing” market outlooks will be associated with “left-wing” moral outlooks, and “right-wing” market outlooks will also be associated with “left-wing” moral outlooks. Respondents with meaningful market outlooks, regardless if they are on “the left” or on “the right”, will have “leftward” moral outlooks by virtue of their higher levels of formal education.

What do these findings mean for Canadian political parties? If political parties are vote maximizing institutions and if the process of vote maximization entails aligning party platforms with the values and beliefs of the electorate, then the challenges confronting the NDP and the Conservative party are quite different. For the Conservative party, adopting positions on the “moral right” risks alienating supporters on the “market right”, whereas adopting positions on the “market right” poses little risk in terms of alienating supporters on the “moral right”. Moral conservatives typically have lower levels of formal education. Market values are therefore less important for most moral conservatives. But economic conservatives have higher levels of formal education and are consequently rather “left-leaning” in their moral outlooks. A vote maximizing Conservative party, therefore, can maximize support by staying on the “economic right” but moving away from the “moral right”.

For the NDP, the challenge is quite different. Positions on the “moral left” are consistent with the moral outlooks of those on the “market left”, even if positions on the “market left” are inconsistent with the economic outlooks of many on the “moral left”. Unlike Conservative Party supporters where there is a clear tension between moral and economic values, the moral and economic values of NDP supporters are comparatively aligned. Moral values move leftward as economic values move *rightward*, and moral values move leftward as economic values move leftward. The correlation between moral and economic outlooks is  $-.11$  ( $p = .01$ ) for Conservatives, and  $+.21$  ( $p = .000$ ) for NDP supporters.<sup>10</sup> Among NDP supporters, increasingly left-leaning moral outlooks are associated with increasingly left-leaning market outlooks, and increasingly left-leaning market outlooks are associated with increasingly left-leaning moral outlooks. Thus, the NDP can adopt left-leaning positions on moral issues without alienating the “market left”. By the same token, they stand to lose some support among the “moral left” by adopting positions on the “market left”.

For a vote-maximizing Conservative Party, by contrast, positions on the “market right” will not alienate those on the “moral right” (for most of whom market values are unimportant). Positions on the “moral right”, however, risk alienating those on the “market right”. As a result, the optimal course of action for the Conservative party is to move away from the “moral right”.

*Ceteribus paribus*: a vote maximizing NDP would prioritize the “moral left” over the “market left”, while their Conservative competitors would put the “market right” ahead of the “moral right.” A strategically minded Conservative party stands to gain by stressing economic values over moral values, while a strategically minded NDP stands to gain by placing moral values ahead of economic ones. Nonetheless, “left-left” turns out to be a safer combination of moral and economic values than “right-right”.

---

<sup>10</sup> The correlation between the economic and moral values of university-educated NDP supporters with at least a moderate amount of political interest is  $.63$  ( $p = .000$ ). The comparative figure for Conservative party supporters is  $-.05$  ( $p = .65$ ).

## VIII. Conclusion

How do Canadians organize their economic values? For those with high levels of formal education and political sophistication, developing an overall outlook toward the economy is relatively straightforward. On the one hand, supporting greater income equality typically entails support for social assistance, an ethic of cooperation, and at least some nationalization of certain businesses and industries. On the other hand, supporting greater economic incentives for individual effort is regularly accompanied by an emphasis on individual responsibility, an ethic of competition, and the privatization of business and industry. But imagine developing an abstract understanding of the economy without drawing on ideas that were acquired through higher levels of formal education, through discussions with friends, or by paying close attention to current events. And consider that about one in four never complete high school (Statistics Canada 2001), 35% “never” discuss politics, and 50% are simply not interested in the political world (World Values Survey). How, then, do these Canadians acquire usable bundles of economic values?

The results presented here suggest that they do not. The economic values of Canadians with low levels of formal education and political engagement are nescient, discordant and fleeting. Many simply “don’t know” their economic values. But even among those who do, there is little connection between one economic opinion and another, or between the same economic opinion at two different points in time. The economic values of politically engaged university graduates, by contrast, are interconnected, durable and highly salient. Their opinions cluster coherently between an egalitarian social democratic pattern at one end, and an individualistic laissez-faire pattern at the other. Not only are their opinions stable across time, but, for these Canadians, differences of core economic values underlie two of the most important political cleavages: the division between the political “left” and “right”, and the division between supporters of Canada’s three main national parties: the NDP, Liberals and Conservatives. In short, educated, sophisticated and engaged citizens orient themselves politically around a set of ideas that mean substantially less to a sizable portion of the Canadian public.

When it comes to moral values, however, the evidence is altogether different. Given that moral values, or notions of right and wrong, are acquired at relatively early stages of socialization, it comes as no surprise to discover that that most Canadians, regardless of their levels of formal schooling and political interest, internalize coherent, stable and meaningful moral outlooks. The *content* of moral outlooks may change as level of formal education increases, but the structure of these values is as coherent and meaningful for those on the “right” and the “left”, and for those with higher and lower levels of formal education. These findings are consistent with the hypothesis that notions of right and wrong are learned early in life, whereas orientations towards the economy are acquired from the type of exposure to elite opinion and greater “sophistication” that comes with exposure to higher levels of formal education.



Table 1: Internal Consistency of Answers to Market Values Questions by Education and Political Interest (Cronbach's Alpha)

<b>Education</b>	<b>Political Interest</b>		
	<u>Low</u>	<u>Moderate</u>	<u>High</u>
< High School	.15	.25	.15
High School	.22	.23	.46
Postsecondary	.35	.38	.65
Complete University	.41	.68	.71

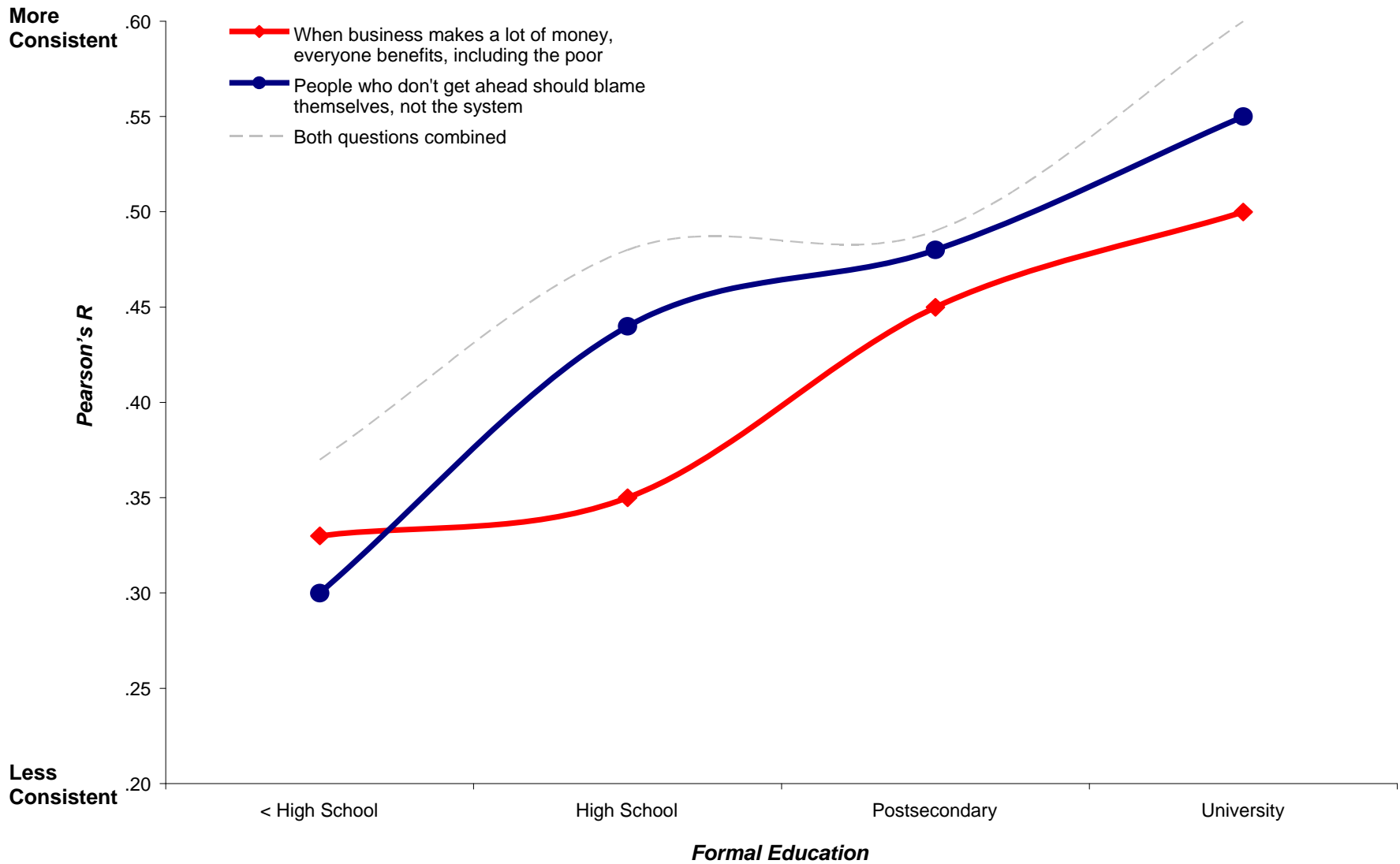
Source: World Values Survey (Canada), 2006

Table 2: Internal Consistency of Answers to Moral Values Questions by Education and Political Interest (Cronbach's Alpha)

<b>Education</b>	<b>Political Interest</b>		
	<u>Low</u>	<u>Moderate</u>	<u>High</u>
< High School	.78	.76	.87
High School	.77	.81	.88
Postsecondary	.79	.80	.81
Complete University	.78	.78	.83

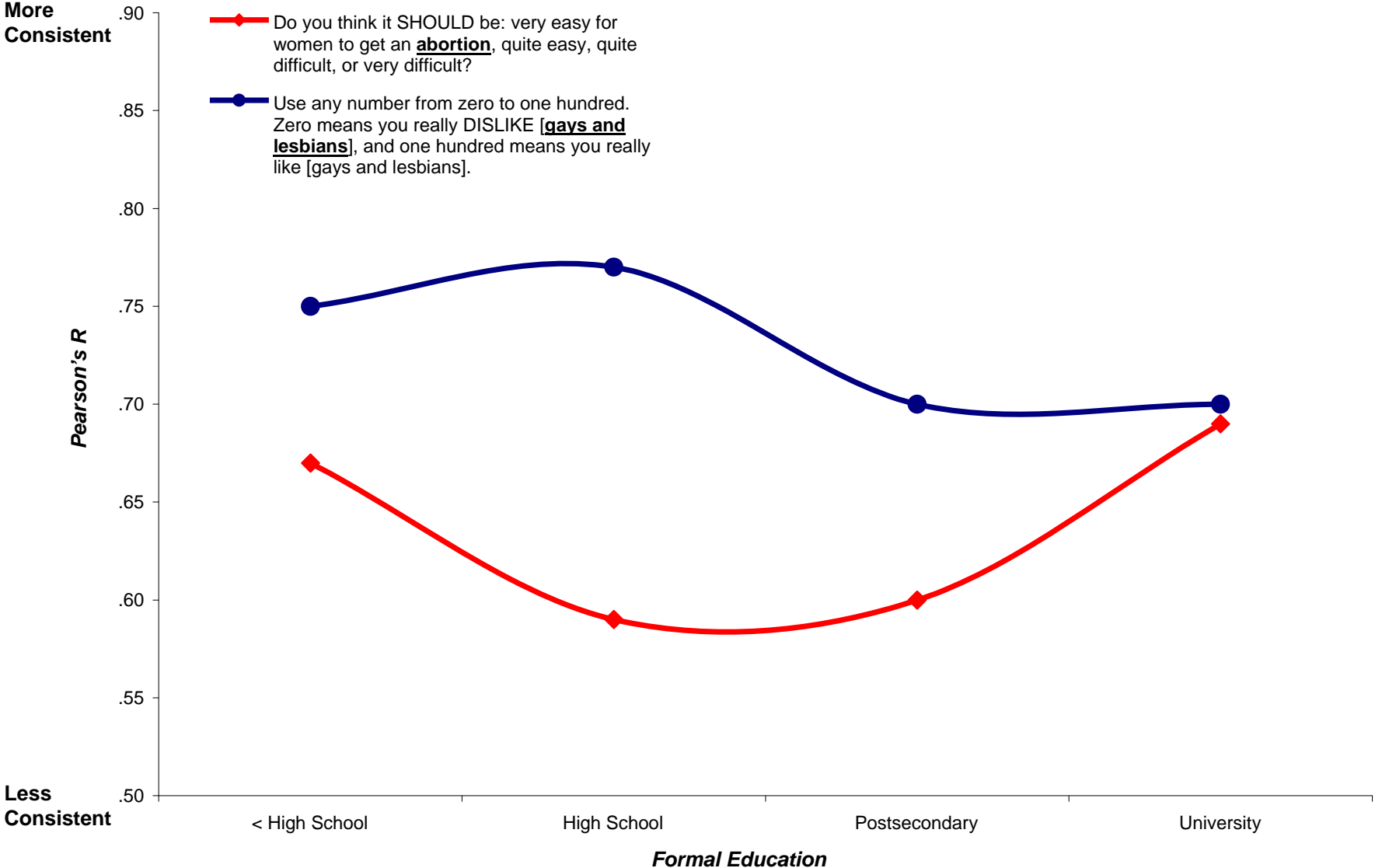
Source: World Values Survey (Canada), 2006

Figure 1: Consistency (Correlations) of Answers to Identical Market Values Questions in 2004 and 2006, by Level of Education



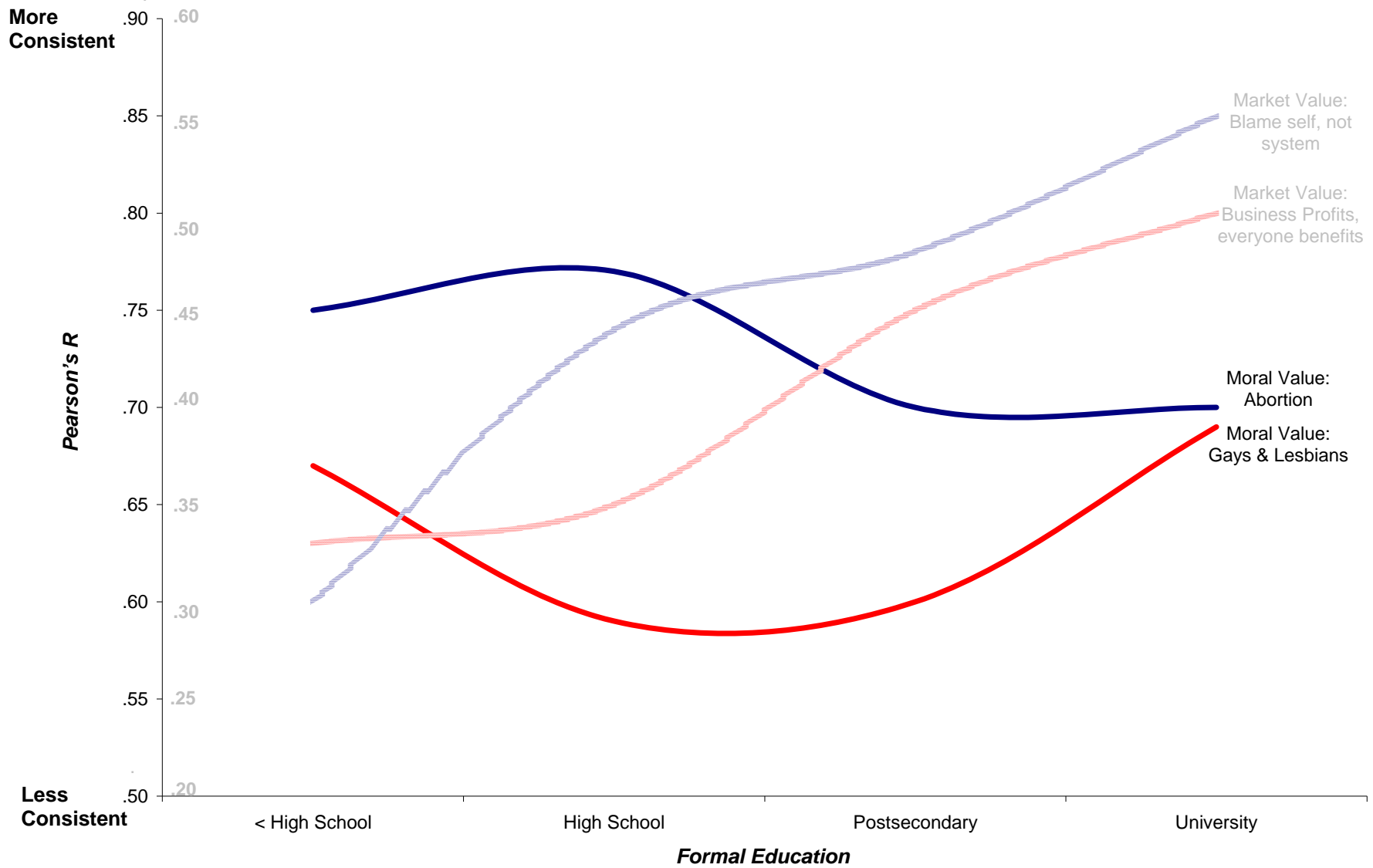
Source: Canadian Election Study, 2004-2006

Figure 2: Consistency (Correlations) of Answers to Identical Moral Values Questions in 2004 and 2006, by Level of Education



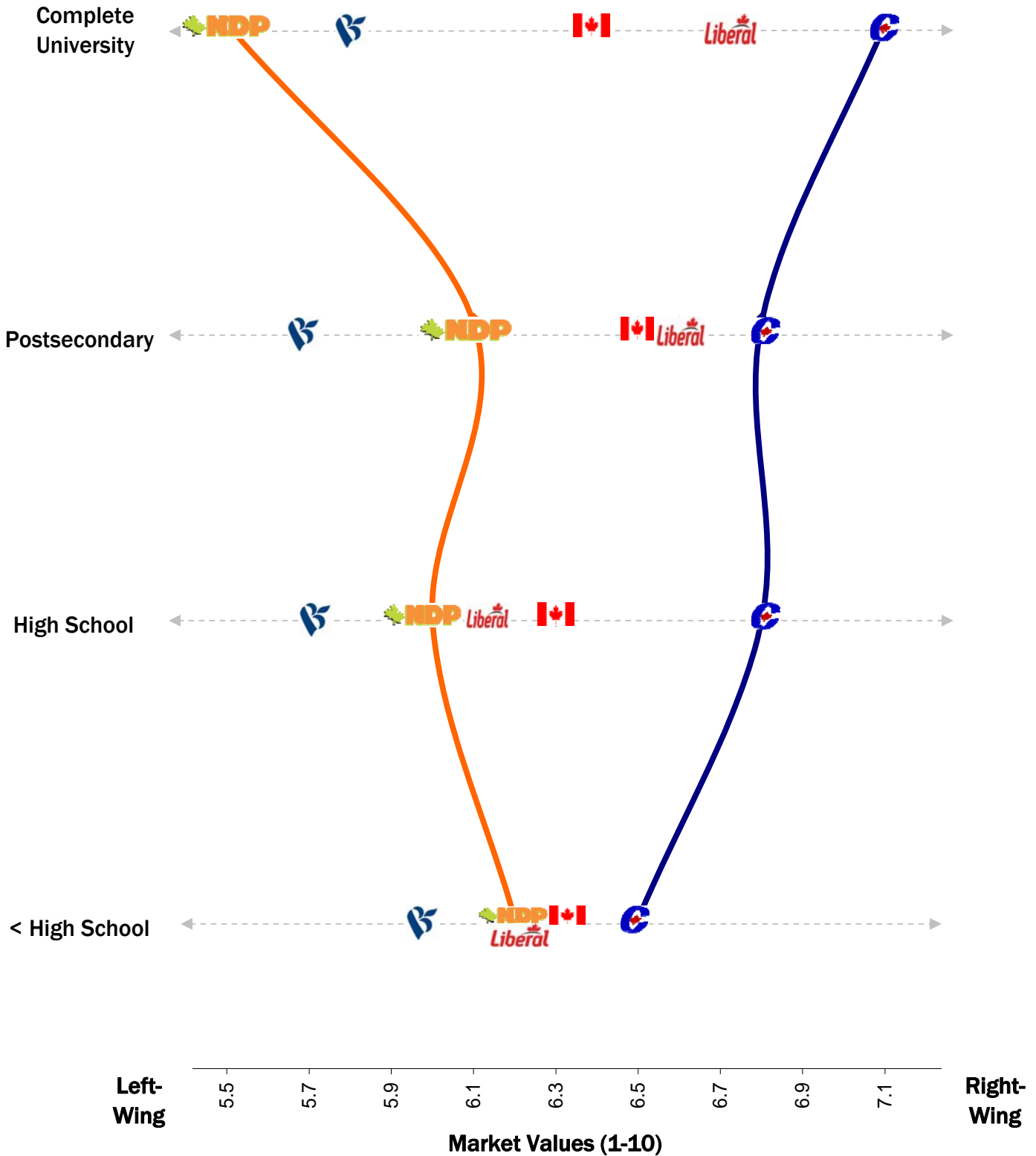
Source: Canadian Election Study, 2004-2006

Figure 3: Cross-time Consistency of Answers to Moral and Economic Values Questions in 2004 and 2006, by Level of Education



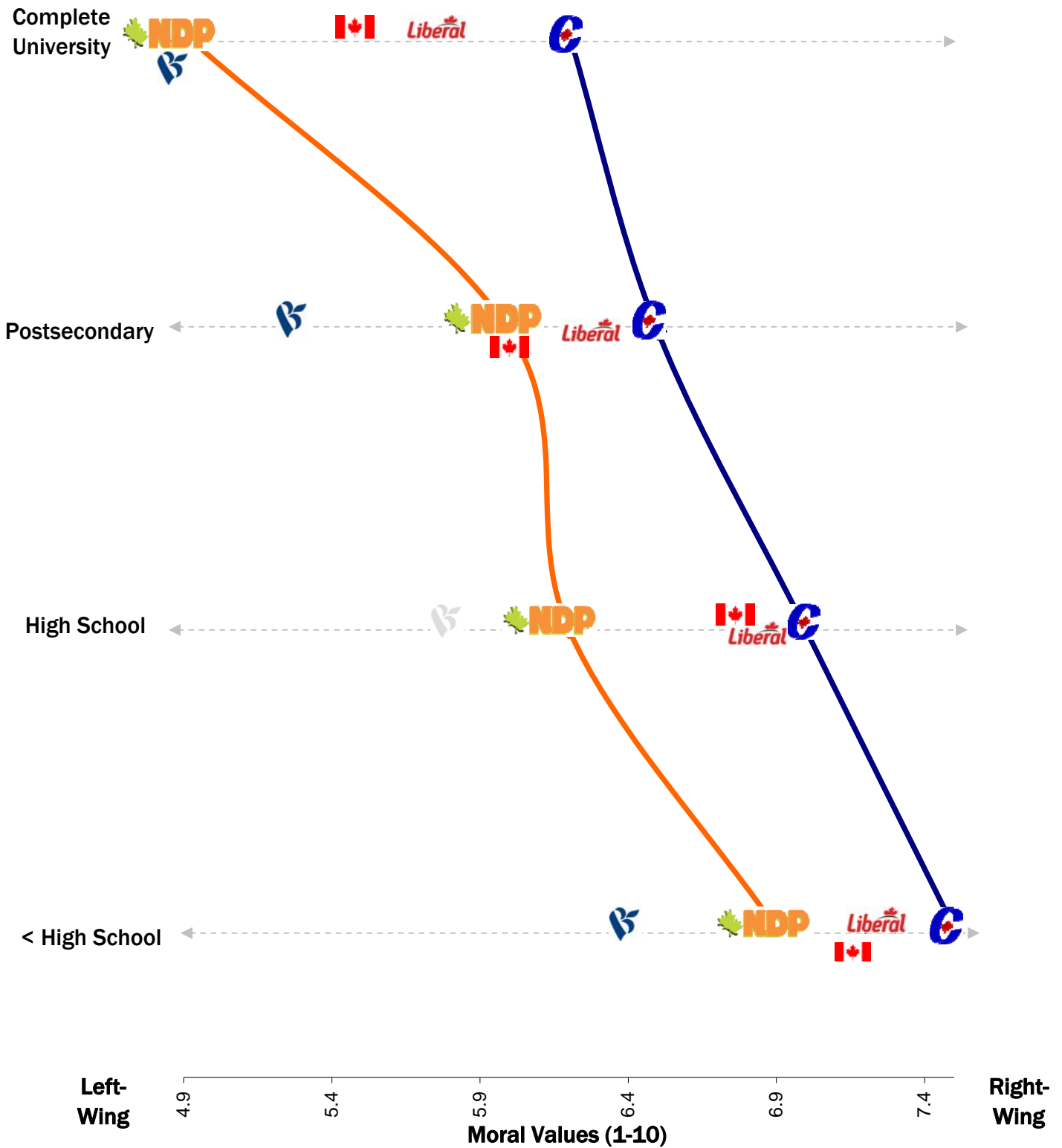
Source: Canadian Election Study, 2004-2006

Figure 4: Average Market Values Position of Party Supporters by Level of Education, Canada 2006



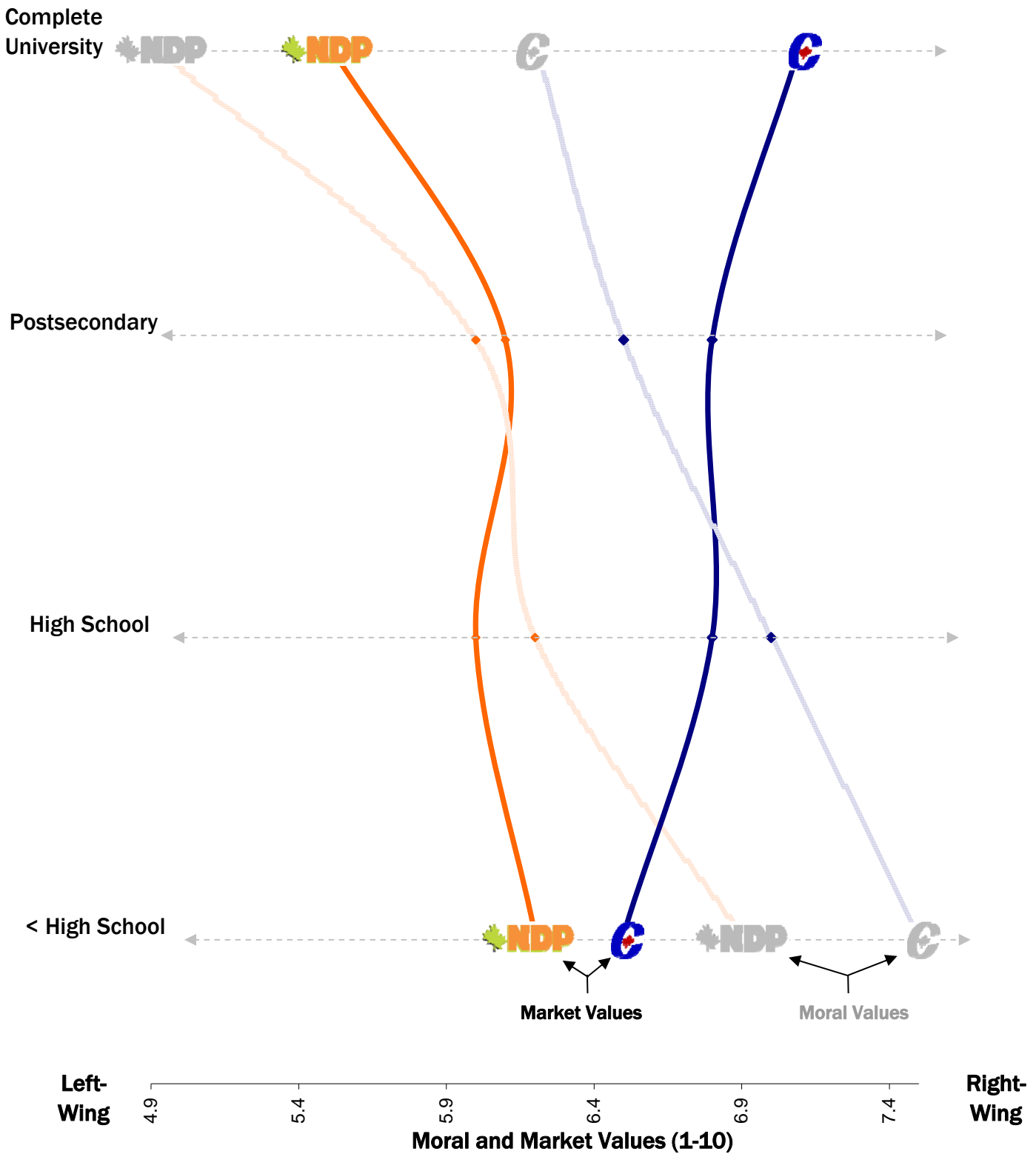
Source: World Values Survey (Canada), 2006  
20

Figure 5: Average Moral Values Position of Party Supporters by Level of Education, Canada 2006



Source: World Values Survey (Canada), 2006

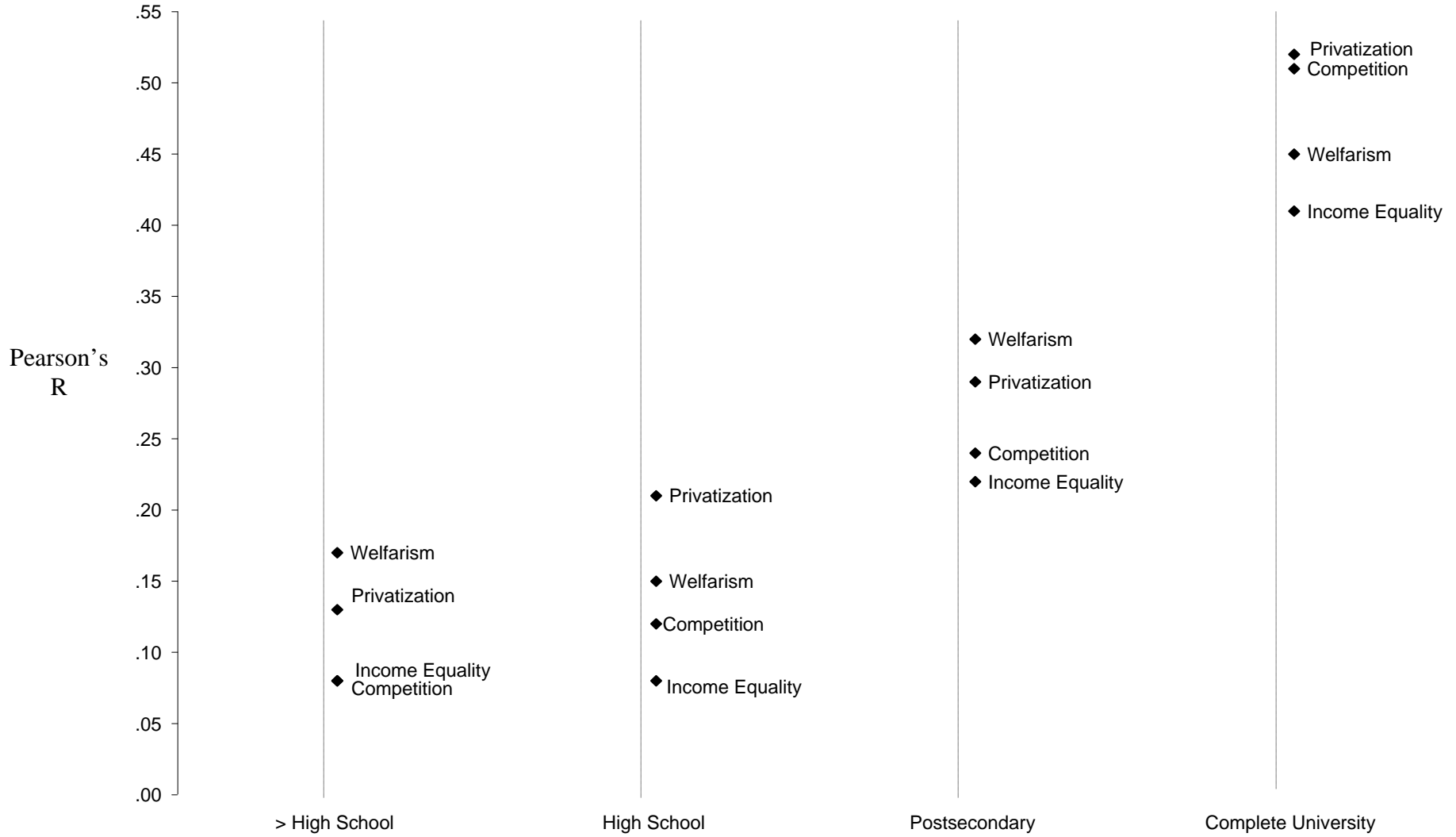
Figure 6: Overlapping Market and Moral Values of NDP and Conservative Party Supporters



Source: World Values Survey (Canada), 2006



### Appendix A: Item-Rest Correlation (Market Values) by Level of Education



Source: World Values Survey (Canada), 2006

## Appendix B: Question Wording and Variable Coding

### I. Values

#### A. Moral Values

Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card.

V202.	Homosexuality	1	2	3	4	5	6	7	8	9	10
V203.	Prostitution	1	2	3	4	5	6	7	8	9	10
V204.	Abortion	1	2	3	4	5	6	7	8	9	10
V205.	Divorce	1	2	3	4	5	6	7	8	9	10
V206.	Euthanasia—ending of the life of the incurable sick	1	2	3	4	5	6	7	8	9	10
V207.	Suicide	1	2	3	4	5	6	7	8	9	10

Coding Reversed and standardized to 0-1.

Cronbach's Alpha = .805

#### B. Market (or Economic Values)

Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between

V120.

Incomes should be made more equal											We need larger income differences as incentives for individual effort
1	2	3	4	5	6	7	8	9	10		

V121.

Private ownership of business and industry should be increased											Government ownership of business and industry should be increased
1	2	3	4	5	6	7	8	9	10		

V122.

The government should take more responsibility to ensure that everyone is provided for											People should take more responsibility to provide for themselves
1	2	3	4	5	6	7	8	9	10		

V123.

Competition is good. It stimulates people to work hard and develop new ideas

Competition is harmful. It brings out the worst in people

1 2 3 4 5 6 7 8 9 10

Cronbach's Alpha = .378

Coding of v121 & v123 is reversed. Scale standardized to 0-1.

C. Environmentalism

I am going to read out some statements about the environment. For each one, can you tell me whether you strongly agree, agree, disagree or strongly disagree?

	Strongly agree	Agree	Disagree	Strongly disagree
V109. I would give part of my income if I were certain that the money would be used to prevent environmental pollution.	1	2	3	4
V110. I would agree to an increase in taxes if the extra money were used to prevent environmental pollution.	1	2	3	4

Cronbach's Alpha = .747

D. Out-group Tolerance

On this list are various groups of people. Could you please mention any that you would not like to have as neighbors?:

	Mentioned	Not mentioned
V35. People of a different race	1	0
V37. Immigrants	1	0
V39. People of a different religion	1	0
V42. People who speak a different language	1	0
V43. Muslims	1	0

Cronbach's Alpha = .707

*E. Work Values*

Please specify for each of the following statements how strongly you agree or disagree with it. Do you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree?

	Strongly agree	Agree	Neither	Disagree	Strongly disagree
V51. To fully develop your talents, you need to have a job.	1	2	3	4	5
V52. It is humiliating to receive money without working for it.	1	2	3	4	5
V53. People who don't work become lazy.	1	2	3	4	5
V54. Work is a duty toward society.	1	2	3	4	5
V55. Work should always come first, even if it means less free time.	1	2	3	4	5

Cronbach's Alpha = .697

*F. Family Values*

V59. If someone says a child needs a home with both a father and a mother to grow up happily, would you tend to agree or disagree?:

- 1 Tend to agree
- 2 Tend to disagree

V60. Do you think that a woman has to have children in order to be fulfilled or is this not necessary?:

- 1 Needs children
- 2 Not necessary

V62. If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?

- 1 Approve
- 2 Disapprove
- 3 Depends (*do not read out, code only if volunteered*)

Cronbach's Alpha = .453

*G. Gender Values*

For each of the following statements I read out, can you tell me how strongly you agree or disagree with each. Do you strongly agree, agree, disagree, or strongly disagree?

- Strongly agree
- Agree
- Disagree
- Strongly disagree

V64.	On the whole, men make better political leaders than women do.	1	2	3	4
V65.	A university education is more important for a boy than for a girl.	1	2	3	4
V66.	On the whole, men make better business executives than women do.	1	2	3	4

Cronbach's Alpha = .781

*H. Law Abidingness Values*

Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card.

	Never justifiable					Always justifiable				
V198.	1	2	3	4	5	6	7	8	9	10
V199.	1	2	3	4	5	6	7	8	9	10
V200.	1	2	3	4	5	6	7	8	9	10
V201.	1	2	3	4	5	6	7	8	9	10

Coding Reversed and standardized to 0-1.

Cronbach's Alpha = .784

**II. Single Item Measures**

*A. Political Interest*

V99. How interested would you say you are in politics? Are you:

- 1 Very interested
- 2 Somewhat interested
- 3 Not very interested
- 4 Not at all interested

*B. Left-Right Self-Placement*

V118. In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?

Left  
1      2      3      4      5      6      7      8      9      Right  
10

C. Vote Choice

V244. If there were a federal election tomorrow, for which party on this list would you vote? Just call out the number on this card. If you are uncertain, which party appeals to you most?

- |   |                              |
|---|------------------------------|
| 1 | Liberal                      |
| 2 | Conservative                 |
| 3 | N.D.P                        |
| 4 | Bloc Quebecois               |
| 5 | Other Party (Specify) _____. |
| 6 | None [ONLY IF VOLUNTEERED]   |

**III. Demographic Information**

A. Religion and Religiosity

V185. Do you belong to a religion or religious denomination? If yes, which one?

- |      |                                  |   |
|------|----------------------------------|---|
| No:  | do not belong to a denomination  | 0 |
| Yes: | Roman Catholic                   | 1 |
|      | Protestant                       | 2 |
|      | Orthodox (Russian/Greek/etc.)    | 3 |
|      | Jewish                           | 4 |
|      | Muslim                           | 5 |
|      | Hindu                            | 6 |
|      | Buddhist                         | 7 |
|      | Other ( <i>write in</i> ): _____ | 8 |

V186. Apart from weddings and funerals, about how often do you attend religious services these days? (*Code one answer*):

- |   |                           |
|---|---------------------------|
| 1 | More than once a week     |
| 2 | Once a week               |
| 3 | Once a month              |
| 4 | Only on special holy days |
| 5 | Once a year               |
| 6 | Less often                |
| 7 | Never, practically never  |

V187. Independently of whether you attend religious services or not, would you say you are (*read out and code one answer*):

- |   |                        |
|---|------------------------|
| 1 | A religious person     |
| 2 | Not a religious person |

3

An atheist

V192. How important is God in your life? Please use this scale to indicate. 10 means “very important” and 1 means “not at all important.” (*Code one number*):

Not at all important										Very important	
1	2	3	4	5	6	7	8	9	10		

*B. Immigrant-Native Born*

V217 Were you born in Canada?

1. Yes (ASK 218, SKIP 219)
2. No (SKIP 218, ASK 219)

V219a In what country were you born? WRITE IN \_\_\_\_\_

V219b How many years have you lived in Canada? \_\_\_\_\_

*C. Sex*

V256. (*Code respondent’s sex by observation*):

- |   |        |
|---|--------|
| 1 | Male   |
| 2 | Female |

*D. Age*

V257. Can you tell me your year of birth, please? 19\_\_\_\_ .

V258. This means you are \_\_\_\_ years old.

*E. Education*

V259. What is the highest educational level that you have attained? [*NOTE: if respondent indicates to be a student, code highest level s/he expects to complete*]:

- |   |   |
|---|---|
| 1 | No formal education                             |
| 2 | Incomplete primary school                       |
| 3 | Complete primary school                         |
| 4 | Incomplete secondary school                     |
| 5 | Incomplete College/CEGEP                        |
| 6 | Complete College/CEGEP                          |
| 7 | Some university-level education, without degree |
| 8 | University-level education, with degree         |

V260. At what age did you (or will you) complete your full time education, either at school or at an institution of higher education? Please exclude apprenticeships [NOTE: if respondent indicates to be a student, code highest level s/he expects to complete]: \_\_\_\_\_

F. Income

V273. Here is a scale of incomes. We would like to know in what group your household is, counting all wages, pensions and other incomes that come in. Just give the letter of the group your household falls into, before taxes and other deductions.

- |    |                    |
|----|--------------------|
| A. | Up to 12 500       |
| B. | 12 501 to 20 000   |
| C. | 20 001 to 27 500   |
| D. | 27 501 to 35 000   |
| E. | 35 001 to 42 500   |
| F. | 50 001 to 62 500   |
| G. | 62 501 to 75 000   |
| H. | 75 501 to 100 000  |
| I. | 100 001 to 150 000 |
| J. | 150 001 or more    |

G. Rural-Urban

V275. (Code size of town):

- |   |                  |
|---|------------------|
| 1 | Under 2,000      |
| 2 | 2,000 - 5,000    |
| 3 | 5 - 10,000       |
| 4 | 10 - 20,000      |
| 5 | 20 - 50,000      |
| 6 | 50 - 100,000     |
| 7 | 100 - 500,000    |
| 8 | 500,000 and more |

Variable recoded to collapse categories 1 and 2.

H. Race

V276a (Code ethnic group of Respondent by observation):

- |   |                                     |
|---|-------------------------------------|
| 1 | Caucasian white                     |
| 2 | Negro Black                         |
| 3 | South Asian Indian, Pakistani, etc. |
| 4 | East Asian Chinese, Japanese, etc.  |
| 5 | Arabic, Central Asian               |
| 6 | Other (write in): _____             |



*I. Province of Interview (Region Classification added in Parentheses)*

V277. *(Code province where the interview was conducted):*

- |    |                                 |
|----|---------------------------------|
| 1  | Prince Edward Island (Atlantic) |
| 2  | Nova Scotia (Atlantic)          |
| 3  | New Brunswick (Atlantic)        |
| 4  | Quebec                          |
| 5  | Ontario                         |
| 6  | Manitoba (Prairies)             |
| 7  | Saskatchewan (Prairies)         |
| 8  | Alberta                         |
| 9  | British Columbia                |
| 10 | Newfoundland (Atlantic)         |

## Appendix C: Aggregate-Level Predictors of Left-Right Self-Placement and Party Support

Table C.1: Predictors of Left-Right Self-Placement (1-10) in Canada, OLS Regression

	<u>All Respondents</u>		<u>Least Sophisticated</u>		<u>Most Sophisticated</u>	
	b	(SE)	b	(SE)	b	(SE)
sex (male)	-.210	(.129)	-.288	(.296)	-.256	(.301)
age	.002	(.005)	-.012	(.011)	.032	(.013)
visible minority	-.424	(.242)	<sup>a</sup> -1.193	(.561)	<sup>b</sup> .348	(.530)
immigrant	.318	(.205)	.350	(.564)	.241	(.401)
rural-urban	-.029	(.042)	-.155	(.090)	<sup>a</sup> -.082	(.103)
married	.080	(.148)	-.147	(.316)	.433	(.350)
have children	-.013	(.047)	-.035	(.094)	.024	(.126)
Atlantic	-.222	(.178)	-.663	(.434)	.686	(.385)
Quebec	-.506	(.180)	<sup>c</sup> -.726	(.417)	<sup>a</sup> -.109	(.407)
West	-.184	(.174)	.124	(.421)	.128	(.379)
education	.017	(.052)	-.344	(.326)	(university only)	
unemployed	.125	(.213)	.208	(.454)	-.921	(.766)
income	.024	(.026)	-.038	(.066)	.069	(.060)
rent/own	-.152	(.131)	.128	(.292)	-.846	(.301)
religiosity	.258	(.109)	<sup>b</sup> .096	(.246)	.047	(.244)
social trust	-.066	(.134)	.598	(.341)	<sup>a</sup> .127	(.353)
life satisfaction	.059	(.038)	.120	(.077)	.058	(.111)
work values	.174	(.089)	<sup>a</sup> .096	(.215)	.070	(.214)
gender values	.075	(.121)	.154	(.281)	.297	(.301)
anti-immigrant values	.063	(.034)	<sup>a</sup> .111	(.080)	.099	(.081)
outgroup tolerance	-.180	(.081)	<sup>b</sup> -.254	(.154)	.142	(.277)
<b>economic values (pro-market)</b>	<b>.207</b>	<b>(.048)</b>	<sup>d</sup> <b>-.097</b>	<b>(.111)</b>	<b>.435</b>	<b>(.114)</b>
law abidingness	.066	(.050)	.170	(.101)	<sup>a</sup> -.072	(.144)
<b>moral values (traditional)</b>	<b>.118</b>	<b>(.037)</b>	<sup>c</sup> <b>.178</b>	<b>(.083)</b>	<sup>b</sup> <b>.425</b>	<b>(.097)</b>
science and technology values	.977	(.315)	<sup>c</sup> 1.553	(.673)	<sup>b</sup> .458	(.765)
environmentalism	-.229	(.093)	<sup>b</sup> .006	(.206)	-.497	(.241)
liberal democratic values	-.019	(.047)	.092	(.081)	.284	(.243)
constant	3.464	(.911)	<sup>d</sup> 5.236	(2.010)	<sup>c</sup> .445	(3.245)
Adjusted R-squared	.15		.12		.50	
N	828		160		140	
Prob > f	.0000		.0165		.0000	

<sup>a</sup>  $p \leq .10$    <sup>b</sup>  $p \leq .05$    <sup>c</sup>  $p \leq .01$    <sup>d</sup>  $p < .001$

Notes:

Least Sophisticated = less than postsecondary education and low political interest

Most Sophisticated = university educated and high political interest

Source: World Values Survey (Canada), 2006

Appendix C (continued...)

Table C.2: Predictors of Vote Choice (National Parties) in Canada, Multinomial Logistic Regression

	<u>Liberal (1)</u>		<u>NDP (1)</u>		<u>Green (1)</u>		
	b	(SE)	b	(SE)	b	(SE)	
sex (male)	-.229	(.200)	.121	(.238)	-.869	(.493)	a
age	.004	(.007)	-.008	(.009)	-.025	(.019)	
visible minority	.493	(.376)	1.134	(.417)	.252	(.907)	
immigrant	-.199	(.302)	-1.192	(.410)	-1.185	(.783)	c
rural-urban	.131	(.063)	.255	(.076)	.258	(.165)	d
married	-.146	(.219)	.339	(.268)	-.591	(.595)	
have children	-.027	(.070)	-.013	(.087)	.081	(.215)	
Atlantic	.295	(.253)	.002	(.298)	-1.732	(.856)	b
Quebec	-.662	(.329)	-.945	(.397)	-.090	(.633)	b
West	-.387	(.253)	-.530	(.291)	-.648	(.549)	
education	.061	(.077)	.107	(.093)	.495	(.211)	b
unemployed	.082	(.362)	-.111	(.396)	.584	(.799)	
income	-.112	(.040)	-.211	(.047)	-.115	(.091)	d
rent/own	.278	(.193)	.150	(.223)	-.081	(.425)	
religiosity	.008	(.185)	-.287	(.202)	-.933	(.348)	c
social trust	.042	(.202)	.287	(.238)	.218	(.510)	
life satisfaction	.058	(.060)	-.108	(.067)	-.038	(.154)	
work values	.220	(.137)	.144	(.162)	.226	(.329)	
gender values	-.116	(.180)	-.518	(.222)	.398	(.446)	b
anti-immigrant values	-.133	(.052)	-.082	(.061)	.006	(.118)	
outgroup tolerance	.045	(.122)	.221	(.170)	.440	(.557)	
<b>economic values (pro-market)</b>	<b>-.207</b>	<b>(.076)</b>	<b>-.474</b>	<b>(.091)</b>	<b>-.155</b>	<b>(.175)</b>	d
law abidingness	.104	(.081)	.028	(.099)	.141	(.196)	
<b>moral values (traditional)</b>	<b>-.177</b>	<b>(.058)</b>	<b>-.212</b>	<b>(.068)</b>	<b>-.303</b>	<b>(.141)</b>	c
science and technology values	-.288	(.493)	-.631	(.568)	-3.725	(1.145)	d
environmentalism	.069	(.143)	.165	(.171)	.744	(.377)	b
liberal democratic values	-.072	(.068)	-.009	(.083)	.340	(.221)	
constant	.081	(1.368)	3.233	(1.647)	-6.314	(4.031)	b
Pseudo R-squared	.14						
N	754						
Prob > Chi2	.0000						

Comparison Group = Conservative Party (0)

<sup>a</sup>  $p \leq .10$    <sup>b</sup>  $p \leq .05$    <sup>c</sup>  $p \leq .01$    <sup>d</sup>  $p < .001$

Source: World Values Survey (Canada), 2006

## Bibliography

- Blais, Andre, Elisabeth Gidengil, Richard Nadeau and Neil Nevitte. 2002. *Anatomy of a Liberal Victory: Making Sense of the Vote in the 2000 Canadian Election*. Peterborough, ON: Broadview Press.
- Box-Steffensmeier, Janet and Suzanna De Boef. 2001. "Macropartisanship and Macroideology in the Sophisticated Electorate". *Journal of Politics*, 63: 232-248.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In David E. Apter ed. *Ideology and Discontent*. New York, NY: Free Press.
- Feldman, Stanley. 1988. "Structure and Consistency in Public Opinion: The Role of Core Beliefs and Values." *American Journal of Political Science*, 32: 416-440.
- Gilens, Martin. 2001. "Political Ignorance and Collective Policy Preferences." *American Political Science Review*, 95: 379-396.
- Goren, Paul. 2000. "Political Expertise and Principled Political Thought." *Political Research Quarterly*, 53: 117-136.
- Goren, Paul. 2004. "Political Sophistication and Policy Reasoning: A Reconsideration" *American Journal of Political Science*, 48: 462-478.
- Hochschild, Jennifer L. 1981. *What's Fair? American Beliefs about Distributive Justice*. Cambridge, MA: Harvard University Press.
- Iyengar, Shanto, Mark D. Peters and Donald R. Kinder. 1982. "Experimental Demonstrations of the 'Not-So-Minimal' Consequences of Television News Programs". *The American Political Science Review*, 76: 848-858.
- Laponce, J.A. 1981. *Left and Right: The Topography of Political Perceptions*. Toronto, ON: University of Toronto Press.
- Laponce, J.A. 1972. "In Search of the Stable Elements of the Left-Right Landscape." *Comparative Politics*. 4: 455-475.
- Laycock, David. 2002. *The New Right and Democracy in Canada: Understanding Reform and the Canadian Alliance*. Don Mills, ON: Oxford University Press.
- Luskin, Robert C. 1990. "Explaining Political Sophistication". *Political Behavior*, 12: 331-361.
- McClosky, Herbert and John Zaller. 1984. *The American Ethos: Public Attitudes Toward Capitalism and Democracy*. Cambridge, MA: Harvard University Press.
- Nevitte, Neil and Roger Gibbins. 1990. *New Elites in Old States: Ideologies in the Anglo-American Democracies*. Toronto, ON: Oxford University Press.

- Nevitte, Neil. 1996. *The Decline of Deference: Canadian Value Change in Cross-National Perspective*. Peterborough, ON: Broadview Press.
- Nevitte, Neil and Christopher Cochrane. 2007. "Value Change and the Dynamics of the Canadian Partisan Landscape." In Tanguay and Gagnon eds. *Canadian Parties in Transition*. 3<sup>rd</sup> ed. Peterborough, ON: Broadview Press.
- Nie, Norman, Jane Junn and Kenneth Stehlik-Barry. 1996. *Education and Democratic Citizenship in America*. Chicago, IL: University of Chicago Press.
- Robinson, W.S. 1950. "Ecological Correlations and the Behavior of Individuals." *American Sociological Review*. 15: 351-357.
- Rokeach, M. 1973. *The Nature of Human Values*. New York: Free Press.
- Sniderman, Paul M., Richard A. Brody and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. New York, NY: Cambridge University Press.
- Statistics Canada. 2001. *Census of Population*. <http://www40.statcan.ca/101/cst01/educ43a.htm> (February 2007).
- Verba, Sidney and Gary Orren. 1985. *Equality in America: The View from the Top*. Cambridge, MA: Harvard University Press.
- Williams, Robin. 1968. "The Concept of Values." In David C. Sills ed. *International Encyclopedia of the Social Sciences*. Vol. 16. New York: Crowell, Collier and Macmillan, Inc: 283-288.
- Williams, Robin. 1963. *American Society: A Sociological Interpretation*. New York, NY: Alfred A. Knopf, Inc.
- Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. New York, NY: Cambridge University Press.