

VOTING IN THE 21ST CENTURY:
NEW PERSPECTIVES ON INCREASING VOTER PARTICIPATION ON
ELECTION DAY

by

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New Perspectives on Increasing Voter Participation on Election Day

Project directed by Professor Tony Robinson

ABSTRACT

This study examines whether voting on weekends would increase voter turnout. The study controls for several of the most popular socio-economic and institutional factors that have been hypothesized by earlier research as influencing voter turnout. This study concludes that voting on the weekends would not improve voter turnout, and also yields new conclusions regarding the consequences of choosing to study turnout as a percent of registered voters versus studying turnout as a percent of the entire voting age population. A post analysis of the data further reveals that the primary factor in the differentiation of results in voter turnout data is due to the different types of registered voter populations -- voluntary verses required. When these two populations are mixed, they yield conflicting results between registered and voting age population turnout, but when separated, results become more homogenous.

DEDICATION

This project is dedicated to the Douglas County Democratic Party in Colorado that virtually did not exist in 1999, but is now a party setting new standards and changing the political picture in a county that is 50% Republican, 30% unaffiliated and 20% Democrat. It is also dedicated to Dr. Robert Clifton who created the New Directions Public Policy program with a vision to reach individuals with a sincere interest in Public Policy. Dr. Clifton made the program practical with an emphasis on real issues facing government officials today.

ACKNOWLEDGEMENTS

I want to express my special thanks to Dr. Tony Robinson for chairing this project. I chose Tony to lead this project because of my admiration for the work he has done in Denver for the migrant workers. I also chose Tony because he was able to convince me that education is a “requirement of citizenship” in the United States, and not a commodity that need only be provided to those who can afford to buy it.

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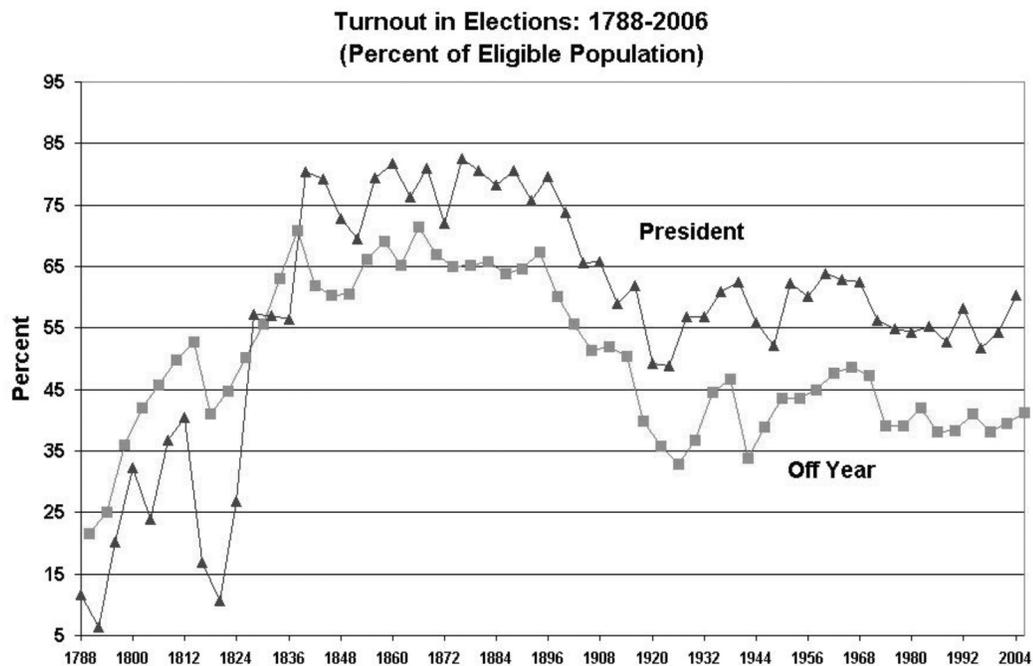
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CHAPTER 1

WHY NOT HOLD ELECTIONS ON THE WEEKEND?

Low Voter Turnout: An American Problem

One of the key elements required to make democratic changes in public policy is the power of the people to vote. However, as Figure 1.1 shows, the United States has been sustaining a low level of eligible voter participation for decades. U.S. voter turnout is to a point where only about 55% of eligible citizens are voting in Presidential election years and 40% are voting in off election years.



Source: http://www.voteview.com/Congressional_Elections_Introduction_Voter_Turnout_VEP.htm, September 28, 2008.

Figure 1.1. Poole's (2007) chart of United States voter turnout information compared to eligible voting age population for elections from 1788 to 2006.

U.S. averages seem to be hovering about 10-20 points below the cross-national average of 67.4% voter turnout for the voting age population, as found later in this study.

Part of the sustained reduction in voting participation (as a percent of eligible voters) relates to increases in the eligible voting population that has occurred throughout U.S. history. The number of eligible voters increased most dramatically at four points: during the Jacksonian Revolution around 1828, common white men became active voters; non-white men were added to the voting rosters in 1870 via Amendment XIV (but only gained the actual right to vote in much of America following the voting rights acts of 1964 and 1965); women obtained the vote in 1920 with Amendment XIX; and the minimum voting age was changed from 21 to 18 in 1971 by Amendment XXVI. While one might expect to see spikes in participation after these Constitutional Amendments were passed, the addition of these new voters does not seem to result in higher turnout. In fact, as Poole (2007) points out, adding more voters to the rosters is associated with declining participation of eligible voters. (An increase can only be seen if more than 50% of the *new* voter population votes.) Therefore, when there are suddenly millions of new eligible voters, with no history or knowledge of voting in the past (e.g., young people), the overall rate of participation by the total

number of eligible voters declines for a while until the new voters have developed their voting habits.

According to Poole (2007), voter turnout within the U.S. eligible voting population in 2004 was a bit higher (about 60%) than in other recent years due to the controversial Presidential election. Data for the 2008 election from the U.S. Elections Project (2010) show that the number increased to about 62% of the eligible voting age population, again, possibly due to a controversial Presidential Election.

However, if we contrast eligible voting age population data in Poole's (2007) chart with election data from the Federal Elections Commission between 1960 and 2008 in Table 1.1 (data compiled by the Internet service *Infoplease*, 2008; highlighting added), which lists percent turnout by registered voters, the numbers sometimes suggest a very different trend in voting habits. For example, turnout by voting age population percentages did not vary much for the Presidential Elections in 1960, 1964, and 1968 (63.1%, 61.9%, 60.8% respectively). These numbers indicate a gradual down turn in voter interest. Yet the votes by registered voters seemed to spike in the 1960 and 1964 elections with what appears to be the highest percent registered voter turnout in all the years from 1960 to 2008 with the understanding that the percent of registered voters for 1960 was not actually 106% since registration data from 16 states is missing.

Table 1.1. Voting Age Population Turnout and Registered Voter Turnout
Percentages Between 1960 and 2008

Year	Voting-age population	Voter registration	Voter turnout	Turnout of voting-age population (percent)	Turnout of registered voters (percent)
2008*	231,229,580	NA	132,618,580*	56.8%	NA
2006	220,600,000	135,889,600	80,588,000	37.1%	59.3%
2004	221,256,931	174,800,000	122,294,978	55.3	70.0%
2002	215,473,000	150,990,598	79,830,119	37.0	52.9%
2000	205,815,000	156,421,311	105,586,274	51.3	67.5%
1998	200,929,000	141,850,558	73,117,022	36.4	51.5%
1996	196,511,000	146,211,960	96,456,345	49.1	66.0%
1994	193,650,000	130,292,822	75,105,860	38.8	57.6%
1992	189,529,000	133,821,178	104,405,155	55.1	78.0%
1990	185,812,000	121,105,630	67,859,189	36.5	56.0%
1988	182,778,000	126,379,628	91,594,693	50.1	72.5%
1986	178,566,000	118,399,984	64,991,128	36.4	54.9%
1984	174,466,000	124,150,614	92,652,680	53.1	74.6%
1982	169,938,000	110,671,225	67,615,576	39.8	61.1%
1980	164,597,000	113,043,734	86,515,221	52.6	76.5%
1978	158,373,000	103,291,265	58,917,938	37.2	57.0%
1976	152,309,190	105,037,986	81,555,789	53.6	77.6%
1974	146,336,000	96,199,020 ¹	55,943,834	38.2	58.2%
1972	140,776,000	97,328,541	77,718,554	55.2	79.9%
1970	124,498,000	82,496,747 ²	58,014,338	46.6	70.3%
1968	120,328,186	81,658,180	73,211,875	60.8	89.7%
1966	116,132,000	76,288,283 ³	56,188,046	48.4	73.7%
1964	114,090,000	73,715,818	70,644,592	61.9	95.8%
1962	112,423,000	65,393,751 ⁴	53,141,227	47.3	81.3%
1960	109,159,000	64,833,096⁵	68,838,204	63.1	106.2%

*Source 2008 election results: http://elections.gmu.edu/Turnout_2008G.html.

n.a. = not available. NOTE: Presidential election years are in boldface.

1. Registrations from Iowa not included.

2. Registrations from Iowa and Mo. not included.

3. Registrations from Iowa, Kans., Miss., Mo., Nebr., and Wyo. not included. D.C. did not have independent status.

4. Registrations from Ala., Alaska, D.C., Iowa, Kans., Ky., Miss., Mo., Nebr., N.C., N.D., Okla., S.D., Wis., and Wyo. not included.

5. Registrations from Ala., Alaska, D.C., Iowa, Kans., Ky., Miss., Mo., Nebr., N.M., N.C., N.D., Okla., S.D., Wis., and Wyo. not included.

Source: Federal Election Commission. Data drawn from Congressional Research Service reports, Election Data Services Inc., and State Election Offices.

Source: <http://www.infoplease.com/ipa/A0781453.html>, February 2, 2010.

There is another difference between Figure 1.1 and Table 1.1. Poole (2007) specifically says that he used “eligible voting age population”, while the data from the Federal Election Commission specifies “voting age population.” This difference may explain why percent of eligible voters in Poole’s (2007) chart are somewhat different from the percentages of voting age population in the table from the Federal Election Commission.

Impact of Differing Data Populations on Turnout Results

The Internet based U.S. Elections Project (2010) discusses the differences between using “voting age population” (VAP) data and “eligible voting-age population” (VEP) data. The analysis in Figure 1.1 uses eligible voting-age population numbers that exclude ineligible voters from the voting population number. (In the U.S., ineligible voters include non-citizens and many felons over 18 years old.) The statistical voter turnout averages calculated using VEP are slightly higher as a result.

In another example where different data populations can have variable effects on calculating turnout results, the Douglas County, Colorado, Clerk and Recorder, Carole Murray, reported 97% turnout of *active* voters¹ in the 2004 election. However, if the number of those who voted is compared to the number of those who were registered in the County on November 2, 2004, only 39%

¹ “Active voters” are those who have voted in at least the previous two General elections.

voted (Statement of Votes Cast, 2004). The number of those who were eligible to vote but not registered was not reported. Thus, reported voter turnout statistics can vary dramatically depending on what number is selected to serve as the denominator—the number of registered voters, the number of active voters, the number of people in the voting-age population, or the number of eligible voters in the voting-age population—versus the number who actually vote. These differences have dramatic consequences in the resulting turnout number that is reported. However, regardless of which population is selected, the trend lines remain the same—as the number of voters has increased in the U.S., voter turnout over the past several decades has remained lower than cross-national averages.

Overview of Some Balloting Strategies Used to Improve Voter Turnout

Much research has been done to try to determine the root cause behind either increased or decreased voter participation. Many have looked at different balloting strategies by which to increase voter turnout, such as voting early (Gans, 2004), or voting by mail (Karp and Banducci, 2000), as well socio-economic criteria including the influence of cohorts, peers, and spouses that shape whether an eligible voter actually votes (Miller, 1992; Straits, 1990; Glaser, 1960). None of this research indicates that variations in balloting methods or social-economic influences has made any long term, sustained impact on overall

voting participation. What the research (to be presented later) does show is that a substantial difference in political structures and election laws (collectively known as “institutional factors”) such as *compulsory voting* and *proportional representation* do make a sustained difference in voter turnout.

This project will, in some cases, re-test, and in other cases, test for the first time, aspects of political structures and specific voting laws that research has conjectured (and laypersons have suggested) could make a difference in voter turnout within a free democratic country. Those institutional variables include: compulsory registration, compulsory voting, voting on a weekend verses a weekday, as well as unicameral systems, proportional representation systems, and differences between presidential and legislative (or parliamentary) elections. Through a review of the existing literature on the subject, and using the estimation of an election turnout regression model, this project will explore the impact of these institutional variables on voter turnout.

In Chapter 2, the relevance of the question is assessed to determine what degree others believe that changing Election Day to a weekend or holiday would make a difference in voter turnout. That is followed by a review of some of the voter turnout research that has been done on institutional variables including the very limited work that has been on weekend and holiday voting. Chapter 3 is the research section containing the research model, methods used to conduct the research, results, and discussion.

CHAPTER 2

LITERATURE REVIEW

Overview of Interest in the Voting Day Question

The relationship between voting rules (including such basic rules as the day of the election) and voting turnout rates is a subject of perennial interest. For example, “*Why Tuesday?*,” founded by attorney William B. Wachtel (2005), provides the answer to why the United States holds elections on Tuesdays.

In 1845, before Florida, California, and Texas were states, or slavery had been abolished, Congress needed to pick a time for Americans to vote. We were an agrarian society. We traveled by horse and buggy. Farmers needed a day to get to the county seat, a day to vote, and a day to get back, without interfering with the three days of worship. So that left Tuesday and Wednesday, but Wednesday was market day. So, Tuesday it was. In 1875 Congress extended the Tuesday date for national House elections and in 1914 for federal Senate elections.

The *Why Tuesday?* website also contains comments from readers, none of whom seem to be compelled by the need to hold elections on a Tuesday so as to help farmers vote in this era. Comments from *Why Tuesday?* contributors allude to voting on weekends or holidays as a possible means of increasing voter turnout:

- “I believe [we] should vote on Saturday! ... Bring ALL the family and kids and make it into a National celebration of civic activism, transparency, accountability and responsibility! Music, dance, bands, songs, picnics,

parades, convocations, crusades, fireworks, the works!!” Fred Smart,
11/03/2007

- “Do you really want everyone to vote? ...most people are not informed therefore I don't believe they should vote.” Mike, 11/19/2007
- “I did not vote this year because it was inconvenient. I went to Yoga instead. I would more likely vote on a Saturday.” Jenean, 11/30/2007
- “I think that we should vote [hold the General Election] on Veterans Day. What better way to honor our democracy, and the sacrifices made by our soldiers, than to vote?” Brian, 12/01/2007
- “...barriers to voting, which are merely inconveniences, are a very good thing. It keeps the ballots free from the lazy and undedicated. ...many people just don't care enough. And if they don't care, they should not vote.” Carlos, 12/03/2007
- “If someone doesn't care about voting to begin with, I doubt changing the day of the election will have any effect.” Rdizzle, 12/12/2007
- “Any day is a good day to vote but, ... there are better days than other[s] and the weekend is a ... lot better than a Tuesday.” Eduardo Segura,
01/15/2008
- “It really doesn't matter so much which day of the week election day is so much as it should be a [f]ederal holiday.” Melanie Sedqi, 01/16/2008

- “If voting were held on a weekend, wouldn’t many of the people who say they are disenfranchised now (foodservice and hospitality workers, laborers who don’t work 9-5 jobs) still have a hard time getting to the polls? Also, if voters aren’t engaged, what’s to stop them from traveling over the weekend, especially if [E]lection [D]ay becomes a national holiday?” James Koran, 01/23/2008
- “Move it to Saturday, and a sizeable number of the practicing Christian [and Jewish] population will be forced to choose between voting and worshipping on the [S]abbath.” Cody Cooper, 02/03/2008
- “...a Voting Holiday, and instant Registration could be helpful in creating new dynamics to voting.” Alan Smith, 01/29/2008

This sample of citizen comments is supported by a variety of non-scientific public opinion polls. Data for the following polls were collected from the Internet on August 9, 2009:

- Helium®, a citizen journalism Internet publishing company, published a poll showing:
 - 59% (247 votes) in favor
 - 41% (172 votes) against making Election Day a holiday.
- The Daily Kos® asked viewers to rank making Election Day a holiday. The poll showed:

- 91% (103 votes) strongly favored
- 6% (7 votes) somewhat favored
- 3% (3 votes) did not favor making Election Day a holiday.
- MSNBC had the most respondents (4346) to the question “Should Election Day be a national holiday?” The majority of respondents replied in the affirmative.
 - 5.4% “Yes. I would love an extra day off.”
 - 73% “Yes. That would make it easier for voters to get to the polls.”
 - 5.9% “No. Workers should make time during their day to visit the polls – or vote absentee.”
 - 11% “No, but employers should give employees paid time off to vote.”
 - 4.6% “No. I think our current system works just fine.”

In a scientific survey, the selection of the respondent pool is as critical to the research as the questions to be addressed (National Science Foundation, 2008). Internet polls are simply answered by anyone interested in posting a response. However, these polls serve to indicate a level of interest in possibly making Election Day a holiday or making it a non-working day.

• Helium is a registered trademark of Helium, Inc.

• “Kos” and “Daily Kos” are registered trademarks of Kos Media, LLC.

The U.S. originally chose to have elections on a Tuesday based on the needs of a rural, agrarian economy. However, the research of Blais, et al (2003) (replicated in this study) found that most democratic countries, also with agrarian roots, declare Sunday to be the official voting day. Does the day of election make a difference in voter turnout?

What Do Scholars Say About Institutional Voting Laws and Voting On Weekends Verses Weekdays?

Many scholars have studied variables that effect voter registration and voter turnout in the United States. Studies have measured the effects of early voting, allowing time off from work to vote, socio-economic conditions related to voting, and the impact of election specific issues on voter participation (such as a controversial issue on the ballot). The results of these studies rarely suggest a clear solution that legislators may use to achieve a permanent improvement in overall voter turnout. While voting by mail has been shown to increase voting in local elections, improved turnout may only be from *active voters*² (Karp and Banducci, 2000). Time-off for voting fails to increase voter participation (Sterling, 1983). Data indicate that married couples influence each other's voting behavior such that if one partner votes, so will the other (Straits, 1990; Glaser, 1960). However, this kind of socio-economic information is not useful to lawmakers who

² As mentioned earlier, active voters are those who vote regularly. Karp and Banducci (2000) found that voting by mail seemed to improve voter turnout for those who tended to vote anyway by making it easier for active voters to submit a ballot. It did not seem to increase voter turnout among those who did not vote regularly.

cannot generally pass laws to change the basic social structure of a community in order to drive up voter turnout. Voting on controversial issues will conditionally improve voter participation, but the turnout improvements do not last from one election to the next (Everson, 1981).

In general, research on the effect of social, economic, or cultural variables in driving voting rates up or down is not very useful to policy-makers who seek long-lasting voter turnout improvement. Such broad social variables are not easily amenable to change through legislation, and, in any case, it would be a very indirect and complicated strategy to try to improve voter turnout by changing such things as marriage rates or educational levels. But there is a category of election turnout research that is directly relevant to policy-makers: research on whether election rules (such as rules governing the day of election, or required voter registration) matter in terms of voter turnout. Such election rules are easier to change through legislative action than broader social or cultural factors. Research has already been conducted on the impact of several of the more popular voting laws.

André Blais (2000) overviews the major research on cross-national variations in institutional voting laws and their effect on voter turnout. The overview summarizes the methods and conclusions of Powell (1980, 1982, 1986), Crewe (1981), Jackman (1987), Jackman and Miller (1985), and Blais and Carty (1990) as follows:

- Powell 1980, 1982, 1986
 - Number of countries in study: 29
 - Election years studied: 1958-1976
 - Measure: % of population old enough to vote who voted
 - Median turnout: 77%
 - Influence on turnout:
 - Turnout seems to be higher in countries where registration is automatic
 - Turnout is higher in countries where voting is compulsory.
 - Turnout is higher in countries with PR systems resulting in strong party alliance.
 - Turnout is lower in countries with a presidential executive and winner-take-all election laws.

- Crew, 1981
 - Number of countries in study: 27
 - Election years studied: 1945-1980
 - Measure: % of registered voters that voted
 - Mean turnout: 79%
 - Influences on turn out:
 - Turnout is higher when voting is compulsory

- U.S. has low turnout because citizen must take the initiative to become registered
 - PR systems resulting in strong party alliance improve voter turnout
- Jackman, 1987
 - Number of countries in study: 19
 - Election years studied: 1960-1970
 - Measure: % of the total population that voted
 - Mean turnout: 78%
 - Influences on turnout:
 - Compulsory voting; same as Powell.
 - Nationally competitive districts; same as Powell.
 - Turnout is higher in unicameral and PR countries; but declines as number of Parties increase.
 - Voter turnout decreases in electoral disproportionate districts.
 - The greater the probability of a coalition government, the lower the incentive to vote.
- Blais and Carty, 1990
 - Number of countries in study: 22
 - Election years studied: 509 elections up to 1985

- Measure: % of registered voters that voted
- Mean turnout: 78%
- Influence on turnout:
 - Turnout higher with compulsory voting
 - Turnout higher when populations are smaller
 - Turnout 7% lower in a plurality election and 5% lower in a winner-take-all election than in a PR election.
- Jackman and Miller, 1995
 - Number of countries in study: 22
 - Election years studied: 1980s
 - Measure: % of the total population that voted
 - Mean turnout: 78%
 - Influences on turnout:
 - Cross-national variations in voter turnout cannot be explained by cultural factors.
 - New democracies have about the same turnout as older democracies.
 - Found no relationship between turnout and aspects like life satisfaction, trust, or political discussion rates.

In 1987, Jackman measured the impact of institutional factors on voting turnout including: 1) nationally competitive districts; 2) electoral

disproportionality³; 3) multipartyism; 4) unicameralism; and 5) compulsory voting. Jackman (1987) tested the theory of G. Bingham Powell, Jr. (1986) who said that at the national level, in presidential elections, where the winner is decided by direct vote, voter turnout is higher because individual voters feel that their vote counts more as opposed to systems where the President is elected by the legislature. Jackman (1987) also tested whether electoral districts that have a more even distribution of party affiliation have better voter turnout because the individual vote matters more. Turnout tends to be lower in districts where one party dominates (Hill, 2002). A corollary of this argument is that a proportional representation (PR) system of electing officials would increase turnout by eliminating the disproportional, noncompetitive district issue. While some studies suggest that proportional representation (PR) increases voter participation (e.g., Ranney, 1977), Jackman (1987) says it does not; this is because in “traditional” PR systems, i.e., a “closed list” system, voters elect a group of candidates nominated by the party. Thus, the voter does not elect the individual members of the legislature directly. In addition, in order for representatives of small parties to make a difference, they have to form coalitions with other small parties or even

³ Electoral disproportionality is basically the opposite of proportional representation, where minor parties must accumulate many more votes than there are party members to obtain a seat in the legislature. The typical result is that those who vote for a minor party candidate “waste their vote”. As a result, Jackman (1987) concludes that electoral disproportionality would tend to lower voter turnout.

large parties in order to make a substantive change. Jackman (1987) argues that both these conditions tend to dissuade voters.

Jackman (1987) does argue that unicameral systems motivate voters. In a unicameral system, the individual representative has more power and does not have to compromise with a second house in order to pass legislation. As a result, voters are more interested in voting to ensure their preferred representative is elected.

Finally, Jackman (1987) discounts the results from his own study that shows compulsory voting increases voter turnout by 22%. He says that success of compulsory voting is based on whether a country actually enforces this law, and, even then, there is no guarantee of “total compliance.”

Extending the research on institutional factors influencing voter turnout, Mark Franklin (1996) seems to be the first researcher to conclude that voting on the weekend contributes to a higher voter turnout. His research is summarized as follows:

- Franklin, 1996
 - Number of countries in study: 31
 - Election years studied: 1960-1985
 - Measure: % of registered voters that voted
 - Mean turnout: 79.87%
 - Influences on turnout:

- Turnout is higher in countries where voting is compulsory.
- Turnout is higher in countries with PR systems.
- Turnout is higher in countries that utilize postal voting (mail-in ballots).
- Turnout is higher when Election Day is on a weekend.

However, Franklin's study is a study over time. He finds that most factors related to higher turnout have a steadily diminishing impact on turnout as time passes, especially the factors of proportionality in the electoral system and weekend voting.

Following up on Franklin's (1996) study, Blais, Massicotte and Dobrzynska (2003) specifically address the topic of "holiday voting" in their 2003 research. This time, researchers use two different methods to test institutional voting factors in their study. They test turnout as a percent of the voting age population as well as the registered voter population. The differences in the two test are summarized as follows:

- Blais, Massicotte and Dobrzynska, 2003
 - Number of countries in study: 61
 - Election years studied: 119 elections \geq 1990
 - Measure: % of registered voters that voted
 - Mean turnout: 74%
 - Influences on turnout:

- Turnout is higher in countries with a higher GDP per capita.
- Turnout is higher in countries where voting is compulsory with penalties.
- Turnout is higher in countries where voting is made easy such as those that conduct mail-in elections or allow early voting.
- Turnout is higher in countries that have PR systems.
- Measure: % of population old enough to vote that voted
- Mean turnout: 71%
- Influences on turnout:
 - Turnout is higher in countries that have PR systems.
 - Turnout is higher in countries with a higher GDP per capita.
 - Turnout is lower in countries that allow voters to register on Election Day.

Blais, et al (2003) conclude that based on their analysis, in contrast with Mark Franklin (1996), making Election Day a holiday “does not seem to be a really significant factor” (p. 11). Blais, et al (2003) report a holiday regression coefficient of -.26 for turnout for registered voters and -.97 for turnout for the voting age population. That means if you have holiday voting, registered voter turnout levels go down about 1/5 of 1%. However, for the voting age population, turnout goes down nearly a full 1 percent. However, neither coefficient was

significant compared to the other factors in the analysis that included controls for socio-economic and geographic factors. While Franklin (1996) found that weekend voting and PR elections did tend to increase voter turnout in the short term, the results gained would dissipate over time. Ellis (2006) also comments that the results researchers have obtained regarding the analysis of weekday verses weekend or holiday voter turnout often conflict. However, most studies conclude, rather unexpectedly, that weekend or holiday voting typically has a somewhat negative impact on voter turnout rather than a positive one. In one single country study (France), Debois and Ben Lakhdar (2007) found that the impact of holiday voting on turnout was strongly negative.

Thus, as identified in Chapter 1, while we seem to have much interest and belief from the general public that weekend or holiday voting might make a difference in voter turnout, most of the actual data on the impact of holiday, weekend, or time-off from work on voter turnout shows either negative or insignificant results. Within this literature review, there is only one researcher (Franklin, 1996) who found a significantly positive result that supported the idea of improving voter turnout by voting on the weekend or holiday. However, Franklin pointed out that this result tended to disappear over time for registered voters. Still, the clear intuitiveness of the idea and the continued interest by many journalists and the general public as illustrated in Chapter 1, keeps this

idea for increasing turnout by voting on the weekend alive and calls out for additional research on the subject.

CHAPTER 3

Comparing Cross-National Voter Turnout Data In Democratic Countries

Martin Wattenberg argued in the October 1998 edition of the *Atlantic Monthly* (in-line with Franklin's 1996 study) that enacting proportional representation and/or changing Election Day to a weekend or making it a holiday could have a positive, permanent impact on voter turnout. However, this assertion seems to be challenged by subsequent data provided by Blais, et al (2003) and the other research detailed in the preceding chapter.

This study proposes to revisit the question and test cross-national data once again with a specific emphasis on the question of whether voting on the weekend (or non-working day, also known as a "rest day", or holiday) makes a difference in voter turnout. As in the studies of Jackman (1987) and Blais, et al (2003), a regression model will be used that controls for a variety of social, economic, and institutional variables in an effort to determine the independent effect of a single variable: weekend voting. In addition, this study will specifically differentiate the impact of compulsory voting enforcement on voter turnout and call out, yet again, the impact of proportional representation on voter turnout.

Hypothesis

The hypotheses for testing whether Wattenberg's (1998) premise is correct will be:

H₁: Free democratic countries that vote on weekends will have a better voter turnout than those who vote on a weekday.

H₀: Voter turnout on the weekend will not be significantly different from voter turnout on a weekday (the null hypothesis).

Research Model: Variable Definition

Independent Variables

In order to test the single question of whether voting on the weekend versus a weekday will cause a significant difference in voter turnout, or whether other institutional factors might be responsible for the difference, leading institutional factors hypothesized to contribute to voter turnout differences are included in the model. The institutional variables are: 1) compulsory (required) registration; 2) compulsory (required) voting; 3) Presidential versus non-Presidential elections; 4) elections held under unicameral systems; 5) elections under systems of proportional representation; and last, 6) elections held on a weekday versus the weekend. The following independent variables will also be included in order to control for the effect of different social-demographic factors: 1) the average gross domestic product per person of a country, as an estimate of individual wealth; 2) the average literacy rate of a country, as an estimate of individual education; and 3) the freedom rank⁴ of the country, as an estimate of

⁴ The freedom rank of a country is a ranking given by the Freedom House organization where "1" is the highest rank. Freedom House evaluates countries based the country's

individual freedoms as these individual freedoms may have an influence on voter turnout.

Dependent Variables

According to Barbara Norrander (1986), “Turnout, in aggregate analyses, is the ratio of votes cast to the total possible number of votes. In general election studies, the denominator is the eligible electorate, which may be comprised of those legally registered to vote or those with the potential to be legally registered” (p. 357). Blais, et al (2003) says, “Neither of the two indicators [registered voters and eligible electorate, a.k.a. voting age population,] is perfect” (p. 3). For example, VAP data based on census data may be “too inclusive”: that is, the VAP data include non-citizens and others who are not eligible to vote. Adjustments to the VAP numbers between each census for each election year may be very unsystematic at best to non-existent at worst. On the other hand, analysis based on voter registration may also be slanted because it does not include all those eligible to be registered, and is likely to contain duplicate or fictitious names, as voter registration rolls are notoriously inaccurate. Therefore, to be all-inclusive, Blais, et al (2003) include both measures of turnout (percent of registered voters and percent of voting age population) in their study. For this project, a source of data was located that provides voting-age population, registration numbers, and

advancement of human rights and democratic practices. Freedom House ranks only countries with a score of 2.5 or higher as “free”.

voter turnout numbers for elections worldwide. (See the International Institute for Democracy and Electoral Assistance website linked to the Electoral Knowledge Network ACE Project.) Therefore, as in the Blais, et al (2003) study, two dependent variables will be tested: 1) voter turnout compared to number of registered voters; 2) voter turnout compared to voting age population.

Method Used to Acquire and Test Data

Data Gathering

The dependent variable voting statistics were obtained through the Electoral Knowledge Network *ACE Project* (ACE)⁵ and its link to the International Institute for Democracy and Electoral Assistance (IDEA). While IDEA provides voting results (the number of people who voted compared to those who registered as well as number of people who voted compared to the voting age population) for over 200 countries that regularly hold elections, data collection for this project was restricted to 86 countries ranked “free” by *Freedom House*⁶ in

⁵ The ACE Electoral Knowledge Network was established in 1998 as the ACE (Administration and Cost of Elections) Project by IDEA, IFES and UNDESA, as a systematic on-line repository of election information. The ACE Electoral Knowledge Network (www.aceproject.org) is an online knowledge facility that provides comprehensive and authoritative information on elections, promotes credible and effective electoral processes by offering knowledge, capacity development and electoral assistance services. It also provides users with comparative data and news related to elections and it acts as a forum for election practitioners to meet and share knowledge and experiences. It is freely accessible to all.

⁶ Freedom House is a Washington-based international non-governmental organization that conducts research and advocacy on democracy, political freedom, and human rights. Freedom rankings for a country are determined based on an assessment of civil rights including: freedom of expression and belief, associational and organizational rights, rule of law, and personal autonomy and individual rights, as well as the electoral process, political pluralism and participation, and the functioning of government in

order to follow the precedent set by previous scholars who have restricted research to countries with similar interests in democracy and avoided tainting their studies with results from countries that don't have free elections. ACE also provided data regarding which countries have compulsory registration and compulsory voting laws and which countries back up these laws with either strict, weak, or no enforcement, thus providing data for independent variables on compulsory and voluntary voting.

Other sources were used to provide the other independent variables. MSN's online encyclopedia provided data on countries with unicameral governing structures. The International Foundation for Electoral Systems (IFES) provided the actual dates that elections were held, from which it could be determined whether each election was held on a weekday or the weekend. *Infoplease* provided the literacy rate and GDP/PPP per capita data. The World Policy Institute provided the list of countries that vote using some form of proportional representation. (All of the Internet resources used to compile data for this study are listed and annotated in Appendix A.)

In all, data from 182 elections held between 1998 and 2009, from 86 countries ranked 1 to 2.5 on the freedom scale (see Appendix B) are used to test the relationship between *Voter Turnout to Registered Voter* ratios and the

each country. It publishes an annual report assessing the degree of perceived democratic freedoms in each country that is used in political science research.

selected independent variables. A subset of the same elections (numbering 168 elections from 77 countries) is used to test the *Voter Turnout to Voting Age Population* ratios against the independent variables. The number of elections for the second test was reduced due to missing VAP data for some countries.

Testing

After the complete data set was compiled, a multiple regression ordinary least squares (OLS) test from Microsoft® Excel® 2004 for Mac Version 11.5.1. was used to estimate the relationship between the two dependent variables against the independent variables.

Method for Scoring Data

Scoring Socio-Economic Variables

The scores for socio-economic variables are not converted into categorical variables. The actual values for each variable are used. These variables are listed in Appendices B and C.

Scoring Institutional Variables

The institutional variables for each country in the study are noted in Appendices E and F. Each institutional variable is scored as follows:

- Country has Compulsory Registration: Yes = 1; No = 0
- Country has Compulsory Voting – Strong Enforcement: Yes = 1; No = 0
- Country has Compulsory Voting – Weak Enforcement: Yes = 1; No = 0

• Microsoft and Excel are registered trademarks of Microsoft Corporation.

- Country has Compulsory Voting – No Enforcement: Yes = 1; No = 0
- Country selects representatives based on proportional representation: Yes = 1; No = 0
- Country has a unicameral form of government: Yes = 1; No = 0
- Country holds elections on the weekend: Yes = 1; No = 0
- Election was a Presidential Election: Yes = 1; No = 0

As in Jackman's (1987) research, where "dummy variables" were assigned to signify whether a specific law was either present or not present for a given country, the scoring of the independent variables in this study is not indicative of their importance but merely an indicator of their presence. Thus, the numeric value serves to "differentiate" one law or condition from another so that the statistical analysis software is able to analyze the data. For example, the software can compare each country's percent turnout score with the country's PR score ("1" or "0") and be able to determine whether one country's voter turnout rate is higher, lower, or no different from the other country's voter turnout rate while controlling for the presence of "PR" or "no PR".

Scoring the Dependent Variables

The dependent variables are expressed as percentages, where the number of voters is divided either by the number of registered voters or the voting age population for each election.

Results

The results are divided into two sections. The first section evaluates the relationship between voter turnout as a percent of registered voters and the independent variables. The second section evaluates the relationship between voter turnout as a percent of voting age population and the independent variables. For reference, Appendix D lists the average voter turnout percentages (for both registered voters and voting age population) in elections involving each of the independent variables in this study. Notable is that the overall average percent turnout for registered voters is 69.4%, and the average turnout for the voting age population is 67.4%; these very similar figures suggest that perhaps there will be little difference in the results between the two voting populations.

Voter Turnout Results for Registered Voters

The first regression test (Table 3.1) was performed to analyze the relationship between the average registered voter turnout and all of the independent variables. (For the full regression results see Table G.1 in Appendix G.)

Table 3.1. Factors Impacting Registered Voter Turnout

Independent Variable	Regression Coefficient	Standard Error
Literacy Rate	0.26**	0.12
GDP/PPP per Capita	0.00021**	0.000084
Freedom Rank	3.77	2.37
Registration Required	-2.27	2.45
PR Country	1.01	2.25
Weekend	-1.51	2.19
Uni-Cameral System	-2.33	2.75
Compulsory Voting Strongly Enforced	14.48****	4.14
Compulsory Voting Weakly Enforced	13.01****	3.56
Compulsory Voting Not Enforced	3.19	4.10
Presidential Election	-1.80	2.34
Intercept	35.38***	12.62

Number of observations: 182; Adjusted R²: 0.18

* significant at $p \leq 0.10$ (two-tailed test)

** significant at $p \leq 0.05$ (two-tailed test)

*** significant at $p \leq 0.01$ (two-tailed test)

**** significant at $p \leq 0.001$ (two-tailed test)

The regression test comparing registered voters to those who vote reveals that compulsory voting with enforcement plays the most significant role in effecting voter turnout for registered voters with a highly significant regression coefficient of 14.48 for strongly enforced and 13.01 for weekly enforced. In other words, compulsory-voting systems with enforcement will drive voting turnout up 13-14.5%, compared to countries that do not have an enforced compulsory system. Blais, et al (2003) obtained a similar regression coefficient score of 12.60 ($p \leq .01$) for compulsory voting combining all levels of enforcement when turnout was compared to registered voters. Therefore, these results can be considered to have replicated previous findings and support Blais, et al's (2003) conclusion that *enforcement* of compulsory voting laws has a dramatic impact in voter turnout among registered voters.

The test comparing registered voters to those who actually vote did not show that voting on weekends verses weekdays made any significant difference for registered voters. As a matter of fact, the regression coefficient is slightly negative (-1.51), indicating that voting on weekends may tend to lower voter turnout for registered voters. This result is not too dissimilar from Blais, et al's (2003) result that shows a regression coefficient of -.26 for holiday voting. However, since neither of these values is significant, the information simply points to an interesting similarity in the analysis.

Voter Turnout Results for the Voting Age Population

The same type of regression test that is performed on registered voters is also performed on the voting age population (see Table 3.2). For the complete regression test, see Table G.2 in Appendix G.

Table 3.2. Factors Impacting Voting Age Population Voter Turnout

Independent Variable	Regression Coefficient	Standard Error
Literacy Rate	0.20	0.17
GDP/PPP per Capita	0.000250**	0.000012
Freedom Rank	-4.43	3.47
Registration Required	-1.90	3.56
PR Country	9.50***	3.27
Weekend	-10.83****	3.19
Uni-Cameral System	-4.78	3.98
Compulsory Voting Strongly Enforced	6.38	5.86
Compulsory Voting Weakly Enforced	9.28*	5.36
Compulsory Voting Not Enforced	-2.08	5.79
Presidential Election	0.41	3.43
Intercept	62.01****	18.15

Number of observations: 168; Adjusted R²: 0.08

* significant at $p \leq 0.10$ (two-tailed test)

** significant at $p \leq 0.05$ (two-tailed test)

*** significant at $p \leq 0.01$ (two-tailed test)

**** significant at $p \leq 0.001$ (two-tailed test)

The regression test for turnout as a percent of voting age population yields an entirely different result from registered voters. The regression coefficient for strong and weakly enforced compulsory voting levels dropped significantly from 14.48 and 13.01 to 6.38 and 9.28 respectively, where the 6.38 coefficient for strong compulsory enforcement has dropped to an insignificant level. Blais, et al (2003) shows the same type of decline in their study where the compulsory voting regression coefficient for registered voters is a very significant 13.28 ($p \leq .01$), but for the voting age population it falls to an insignificant 5.59.

The current study also conforms with Blais, et al's (2003) study in that proportional representation is a major factor in getting the voting age population to the polls with a regression coefficient of 7.84 ($p \leq .01$) compared to 9.5 ($p \leq .01$) in this study.

Thus far, the results in the current study are comparable to the Blais, et al (2003) study. However, the result for "holiday voting" in the 2003 study is not analogous to the current study comparing weekend and weekday voting for the voting age population. This divergence might be due to a difference in the data used to study "holiday" or non-working day voting in the 2003 study. While Franklin (1996) specifically states that he looked at weekend voting, Blais, et al (2003) do not specify what data were used to formulate their conclusion. When the institutional variable tables at the end of the 2003 study are examined, those countries that hold elections on weekends or actually declare Election Day to be

a holiday are not identified. Only those countries that provide employees time-off from work to vote are identified. Since the source data that Blais, et al (2003) used to conclude that holiday voting has no impact on voter turnout cannot be confirmed, this leaves a question regarding the differences in the results between the current study and the 2003 study. The current study specifically compares weekday to weekend voting.

Post Analysis As A Result of the Discussion Section

Analysis of Data for Those Countries That Do Not Require Registration

In the discussion section of this study, a question regarding drivers that appear to change as a result of moving from the voting age population to a registered voter came up. It was determined that if the study were divided between those who live in countries that require registration (or automatically register the voting age population) from those countries where registration is strictly a voluntary act, that these results might explain the variations in the differences that are seen in the primary study.

For the first test, analysis of countries that do not require registration, the results for registered voter turnout are shown in Table 3.3, and the results for the voting age population are shown in Table 3.4. The full regression test results are shown in Tables G.3 and G.4 in Appendix G.

Table 3.3. Factors Impacting Registered Voter Turnout In Countries That Do Not Require Registration

Independent Variable	Regression Coefficient	Standard Error
Literacy Rate	0.47***	0.14
GDP/PPP per Capita	0.000123	0.000136
Freedom Rank	9.47**	3.66
PR Country	8.10**	3.98
Weekend	4.41	3.72
Uni-Cameral System	-14.65	9.96
Compulsory Voting Strongly Enforced	--	--
Compulsory Voting Weakly Enforced	20.44**	8.43
Compulsory Voting Not Enforced	--	--
Presidential Election	-1.05	3.99
Intercept	5.00	15.74

Number of observations: 61; Adjusted R²: 0.23

* significant at $p \leq 0.10$ (two-tailed test)

** significant at $p \leq 0.05$ (two-tailed test)

*** significant at $p \leq 0.01$ (two-tailed test)

Table 3.4. Factors Impacting Voting Age Population Turnout In Countries That Do Not Require Registration

Independent Variable	Regression Coefficient	Standard Error
Literacy Rate	0.42**	0.18
GDP/PPP per Capita	-0.000425**	0.000179
Freedom Rank	-7.18	5.00
PR Country	14.73***	5.33
Weekend	.697	5.01
Uni-Cameral System	-32.73**	12.74
Compulsory Voting Strongly Enforced	--	--
Compulsory Voting Weakly Enforced	-7.14	11.06
Compulsory Voting Not Enforced	--	--
Presidential Election	-3.80	2.34
Intercept	46.30**	20.72

Number of observations: 54; Adjusted R²: 0.15

* significant at $p \leq 0.10$ (two-tailed test)

** significant at $p \leq 0.05$ (two-tailed test)

*** significant at $p \leq 0.01$ (two-tailed test)

*Analysis of Data for Those Countries That
Require Registration*

For the second test, analysis of countries that require registration, the results for registered voter turnout are shown in Table 3.5, and the results for the voting age population are shown in Table 3.6. The full regression test results for these two test can be found in Tables G.5 and G.6 in Appendix G.

Table 3.5. Factors Impacting Registered Voter Turnout: Socio-economic and Institutional Factors In Countries That Require Registration

Independent Variable	Regression Coefficient	Standard Error
Literacy Rate	-0.04	0.22
GDP/PPP per Capita	0.000143	0.000108
Freedom Rank	-2.86	3.32
PR Country	-1.81	2.73
Weekend	-6.17**	2.72
Uni-Cameral System	-1.41	2.75
Compulsory Voting Strongly Enforced	15.65****	4.13
Compulsory Voting Weakly Enforced	15.75****	4.09
Compulsory Voting Not Enforced	2.19	4.01
Presidential Election	-2.22	2.81
Intercept	78.17***	24.13

Number of observations: 120; Adjusted R²: 0.22

* significant at $p \leq 0.10$ (two-tailed test)

** significant at $p \leq 0.05$ (two-tailed test)

*** significant at $p \leq 0.01$ (two-tailed test)

**** significant at $p \leq 0.001$ (two-tailed test)

Table 3.6. Factors Voting Age Population Turnout: Socio-economic and Institutional Factors In Countries That Require Registration

Independent Variable	Regression Coefficient	Standard Error
Literacy Rate	-0.19	0.344
GDP/PPP per Capita	0.000270	0.000168
Freedom Rank	-8.23	5.15
PR Country	6.6	4.22
Weekend	-15.50****	4.23
Uni-Cameral System	-2.13	4.27
Compulsory Voting Strongly Enforced	9.40	6.29
Compulsory Voting Weakly Enforced	14.55**	6.80
Compulsory Voting Not Enforced	-1.97	6.10
Presidential Election	2.87	4.42
Intercept	107.68***	36.92

Number of observations: 114; Adjusted R²: 0.09

* significant at $p \leq 0.10$ (two-tailed test)

** significant at $p \leq 0.05$ (two-tailed test)

*** significant at $p \leq 0.01$ (two-tailed test)

**** significant at $p \leq 0.001$ (two-tailed test)

Results of Post Analysis

The results of the post analysis seem to be more homogeneous than the results of primary study. For those not required to register, the strongest influence on voter turnout seems to be proportional representation for the voting age population and continues to be proportional representation for the registered voter population.

In the group that requires registration, it would seem that the population of eligible voters would be identical to the population of registered voters since the entire voting age population is supposed to be registered. The results vary due to the following factors: 1) registration lists are typically not accurate; 2) voting age population data could be based on out-dated census numbers; 3) registration may not be automatic, thus the individual is responsible for maintaining their own registration as in countries that do not require registration. Still, the regression tests yield a more homogenous result for those who are required to register despite these variations. For those required to register, the strongest influence on voter turnout seems to be voting on a weekday for the voting age population and continues to be voting on a weekday for the registered voter population.

In the group of countries that do not require registration, only one country requires voting—Chile. In the group of countries that require registration, about half also require voting at some level of enforcement. Required voting seems to

have a positive influence on all voter turnout results except for the voting age population that is not required to register.

Discussion

Holding Elections on the Weekend

In the primary study, the hypotheses that holding elections on weekends would improve voter turnout was not supported. For registered voters, whether voting occurred on a weekend or weekday had no significance. However, for the voting age population, voting on the weekend had a significantly negative impact. From the average turnout percentages shown in Appendix D, it appears that voting on Monday through Thursday produces good results. Friday seems to be the worst day of the weekdays to hold an election, and weekend voting makes little difference.

Unexpected Finding

Probably the most significant revelation in the primary study is the change in the results when the two different voting populations (registered voters and voting age population) are both used to compare voter turnout results. It is a bit puzzling why one study does not agree with the other study when the only difference is that one is comparing turnout to registered voters and the other is comparing turnout to the voting age population. Is not the registered voter population a subset of the voting age population?

Based on the review in Chapter 2, until Blais et al (2003), there did not seem to be many variations in cross-national voter turnout results when either the voting age population or registered voters populations were used in research. However, the results of the Blais et al (2003) study and the current study suggest that the populations are very different given that registered voters seem to vote more if they are required to vote and the voting age population votes more if they do not have to vote on the weekend. That leads to a rather interesting question. After a member of the voting age population moves to the registered group, what changes? Dr. Robinson (draft comments, March 2, 2010) suggests that “people who...*choose* to register to vote (versus stay unregistered) are *already* substantially different from people who stay unregistered, and thus they respond to different variables.” This suggests a possible difference between those who register to vote out of pure choice versus those who are automatically registered or who are required to register whether they want to be or not. With the data collected for this study, a quick analysis can be done to test the difference between these two populations. (See Post Analysis as a Result of the Discussion Section, page 37.)

When the data are divided between those who are required to register (or who are automatically registered) versus those who choose to register, the influence of the independent variables on the dependent variables become more homogenous between the voting age population and registered voters who vote.

The results seem to indicate that the true differentiation in voter populations is along the lines of required versus voluntary registration. When registration is required, governments typically register all of the eligible voting population automatically. With that, a “motivation” to become registered becomes difficult to quantify since it is not clearly measurable as a chosen behavior. However, in half the countries that require voter registration, voting is optional, so a motivation for voting can still be suggested and quantified. From the results of the post analysis research, voting on weekdays brings more registered voters and members of the voting age population to the polls when registration is required. On the other hand, for those who choose to register, PR countries have the highest turnout for both registered voters and the voting age population.

Why do these populations behave so differently?

When an individual chooses to register, it is likely that the person wants to vote. From that perspective, the person will likely strive to cast his or her vote on any day that the election is held. The results support this possibility showing that the day of the week that elections are held has no impact on those who live in countries where registration is a choice. At the same time, more of the overall voting age population and registered population vote if they live in a country where officials are elected via a proportional system.

However, the voting population living in countries where registration is automatic or required seems to resent giving up their weekends in order to vote.

(This was the conclusion of Dubois and Ben Lakhdar (2007), who speculated that a decrease in voter turnout on weekends or holidays was caused by the desire of the voting population to want to vacation on their day off rather than vote.) This conclusion is supported by the results that show a negative impact on voter turnout in countries where voter registration is required when elections are held on the weekend. Results also indicate that required voting can be used to improve voter turnout in these countries.

Conclusions

Most studies, regardless of the data population, have concluded that compulsory voting and PR election strategies rank highest in voter turnout results. Very few studies have included weekend verses weekday voting in their study. When “holiday” or weekend voting criterion are included in the study, the research have yielded contradictory results. This may have been due to differences in the population studied. It is interesting that in this study, the specific inclusion of weekend verses weekday election criteria ended up to be one of the most significant criteria influencing voter turnout at least in those countries that require voter registration. It is also interesting that the results proved to be the opposite of the hypothesis. That is, weekday voting tends to bring out more voters than weekend voting.

The study of voter turnout and the institutional factors that may or may not influence voter turnout seems to require more granularity than previous research

has suggested. While Barbara Norrander (1986) stated that either turnout levels of registered voters or turnout levels of eligible voting age population may be used to analyze voter turnout dynamics, the fact is, the results do not yield the same conclusions for the two populations. However, when the two populations are further subdivided into those who are required to be registered versus those who choose to register, continuity between the voting age population and registered voters emerge. Therefore, according to this study, it would be possible for countries that do not require registration and do not want to require voting to increase voter turnout as much as 15% for the voting age population and as much as 8% for registered voters by introducing some form of proportional representation election policy. In the United States, this type of policy solution may not be practical at the state or federal level as proportional representation would require larger districts, especially for Senatorial seats. To elect U.S. Senators using a PR system, two or three states would need to be combined forming a new Senatorial District in order for a PR system to work. This would require Senators to support a wider diversity of constituent interests. PR systems in the U.S. might be more easily adapted to the election of local officials. An increase in interest in local elections might spill over to state and federal elections.

At the same time, in countries that do not require registration, changing Election Day to the weekend, or making Election Day a non-working day would

have virtually no effect on voter turnout. Current levels of active voters would continue to strive to vote regardless of which day is designated “Election Day.”

APPENDICES

Appendix A. Data Sources With Annotations

Following is a complete list of references for all of the data that was collected from the Internet and used in this study. Annotations describe how the data was used in the study.

2008 election results. Retrieved February 7, 2010, from

http://elections.gmu.edu/voter_turnout.htm.

The United States Elections Project is an information source for the U.S. electoral system. The project provided the data in Figure 2 that was organized by InfoPlease showing how voter percentages for the voting age population and registered voters can tell different stories about the increase or decrease in voter turnout.

2008 freedom scores for independent countries. Retrieved January 20, 2009,

from <http://www.freedomhouse.org>.

Freedom House provided the 2008 freedom scores for independent countries.

Countries that require all of the voting age population to register. Retrieved

January 20, 2009, from <http://aceproject.org>.

The Electoral Knowledge Network ACE Project was the initial source for voter registration and vote results. In the middle of this project, the database was replaced by a link to IDEA. The ACE Project was used

to identify countries that require all of the voting age population to register. ACE also provided data regarding which countries have compulsory registration and compulsory voting laws and which countries back up these laws with either strict, weak or no enforcement.

Countries that have a unicameral based legislative system. Retrieved August 2, 2009, from

http://encarta.msn.com/encyclopedia_761586474/unicameral_system.html.

MSN's online encyclopedia listed countries the use a unicameral based legislative system.

Countries that vote using some form of proportional representation. Retrieved February 10, 2010 from

<http://worldpolicy.org/projects/globalrights/prindex.html>.

The World Policy Institute provided the list of countries that vote using some form of proportional representation, typically the *party list*.

Election Day dates. Retrieved January 25, 2009, from

<http://www.electionguide.org>.

The International Foundation for Electoral Systems (IFES), established in 1987, provided the dates of the elections.

Literacy rate and GDP/PPP per capita data. Retrieved August 2, 2009, from

<http://www.infoplease.com/ipa/>.

InfoPlease provided the literacy rate and GDP/PPP per capita for countries in this study. A literacy rate score was used as a substitute for an actual average education grade level due to the lack of this data for most of the countries in the study.

Voter turnout results and voter registration numbers. Retrieved from the ACE project January 20, 2009 from website: <http://aceproject.org>.

When the project started, registration and voter turnout results were found in data gathered by the ACE Project. In the middle of this project ACE linked up with IDEA and discontinued their database records of voter turnout data.

Voter turnout results, voter registration numbers, and voting age population numbers. Retrieved July 15, 2009, from <http://www.idea.int/vt/>.

IDEA was linked up with the ACE Project and provides both registration and voting age population data as well as voter turnout data. Without this resource, this project would not have yielded the rich results that were achieved.

Appendix B. Alphabetical List of 86 Countries Included
in This Study Ranked 1 to 2.5 on the FREE Scale
by Freedom House 2008.

Andorra	1	Guyana	2.5	Peru	2.5
Antigua & Barbuda*	2	Hungary	1	Poland	1
Argentina	2	Iceland	1	Portugal	1
Australia	1	India	2.5	Romania	2
Austria	1	Indonesia	2.5	Samoa	2
Bahamas	1	Ireland	1	San Marino	1
Barbados*	1	Israel	1.5	Sao Tome &	2
Belgium	1	Italy	1	Principe	
Belize	1.5	Jamaica	2.5	Senegal	2.5
Botswana	2	Japan	1.5	Serbia	2.5
Brazil	2	Korea, South	1.5	Slovakia	1
Bulgaria	1.5	Latvia	1.5	Slovenia	1
Canada	1	Lesotho	2.5	South Africa	2
Cape Verde	1	Liechtenstein	1	Spain	1
Chile	1	Lithuania	1	St. Kitts & Nevis	1
Costa Rica	1	Luxembourg	1	St. Lucia	1
Croatia	2	Mali	2.5	St. Vincent &	1.5
Cyprus (Greek)	1	Malta	1	Grenadines	
Czech Republic	1	Marshal Islands	1	Suriname	2
Denmark	1	Mauritius	2	Sweden	1
Dominica	1	Mexico	2.5	Switzerland	1
Dominican Republic	2	Micronesia	1	Taiwan	1.5
El Salvador*	2.5	Monaco	1.5	Trinidad & Tobago	2
Estonia	1	Mongolia	2	Ukraine	2.5
Finland	1	Namibia	2	United Kingdom	1
France	1	Netherlands	1	United States	1
Germany	1	New Zealand	1	Uruguay	1
Ghana*	1.5	Norway	1	Vanuatu	2
Greece	1.5	Palau	1		
Grenada	1.5	Panama	1.5		

Source: <http://www.freedomhouse.org>, January 20, 2009

*Due to lack of data, these countries were not included in the comparison of voter turnout to voting age population.

Appendix C. 2005 Socio-Economic Scores for Countries
with Freedom Scores of 1 to 2.5.

Country	Literacy Rate	GDP/PPP Per Capita	Country	Literacy Rate	GDP/PPP Per Capita
Andorra	100	38,800	Italy	99	30,400
Antigua & Barbuda	85.8	10,900	Jamaica	88	4,200
Argentina	97.2	13,000	Japan	99	33,600
Australia	99	37,000	Korea, South	98	24,800
Austria	98	39,000	Latvia	100	17,400
Bahamas	98.2	18,900	Lesotho	85	1,300
Barbados	97	17,400	Liechtenstein	100	25,000
Belgium	99	35,300	Lithuania	100	17,700
Belize	94	7,900	Luxembourg	100	80,500
Botswana	81.2	16,400	Mali	46	1,000
Brazil	88.6	9,700	Malta	93	53,400
Bulgaria	98.2	11,300	Marshal Islands	94	1,600
Canada	99	38,400	Mauritius	86	11,200
Cape Verde	77	3,200	Mexico	91	12,800
Chile	96	13,900	Micronesia	89	2,300
Costa Rica	94.9	10,300	Monaco	99	30,000
Croatia	99	11,600	Mongolia	99	3,200
Cyprus (Greek)	98	27,100	Namibia	84	5,200
Czech Republic	99	24,400	Netherlands	99	38,500
Denmark	100	33,400	New Zealand	99	26,400
Dominica	94	5,500	Norway	100	53,000
Dominican Republic	85	9,200	Palau	92	7,600
El Salvador	80	5,800	Panama	93	10,300
Estonia	100	21,100	Peru	87.7	7,800
Finland	100	35,300	Poland	100	16,300
France	99	33,200	Portugal	93	21,700
Germany	99	34,200	Romania	98	11,400
Ghana	75	1,400	Samoa	100	2,100
Greece	98	29,200	San Marino	96	34,100
Grenada	96	10,500	Sao Tome & Principe	84.9	1,600
Guyana	99	3,800	Senegal	40	1,700
Hungary	99	19,500	Serbia	96.4	10,400
Iceland	99	39,400	Slovakia	99.6	20,300
India	61	2,700	Slovenia	100	27,200
Indonesia	90	3,400	South Africa	86	9,800
Ireland	99	45,600	Spain	98	30,100
Israel	97	25,800			

Country	Literacy Rate	GDP/PPP Per Capita	Country	Literacy Rate	GDP/PPP Per Capita
St. Kitts & Nevis	97.8	13,900	Trinidad & Tobago	99	18,300
St. Lucia	90	10,700	Ukraine	100	6,900
St. Vincent & Grenadines	96	9,800	United Kingdom	99	35,100
Suriname	89.6	7,800	United States	99	45,800
Sweden	99	41,100	Uruguay	98	1,600
Switzerland	99	35,300	Vanuatu	74	3,900
Taiwan	96.1	30,100			

Source for *Literacy Rate* and *GDP/PPP Per Capita*: <http://www.infoplease.com/ipa/>, August 2, 2009

Appendix D. Average Turnout Results Based On Various
Institutional Variables Measured in This Study

	Number of Elections	Average Percent Turnout of Registered Voters	Number of Elections	Average Percent Turnout of Voting Age Population
Overall Average	182	69.4	168	67.4
Presidential Election	43	67.9	40	67.5
Legislative Election	139	69.8	128	67.3
Weekday	67	68.7	61	71.7
Weekend	115	69.8	107	64.9
No PR System	78	66.8	69	63.8
PR System	104	71.4	99	69.8
Registration not required	61	67.7	54	67.5
Required registration	121	70.3	114	67.3
Voting not required	141	66.8	129	66.3
Required voting	41	78.2	39	70.8
Compulsory voting no enforcement	12	70.8	12	65.6
Compulsory voting weekly enforced	16	79.0	14	73.1
Compulsory voting strongly enforced	13	83.9	13	73.0
Not a Unicameral system	149	69.9	137	67.9
Unicameral system	33	67.0	31	65.1
Freedom Rank = 1	97	70.8	91	67.6
Freedom Rank = 1.5	27	68.8	24	69.9
Freedom Rank = 2	34	71.8	31	68.3
Freedom Rank = 2.5	24	63.3	22	62.3
Monday	24	70.3	22	72.7
Tuesday	14	69.0	13	71.0
Wednesday	15	69.4	13	75.3
Thursday	9	68.8	8	72.6
Friday	5	58.1	5	58.7
Saturday	23	72.2	22	67.3
Sunday	92	69.2	85	64.2