# **Working Paper Series**

# Youth Electoral Engagement in Canada

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# **Executive Summary**

Youth electoral engagement in Canada is declining. Despite this, we do not know much about the causes of this decline.

Using census data, this report provides a profile of youth in Canada. This demonstrates the most important differences between those under 30 years of age and those over 30. We then consider the relationship between various factors and the decision to vote among Canadian youth. Following this, we perform a cohort analysis to show how youth electoral participation has evolved over time. In these analyses, we distinguish two youth groups, those aged 18–24 and those 25–30, whom we compare to all other age groups. We finally examine the factors that seem to affect Canadian youths' decision to vote or not to vote. We briefly summarize existing research in the area, particularly in Canada but also abroad, with a view to establishing the state of knowledge, the major gaps that exist and the most promising avenues for further research.

We find that Canadian youth are different from their older counterparts. They are less likely to be married, somewhat better educated and slightly less religious. They earn less income. But they are more likely to have been born in Canada.

Of these socio-demographic factors, education and origin (i.e. being born in Canada) are the most powerful predictors of voting. But the most crucial determinants are interest in politics and information about politics. Our cohort analysis suggests that most of the decline in voter turnout is attributable to decline among younger generations. After reviewing the current knowledge on the causes of declining youth turnout, we suggest future studies that could identify solutions to address this decline.

#### 1. Introduction

The main objective of this report is to establish what we do and do not know about the amount and causes of youth electoral engagement (and non-engagement) in Canada. To do so, we first use census data to provide a socio-demographic profile of the youth population in Canada and to show how similar or different that profile is from that of the older population. We then use data from the Canadian Election Study (CES) for two distinct and complementary purposes. We first compare the profiles of youth voters and non-voters, in terms of both socio-demographic characteristics and a range of attitudes and behaviours such as political knowledge, political interest, community engagement and media use. We then perform a cohort analysis of voter turnout since 1965 (the beginning of the CES) to show how youth electoral participation has evolved over time. In these analyses, we distinguish two youth groups, those aged 18–24 and those 25–30, whom we compare to all other age groups.

We finally examine the factors that seem to affect Canadian youths' decision to vote or not to vote. We briefly summarize existing research in the area, particularly in Canada but also abroad, with a view to establishing the state of knowledge, the major gaps that exist, and the most promising avenues for further research.

# 2. A descriptive profile of Canadian youth

Our first task is to provide a summary picture of youth's socio-demographic characteristics. Table 1 presents the main findings. Following Statistics Canada's age group classifications in the 2006 Census, we distinguish two youth groups, aged 18–24 and 25–29, which we compare to those aged 30–64. We focus on those socio-economic characteristics that existing research suggests could be related to the propensity to vote or not to vote: gender, education, income, employment, marital status, place of residence (urban/rural), mobility, religion, and origin, i.e. whether individuals were born in Canada or not.<sup>2</sup>

Beginning with gender, we find that men and women are more or less equally balanced in each age group. However, men seem slightly more prevalent in those aged 18-24. Women appear slightly more prevalent in those aged 25-29 and 30-64.

Looking at household income, we find little difference in the percentage of those with income less than \$40,000 per annum among those aged 18-24 and 25-29 (27%). Among those aged 30-64, there is a slightly lower percentage (24%).<sup>3</sup>

Considering education, we find that Canadian youth are better educated than their older counterparts. While just over a quarter (28%) of Canadians aged 18–24 report having some post-secondary education, this share climbs to 54.2% among those aged 25–29. By contrast, under half (47%) of those aged 30-64 report having some post-secondary education. We assume that the eventual level of education among those aged 18-24 will look very similar to those aged 25-29. Indeed, we find evidence for this when we examine the share of Canadians who are students. We find that more than half of those

aged 18-24 (58%) are currently students. This declines to 23% among those aged 25-29. Just eight percent of those aged 30-64 report being students.

Table 1: A demographic profile of young Canadians

	18-24	25-29	30-65
% men	50.5	49.2	49.1
% household income more than \$40,000	73.4	72.6	75.5
% some post-secondary education	28.0	54.2	47.2
% students	58.3	23.2	8.1
% married	4.3	26.7	61.2
% urban	69.5	72.3	67.2
% moved in last year	27.6	28.9	11.0
% non-religious	20.9	22.6	15.4
% born outside of Canada	16.4	20.0	25.5

Data are drawn from the 2006 Canadian Census, with the exception of religious attendance.

Rates of marriage also differ greatly between various age groups. For those aged 18-24, just one in twenty-five reports being married. This increases to 27% of those aged 25-39. The percentage more than doubles to 61% among those aged 30-65.

Young Canadians appear only slightly more likely to live in an urban area.<sup>5</sup> More importantly, young Canadians are nearly three times as likely to have moved in the last year compared to their older counterparts. More than a quarter (27.6%) of those aged 18-24 report moving in the last year. This share climbs to 28.9% among those aged 25-29. By contrast, among those aged 30-64, only 11.0% report having moved in the last year. This is a stark difference.

We find that young Canadians are more likely to report no religious affiliation than older Canadians.<sup>6</sup> Among those aged 18-24 and 25-29, one-in-five reports no religion. The ratio declines to one-in-seven among those aged 30-64. Clearly, religion appears less important to young Canadians than to older Canadians. This too could explain some of the decline in voter turnout, as religion or religious observance has been known to be a predictor of the decision to participate in elections.

Finally, when we consider the place of birth of Canadians, we find a notable difference between our age groups. Young Canadians are *more* likely to have been born in Canada than older Canadians. Among those aged 18-24, some 84% report being born in Canada. This declines slightly (80%) among those aged 25-29, and declines even farther among those aged 30-65 (74%).

Having profiled young and older Canadians, we now consider the differences between voters and non-voters among Canadians aged 18-30.

## 3. Contrasting young voters and non-voters

We now focus our attention exclusively on youth and on the differences among youth voters and abstainers. For this part of the analysis we pool together the Canadian Election Studies conducted in 1997, 2000, 2004, 2006, and 2008. We need to pool these five studies in order to get a sufficient number of both voters and non-voters within each of our two youth groups. The CES data, like all election surveys, overestimate turnout mostly because those who are not interested in politics (and who are less inclined to vote) are less prone to respond to election surveys (Brehm 1993). We have thus weighted the data so that self-reported turnout in the survey corresponds to the official turnout as reported by Elections Canada. In this part of the analysis, we use the same age categories we used in an earlier version of this report, namely 18–24 and 25–30.

In contrasting young voters and non-voters, we first consider socio-demographic factors. We then consider political engagement factors. In each case, we consider simple bivariate relationships, i.e. relationships between voting and one other factor. Following this, we consider multiple factors at the same time to determine the *independent* effect of each.

As we shall see, not every factor matters much for the decision to vote (e.g., gender), and some others appear to matter differently for different age groups (e.g., marriage). Finally, political factors seem to exert more influence than socio-demographic factors.

# Socio-demographic Factors

Our analysis begins with socio-demographic characteristics. Table 2 shows the estimated proportion of voters among different groups. Several important patterns emerge. The most apparent pattern is that regardless of the variable, turnout in every category increases as people get older. For example, consider those whose household income is less than \$40,000 per annum. On average, 34% of those aged 18-24 vote. However, among those aged 25-30 in the same income group, 41% report voting. This increase with age can be seen across every one of our categories (we also demonstrate this general trend in the next section).

In comparing voters and non-voters, no clear differences occur according to gender. The difference between men and women never exceeds 1.5 percentage points. By contrast, we see that income appears to exert an influence over the decision to vote or not to vote. Indeed, the gap in voter participation between those with a household income below \$40,000 and those above is nearly 6 percentage points among those aged 18-24 and 11 percentage points among those aged 25-30. The effect of some postsecondary education is similar, though the size of the effect is larger. The participation gap among those aged 18-24 is 9 percentage points. It grows to 17 percentage points among those aged 25-30.

What of the effects of being a student? Our results suggest that being a student has the effect of increasing participation among those aged 18-24 (the gap is 9 percentage points) while there is really no difference among those aged 25-30.

**Table 2: Turnout Rate by Socio-demographic Groups** 

	Male	Female		
18-24	37.9	36.6		
25-30	46.3	47.6		
	<\$40,000	\$40,000+		
18-24	33.7	39.3		
25-30	41.0	52.3		
	No Postsecondary	Some Postsecondary		
18-24	32.0	41.1		
25-30	35.2	52.5		
	Not a student	Student		
18-24	33.8	43.4		
25-30	47.0	46.3		
	Not married	Married		
18-24	38.2	33.5		
25-30	44.4	49.6		
	Urban	Rural		
18-24	36.1	42.8		
25-30	49.9	37.9		
	Not religious	Religious		
18-24	34.4	38.4		
25-30	46.4	48.0		
	Not born in Canada	Born in Canada		
18-24	26.9	38.8		
25-30	43.5	47.9		

Data are drawn from the 1997, 2000, 2004, 2006, and 2008 Canadian Election Studies.

We find that where one lives has an effect on the likelihood of voting. Among those aged 18-24, those who live in rural settings outvote those in urban environments by some 7 percentage points. However, among those aged 25-30, the pattern appears to be the reverse as the gap grows to 12 percentage points in the direction of those living in urban centres. This is a puzzling pattern and we cannot determine its cause at this time. The most plausible hypothesis, however, is that this is due to differences in the rural population between two age groups attributable to mobility. There is a general migration among individuals from rural to urban settings. However, this migration is most likely to occur among those who are better educated and better off and seeking more lucrative employment or higher education. Accordingly, those who select out of a rural environment by the time they reach our second age group are more likely to vote than those who opt to remain in a rural setting.

Unfortunately, the CES does not include a measure of mobility, though we suspect that mobility is an important factor in lower turnout rates among youth. It should certainly be explored further in the future.

Marriage appears to have similarly contradictory effects. In our younger group, single individuals are more likely to vote than married citizens. Indeed, the gap is some 5 percentage points. However, this gap reverses in favour of the married among those aged 25-30. Again, we do not have the data at hand to decisively explain this pattern; however we do note that marriage does not play a role in our later multivariate analysis.

Religiosity has been known to influence the decision to vote for some time (see, for instance, Abramson et al. 2006, 90, Table 4.4). We find support for this proposition in our data, particularly among the youngest voters. For those citizens aged 18-24, religious adherents participate more than non-adherents to the tune of 4 percentage points. This gap declines to below 2 percentage points among those aged 25-30.

Finally, we find that whether citizens are born in Canada has important effects on the decision to vote or not to vote, but that this effect declines with age. For our younger citizens, those who are Canadian-born are much more likely to vote. Indeed, the gap is 12 percentage points, the largest observed among all of our socio-demographic factors. However, this gap declines to just 4 percentage point among voters aged 25–30. This suggests that those who are born outside of Canada take slightly longer than their Canadian-born counterparts to come to socialize into Canadian politics. However, these results also suggest that this socialization and resulting participation do occur given time. It remains to be seen whether this influence is robust after controlling for other political factors. To anticipate our results, we do find that even after controlling for political factors, individuals born outside of Canada have a markedly lower probability of voting. This suggests that something in the experience of being an immigrant makes voting either more difficult or less attractive, even among those who are informed about and engaged in Canadian politics.

#### Political engagement Factors

In addition to socio-demographic factors, the decision of individuals to vote or not to vote is likely affected by their engagement in politics. We begin by considering individuals' interest in politics. Unsurprisingly, those who profess a high interest in politics are more likely to vote. Indeed, among those aged 18-24 the gap is some 22 percentage points between those who express a medium or high general interest in politics and those who express a low interest. This gap grows further to 28 percentage points among those aged 25–30! (Table 3)

A similar pattern emerges according to political information, which is either measured as a share of correct answers to a series of factual questions or is evaluated by an interviewer (see Blais et al. 2009). Among those aged 18-24, those who are regarded as having medium or high political information vote at a rate 23 percentage points higher than those with low information. This gap grows to 27 percentage points among those aged 25-30. As with interest in politics, information about politics plays a very important role in the decision to participate in federal elections.

Campaign events may also play a role in motivating voters to go to the polls. Principal among these events are the leaders' debates. Watching debates can help clarify the differences between parties and give voters of all stripes more concrete reasons to go the polls and cast a ballot. The CES data suggest that among those aged 18-24, the participation gap between those who watch a debate and those who do not is some 24 percentage points. This gap is similar (24 points) among those aged 25-30.

**Table 3: Turnout Rate by Political Characteristics** 

	Low interest in politics	Med/high interest in politics
18-24	24.2	46.6
25-30	32.5	60.5
	Low political information	Med/high political information
18-24	24.8	47.5
25-30	31.4	58.5
	Did not watch debate	Watched debate
18-24	33.9	58.3
25-30	43.2	67.4
	No other political activity	Other political activities
18-24	29.5	45.8
25-30	40.9	51.4
	No use of internet for news	Use of internet for news
18-24	29.2	45.6
25-30	37.3	62.8

Data are drawn from the 1997, 2000, 2004, 2006, and 2008 Canadian Election Studies.

Until now, we have considered factors of engagement with formal electoral politics. But what is the relationship between engagement in other social or political activities and the decision to vote in elections? For example, what is the relationship between engaging in protest or other unconventional political action and the decision to vote. It is sometimes suggested that youth are not voting because they have found more meaningful political activities in which to engage. If this is the case, then we should find that turnout is at least slightly lower among those citizens who engage in other political activities, such as signing a petition or attending a protest. In three elections (2000, 2004, and 2008), the CES asked respondents to indicate how many of various political activities they have engaged in, namely signing a petition, participating in a boycott, attending a lawful demonstration, joining an illegal protest, or occupying a building or factory. As it turns out, those who participate in other political activities appear more likely to vote in federal elections than those who do not participate in other activities. Among those aged 18-24, the turnout gap between those who engaged in no other activity and those who did is 16 percentage points. This gap is attenuated among those aged 25-30, but it still exists at 11 percentage points. Other political activities thus appear to pull citizens into voting at a

much younger rate. Among those who do not protest, this difference is only made up later on by other positive factors, such as age, increasing income, increased education, etc.

Finally, we consider whether accessing information about politics over the internet is related to voting among young people. In four elections (2000, 2004, 2006, and 2008), the CES has asked Canadians if they have used the internet to access information about the respective federal election. As can be seen, those who use the internet for this information acquisition are more likely to vote. Among our younger group, participation for those who access information on the internet is 16 percentage points higher. This difference increases to 26 percentage points among those aged 25-30. While causation could run in either direction, we do think it likely that access to the internet makes the information acquisition required to vote in an election easier and is thus logically associated with higher participation.<sup>12</sup>

These results suggest that there are several factors which distinguish voters and non-voters among Canadian youth. Some of these factors are related to an individual's station in life. But others are related to an individual's interest and engagement in politics. To understand which factors are most important, we perform a logistic regression that considers first all socio-demographic factors and then adds in political factors. The results of this regression tell us which factors are the most important determinants of youth voting and which do not play an independent role. <sup>13</sup>

Table A1 (in the Appendix) indicates the independent effects of these different factors and Table 4 summarizes the impact of the most influential factors. The first set of results focuses on socio-demographic characteristics. The results show that the two most important factors are education and place of birth. The better educated have odds of voting 52% higher than those who do not have post-secondary education while those born in Canada have odds of voting over nonvoting 61% greater than those born outside the country. Then there are four other factors, age, income, gender, and residence, with some modest effect. Indeed, we find that those with an income greater than \$40,000 are more likely to vote. Similarly, those who are aged 25-30 are more likely to vote than those aged 18-24. We should note, however, that *much larger* age effects likely exist between those aged over 30 and those considered here. We find that women appear less likely to vote. Likewise, those in rural settings appear less likely to vote, on average. However, these last two effects do not persist when we control for other political factors.

When we consider socio-demographic and political factors together, we also see that the impact of education is substantially reduced, such that the result becomes statistically insignificant. This indicates that the higher turnout of those with post-secondary education is due mostly to their higher level of attention to political affairs. The findings reported in Table 4 indicate that the decision to vote or not to vote is strongly shaped by one's degree of interest and information. Those who indicate a medium or high general interest in politics (about 47% of those aged 18-24 and 61% of those aged 25-30) are most likely to vote. Indeed, their odds of voting are 88% higher than those youth who do not express a high interest in politics. Information about politics has a similarly large effect. Among those individuals who are evaluated as having a medium or high amount

of information (48% of those aged 18-24 and 59% of those aged 25-30), the odds of voting are 89% higher than those who have a low amount of information. The two largest effects, then, are related to intellectual engagement in politics. In fact if we combine information and interest into an "engagement" factor, we find that the odds of voting are more than three times as high in the high engagement group (result not shown).

Our findings also suggest that the lower turnout rate observed among women is similarly related to their lower level of interest. Indeed when interest and information are taken into account, there is no gender or rural/urban gap. The situation is different, however, with respect to income and origin. In these cases, the initial relationship is maintained after the introduction of interest and information. It may well be that those who are relatively well-off and born in Canada are more integrated into their community. This is consistent with the view that the act of voting expresses in part one's social and psychological identification with society.

Table 4: Most influential factors in the decision to vote among youth (aged 18-30)

Model 1 -Socio-Demographic Factors	Odds Ratio Effect
(Without Political Factors)	
Canadian-born	1.61
Some post-secondary education	1.52
Age	1.37
Income greater than \$40,000	1.27
Woman	0.83
Rural	0.74
<b>Model 2 – With Political Factors</b>	
Canadian-born	1.91
Information about politics	1.89
Interest in politics	1.88
Income greater than \$40,000	1.26

Data are drawn from the 1997, 2000, 2004, 2006 and 2008 Canadian Election Studies. Each cell presents the change in probability of an individual voting given a characteristic. The estimates are drawn from the model reported in Table A1.

Taking all of this information together, we can draw a profile of the typical average youth voter and non-voter. The average youth voter is both interested in and informed about politics. The average non-voter is not. Demographically, the average voter likely lives in a wealthier household and is more likely to be born in Canada. All other factors do not help us distinguish voters from non-voters.

### 4. A cohort analysis of voter turnout in Canadian federal elections

In this section we revisit and update a cohort analysis of voter turnout in Canada. We refine a methodology initially employed by Blais et al. (2004) and inspired by Johnston (1989, 1992) to sort out life-cycle, generation (cohort), and period effects on turnout, and we update the analysis. <sup>15</sup> The basic idea is simple. We pool together all the available CES

data sets, covering all federal elections<sup>16</sup> from 1965 to 2008 inclusively (except for 1972, when no election study was conducted). We have a total of 13 election studies.<sup>17</sup>

We then proceed to a multivariate estimation that includes life-cycle, cohort, and period effects. Life cycle effects simply correspond to the impact of age. The idea is that as people grow older, as they get more involved in their social milieu and develop stronger preferences over time, their propensity to vote increases. The relationship, however, is curvilinear. At the end of the life cycle, turnout decreases slightly, most especially for health reasons. Cohorts are defined in terms of the first election in which people had the right to vote. For instance, those born between 1942 and 1944 had the right to vote for the first time in 1965 (voting age was then 21). We estimate a model with 14 cohorts, each defined on the basis of the first election in which they were eligible to vote. We have also created variables for each election, which measure the impact of whatever specific contexts of an election that made the election more or less "exciting".

On the basis of the results of the multivariate model (Table A2 in the Appendix) we are able to estimate the turnout rate of the various cohorts at each federal general election.<sup>18</sup> These estimations are presented in Table 5. A number of interesting patterns emerge. Reading horizontally, we can see the life-cycle effect: the turnout rate of a given cohort tends to rise over time, as people grow older. However, the rate at which it increases declines over time. This is the general trend but there are specific "period" effects, that is, turnout is particularly low or high in some elections. We can observe, for instance, that turnout decreases among all cohorts from 1979 to 1980 and increases substantially from 1980 to 1984, among all cohorts.

Generation effects can best be appreciated by comparing the initial turnout rates of the various cohorts. In the 1960s, about 70% of the members of a new cohort would vote in the first election in which they were eligible to participate; by 2004 it was only slightly over 30%. At least two-thirds of new voters would cast a ballot in the 1960s; by 2004 it was about one third.

As shown in previous analyses (Blais et al. 2004) this is the major reason why turnout has been going down. Turnout decline among new cohorts started in the 1970s, and has proved to be quite steady. The turnout rate of new cohorts had already declined to about 50% in the 1980s and into the 40% range in the 1990s. There seems to be a persistent downward trend in the turnout rate of new cohorts. The consequence of this is that despite the fact that young voters are more likely to vote as they get older, they are beginning at such a low level of participation that overall turnout can only be expected to decline.

**Table 5: Estimated Turnout by Cohort and Election** 

Election	1965	1968	1974	1979	1980	1984	1988	1993	1997	2000	2004	2006	2008
Cohort													
1965	69	71	71	79	75	82	84	85	81	78	79	80	76
1968		70	71	80	75	83	85	85	82	79	80	81	77
1972			60	71	65	75	78	79	75	72	73	75	70
1974			56	68	62	73	76	77	74	70	72	74	69
1979				60	54	66	70	72	68	64	66	68	63
1980					45	57	62	64	61	57	59	62	56
1984						58	63	65	62	58	60	63	58
1988							54	57	53	50	53	56	50
1993								53	49	46	49	52	47
1997									43	40	43	47	42
2000										34	37	41	36
2004											34	38	34

Data are drawn from Canadian Election Studies conducted for every election between 1965 and 2008, except 1972. Each cell presents the probability of an individual voting given their cohort and the election. The estimates are drawn from the model reported in Table A2.

## 5. Why is youth turnout so low?

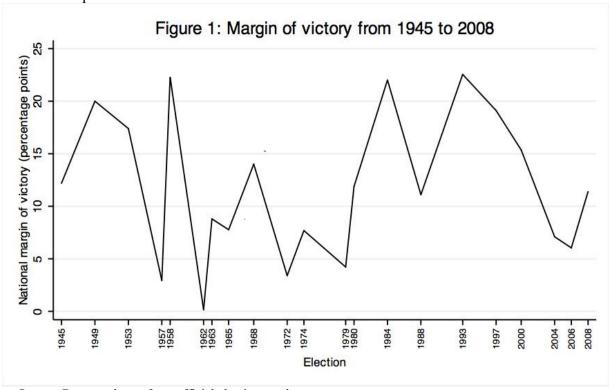
The final and most important question to address concerns the causes of this declining turnout among youth. We should say at the outset that we do not know a lot about these causes. This should not be surprising. The turnout decline is a long-term phenomenon; there are good reasons to think that it is a complex pattern with a combination of causes. Some of the data that would be needed to uncover the root causes are simply not available. Most crucially, the CES does not contain a stable set of attitude questions that would allow us to determine whether the most recent cohorts feel differently about politics and elections from previous cohorts, at the same age.

At the same time, we know quite a few things about the phenomenon and what we know allows us at the very least to rule out certain interpretations. The first point to make is that this trend is not unique to Canada. There is clear evidence that youth are less prone to vote now than in the past and that this is the main source of overall turnout decline in other countries as well: the United States (Dalton 2007; Lyons and Alexander 2000; Miller and Shanks 1996; Wattenberg 2007), Britain (Clarke et al. 2004) and Finland (Wass 2007). This suggests that the causes of youth electoral disengagement are not specific to the Canadian context. We should be looking for reasons that could apply to many other countries.

As Franklin (2004) noted, turnout may increase or decrease over time, either because citizens change or because the electoral context changes or because of both. A first line of inquiry is thus to inquire whether the declining youth voter turnout could be related to changes in the electoral context.

The most striking change in the Canadian electoral context has been the shift from a system with two major parties plus a minor one (the New Democratic Party) to a multiparty system, with now four parties represented in Parliament and five parties receiving at least 5% of the vote. It is indeed paradoxical that turnout has declined in Canada precisely at the time when the range of choice offered to voters has been increasing. But it would be erroneous to see any causal relationship between these two phenomena. Britain has witnessed the same decline in turnout while maintaining its traditional party system.

Another aspect of the electoral context that has been shown to affect turnout is competitiveness. The more competitive the election is perceived to be, the greater the incentive to vote and the higher the turnout (Franklin 2004). This raises the question of whether elections have become less competitive over time in Canada (and elsewhere). The answer is negative. In fact, if anything, the winner's margin of victory has slightly declined over time in most democracies (Franklin 2004, 187). In Canada, as can be seen in Figure 1, there is no clear trend in margin of victory, defined as the vote gap between the first-placed party and the second. In fact, the mean vote margin in the last four elections (9.8 points) is slightly lower than the average for the 17 elections held from 1945 to 1997 (12.2 points). To the extent that there is a trend, elections appear slightly more competitive now.



Source: Data are drawn from official election results.

Still another possibility is that elections have become less meaningful over time. Two variants of this thesis have been advanced. The first concerns the impact of globalization. The argument is that as the world economy has become more global, there is not much that national governments can do, and they become more or less irrelevant. That

argument is difficult to evaluate rigorously and the empirical evidence of the impact of globalization is far from conclusive (Boix 1998). Recently, Vowles (2008) used data covering 40 countries and 72 elections to see whether the propensity to think that those in power cannot make a difference is higher in countries that are more integrated into the global economy, and he found no such relationship. There remains the possibility that such a relationship emerges only among youth. This would require further research.

There is also the possibility that elections do not matter much anymore because party differences have been gradually waning over time. There has been much talk, for instance, of a new rapprochement between the left and the right (see Noël and Thérien 2008, chapter 7). Yet, "systematic studies of party programs in Western democracies between the Second World War and the end of the 20th century show the remarkable stability of the left–right division over time and across space" (Noël and Thérien 2008, 196). It is particularly difficult to believe that partisan differences have declined in Canada – given that the Canadian party system was traditionally described in the 1960s and 1970s as being based on pragmatic brokerage politics (Carty et al. 2000) and that the new parties that have emerged since, the Bloc québécois and the Reform Party in the 1990s and the Green Party more recently, could hardly be construed as "centrist".

Still another possibility is that changes in the way election campaigns are run may be partly responsible for the turnout decline. Some studies have shown that traditional door-to-door canvassing has a powerful impact on turnout (Carty and Eagles 2006; Green et al. 2003; Pattie et al. 1994). There is some evidence that direct candidate contact with voters has been decreasing over time, as parties have devoted more attention to the media (Denver et al. 2003). This shift may have contributed to lower turnout, although it is not clear why this should have affected the youth more than older people.

In the same vein, lower turnout may have been facilitated by the increasing negativism of election campaigning. But here again the connection is dubious. On the one hand, we are not aware of any study that has rigorously documented this more negative trend. On the other hand, and most importantly, the link between negative campaigns and low turnout is far from obvious (for conflicting findings and conclusions, see Ansolabehere et al. 1999; Geer 2006; Lau and Pomper 2001). Finally, even if there is a connection, we would have to explain why negative ads seem to depress turnout only among the youth.

There is thus no clear evidence that the decline in youth turnout can be imputed to changes in the electoral context. The most plausible hypothesis is therefore that youth turnout is declining because of changes that have occurred among young citizens. The problem, of course, is to identify which specific changes have produced the turnout decline. Here, as well, there are two possibilities: socio-demographic changes and attitudinal changes.

The first possibility concerns changes in the life-cycle. We have known for a long time that turnout is higher as one grows older (Wolfinger and Rosenstone 1980). The standard interpretation is that as people get married, have kids, buy a home, and get settled into their community the propensity to vote increases. People become more integrated into

their milieu, are more likely to be involved in groups, and they more or less naturally go to the polls when there is an election. This was the case in the 1960s and 1970s and is still the case today (see Goerres 2007). What has changed is that the gap between the young and the old has widened. One reason for this could be that the process of "maturation" takes more time than before. People get married, have kids and buy a house later in life, and so it takes more time for them to be engaged in their milieu. This suggests that we should not be too worried by the recent turnout decline among youth. They will eventually catch up. <sup>19</sup>

There has been very little systematic examination of the "late maturation" hypothesis. Smets (2010) has ascertained the validity of this interpretation in the case of Britain, where turnout has also declined substantially. Her findings suggest that part of the drop in turnout among those below age 30 can be imputed to the fact that they are less likely than before to be married at an early age, to own their home, and to have lived at the same place for a long time. Smets also finds, importantly, that attendance at religious services, political interest, and the strength of partisan identification predict electoral participation. As far as we can tell, no similar study has been performed with Canadian data. This is a promising avenue for further research, particularly in studying the effects of mobility.

A second possibility is that younger cohorts have different perceptions, attitudes and values. Three specific hypotheses have been advanced in the literature. The first is that recent cohorts are less prone to develop feelings of attachment to any of the parties. Because they tend not to identify with any party, they often do not have clear preferences among them, and the incentives to go to vote are therefore weaker. There is some evidence that partisan attachments have declined over time and particularly among younger citizens (Dalton and Wattenberg 2000) and that this has contributed to the turnout decline (Miller and Shanks 1996). We are not aware of any systematic study along those lines in Canada. This is clearly a question that requires further investigation.

Another hypothesis is that younger generations are less likely than previous generations to construe voting as a civic duty. There is some circumstantial evidence supporting that hypothesis. Blais et al. (2004) and Wass (2007) have shown that much of the age gap in turnout can be imputed to a weaker sense of civic duty among youth. Unfortunately, however, we do not have longitudinal data that would allow us to determine whether sense of duty is indeed weaker among today's youth than among those of yesterday.

A further hypothesis is that the changing nature of political information, in both how it is communicated and how it is acquired, is resulting in a generation of citizens who are politically socialized in a manner fundamentally different than previous generations (Milner 2010). When combined with lower "civic literacy," this may lead to lower turnout in the future.

Finally, Dalton (2007) has argued that the younger generation is gradually abandoning electoral politics because it is more interested in more direct forms of political participation, such as demonstrations. There is a kernel of truth in that interpretation, as

indeed recent generations are more prone to march in the streets than their predecessors (Dalton 2007). But it is not clear that there is a causal relation between the two trends. As we noted above, those who are engaged in non-electoral political activities are also more inclined to vote (see also Teorell et al. 2007; Verba et al. 1995).

#### 6. Conclusion

In many ways, younger Canadians are not very different from their older counterparts. In some respects, though, they are. Perhaps the most important difference is that most of them are not married. They also tend to move more often, to be somewhat better educated and slightly less religious. Their household income is slightly lower. Contrary to what could be expected, they are somewhat more likely to have been born in Canada.

We have seen that, among demographic characteristics, education and origin (i.e. being born in Canada) are the most powerful predictors of voting. Political factors – notably interest in and information about politics – have an even greater effect. We have also confirmed that the recent turnout decline observed in Canada, as in many other countries, is due mainly to the drop in electoral participation among recent cohorts. The turnout rate of new cohorts (who are eligible to vote for the first time in an election) is now only slightly over 30%, while it used to be over 60%.

This raises the question of why so few young electors decide to vote. We have seen that existing research does not allow us to provide clear answers to this question. The review of the literature suggests, however, that this may be more the outcome of changes in youths' socio-demographic situation and/or values and attitudes than in changes in the electoral landscape.

Where do we go from here? The first observation to be made is that almost all the evidence that is marshalled on this question is based on survey data. Survey data are absolutely essential, especially if we want to understand the values and beliefs that lead many young Canadians to abstain in elections. Yet surveys have their limitations, most especially with respect to turnout. The basic problem is that most of those who do not vote do not bother to respond to surveys. The consequence is a substantial underrepresentation of non-voters in electoral surveys.

Because of these limitations, it is imperative to use other data sources. This is why we strongly encourage Elections Canada to continue its analyses of turnout rates across age groups, based on an examination of actual results. This methodology provides more reliable estimates of turnout than those that can be arrived at with surveys. On this point, it is worth noting that academic studies of turnout in countries like the United States and Britain have the opportunity to validate electoral participation; that is, it is possible to verify if those who say they voted really did so. It is not clear to us why it is a fundamental right to protect the confidentiality of the act of voting, and/or why this right is more important in Canada than in the United States and Britain. Much more could be learned through surveys if it were possible to validate whether respondents actually voted or not.

In the same vein, there is the opportunity to design experiments to test ideas about how to increase turnout among youth. For instance, the personal information that is provided by Elections Canada about where and when to vote comes by mail. It may well be that younger people pay little attention to regular mail and that they would be more responsive if they were contacted through the Internet or through other new communication technologies. The logical way to test such an idea is to run an experiment in a local electoral district, where a random half is contacted by mail and the other half by Internet or another medium. There have been many such experiments conducted in the United States and they have produced some very interesting findings (see Gerber et al. 2008). No equivalent studies, however, have been undertaken in Canada.

We also need to have a much deeper understanding of variations in the propensity to vote among segments of the youth population. The CES data provide some useful information about the profile of young voters and non-voters, but that information is necessarily limited by the relatively small sample of young citizens and the lack of information about some of the socio-demographic characteristics. This would call for a large survey of young respondents that would allow us to better specify which subgroups of the youth population are least and most inclined to vote. At this stage, it is impossible to say anything about turnout among Aboriginal youth, ethno-cultural groups and youth with special needs.

There is also ample evidence that the attitudes and values of recent generations are different from those of their predecessors and that this change is in good part responsible for the recent turnout decline. We have a good sense of what these attitudes and values are, but it is difficult to demonstrate without doubt that this is the case because we have little longitudinal data that would allow us to see precisely if and when these attitudes have changed over time. Thus, the need exists to plan in the future longitudinal studies that will enable us to pin down which attitudes do and do not change and to determine how these attitude changes are correlated with the decision to vote or not to vote. One possibility in this regard would be for Elections Canada to link with Statistics Canada and Human Resources and Social Development Canada in their National Longitudinal Survey of Children and Youth.

Finally, there is the issue of new technologies. In Canada, people express their preferences on a ballot paper, which is, to say the least, an old way of doing things. Whether one should allow other forms of voting, most especially mail and/or Internet voting, is a thorny issue that raises fundamental questions about the risk of fraud. Clearly, more research is needed to more rigorously ascertain the potential advantages and disadvantages of these other forms of voting. We first need to take stock of what is being done elsewhere in the world, to learn the successes and failures of experiments that are being done in many countries. But this must be completed by experiments of our own, that are sensitive to the peculiarities of the Canadian context. Again, we strongly encourage Elections Canada to conduct rigorous experiments (with randomly allocated treatment and control groups), perhaps in specific electoral districts and perhaps initially

at the time of by-elections, to determine if Canadians in general, and younger citizens in particular, would be more inclined to vote if they could do so from home.

There is much to do if we want to properly understand what induces Canadian youth to engage or not to engage in elections. We need to adopt a variety of approaches, both experimental and non-experimental. We need to complement surveys with analyses based on administrative records. We need to do longitudinal research to understand how and why different cohorts of people come to view the act of voting differently. And we need to do all of this sooner than later.

# Appendix

Table A1: Individual-level determinants of voting by young Canadians (18-30)

	OR	S.E.	P>z	OR	S.E.	P>z
Aged 25-30	1.37	0.16	0.01	1.22	0.17	0.15
Post-secondary	1.52	0.18	0.00	1.12	0.15	0.41
Income	1.27	0.08	0.00	1.26	0.10	0.00
Woman	0.83	0.09	0.08	1.12	0.14	0.37
Rural	0.74	0.10	0.03	0.86	0.13	0.31
Student	1.24	0.19	0.14	1.20	0.21	0.30
Married	1.06	0.12	0.63	1.14	0.15	0.34
Religion	1.06	0.13	0.61	0.94	0.13	0.66
Canadian-born	1.61	0.29	0.01	1.91	0.39	0.00
<b>Interest in politics</b>				1.88	0.17	0.00
Information				1.89	0.17	0.00
Watched Debate				1.29	0.22	0.14
1997	0.88	0.20	0.58	1.10	0.27	0.71
2000	0.77	0.16	0.20	1.11	0.25	0.65
2004	0.60	0.12	0.01	0.82	0.20	0.41
2006	0.64	0.13	0.03	0.75	0.17	0.21
N	1538			1330		
Likelihood Ratio	63.71			227.27		
Pseudo-R2	0.03			0.12		

Data are drawn from the 1997, 2000, 2004, 2006, and 2008 Canadian Election Studies. The dependent variable is voted (1) or did not vote (0) in the election. The model is a logistic regression. Variables 1997, 2000, 2004, and 2006 are dummy variables indicating the probability of voting in each of those elections compared to the 2008 election.

Table A2: Probability of Voting in a Federal Election by Age, Cohort, and Election

	Coef.	S.E.	Z	P>z
Age	0.04	0.01	8.61	0.00
•	-0.00	0.00	-8.79	0.00
Age-squared 1965 Cohort	-0.06	0.00	-0.71	0.00
1968 Cohort	-0.00	0.08	-0.71 -0.14	0.48
1908 Conort 1972 Cohort	-0.39	0.06	-0.14 -6.86	0.09
	-0.39 -0.42	0.08	-5.54	0.00
1974 Cohort	-0.42 -0.68	0.08		0.00
1979 Cohort 1980 Cohort	-0.06 -0.96		-10.11 -9.33	
		0.10		0.00
1984 Cohort	-0.87	0.09	-11.07	0.00
1988 Cohort	-1.13	0.09	-12.73	0.00
1993 Cohort	-1.20	0.09	-12.73	0.00
1997 Cohort	-1.35	0.11	-12.41	0.00
2000 Cohort	-1.51	0.13	-11.72	0.00
2004 Cohort	-1.51	0.13	-11.72	0.00
2006 Cohort	-0.46	0.29	-1.59	0.11
2008 Cohort	-2.02	0.32	-6.25	0.00
1968 Election	-0.01	0.06	-0.14	0.89
1974 Election	-0.12	0.07	-1.80	0.07
1979 Election	0.26	0.07	3.73	0.00
1980 Election	-0.03	0.07	-0.39	0.70
1984 Election	0.37	0.07	6.73	0.00
1988 Election	0.48	0.07	6.73	0.00
1993 Election	0.47	0.07	6.36	0.00
1997 Election	0.24	0.08	3.12	0.00
2000 Election	0.04	0.08	0.47	0.64
2004 Election	0.08	0.08	1.01	0.31
2006 Election	0.18	0.09	2.11	0.04
2008 Election	-0.05	0.09	-0.61	0.54
Constant	0.13	0.14	0.92	0.36
N	36522			
Likelihood Ratio	2707.79			
Pseudo-R2	0.06			

Data are drawn from the 1965, 1968, 1972, 1974, 1979, 1984, 1988, 1993, 1997, 2000, 2004, 2006, and 2008 Canadian Election Studies. The dependent variable is voted (1) or did not vote (0) in the election. The model is a logistic regression. The cohort variables indicate the election in which a respondent was first eligible to vote. Accordingly, those coefficients report the probability of voting in any election given membership in a certain cohort. The election variables indicate the probability of any individual voting in a respective election, given their cohort.

#### References

Abramson, Paul, John Aldrich, and David Rohde. 2006. *Change and Continuity in the 2004 and 2006 Elections*. Washington, D.C.: CQ Press.

Ansolabehere, Stephen, Shanto Iyengar, and Adam Simon. 1999. "Replicating Experiments Using Aggregate and Survey Data: The Case of Negative Advertising." *American Political Science Review* 93: 901–910.

Bartels, Larry. 1996. "Uninformed Voters: Information Effects in Presidential Elections." *American Journal of Political Science* 40: 194–230.

Blais, André, Elisabeth Gidengil, Neil Nevitte, and Richard Nadeau. 2004. "Where Does Turnout Decline Come From?" *European Journal of Political Research* 43: 221–236.

Blais, André, Elisabeth Gidengil, Patrick Fournier, and Neil Nevitte. 2009. "Information, Visibility, and Elections: Why Electoral Outcomes Differ When Voters Are Better Informed." *European Journal of Political Research* 48: 256–280.

Blais, André, Elisabeth Gidengil, Richard Nadeau, and Neil Nevitte. 2002. *Anatomy of Liberal Victory*. Peterborough: Broadview Press.

Boix, Carles. 1998. *Political Parties, Growth and Equality: Conservative and Social Democratic Economic Strategies in the World Economy*. Cambridge: Cambridge University Press.

Brehm, John. 1993. *The Phantom Respondents: Opinion Surveys and Political Representation*. Ann Arbor: University of Michigan Press.

Carty, R. Kenneth, William P. Cross, and Lisa Young. 2000. *Rebuilding Party Politics*. Vancouver: University of British Columbia Press.

Carty, R. Kenneth and Munroe Eagles. 2006. *Politics Is Local*. Toronto: Oxford University Press.

Clarke, Harold D., David Sanders, Marianne C. Stewart, and Paul Whiteley. 2004. *Political Choice in Britain*. Oxford: Oxford University Press.

Cross, William P. 2004. *Political Parties*. Vancouver: UBC Press.

Dalton, Russell J. 2007. *The Good Citizen: How a Younger Generation Is Reshaping American Politics*. Washington, D.C.: CQ Press.

Dalton, Russell, and Martin Wattenberg. 2000. *Parties Without Partisans: Political Change in Advanced Industrial Democracies*. Oxford: Oxford University Press.

Denver, David, Gordon Hands, Justin Fisher, and Iain MacAllister. 2003. "Constituency Campaigning in Britain, 1992–2001." *Party Politics* 9: 541–559.

Franklin, Mark N. 2004. *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies Since 1945*. New York: Cambridge University Press.

Geer, John. 2006. *In Defense of Negativity: Attack Ads in Presidential Politics*. Chicago: University of Chicago Press.

Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. 2008. "Social Pressure and Voter Turnout: Evidence from a Large-Scale Field Experiment." *American Political Science Review* 102: 33–48.

Goerres, Achim. 2007. "Why Are Older People More Likely to Vote? The Impact of Ageing on Electoral Turnout Across Europe." *British Journal of Politics and International Relations* 9: 90–121.

Green, Donald P., Alan S. Gerber, and David W. Nickerson. 2003. "Getting Out the Vote in Local Elections: Results from Six Door-to-Door Canvassing Experiments." *Journal of Politics* 65: 1083–1096.

Johnston, Richard. 1989. "Générations politiques et changement électoral au Canada." In Jean Crête and Pierre Favre (eds.), *Générations et politique*. Paris: Economica.

———. 1992. "Political Generations and Electoral Change in Canada." *British Journal of Political Science* 22: 93–116.

Lau, Richard, and Gerald Pomper. 2001. "Effects of Negative Campaigning on Turnout in U.S. Senate Elections, 1988–1998." *Journal of Politics* 63: 804–819.

Lyons, William, and Robert Alexander. 2000. "A Tale of Two Electorates: Generational Replacement and the Decline of Voting in Presidential Elections." *Journal of Politics* 62: 1014–1034.

Miller, Warren E., and J. Merrill Shanks. 1996. *The New American Voter*. Cambridge, Mass.: Harvard University Press.

Milner, Henry. 2010. *The Internet Generation: Engaged Citizens or Political Dropouts*. Medford: Tufts University Press.

Noël, Alain, and Jean-Philippe Thérien. 2008. *Left and Right in Global Politics*. Cambridge: Cambridge University Press.

Pattie, Charles, Paul Whiteley, Ron Johnston, and Patrick Seyd. 1994. "Measuring Local Campaign Effects: Labour Party Constituency Campaigning at the 1987 General Election." *Political Studies* 42: 469–479.

Plutzer, Eric. 2002. "Becoming a Habitual Voter: Inertia, Resources, and Growth in Young Adulthood." *American Political Science Review* 96: 41–56.

Smets, Kaat. 2010. "A Widening Generational Divide? Assessing the Age Gap in Voter Turnout Between Younger and Older Citizens." PhD thesis, European University Institute, March 2010.

Stoker, Laura, and M. Kent Jennings. 1995. "Life-Cycle Transitions and Political Participation: the Case of Marriage." *American Political Science Review* 89: 421-36.

Teorell, Jan, Mariano Torcal, and José Ramón Montero. 2007. "Political Participation: Mapping the Terrain." In Jan Van Deth, José Ramón Montero, and Anders Westholm (eds..), *Citizenship and Involvement in European Democracies: A Comparative Analysis*. London: Routledge.

Verba, Sidney, Kay Schlozman, and Henry Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge: Harvard University Press.

Vowles, Jack, 2008. "Does Globalization Affect Public Perceptions of 'Who Is in Power Can Make a Difference'? Evidence from 40 Countries, 1996–2006." *Electoral Studies* 27, 63–76.

Wass, Hanna. 2007. "The Effects of Age, Generation, and Period on Turnout in Finland, 1975–2003." *Electoral Studies* 26: 648–659.

Wattenberg, Martin P. 2007. Is Voting for Young People? New York: Pearson Longman.

Wolfinger, Raymond E., and Steven J. Rosenstone. 1980. *Who Votes?* New Haven: Yale University Press.

#### **Endnotes**

<sup>&</sup>lt;sup>1</sup> These two groups respectively represent 9.2% and 6.3% of Canadians, according to the 2006 census.

<sup>&</sup>lt;sup>2</sup> Throughout this study, we use the 2006 Census whenever possible. All data are drawn from the 20% sample. In a previous version of this study, we compared Canadians aged 18–24 and 25–30. We use the categories provided for the 2006 Census (i.e. 18–24 and 25–29). When we regroup the previous data according to these new categories, we find that the general differences between groups hold for each variable. Accordingly, the percentages presented are not sensitive to the different categorizations.

<sup>&</sup>lt;sup>3</sup> We make use of household income rather than individual income for two reasons. First, household income is the measure used in the Canadian Election Study. Accordingly, it affords us greater congruence between the first and second analyses to use this measure. Second, measuring individual income will tell us little about the economic class or status of individuals who are not working. Consider, for example, two high school students, one from a very poor family and the other from a wealthy family. We would expect that the benefits of a large household income would make the second individual very different from the first, not least in attaining the tools and knowledge necessary to vote. Nonetheless, if we measured their individual incomes, we would see no difference between them and would be at a loss to explain the relationship between income and electoral participation. For these two reasons, we employ a measure of household income.

<sup>&</sup>lt;sup>4</sup> Following the 2006 Census categories as defined by CANSIM, we consider those who have some postsecondary education as having a college or CEGEP certificate or a university certificate, diploma or degree. This produces results that are markedly different from those in our earlier version of this report. This is due to different classification categories in 2001 and 2006. Nonetheless, while the quantities differ markedly, the same pattern is obtained as before, where those in the middle age category have the highest average education.

<sup>&</sup>lt;sup>5</sup> We consider Canadians resident in census metropolitan areas (or CMAs) to be resident in an urban area.

<sup>&</sup>lt;sup>6</sup> Questions pertaining to religion are asked in every second census. Accordingly, we rely on the 2001 Census to provide information on religious attendance among our various age groups.

<sup>&</sup>lt;sup>7</sup> By pooling our datasets, we make the assumption that sociodemographic and political factors have the same effect in each election. Because of the small number of young respondents in each individual study, it would be difficult to conduct election-specific analysis. However, we have examined regressions for each year separately and we do not find significant differences between elections. Accordingly, we rest with the pooled analysis.

<sup>&</sup>lt;sup>8</sup> Stoker and Jennings (1995) show that getting married initially depresses electoral participation but that its long term impact is positive. The Canadian data are consistent with such an interpretation.

<sup>&</sup>lt;sup>9</sup> Interest in politics is assessed by asking individuals how interested they are in politics generally. Individuals can give a response between 0 (not interested at all) and 10 (very interested). Those who answer four or higher are considered to have medium or high interest.

<sup>&</sup>lt;sup>10</sup> Political information is measured in two manners. In 2000, it is based on a respondents' general political knowledge, their ability to correctly identify party leaders, and their knowledge of parties' positions and promises, as well as their ability to provide an approximation of the federal surplus. In all other years, political knowledge was assessed by the interviewer. Bartels (1996) has argued convincingly that interviewer evaluations of knowledge are valid indicators of respondents' political knowledge and information.

<sup>&</sup>lt;sup>11</sup> Occasionally, the differences between voters and non-voters are significantly different than in the previous version of our report. This is due to two factors. First, there was a slightly larger number of respondents in 2008 than in previous years, meaning that responses in 2008 are given somewhat more weight. Second, not all measures are exact from year to year, and so will result in greater or lesser differences between voters and non-voters. Nonetheless, all of the reported differences are in the same direction as in the previous report, suggesting consistent patterns on our key variables. This likewise applies to our regression results presented in the next section.

<sup>&</sup>lt;sup>12</sup> Two further factors, party membership and cynicism should be considered. However, they are beyond the scope of the CES. First, there is likely a positive relationship between party membership and voting. However, the CES only once measures party membership, so there is an inadequate amount of data to test this relationship. We should note, however, that party membership is known to be comparatively low among young Canadians (Cross 2004) and so some of the decline in voter turnout could be caused by less engagement with politics. However, it is equally plausible that the relationship runs in the other direction and that party membership follows from engagement in politics. Second, there is a common argument that youth vote less because they are more cynical about politics than their older counterparts. While the CES does not measure cynicism in a consistent manner year over year, we do note that Blais et al (2002, Table 3.1, pg 51) find no relationship between cynicism and voter turnout.

<sup>&</sup>lt;sup>13</sup> We consider only those factors that were included in every CES. Accordingly, we exclude other political activities and internet usage.

<sup>&</sup>lt;sup>14</sup> We note that age is not significant in the second set of regressions, contrary to our earlier report. We note two important caveats. First, the estimated effect for age in this model is statistically indistinguishable from 0, but also indistinguishable from our previous estimated effect for age. Second, most of the age effect is captured by increases in interest and information that occur as voters age.

<sup>&</sup>lt;sup>15</sup> Life-cycle effects are those that take place as people get older, generation effects refer to differences between groups of people born at different times, and period effects refer to over-time changes that affect all individuals. Period effects may point to specific events, such as pre and post World War II, or to specific characteristics of a particular election. We have made two refinements to the methodology used by Blais et al. (2004). Generations are here defined in terms of the first election in which a group of individuals had the right to vote instead of the rather crude distinction between pre-baby-boomers, baby-boomer, born in the 60s, and born in the 70s. And we create a separate variable to tap the specific peculiarities of each election instead of a simple contrast between elections held before and after 1990.

<sup>&</sup>lt;sup>16</sup> The 1965 election does not appear because it is used as the reference group. We are thus measuring how more (or less) likely people were to vote in each election, compared to 1965, everything else being equal, that is controlling for life-cycle and generation effects.

<sup>&</sup>lt;sup>17</sup> Blais et al. (2004) examined nine elections, starting in 1968 and ending in 2000.

These are only estimations and they are valid only to the extent to which the assumptions that we have to make are plausible. We have to assume that the over-reporting bias is relatively constant across cohorts and age groups and also that the life cycle effects are relatively constant across cohorts. Our intuition is that these assumptions are not strictly true but that the biases are not large and that they partially cancel out. Note that while we include variables for those who were eligible to vote for the first time in the 2006 election and the 2008 election, (see Table A2), we do not provide an estimation of the turnout rate for these voters, as the number of voters is too small (69 and 122 respectively).

<sup>&</sup>lt;sup>19</sup> They may not catch up, however, if they form the habit of not voting (Franklin 2004; Plutzer 2002).