The Effects of Voter Registration and Declining Political Party Competition on Turnout in the United States of America, 1880-1916

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Abstract

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My dissertation explains the extent to which electoral institutions and declining political party competition precipitated a steep decline in U.S. turnout after 1896 from which the nation never recovered. Turnout dropped from 83 to 66 percent in less than ten years. This is a persistent puzzle in political science because data limitations have stymied empirical assessment of existing theories. Using original datasets on nineteenth century voter registration laws and records on political gambling on presidential elections from 1880 to 1916, I test the hypothesis that the shift in electoral behavior was a function of registration reforms and declining competition. I find that registration laws and political competition modestly explain the decline. Registration reforms explain one percent of the seventeen point turnout drop, and the combined effect of registration and declining competition is approximately two to three percentage points of the drop. I also found that the effect of registration are conditional on immigration, the effect is stronger in states with higher immigrant populations. For the most part, political party competition had a positive effect on turnout in the expected direction. In states remaining competitive after 1896, the long-term average effect of competition on turnout was an increase of about 14 percentage points. To validate this argument, I use election-betting data to create a measure of the public's perception of electoral competition in the states. My findings indicate that highly informed individuals accurately predicted election outcomes, which suggests the public was aware of the electoral competitiveness of presidential elections in the states. This means that perceptions about the electoral competitiveness of races likely influenced voters' decisions to participate. My dissertation advances our empirical and theoretical understanding of the interaction between institutions and political behavior and helps to inform the current debate on the potential implications that contemporary legal reforms in election laws might have on voter participation in America.

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Chapter 1: Declining Voter Participation in America After 1896

1.1 Introduction

Voting in America is more difficult than in most established democracies. People have to register in order to vote, oftentimes at least a month ahead of the election. It is also becoming more common for states to require citizens to obtain and present government issued voter identification at the polls. Moreover, there are many kinds of elections in the United States, and each take place at different points in time and during business days. These obstacles to voting are commonly cited as reasons why voter turnout is low in the U.S. compared to turnout in most industrialized democracies. Many states and the federal government attempted to change this during the second half of the twentieth century. Passage of the Voting Rights Act of 1965 and the National Voter Registration Act of 1993 were major efforts towards making voting easier and boosting turnout in the states. But things began to change at the onset of the twenty-first century.

With the adoption of the Help America Vote Act of 2002, numerous states implemented limitations to voting in the form of voter identification requirements, reduced days and hours of registration and voting, restrictions on registration drives, and citizenship proof requirements. What is striking about the new laws is just how similar they are to the suffrage restrictions first adopted during the late nineteenth century. At that time, states established strict registration systems. For the first time requiring Americans to show up in person to register and oftentimes be able to provide proof of citizenship, identification, and ability to read and write in the English language. Registration days were few and far between, commonly during business days and regular working hours. Registering and voting was so difficult at this time, that it is a wonder anyone did it despite these obstacles. There is a vast literature in American politics that suggests low turnout in America results from the implementation of registration requirements. The changes in elections laws today bring this issue back to the forefront. Since states are now once again making it more difficult for people to register and vote, scholars hypothesize that these innovations will likely suppress the vote.

Voting is important because the electorate determines the course of public policy. Low turnout could mean that the views of a large number of Americans go unrepresented. The current changes in election laws are concerning because if voting regulations alter the composition of the electorate, then policy is likely to reflect the interests of the few. Recent studies suggest that who votes matters especially for the matter of economic inequality in the U.S. Larry Bartels (2008) argued that while increased turnout from historically underrepresented minorities is unlikely to influence the behavior of legislators, "whenever the votes of those poor people who do turnout make the difference between electing a Democratic senator or a Republican, they will clearly be enormously consequential for the course of public policy," (294). Jane E. Leighley and Jonathan Nagler (2014) explored this issue further, showing that voters and nonvoters perceive the government differently. Nonvoters are more likely to favor redistributive policies than are voters. This means that if all the nonvoters in the U.S. participated, legislators would address issues of economic inequality differently than how they currently do.

This dissertation is about the problem of low voter turnout in America, a problem that originated during the late nineteenth century. It focuses on the interaction between democratic institutions and politics just after the Gilded Age to understand why millions of voters suddenly stopped participating in presidential elections and voting rates never returned to their previous levels. Drawing on neglected documents on voter registration laws and on historical records about political gambling in presidential elections, I analyze the effects of stringent electoral institutions and political competition on voter turnout in the United States from 1880 to 1916. I do this in an effort to advance empirical and theoretical understanding of voting behavior and to show how historical processes of institutional and behavioral change shaped the development of American elections from the late nineteenth century to the present.

Strict voting laws formed part of the recent 2012 U. S. presidential election in a way that is similar to the role they played during the late nineteenth century, when states originated the registration and voter identification systems from which the current ones evolved. Reversing a decades-long national shift toward the liberalization of electoral institutions, most states are once again strengthening voting requirements in the form of new registration, photo identification, and proof of citizenship laws (Weiser and Norden 2011). After a 2008 Supreme Court decision siding with Indiana's voter identification legislation, more than half of the states placed limitations on the franchise (Stout 2008). Many are concerned that the new laws disproportionately shape the composition of the electorate by potentially suppressing turnout among marginalized groups, making the electorate unrepresentative of the population. In this manner, suffrage limitations could make politicians less accountable to the public, disconnecting policies from public preferences and thereby negatively impinging on democratic governance.

Empirical studies on the impact of current stringent electoral laws on turnout demonstrate contrasting findings. Scholars have particularly focused on the potential impact of voter identification requirements on turnout. Some studies show a statistically significant and negative relationship between these strict regulations and participation, while others find no such effect (Alvarez, Alvarez, and Katz 2007; Ansolabehere and Konisky 2006; Barreto, Nuño, and Sanchez 2007; Erikson and Minnite 2009). But research on the effects of these contemporary legal changes is necessarily limited by its focus on few spatial and temporal settings. There have only been a few presidential and congressional elections since passage of the Help America Vote Act of 2002 in which these voter identification laws have been implemented. Most studies focus on at most two presidential elections. The reason for this is that much of the legal changes have taken place in the past six years. This means that there is not enough data to test the effects of these reforms on turnout with a large enough sample to make convincing statistical inferences. Consequently, it is difficult for policy analysts to know what to expect from current reforms.

This dissertation addresses that problem through the lens of a steep turnout decline that took place in America circa 1900. The analysis is situated in a persistent puzzle in the political science literature addressing a rapid decline in voter participation after 1896, when the nation experienced several economic, political, and social changes. During the Gilded Age, national turnout rates averaged around "85 percent or more" in many states outside the South and "60 percent" in Southern states (Converse 1972, 269-270). These figures changed rapidly at the turn of the twentieth century remaining permanently low throughout the country's history in comparison to the earlier era. In the South, participation decreased to "30 percent" and in other states it dropped to the "70 percent range" (Converse 1972, 269-270). Figure 1 shows the drop in turnout for presidential elections for a sample of 27 non-southern states. This steep decline in participation happened during the short period of ten years after 1896.

This study takes a systematic approach to this puzzle. I analyze within-state variation in voter turnout in American presidential elections from 1880 to 1916 to test the hypothesis that voting rates dropped precipitously as a function of registration reforms and political competition in non-southern states. Justification for excluding the South is discussed subsequently in this chapter. Two theories attempt to explain the phenomena, one behavioral, the other institutional. The first argues that a decline in electoral competition weakened political parties and influenced a permanent drop in voter participation after 1896 (Burnham 1965, 1970, 1974, 2010). The other notes electoral reforms suppressed turnout (Converse 1972, 1974; Rusk 1970, 1974, 2001). The two views differ in the extent to which they attribute the drop to either changes in the behavior of the electorate or institutional reforms. The matter remains controversial among social scientists. Some favor one theory over the other, while many believe a synthesis of the two better accounts for the changes in political behavior (Kousser and Cox 1981; Piven and Cloward 2000).

Although methodological and data limitations stymied prior research, this study is by no means the first attempt at answering this question. Scholars contend that voter registration lowers turnout because it makes it more difficult for people to vote. While registration is easier in the twenty-first century than it was at the turn of the twentieth century, it is still a burden rarely required in most established democracies (Rosenberg and Chen 2009; Jackman 1987). It is thus no wonder that low participation rates in the

U.S. are often attributed to registration requirements (Kelly 1967; Wolfinger & Rosenstone 1980; Erikson 1980).

Most studies on the U.S. case focus on three significant drops in voter turnout over the nation's history, the rapid decline after 1896, another in the 1920s, and a persistent drop in participation after the 1960s. Scholars usually explain changes in the voting behavior of the 1920s electorate with the adoption of the nineteenth amendment, which expanded suffrage rights to women who "did not rush out to vote in huge numbers" (Keyssar 2009b, 176). The other two time periods are more puzzling. One line of research explains why voting rates in the United States consistently dropped after the 1960s, attributing about seven to ten percentage points of the changes in turnout to registration laws (Mitchell and Wlezien 1995; Rosenstone and Wolfinger 2003). But recent innovations in statistical modeling suggest these studies overestimated the effect of registration in the modern era. Ansolabehere and Konisky (2006) and Burden and Neiheisel (2009) find the actual impact of registration is approximately three to four percentage points. Other explanations for low turnout after the Second World War include partisan decline (Wattenberg 2002), and eroding social networks (Putnam 2000).

Another set of studies center on the post 1896 decline. They find that registration explains approximately one-third of the drop in participation. Industrialization, political competition, and changes in the behavior of the electorate explain the remaining two-thirds (Burnham 1974, 1988, 2010; Kleppner and Baker 1980; Carlson 1976; Kornbluh 2000). Some scholars argue the persistent problem of low turnout in America is rooted in the late nineteenth century, when the nation underwent major economic, political, and institutional changes. According to this view, economic elites gained control of electoral administration and used institutional reforms in the form of strict registration, primaries, and ballot laws to restructure the political system in an effort to preserve their private interests. These changes formed the foundation of electoral systems that constricted electoral participation over time (Piven and Cloward 2000; Burnham 1970, 1965).

The 1896 and 1960s puzzles differ because expectations about the effect of registration requirements are not the same for both time periods. After the Civil Rights era many states made it easier for people to register and vote. But the efforts failed to boost turnout at the aggregate level. The 1896 situation on the other hand, seems more directly related to registration laws. States first implemented strict voter registration systems around this time. A look at data from this time period suggests a negative correlation between registration and low turnout. To determine a causal linkage between registration, other variables, and turnout systematic analysis is needed.

Existing studies are based on a limited number of observations, making it difficult to rule out problems of internal and external validity. Moreover, much of the research on this area is on modern registration laws, which are markedly different from their nineteenth century counterparts. Contemporary legal changes, particularly the adoption of voter identification requirements, more closely mirror the late nineteenth century trends. But data limitations impede adequate statistical analysis on the effect of these institutions on turnout. To understand the general effect of strict registration laws on turnout it is necessary to study other time periods. What is needed is a study based on a larger sample of states and on historical voting laws.

1.2 Contributions of the Dissertation

This study exploits the panel structure of two original datasets, one on nineteenth century voter registration laws and the other on election betting records. The dissertation makes a statistical argument on the impact of institutional and behavioral variables on electoral participation. The project remedies some of the problems in prior research through an innovation in statistical modeling and the incorporation of new data. The key independent variables are voter registration laws and political competition. The data consists of multiple observations of institutional and behavioral variables for twenty-seven non-southern states from 1880 to 1916. In line with other studies focusing on this puzzle, I exclude the South, defined here as the eleven Confederate states because the impact of electoral reforms in that region represents a different puzzle widely addressed in a separate literature (Kousser 1974; Rusk and Stucker 1978). Registration laws in the South were associated with a variety of other laws that make it difficult to untangle the effect of registration on turnout (Kousser 1974). Also, the collapse of electoral competition in that region differs sharply from the rest of the nation.

This analysis makes three contributions to the literature. First, it presents a full dataset of voter registration laws in non-southern states for 1880-1916. These laws formed the foundation of the voter registration systems that are still in place today. In fact, voter identification requirements originated during the late nineteenth century. Collecting data on voter registration laws is a challenging task requiring archival research on laws that changed nearly every year in many states and were frequently challenged in courts (Keyssar 2009b; Heckelman 2000). This means that researchers need to examine numerous and various types of legal records to extract the relevant information and code it consistently ensuring adequate measurement of the characteristics of interest. Due to the resources needed to accomplish this task, most studies to date have been limited to a few case studies. My dissertation expands this knowledge. Using the archival collections of state session laws and other legal documents from across the country, I assembled yearly data on voter registration laws from 1878 to 1917 for twenty-seven states. No other study of voting behavior offers a rich dataset on voter registration laws for this time period.

Second, it uses data of presidential election betting to supplement the study of electoral party competition in new ways. The American public has a long tradition of betting on elections, but surprisingly little is known about this practice and its central role in nineteenth century politics. Before the existence of scientific public opinion polls the media relied on election betting to forecast contest outcomes. Indeed, there is evidence that the public incorporated betting predictions into the voting decision. People gathered to bet on elections in betting markets that sprung up in most cities across the country. The wagers captured the political opinions of the mass public and the electoral competitiveness of national and local elections. In this way, betting records aggregate a great deal of information about the political environment in America at the turn of the twentieth century.

Recent research shows that one of the important roles these betting markets played was in forecasting presidential elections at the national level (Rhode and Strumpf 2004; Erikson and Wlezien 2012). The data come in the form of betting odds on national, state, or local races typically published in newspapers in the months and weeks ahead of elections. For example, reporters might note “odds are 2 to 1” (or 67 %) that Wilson will carry Pennsylvania." These prices represent the probability that a candidate will win an election, and most forecasts usually hit the mark. This is remarkable because it happened in the era before scientific public opinion polls helped to provide information what the public thought about elections. The reason for the precision of predictions is not known, but theoretical economists argue the accuracy resulted from information aggregation (Wolfers and Zitzewitz 2004). In the historical period, the betting markets aggregated information in the form of the political opinions of all the individuals betting and on knowledge about politics the price-setters (bookmakers) acquired. But existing studies fail to analyze the relationship between elections, political gambling, and the public. Moreover, they omit information on election predictions at the state and local levels, which is crucial to understanding nineteenth century politics.

To examine party competition from the perspectives of the public, I assembled betting market data for six states for 1880 to 1916 and for all states for the elections of 1896 and 1912. These data are available in national, state, and newspapers in microfilm and electronic collections at libraries and historical societies across the country. I collected data on betting odds on presidential elections at the state level from 1880 to 1916. I also collected data for up to 41 states on candidate prices on presidential elections at the state level for the elections of 1896 and 1912. I coded this data as the probability of a Democratic candidate winning the election. For example, if betting odds were 2 to 3 on Wilson, this means the candidate had a 60 percent chance of winning the election.

This data differs from that used in previous election betting studies because it focuses on betting market predictions of presidential election outcomes at the *state* level and because I interpret it in new ways. Like a time machine, betting market data can take us back in space and time to provide a snapshot of public perceptions on elections. This enables the study of the political behavior of historical electorates at the macro level with greater precision than is possible with existing sources. The data can tell us the extent to which the public perceived the electoral competitiveness of individual states at a given point in time. For example, state-level data for New York on October 5^{th} 1896 informs us of the public's partisan and candidate preferences as well as on whether people thought the race was close in New York a month ahead of the election. This is crucial because electoral competition is considered one of the most influential factors affecting the voting decision (V.O. Key 1955; Burnham 1965). Yet we do not have this kind of information for the nineteenth century electorate. Much of what is known about historical electorates is inferred from empirical research based on contemporary voters. Betting market data instead allows us to understand political competition from the perspectives of historical voters themselves.

The third contribution this dissertation makes is in employing appropriate statistical modeling techniques for the question at hand. There are several problems with prior studies. For one, most are based on few observations which suggest problems of external and internal validity. For studies based on one or a few states, it is not clear the extent to which the results generalize to other states. Moreover, the extant research is for the most part based on cross-sectional and or time series designs (see Carlson 1976, Kornbluh 2000). But these types of models are plagued with problems of omitted variable bias, researchers cannot control for all variables influencing the dependent variable of interest (Ansolabehere and Konisky 2006). To address this problem, I employ panel methods, emphasizing fixed effects models—a statistical modeling technique commonly used with longitudinal cross-sectional data that yields better estimates on the effects of the independent variables of interest (Ansolabehere and Konisky 2006; Allison 2009). These models make it possible to control for all variables that are difficult or impossible to measure, provided that the unobserved unit characteristics do not change over time. This limitation is overcome by including measures of the time-varying characteristics in the equation. These models yield better estimates on the long-term average effect of the explanatory variables than cross-sectional designs or alternative approaches.

1.3 Overview of the Legal-Institutional and Behavioral Theories

Students of American historical elections generally agree that voter registration and ballots laws contributed to a decline in voting rates at the turn of the twentieth century. But there is disagreement about the magnitude of the effect and on whether the reduction in turnout resulted from changes in the voting behavior of the electorate, the exclusion of legitimate voters from the polls, or the success of Progressive reforms in reducing fraud. The research is broadly situated in two schools of thought, the behavioral and institutional perspectives. The political competition (or behavioral) approach contends that changes in voter participation resulted from diminished electoral competitiveness in the states after 1896 (Burnham 1965, 1970, 1974, 2010). This view is well known as Schattsneider's "System of 1896." It contends that during the late nineteenth century political competition changed across the nation. The Republican Party won most elections outside the South, where Democrats gained control of most offices. The 1896 presidential election thus marked a national realignment that persisted for the next 36 years. Institutionalists, on the other hand, argue that Progressive reforms in the form of voter registration, ballot laws, and the direct-primary account for the apparent transformation in political behavior (Rusk 1970, 1974, 2001; Converse 1972, 1974).

Interpretations on the impact of institutional or behavioral variables on turnout depend on varying assumptions about American electoral history. One school of thought argues the expansion of universal white male suffrage fueled party politics by the mid-nineteenth century leading to the "Golden Age of Parties," also known as the Third Party System (1850s to 1896) which was characterized by the militaristic mobilization of the electorate, one which was highly motivated and committed to politics. Turnout averaged above 80 percent throughout the nation. One reason for this was that parties successfully appealed to voters through the use of religion and ethnicity. The Republican Party for the most part targeted Protestant constituents while Catholics were more exclusively Democratic. Republicans represented the native white stock and blacks, while immigrants tended to identify with the Democratic Party. Enthusiastic mobilization of the electorate partially explains the high turnout rates of the Third Party System. Another reason for the nearly universal participation was that this era was also characterized by the spoils system. With universal male suffrage, patronage became the tool political machines used to control voters. In exchange for the vote and for loyalty to the party, local party organizations provided new immigrants with jobs, and sometimes with homes and food. This system helped to turn out the vote because local party organizations demanded its members to get out the vote for the party. Another school of thought on the other hand, sees the Third Party System as an era of rampant fraud, one in which local political organizations and other people in power used bribery and intimidation to control voters.

For example, the infamous Democratic political machine in New York City—Tammany Hall is well known for perpetuating fraudulent election practices in New York City.

It is important to take into account these two views of the Third Party System to understand how behaviorists and institutionalists interpret the effects of electoral reforms on turnout. For the latter group, Progressive reforms had intended and unintended consequences. Legal changes successfully curbed fraud, but also made participation more difficult for legitimate voters. Thus, for institutionalists, structural changes explain the bulk of the decline in turnout. On the flip side of the coin, behaviorists acknowledge electoral fraud was part of nineteenth century politics, but note that accounts of fraud are largely exaggerated in outdated historiographies. While institutions partly suppressed turnout, these scholars note that changes in the political behavior of the electorate better account for limited voter participation after 1896. It is unclear from either perspective the precise effect of institutions on participation. Numerous empirical studies have attempted to estimate the effect of Progressive reforms on participation, but most of the research is based on only a handful of case studies

1.4 Literature Review

Charles Merriam and Harold Gosnell were among the first to report a negative association between registration laws and turnout. In their book *Non-voting, Causes and Methods of Control*, the authors conducted a survey on a mayoral election in Chicago and found that burdensome registration deterred some people from voting. The study lent support to the idea later advanced in Joseph P. Harris' 1929 book on registration laws, that registration reform was needed to secure the vote for the legitimate electorate. Later in 1967, Stanley Kelley and colleagues revived the idea that registration laws largely shaped voting behavior. They noted that the turnout decline circa 1900 was most likely the result of the adoption of strict registration laws in the states. They argued that when states began liberalizing their laws after 1924, turnout started to increase. These early studies on the relationship between institutions and turnout laid the groundwork for the legal institutional theory later advanced by Phillip Converse (1972) and Jerrold Rusk (1972, 1974, 2001).

Another theory about political change began to develop around a decade before Kelley et al. published their paper. V.O. Key Jr. advanced his theory of critical elections (1955), in which he argued that changes in the behavior of the electorate resulted in a critical realignment after the 1896 and 1928 elections. This theory was also elaborated in E. E. Schattschneider's *The Semisovereign People*, which advanced the notion that political coalitions tend to align along salient conflicts at particular points in time. According to this view, dominant conflicts structure permanent political alignments until another conflict becomes salient. Schattschneider argued that those people with the capacity to control conflict dominated politics. He noted political parties were essential to democracy in terms of who gets what where and why because parties socialized conflict whereas business interests privatized it, which is not always in the best interest of the public.

Schattschneider applied this theory to the case of the 1896 presidential election between the Republican candidate, William Jennings Bryan, and the Democratic and Populist opponent, William McKinley. He noted two conflicts gained prominence in American politics at the time, the Populist movement and, and the resurfacing of Civil War animosities. The Bryan candidacy united the Populist element with the Democratic

Party. But this resulted in the unlikely alliance between conservative Southern Democrats and conservative Republicans in the north. By the 1890s, the Populist movement was spreading rapidly from the western states into the southern region, alarming conservatives in both parties. They responded by prioritizing another conflict—old Civil War tensions. Conservatives emerged victorious because they succeeded at bringing more people to their side. Consequently, a national party realignment took place. Outside the South, the Republican Party rose to power throughout most of the nation, becoming the dominant party in most of the country for the next three decades. Political competition thus declined across the states. This resulted in a dramatic drop in voter participation nationally. This in turn decreased the value of voting, as voters no longer had viable alternatives to choose from. Without competition to fuel politics and party organizations, the ousted party weakened. After 1896, voters stopped showing up at the polls, not because they were apathetic and lost interest in politics, but because they lacked choices in parties and candidates.

Building on Key's and Schattschneider's work on critical realignments, Walter Dean Burnham published his 1965 seminal paper, *The Changing Shape of the American Political Universe*, in which he further developed and empirically tested the theory of critical realignments. He observed that punctuated and permanent shifts in mass political coalitions happened about every thirty-six years in America. A political coalition remained dominant until it was displaced by another, which lasted for approximately the same amount of time. Burnham argued that these critical realignments explained the precipitous turnout decline of the late nineteenth century. When the Republican Party became dominant in most states in the north and the Democratic Party took control of the south, the value of voting declined. Without close elections, many voters failed to see a reason to participate given that the outcome of the election was fairly secure for one party. Burnham also noted that with this realignment voters also stopped voting for lower office elections, a phenomenon he labeled "roll-off." Likewise, participation in congressional elections also dwindled at this time (drop-off). He also observed that people started to split their tickets between candidates of several parties. This meant the realignment of 1896 caused a weakening of party loyalty among voters. Whereas in the third party system voters were committed and loyal to the parties, this attachment lessened after 1896. He suggests the reason for this was that parties ceased to mobilize the electorate as they had in the past.

With diminished electoral competition, parties were fairly certain of election outcomes, and could thus save the time and resources needed for mobilization. Weak parties in turn provide no support for local party organizations, which were crucial for motivating voters. Without party encouragement, a large segment of the electorate dropped out. Another factor influencing voting rates was that a decline in electoral closeness resulted in a decline in the value of the vote. In sum, for Burnham, voter abstention after 1896 resulted from the weakening of parties and from a related decline in the value of the vote.

Responding to Burnham's theory, Jerrold Rusk (1970) argued that many of the changes in mass behavior that Burnham observed were better accounted for by the adoption of the Australian or secret ballot in the 1890s, which curbed electoral corruption by securing privacy in the ballot box and by eliminating the former practice of having parties print their own ballots. For Rusk, this change in balloting systems explained the increase in split-ticket voting at the turn of the twentieth century. Challenging Burnham's theory of weak party allegiances after 1896, Rusk showed an increased tendency in ticket-splitting where the office-bloc ballot was in place. With the secret ballot, voters were better able to express their political preferences. They were not forced by the balloting system to choose all candidates of one party.

Converse (1972) similarly argued that in addition to the Australian ballot other structural changes such as the adoption of personal registration laws and the direct primary explained shifts in voting behavior. He noted that in the last two decades of the nineteenth century most states changed their registration systems, transitioning from "weak" systems of registration in which the burden of registration was placed on the state to more stringent registration systems that required voters to show up at designated locations to register in person during specific days. For Converse, the new registration systems lowered turnout in several ways. Registration made corruption in the form of repeat voting more difficult because voters were now identified at the polls. But registration also made voting more burdensome, since voters were required to become informed about registration locations, dates, and times, and had to travel sometimes great distances to register oftentimes during working hours. Thus, for a large segment of the electorate registration was prohibitively expensive and for others it was not worth the costs.

In addition to registration changes, Converse argued that adoption of the direct primary in the early decades of the 1900s also influenced changes in voting patterns. With the direct primary, parties no longer controlled the nomination process. Prior to this reform, parties nominated candidates and then presented voters with party ballots that allowed voters to cast a ballot for all the party's candidates. But with the direct primary, elections became more candidate-centered. This meant that candidates now had to persuade voters to cast ballots in their favor. The reform thus made parties weaker because voters could be persuaded by candidates from other parties.

The idea that institutional factors better explain changes in the behavior of the electorate after 1896 became known as the legal-insitutionalist theory. Burnham (1974) responded to Converse and Rusk's challenge with a study on the effect of registration reforms on turnout for a set of case studies. He conducted a within-state analysis for Missouri, Pennsylvania, Ohio, and New York, noting for example that after Pennsylvania passed a strict registration law in 1906 affecting mostly Philadelphia, turnout in that county actually increased probably due to the fact that a strong political machine there could circumvent the legislation. Burnham also showed that a comparison of 8 registration and 37 non-registration counties in that state revealed that turnout was 14.5 percent lower in registration counties relative to non-registration counties. He thus acknowledged that registration certainly had an effect on turnout, albeit not as strong as institutionalists contended. Burnham concluded that registration explained about one-third of the turnout drop but the other two-thirds remained unexplained. Moreover, he noted that voting participation also dropped in areas lacking registration requirements. This meant that legal changes provided only a partial explanation for the decline in participation. Burnham (1974) also noted that the Australian ballot could not successfully explain the rise in split ticket voting. He noted that in Massachusetts for example, the office bloc ballot was adopted in 1889 but the rise in split ticket voting only happened about fifteen years later, suggesting that voting patterns in stat state reflected true party attachments and were not mere functions of changes in the balloting system.

With these findings Burnham acknowledged that while institutional variables formed part of the explanation, they were intermediated independent variables that failed to explain most of the drop in voting rates. He argued that the institutional theory is better understood as a subset of his general system-changes theory.

Burnham’s argument later gained more strength when political scientists and historians developed a line of research known as the ethno-religious or ethno-cultural studies (Jensen 1971; Kleppner 1970, 1982, 1987), which provided additional support to the political competition thesis (McKormick 1986).The ethno-cultural studies posited that partisan loyalty during the historical era was rooted in ethnicity and culture. This line of research is similar to the contemporary argument prominently challenged by Fiorina (2006) that politics in America is presently intensely polarized due to cultural issues. Modern polarization is thought to result from clashes between liberals and conservatives at the mass and elite level who hold diverging opinions on issues of race, religion, and other matters. The ethno-cultural researchers of the 1970s held a comparable view of nineteenth century American politics. Their work challenged existing historiographies that argued economic factors primarily explained voting patterns (McCormick 1986). Paul Kleppner and others instead argued that parties used religious or cultural appeals to gain the support of the electorate. Religion and ethnicity were the primary factors motivating voters to cast ballots. Kleppner (1970) for example showed that for a small sample of northern states, regions within those states associated with particular religious or ethnic communities tended to vote in line with those beliefs or identities. Protestants were typically native white stock and associated with the Republican Party and Catholics were often immigrants associated with the Democratic Party. Involvement in politics also resulted from people's desires to oppose other religious or ethnic groups (McCormick 1986).

Many of these studies used quantitative methods to infer mass political behavior from aggregate data using various statistical methods, such as ecological regression. A more fruitful approach would employ individual-level data, but this is not available for the historical period. There are other problems with this line of research that Richard McCormick (1986) previously observed. The author finds that the ethno-cultural studies fail to successfully explain how religious and ethnic identities led to political affiliations. While some ethno-cultural researchers argued that parties simply labeled their policy goals with religious or ethnic symbolism, McCormick thinks that in order for such appeals to have been successful at the mass level, the religious and ethnic identities of the electorate needed to be as entrenched as the ethnocultural theorists suggest it was, but McCormick had some doubts about that. He noted that many voters were "unaffiliated with a church and thus beyond the scope of party allegiance based upon religious beliefs." Moreover, in "Protestant denominations, 60 percent or more of those belonging to the church were females, signifying that the proportion of voters who were nonmembers was higher" (53). This observation presents a significant challenge to the ethnocultural studies. If most voters lacked strong religious identities, then it is not clear that their motivation to vote was primarily driven by religion.

Recent research provides some evidence in support of the ethno-cultural thesis, however. Using individual-level data for the historical period, DeCanion (2007) finds that

Protestant voters in Illinois and Indiana during the late 1870s were more likely to vote for the Republican Party "regardless of economic factors" while the political preferences of Democrats were more strongly influenced by economic factors. Pertaining to ethnicity, he found that it was a factor influencing Protestants to oppose Democrats, but that some immigrant groups (i.e., Scandinavians) tended to vote Republican. However, in contrast to the ethnocultural perspective, the author finds that both economic and ethnocultural factors influenced party allegiances in the nineteenth century. Democrats were more inclined to base their vote on "economic dimensions."

The ethnocultural view is best understood as a subset of Burnham's theory because it builds on Burnham's proposition on the weakening of political parties after 1896. For ethnoculturalists, with diminished political competition, parties failed to mobilize voters along the dimensions of ethnicity and culture. Since these were the primary factors influencing voter turnout, when parties ceased using this symbolism to get out the vote, people stopped participating because the connection between politics and religion and ethnicity was now lacking. According to this view, the public lost interest in politics.

1.5 Statement of the Problem

The general consensus is that a synthesis of the institutional and behavioral theories presents a better explanation for the turnout drop than either proposition alone. In an empirical study about corruption in New York, Gary W. Cox and Morgan Kousser (1981) showed that both institutional and behavioral factors explained changes in voter participation at the turn of the twentieth century. But it is not clear from one case study if the findings generalize to other states. In a paper that used a larger sample of 15 states, Kleppner and Baker (1980) also showed that that competition and institutional theories were not competing theories. They found that competition explained most of the changes in participation, but rules changes explained about 40 percent of the turnout drop. Similarly, Francis Fox Piven and Richard A. Cloward (2000) argued in favor of combining both theories. In line with Burnham, the authors showed that both parties were dominated by economic elites who engineered the marginalization of voters through control of electoral processes. They argued that changes in party competition combined with legal reforms resulted in the massive decline in turnout at the turn of the twentieth century. With diminished electoral competitiveness, parties did not see it to their advantage to have an enlarged electorate, or they sought to constrict the base of opposition parties. They add that “the parties themselves were important agents of electoral constriction” (29) because large electorates are not always a benefit to parties if the parties lack information about the voters’ preferences. Parties may also want to shrink the base of opposition parties, and for this reason they usually employed changes in electoral rules. The authors particularly stress the effect of voter registration laws which “made it less likely that voters with fewer personal resources would vote” (28). A smaller electorate also makes it easier for parties to target voters. Since voter registration made it difficult for the poor to vote, the parties disengaged from this segment of the electorate. These changes were typically advanced by the Republican Party. Since working-class voters were now disproportionately underrepresented in the electorate, policies became more conservative. The key independent variable in all of this was declining competition, which led to rules changes. The authors conclude “voter turnout dropped specifically as a result of voter registration" (92). While this piece provides a rich summary of the literature, it lacks any empirical analysis of the advanced claims.

Historian Mark Kornbluh (2000) attempted to remedy that problem, providing an empirical examination of the effect of competition and electoral rules on turnout at the turn of the twentieth century. He found a strong positive correlation between competitive states and turnout and a negative correlation between turnout and electoral rules. So he too argued that both institutional and behavioral factors explained the changes in turnout decline, but advanced the idea that these variables are better understood within the broad historical context. Kornbluh argued that social changes are also part of the explanation. He noted that politics lacked the centrality it once used to in people's lives, that people expressed political opinions in new ways, primarily through participation in interests groups, and that the national government took on a more important role in politics than it once had. Thus, the enthusiasm for local and state politics dwindled. There are some limitations to Kornbluh's study, however. His work does not include any data on voter registration laws and the time-series analysis failed to control for confounding variables that could provide an explanation for the turnout drop. For instance, many of the social changes Kornbluh mentions, such as greater involvement in political organizations, changes in campaign style, and the United States' expanded role in the international arena, needed to be coded and included into his time-series regression models, but they are not.

1.6 Data and Methodological Limitations

In their review of the literature on voter turnout, Piven and Cloward lamented that "there exists no adequate political history of voter registration" (qtd. in Piven and

Cloward 2000: 292). Collecting this data is a challenging task because the laws changed nearly annually in all the states and were frequently challenged in courts. The information is also scattered in different types of state legal documents. Researchers need to familiarize themselves with how to conduct legal research and also have the opportunity to collect the data from a wide range of libraries. Despite the difficulties, numerous scholars attempted to collect this data in the past.

Harris (1929) was the first to write a well-known book on state registration systems, which included the history of these laws for a handful of case studies. Some decades later, political scientist, Richard Carlson (1976) wrote a PhD dissertation on the effect of registration laws in the early twentieth century. He summarized the histories of registration requirements in 35 non-Southern states and measured the proportion of the population affected. But for most cases the descriptions were short and brief, and lacked details about the stringency of these laws in the states. Moreover, since his focus was the 1912 to 1924 time period, details were lacking for the late decades of the nineteenth century. Kleppner and Baker (1980) similarly traced the histories of registration laws for a sample of fifteen states from 1900 to 1916, but information on the details of the laws was not published and the data are unfortunately lost (Kleppner 2009). A more recent attempt was made by historian Alexander Keyssar, whose renowned book *the Right to Vote* traces the history of electoral reforms in the U.S. since the nation's founding to the present. But Keyssar too "omits data regarding registration laws" (303). He attempted to assemble the data, ending up with a fifty-page document of registration reforms, but that data too was lost (Keyssar 2009a).

Due to this lack of a registration measure, Keyssar did not study the impact of registration on turnout (Keyssar 2009b, 303). Other scholars have similarly expressed dissatisfaction at the inability to study the effect of registration on turnout due the complexities of gathering and coding registration laws data. For instance, in a 2000 study on the impact of legal institutions on turnout, economist Jac Heckleman noted that the states "continually altered the various requirements, which unfortunately prevents consistent coding at the state level" (200).

Prior studies also failed to provide a convincing explanation of this phenomenon because the methodologies employed were inadequate for the problem at hand. Most of the existing work used cross-sectional and time series regression analysis to estimate the impact of legal reforms and competition on turnout over time. But cross-sectional models potentially suffer from the problem of omitted variable bias because these studies ignore variation in electoral laws and unit-specific unobserved characteristics that might explain changes in turnout (Ansolabehere and Konisky 2006). One exception is Burnham's (1974) within-state analysis on the effect of registration on Missouri, Ohio, New York, and Pennsylvania. But since the study is based on a handful of observations, it is unclear if the findings explain variation in turnout in other states (Converse 1974).

Subsequent studies sought to remedy this problem by providing rich datasets, but these too suffered from poor modeling techniques. One of the problems with Carlson's (1976) dissertation is that the author employed the technique of stepwise regression, which allows researchers to select from a set of independent variables only those that produce significant results before running the full regression. Stepwise regression has fallen out of favor with researchers because the technique presents numerous estimation problems, including biased R^2 values, incorrect p-values, and biased coefficients.

Like Carlson, Kleppner and Baker (1980) attempted to provide a remedy for the lack of data problem. They gathered an original dataset of personal registration laws for 15 non-southern states for 1900-1916 and conducted a series of statistical tests to determine the effect of these regulations on participation. Their findings showed that registration laws accounted for about 43.4 percent of the turnout decline on presidential elections from 1900 to 1916. These findings are based on a statistical technique known as the "decomposition procedure," which was previously developed by Walter Dean Burnham (1974). This technique allowed the authors to estimate the effect of registration on turnout.[1] The technique does not consider the potential effects of other variables; it focuses only on the relationship between those two variables. But since Philip Converse and Jerrold Rusk "ha[d] already rejected the explicit assumption of [the] decomposition procedure", Kleppner and Baker also conducted a multivariate regression analysis.[2] In a

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[1] To estimate the impact of personal registration on turnout, Kleppner and Baker (1980) used two different statistcal methodologies. One was called the "decomposition procedure," (210-211) and the other was multivariate regression analysis. For the decomposition procedure, the authors describe the method as follows: "(1) Fit a regression line to the 1900-1916 turnout measures for each category of registration coverage and for the counties that had no personal registration. (2) Calculate for the nonregistration counties 1916 $\hat{Y}$ as a proportion of 1900 $\hat{Y}$. (3) Multiply this proportion by the 1900 $\hat{Y}$ for each category of registration coverage to derive an "expected 1916 turnout value. (4) For each category of registration coverage, calculate the difference between this "expected 1916 turnout value and the regression-line 1916 $\hat{Y}$. This value—symbolized as "E" – "O"—represents the difference between the turnout level (the "E" value) predicted for the category from taking into account the behavioral factors operating in the nonregistration areas and the turnout level (the "O" value) predicted for it from its own linear trend. (5) For each category of registration coverage and for the nonregistration counties, calculate the absolute loss on the regression line, ($\hat{Y}$ 1900- $\hat{Y}$ 1916). (6) Divide the "E" – "O" by ($\hat{Y}$ 1900- $\hat{Y}$ 1916), and multiply that quotient by 100 to convert it to a percentage." This method only considered the impact of registration on turnout without taking into account other variables.

[2] The decomposition procedure rested on the assumption that registration laws did not have an effect in areas where the laws were not in place. Converse (1970) and Rusk (1974) disagreed with this idea, contending that laws could have had an indirect effect on turnout in areas where they were not in place if

cross-sectional time-series regression analyses, they found that registration explained from 1.7 percent to 9 percent of the variance. The authors thus argued that most of the decline must therefore be explained by behavioral factors. One reason to be skeptical about these results is that the study too suffers from omitted variable bias because the authors do not control for unobservable factors that could influence the dependent variable. The authors failed to control for unobserved variables that may have had an impact on turnout. Another problem with the work was that the authors used the stepwise regression technique in the regression analysis. My dissertation proposes to remedy these issues by employing new methods and data to examine the impact of electoral rules and political competition on turnout.

1.7 Significance of the Study

For an advanced democracy, the U.S. has one of the world's poorest records of voter participation. Scholars commonly attribute the problem to the voluntary system of registration in the United States where, in contrast to most established democracies, the costs of registration rest with the individual rather than the state (Rosenberg and Chen 2009; Hershey 2009). But Wattenberg (2002) notes that countries with similar registration systems experience higher turnout than the United States. Others argue that relaxing or eliminating registration requirements fails to produce the desired results (Hanmer 2009). For instance, voting rates dwindled for decades after the 1960s even when many states eased registration procedures. While turnout increased slightly in the early twenty-first century, it remained the case that only a bit over half of the eligible

people changed their behavior (i.e., did not commit electoral fraud) out of fear that the laws could be established in their areas.

electorate participated. This pattern is also emerging in many countries across the world, where turnout started declining in established democracies during the later decades of the twentieth century (Wattenberg 2002).

The reasons for the turnout problem remain unclear. Structural and behavioral factors are among the most common explanations. But the problem persists in the political science literature because it is not always possible to measure the key independent variables of interest and untangling the effects of these variables with precision can prove challenging. Scholars typically remedy this with “longitudinal and quasi-experimental” analyses (Hershey 2009, 87). This is one reason why the United States is among the most studied cases. Changes in voting behavior for over a hundred years allows for adequate hypothesis testing.

This dissertation addresses this gap in the knowledge. My study explores the effects of political behavior and institutions on turnout to understand the consequences of institutional reforms on American political development and on democratic governance at large. Increasing understanding of this subject is important because electoral participation is essential for successful democratic governance. This project makes a contribution to the voting behavior literature and nineteenth century electoral history. The data and methodological contributions enable future research on the subject and increase the external validity of research findings. The information is thus useful for academics and policy analysts. It also helps to inform the current debate on the impact of voter identification laws on turnout.

1.8 Theoretical Framework

This work is grounded on a rational choice perspective of political behavior. The reason for this is because by making voting more difficult, stringent election laws increase the costs of voting. These laws are thus likely to influence the behavior of those individuals affected by them. From a rational choice perspective, this means that voters are likely to take into account these increased costs when making the decision to turn out and vote. In *An Economic Theory of Democracy*, Anthony Downs' (1957) argued that political actors adopt strategies and structure the political environment in such a way as to maximize their goals. Uncertainty or incomplete information played an important role in the behavior of parties, politicians, and voters. With a spatial model of a two-party system along a left-right ideological spectrum, Downs showed that competition for the median voter would influence the two parties to converge at the center. In this scenario, parties are unaware of the position of the median voter. They thus move closer to the center in an effort to gain as much voters as possible. Thus, both parties would appear similar to voters. In an effort at differentiation, parties would employ ideology, and politicians or others would use persuasion to sway voters to either side. In this setting, parties are vague and ideologies are mechanisms used to maximize the parties' chances of winning an election. For Downs, there are different types of voters, the informed and uninformed. Informed voters participate in elections to maximize the benefits obtained from government; uninformed voters on the other hand use ideology to inform the voting decision because it minimizes information costs (113). Others abstain from voting because the costs outweigh the returns of participation. This is modeled as $R = PB - C + D$, where R is the expected reward from voting. P is the probability that an individual's vote decides the election, *B* is the benefit obtained when the preferred side wins, and *C* represents the costs of voting, such as information gathering and transportation. *D* represents the intrinsic reward from voting (Riker and Ordeshook 1968). Several implications follow from Down's model. The first is that voting is a function of the costs of participation, when voting systems present an encumbrance to voters, more individuals abstain from the polls. The model also suggests that election closeness increases the benefits of voting relative to the costs, because in competitive elections voters have a reasonable expectation that the returns of voting will be in line with their investment. Parties also have an incentive to mobilize voters. Thus, a competitive system should experience higher turnout. On the other hand, when costs outweigh the benefits, it would be irrational for citizens to vote since their impact on the election outcome is minimal.

1.9 Limitations of the Study

As is true in any large scale project, there are some limitations in the current study. The first relates to the statistical methodology employed. One of the advantages of fixed effects models is that researchers can control for all time-invariant variables whether observed or unobserved that may have an effect on the dependent variables. But this is not without costs. This means for example, that some characteristics about states are assumed to remain constant over time, which may not always be the case. In studies about individuals this could mean that the personality of an individual is thought to remain the same as the person ages. While this is a minor drawback in this study, the benefits outweigh the costs. Without controlling for unobserved variables, the possibility of obtaining biased estimates is higher. While it is possible that confounding factors influence the dependent variable, I remedy this to the best extent possible by including the relevant control variables into the equation.

Another limitation of the study is the great variance in voter registration laws and abundance of information for the states during the time period of interest. In order to consistently code the information, I focused on only some aspects of registration laws common across the states to measure the categories of interest, which were the most stringent aspects of the laws and the categories commonly identified in the literature as strongly correlated with low turnout. But this comes at the cost of omitting information possibly relevant to a specific state at some point in time. Another limitation is that I do not have data on how these laws were enforced in practice. It is possible that these laws were not enforced as written. With data on enforcement, it would be possible to better code this laws and to quantitatively calculate their potential effects on turnout. I expect to consider additional characteristics of voter registration laws in future studies, but for the purposes of this dissertation the categories selected are the most relevant to test the hypothesis specified.

Last, one of the innovations of the study is the use of betting records to indirectly study one aspect of public opinion for historical electorates, but this too is not without limitations. Election market data for presidential elections at the state level was collected for a handful of states for the time period of interest, and for all states for two presidential elections. But ideally, the data would be available for at least a full sample of the twenty-seven states studied. In future research, I expect to accomplish this task but resource limitations narrowed the number of states for which I could collect the information.

1.10 Definitions

Some definitions are in order. *Voter turnout* is here understood as “the ratio V/E, where V is the total vote cast in the presidential race in a given election year in a state, and E is the number of people eligible by law to vote in that state according to the criteria of citizenship, race, sex, and age laws on suffrage” (Rusk 2001). *Political Party Competition* refers to the degree of competition between two or more parties. Competitive elections are a sign of a healthy democracy because parties are motivated to propose policy platforms in the interests of the electorate. Closeness encourages elites to mobilize the electorate, and this in turn promotes higher turnout. This concept is usually measured on some kind of scale that captures the level of competitiveness in political contests. In this dissertation, I create an index of political competition based on election results between the two leading parties that measures competitiveness on a scale from 0 to 1, with higher values indicating increased competition. I also employ Rusk’s (2001) measure of political competition—a composite index capturing electoral closeness in the states for various types of political races including, presidential, congressional, and gubernatorial elections. It measures competitiveness on a scale from 0 to 100, where 100 indicates perfect competition.

In this dissertation, I use the terms *Australian Ballot* and *Secret Ballot* interchangeably. These terms pertain to election laws that required states to print official ballots. This is in contrast to the practice that formerly prevailed in the United States, which allowed parties to print their own ballots.

The definition of voter registration laws is self-evident, but some clarification is needed for the terms *personal registration systems* and *nonpersonal registration systems*.

The first refers to a system in which the law requires individuals to go to a specific location and appear in person to register during specific set hours commonly published in newspapers some weeks or days in advance of registration. A *nonpersonal registration system* on the other hand means that people did not have to present themselves in person at any location in order for their names to appear in registration rolls. In some cases, particularly in small towns, registration officers entered the names of all eligible individuals into voter registration lists. The names were either known to them personally or extracted from previous election records. In other instances, states used poll tax lists to register voters. There are other systems of registration considered *nonpersonal* in this study; those include cases when the state conducted house-to-house canvasses to register voters. The definition of *nonpersonal registration* captures the idea that the costs of registration are placed on the state rather than on individuals.

Other terms in need of clarification concern election betting. *Election Betting or information markets* are terms here used interchangeably referring to informal organizations of individuals wagering on election outcomes at the national, state, and local levels. *Bookmakers* are individuals who collect bets made in the form of money or other property from participants, keeping records of bets made "by the middle of the nineteenth century, the idea of a betting "book" was commonplace. From there, it was a quick step to refer to the man who maintained the book as a "bookmaker," […] further shortened to "bookie" by 1885" (Schwartz 2006, 175). *Betting odds* or *candidate prices* are similarly identical terms, these refer to the probabilities announced by bookmakers of the chances for particular candidates. Some bookmakers were well known across the country for their election predictions, but they were not highly regarded. Progressive newspapers tended to condemn their actions, and gambling was one of the grievances the temperance movement sought to curtail. While political gambling was illegal across the states, the practice was not considered corrupt in the late nineteenth century, this changed at the start of the twentieth century. A definition of the term *corruption* is thus in order. I adopt a broad definition of electoral corruption to include fraud on the part of voters, political machines, and election officials. In this way, corruption could mean voter-impersonation, repeat voting on the same election, vote-buying, vote miscounting, voter intimidation, and election officials behaving contrary to the rules governing their position in an effort to advance private interests.

1.11 Conclusion

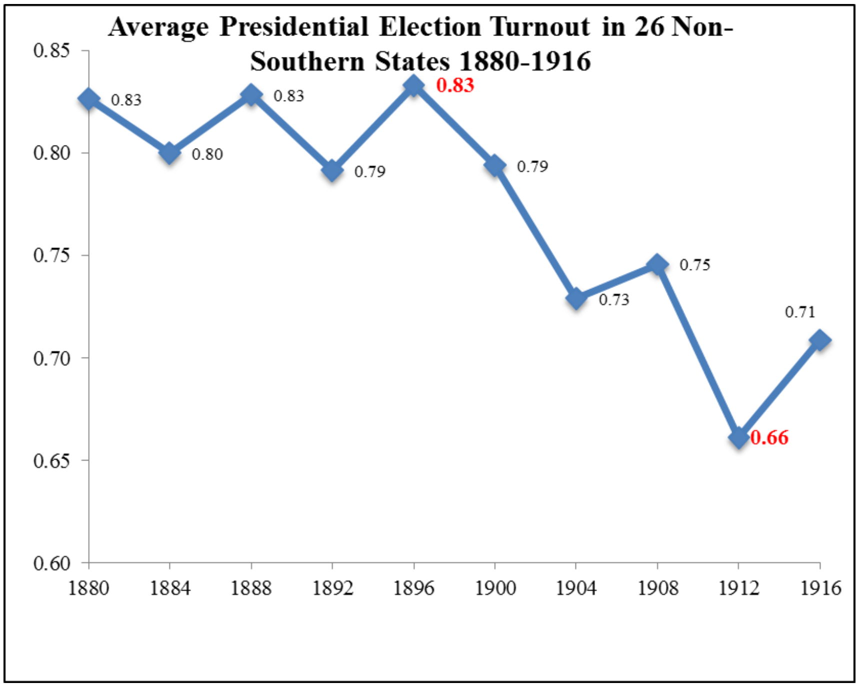
The aim of this study is to uncover the extent to which stringent voter registration laws and political competition determine voter participation. The central questions this project answers include, what is the true effect of voter registration on turnout when other variables are held constant? What is the effect of political competition on turnout for the historical period? Did the public know if races were close in their state during the months and weeks prior to elections? To what extent did the public incorporate information from election betting markets into the voting decision? Did perceived political competition influence turnout?

In chapter two, I discuss the data and methodology employed. The chapter goes into detail about the data collection method and how variables were coded. Chapter three traces the history of the transition to strict registration systems that took place in the American states during the late nineteenth century. For a sample of twenty-seven states, I note the details of registration laws for every year after 1880, focusing on the breadth of coverage, the number of days registration was open, and other regulations that became part of registration laws over time, including voter identification laws, property requirements, proof of citizenship statutes, and English fluency tests. In contrast to much of the conventional wisdom on this topic, my preliminary findings do not show evidence that capitalist interests in both parties pursued passage of restrictive measures, but rather that there was bipartisan support for these laws, and that passage of the laws was influenced by anti-immigration and post-Civil War tensions during the late nineteenth century.

In chapter four, I present the results and interpretation from the statistical analysis on the impact of voter registration and political party competition on turnout. The next chapter delves more deeply into the concept of political competition. Chapter five focuses on an examination on the effect of *perceived* political competition on turnout. This chapter first discusses the literature on political competition and explains why a new measure of competition is needed. I then turn to a review of the literature on political betting markets. Next, I provide an overview of the role of betting markets in the American states at the turn of the twentieth century. I then describe the data collection process and coding of betting odds. I then examine the accuracy of betting markets forecasts on the presidential race at the state level by comparing candidate prices with the Democratic percent of the 2-party vote for the 1896 presidential election. Last, I examine the effect of competition on turnout from 1880 to 1916 for a sample of six states.

Last, the concluding chapter places the findings within the context of the voting behavior literature and assesses the extent to which the findings advance knowledge of electoral behavior in America. It also discusses the implications of this study within the context of current changes in elections laws in the U.S. The chapter also lays the groundwork for further research.

Figure 1.1 Average Presidential Election Turnout in 26 Non-Southern States 1880-1916



Chapter 2: Research Design

2.1 Introduction

In this chapter, I describe the research methodology, data collection and coding processes employed in this study. The objective of this dissertation is to explain variation in turnout over time within the American states at the turn of the twentieth century. I analyze why voting rates dropped rapidly from an average of 83 to 66 percentage points after 1896 in non-southern states. Some of the contributions include an original data set of voter registration laws and another on betting odds in American presidential elections. I assess the extent to which existing theories explain a sudden change in the voting behavior of the American electorate during the dawn of the Progressive era.

2.2 Dissertation Research Approach

Using a quantitative research design, I test the central hypothesis that voter turnout from 1880 to 1916 is a function of voter registration laws and declining political party competition. The analysis is divided into two parts. In the first, I focus on the potential effect of changes in registration laws and electoral competition on voting rates. The bulk of this research is discussed at length in chapters three and four. I first provided a detailed summary of the adoption of personal registration systems in the American states during the later decades of the nineteenth century (chapter three), and follow this with an empirical analysis of the potential effects that changes in registration laws and in political competition had on turnout (chapter four).

The second part of the study delves more closely into the concept of political competition (chapter five). Using records from the little-known history of political gambling on presidential elections in the United States during the late nineteenth and early twentieth centuries, I fashioned an innovative way to measure electoral competition that captures public perceptions on election outcomes and electoral closeness during the months and weeks prior to the election results. For studies focusing on the relationship between competition and turnout, it is competition prior to the election that theoretically matters most for turnout. Electoral closeness incentivizes parties to mobilize voters, campaigns target competitive states, and individual voters are more likely to participate since the value of their vote is higher in such elections. Chapter five of this dissertation details this research along with the data collection process for that subject.

2.3 Prior Efforts at Data Collection on Historical Voter Registration Laws

The American states have a long history of experimenting with complex and dynamic systems of voter registration. Whereas things were not too complicated in the early decades of the 1800s, this changed rapidly when many states adopted various forms of voter registration requirements as the century came to a close. These laws varied greatly between and within states and over time, changing approximately every year in most states. The variation in registration systems across and within states makes the data collection process costly and laborious. Researchers have to first gain access to the data, which can be difficult because historical data of this type is typically archived in different locations (sometimes different states). After obtaining the documents, researchers have to sort through thousands of pages of various types of legal documents to extract the relevant information. Since it is necessary to do this for every single year and for every state, the data collection process can prove prohibitively costly, as has been the case in the past.

2.4 Data Collection Process

One of the central contributions of this dissertation is a data set of yearly voter registration laws for a sample of 26 non-southern states in the union from 1880 to 1916.[3] Documenting the history of each state's voter registration system and determining the breadth of coverage of registration laws involved extensive archival research and the added step of determining the population covered by these laws by using a combination of registration legislation records with Census data of Minor Civil Divisions (MCD) to measure annually the proportion of each state's eligible voters required to register. This approach to data collection and coding resulted in the first dataset of late nineteenth century voter registration laws for a large sample of states. The data enabled systematic analysis on the relationship between voter registration laws and electoral participation.

To collect the data, I employed the following legal research methodology.[4] I first consulted legal reference books to identify the type of legal records in which each state published these laws. This was a necessary step because many states printed registration laws in a variety of publications.[5] I identified the two most original sources containing

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[3] I collected data on registration laws for 27 states, but I had to exclude the state of Rhode Island from the quantitative analysis because registration laws in that state applied to people of different incomes in various ways. Property owners were exempt from personal registration, while others had to register in person. Since there was no data available on the number of people who were property owners in Rhode Island for the time period in question, it was not possible to include the state in the statistical analysis.

[4] For the states of California, Illinois, Missouri, New Jersey, New York, and Pennsylvania, I used some of the data from Harris (1929), Burnham (1974), and Keyssar (2009). But for most of these states, I supplemented the information using legislative records and Census data.

[5] I did this after consulting numerous secondary and primary sources, including almanacs, and newspapers. Even though historical almanacs such as *the World Almanac*, sometimes contained tables identifying the registration laws in each state, I found this data was largely unreliable after comparing it with original legal sources.

this information, namely the session laws of each state and the corresponding compiled, annotated, and or revised statutes.

Session laws contain details of every law a state legislature passed on a specific year. In most cases, these records exist for every two years because assemblies typically met biennially.[6] The information available in session law documents includes detailed descriptions of the laws, which could include legislative intent, expectations about enforcement and sometimes the specific dates when laws took effect. But in contrast to say, the *Congressional Record*, session law documents do not include records on the different stages of the law adoption process or legislative debates.

Another less detailed but nonetheless rich source of information was the states' statutory compilations. Compiled, annotated, and or revised statutes are documents that assemble the amendments and other changes made to laws over a year or more commonly for a set of years (Armstrong 2009). For example, the *Compiled Statutes of the State of Nebraska 1881* (published in 1887) contained all amendments made to that state's laws in 1882, 1883, 1885, and 1887. The information for the latter year would often include the details of a law for each preceding year it was amended. Each type of document does not necessarily exist or is available for all states and years, so I consulted them when available. Annotated statutes are similar to compiled statutes, but might contain additional information on legal interpretations of the laws, including clarifications of the manner in which laws should be enforced along with summaries of court cases associated with a particular piece of legislation. For example, in *Mills'*

[6] There are some exceptions to this, sometimes legislatures met annually. For cases when legislatures met annually, I used all years of session laws available.

Annotated Statutes of the State of Colorado 1892, a footnote to section no. 1687 of the 1891 registration law provides clarification to a law which stated "no vote received unless name registered" but the annotated statutes list the court case, *Kuykendall v. Harke*r, which noted that the "votes of unregistered voters, received without objection and without oath, presumed legal" (Colorado Statutes Annotated 1891, 1088). This information is insightful in terms of determining the extent to which states enforced registration laws in practice.

For most states, I first researched registration laws in the statutory compilations to identify the law in place in 1916 and worked backwards to 1878 to pinpoint the law in place in 1880.[7] Next, since compiled statutes lack much of the specific details of each law for every year, it was necessary to supplement the information from the statutes with information from the session laws (Armstrong 2009). Using each state's session law documents, I traced the changes in state voter registration laws for each state, for every single year from 1878 to 1916. This methodology ensured I had the most complete amount of information possible.

But because there is a great amount of information in states' session laws, I focused only on some aspects of the registration laws, including whether states had personal, non-personal or mixed registration systems, the total state population covered by registration laws, how many days registration was open and for how many hours, and in some cases whether there were additional prerequisites for registration such as registry taxes, literacy or English proficiency requirements. I focused on these characteristics of

[7] For some states I started my research using the session laws.

registration laws because the literature identifies these constraints as those most often associated with turnout.

Another aspect of registration frequently addressed in the literature is the extent to which registration is periodic or permanent. Periodic registration meant people registered every one, two, or four years. If on the other hand, registration is permanent then no re-registration is required. I decided not to focus on this characteristic of the law for several reasons. First, as Springer (2006), Carlson (1976) and Harris (1929) note, the adoption permanent registration in the states began to take shape by the 1920s. Before that, most states had periodic registration systems, in which people usually had to register annually. In some cases registration for general elections was not valid for municipal elections, so people had to register not only annually but for each type of election. While some states had some forms of permanent registration system before the 1920s, many states purged registration records annually, meaning people had to re-register whether or not the law required it (Carlson 1976; Paul Kleppner and Baker 1980). Carlson (1976) thus notes that essentially all systems were periodic. Carlson (1976) and Kleppner and Baker (1980) examined the differences between periodic and permanent registration and found no differences between the two for the late nineteenth and early twentieth centuries. For these reasons, I do not focus on the distinction between periodic and permanent registration. In this study, I assume that registration was periodic for the states and time period under consideration.

2.5 Measuring the Proportion of the Population Required to Register

Calculating the total annual state populations required to register is a laborious task not only because registration laws did not apply uniformly to state populations, but also because each state used varying legal definitions to identify the number of registration eligible individuals. In most cases, states limited personal registration requirements to cities, excluding rural areas, which instead had either non-personal or no registration systems. But legislators rarely named the urban areas that would come under personal registration requirements. Instead, they typically used city classification definitions. This means they referred to affected areas as cities of the first, second, third class and so on. Such classifications designate areas of specific population sizes with unique definitions for each state. For example, it may be that a city of the first class had over 200,000 residents in one state, whereas the same category (i.e., city of the first class) could have over 100,000 in another. The classifications were also bound to change every decade in accordance to new censuses (state legislators made such changes to the classification laws).

Another complication in measuring the proportion of the affected population was that it was not always the case legislators used city classification schemes to refer to population sizes. Sometimes they noted actual numbers to specify affected populations, or named the specific cities or localities covered by the regulation. Yet, other times they used different procedures to determine which segments of a state fell under personal registration laws. One such method involved multiplying the Census population by five and determining that all locations exceeding a specific population limit would come under registration. But in most cases, legislators used the current census to identify the locations that would come under registration, and they specified that only those cities or localities having such population sizes in the Census year were to be affected by the law. This meant for example, that if registration applied only to large cities, and the population of a non-affected area drastically increased within a few years, it would not come under registration laws.

These characteristics of registration laws make it difficult to identify with precision the total populations covered. The approach used here is admittedly rough, but it is a systematic and conservative way of calculating the breadth of coverage of these laws in the states. I focused on personal registration requirements because it was the major change in voter registration that took place during the late nineteenth century, and it is one of the most stringent aspects of registration laws. It is also possible to measure this change. To create an estimate that approximated the total population required to register in person for each state and every presidential election, I employed the following methodology. Using voter registration legislation records, I extracted information on which type of cities (i.e., first class, second class) had personal registration requirements. Next, I used a number of primary[8]and secondary sources to find the city classification definitions for the various states, and then used those definitions to identify the cities covered by the law (True 1885; Woodward 1895; Frye 1897; Louis 1906; The Encyclopedia Britannica 1911; Dillon 1911). With the definitions, I was able to determine the size of the populations covered by personal registration laws for every state and year. Next, I identified all cities, towns, and or counties within a state that came under registration requirements using data from the Census by Minor Civil Divisions, which includes population data at the city, town, and county levels. I then summed up the total registration eligible population. I then divided that population by the total state population. This gave me a proportion of the total population affected by registration

[8] Sometimes these documents included session laws or statutory compilations.

laws. An example can help illustrate this methodology. In 1892, Nebraska had personal registration in cities with populations over 2,500. I turned to the Census to identify all such cities and the corresponding counties. I summed the total population required to register in the state and divided that number by the total state population to obtain the proportion of the registration population. I used linear interpolation to calculate the registration eligible poulation for the in between Census years.[9] This procedure yielded a rough but conservative estimate of the proportion of the statewide population affected by registration laws. When in doubt, I underestimated rather than overestimated the total number of people covered by personal registration requirements.

2.6 Unit of Analysis

The unit of analysis in this study is the state. Most of the changes discussed in this project happened at the state level. While application of the laws varied within states and over time in some cases, this is not true for all cases in the sample. Moreover, focusing on the state makes the analysis more feasible because most of the data was wholly and readily available at the state-level whereas it was only partially available for subnational units. For instance, data on personal registration systems might exist at the county level for most states, but the same is not true for data on the direct primary. Additionally, for some variables it is necessary to collect data at the state-level prior to doing the same for other units within states. While some prior studies focused on the county as the unit of analysis, these works were based on a handful of case studies (Burnham 1974), which

[9] Initially, I attempted to measure the total voting age population that was required to register by summing the total voting age population in cities required to register and dividing that number by the total state voting age population. But this is a more complicated procedure than the one I employed here and it yields no better estimates. I compared an contrasted estimates using both methods and noticed that the proportions of the affected populations did not differ significantly.

tends to facilitate the data collection and coding process. Prior studies also focused on a different time period for which the data were more readily available (i.e., Carlson 1976). One of the limitations of focusing on the state level as the unit analysis is that it is not possible to make inferences on the effects of the explanatory variables on turnout for smaller units. But since research resources are limited, it makes more sense to focus on collecting the data at the state level and then to explore the question focusing on other units of analysis in future research.

2.7 Method

To exploit the longitudinal structure of the data, I employ panel methods on a sample of 26 non-Southern states[10] in the Union as of 1880. The time period of interest is 1880 to 1916 for purposes of comparing changes in turnout from the high rates of the 1880s to the drop after 1896. For each state, I have ten observations (turnout in presidential elections from 1880 to 1916), measures of electoral reforms, political competition, demographics, and state identification and year variables. Panel data helps to limit the problem of omitted variable bias because information is included for units on both temporal and spatial dimensions (Hsiao 2003, 5). Increasing the amount of information makes statistical inferences more likely to approximate the actual values of the parameters estimated. This also facilitates the comparison of the potential before and after effects of explanatory variables on a dependent variable (Pindyck and Rubinfeld 1998, 250). In this study, I primarily use fixed effects models. In chapter four, I will go into detail about why these models are the most appropriate to use with my data.

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[10] While the original sample includes 27 states, I excluded Rhode Island from the statistical analysis because it was not possible to code the personal registration population there due to unique property requirements in the law that determined who was affected by the registration laws.

2.8 Conclusion

This dissertation tackles an age old question in the discipline that is increasingly relevant to contemporary politics. Drawing on new data and methods, this study intends to ensure a high level of internal and external validity. This is accomplished through the data collection process, through the design of variables that closely measure the intended concepts or characteristics, and through the use of a statistical model that corrects many of the shortcomings of prior efforts at answering this question.

The data on historical voter registration laws is a significant contribution to the literature, not only because it provides a detailed history of these laws for a large sample of states, but because the coding and merging of the data with Census information allow for systematic quantitative analysis on the impact of registration reforms on turnout for a large sample of states. This is something scholars in the past had hoped to be able to do, but it was not feasible at the time (Burnham 1974; Heckelman 2000, Keyssar 2009). This empirical assessment of existing theories of voting behavior is meant to advance theoretical understanding and push the developments of new theories forward. While the results shed light on the voting behavior of the historical American electorate, the study also increases understanding on the impact of rules and politics on electoral participation more generally. The project is especially relevant to our understanding of American politics today, in which legislators are passing restrictive voting laws very similar to those of the late nineteenth century. By studying the potential effects of these rules changes on turnout and on American democracy overall, this project helps to inform what could be expected from the current efforts.

Chapter 3: Development of Personal Registration Systems in America

States began implementing voter registration laws during the early nineteenth century. Prior to this, registration was not necessary because only a limited segment of the population could exercise the franchise. Things changed by mid-century, the gradual expansion of universal male suffrage fueled party politics and contributed to the growth of political machines. Using patronage and corruption to secure the vote for party favorites, local and state party organizations seemed to dominate electoral politics (Bensel 2004).

Responding to these changes in politics, most states adopted restrictive voting laws. In establishing registration systems, state legislators argued against fraudulent practices plaguing electoral administration. These included "repeating" (voting more than once), impersonating, and floating (the transportation of groups of men from precinct to precinct to vote). Proponents of stringent voting regulations also noted that increased urbanization and immigration facilitated corrupt practices because anonymity made it difficult for election officials to determine voter eligibility.

Since the Constitution grants states control over electoral administration, registration systems evolved in accordance to each state's election laws. New England pioneered the effort and other states followed suit. Few states had registration laws before 1860 (Harris 1930), but by the 1880s most states had established some form of voter registration (Argersinger 1992). While there was some variation in registration laws across the states earlier in the century, most of these first registration systems were fairly similar. Election officials made lists of voters known to them personally. In some cases lists were assembled from poll lists of voters from previous elections, or in the instance where poll taxes were prerequisites for voting, election officials used records of tax lists to register voters. This form of registration prevailed in most states up until the mid-1880s.

But as the century came to a close, states moved in the direction of adopting tougher voting regulations. The early registration systems were "weak" and proved inefficient at preventing fraud largely because political machines easily circumvented the voting limitations (Harris 1930; Converse 1972; Argersinger 1992). For example, instead of relying on numerous "repeaters" and "floaters" to stuff ballot boxes, machine politicians needed only to employ the assistance of election officials to enter fictitious names in registration lists and to cast ballots in the name of legitimate voters who had failed to show up at the polls. With such practices prevailing in the electoral environment, "intellectuals, journalists, ministers, and other professionals" (Converse 1972, 297) called for the elimination of electoral fraud through tougher registration requirements. Among the new proposals advanced in several states were the adoption of personal registration, the administration of oaths at registration, registry taxes, tough penalties for fraud, and limited days and hours for registration.

This dissertation focuses on this transition from the "weak" registration models to the more stringent personal registration systems of the late nineteenth and early twentieth centuries. The following discussion traces the evolution of these laws in non-southern states in an effort to show the great variation in registration systems within and between states over time and to untangle some of the causal factors that might have influenced passage of these laws.

3.1 Characteristics of Personal Registration Systems

There were common elements in personal registration systems across the states. Typically, registry boards used newspapers to inform voters about specific registration locations, and the days and hours a board of registration or other government agents would accept applications. For the most part, states had two types of registration models. The first was uniform registration, which meant the law applied equally to all citizens of the state. Some states like California, Maine, and Michigan had uniform personal registration laws throughout most of the late nineteenth and early twentieth centuries, but in most cases, personal registration laws applied only to highly populated cities. Such states had mixed-registration systems, which meant registration regulations varied within a state, with most states limiting personal registration to large cities (Carlson 1976). State legislators gradually increased coverage of the laws in each state, but most states are best characterized as having mixed registration systems (Carlson 1976). That means the rural parts of a state typically had no registration or nonpersonal registration systems, while the more populated parts were covered by personal registration laws (Burnham 1974; Carlson 1976; Kleppner 1980). This practice persisted well into the mid-twentieth century (Carlson 1976; Ansolabehere and Konisky 2006).

It was not uncommon for registration laws to surface in areas with large immigrant populations. This may explain why the new regulations were increasingly associated with proof of naturalization papers. In Nebraska, for example, where the proportion of the immigrant population was comparable to that of other states at 28 percent on average during this time period, the foreign-born had to state whether or not they were naturalized and then provide proper documentation (Consolidated Statutes of the State of Nebraska 1891, 377). Similarly in Nevada, which had a smaller immigrant population of 17 percent on average, immigrants brought their naturalization papers before the board of registry. But there the law was more relaxed than in other states, allowing immigrants to answer questions to confirm citizenship status. Registry agents could ask for example: "In what year did you come to the United States? Second—In what state, county, court, and year did you declare your intention to become a citizen? Third—In what state, county, court, and year were you finally admitted to citizenship? Fourth—Where did you last see your certificate of naturalization?" The swearing of an affidavit would then permit undocumented immigrants to vote (The Compiled Laws of Nevada 1861 to 1900).

While proof of citizenship requirements were common across the states, that is where similarities ended. Registration laws varied considerably throughout the nation. For example, in 1890s California registration opened for at most 90 days one hundred days before an election, while in Iowa it opened only for two days on the second two Tuesdays before an election. Yet in Kansas, it was open almost all year, closing ten days prior to an election. Hours of operation also varied greatly across states, with some states allowing people to register after regular business hours. For example, after 1892, Kentucky had registration hours from 6 a.m. to 9 p.m., whereas in Connecticut registration closed at 5 p.m.

3.2 Differences in the Manner of Registration across the States

3.2.1 Personal and Nonpersonal Registration

The manner of registration varied greatly both across and within states. In most cases, when personal registration systems were implemented people went to specific locations to register personally. But the burden of registration was not always placed on individuals. Colorado, West Virginia, and Massachusetts developed registration systems similar to those of most modern democracies, where the task of registering people falls on the state. From 1891 to 1910 Colorado law called on state agents to conduct a house-to-house canvass to register people in cities with populations exceeding 15,000 inhabitants. The Board of Registration then deposited the registry with the county clerk, announcing this in newspapers for four weeks. This gave people 90 days after this notice to register in person if they discovered their name was omitted from the list. In 1905, state legislators extended the law to cities over 5,000 inhabitants. People could register in person if they were not canvassed on the thirtieth day before the election from 9 a.m. to 9 p.m. (Colorado Session Laws 1905). Six years later, the practice of registering people via house-to-house canvass ceased. New voters now had to register in person (the state registered everyone else from existing registration lists) (Colorado Session Laws 1911, 345). That year the law was also amended to make registration permanent. Also, registered voters who failed to vote were notified by mail to appear in person at some designated location to prevent their name from being stricken from the rolls (Colorado Session Laws 1913, 262).

Another state with a similar procedure for registering citizens was West Virginia. West Virginians were historically resistant to adopting registration requirements. In 1868, a registration law was enacted, but it was quickly abolished in 1872 by constitutional provision. Article 6, statute 43 of the state constitution stated that "the Legislature shall never authorize, or establish any board or court of registration of voters." Article IV, statute 12 stated "no citizen shall ever be denied, or refused the right or privilege of voting at an election, because his name is not, or has not been registered, or listed, as a qualified voter" (Constitution of the State of West Virginia 1872). The law gradually changed to allow for some type of registration of voters. In 1891, the state required assessors to make a list of known voters. But no person could be denied the right to vote for failure to appear on the list (The Code of West Virginia 1891). In 1902, the constitution was amended to allow for a registration of voters, and in 1905, a uniform personal registration law passed. Registration officially closed on October 1st, but the law included provisions permitting people to continue to register until 10 days before the election (The Code of West Virginia, 88). In 1911 and 1913, the legislature changed the personal registration system to a nonpersonal one. Beginning the first Monday of September, registrars conducted a house-to-house canvass to register people. They also used previous year registration lists to register voters. The registrars then sat for two days beginning the first Monday of October to make corrections to the list, they then posted the notices of this meeting ten days prior to the meeting in voting precincts (Hogg's West Virginia Code, Annotated:, 1914). Like Colorado and West Virginia, Massachusetts too implemented an innovative system of nonpersonal registration. By the late 1890s, during the first seven days of May the board of police visited each household to make a list of all eligible voters. They recorded the "name, age, occupation, and residence" of males of voting age (Acts and Resolves passed by the General Court of Massachusetts in the year 1896, 974). Registration conducted by house-to-house canvass was a-typical, but commonly practiced for many years in Colorado and Massachusetts and for some time in West Virginia. This is in sharp contrast to some of the stringent registration systems that developed in other states at the same time.

3.2.2 Property Requirements

Rhode Island, for example had some of the toughest registration requirements in the nation. In 1844, the state adopted a registration law via constitutional provision exempting anyone who owned property valued at $134 dollars [11] or more from registration. The state entered the name of such property owners on a registration list, and these did not have to register annually (Acts, Resolves and Reports 1889, 200). Everyone else had to register annually in person and pay a registry tax of one dollar.[12] On or before the first Monday in January, the town clerk or town treasurer assessed a one dollar registry tax. People were required to pay the tax by the second Saturday in January in order to vote in November (Public Statues of Rhode Island 1881, 23, 43-44). The law also made registration difficult by requiring people to register before the last day of December prior to the year they intended to vote (10 months before the election). Registration opened for three days before the last business day in December from 9 a.m. to 9 p.m. The closing date was extended to June 30th by 1898, but the law remained relatively unchanged by 1916 (General Laws of the State of Rhode Island 1896, 65; Public Statues of Rhode Island 1881, 23, 43-44).

The examples of California, West Virginia, Massachusetts, and Rhode Island illustrate how the manner of registration could vary across states. Rhode Island stands alone as a state with one of the most rigid registration systems, yet some of the elements

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[11] This amount is not adjusted for inflation. Adjusted for inflation, this amount is $3,941 in 2010 dollars.

[12] This is not adjusted for inflation. The equivalent is approximately $17 dollars when adjusted for inflation. Registry taxes were taxes specifically required for registration. These fees might be in place in addition to poll taxes.

that characterized Rhode Island law were also found in other states. These included registration fees, early deadlines, and language requirements.

Maine and Massachusetts serve as examples of poll-tax states. In 1893 Maine passed a uniform personal registration law, which called on assessors to collect annual poll taxes from voting-age males during the months of April and May (Revised Statues of Maine 1893, 361). Massachusetts similarly conditioned voting on poll taxes. Tax collectors were legally required to furnish a list of poll taxpayers to registrars, who were in turn not allowed to register debtors, unless these were exempt from taxation (Acts and Resolve passed by the General Court of Massachusetts in the year 1884, 277). At least seven other states required tax payments for voting.[13] Others, like Rhode Island, implemented specific registration fees. In 1891, Delaware made voters pay a registry tax six months before an election. Seven years later, legislators labeled the tax a "registry fee" and raised it to one dollar (Registration and Election laws of the State of Delaware 1910). In addition to tax payments, education requirements were another common feature of the late nineteenth century registration laws. In most cases, states asked voters to show they could read lines from the state constitution in the English language. To ensure voters did not memorize these ahead of time, registrars typically selected the lines. In most states, such as California, Maine, Massachusetts, and New Hampshire, writing ability was also required. [14] This was typically accomplished with signature requirements.

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[13] See Keyssar, p.334 for a table of states with taxpaying requirements for suffrage: 1870-1921.

[14] See Keyssar, p. 340 for a listing of states with literacy requirements.

3.2.3 Voter Identification Laws

Voter identification requirements were another innovation of the late 1890s. For decades, election administrators struggled to combat fraud in the form of voter impersonation. One of the most common ways states used to identify voters was through physical descriptions. Registration legislation usually required registrars (or selectmen) to write down the specific characteristics of voters. For example, after 1895 in California, registrars had to write down the skin color of potential voters (California Session Laws 1895). In other cases, registrars could also write identifying marks, such as scars and height for example. But this was not too useful (Harris 1929, 15). In addition to descriptions of physical appearance, states began experimenting with signature requirements. The idea was to compare signatures submitted on the day of registration with the signature written on Election Day. While signatures on registration day were always required if a signature law was in place, comparisons on Election Day were usually reserved to cases when a voter was challenged. Nevada had such a system by 1911, requiring all applicants for registration to sign their names. In the event a potential voter was unable to write, the Nevada legislature designed a system of identification not unlike many of the online identification systems government and financial institutions use today to identify people at the other end of a computer. These identification systems usually consist of a set of questions someone answers at time one, which are later compared to answers provided by the same individual at time two. In the political environment in Nevada in 1916, this meant a person answered “Identification Statements for Registration Day.” Some of the questions included, “What is your name? What is or was your father’s full name? What is or was your mother’s full name? What is your occupation? What is the name of your present employer? If unemployed, what is the name of your last employer? Where was his place of business? Are you married or single?" The answers to the questions were recorded in a numbered pieced of paper that referenced each question, and was later bound in a book. The book was turned over to the Election Board, whose agents used to compare signatures or the answers to identification questions on Election Day (Statutes of the State of Nevada, 1915). Signature laws proved to be an efficient manner of identity confirmation in several states (Harris 1929).

In sum, the personal registration systems that developed during the late nineteenth century were vastly different from their early counterparts. States now asked individuals to go to specific registration locations and register personally at specific dates and times. Compounding the problem was that these days and hours were in some instances very limited, with some states offering only 2 days of registration during regular working hours. This meant that it would be difficult for laborers to register. It also meant people had to take time to become informed about registration locations. Additionally, as registration regulations became increasingly associated with literacy, identification, and property requirements, immigrants and the poor were most likely affected.

Given that registration systems varied widely across states, it seems that each state's political and institutional environment influenced the development of its registration procedures. This leads to some important questions. First, why was the breadth of coverage mostly limited to cities? Who were the proponents of these laws, and why did they support such measures? What were the motivations that led to institutional change and why was it possible to achieve at this point in time?

3.3 Who Supported New Registration Laws and Why?

Much like contemporary legislative debates over restrictive voting laws, the fight over registration laws in the past was bitterly partisan. Like today, Republicans generally favored strict regulations, while Democrats opposed them. But this was not always the case. Sometimes Democrats favored uniform registration laws in order to counter Republican proposals of mixed-registration systems. Adoption of rigid laws was also not always conditional on the party in power, at times, the minority party succeeded at implementing strict voting regulations. The following analyzes the historiography on voting laws during the Progressive era, and combines these with primary sources in the form of Session Laws, legislative debates, and newspapers to explain who supported these laws and to show the motivations influencing institutional change. This helps to illustrate the conditions that made it possible for these laws to pass, even when it did not seem plausible they could.

3.3.1 Partisan Battles

Republican legislators tended to propose registration laws as weapons against electoral fraud, which they at times attributed to Democratic constituents ("Connecticut Legislature"). The development of these laws in the states of California, Illinois, and New Jersey as documented by Alexander Keyssar (2009) illustrates the type of political battles that markedly changed electoral institutions in these and other states. For example, in 1866 New Jersey Republicans instituted statewide personal registration, but it was repealed two years later by the Democratic Legislature. Soon after, Republicans re-gained control of the assembly, and now designed a law that would apply only to the seven largest cities in the state. Over the years, the two parties fought over the number of hours registration should be open, with Republicans seeking to limit registration to business hours while Democrats sought a more flexible schedule. By 1911, the two parties reached a compromise, agreeing on a personal registration law for cities with 5,000 inhabitants or more. In Illinois, registration laws were also the product of Republican legislatures. The business class urged the legislature to pass the law due to perceived fraud by Democrats. The new law included strict procedures for registration (Keyssar 2009), making registration personal in that city and limiting it to only two days.[15]

Support for restrictive laws did not come exclusively from Republicans however. In New York, where the City was dominated by the infamous Democratic political machine, Tammany Hall, Democrats sought a uniform registration law to combat Republican efforts at a mixed-system, in which the most rigid procedures would apply to selected cities. This was also the case in California, where Republicans passed the Registry Act of 1866, making a uniform personal registration law, despite Democratic opposition. But over time Democrats embraced the registration law, deciding to tweak it toward the Party's advantage rather than oppose it. When Republicans came in power however, like in New York, they sought to limit the strictest procedures to urban populations (Keyssar 2009; Harris 1929).

It was not always the case however, that party in power succeeded at adopting stringent registration laws. During the 1868 presidential election, state legislators from the Republican minority in Connecticut wanted to strengthen existing voter registration

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[15] The law there was part of the City Election Act of 1885, which incorporated the registry law. Cities had to approve the Act before it could be implemented. It initially only applied to Chicago, but by 1914 nine other cities joined.

laws to make registration personal, during regular business hours, and with a bi-partisan board of registration. This would replace the nonpersonal registration system supervised by town's "selectmen," whose lists of voters normally constituted the registry. O.H. Platt, one proponent of the measure, noted "if we are expectant to make an effort to carry the State for Grant […] the Legislature must pass laws which shall prevent the wholesale fraudulent voting from which we have suffered this spring" ("Connecticut Legislature"). Democratic newspapers called it a "disenfranchising law" meant to "overcome last spring's seventeen hundred Democratic majority in the Presidential election" ("The Connecticut Infamy," *Cincinnati Daily Enquirer*, September, 1868). The bill passed after a contentious partisan fight that included an investigation when Republicans alleged Democrats tampered with the bill once it was signed by the Governor ("A Political Forgery," *Evening Post*, July 25, 1868).

Among the most common explanations in the literature as to why members of the two opposing major parties supported passage of stringent voting laws are motivations fueled by opposition to immigration and racial prejudice (Darmofal 2004; Tichenor 2002). The following discussion presents some examples of how opposition to immigration and racial and ethnic discrimination might have provided motivation for members of both parties to support restrictive voting procedures.

3.3.2 Immigration

In a quantitative analysis on passage of restricting voting laws at the turn of the twentieth century Darmofal (2004) empirically examined the idea that these laws formed part of a "conservative cabal" meaning that unified Republican governments outside the South were more likely to adopt such measures than Democratic governments. Contrary to the conventional wisdom, he finds that both Democrats and Republicans were responsible for the adoption of the Australian ballot, literacy tests, poll tax, and registration laws. He notes that these measures passed under divided governments. Darmofal finds the laws were more likely to pass when a state had sizeable black and immigrant populations. His findings are consistent with the historical evidence on voter registration laws. Most states had specific provisions targeting immigrants. In almost all cases, the foreign-born were required to provide proof of citizenship prior to registering.

An explanation for this is found in the urban politics literature on political machines during the late nineteenth century. As Thomas Henderson (1976) and Steve Erie (1988) show, by the late 1890s Democratic local political organizations, which normally mobilized the immigrant population, now lacked the resources to support a large electoral base. For this reason, by the 1890s political machines sought to constrict the electorate, and so welcomed measures that would advance those ends. These studies are consistent with the fact that while registration laws varied considerably across states, almost all included measures making voting more difficult for immigrants. For example, in the 1868 debate in the Connecticut legislature, much of the contention centered on the issue of immigration. Democratic newspapers argued the intent of the law was to disenfranchise workers and immigrants, noting "it was an insult to the judges of the courts, and to the foreign population" because immigrants would now have to "place the word "naturalized" opposite their names when they apply to be freemen" ("A Political Forgery," *Evening Post*, July 25, 1868). Immigrants would be disenfranchised because it would be difficult for them to register since they needed to produce naturalization papers and were vulnerable to the challenges of any elector ("Connecticut Legislature").

Opposition to immigration in Connecticut helps explain why the law could pass even though it was only supported by the minority party there.

Evidence from others states also shows how opposition to immigration was correlated to rigid registration procedures. In Rhode Island, immigrants were especially burdened because they were required to own property in order to vote. Rhode Island's strict voting regulations became the subject of a hearing by the United States Senate, which assembled a Special Committee "concerning the denial or abridgement of the right of suffrage to citizens of the United States" (The Campaign Text Book,1880). Witness testimony helps to illustrate how the law worked in practice. One such testimony was from Carl W. Ernst, an immigrant to the state who prepared a report showing that the registry tax and other regulations made it difficult or impossible to vote there. He noted that of the "80,000" possible voters in Rhode Island, "30,000" were unable to vote as a direct consequence of the state's registration laws. About a third of the population in Rhode Island was foreign born, so it is safe to assume that nearly 10,000 of those were immigrants. Comparing voting rates in Rhode Island to those of Massachusetts, Ernst noted a five to ten percentage point difference in the number of voters in each state, arguing that it translated to a loss of "12,000 votes" in Rhode Island. He argued that "the compulsory payment of the registry tax ten months prior to the general election, in a presidential year, caused great complaints upon the part of the poor men and foreign born citizens in Rhode Island; and to these features of her laws many intelligent witnesses ascribe the small percentage of voters among her people." He proceeded to protest the special obstacle an immigrant faced "who cannot vote unless he owns real estate, and of course, he cannot get upon the registry. If registry taxes for one year are not paid the

Constitution forbids the vote until the arrears for two years are paid up." Ernst concluded that the registry law explained why nearly 38 percent of the voting eligible population "actually abstained from voting" in Rhode Island. Others shared similar sentiments. An immigrant, Col. James Moran, testified that though he served in the Armed forces because it enabled him to vote, he soon lost the right to vote when he lost his property. Comparable testimony was also presented by an immigrant former member of Congress from Rhode Island, Hon. Thomas Davis, who noted "I failed in business and the title of my property passed to my assignees, and I cannot vote now" (The Campaign Text Book).

The size of the immigrant populations in the states may well explain the cross-state variation in the manner of registration across the nation. There may be a correlation between the proportion of the immigrant population and the strictest registrations systems, namely those that allowed only few days for registration, had stiff proof of citizenship requirements and English fluency laws. In chapter four, this study explores this relationship further. In a quantitative analysis, I discuss the relationship between registration laws and turnout, and how these two variables affected turnout rates.

3.3.3 Racial Prejudice in the North

It is generally understood that racism motivated legislators to pass rigid voting laws in southern states, but it was also the case that non-southern states with sizeable black populations were also more likely to have strict voting laws (Darmofal 2004). The Senate hearings on Rhode Island's registration laws brought to light another matter that commonly surfaced in discussions against laws that made it harder for immigrants to vote, the matter of racism against the black population. It was not uncommon to see arguments of immigrants pitted against blacks for the right to vote, with the foreign-born generally opposing liberalized laws for blacks. Racism as a motivation for the passage of these laws was evident in an 1868 legislative debate in Connecticut. Democrats there argued Republicans meant to use registration laws to disenfranchise workers and immigrants, and to register blacks. They referred to Republicans as “the party that turns loose the negroes of the South into the local Legislatures, but revengefully keeps white citizens of the North from the polls” ("Connecticut Legislature”). Another newspaper reported:

> The action of the republican [sic] board of registers in Meriden, Connecticut, in registering a colored man as a voter will be followed by the Republican boards of registration throughout that State, in pursuance of advice from this city, a careful canvass having demonstrated that there was little, if any, prospect of the radicals carrying the State otherwise. There are 4,000 male negroes in Connecticut, and with the aid of their votes the radicals will be able to overcome the increased democratic poll on Tuesday next. Private accounts […] say the people of Connecticut are very much outraged at this extraordinary attempt to defeat the popular will (“Letters from Washington,” *The Sun*, March 28, 1867).

Republican newspapers on the other hand, noted that the law’s “principal object is to prevent the issue of fraudulent naturalization papers to aliens, and to make it impossible to vote more than once” (“A Political Forgery,” *Evening Post*, July 25, 1868).

The rapid and continuous changes in voting registration laws after the 1880s provide some clues as to why turnout plummeted rapidly during this point in time. First, electoral administration systems were evolving as legislators were writing the laws. States were experimenting with varying forms of administering elections. It was unclear to both election officials and the public how the new laws should work in practice. This meant that a great deal of learning needed to take place in a short time. Second, and relatedly, voters were unfamiliar with the new regulations. Anecdotal accounts from 1886 suggest that “there was plenty of evidence that a number of persons applying for admission as electors needed more knowledge of the law or more skillful coaching" ("Making Voters, the Board of Registration Fairly Busy This Forenoon" *New Haven Register*, Oct. 25, 1886.). Last, since the new laws had numerous aspects likely to affect the poor and racial and ethnic minorities, it is possible that turnout declined disproportionately among this segment of the voting eligible population.

Before turning to an analysis on the impact of personal registration laws on turnout, I present brief summaries of the evolution of these systems in non-southern states.[16] The states are grouped into regions in accordance to the contemporary U.S. Census' regional classification.

3.4 Northeast

3.4.1.1 Connecticut

During the 1868 presidential election, state legislators from the Republican minority in Connecticut wanted to strengthen existing voter registration laws, to make registration personal, during regular business hours, and to establish a bi-partisan board of registration to replace the nonpersonal registration system supervised by town's "selectmen," whose lists of voters normally constituted the registry. The law passed and Connecticut implemented a registration law. Legislators continued to develop it throughout the next few years. In 1877, registration was on the Thursday three weeks before the election, but it was at the discretion of registrars if they wanted to hold more sessions for the correction of the lists, and they would so announce it in newspapers or on signs posted in town (Public Acts Passed by the General Assembly of the State of

[16] Some states are excluded from this discussion, namely New Hampshire, Oregon, and Pennsylvania, either because they are widely covered elsewhere in the literature or because data was limited.

Connecticut 1877, Chapter CXLVI, section 8, 236). Thus in Connecticut, there was one day of registration, but registrars held additional days to correct lists, and earlier in the 1880s it was at the discretion of registrars as to how many days they would hold additional registration sessions. In the 1880s, Connecticut required personal registration in cities with populations exceeding 5,000 inhabitants (The General Statues of Connecticut 1887, 717). A board of registry composed of "selectment" made a list of known eligible voters and when necessary met to accept personal registration applications (The General Statues of Connecticut 1878; The General Statues of Connecticut 1881). Anecdotal accounts from 1886 suggest that "there was plenty of evidence that a number of persons applying for admission as electors needed more knowledge of the law or more skillful coaching" ("Making Voters, the Board of Registration Fairly Busy This Forenoon" *New Haven Register*, Connecticut, 10-25-1886). Prior to 1887, registration days were usually associated with a town's annual meeting. The legislature amended the law in 1887, making registration biennially and 18 days prior to a town's annual meeting (The General Statues of Connecticut 1887). Selectmen met on a Tuesday "after the first Monday of November" to register persons. In towns of less than 5,000 people, registration could be made orally or in writing. But written application specifying the applicant's name, address, and the date of becoming 21 years of age was required in towns with larger populations. Application could be made in person or on behalf of someone. Registration closed at 5 p.m. on the "Thursday of the third week" preceding the election (The General Statues of Connecticut 1887, 53). In 1897, the hours of registration extended to 8 p.m. This would allow individuals who worked from 9 to 5 to register after work. By 1915 however, it was a bit more difficult for some people to register because the law now required individuals to read three lines from the Connecticut state constitution selected by the registrars (to prevent the likelihood that a person might memorize the lines before registration day) (The General Statues of Connecticut 1915, 1923).

3.4.1.2 Maine

By the 1880s, Maine had a personal registration law in effect in towns with populations over 300. Registration was open for two days between August 11th and the 18th. In towns with populations over one thousand, registration lasted for three days before Election Day, and in towns with populations over 4,000 it was open for four days until the day before the election. Elsewhere, assessors prepared lists of known voters before August 1st every year there was a gubernatorial election (Revised Statutes of Maine, 1884). The following decade, registration became more difficult throughout the city, when in 1893 the legislature adopted a uniform registration law along with other voting requirements that made registration difficult for some individuals. The state Constitution was amended that year to include the ability to read the constitution in the English language as a requirement for voting. Eligible voters now also had to pay a poll tax. Though registration was personal, the new law incorporated some aspects of the nonpersonal registration law. Assessors prepared lists of voters from existing registration lists 30 days before the election, and anyone that was not on the list was required to register in person. In cities with populations over 19,000, registration was open from 9 in the morning to 7 at night. It was open for 12 days before the election. This law (with minor changes) remained in place until 1904 (Revised Statutes of Maine,1904). The registration law was little changed by 1916. At this time, a board of registration had been established in large cities, as in the past, they made lists of known voters and anyone not on the list had to register in person. In smaller cities, municipal officers made the registration lists. The Board entered the name of anyone who was assessed a poll tax, but anyone who personally applied for registration had to read the constitution in such a way as to show that it was not being recited from memory (Revised Statutes of Maine,1916).

3.4.1.3 Massachusetts

Massachusetts was the first state to adopt a registration system as early as 1801 (Keyssar, 52). By 1878, it had a mixed system or personal and nonpersonal registration. Selectmen placed the names of known voters on a list. A poll tax was required for voting, but exceptions were made due to poverty (Acts and Resolve passed by the General Court of Massachusetts 1884). Assessors kept records of poll tax payments and registered those individuals. Others were able to register in person two weeks before any annual election (Acts and Resolves passed by the General Court of Massachusetts 1878). The registry contained the name, address, occupation and “other particulars as may be necessary to fully identify” applicants. Registration days varied depending on whether it took place in a town or city. From 1880 to 1886 in towns, it took place on a Saturday before an election until 10 p.m. In cities, the registry board could decide on the dates (Public Statutes of the State of Massachusetts 1886). Beginning in 1887, the manner of registration was more formally codified. The Selectmen of each town and city assigned three members to constitute a bipartisan “board of registrars.” The board used voting lists from the previous annual election to make a registration list. In cities, registration opened until 10 p.m. on the Saturday before an election (but the board could decide on additional dates.) In towns, registration closed at 10 p.m.

By 1892, registration was different in Boston. It opened for at least ten days for registration sessions of at least three hours between “the second day of September and the annual state election […] and shall hold a session from nine o’clock in the morning until ten o’clock in the evening of the fourteenth day preceding the annual state and annual city election, which shall be the last day of registration” (Acts and Resolves passed by the General Court of Massachusetts 1892). In 1895, the board of registration in Boston was replaced with election commissioners from the two major parties casting the largest vote for governor (Acts and Resolves passed by the General Court of Massachusetts 1895).

> Said board of election commissioners shall, between the first day of May and the first day of October in the year 1896 and in every 10th year therafter, make a new general register of the qualified voters of the city. Said general register shall be prepared in the manner provided by law for preparing general registers, but in determining the residence of any voter for registration said election commissioners shall receive as prima facie evidence of such residence a certificate from the assessors of taxes or a tax bill, or notice from the collector of taxes in said city showing that such person has been assessed for a poll tax as a resident of said city on the first day of May, and in case the applicant shall fail to present such certificate, bill or notice, he shall be required to otherwise satisfy the said commissioners as to such residence (Acts and Resolves passed by the General Court of Massachusetts 1895).

In 1895, personal registration was required only in Boston (Acts and Resolves Passed by the General Court of Massachusetts 1896). But the next decade Boston began an innovative system of registration in which the board of police registered voters. The law stated:

> In Boston the board of police shall, within the first seven week days of May in each year, by itself or its officers, visit every building in said city, and after diligent inquiry make true lists, arranged by streets, wards and voting precincts, and containing as nearly as the board can ascertain the name, age, occupation and residence on the first day of May in the current year, and the residence on the first day of May in the preceding year, of every male person, twenty years of age or upwards, residing in said city. Said board shall designate in such lists all buildings used as residences by such male persons, in their order on the street where they are located by giving the number or other definite

description of every such building so that it can be readily identified, and shall place opposite the number or other description of every such building the name, age and occupation of very such male person residing therein on the first day of May in the current year, and his residence on the first day of May the preceding year.

The registration system did not change much by 1916.

3.4.1.4 New York

New York's first registration law came in 1859, after a contentious struggle between city politicians and the state government. This was characteristic of New York politics, the City was mostly ruled by Democrats, whereas the Republican Party dominated in the state legislature. City politicians often fought legislators' attempts at enacting a registration law that applied only to the City, favoring uniform registration systems instead. This was the central debate about registration throughout the many years the law was revised (Harris, 1929; Hayduk 2005). In 1872, nonpersonal registration applied only to cities and villages over 10,000, whereas in New York City and Brooklyn personal appearance was required—it started on Tuesday four weeks before the election, Wednesday the third week, Friday and Saturday two weeks before the election from 9 in the morning to 9 o'clock at night. This law was challenged in the courts, (the constitutionality of personal registration in New York City and Brooklyn). The courts ruled in favor of personal registration (*People v. Livingston,* 18 Hun, 60*; Hall v. People,* 90 N. Y. 498*; People v. Wilson.* 62 N. Y. 186) (Western Reporter 1886). Throughout the 1880s (The Election Code of the State of New York 1880) personal registration was still the norm in New York City and Brooklyn, in other cities registration was nonpersonal (cities over 10,000) (Harris 1929). The list was made from previous poll list (Laws of the State of New York. 1872). Registrars met three weeks before a general election on Tuesday at 9 a.m. to register people in person and to make a list of those not required to appear in person from prior years' poll lists. In 1890, statewide registration was adopted; it was personal only in cities. Registration was open on the four Saturdays before the election from 9 in the morning until 9 in the evening (Session Laws 1890). In Brooklyn, registration was open during the same days as in 1872, but hours were extended, now from 7 to 10 a.m. and from 3 to 10 p.m (Laws of the State of New York. 1890). In the rest of the state, registration was open on the four Saturdays before the election from 9 a.m. to 9 p.m. in the cities, elsewhere it was open for 3 days (third and second Saturdays and last Friday before the election). Outside cities, the law stated that "the board shall …place upon such list the names of all persons qualified to vote in such district at such election, which appear upon the poll-list of the next preceding general election held in the district [and also] the names of all other persons known or proven to the satisfaction of the board to be so qualified" (Laws of the State of New York. 1890). In 1895, the law was amended to require personal registration only in cities and villages with populations over 5,000 (The Revised Statutes, Codes and General Laws of the State of New York, 1895). The law did not change much by 1916.

3.4.1.5 Vermont

Vermont had a nonpersonal registration system during the 1880-1916 time period. Selectmen made "check-lists" of known voters. Thirty days before a "freemen's meeting" the selectmen met to make the lists, which included the name, address, school district, of each person eligible to vote (Session Laws 1882; Session Laws 1884). In November 24, 1896 the law was amended making it necessary for potential voters to file "certificates of residence" with the town clerk stating that his name was on the check-list. Prior to voting in any election, individuals had to file this certificate in their city or town (Session Laws

1896). The law did not change much after that, except that beginning in 1900 people would be given 24 hour notice before their names were erased from the list.

3.4.2 South Atlantic

3.4.2.1 Delaware

Delaware enacted its first personal registration law in 1887, a provision that applied only to city elections in Wilmington. Voters were to register personally on the two Saturdays prior to a city election between noon and 7 p.m. (Laws of the State of Delaware 1887, 366-397). The legislature passed a uniform registration law in 1891, though a separate act was passed for the city of Wilmington. There were commonly minor differences between the acts passed for a city and the acts passed for the state, namely on the amount of days and hours registration was open. The 1891 law required personal registration throughout the state, and the payment of a registry tax collected 6 months prior to the election from anyone over 22 years of age living outside the city of Wilmington. It is not clear if a similar tax was required in Wilmington (Revised Statutes of the State of Delaware (1891). Registration was in the following way: a registration officer registered people who appeared in person, and this took place during the first four Saturdays in September before a general election. In 1898, the law was made more stringent with the requirement of a one dollar payment for registration (this fee had to be paid from 1898 to 1907). In 1908 the registration fee was abolished (Registration and Election Laws of the State of Delaware 1910.)

3.4.2.2 Kentucky

Kentucky first passed a registration law in 1883. The law applied only to the city of Louisville (Laws of Kentucky 1883). It required annual personal registration; open for three days in July. The next year the law was extended to the city of Paducah (Laws of Kentucky 1885), and to the county of Powell by 1890. However, for the county of Powell registration proved to be too expensive, and the county was excluded from registration requirements in 1892, however a great number of other cities were now required to register (Laws of Kentucky, Session Laws 1892). All cities with a population of 3,000 or more were required to register annually. By 1904, this was extended to cities of the fifth and sixth classes, which meant all cities with populations over 1,000, had to register. This requirement was however repealed in 1908, while the law continued to require registration in cities over 3,000 (Laws of Kentucky, Session Laws 1908, Kentucky Election Laws 1904). At this time, the urban population in Kentucky was growing. Approximately the population in Kentucky that lived in cities over 4,000 was nearly 20 percent of the total state population (Harry et al. 1900). From 1880 to 1884, registration was open for three consecutive days in July from 6 a.m. to 9 p.m. In 1885, it opened on the first Monday of January and the next day from 6 a.m. to 8 p.m. In 1892, registration opened on the first Tuesday in October every year, days were flexible at the discretion of cities provided an ordinance was approved, but the last day of registration had to be fixed as no later than the third Tuesday in October. Registration hours and dates remained relatively constant until at least 1916 (Kentucky Election Laws 1892, 38; Kentucky Election Laws 1904, 4).

3.4.2.3 Maryland

Maryland had a personal registration system in place since 1865. It applied to Baltimore city and some counties (The Maryland Code 1870, 155). In 1882, the legislature passed a uniform registration law (Session Laws 1882, 28). The law was advanced by the Democratic Conservative party or Maryland, which demanded "further security for fairness in […] elections by providing for a correct and accurate registration of the names of all persons entitled to vote in this state" (Appleton's 1880). Registration took place on the third Monday in September for six consecutive days in Baltimore and three consecutive days in the counties, from 9 a.m. to 9 p.m. in Baltimore, and until 6 p.m. elsewhere. In 1884, registration was pushed back to the summer months, beginning the first Monday of June until the first Monday in July. It was held daily (except Sundays) from 8 a.m. to 7 p.m. Registrars met to revise the list on the first Monday of September for 15 days, and for three consecutive days from the first Monday of October (Session Laws 1882, 28). From 1896 to 1916, registration opened until 9 p.m. in Baltimore, and until 8 p.m. elsewhere. It opened seven weeks before a biennia election. Registration usually consisted of revising lists, so only new voters would be affected by registration except for years when a new general registration was required by law, such was the case, for example, in 1906.

3.4.2.4 West Virginia

West Virginia had a registration system in place in 1868, but it was abolished in 1872 by constitutional provision. Article 6, statute 43 of the constitution stated that "the Legislature shall never authorize, or establish any board or court of registration of voters." Article IV, statute 12 stated "no citizen shall ever be denied, or refused the right or privilege of voting at an election, because his name is not, or has not been registered, or listed, as a qualified voter" (Constitution of the State of West Virginia 1872). The law gradually changed to allow for some type of registration of voters. In 1891, assessors were to make a list of known voters. No person could be denied the right to vote for failure to appear on the list, but if challenged the voter had to abide by the rules regarding challenged voters, i.e., take an oath (The Code of West Virginia1891). In 1902, the constitution was amended to allow for a registration of voters. In 1905, a uniform personal registration law passed. Registration closed on October first, but people were allowed to continue to register until 10 days before the election (The Code of West Virginia, 88). In 1911 and 1913, the legislature changed the personal registration system to a nonpersonal system. Beginning the first Monday of September, registrars conducted a house to house canvass to register people. They also used previous year registration lists to register voters. The registrars then sat for two days beginning the first Monday of October to make corrections to the list, they then posted the notices of this meeting ten days prior to the meeting in voting precincts (Hogg's West Virginia Code, Annotated1914).

3.4.3 Midwest

3.4.3.1 Iowa

In 1880, Iowa required voters living in cities and towns with populations over 6,000 to register annually. Assessors made list of voters, the board of registry consisted of the "township trustees" and "clerk." They met on "the first Monday of September at 9 o'clock in the morning." The registry was made from the assessor's list and the poll books of the previous election. Then the board met on the Tuesday before a general election to revise the list, after having posted an announcement of the meeting in a newspaper. They met for revisions from 9 a.m. to 5 p.m. every day until all revisions were completed (but stopped five days before the election.) In cities, a similar manner of registration was used, except that instead of assessors registering people, the "the clerk of the city or town" prepared lists of voters from "poll-books of the last preceding annual election." The board of registry in cities and incorporated towns consisted of "the mayor, assessor, clerk, and marshal." They met to revise the list (in the same way as was done in towns) (McClain's Annotated Statutes of the State of Iowa.1880. 396). Personal registration was adopted in 1886. That year, the law was amended to extend registration to cities over 2,500. Six weeks before the general election, three registrars from the party that got the most votes in the last election (out of the two major parties) were chosen to register people. "Any person entitled to vote, at any elections mentioned in the preceding sections, shall appear at the time and place designated for registration of voters, and make and subscribe a statement, under oath, in a suitable registration book to be provided for the purpose by the city clerk and furnished to the registers at the equal expense of the city and county, and by them kept open for public inspection and examination during the time fixed for the registration." The applicant was then questioned by a member of the board, and signed his application. Registration was open for three days before the general election (Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1888). The law was challenged in court, but the courts ruled that the regulations were not unconstitutional (McClain's Annotated Code and Statutes of Iowa,1888). In 1895, registration was extended to all cities with populations over 2,000, registration opened for two days beginning on the second Thursday before a general election from 8 in the morning until 9 at night. During presidential election years, it opened for 3 days (The Code of Iowa. 1895). The following year the law was amended, applying registration to cities over 3,500 (Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa. 1896; Annotated Code of the Sate of Iowa. 1897). During the remaining years in the early 1900s, there were only minor changes made to the law (Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1900; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1902; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1904; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1906; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1907; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1909; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1911; Acts, Resolutions, and Memorials Passed at the Regular Session of the General Assembly of the State of Iowa 1913).

3.4.3.2 Illinois

In the 1880s, Illinois had a nonpersonal registration system in which assessors made lists of voters every four years before a presidential election. In 1885, the legislature adopted the City Election Act, which required personal registration for any city that chose to adopt the act. Registration took place on the four non-consecutive Tuesdays before the general election from 8 a.m. to 9 p.m. After the second registration day, the board was able to go out and canvass its precinct thereby recording the name of every male over 21 years of age and registering them, they then met again for two more Tuesdays before the election from 6 p.m. to 10 p.m (Laws of Illinois 1885, 153). In 1891, registration was every 2 years before every congressional election on the three weeks before the election on a Tuesday, and on the following Tuesday from 8 a.m. to 9 p.m. (Laws of Illinois 1891, 85-86). In 1901, registration was biennial on Tuesday three weeks before election, and Tuesday two weeks before election (Laws of Illinois 1901).

3.4.3.3 Indiana

Indiana first implemented a statewide personal registration system in 1911. It was held every four years. There were three registration sessions, the first was held in May, it was known as the May session, from 5 a.m. to 8 p.m. If the voters requested two more registration days, the board was to remain in session. The second session was 60 days before the election on a Friday. Last, the October session was held 29 days before the election on a Monday (Laws of the State of Indiana 1912, 528). In 1915, the law was changed to make registration open from 6 a.m. to 9 p.m. or until it was done, if 10 voters requested an additional day, then one more day for registration was allowed (Laws of the State of Indiana 1915, 537).

3.4.3.4 Kansas

In 1880, registration in Kansas was in cities of the first and second class, which meant all cities with over 2,000 populations had to register in person annually (Compiled Laws of Kansas, 1881). In 1901, the counties of Montgomery and Summer were included in the registration law (General Statutes of Kansas of 1901). A move towards permanent registration began in 1905, when voters were also exempted from a re-registration requirement. By 1915, biennial registration was enacted in cities of the first class (cities with populations over 80,000) (Session Laws, 1915). In 1920, about 33 percent of the state voting age population was affected by the registration statutes. From 1880 to 1904, registration was open all year, closing 10 days before the election "during usual office hours" (Session Laws 1879,159; Session Laws 1915, 269).

3.4.3.5 Michigan

Michigan began registering voters in 1859. Registration was personal in both towns and cities, but there were some variations in the way it was conducted. Cities had at least five registration days, whereas towns had two or three. In towns, before the 1880s, people had the opportunity to be registered by tax assessors while they conducted property assessments (Compiled Laws of the State of Michigan. 1897). In cities outside of Detroit, registration was open on the two Saturdays before a general election from 8 in the morning until 8 at night. In towns, registration opened from 9 to 5 on the Saturday two weeks before the general election, and at the annual township meeting. The major difference in the manner of registration in Detroit compared to the rest of the state was that in Detroit registration was periodic every four years. It opened in the first Monday in October for at most five days from noon until 8 p.m. Elsewhere in the state registration was permanent (meaning people did not have to register annually once on the list, this is different from most states where registration usually took place every year) (Laws Relating to Elections 1895; Compiled Laws of the State of Michigan, Session Laws. 1883), Session Laws 1885; Session Laws. 1893; Session Laws. 1895; Session Laws. 1899; Session Laws. 1907; Session Laws. 1909; Session Laws. 1913; Howell's Annotated Statutes of the State of Michigan. 1913).

3.4.3.6 Minnesota

Minnesota’s first registration law was enacted in 1858. By the 1870s, Minnesota had nonpersonal registration in cities with populations over 12,000. The board of registry met two weeks prior to the election to enter the names of voters on a list from the previous election’s poll list. Typically in such cases, the lists were made public at an announced location (advertised in the newspaper) and anyone whose name did not appear on the list was to register in person with the board (The General Statutes of the State of Minnesota 1879). In the 1880s, the board typically met on a Tuesday three weeks before the election to register the names of eligible voters in each election precinct. To accomplish these, registrars used existing poll lists to transfer the names of individuals from that list to the registration list (General Laws of the State of Minnesota 1889). In 1891, the legislature passed a personal registration law that applied to cities with populations over 40,000. The law now stated “there shall be no name of any person registered unless he shall appear personally before said judges or register by affidavit of absent person.” Registration began on the second Saturday and last Wednesday before a general election (General Laws of the State of Minnesota 1891, 35). There were only a few cities with large populations in the state, and so only two cities were covered by the law, St. Paul and Minneapolis. When in 1897 another law was passed requiring personal registration in cities with populations over 15,000 the city of Duluth was added to the list (General Statutes of the State of Minnesota in Force January, 1891 with Revised Statutes 1893). By the next decade, cities with populations over 50,000 were included, but these were essentially the same cities covered in the past: St. Paul, Duluth, and Minneapolis. The average voting age populations in these cities was 28 percent. Registration was in effect in the rest of the state in the form of nonpersonal registration in cities over 12,000 (and in cases were people's names were not on the list, they were required to register in person or else lose their vote.) In 1915, the legislature exempted cities of the fourth class from registration; these cities had populations under 10,000. There were not many cities in the state with large populations however.

3.4.3.7 Missouri

Missouri enacted a personal registration law in 1865, affecting only the city of St. Louis (Carlson 1976, 111). By the 1880s, personal registration was in place in cities with populations over 25,000. A "recorder of votes" was assigned the duty of registering voters who presented themselves in person. Using the registration list from the previous year (i.e. 1882 list for 1883 registration), the recorder of votes corrected the list as necessary. No predetermined length of time for registration was assigned in the law, instead the recorder of votes decided how long the registration period would be, provided that twenty days before the election registration hours were extended from the usual 9 to 5 to 9 p.m (Laws of Missouri 1881). Registration was open for three non-consecutive days from 8 in the morning to 9 at night. Throughout the 1880-1916 time period, the registration law had only minor revisions. The manner of registration differed slightly in cities with populations 25,000 to 100,000 and cities with populations over 100,000. In cities 25,000 to 100,000 there were at most five days of registration within the 40 days before every biennial election. The county court in each election district would announce the registration days and places where it would take place. In cities with populations over 100,000, registration opened from 9 in the morning to 9 at night for three days (the Tuesday three weeks before a general election, the following Saturday, and Tuesday). As the statewide population increased by the 1900s, different regulations were in force in cities over 300,000 where registration was open from 8 in the morning to 9 at night for four days (Monday, Tuesday, Wednesday, Thursday) seven weeks before the general election.

3.4.3.8 Nebraska

In 1880, nonpersonal registration was required in Nebraska in cities with populations over 25,000 and in the city of Plattsmouth. Assessors made lists of known voters. This meant that voters who were omitted from the list because they were not known to the assessors had to register personally (The Compiled Statues of Nebraska 1881). In 1889, the state transitioned to a personal registration system in cities with populations larger than 5,000. Registration was open four days (on a specific day of the week) for four weeks prior to the election (Consolidated Statutes of the State of Nebraska 1891). This law was amended in 1895 to exclude cities under 7,000 populations from personal registration. Nebraska continued to relax registration requirements over the next few years. In 1903, cities with populations less than 25,000 no longer had to register annually, the last general registration for these cities was held in November of 1903 (Election Laws of the State of Nebraska 1905). In 1907, biennial registration was introduced in larger cities. In 1915, the legislature adopted a law to require personal registration only in cities with populations over 40,000. There were only two such cities in Nebraska at the time, Omaha and Lincoln. The new law also made registration permanent in these cities (Session Laws of the State of Nebraska 1915).

3.4.3.9 Ohio

In the late 1880s, Ohio began a system of personal registration in cities of the first and second class (Session Laws 1888, 85; Session Laws 1889, 282). Registration took place on "Thursday in the fourth week, Thursday in the third week, Friday and Saturday in the second week next before the day of the general election in November in each year" (Session Laws, 36-40). In 1904, registration extended to cities with populations larger than 14,000 (Session Laws, 192). In 1906, registration started in September, on the "Thursday in the 5th week, Thursday in the 4th week, Friday and Saturday in the 3rd week next before the day of the general election in November each year" (Session Laws, 213-215). It now applied to cities with populations larger than 11,000. Registration was annual in cities with populations exceeding 100,000, and every four years in cities with populations over 11,000 but less than 100,000.

3.4.3.10 Wisconsin

Registration laws in Wisconsin changed nearly every year. In 1864, Wisconsin enacted a statewide registration law that applied to "any town, ward, or incorporated village in this state" (The Laws of Wisconsin. 1864). Registration was nonpersonal, members appointed to the board of registry met on a Tuesday three weeks before the election to register eligible voters. They used poll books from the most recent general or municipal election to make a list of voters. The board then met on a Tuesday one week before the election to revise the list, adding the names of anyone who showed up to register in person. The law was gradually changed to limit registration to particular areas. By 1878, registration was in effect in cities over 3,000 and towns and villages over 1,500 (city of La Crosse was exempted) (Revised Statutes of the State of Wisconsin. 1878).

Until 1884, these populations remained affected by the registry law. Gradually, the law was changed to cover only cities or villages with populations over 3,000 and any towns or villages "which contain such city or village, or any part of which is embraced in any part of any city or village, in which registration is […] required" (The Laws of Wisconsin. 1893, 396). Minor revisions to the law were made in 1885, 1887 (cities with populations in the range of 3,000-20,000), and 1888 pertaining to changes in registration in cities over 20,000 (1885) and 50,000 (1888) (these changes usually had to do with appointments to the board of registry, and meeting days). The manner of registration across differently characterized population regions did not change. After 1897, registration was in effect in any city or village with populations over 2,000 and towns over 3,000 (The Laws of Wisconsin. 1897; Election Laws of Wisconsin 1906). In 1901, Wisconsin adopted personal registration in cities with populations over 150,000. Elsewhere, registration remained nonpersonal in cities of the second and third class (over 10,000) (The Laws of Wisconsin 1901). In accordance to the statutes of 1898, registration was required in "each ward or election district of every city and in each ward or election district of every incorporated village, which city or village at the last previous census had a population of 2,000 or more and in every town having a population of 3,000 or more." In 1903, the law was amended to allow cities and villages with populations over 2,000 and less than 3,000 to conduct a registration of voters (The Laws of Wisconsin 1903). Thus, in 1900 cities or villages with populations over 2,000 were covered (and towns over 3,000). In 1904, these populations were not covered. In 1907, registration was limited to cities or villages over 5,000 (in addition to personal registration in cities of the first class) (The Laws of Wisconsin. 1907). By 1912, Wisconsin enacted a new form of nonpersonal registration in large cities. In cities with populations over 100,000 registration cards were distributed to voters (cards had spaces for date, ward, precinct, name, residence). The cards were to be filled out by the voter or a person other than the voters, but had to be signed by the voter. Two weeks were allowed for distribution and collection of the cards. Voters had approximately one week to fill the cards. The registration list was then made public, and a date was reserved for revisions. In villages less than 5,000, 20 percent of the voters from the last election could file a petition to require registration in their areas. Registration was on Primary election day and the Tuesday after. The board of registry made a list from the poll list of the last preceding general and municipal election (Wisconsin Annotated Statues. 1921). Registration was from 9 in the morning to 8 at night (on Primary Election Day and the following Tuesday). In cities or villages 5,000 or more nonpersonal registration was required (took place on Tuesday four weeks before the election, was open for 2 days from 9 to 8 at night.) In cities of the first class, registration was annual and personal, on a Monday and Tuesday four weeks before the election from 6 in the morning to 8 at night (this was the law in 1901, 1903, 1906, 1907, 1911). A personal registration in cities of the first to fourth class was made in December of 1912.

3.4.4 West

3.4.4.1 California

In 1866, California established a statewide system for the registration of voters. A different registration law was in place in San Francisco, but it did not differ much from the statewide system, differences were minor i.e., days registration was open. Registration was personal throughout the state; it opened in July before a general election and remained open for 90 days. It closed thirty days before the election, though the registration board met three days before the election to correct the list. Over time, legislators strengthened registration requirements. After 1895, registration was limited to 75 days, and the skin color of individuals was supposed to be entered into the registry, people also had to read the Constitution in the English language and write their names (if they could not write an explanation had to be entered in the record) (Session Laws 1891; Session Laws1895; Session Laws 1899). In 1899, and thereafter (until at least 1916) the law stated that “there shall be in each even-numbered year, in each of the counties of the state, a new and complete registration of the voters of such counties, and cities and counties, who are entitled to thereto. Such registration shall begin on the first day of January of such years, and shall be in progress at all times except during the forty days immediately preceding any election, when it shall cease” (The Statutes of California 1899, 60, chapter 53, statute 1094). The law did not change much throughout the years, except that the state was moving towards a system of permanent registration by 1907. In 1911, it established biennial registration. It also extended the registration period, now registration opened on January and closed 30 days before the election (Session Laws 1911; The Political Code of the State of California 1916).

3.4.4.2 Colorado

In 1891, the Colorado legislature passed a law requiring nonpersonal registration in cities with populations over 15,000. Registrars conducted a house-to-house canvass to enroll voters. The Board of Registration then deposited the registry with the county clerk, this was announced in newspapers for four weeks. People had 90 days after this notice was posted to register in person if they found out their name was omitted from the list.

Registration started 60 days after April 13th (The Colorado Election Law 1891, 52). In 1905, the law extended to cities over 5,000 inhabitants. The state continued to register people via house-to-house canvass. Registration now started 45 days before the election for up to five days. People could register in person if they were not canvassed on the thirtieth day before the election from 9 a.m. to 9 p.m. (Session Laws 1905). In 1911, the practice of registering people via house-to-house canvass ceased. New voters had to register in person (the state registered everyone else from existing registration lists) (Session Laws 1911, 345). In 1911, the law was amended to make registration permanent. Also, registered voters who had failed to vote were notified by mail to appear in person at some designated location to prevent their name stricken from the record (Session Laws 1913, 262).

3.4.4.3 Nevada

Nevada passed its first registration law in 1869 (Session Laws Nevada 1881, 55). By the 1880s, the state had a statewide system of personal annual registration (Session Laws 1881, 55-56; General Statutes of the State of Nevada in Force from 1861 to 1885). But in 1887, legislators experimented with strict registration requirements meant to exclude some populations from voting. They ruled that Mormons were to be excluded from registration. The law stated that “no person shall be allowed to vote at any election in this State who is a bigamist or polygamist, or who teaches the doctrines of bigamy or polygamy, or who belongs to the Church of Jesus Christ of Latter-day Saints, commonly called the Mormon Church.” Every person applying for registration had to swear “that I am neither a member nor belong to the […] Mormon Church” (Session Laws Nevada 1887, 107). This law provoked outrage from the Mormon community, and was quickly challenged in the courts. The following year, the supreme court of Nevada ruled that the law violated the state constitution (Reports of Cases determined in the Supreme Court of the State of Nevada, Volume XX). After that, minor changes were made to registration procedures throughout the decades. In 1911, a signature requirement was in place in cities over 2,000. This meant that people provided their signatures on registration day, and then if they were challenged on Election Day, they had to provide their signature for comparison with the registration day signature. If a person was unable to write, then a set of questions were asked to that person on registration day, "what is your name? What is your father's full name? What is the name of your present employer? What is your occupation?, the same questions then repeated on Election Day, the answers were then compared to confirm the individual's identity (Session Laws 1911, 370).

3.5 Conclusion

This chapter detailed the evolution of personal registration systems in non-southern states from their onset in the 1880s until 1916—when registration laws were becoming more stable and states started to implement permanent registration systems (Springer 2006). One of the most striking features of this history is that these laws varied considerably within and across states. Some states like Colorado and Massachusetts experimented with innovative nonpersonal registration procedures, while others like California, Connecticut, and Rhode Island, established registration requirements that made it almost impossible for individuals to register and vote. Yet, many people still registered and continued to participate in elections.

The discussion in this chapter suggests that immigrants and racial and ethnic minorities were possibly most likely affected by the strict voting laws passed during this time. Whereas earlier in the century, immigrants were eligible to vote in the U.S., by the 1880s states passed citizen requirements for voting and thus registration laws typically required proof of citizenship.

This chapter also provided evidence consistent with the literature that these laws surfaced in areas with large immigrant and other minority populations. This suggests some of the motivations for passage resulted from racial and or ethnic prejudice. This was evident in some of the examples presented here showing that while some of these restrictions resulted from bitter partisan battles, sometimes members of both major parties welcomed these changes.

The implications of these reforms presented serious obstacles for registration and voting for those affected. The laws increased the costs of voting particularly for people who likely could not afford such costs. For this reason, it is possible that the implementation of personal registration systems explains the precipitous turnout drop of the late nineteenth century. The variation in the laws within states over time provides an opportunity to study the impact of these reforms on electoral participation by comparing the before and after effects of the policy change on turnout. One limitation to this is that the laws may not have been practiced as written and that political machines could circumvent the laws. With measures on enforcement of these laws and on the strength of political machines it might be possible to look at this further. But such a task is beyond the scope of the present study. In the next chapter, I turn to a quantitative analysis on the effect of strict registration laws on turnout from 1880 to 1916.

Chapter 4: The Effects of Voter Registration and Political Party Competition on Turnout in the United States of America, 1880-1916

4.1 Introduction

Did Progressive reforms and changes in political party competition influence a rapid and steep decline in presidential election turnout in America at the turn of the twentieth century? Throughout most of the Gilded Age, turnout rates reached nearly 80 to 90 percent outside the South, but then suddenly plummeted during the closing decades of the nineteenth century. In this chapter, I test the hypothesis that electoral participation in presidential elections from 1880 to 1916 was a function of registration reforms and political party competition. I present the empirical findings and discussion on the effects of these variables on turnout. I first provide an overview of the descriptive statistics followed by the results and interpretation of various statistical models.

4.2 Descriptive Statistics

4.2.1 Descriptions of the Variables

4.2.1.1 Voter Turnout

The variable, *Turnout*, captures the proportion of the voting age-eligible population participating in presidential elections.[17] It is defined as the total number of votes cast in presidential elections divided by the total voting age population. The data is from Gans and Mulling (2011), who designed a measure of the voting age-eligible citizen population based on Walter Dean Burnham's research, innovating on Burnham's work by

[17] Focusing on presidential elections helps to narrow down the analysis. One reason why scholars in the past have found it difficult to study this question is because collecting data on registration laws requires a great effort. Focusing on presidential elections makes this task more feasible.

using interpolation to take into account population changes from "November of each election year" (Gans and Mulling 2011, 24). They also considered states that enfranchised women prior to adoption of the nineteenth amendment and states that allowed citizens younger than twenty-one years of age to vote. Primarily, I use Gans and Mulling's measure of voter turnout in my analysis, but I compare those results with another measure of voter turnout created by Jerald Rusk (2001). He similarly coded the voting eligible population in accordance to voting qualification laws. I find little difference between the two measures, but opted to use Gans' definition of the voting eligible population because it was the most up to date version of this variable and possibly a more accurate estimate of turnout than its predecessors because of the linear interpolation innovations.

4.2.1.2 Registration

With the voter registration data, I created several measures of personal registration. The first is *Personal Registration*, which captures the proportion of the population required to personally register in a state for every presidential election year. I also coded personal registration as a dummy variable, *Registration Dummy*, for which 1 indicates a year a state had a personal registration system in place and 0 otherwise. Another registration variable, *Registration Days*, measures how many days registration was open to the public. This is a discrete variable that ranges in values from 1 to 365, where 365 indicates registration is open year-round or there are no personal registration requirements in place for a particular year in a state, values of 1 or 2 on the other hand means that people had one or two days to register.[18]

4.2.1.3 Political Party Competition

The concept of political competition refers to the closeness of races in any given election. For example, in a highly competitive contest two or more parties are almost tied to win. On the other hand, contests are not competitive when one party is almost guaranteed victory, perhaps because the electorate is favorably biased towards one side or machine politics allow one party to dominate elections. Competitive parties are desirable in a properly functioning democracy because they give the public real alternatives from which to choose from and incentivize parties to follow through on promises ("Toward a More Responsible Two-Party System: A Report of the Committee on Political Parties" 1950). Competition is also healthy for democracy because it promotes higher voter turnout. Close races motivate parties to mobilize the electorate to build strong coalitions and to sway voters from opposing sides. At the individual level, competition increases the value of each person's vote because it makes it more likely that any one vote alters the election outcome (Downs 1957). For these reasons, competition is expected to boost electoral participation.

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[18] I also created a stringency scale variable but discarded it from the analysis because it did not provide more information than *Registration Days*. It was an ordinal level variable that captures the stringency of registration laws in reference to how many days and hours registration was open to the public. It is a scale ranging from 0 to 2, where 0 means there was no registration required in the state, 1 suggests generous registration, and 2 indicates strict registration. For example, in 1880 Kentucky registration opened for three consecutive days in July from 6 a.m. to 9 p.m. Eight years later, registration opened on the first Monday of January and the next day from 6 a.m. to 8 p.m. This seems like a stringent registration law because on both time periods registration opened and closed long before the election. People who gained interest in the election after these registration periods were excluded from the electorate. From 1880 to 1888 the law became more stringent as it further distanced the registration period from Election Day.[18] In this scale Kentucky is coded as 1 at T_1 and as 2 at T_2.

I created a measure of political party competition that captures competition levels in presidential elections for every state in the sample from 1880 to 1916. I made an index of political competition between the two leading parties ranging from 0 to 1, where 0 indicates the absence of competition and 1 indicates perfect competition. It is designed as the absolute value of the difference between the proportion of the Democratic and Republican vote share subtracted from 1.[19] I named the variable *Competition*.

4.2.1.4 Immigration

Changes in demographics are another factor associated with voter turnout. During the later decades of the nineteenth century, millions of immigrants settled in the United States, many originally from Britain, Germany and Ireland but later from Eastern Europe. With the exception of the Irish, European immigrants faced little opposition, "from the vantage point of intellectuals […] the overall cultural character of European newcomers at this time was quite satisfactory"[20] (Zolberg 2006, 187). For the most part, these groups assimilated well into the political culture, or established strong political machines in urban areas (as was the case with the Irish in New York City). Things changed by the 1890s. Immigrants now came from eastern and southern Europe, "the largest groups were Italians (some 3 million), Jews (2 million, mostly from the Russian Empire), and Poles (1 million)" (Zolberg 2006, 205). Many opposed the entrance of these new groups of immigrants because they did not think the new immigrants would assimilate well to American culture (Tichenor 2002, 78). Consequently, restrictionist policies to curtail

[19] I use the following equation: Competition = 1- absolute value [Democratic proportion of the vote – Republican proportion of the vote]

[20] Zolberg notes that this is up until the 1880s.

immigration and the potential influence of the immigrant vote became popular at this time (Henderson 1976; Tichenor 2002; Zolberg 2006). States increasingly adopted voting limitations that included naturalization requirements and personal registration laws in areas with sizeable immigrant populations. Naturalized immigrants usually had to prove their citizenship prior to registering and voting, and commonly had to pass English proficiency exams. These policy changes were potentially detrimental to voter turnout because they constrained the electorate and made it more difficult for immigrants to vote.

For these reasons it is necessary to consider the effect of population changes at the turn of the twentieth century on turnout. I expect that increases in immigration are associated with lower turnout. To test the hypothesis that immigration is negatively associated with voter turnout, I used Census data to create a measure of the proportion of the foreign born population in every state for every presidential election year. I used linear interpolation to calculate population levels for in between Census years.[21] I named the variable, *Immigration*.

4.2.1.5 Direct Primary

Direct primaries are a way of nominating candidates for office via elections instead of leaving control over nominations to party officials. The direct primary came about during the late nineteenth century, with most states adopting the primary in the early 1900s (Ware 2002). Before the direct primary, party leaders were thought to make nominations in smoke-filled rooms without much influence from the public. This allowed them greater control over public offices and patronage. Party leaders chose the people

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[21] US. Census Office. Decennial Census <http://library.columbia.edu/subject-guides/usgd/federal/census.html>.

who would govern, control the finances, and distribute patronage. With primaries however, voters chose candidates for nomination in elections. The conventional wisdom holds that the direct primary was a Progressive reform meant to weaken parties' control over candidate nominations. An alternative view to the general consensus posited by political scientist, Alan Ware (2002), argues that it was in fact party leaders themselves who adopted the direct primary. Ware argues that adoption of the direct primary merely reflected the institutiaonalization of existing norms and procedures. As American society expanded and many more people became involved in the political system, party leaders had less control over the political machinery. Party organizations favored the direct primary because it allowed party leders to maintain some control over party organizations and better abitlity to guard against opposing parties (Ware 2002, 21-22).

Keeping both views in mind, in this study, I test the hypothesis in line with the conventional wisdom. I expect that the direct primary is negatively associated with turnout. Data on the direct primary comes from Alan Ware's (2002) study. In his book, he provides information on the year when most offices in a state were covered by direct primary laws (Ware 2002, 118). I use this information in this dissertation. With the data, I designed the dummy variable, *Direct Primary*, it is coded 1 for a year when the direct primary governmed most offices in a state, and 0 otherwise.

4.2.1.6 Australian Ballot

In the early 1890s, most states adopted the official government-printed Australian or secret ballot to make the act of voting private and to replace the practice wherein parties printed their own ballots and their unique designs to influence elections. The system in place by 1892 was similar to the one in place in Australia since the 1850s.

There, electoral corruption prompted state officials to create a system that allowed voters to cast ballots in private. In America, prior to the Australian ballot, parties printed their own ballots and it was not uncommon for party officials to hand the ballots to workers who were then required to publicly demonstrate who they were voting for when casting a ballot. For example, a Senate investigation in 1889 found that “men were frequently carried to the polls in their employer’s carriages. They were then supplied with ballots, and compelled to hold up their hands up with their ballots in them so they could be watched until the ballots were dropped into the box” (Evans 1917, 12). The Australian ballot came in two forms, the Indiana or straight ticket ballot and the Massachusetts or office-bloc ballot. The Indiana ballot was not unlike the former party-printed ballots, it listed candidates of each party by column and voters needed simply to check a circle on top of a column to cast all votes for the party. It however, secured the secrecy of the vote, in contrast to unofficial ballots. The Massachusetts ballot was the most commonly used across the states. This ballot arranged candidates by office title instead of by parties. It involved no party symbols or designs. Rather, provided voters could read, they were able to choose candidates from among different parties (Evans 1917).

Many argue that while the secret ballot possibly curbed electoral corruption, it also made it more difficult for people to vote because it was essentially a literacy test. Accordingly, there are two ways in which the secret ballot is expected to lower turnout. On the one hand, the official ballot made it difficult for parties to buy and sell votes. Since voting was now secret, party officials could no longer monitor voters at the polls to make sure they cast the ballot for the party and reward voters in return. Elimination of this form of electoral corruption should lower participation among individuals whose act of casting the ballot was motivated by this practice because it was a form of mobilization parties could no longer exercise, and an incentive for participation some voters no longer had. Another reason why the ballot might negatively affect turnout pertains to ballot design. Most states adopted the Massachusetts or office-bloc ballot, which excluded party symbols or ornate designs in favor of the written word. Each office was listed by title in a bloc that included all of the candidate's names. This meant that reading ability was required of voters, so the office-bloc ballot was essentially a literacy test. As such, it is expected that illiterate voters were most likely affected by this reform (Rusk 1970; Heckelman 1995; Heckelman 2000; Rusk 2001). To test the hypothesis that the secret ballot lowered turnout, I used a dummy variable coded as 1 for every year in which a state had the Australian ballot and 0 otherwise. The variable is from a data set assembled by Hirano and Snyder (2007). In this study, I labeled the variable, *Ballot*.

4.3 Method

In this study, I use various econometric methods, emphasizing the results of fixed effects models. Fixed and random effects models are comparable techniques for working with panel data, but each makes different assumptions about the data. Random effects models operate under the assumption that unit-specific effects are uncorrelated with the predictor variables. If that assumption is correct, then random effects models are preferred because, since they use cross-sectional and time-invariant information for every unit, they potentially produce more efficient estimates. If the assumption is wrong however, random effects models can result in biased estimates (in the form of omitted variable bias). Fixed effects models on the other hand, make no assumptions about the distribution of the unit-specific effects. Fixed effects models focus only on within-unit variation over time, ignoring cross-sectional variation (Wooldridge 2009, 482). Under the assumption that unit-specific characteristics are time-invariant, with these models it is possible to control for all unobservable factors that could potentially influence the dependent variable. In some of these models, this is accomplished with the inclusion of dummy variables representing the time-invariant unit-specific characteristics or by demeaning the variables. By controlling for all unobservable factors, these models reduce the likelihood of misspecification from omitted variable bias. But if the assumption of no correlation is wrong, fixed effect models yield inefficient estimates.

4.4 The Case for Fixed Effects

Choosing between fixed or random effects models depends on whether the underlying assumptions hold true for the data. I used fixed effects models primarily because I cannot make the assumption that unit-specific effects are uncorrelated with the explanatory variables. In this study, unit-specific characteristics might constitute a state's political culture, institutional environment, or geography, which are all potentially correlated with the independent variables (e.g., registration, political competition). This point was also made in (Wooldridge 2009, 493). He argued that "when the unit of observation is a large geographical unit (say, states or provinces)" it is difficult to assume that unit effects are uncorrelated with the predictor variables. He further noted that in such cases fixed effects models are "almost always much more convincing than RE [random effects]" models.

Another way to choose between the two models is to run the Hausman test of the null hypothesis that the fixed and random effects coefficients are the same (Allison 2009). In this dissertation, I will run the Hausman test to decide which model to use.

Significant findings provide evidence against rejecting the null hypothesis. I obtained a negative chi-square statistic of 23.81, meaning that I cannot reject the null hypothesis of no correlation between the unit effects and the predictor variables. This suggests that it would be fine to use the random effects model with this data. But the Hausman test has some limitations on panel data because it does not take into account variation in the error term across cases. I thus turned to another test, a variation of the Hausman test designed for panel data[22] that tests the null hypothesis that the explanatory variables are uncorrelated to the unit-specific effects. I obtained a significant Sargan-Hansen statistic, indicating that the assumption of no correlation is too strict for my data, and a fixed effects model is more appropriate. This test added further justification for primarily using fixed effects methods with my data.

4.5 Heteroskedasticity and Autocorrelation in Time-series cross-sectional (TSCS) Data

Panel data is commonly plagued with problems of heteroskedasticity and serial correlation, which can lead to numerous violations of classical OLS assumptions, namely that the errors are equally distributed and are not serially correlated with each other. The problem of heteroskedasticity is compounded in TSCS because variation in the error term happens both across space and over time (Beck and Katz 1995). Errors are potentially correlated from year to year because whatever affects the dependent variable one year is likely to have an effect on the dependent variable in the following years (first-order autocorrelation). Under these conditions, the estimates obtained are not ideal because

[22] A test created by Mark E Schaffer and Steven Stillman, authors of the “xtoverid” command in Stata.

“there are other linear unbiased estimators that have smaller variances.”[23] In the absence of a homoskedastic error variance, the OLS estimator yields smaller standard errors than would otherwise be the case, increasing the likelihood of type I errors (Studenmund 2006, 354). Making adjustments to the data can limit problems associated with autocorrelation and heteroskedasticity.

In this study, before making any corrections for heteroskedasticity and serial correlation, I first tested for the presence of heteroskedasticity using the “modified Wald test for groupwise heteroskedasticity” in fixed effect models.[24] It tests the hypothesis that errors are homoskedastic across cases yielding a significant chi-square statistic when errors are correlated across cases (Greene 2000). I obtained a chi-square of 2249.77 and a p-value of 0.0000 indicating evidence in favor of rejecting the null of homoskedasticity. I conducted additional tests because this test may not be ideal when N is large and T is small as is the case with my data (N= 26, T= 10). Next, I used two tests of cross-sectional dependence in panel data for cases when N is large and T is small (Friedman’s t-statistic, and Pesaran’s cross-sectional dependence test).[25] I obtained significant results for both tests, indicating strong evidence of panel heteroskedasticity.[26]

I then tested for first-order serial correlation AR (1). I used Wooldridge’s (2009) test for serial correlation in panel data. It tests the hypothesis that the error term is

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[23] The coefficients are unbiased and consistent.

[24] xttest3 in Stata 10 from Greene (2000, 598).

[25] In Stata 10, these tests are executed with the xtcsd command.

[26]The results for Friedman’s test of cross sectional independence were 6.067, Pr =1.0000/ Pesaran's test of cross sectional independence = -1.441, Pr = 1.8504.

correlated over time (Drukker 2003).[27] I obtained a significant F statistic, suggesting evidence against the null of no first-order autocorrelation, meaning the error variances are correlated over time even when year-specific effects are included in the specification (it may seem that since unit-specific characteristics are considered time-invariant in the model that there would not be a problem of serial correlation, but the test showed this is not the case).

Next, I corrected the issues of heteroskedasticy and autocorrelation using a Prais-Winsten regression[28] with Beck and Katz' (1995) panel-corrected standard errors (PCSEs). [29] The Prais-Winsten (PW) transformation rids the data of first-order serial correlation through a type of weighted least squares procedure. It is a useful approach for remedying the problem of autocorrelation because it uses all available information (this is in contrast to other methods like the Cochrane-Orcutt, which drop the first observation in the time-series to adjust for autocorrelation). Correcting for this type of first order serial correlation makes it more likely that coefficient estimates will be efficient and will yield unbiased standard errors (Baltagi 2008, 92). To adjust for panel heteroskedasticity, I used Beck and Katz' (1995) PCSEs. This adjustment is appropriate for TSCS data particularly in situations when the sample size is larger than the time-period examined. PCSEs

[27] This is executed in Stata 10 with the command xtserial, "under the null of no serial the residuals from the regression of the first-differenced variables should have an autocorrelation of -.5. This implies that the coefficients on the lagged residuals in a regression of the lagged residuals on the current residuals should be -.5. xtserial performs a Wald test of this hypothesis."

[28] In Stata 10, this procedure is used with panel data with the command "xtregar."

[29]In Stata 10, "Xtpcse calculates panel-corrected standard error (PCSE) estimates for linear cross-sectional time-series models where the parameters are estimated by either OLS or Prais–Winsten regression. When computing the standard errors and the variance–covariance estimates, xtpcse assumes that the disturbances are, by default, heteroskedastic and contemporaneously correlated across panels" (StataCorp 2007, 330).

transform the data to make the error variance across space consistent with the classical assumptions of the OLS model of no constant error variance. PCSEs yield standard errors that are more accurate than those produced by other methods (e.g., Feasible Generalized Least Squares, also known as the Park method, which can lead to overconfident statistical inferences).

I estimated several variations of a Prais-Winsten regression model with PCSEs and state and year fixed effects. I ran two versions of fixed effects model.[30] In one, I used a least squares dummy variable (LSDV) model, in which unit-specific effects are controlled for with year and state dummy variables. An equivalent way of doing this is through de-meaning the data by residualizing each variable on state and year so that the residuals average zero for each state and year. To do this, I first ran separate ANOVA regressions for each variable on state and year dummies. Next, I obtained the predicted values and generated new variables of the residuals for all variables in the model. I then ran the Prais-Winsten regression with PCSEs using only the residualized variables (for the dependent and independent variables in the model). These results along with robustness checks are presented and discussed in detail in chapter four.

4.5.1 Summary Statistics

Table 4.1 presents summary statistics for all variables. Between 1880 and 1916, average turnout was approximately 77 percent, reaching levels over 90 percent in such states as Indiana, Ohio, and New Jersey. See table 4.2 for a 26 by 10 grid of state turnout percent. The mean proportion of the population required to register in person was .38.

[30] As a robustness check, I also estimated a model using “xtregar” in Stata correcting for autocorrelation only but not for panel heteroskedasticity.

The proportion of the foreign born population ranged from 0 to .34, with a mean of .12. In the index of political party competition, closeness ranged from .0009 to .9998, which means some states had nearly perfectly competitive elections during this time period. Some of these states included Connecticut in 1880 and 1884, Indiana in 1888, and Maryland in 1904 and 1908. Table 4.3 shows a 26 by 10 grid of political party competition in the states measured as the percent Democratic of the two-party vote. Table 4.4 presents the competition index between the two leading parties. This means that in cases when a third party was a leading party in an election, the third party is included as opposed to the Democratic or Republican party. This was for the most part true for the 1892 and 1912 presidential elections. In 1892, a third party won in Colorado, Kansas, and Nevada. In 1912, this was the case in California, Michigan, Minnesota, and Pennsylvania. Figure 4.1 and table 4.5 show additional details of the registration data. Figure 4.1 shows that the adoption of personal registration systems in the states increased in a linear fashion over time. Table 4.5 shows that by 1880 about a third of the states had personal registration systems. This changed dramatically over the next two decades; in 1916 approximately 80 percent of the states had personal registration systems in place.

4.5.2 Correlation table

Table 4.6 presents a correlation table of all explanatory variables. The variables more strongly correlated are the *Australian Ballot* and the *Direct Primary*, the correlation is .32 and positive indicating a possible causal linkage between the adoption of the secret ballot and implementation of direct primaries in some states. This may be because legislators in favor of ballot adoption ultimately also adopted the direct primary (Ware 2002). Other variables are only modestly correlated, which eases concerns about multicollinearity in the regression analysis that follows. In the forthcoming sections, I address concerns about multicollinearity for the variables that are strongly correlated by running separate regressions in which some of the variables are excluded from the model. I also examine interaction effects.

4.6 Model Specification

The specification of the fixed effects model is as follows:

$$T_{it} = \beta_0 + \beta_1 R_{it} + \beta_2 C_{it} + \beta_3 B_{it} + \beta_5 D_{it} + \beta_6 I_{it} + Y_t + \mu_i + \varepsilon_{it}$$

where *i* indexes states, *t* indexes years, *T* is voter turnout, defined as the proportion of the voting age-eligible population casting ballots in presidential elections. β_0 is a constant and ε_{it} is the error term. μ_i are state fixed effects, which capture any state-specific characteristics correlated with turnout, and Y_t year fixed effects, which capture any time-invariant events from election to election that could influence voter participation. The state dummy variables absorb the effects of all the unobservable state-specific characteristics that could have an effect on turnout. The year dummy variables capture any election year shocks that might influence turnout from one election to the next. *R* is personal registration, coded as the proportion of the voting age population in a state covered by personal registration laws. *C* is an index of political competition ranging from 0 to 1, where 0 indicates the absence of competition and 1 indicates perfect competition. *B* is a dummy variable coded 1 if a state had the secret ballot and 0 otherwise. *D* is an indicator of the year when the Direct Primary covered most offices in a state (Ware 2002), it is coded 0, 1. *I* is a measure of the proportion of the foreign born population in a state. In the analysis that follows, I also include interaction terms of the explanatory variables.

The expectation is that personal registration, the secret ballot, the direct primary, and immigration will move in the negative direction and be less than zero. Political competition is expected to be positively associated with turnout.

4.7 Results and Discussion

Table 4.7 presents the results of a Prais-Winsten fixed effects model (column 1) against a basic fixed effects model (column 2) and a pooled OLS model (column 3) (without adjustments for autocorrelation or heteroskedasticity). The chi-squared test in column 1 and F test[31] in column 2 are significant, providing greater justification for the use of fixed effects model with this data. The results of these tests indicate that there is virtually no chance that the results would be stronger if there were no unit and year effects in the model. This provides further evidence (in addition to the Hausman tests discussed earlier) that the fixed effects significantly improve the fit of the model.

In column 1, *Registration* is significant in the expected negative direction at the .05 percent level of significance. The results suggest that when registration goes from 0 (no members of the VEP subject to registration) to 1 (all members of the VEP subject to registration) turnout dropped by approximately 6 percentage points. But only a handful of states experienced changes in registration such that they went from 0 to 1. Some states instead transitioned gradually to uniform registration systems, while others already had

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[31] In Stata 10, the "test" command that is used to obtain *F* statistics "sometimes produce[s] chi-squared and other times *F* statistics." The reason for this is because the chi-squared and F statistics are comparable (Gould 2013). Wooldridge (2013, 751-752) notes that in the *F* test "the order of the degrees of freedom in $F_{k1, k2}$ is critical. The integer $_{k1}$ is called the *numerator degrees of freedom* because it is associated with the chi-square variable in the numerator. Likewise, the integer $_{k2}$ is called the *denominator degrees of freedom* because it is associated with the chi-square variable in the denominator."

personal registration systems in place by 1880.[32] For cases in which states did not transition from 0 (no registration) to 1 (full registration) the expected change in turnout due to registration is smaller than 6 percentage points. To illustrate this point, I calculated the predicted values for some states separately. In 1916, the effect of registration on turnout in Pennsylvania was a drop of about 2 percentage points. In Kansas, participation decreased by 1.9 percentage points as a result of registration, and in 1888 Ohio, turnout dropped by approximately 2.1 percentage points due to the implementation of personal registration requirements.

Competition is significant in the hypothesized direction, which indicates that if a state had a completely uncompetitive race in one election and then had a perfectly competitive race in the next election, turnout would increase by 14 percentage points. But since no state went from being perfectly uncompetitive to fully competitive, the impact of competition on turnout is of a smaller magnitude. For example, in 1908 the impact of competition on turnout in Kansas was an expected increase in turnout of approximately 13 percentage points, whereas in 1904 the impact of competition in that state was 8 percentage points.

The results are for the most part consistent with expectations and in line with both the political competition and institutionalist perspectives. One of the key takeaway points is that political party competition matters for turnout. Theory suggests that when contests are close, party mobilization efforts and individual's own personal assessments of the value of the vote positively influence electoral participation. But competition did not

[32] Indiana goes from 0 to 1 between the 1908 to 1912 election. Oregon goes from 0 to 1 from 1896 to 1900, and West Virginia does so from 1904 to 1908. But many states had uniform registration systems (100 percent of the VEP covered by personal registration laws) during this time period (1880-1916).

always go hand in hand with high turnout, sometimes competitive states experienced turnout decline. Figure 4.2 further illustrates the relationship between competition and turnout. The graph shows a comparison of a set of states (California, Kansas, and Missouri) in which electoral closeness remained consistently high since 1880 or increased slightly after 1896 with turnout in states in which political party competition declined or fluctuated in the late 90s. Consistent with expectations, turnout declined in states where competition dropped after 1896, participation dropped by about 10 points in Michigan for example, and in Pennsylvania rates had decreased by 27 percentage points in 1916 compared to that state's 1880 levels. The figure also shows that participation also declined in competitive states. Without taking into account the 1912 election,[33] voting rates also dropped in states where competition was constant through this time period. This suggests that something else other than competition or registration influenced electoral participation at this time. The findings here lend greater support to Burnham's and other scholars' political competition thesis. In the next chapter, I take a closer look at the relationship between electoral competition and turnout.

It is surprising that given the extreme difficulties associated with registering in person that registration accounts for at most a six point drop in turnout. These results are in line with the recent literature on the actual effects of voter registration on turnout when previous methodological problems are addressed with fixed effects methods

[33] It was a three party contest, which may have influenced turnout in these states. The particular characteristics of that election would need to be accounted for in order to interpret turnout in this graph for that year.

(Ansolabehere and Konisky 2006; Burden and Neiheisel 2009)[34]. While the effect of personal registration seems small, it is substantively significant. The results here show that when everything else is taken into account, registration laws suppressed turnout. To illustrate this, it is worth to point out how turnout figures reduced in some states as a direct consequence of registration laws. For example, in Indiana, electoral participation dropped from 93 percent in 1908 to 81 percent in the 1912 presidential election—one year after implementation of the uniform registration law. Similarly, turnout dropped by six points in Wisconsin from 1900 to 1904, in part as a consequence of registration reforms. The same also happened in New Jersey from 1908 to 1912, when participation declined from 81 to 68 percent, and in Delaware, where it dropped from 75 to 69 percent from 1884 to 1888, when the state switched from no registration to a system of personal registration. These figures suggest that thousands of people failed to show up at the polls in part because of these new regulations. Another related matter that cannot be addressed in this project is the demographics of those affected.

The coefficient estimates for the other institutional and demographic variables are not distinguishable from zero. Several reasons might account for this. It is surprising that *Immigration* is statistically insignificant given the apparent association between immigration and passage of restrictive voting laws described in chapter three. One possibility could be that *Registration* is absorbing some of the effects of *Immigration* and thus *Immigration* appears to have no effect on turnout. But I ran separate regressions in

[34] These studies find that when fixed effects models are employed, the effect of voter registration on participation is smaller than the extant literature suggests. Registration for the contemporary era is associated with a drop in turnout of about 3 to 4 percent, as opposed to the 7 to 10 percent noted in earlier studies.

models excluding one of the two variables and received similar results. Another reason *Immigration* might be statistically insignificant is that immigration could have been positively associated with turnout depending on the various types of political party organizations in the states. It is also possible that the size of the immigrant population was small.

Another variable surprisingly insignificant is the *Australian Ballot*. It may be the secret ballot did not have the expected effect because literacy rates were fairly high in these states, so ballot design might not have been too much of an obstacle for voters. The direct primary might be statistically insignificant because data for this variable was limited; there were only a few years when the direct primary was in place in most offices in any given state, and that was the measure of the direct primary used in this study. Other ways of measuring the potential effects of the direct primary might yield different results.

Comparing these results with those of column 2 suggest that without corrections for heteroskedasticity and autocorrelation the effect of registration is underestimated while competition is slightly overestimated. Comparing the results from the fixed effects models with those of the pooled TSCS OLS model (column 1) indicate that when unobservable unit-specific factors are not controlled for, the model slightly overestimates the effect or *Competition* and *Direct Primary*, while the effect or *Registration* is relatively unchanged.

4.8 Robustness Checks

As robustness checks, I estimated additional models, including random effects models, a lagged year dependent variable model, models with other registration, turnout, and competition variables, and models with interaction effects.

4.8.1 Lagged Dependent Variable Model

The use of lagged dependent variables (DVs) is controversial in the literature. Lagged DVs are used when the effects of the explanatory variables are expected to have some delayed effects. One solution is to include a lag of the dependent variable, particularly when there is an expected long term effect of the explanatory variables on the dependent variable (Wooldridge 2013, 313). Achen (2001) argued that including lagged DVs in the equation could produce misleading results. But Beck and Katz (2011) showed that the decision to add lagged DVs should rest on the theoretical assumptions researchers make about the data. If there is reason to think that explanatory variables will have a long term effect on the dependent variable, then it may well be a good idea to include lagged DVs. If the contrary is true, a lagged DV model is unlikely to yield much useful information. Here, I use a lagged DV model as a robustness check.

Table 4.8 presents the results of the lagged dependent variable model. It takes into account the possibility that the effects of the explanatory variables from one election influence turnout in the next election. Turnout is unsurprisingly significant because turnout from one election influences participation in the next. But the institutional variables are insignificant. This is expected, particularly for registration effects because it is likely legal restrictions had more immediate effects. When the voting regulations were first implemented, people might have had to adjust to the changes (as the example of

Connecticut described in chapter three suggested), but by the next presidential election people might have been used to the new systems. There is little reason to think the effects of the institutional variables are primarily long term.

4.8.2 Results from Random Effects Models

Table 4.9 presents the results of two random effects regressions. Column 1 shows the results of a random effects regression without any corrections to the standard error structure. The coefficient for *Registration* is insignificant. *Competition* is significant with a coefficient of a similar magnitude to the one from the LSDV fixed effects model. In column 2 are the results of a random effects model with clustered standard errors.

4.8.3 Other Measures of Turnout and Competition (Rusk 2001)

I estimated a model using Rusk's (2001) measure of voter turnout, which might differ slightly from Gans and Mulling (2011). To estimate turnout, Rusk used a definition of the voting eligible population that took into account naturalization laws, age requirements, sex, and the disenfranchisement of the black population. Gans and Mulling did something similar, but used linear interpolation that took into account population changes from November to November. For this reason, the two measures might have more or less accurate estimates of the voting age eligible population, so it is worth to consider if the results change when different estimates of voter turnout are used. Table 4.10 presents the results of a fixed effects regression using Rusk's measure or voter turnout. The results are relatively unchanged from those obtained with Gans and Mulling's (2011) measure. Overall, there is little reason to conclude there are significant differences from using either measure. Since Gans and Mulling (2011) probably have a more accurate estimate given their linear interpolation methodology, that measure was favored in this study. This comparison shows that the results are not likely an artifact of the varying voter turnout measures.

Next, I estimated a fixed effects model with Rusk’s (2001) measure of political party competition—a composite index capturing electoral closeness in the states for various types of political races including, presidential, congressional, and gubernatorial elections. It measures competitiveness on a scale from 0 to 100, where 100 indicates perfect competition. It differs from the measure of competition I primarily used in this study because it includes other political contests (gubernatorial and congressional races) in addition to presidential elections. The results of a regression including this measure are presented in Table 4.11. The coefficient for political competition is significant and in the expected direction. It is slightly larger than the coefficient obtained in the Prais-Winsten fixed effects regression model with PCSEs by .02. The coefficient for personal registration is .05 and significant, it is similar to the coefficient obtained in the previous models.

4.8.4 Other Measures of Personal Registration

I also estimated additional models using other measures of registration, namely *Registration Days*, which captures the number of days personal registration was open, and *Registration Dummy*, coded as 1 for every year a personal registration system was in place. Table 4.12 presents the results of Prais-Winsten fixed effects regression with PCSEs using the variable *Registration Days* to capture the effect of registration, it is statistically significant, but the coefficient is of a small magnitude. Table 4.13 presents a similar regression but with a dummy variable of registration, it significant at the .05 level, indicating that turnout would drop on average about 3 percentage points when states imposed personal registration. The findings are consistent with the results discussed earlier on the effect of registration on turnout, but the dummy variable does not capture as much information as the variable that measures the breadth of coverage of these laws for each state. The effect of competition is .1476 and also significant. The other variables are not distinguishable from zero.

4.8.5 Interaction Effects

Another thing to consider is interaction effects. The effect of the explanatory variables on the dependent variable may depend on other key independent variables. If this is the case, then variations in turnout are better explained by including the interaction between two or more independent variables rather than by looking at only the additive effect of each independent variable. I estimated several models with and without interaction terms and compared the results. I generated interaction terms for *Registration* and *Competition*, *Registration* and the *Secret Ballot*, for the *Secret Ballot* and *Competition*, and for *Registration* and *Immigration.* Here, I present the models with statistically significant interaction terms. None of the interactions with the competition variable were statistically significant. I do not present those results here.

The interaction terms were created because the variables interacted are thought to have a relationship on turnout when the two interact. For example, as discussed in chapter three, there is evidence that the personal registration laws surfaced in areas with large immigrant populations. This would suggest that the effect of registration and turnout might be conditional on the values of the immigration variable. For the other interactions, a similar logic applies. The adoption of personal registration laws could depend on the adoption of the Australian ballot. Registration might also be associated with competition.

Perhaps, legislators were more inclined to adopt these laws in states where elections were close in order to prevent competing parties from accumulating the most votes. It is also possible that the Australian ballot was adopted in states that experienced highly competitive elections.

Table 4.14 shows the results of a regression with an interaction term for *Registration* and *Immigration* only. This equation explores the idea that the effect of registration on turnout depends on the different values of *Immigration*. Findings are statistically significant, indicating that *Registration* has a statistically significant effect when interacted with *Immigration*. That means that the effect of registration is conditional on different values of the immigration variable. The R^2 is .77. The R^2 changes when the interaction terms are included in the model. In table 4.7, which presents the main results, the R^2 is .75 for the comparable basic fixed effects model. Next, I ran a regression with the interaction for *Registration* and *Immigration* and for *Registration* and the *Australian ballot*. Table 4.15 presents the results. Both interaction terms are statistically significant, indicating that the effects of the interaction terms are conditional on the different values of the other explanatory variables. Registration has the greatest impact on turnout when immigration is high. These findings lend greater support to the analysis presented in chapter three. States with higher immigrant populations had strict voting laws, and these voting restrictions suppressed turnout in a statistically significant way.

Registration and immigration are statistically related. Registration increased in relation to higher immigration rates. See figure 4.3 for a scatter plot of these two variables. This graph shows that the states that experienced the biggest changes in the values of these two variables were New York, Connecticut, New Jersey, and Illinois. In these states requirements for personal registration increased as the immigrant population expanded. In New York for example, the combined effect of registration on turnout was a decrease in participation of approximately 10 percentage points, and in Connecticut the effect was a drop in turnout of 8 points. While there is a relationship between the two variables, there were some outliers. In Minnesota, for example, the breadth of coverage for personal registration increased as immigration rates dropped, which is contrary to what most states experienced. The results of the equations with interaction terms show that in order to better understand the effect of the explanatory variables on turnout, it is necessary to examine how these variables interacted.

To clarify the effects of the interaction terms on turnout, I calculated the net effects of the interactions on predicted turnout. Taking into account the interaction effects, I estimated the difference that each key independent variable makes in accounting for voter turnout, while holding the others constant. I started with the mean turnout for the sample of states for the period of study, .77 or 77 percent. I manipulate each variable to its maximum and minimum and estimate the following: what difference would it make if X were at its maximum observed value versus its minimum observed value? For instance, for registration, the maximum value is 1, or universal registration, while the minimum is zero, or no registration in the state. The net impact, taking into account its interaction with registration and the secret ballot when registration is at its maximum values is a drop in mean turnout of about two percentage points. Predicted turnout when registration is at its minimum value is 79 percent, whereas it is 75 percent when registration is at its maximum value. See Table 4.16 for the results.

The net effects of the secret ballot and immigration are estimated similarly. The net effect of competition is presented in similar fashion as the difference in turnout from its maximum to its minimum values, using its additive effect since competition does not enter any significant interactions. When competition is at its maximum values, predicted turnout is 81 percent—a turnout rate as high as rates before the 1896 turnout drop. But when competition drops to its minimum values, predicted turnout is as low as 63 percent. The difference between the minimum and maximum is 18 percentage points. For immigration, the net effect is a difference in 24 percentage points when immigration goes from its minimum value (.01) to its maximum value (.41). This is consistent with what would be expected. The Secret Ballot similarly had a negative impact on turnout when it is interacted with registration. Predicted turnout when the Secret Ballot is at its maximum value is as low as 60 percent. It increases to 72 percent in states and years when this variable was not in place.

These results provide insight into the effects of these explanatory variables when interactions are taken into account. The findings show that the immigration effect depends on registration, and that registration depends on immigration. In a similar fashion, the effect of the Secret Ballot is conditional on registration, and the effect of registration depends on the Secret Ballot. Predicted turnout when these variables are at their maximum, minimum, and mean values is consistent with expectations, but the effects of registration and competition are modest, as earlier findings demonstrated.

4.8.6 Analysis of Residual Plots

I conducted an analysis of the residuals to further illustrate the relationship between the two key independent variables, personal registration and political competition, controlling for state and year. First, I first ran an anova regression of each independent variable on state and year dummy variables to obtain residuals from state and year. Then, I created variables of the predicted values (predicted yhat variables) and generated new variables by subtracting variables from the predicted yhat variables. For example, I obtained the predicted values of *Turnout* and labeled this new variable *Hatturnout*. Next, I created a variable of the residuals for *Turnout*. To do this, I subtracted *Turnout* from *Hatturnout*, and labeled this new variable of the residuals *Resturnout*. I followed the same procedure for the other two variables, competition and registration, and labeled the residual variables *Rescomp* and *Resregistration*. The residuals capture the difference between the observed values of each variable and the predicted values. This is equivalent to looking at the relationship between turnout and the predictors without considering the year and state changes (taking out the effect of state and year, the residual analysis shows what the relationship between the two variables looks like. For every year, the average turnout is zero, and for every state the average equals zero. Graphing the residuals is a more controlled comparison than simply plotting the predicted values against each other because it is possible to visualize the relationship between the variables controlling for everything else. Figures 4.3 and 4.4 show the isolated effects of each of these variables on turnout. In Figure 4.3, most observations cluster around zero, indicating that competition is positively and strongly associated with turnout consistent with expectations. Things are a bit murkier for registration. Figure 4.4 shows the relationship between registration and turnout. Some observations do not cluster around zero, meaning that registration does not explain much about turnout in some cases. The relationship is in the negative direction as hypothesized, and most observations cluster in the center suggesting a negative relationship between personal registration and turnout.

4.9 How Much of the Turnout Drop is Explained by Registration and Competition?

Next, I turn to one of the central questions in the literature: how much of the 17 percentage point drop in turnout at the turn of the twentieth century is attributable to registration requirements and declining party competition? Burnham argues "that the effect of registration requirements was worth 30 percent to 40 percent of the period's decline in turnout" noting "two-thirds of the puzzle is left unexplained by personal registration" (Burnham 1988). I now revisit this question based on the findings in this dissertation.

To estimate the total effect of registration and competition on the 17 point drop in turnout I added the total competition and registration effects and subtracted that sum from average turnout. Figure 4.5 shows the average expected effect of registration by year. Figure 4.6 shows this effect within the context of the turnout decline, the gap between the registration line and the baseline year (1880 turnout) indicates how much turnout declined as a result of registration. I estimated that the net effect of registration on turnout was .01, meaning that registration accounted for approximately one percent of the 17 percent drop.[35] To obtain the net registration effect, I used turnout in 1880 as baseline turnout and subtracted the registration effect from the base then divided that sum by the difference between the base and the total unexplained year effects. Registration and

[35] To obtain the net registration effect, I used turnout in 1896 as baseline turnout and subtracted the registration effect from the base, then divided that sum by the difference between the base and the total unexplained year effects, i.e., neteffectreg1916= (.8320385 -.8252769) /(.8320385 -.7079616). I then multiplied .05 by 17 and divided that by 100 to convert to a percent.

competition combined explained approximately two to three percent of the drop. To calculate the direct effect of competition alone, I multiplied the competition coefficient by the drop in mean competition; the effect of competition was usually small, about .02 for years when competition declined the most.

To estimate the cumulative effect of competition and turnout, I multiplied mean competition by the competition coefficient and added the "competition effect" to the registration effect, and subtracted the effect of both from baseline turnout. Figure 4.7 plots the combined effect of registration and competition versus the effect of registration, the unexplained effects and the baseline year. The gap between the baseline and the registration curve represents the registration effect, it shows turnout drops from about two to three percent in most presidential elections during this time period as a direct result of registration. The gap between the baseline and the total registration and competition effect captures the effect of both variables.

As would be expected, there is not much change in turnout as a result of these variables from 1880 to 1892, but after 1896 about three to six percent of the drop in turnout can be attributed to these variables. But, registration and competition explain less of the decline for the 1908 to 1916 presidential elections. The gap between the total year effects and the competition and registration effects represents how much of the turnout drop remains unexplained after accounting for competition and registration, since the gap is so wide after 1896 this means that registration and competition explain only a small part of the turnout drop and a lot remains unaccounted for. If registration and competition explained the total decline, the gap between the total year effects and the cumulative registration and competition effects would disappear. Most of the decline is still reflected by the year effects, which means that something else other than the direct effects of registration and competition contributed in large part to the turnout to drop.

4.10 Conclusion

This chapter made an assessment of the existing institutional and behavioral explanations for the precipitous post-1896 turnout decline in America. Institutionalists (Converse 1972, Rusk 1970, 1974, 2001) see late nineteenth century changes in legal rules as crucial to the turnout drop. Personal registration systems, the Australian ballot and the direct primary are thought to have curbed fraud and reduced turnout among those unwilling or unable to incur the increased costs of voting. Burnham (1975, 1970, 1974, 2010) on the other hand, argues that institutional innovations account only for a small part of the changes in political participation, whereas declining political competition and its effects on party mobilization strategies and voter turnout does a better job of explaining changing voting rates. My findings are in part consistent with both the institutional theory and Burnham’s political competition thesis. But I show that registration and competition account only for about two to three percent of the total 17 point turnout drop after 1896.

The results of this study are consistent with recent political science research on the effect of voter registration on turnout using fixed effects models. Ansolabehere and Konisky (2006) and Burden and Neiheisel (2009) used fixed effects models to examine the effect or registration on turnout in the modern era, finding that when using these statistical methods on panel data registration accounts for about a 6 percentage point drop in turnout. This is in contrast to the 7 to 10 point turnout drop attributed to registration in prior studies. The present study provides greater support for the argument that findings based on fixed effects techniques are potentially more reliable than results based on models that fail to account for unobserved unit-specific characteristics. That said, the findings from this study must be taken with a degree of caution because it is difficult to determine how accurate the estimates are given that the sample size is small (N=26), a larger sample size would increase confidence in the estimates (fixed effects estimators might do better with a larger sample size).

My findings suggest that the adoption of personal registration systems in the states suppressed voter turnout by approximately five to six percentage points on average in non-southern states from 1880 to 1916. This effect is modest when compared to the effect of political competition, but statistically and substantively significant given the thousands of people negatively affected by the reform.

Table 4.1 Summary Statistics

Variable	Observations	Mean	Standard Deviation	Min	Max
Registration	260	0.3801923	0.3993522	0.0000	1.0000
Competition	260	0.7896285	0.2526293	0.0009	0.9998
Ballot	260	0.6615385	0.4740990	0.0000	1.0000
Direct Primary	260	0.1692308	0.3756788	0.0000	1.0000
Immigration	260	0.1696154	0.0863360	0.0100	0.4100
Turnout (VAP)	260	0.7714500	0.1157068	0.3500	0.9700

Table 4.2 Turnout in the States 1880 to 1916

	Percent Turnout (VAP) in the States, 1880 to 1916									
State	1880	1884	1888	1892	1896	1900	1904	1908	1912	1916
CA	72.3	73	80.3	75.9	75.2	68.1	60.7	59.5	44.3	55.8
CO	60.8	59.4	66.6	61.4	69.4	74.6	68.8	63.9	57.1	58.9
CT	90.3	84.2	86	84.4	82.7	79.4	79.6	75.7	70.5	73.2
DE	79.6	75	69.2	79.2	78.5	82.3	81.2	85.7	82.5	83.6
IL	89.9	85.3	84.4	86.8	95.7	89.3	79.9	80.9	74.7	66.7
IN	96.7	93.6	95.4	91.2	97.1	94.2	92.1	92.8	81	86.3
IA	85.3	94.4	88.6	88.5	94.7	89	81	81.6	77.9	77.4
KS	78.5	83.7	96.3	86.8	87.3	88.7	76	80.4	39.1	65.5
KY	72	68.6	80.2	73.3	88.5	86.7	77.3	83.5	74.1	82.2
ME	84.6	73.1	71.3	63.3	62.7	55	49.3	52.9	63.5	65.5
MD	80.1	91.6	86.8	81.1	87.2	85.3	69	70.4	64.3	67.5
MA	71.9	72	69	71.1	66.7	63.6	63.9	61.7	61.5	62.7
MI	85.3	78.2	91.9	86.8	94.6	88.3	78	74.9	66	66.3
MN	81.1	77	88	76.1	84.8	70	60.8	64.4	55.9	62.2
MO	77.3	76.5	81.3	76.5	87.3	82.2	73.8	78.4	73.6	80
NE	72.2	72.2	81.1	72.5	80.6	86.2	75.2	83.4	74.5	83.5
NV	76.4	60.9	69.9	72.2	68.6	68	52.7	81.8	64.9	75.7
NH	91.9	87.2	89.9	85.9	78.2	84	81.2	80.7	77.8	77.5
NJ	95.7	87.5	89.3	88.1	86.7	85	82.5	81.2	68.1	70.3
NY	92.1	88.1	91	84.6	83.2	84	82.6	78.9	64.3	64.2
OH	93.3	92.3	91	85.2	94.4	90.4	82.2	86.7	73.9	75.9
OR	80.1	75.3	71.1	76.1	83.9	63.1	51.5	51.2	35	61.1
PA	90.2	81.9	81.4	74.5	81.7	74.5	73.7	71.2	63.9	63.3
VT	78.4	69.1	70.5	60.6	66.9	57.4	52.4	52.7	62.2	63.8
WV	81.6	85.3	92.7	88.6	92.1	90.1	87.9	85.7	81.9	82.1
WI	91.8	94.6	91.9	86.4	94.6	85.8	80.2	76.9	63.8	69.5

Source: Gans, Curtis, and Matthew Mulling. *Voter Turnout in the United States, 1788-2009*. Washington, D.C.: CQ Press, 2011.

Table 4.3 Political Party Competition from 1880 to 1916

Political Party Competition in the States as Percent Democratic of 2-major Parties, 1880 to 1916										
State	1880	1884	1888	1892	1896	1900	1904	1908	1912	1916
CA	48.98	43.83	46.84	43.83	41.23	41.33	26.91	32.98	41.81	46.63
CO	46.03	0.00	40.84	0.00	84.95	55.55	41.08	48.00	42.83	60.74
CT	48.50	50.06	48.66	50.06	32.54	41.07	38.15	35.94	39.16	46.66
DE	51.53	49.90	55.15	49.90	42.56	44.90	44.11	45.94	46.48	47.78
IL	44.56	48.79	46.58	48.79	42.68	44.44	30.43	39.02	35.34	43.34
IN	47.91	47.46	48.60	47.46	47.96	46.62	40.22	46.91	43.07	46.47
IA	32.76	44.31	44.45	44.31	42.90	39.46	30.71	40.58	37.64	42.74
KS	29.74	0.00	31.03	0.00	51.49	45.96	26.19	42.87	39.30	49.95
KY	55.85	51.48	53.30	51.48	48.86	50.24	49.82	49.74	48.40	51.91
ME	45.32	41.40	39.35	41.40	29.21	35.12	28.79	33.29	39.43	46.97
MD	54.15	53.39	50.34	53.39	41.62	46.23	48.81	48.59	48.57	52.80
MA	39.63	45.22	44.04	45.22	26.27	37.85	37.24	34.04	35.53	46.61
MI	37.27	43.35	44.91	43.35	43.47	38.88	25.78	32.45	27.41	43.90
MN	35.35	37.78	39.66	37.78	40.89	35.69	18.84	33.02	31.84	46.25
MO	52.51	49.56	50.24	49.56	53.95	51.48	46.02	48.41	47.35	50.59
NE	32.65	12.47	39.75	12.47	51.53	47.22	23.44	49.14	43.69	55.28
NV	52.40	6.49	42.18	6.49	75.64	62.25	32.87	45.71	39.70	53.36
NH	47.24	47.11	47.79	47.11	25.42	38.42	37.79	37.56	39.48	49.12
NJ	49.84	50.67	49.87	50.67	36.03	41.09	38.05	39.07	41.19	42.68
NY	48.42	48.99	48.11	48.99	38.72	43.83	42.28	40.74	41.27	44.51
OH	47.02	47.53	47.11	47.53	46.82	45.66	34.32	44.82	40.96	51.86
OR	48.86	18.17	42.85	18.17	48.02	39.64	19.33	34.19	34.34	45.90
PA	46.57	45.09	44.77	45.09	35.76	36.16	27.33	35.41	32.49	40.22
VT	28.14	29.26	26.45	29.26	15.95	22.86	18.84	21.82	24.44	35.22
WV	50.95	49.37	49.35	49.37	46.83	44.75	42.03	43.17	42.09	48.47
WI	42.91	47.73	43.77	47.73	37.00	35.97	28.01	36.67	41.06	42.80

Source: *CQ Press Voting and Elections* http://library.cqpress.com/elections/

Table 4.4 Political Party Competition Index between the 2 Leading Parties, 1880-1916

Political Party Competition Index between the 2 Leading Parties, 1880-1916										
State	1880	1884	1888	1892	1896	1900	1904	1908	1912	1916
CA	0.9991	0.9336	0.9718	0.9995	0.9212	0.8685	0.6505	0.7753	0.2247	0.9966
CO	0.9477	0.8743	0.8562	0.8406	0.2891	0.8642	0.8582	0.9888	0.0112	0.7401
CT	0.9799	0.9906	0.9978	0.9674	0.6930	0.8415	0.8003	0.7653	0.2347	0.9686
DE	0.9650	0.8665	0.8836	0.9865	0.8903	0.9123	0.9006	0.9384	0.0616	0.9758
IL	0.9345	0.9626	0.9704	0.9691	0.8702	0.9161	0.7166	0.8449	0.1551	0.9078
IN	0.9859	0.9868	0.9955	0.9871	0.9714	0.9602	0.8623	0.9851	0.0149	0.9903
IA	0.7585	0.9498	0.9216	0.9471	0.8743	0.8142	0.6732	0.8496	0.1504	0.8868
KS	0.6930	0.7438	0.7581	0.9791	0.9596	0.9340	0.6132	0.9040	0.0960	0.9414
KY	0.8389	0.8767	0.9168	0.8826	0.9993	0.9827	0.9731	0.9829	0.0171	0.9459
ME	0.9386	0.8463	0.8186	0.8720	0.6131	0.7345	0.6169	0.7029	0.2971	0.9598
MD	0.9122	0.9398	0.9706	0.9009	0.8689	0.9473	0.9998	0.9974	0.0026	0.9198
MA	0.8115	0.9197	0.9062	0.9335	0.5675	0.8026	0.7932	0.7583	0.2417	0.9607
MI	0.8478	0.9918	0.9518	0.9565	0.8970	0.8077	0.5625	0.7051	0.2949	0.9166
MN	0.7306	0.7809	0.8551	0.9185	0.8427	0.7548	0.4486	0.7391	0.2609	0.9990
MO	0.8616	0.9253	0.9507	0.9247	0.9129	0.9446	0.9609	0.9991	0.0009	0.9635
NE	0.6971	0.8322	0.8625	0.6891	0.9465	0.9676	0.6206	0.9846	0.0154	0.8571
NV	0.9520	0.8749	0.8468	0.5922	0.4315	0.7550	0.7621	0.9822	0.0178	0.8304
NH	0.9530	0.9520	0.9741	0.9600	0.5676	0.7909	0.7772	0.7824	0.2176	0.9994
NJ	0.9918	0.9835	0.9765	0.9557	0.7636	0.8581	0.8137	0.8227	0.1773	0.8828
NY	0.9810	0.9991	0.9891	0.9659	0.8114	0.9073	0.8915	0.8763	0.1237	0.9298
OH	0.9529	0.9595	0.9754	0.9987	0.9496	0.9336	0.7457	0.9379	0.0621	0.9232
OR	0.9837	0.9573	0.8906	0.7351	0.9799	0.8439	0.5206	0.7769	0.2231	0.9743
PA	0.9573	0.9095	0.9203	0.9364	0.7478	0.7542	0.5933	0.7657	0.2343	0.8596
VT	0.5814	0.6266	0.5525	0.6117	0.3585	0.4713	0.4087	0.4674	0.5326	0.7279
WV	0.9010	0.9681	0.9968	0.9756	0.9460	0.9048	0.8677	0.8975	0.1025	0.9906
WI	0.8887	0.9540	0.9398	0.9833	0.7707	0.7591	0.6480	0.8215	0.1785	0.9341

Source: *CQ Press Voting and Elections* http://library.cqpress.com/elections/

Figure 4.1 Personal Registration in the States, 1880-1916

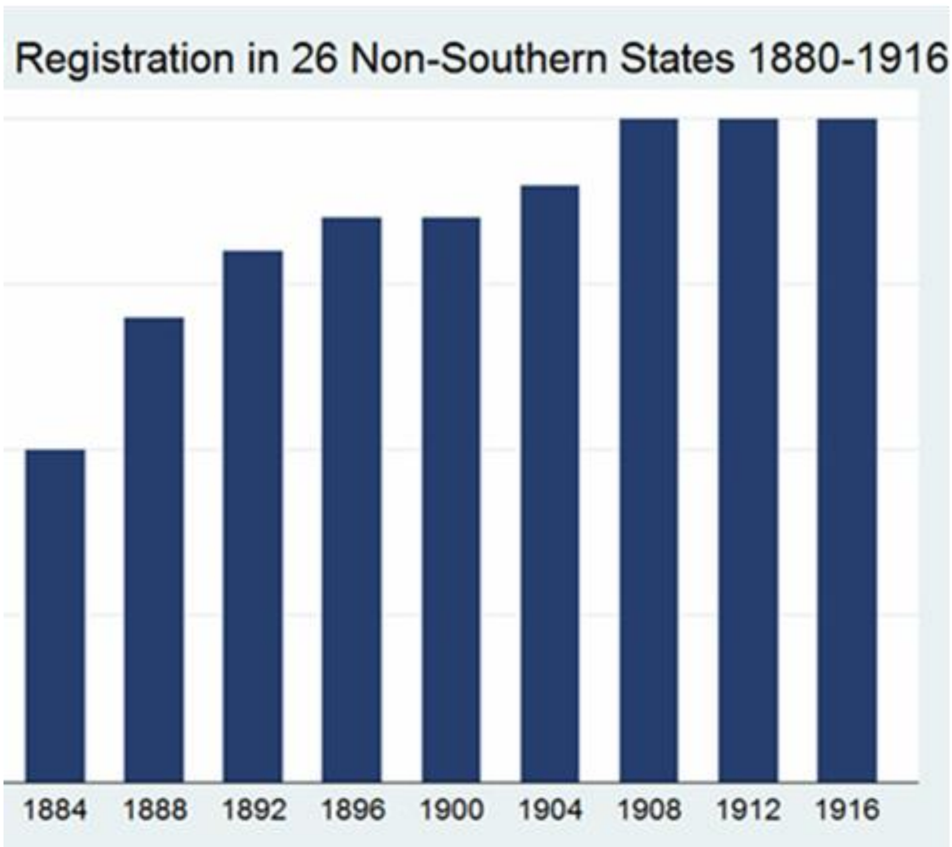


Table 4.5 Personal Registration Laws in Effect in the States from 1880 to 1916

	Personal Registration Laws in Effect in the States from 1880 to 1916									
State	1880	1884	1888	1892	1896	1900	1904	1908	1912	1916
CA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CO	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*
CT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DE	*N*	*N*	Y	Y	Y	Y	Y	Y	Y	Y
IL	*N*	*N*	Y	Y	Y	Y	Y	Y	Y	Y
IN	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	Y	Y
IA	*N*	*N*	Y	Y	Y	Y	Y	Y	Y	Y
KS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
KY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ME	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MA	*N*	*N*	*N*	*N*	Y	*N*	*N*	*N*	*N*	*N*
MI	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MN	*N*	*N*	*N*	Y	Y	Y	Y	Y	Y	Y
MO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NE	*N*	*N*	Y	Y	Y	Y	Y	Y	Y	Y
NV	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NH	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*
NJ	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	Y	Y
NY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
OH	*N*	*N*	Y	Y	Y	Y	Y	Y	Y	Y
OR	*N*	*N*	*N*	*N*	*N*	Y	Y	Y	Y	Y
PA	*N*	*N*	*N*	*N*	*N*	*N*	*N*	Y	Y	Y
VT	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*	*N*
WV	*N*	*N*	*N*	*N*	*N*	*N*	*N*	Y	*N*	*N*
WI	*N*	*N*	*N*	*N*	*N*	*N*	Y	Y	Y	Y

Note: Y= yes, the law was in effect this year. N= no, the law was not in effect this year.

Table 4.6 Correlation Table of Independent Variables

	Registration	Competition	Ballot	Direct Primary	Immigration
Registration	1				
Competition	-0.0668	1			
Ballot	.2147	-0.3054	1		
Direct Primary	.0929	-0.2407	.3228	1	
Immigration	.0986	-0.0238	-.1277	-.0170	1

Table 4.7 The Effect of Registration and Political Competition on Voter Turnout 1880-1916

Explanatory Variables	Prais-Winsten PCSEs Fixed Effects Model 1	Fixed Effects Model 2	Pooled TSCS OLS Model 3
Personal Registration	-.0631*	-.0431	-.0473*
	(.0212)	(.0246)	(.0152)
Political Competition	.1414*	.1826*	.1719*
	(.0430)	(.0380)	(.0248)
Australian Ballot	-.0038	-.0075	-.0271
	(.0215)	(.0261)	(.0140)
Direct Primary	.0032	-.0130	-.0616
	(.0152)	(.0176)	(.0167)
Immigration	-.1935	-.0019	-.1898
	(.2175)	(.1706)	(.0696)
Constant	.6939	.5885	.7142
	(.0824)	(.0651)	(.0283)
N	26	26	26
T	10	10	10
R^2	0.9732	0.7526	0.3405
Adj. R^2		0.7087	0.3275
		F (25, 229)= 10.68	
	Chi^2 (14) = 795.52		
	Prob > chi^2= 0.0000	Prob > F = 0.0000	

* $p < .05$. PCSEs in parentheses. Year and State effects are included in the fixed effects models but not reported here.

Table 4.8 The Effect of Registration and Political Competition on Voter Turnout 1880-1916: Lagged DV Model with Fixed Effects

Explanatory Variable	Coefficient	Standard Error
Lagged Turnout	.4252*	(.0604)
Personal Registration	-.0403	(.0230)
Political Party Competition	.1660*	(.0372)
Australian Ballot	-.0097	(.0238)
Direct Primary	-.0036	(.0158)
Immigration	.2161	(.1831)
Constant	.2750	(.0670)
N= 26		
T= 10		
R^2= 0.8144		
Chi^2= (14) = 383.98		
Prob > chi2 = 0.0000		

* p < .05. PCSEs in parentheses.

Table 4.9 The Effect of Registration and Political Competition on Turnout 1880-1916: Random Effects vs. Random Effects with Clustered Standard Errors

Explanatory Variable	Random Effects Model	Random Effects Model with Clustered Standard Errors
	1	2
Registration	-.0431 (.0246)	-.0431 (.0540)
Competition	.1826* (.0377)	.1826* (.0377)
Australian Ballot	-.0075 (.0149)	-.0075 (.0149)
Direct Primary	-.0130 (.0176)	-.0130 (.0350)
Immigration	-.0019 (.1706)	-.0019 (.2991)
Constant	.5885 (.0651)	.5885 (.1024)
N	26	26
T	10	10
Adj. R^2 overall: 0.7555 Chi^2= 256.67 Prob > chi^2 = 0.0000		

* p < .05. Standard Errors in parentheses.

Table 4.10 The Effect of Registration and Political Competition on Voter Turnout 1880-1916: Rusk's (2001) VEP Turnout Variable (Prais-Winsten PCSEs fixed effects model)

Explanatory Variable	Coefficient	Standard Error
Personal Registration	-.0589*	(.0133)
Political Competition	.1475*	(.0443)
Australian Ballot	.0201	(.0248)
Direct Primary	-.0300	(.0153)
Immigration	-.0815	(.1078)
Constant	.6783	(.0800)

N= 26
T= 10
R^2 =0.9776

* p < .05. PCSEs in parentheses. Year and State effects are included in the models but not reported here.

Table 4.11 The Effect of Registration and Political Competition on Voter Turnout 1880-1916: Rusk's (2001) Competition Index (Prais-Winsten PCSEs fixed effects model)

Explanatory Variable	Coefficient	Standard Error
Personal Registration	-.0531*	(.0168)
Political Competition	.1865*	(.0346)
Australian Ballot	-.0134	(.0158)
Direct Primary	.0020	(.0111)
Immigration	-.0369	(.1593)
Constant	.6184	(.0606)

N= 26
T= 10
R^2= 0.9672

* p < .05. PCSEs in parentheses. Year and State effects are included in the models but not reported here.

Table 4.12 The Effect of Registration and Political Competition on Voter Turnout 1880-1916: Days of Registration Measure

Explanatory Variable	Coefficient	Standard Error
Days of Registration	.0000*	(.0000)
Political Party Competition	.1476*	(.0336)
Australian Ballot	.0453	(.0260)
Direct Primary	-.0095	(.0153)
Immigration	-.2573	(.2118)
Constant	.6833	(.0658)
N= 26		
T= 10		
R^2= 0.9715		

* $p < .05$. PCSEs in parentheses. Year and State fixed effects are included in the model but not reported here.

Table 4.13 The Effect of Registration and Political Competition on Voter Turnout 1880-1916: Registration Dummy Variable

Explanatory Variable	Coefficient	Standard Error
Registration Dummy	-.0333*	(.0115)
Political Party Competition	.1476*	(.0336)
Australian Ballot	.0484	(.0262)
Direct Primary	-.0076	(.0155)
Immigration	-.2471	(.2040)
Constant	.7158	(.0652)
N= 26		
T= 10		
R^2= .9703		

* *p* < .05. PCSEs in parentheses. Year and State fixed effects are included in the model but not reported here.

Table 4.14 Interaction between Registration and Immigration

Explanatory Variable	Coefficient	Standard Error
Personal Registration	0.1163*	0.0439
Political Competition	0.1765*	0.0574
Australian Ballot	0.0299	0.0248
Direct Primary	-0.0027	0.0161
Immigration	0.4586	0.2361
Registration*Immigration	-0.9373*	0.2015
Constant	0.5895	0.079
N	26	
T	10	
$R^{2=}$ 0.7722		

* $p < .05$ Year and Fixed effects are included in the model but not reported here.

Table 4.15 Interactions between Registration and Immigration and Registration and the Secret Ballot

Explanatory Variable	Coefficient	Standard Error
Personal Registration	0.1163*	0.0439
Political Competition	0.1765*	0.0574
Australian Ballot	0.0299	0.0248
Direct Primary	-0.0027	0.0161
Immigration	0.4586	0.2361
Registration*Immigration	-0.9373*	0.2015
Registration*Secret Ballot	-0.0591*	0.0215
Constant	0.5895	0.079
N	26	
T	10	
R2= 0.7722		

* $p < .05$ Year and Fixed effects are included in the model but not reported here.

Table 4.16 Predicted Turnout When Registration, Competition, the Secret Ballot, and Immigration are at the Maximum, Minimum, and Mean Values

	% Turnout at Maximum Values	% Turnout at Mean Values	% Turnout at Minimum Values	Minimum to Maximum Difference in Turnout (percentage points)
Registration	75	77	79	8
Competition	81	77	63	18
Immigration	65	76	89	-24
Secret Ballot	60	64	72	-12

Figure 4.2 Turnout in Competitive States Since 1880 vs. Turnout in States with Declining Competition After 1896

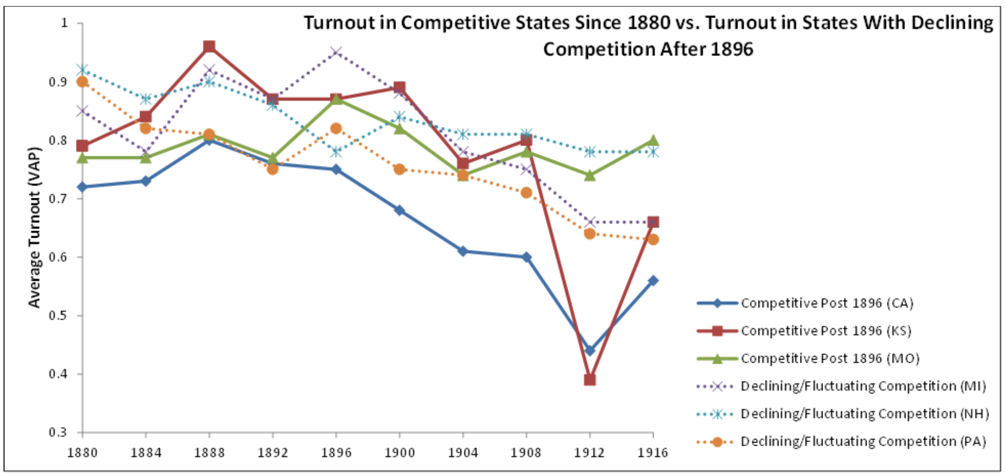


Figure 4.3 Interaction between Registration and Immigration

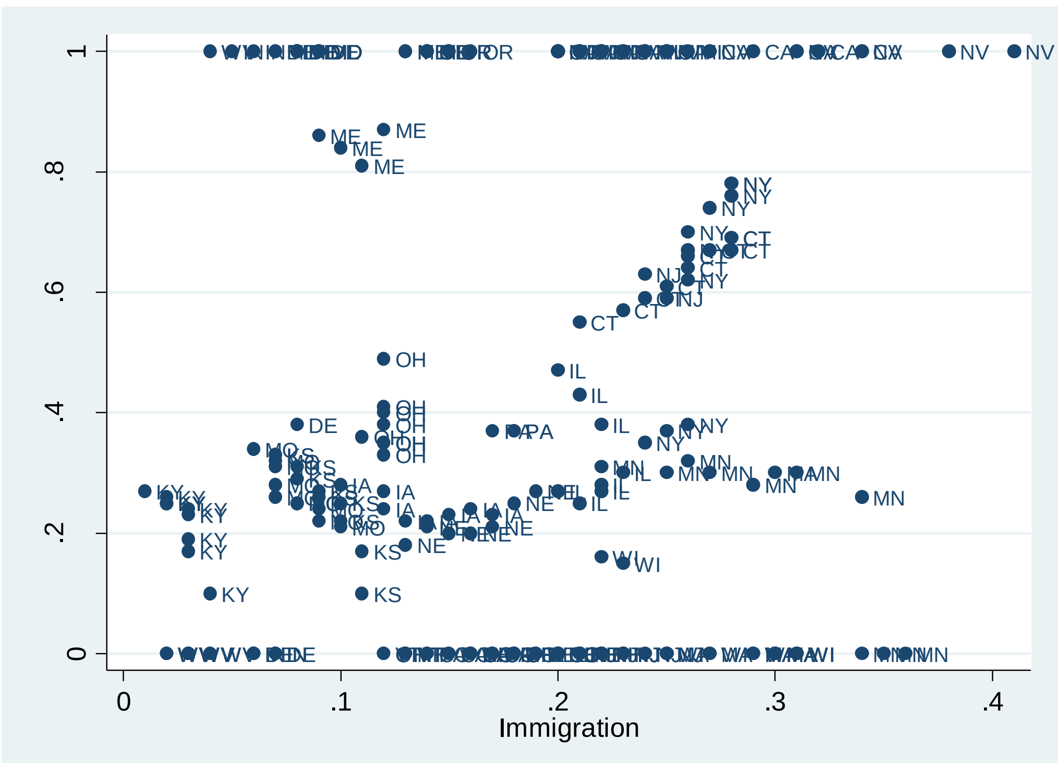
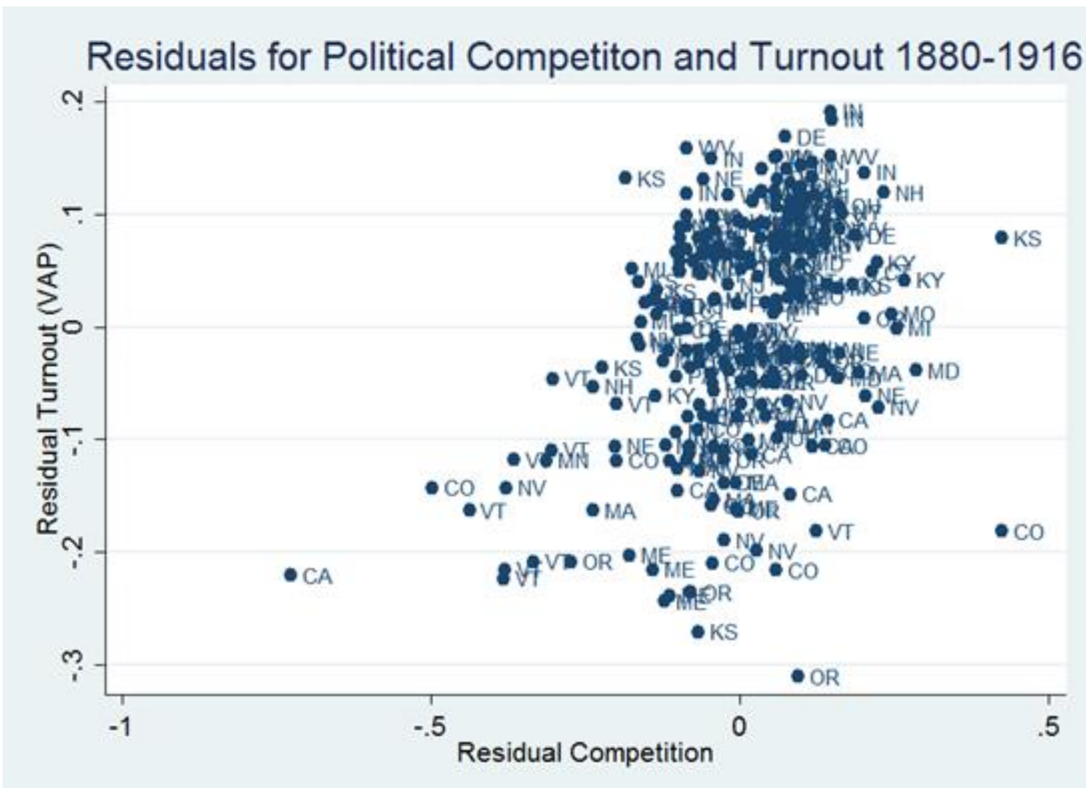
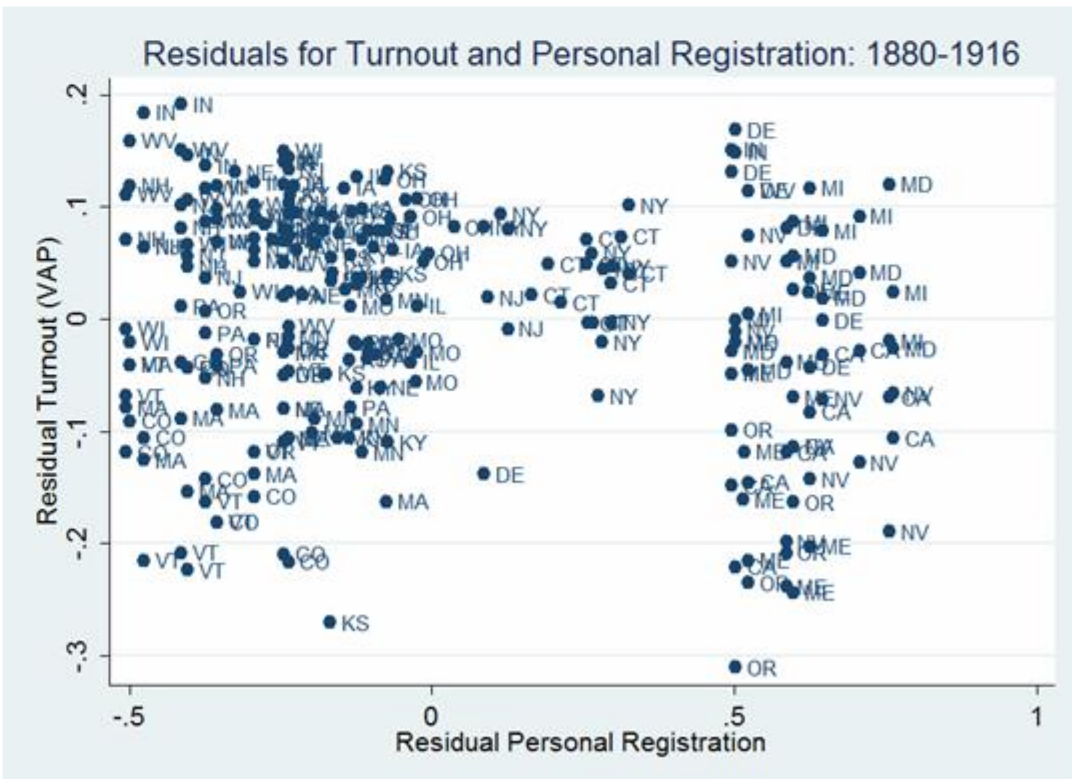


Figure 4.4 Residuals for Political Competition and Turnout 1880-1916



Note: State residuals from state and year effects.

Figure 4.5 Residuals for Turnout and Personal Registration: 1880-1916



Note: State residuals from state and year effects.

Figure 4.6 The Effect of Registration by Year, 1880-1916

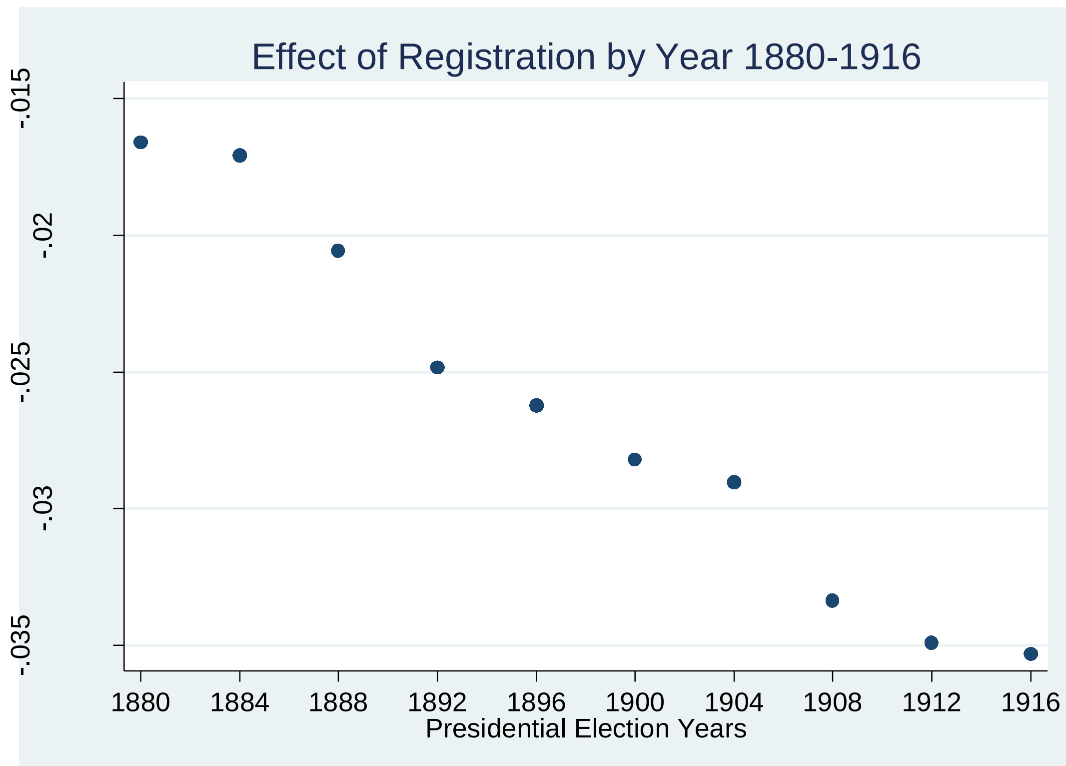


Figure 4.7 Registration Effect vs. Total Unexplained Year Effects

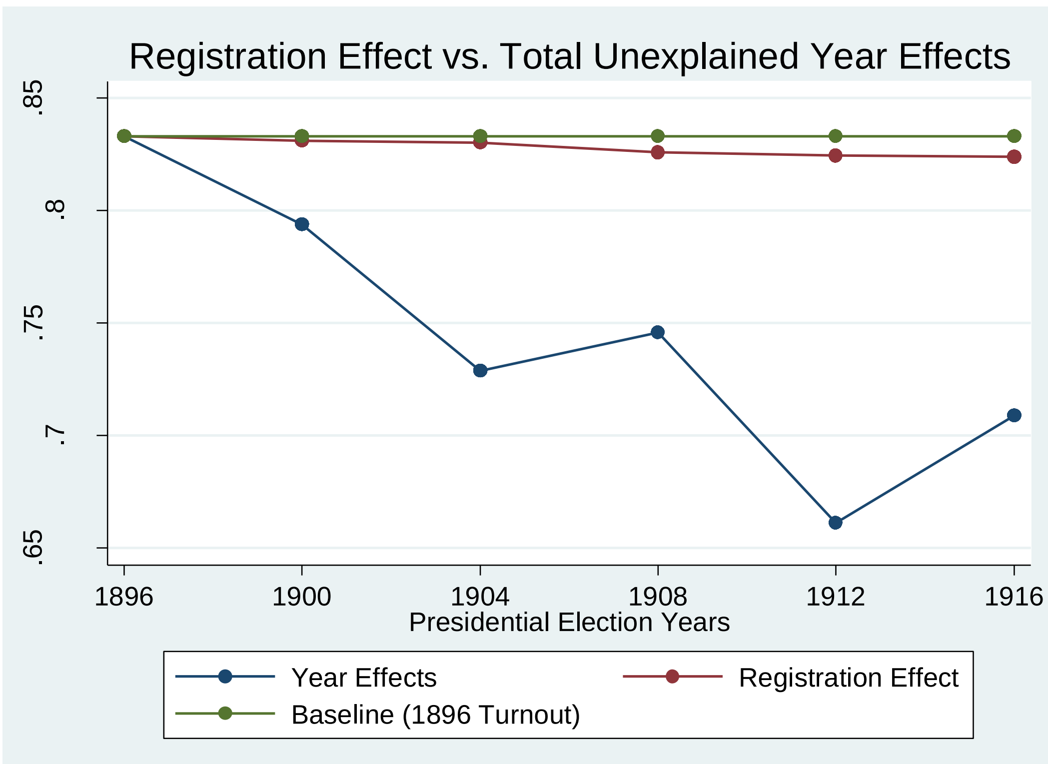
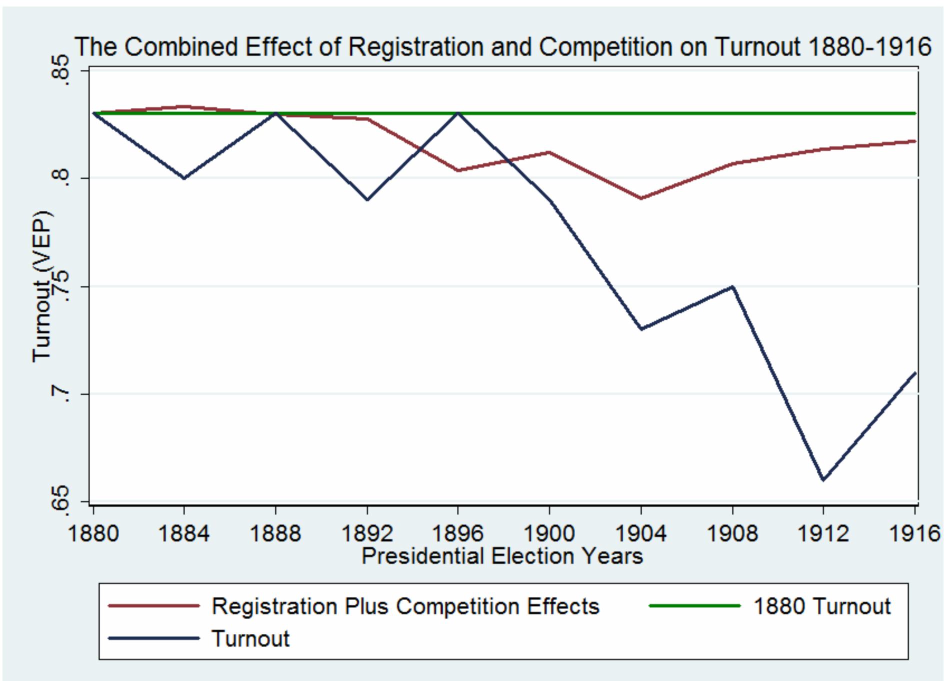


Figure 4.8 The Combined Effect of Registration and Competition on Turnout: 1880-1916



Chapter 5: Chapter Five: What Election Betting Market Data Reveal About Political Party Competition in the States, 1880-1916

5.1 Introduction

Electoral party competition is a key element of healthy democracies. It gives voters viable alternatives in governance, fosters greater party mobilization and in turn higher voter participation, and also promotes better policies along with politician accountability (Schattschneider 1942; Key 1956). Empirical findings from the previous chapter showed a strong and positive relationship between political party competition and voter turnout. People are more likely to show up at the polls when contests are close even when institutional factors make it more difficult to do so. This is in line with theoretical expectations about voting behavior (Key 1950; Downs 1957; Riker and Ordershook 1968). Tight races increase the value of voting at the individual level, boosting turnout because each vote cast has a greater chance of affecting election outcomes than it would in noncompetitive elections. Moreover, electoral closeness motivates parties to mobilize the electorate. As opposing parties ramp up their efforts to accumulate votes, the resulting increase in voter contact and information facilitates participation (Teixeira 1992). While it seems clear there is a causal relationship between high levels of competition and turnout, there are some crucial limitations to this argument associated with difficulties in measuring the concept of political competition.

The vast majority of existing competition measures are based on election returns data, providing information only on the competitiveness of races after the fact. This is problematic for a number of reasons. Such measures fail to capture competition levels prior to election outcomes. If competition varied throughout the campaign influencing parties' mobilization strategies and voters' decision to participate, it is difficult to accurately assess the impact of competition on turnout. A solution might be to assume competition levels on Election Day were consistent throughout the campaign, but such assumptions might lead to inaccurate conclusions.

In this chapter, I introduce a new way of measuring political party competition. I do this to gain greater insight on the relationship between competition and electoral participation Integrating the literature on economics on how betting or information markets accurately aggregate information on the beliefs of groups, I use an original dataset of election betting odds on American presidential elections from 1880 to 1916 to create a measure of electoral closeness that captures public perceptions of competition levels in the states prior to election outcomes. Election betting or information markets are groups of individuals placing monetary wagers on election outcomes. Betting on American elections was common at the turn of the twentieth century and consequently there is an abundance of data on election predictions based on betting market prices (Rhode and Strumpf 2004). This data contains insight on the political behavior of the mass public and relatedly on the electoral competitiveness of national and local elections.

My approach tackles a significant limitation in studying the electoral behavior of the historical electorate. Given there were no scientific public opinion polls or surveys during the late nineteenth and early twentieth centuries, not much is known about the public opinion or perceptions of these voters. But with historical records of political gambling on elections, it is possible to get a glimpse of at least some dimensions of public perceptions on elections at the time, namely candidate and partisan preferences and the closeness of races.

The history of political gambling on elections also shows how bookmakers were key political actors at the time, and how their interaction with the mass media influenced elections. In this way, betting activity amasses a great deal of information about the political environment in America at the turn of the twentieth century, providing significant insight into the thoughts and perceptions of the public and thus information about American political development and society at large. This chapter is organized as follows; I first discuss the shortcomings in existing measures of political competition. Next, I provide an overview of historical betting markets and a discussion of the literature in this field. I then discuss my data collection process, methodology, statistical model and results. Last, I present my interpretations and conclusion.

5.2 Drawbacks in Measuring the Concept of Political Competition

If electoral closeness increases the benefits of voting relative to the costs, competitive elections should result in higher voter turnout (Downs 1957). For the most part, empirical research support Downs' (1957) theory, (Burnham 1965; Burnham 1982; Holbrook and Dunk 1993; Matsuka 1983; Patterson and Caldeira 1984) but some studies suggest there is a weaker or nonexistent relationship between turnout and competition (Foster 1984; Grofman et al. 1998; Matsusaka 1993). Foster (1984) tested all existing models at the time that purported a link between the two variables, finding little evidence in favor of the competition hypothesis. These contrasting findings derive from variation in the operationalization of the concept of political competition. Przeworski and Sprague (1971) note that ideally competitiveness would be measured "directly," capturing parties' mobilization efforts, including costs and time spent. But because this approach would be prohibitively expensive, scholars typically rely on proxies to measure electoral closeness.

The vast literature on political competition includes numerous indexes intended to measure different aspects of competitiveness in elections. In general, most indices combine measures of the percentage of the vote and legislative seats won by a party along with the proportion of elections each party wins over a certain timeframe. Austin Ranney (1965) developed one the most widely used indices—a composite measure of Democratic Party strength at the state level from 1948 to 1960. For each state, Ranney scored the percentage of the vote share, the proportion of legislative seats held, the number of times the Democratic Party won gubernatorial elections, and the average amount of time the Democratic Party was dominant in the legislature and governorship. He averaged the scores and placed them on a 0 to 1.00 scale, where increased value indicate greater Democratic control.

One of the limitations of the Ranney index is its focus on state elections. It also fails to take into account redistricting, and attributes too much weight to party control of legislative seats relative to other state offices (Pfeiffer 1967). Other researchers produced a vast number of indices similar to Ranney's. Paul David (1972) measured the margin-of-victory for national and state offices for the 1870-1970 time period. His index subtracts the percent of the vote share won by each party. Small margins suggest greater competition. With this measure, David created an index that ranges from 0 to 100, with increased values indicating higher competition. A composite version of the index includes average scores for most state and national offices (Rusk 2001), thus improving upon the limitations of the Ranney index. Holbrook and Dunk (1993) designed a measure of district-level competition based on election results. This index takes into account the percentage of the vote won by the winning candidate and the margin of victory, whether a seat is safe and if the election was contested or not. All components are "averaged across districts for all states and combined into a single index value for each state from 1982 to 1986. Complete absence of competition is indicated by a score of 0. This would be a case where all candidates are unopposed." They argued that this measure was superior to the Ranney index because it was based on actual election results, instead being a measure of party control of government.

But it can be problematic to measure competition with election returns data. Such an approach provides no information about levels of competition prior to the election. Theoretically, it should be voters' perception of competition before elections that matter for turnout because perceived competition potentially influences voters' decisions to register and vote (Cebula and Murphy 19080; Foster 1984; Uhlander and Grofman 1986). Foster (1984) compared and contrasted models of ex ante and ex post (Barzel and Silberberg 1973; Silberman and Durden 1975) competition models, and found minimal support for the idea that ex post competition influences turnout. But measures of ex ante competition were crude due to data limitations, most measures were based on party balance in legislatures (e.g., Cebula and Murphy 1980). Foster conducted her own empirical tests on the effect of ex ante competition on turnout using a measure of competition inspired by that of Cebula and Murphy's. In that study, ex ante competition was designed as the total number of Democrats in the legislature divided by the sum of Republicans and Democrats minus .50. Smaller values indicated voters expected the contest to be close. She found that "election closeness effects appear to be significant and relatively stable from year to year, although of small magnitude." She concluded that the evidence "in favor of the ex-ante model (although stronger than for the ex post models) was weak and unpredictable on a year-to-year basis." Thus, most existing measures of ex ante competition were poor proxies for perceived competition.

In sum, there are significant limitations to studying the effect of competition on turnout. Ideally, measures would capture information on electoral closeness prior to elections, but that kind of data is lacking. This dissertation addresses that problem. I propose a new measure of political competition based on the literature on election betting markets. This pre-election measure of competition captures the actual sense of competition that parties were responding to before the election.

5.3 Literature on Historical Betting Markets

There is a growing literature on historical betting markets in American elections that shows these markets accurately forecasted elections before the advent of scientific public opinion polls (Rhode and Strumpf 2004; Erikson and Wlezien 2008, 2012). Rhode and Strumpf (2004, 2008) were the first to show the important role of historical betting markets in American elections, richly detailing the history of the New York betting market. Looking at presidential, gubernatorial, and local elections in New York, they find that in the pre-poll era, information markets made highly accurate forecasts months and weeks ahead of elections with increased precision as Election Day neared. This is striking given the limitations in information at the time relative to the present day, in which public opinion polls figure prominently in election forecasting. Their findings formed part of a broader literature on the efficiency of information markets— a subset of which focuses on how election market predictions compare to forecasts based on public opinion polls.

Rhode and Strumpf (2004, 2008) showed that despite the absence of scientific public opinion polls, the predictive power of these historical betting markets compared favorably to that of their modern counterparts, most notably the Iowa Electronic Market (IEM) at the University of Iowa—an online election betting market established in 1988 in which traders could profit from the buying and selling of shares on candidates' expected vote share on the day of the election (Forsythe et al. 1992). Numerous studies show the IEM's predictions come close to matching actual vote margins on Election Day and can outperform public opinion polls (Sunstein 2004; Surowiecki 2004; Wolfers and Zitzewitz 2004b). But Erikson and Wlezien (2008, 2012a, 2012b) show such assessments are inadequate given that traders benefit from information available from the polls. They however confirm Rhode and Strump's (2004) findings on the accuracy of historical betting markets, and note these markets' forecasts outperformed their modern counterparts despite the lack of poll data.

In this study, I do not take part in the debate on whether markets or polls are better election predictors, but rather take the general consensus that historical betting markets made surprisingly accurate forecasts prior to the advent of scientific public opinion polls as a given. One of the most important implications of such findings is that information markets captured the competitiveness of contests well ahead of Election Day. As Rhode and Strumpf (2004) note, historical betting markets "were highly successful in identifying those elections—1884, 1888, 1892 and 1916—that would be very close" (Rhode and Strumpf 2004, 130). This suggests people probably knew if races were competitive before elections. This information is crucial because electoral competition is one of the driving factors behind political campaigns. Party competition influences campaign spending, voter mobilization, and turnout. But since the existing research is limited to predictions on general election results and state and local elections only for New York, it is not known if election markets made accurate predictions of election outcomes at the state level for other cases. It is thus not clear if people were aware of the levels of electoral competition in the individual states. Yet, that is precisely the information most relevant to campaigns, mobilization, and turnout.

In this study, I take this research on betting markets and political competition further, asking if price-setters could reliably predict presidential election outcomes at the state level. I do this to assess the extent to which price-setters were aware of the competitiveness of elections in the states and if they could predict when the level of competition was about to change. With this information, I can make inferences about the public's perception of political competition of presidential races at the state level and on the relationship between competition and turnout. Before turning to this analysis, I first present a brief history of election markets in America.

5.4 Overview of Historical Betting Markets

Days before winning the presidential election of 1912, Woodrow Wilson put to rest any doubts about his potential victory noting, "the Gentlemen in Wall Street don't bet 5 to 1 [84%] on their own destruction" ("Wild Over Wilson" 1912). Citing the betting odds to predict election outcomes was customary in America at this time (Rhode and Strumpf 2004). Yet, in the voluminous literature on nineteenth century American electoral history there is scant evidence of the central role political gambling played in elections. By the dawn of the Progressive Era "so common and universal [was] the practice of betting on elections that a man from Mars upon witnessing it for the first time would be astonished to be informed that it is forbidden by law in every State of the Union" (Baker 1912). People from all walks of life, rich and poor, native stock and immigrant, as well as men and women engaged in various forms of election betting. In a similar way to how contemporary reporters get election predictions from the well-known poll-analyst, Nate Silver, in the past, journalists famously consulted Chicago's bookmaker, Big Jim O' Leary, or Pennsylvania's William Singerly, or the Ullman brothers from New York. Yet the literature on late nineteenth century American politics makes almost no mention of how in the era before public opinion polls the media relied on information from betting markets to forecast election outcomes, or on how the public incorporated betting market predictions into the voting decision.

During the late nineteenth century, political betting markets existed across the nation, usually in every major city (Rhode and Strumpf 2004). People gathered in pool-rooms, hotels, or bars to wager on race outcomes at the national, state, and local levels, or they alternatively used telegraphs or telephones to secure bets offsite. Bookmakers typically ran a specific market, setting the prices or betting odds on candidates and other election outcomes. Some of these markets were thick, which means a great number of people participated in the betting, whereas others were thin, meaning the betting was not too lively. New York City housed one of the nation's liveliest betting markets. By the late nineteenth century, the betting market in New York City was so large and organized it operated out of Wall Street, where bets where traded similarly to how stocks are exchanged. In contrast to the betting markets in other urban areas, the New York City market was a national market in the sense that people from all over the nation (and from outside the U.S.) traded in this market and newspapers relied heavily on forecasts from this market to track campaign developments (“Election Bettors are Slow to Put up Money on Presidential Race” 1912). For example, on Election Day in the presidential election of 1900, the *Philadelphia Enquirer* noted the New York market gave McKinley an 84 percent probability of winning the general election, noting “the betting is not an infallible guide […] but when it is indulged in so widely, it shows in what way the general sentiment is running. Wall Street is quick to catch on to the latest information, and the fact that Wall Street predicts McKinley’s election is worthy of note” (“Now for the Election” 1900).

5.4.1 Types of Betting:

There were different forms of betting, one for financial or other proprietary purposes and another for the sake of social entertainment. Newspapers typically referred to the latter as “freak” or “queer” election bets consisting of agreements between people in which the losing party engaged in some sort of embarrassing activity such as pushing another in a wheelbarrow, moving a nut along the sidewalk with a stick in the mouth, or growing a beard (Rhode and Strumpf 2004; "Campaign Betting" 1888). One newspaper noted that “freak bets on elections are the joy of post-election days” (“Election Betting Odds as Prophecies” 1916). Men, and to a lesser extent, women, commonly engaged in these types of bets as evident in the numerous freak bets that involved marriage proposals, which meant that the losing party conceded to marry the winner (“Queer Election Bets” 1900).

The other type of betting was in the form of financial transactions in pari-mutuel systems up until the 1870s. Pari-mutuel betting means that bookkeepers collect all bets and charge a commission typically of 5 percent, which is deducted from any payoffs.

There was usually one or a handful of well-known bookmakers in a betting market. After that, the betting was no longer pari-mutuel, bookmakers collected bets based on people's choices.

5.4.2 Bookmakers and Political Gambling Across U. S. Cities:

Some of the bookmakers were known mostly to bettors, but others like Chicago's Jim O' Leary or the Ulman brothers were known to the general public across the nation. Bookmakers were politically savvy individuals who used their private knowledge and "impartial beliefs to set the prices competitively" (Rhode and Strumpf 2004, 134). They kept a "book" of these betting odds and published changing prices daily in their betting establishments or in accordance to political developments. For the most part, two kinds of people participated in these markets, committed partisans and "professional gamblers." The partisans were a "very large class […] who blindly follow the party lead and religiously believe in their party's success […] chiefly because they are partisans and are anxious to uphold their party's standard with their money. These men—and they are a great majority—bet more or less recklessly." The "professional gamblers" on the other hand placed "their money out in a very cold and systematic way that no amount of enthusiasm could influence. They calculate on a sure thing" ("Campaign Betting" 1888). The difference between the two is that partisans bet in line with their party identification and candidate preferences, whereas professional gamblers used their knowledge about politics and the campaign to bet on the most likely outcome, their incentive is to make a profit not to back candidates or express partisan preferences. One newspaper noted that "brokers bet on elections just as they buy and sell stock, in order to make money" ("Election Betting Odds as Prophecies" 1916).

During the late 1880s there were election markets in major cities across the nation (Rhode and Strumpf 2003, 3; "The Election Bet Has Come it Has Made Its Initial Bow with the Croker Wager" 1900). Betting was so lively in cities that national and local newspapers (Town Talk 1904) commonly reported how the wagering was going in places like Philadelphia, Chicago, Cleveland, Boston, San Francisco and Baltimore. Hotels and bars were the most common sites of betting in the Northeast and Midwest, whereas in the West bookmakers typically operated in cigar shops ("Election Bets" 1884).

Chicago was home to one of the better known markets in the nation. During the 1900s, it was led by Jim O' Leary, "one of the most successful professional gamblers in Chicago" (Longstreet 1973, 121). O'Leary made a name for himself for making accurate election predictions and perhaps for this reason was one of the only persons ever arrested for election gambling in 1912 Chicago ("Saloonkeeper Bets $5 Jury Will Set Him Free" 1912). This however, did not stop him from continuing to make millions in political gambling well until his death in 1925.

5.4.3 Crackdown on Election Betting:

In 1908, the *New York Times* reported the betting on elections was not as lively as it had been in previous years ("Topics of the Times" 1908), particularly because New York implemented stricter prohibitions on election gambling. But this did not stop people from finding creative ways to engage in the practice. One paper noted individuals now referred to bets as "agreements" in which parties arranged to exchange money on election outcomes ("Even Money in New York Fight" 1908). Yet another innovation was the emergence of insurance policies on the potential victory or loss of a candidate's election (Rhode and Strumpf 2003, 3). The insurance company, *Lloyd's of London* started selling election insurance in 1908, “writing policies against the possible election of Mr. Bryan” and setting betting odds in accordance to how the insurance sold (“Insuring Bryan's Defeat” 1908). That year, the *Street Pandex of the News*, wrote that “Lloyd’s of London accepts insurance risks equivalent to betting odds of 9 to 1 on Taft” and odds of 7 to 1 on Taft [were] reported.”

While Rhode and Strumpf (2003, 3) note that “few if any policies were actually issued in 1908,” there is some evidence that other insurance companies followed suit, engaging in the election gambling business. In 1912, Pennsylvania’s *Wilkes Barre Times*, published the betting odds of an insurance company in Pittsburgh that “ma[de] a specialty of insuring its customers against the loss on election bets” (“How the Country is Betting on Wilson” 1912). Despite these practices, it seems election betting began dwindling by the late 1930s. As Rhode and Strumpf (2004) note, many factors contributed to its decline, including the advent of scientific public opinion polling, enforcement of legal prohibitions on election gambling and the legalization of other forms of gambling.

5.5 How Money Talks: the Theory Behind Market Prediction Accuracy

The general principle behind information market accuracy is based on the concept of the “wisdom of the crowds”—the idea is that groups are smarter than any single individual in them. Given a question, a group is more likely to approximate the correct answer than any of its smartest members. This is also known as the Condorcet Jury Theorem, which states that groups are better informed than any of its members, and larger groups are more likely than smaller ones to arrive at correct answers. The best example of this comes from a well-known experiment that social scientist, Francis Galton, conducted in the early 1900s. He asked a group of people to estimate the weight of an ox, a few people in the group had a good idea of how much the ox weighed, but most could only make random guesses. Galton hypothesized the group could not accurately estimate the weight given that the majority of individuals had little idea about the actual weight of the ox. But it turned out the group's average answer of 1,197 pounds was very close to the ox's actual weight of 1,198 pounds (Surowiecki 2004).

The Francis Galton example illustrates how information markets work. Markets aggregate all the information available to the group, and will "aggregate beliefs very well" (Wolfers and Zitzewitz 2004a) provided that at least a few individuals in the group are knowledgeable (can approximate the correct answer), and that the group is sufficiently large, then the average answer of the group is very likely to reflect the actual answer. Errors (incorrect information) cancel each other out. In these markets, betting is the mechanism by which information is revealed, because it gives members an incentive to share information. If these conditions hold, information markets will successfully forecast an event. Economists refer to this as the "efficient market hypothesis," markets can aggregate correct information "as long as the marginal trade in the market is motivated by rational traders" (Wolfers and Zitzewitz 2004b).

The idea that a few knowledgeable individuals willing to share information is a necessary condition for market efficiency is known as the "Marginal Trader Hypothesis" (MTH) (Forsythe et al. 1992; Blackwell and Pickford 2011). Under this view, markets successfully aggregate the average beliefs of a group because a handful of well-informed and unbiased individuals set prices. These"traders move the market to the equilibrium price and help to keep the price at the "correct" level" (Blackwell and Pickford 2011). By setting prices, these well-informed few share privately held information, helping to correct any errors in the perceptions of the group (Sunstein 2004). In sum, information markets can successfully predict events, such as election outcomes, as long as there are a few individuals in a successfully large group, willing to share their privately-held information and to set prices rationally.

These theories on information market efficiency have not gone unchallenged. Mansky (2005) notes there are no formal theories explaining why aggregated information should reflect a group's average beliefs. He cautions against the idea of using prices as probabilities without taking into account whether or not traders are risk averse. Mansky argues that it is not always the case that prices reflect the average beliefs of a group. This research was challenged by Justin Wolfers and Eric Zitzewitz (2004), who presented a formal model that shows when some of Manski's assumptions are relaxed, markets can successfully aggregate the average perceptions of a group. The theoretical and empirical research on why and how markets work is a growing literature that is continuing to gain increased interest given the potential value of information markets to democratic societies. In the next section, I discuss how historical betting markets worked through an application of the Marginal Trader Hypothesis.

5.6 The Marginal Trader Hypothesis in the Context of Historical Betting Markets

According to the MTH, efficient betting markets contain a small group of well-informed and unbiased individuals who share their information through price-setting. In the historical betting markets, these individuals are best thought of as the bookmakers who ran the betting establishments. Newspapers referred to betting commissioners as "oracles" or "prophets" of elections, at times noting they were "brim full of 'inside' information regarding the national campaign"("Bookmakers' "Bluffs" Professional

Gamblers Putting up Money on Cleveland" 1888). The Red Bank Register explained this was possible because the:

> men are engaged to get all the information possible. The betting odds are based on this information, which is usually better and more accurate than the informationwhich is received by party managers on either side, since the information they get is more or less tinctured by political bias. The betting odds on a national election may therefore be taken as a pretty accurate gauge of the general feeling throughout the country as to the prospects of the Presidential candidates. […] the odds are only in keeping with the general public sentiment (Town Talk 1904).

Journalists also noted, "men who follow the betting as a profession have no politics. They watch the phase of things and put their money where they think it will do the most good" adding that "from private sources […] the prevailing public sentiment is ascertained, and by such information the betting is regulated to a considerable extent" ("Money That Talks" 1876). Given this evidence, it is worth to ask, what were these "private sources" and how did they acquire this information?

There are several ways in which professional gamblers could conceivably get private information about elections. Some anecdotal accounts reveal how betting commissioners obtained their "private" knowledge. One way was through their relationships with politicians. For example, O'Leary's close connections with politicians were evident during his funeral, where "leading politicians of both great parties were there to show respect" ("Back O' Yards' Says Good-By to Jim O'Leary" 1925). It was not uncommon for politicians to frequent pool-rooms and privately secure bets with these commissioners. By doing so, they revealed some information about the election to the bookmakers. For instance in a San Francisco pool-room, "a Blaine syndicate […] place[d] in the hands of Mr. Gunst [betting commissioner] $1,500 to bet on Blaine" ("Election Bets" 1884).

Bookmakers also studied the election, setting prices based on their knowledge of the election and not on their partisan preferences. For example, a bookmaker in 1884 said "I have studied the question up cooly and without any prejudice" ("I'll Bet You a Hundred" 1884). Newspapers confirmed such perceptions stating that bookmakers "wager money, not from a feeling of loyalty to any party traditions, but to add to their bank rolls" noting the bookmaker's prices were an indication of how they thought the election would turn, bookmakers "show their belief in the claims made by the Republicans, by asking bettors to risk seven dollars to gain one [and] offering to give seven dollars for every two wagered on Bryan" ("All Signs Point to Taft Victory" 1908).

In the 1892 election, Joe Ullman gave an example of how he studied the election, he "bet on information which satisfied him that Tammany was loyal in New York and that the Democratic work in Indiana was being done in the right way and places" (he was correct in the bets he laid out in his book that year) ("Joe Ullman's Big Election Book" 1892). They also considered campaign events and the timing in the campaign before setting prices. For example, days before August 20th of 1896, James Mahoney had made an offer on Bryan, which he reneged later after a campaign event in Madison Square Garden. The paper noted Mahoney "did not want to bet on Bryan at the odds quoted." He said "I am going to wait […] before betting any money on the election. Things are all mixed up, and it is a little too early to place money. I would not today bet on Bryan's election if I were offered odds of 5 to 1" ("James Mahoney" 1896). Another source of information for bookmakers seems to have been the betting itself, in October 7th of the 1884 election the bookmaker noted above for that same year added that "the result is a little too doubtful for me […] there is too little bookmaking going on" ("I'll Bet You a Hundred" 1884).

Yet another potential way betting commissioners acquired private information was through innovations in organization and communication. For instance, in 1904 a group of people formed the National Election Association, meant to "aid those who desire to make wagers on the coming election" they planned to "make careful canvasses into every district in every state in the union with the idea of furnishing information on the result of the coming presidential contest to those disposed to make wages" ("A Brand New Idea" 1904). The organization purported to have hundreds of individuals in the states working on this matter.

These examples provide some empirical evidence of how the historical betting markets operated in accordance to the MTH. Bookmakers acquired private knowledge about the election as some of the evidence suggests, and set prices accordingly, at times using information from how the betting was going to adjust prices. These examples show how it was possible for the knowledgeable individuals to make accurate predictions of election outcomes before Election Day. According to the MTH, if these few knowledgeable individuals set prices in an unbiased fashion as they claim, in thick betting markets, then market prices should reflect election outcomes. I turn to testing the hypothesis that informed individuals were aware of how presidential elections would turn out in the states in the next section after discussing the data and method.

5.7 Data and Method

Using a similar data collection methodology to that of Rhode and Strumpf (2004), I assembled three data sets of election betting odds on presidential election outcomes at the state level. For example, a newspaper might report that "odds are 2 to 1 (or 67%) that Wilson will carry Pennsylvania." From that sort of description, I collected the information on the betting odds on Wilson for that election year. My dataset differs from Rhode and Strumpf's because it is based on betting odds on election outcomes at the *state level* rather than on general election outcomes. Data at the state level contain insight on the electoral competitiveness of presidential races for the individual states.

The first data set is for six states from 1880 to 1916. The six states are California, Connecticut, Illinois, Indiana, Ohio, and New York. While I collected data for a greater number of states, I focus on this sample because there was a greater abundance of betting odds data for these dates throughout the time series. The six state panel is not yet fully balanced however, because there is some missing data for some years and states, particularly for California and Connecticut. The other data set is cross-sectional, consisting on prices from September 27th and October 5th for 43 states for the 1896 presidential election. It is based on the book of two New York City bookmakers. Table 5.1 shows this dataset. Last, I have a smaller data set for the 1896 election of seven states on prices during the week before the election.[36]

Betting odds data is embedded in newspaper stories on market predictions about elections. I collected most of the data from numerous national and state newspapers and from a newspaper index volume. The vast majority of the data come from online historical newspaper databases, but some of it was gathered from microfilm collections from various state libraries. For each state, I collected as many state-level candidate

[36] I also collected a cross-sectional dataset for all states for the 1912 election but exclude it from the analysis here due to difficulties in coding the 3-way race.

prices as was available from newspapers, for any date the data were available. On average, I gathered about five candidate prices for each state and year, with the exception of the 1896 election for which I have an abundance of data. For some states I have data from August to November, but I focused on the candidate prices closer to the election. When I had more than one price, I averaged the prices for the week closest to the election.

Like Rhode and Strumpf (2004), I used betting odds based on actual bets and not offers, meaning that the prices reflect bets taken and not merely offers made. Prices based on actual betting are a better reflection of how the wagering is going than betting odds based on offers not taken. The data from prices quoted in betting markets across the nation, but mostly from lively markets, such as those found in New York, Chicago, and Philadelphia. For each state and year, I kept track of whether or not the betting odds came from a thick (heavy betting) or a thin (light betting) market. I also kept track of the date the odds were reported in newspapers and of the approximate date of betting.

Next, I converted the betting odds into probabilities, focusing on the probability of a Democratic win. For example, if odds were 4 to 5 that Cleveland (D) would carry California in 1888, I divided 5 by 9 (5/ 4+5) to obtain a 56 percent probability of Cleveland carrying the state. When there were multiple betting odds for a given week, I averaged the prices. For example, for the last week of October during the 1896 election in Illinois I have two prices, 5 to 4 on McKinley carrying Illinois and 3 to 1 McKinley that carries Illinois. These betting odds translate into 56 percent and 75 percent probability of McKinley carrying the state. I averaged both prices for a 66 percent likelihood of a Democratic win in Illinois in 1896. From the Democratic price, I could also estimate the expected Republican price (the difference of the Democratic price from 100). Next, since betting market probabilities are not linearly related to the vote (Erikson and Wlezien 2012), I created a new variable translating the probabilities into the log of the odds to facilitate interpretation. The log of the odds equal the Democratic price divided by one minus the Democratic price, (i.e., Log of the odds = log (Democratic Price/(1-Democratic Price))). This variable is linearly related to the vote.

To complete the dataset, I use data on the actual percent of the vote share each party won in a state for every presidential election year. That data come from the CQ Press Voting and Elections Collection database. I created two variables, *Democratic Price* and *Democratic Vote* (the Democratic percent of the 2-party vote).

With the data for six states, I test the hypothesis that betting markets were good predictors of presidential election outcomes at the state level. For the 1896 data, I test the same hypothesis, but also examine if well-informed people were able to anticipate the 1896 realignment (I look at whether people could anticipate when voting patterns were about to change). I do this by controlling for the 1892 presidential election.

5.8 Results

Table 5.2 presents the correlations between the price and the actual vote for the six-state time-series data. The correlations are fairly strong in California (.79), and Illinois (.60) suggesting a relationship between the market predictions and the actual vote during the last weeks of the campaign. But for other states the correlation is modest or weak, which means there is little relationship between the Democratic odds and the vote in those states. Figure 5.1 shows the market predictions of a Democratic win as a function of the Democratic percent of the 2-party vote for this six states. This shows a linear and positive relationship between price and the actual vote. Figures 5.2 to 5.7 show the relationship between price and the vote for each individual state. Next, I turn to a closer look at the 1896 presidential election.

5.9 The 1896 Presidential Election as Seen by the Betting Markets

While the 1896 presidential election between William Jennings Bryan (D) and William McKinley (R) is one of the most talked about in American history, the important role election betting markets played in this race is little known. This remains an unknown but important story about American electoral history on the dissemination of electoral information during the pre-poll era, on what the public potentially knew about the election outcome, and on whether people could anticipate the changes in electoral politics that took place afterwards. It is generally accepted that the 1896 election resulted in a critical realignment[37] characterized by a regional shift in electoral coalitions that led to Republican Party dominance in the Northeastern and Midwestern states and solidified Democratic control of government in the Southern states for about 36 years (Burnham 1970). The most salient issues were economic, as the nation recovered from the depression of 1893, which happened under the leadership of the Democratic Party (which took much of the blame for the depression). Republicans maintained that the gold standard and the tariff would promote economic prosperity. Democrats and Populists argued in favor of the use of silver to alleviate the economic pressures of farmers (Sanders 1999; Bensel 2000). This was a heated issue, pitting Democrat against

[37] The critical realignment theory is controversial because some argue that there is little reason to think a shift in partisan preferences of the electorate took place, or that party dominance was not necessarily as permanent as Burnham suggests. There is however, a general agreement in the literature that the 1896 election resulted in this regional shift in partisan coalitions. For a critique of the realignment theory see Mayhew, David R. Electoral Realignments : A Critique of an American Genre. The Yale Isps Series. New Haven, CT: Yale University Press, 2002. Print.

Democrat and resulting in some unlikely alliances between Republicans and wage-earners (Bensel 2000). The issues made for a close contest,[38] marked by popular enthusiasm, memorable speeches, turnout of over 86[39] percent (Rusk 2001, 52) and innovations in campaigning.

The media kept track of virtually every aspect of the campaign, including what the betting activity suggested about the potential election outcome. Beginning in July of 1896, reports on bets on the election started to surface. These were of minor bets between individuals, some of the early bets on July 3rd in Missouri were at odds of 71 probability against a McKinley victory in the general election ("Betting Against McKinley " 1896). The Wall Street bettors expressed greater confidence in a McKinley election, odds in the stock exchange on July 2nd suggested his chances of winning were .72 or .67 percent ("Bets on McKinley" 1896). Things continued to look grim for Bryan in September. In September 19th, the bettors in the Chicago market gave Bryan only a 40 percent chance of winning the general election ("Odds Against Bryan" 1896). By the end of the month, it seemed the markets identified McKinley as the potential victor in the general election and in several states. A systematic analysis of candidate prices at the state level provides some evidence of this.

Table 5.3 and Figure 5.8 present the correlations between Democratic price and the vote for the cross-sectional dataset on the 1896 presidential election. The results for the cross-sectional data on 43 states on the prices from September 27th and Oct. 5th are in the first row. There is a tight correlation between price and the vote in this election more

38 In Rusk's (2001, 520) party competition index ranging from 0 to 100, the competition level was 72.1.

39 National turnout was 79.7 percent, 86.2 in non-southern states and 57.4 in the South (Rusk 2001, 52).

than a month ahead of the election (these prices are from September 27th and October 5th), this suggests that well-informed individuals were able to correctly set prices in accordance to campaign developments. The correlation is probably stronger for the last weeks of the campaign. This is evident in the second row, which presents the correlations between price and the vote for a sample of 7 states, the .92 correlation suggests the markets could accurately foresee how the election would turn out. See also Figure 5.9 for a graph of election-eve prices for 1896.

Next, I turned to a regression analysis of the 1896 election presented in Tables 5.4, 5.5, and 5.6. I tested whether Democratic prices were a function of the Democratic vote in 1896 and 1892. There is a possibility that prices for the 1896 election were based on results for the previous election (1892). The findings in table 5.4 show that the impact of the vote in the 1892 election is statistically insignificant, indicating that prices were driven by what was happening in the 1896 campaign. The findings in Table 5.5 are consistent with expectations. They show that the coefficient for perceived competition is statistically significant and in the expected direction. This indicates that candidate prices influenced turnout rates. The variable for the 1892 vote is insignificant. Registration is significant and in the negative direction. Next, I compare these results with those in Table 5.6, which presents the results of a regression of turnout on political party competition as measured by Rusk (2001) (on a scale of 0 to 100, where 100 indicates perfect competition). The findings suggest that competition is significant. Both the competition and the perceived competition variables influenced turnout in the 1896 election. This would be expected, but the perceived competition variable adds information that was unknown previously. Perceptions about political competition influenced turnout a month ahead of the election. The results lends greater support to the idea that in 1896 well-informed people made accurate assessments of the election outcome and were able to perceive the 1896 realignment, which means the public was likely aware of this given the information was heavily disseminated in newspapers and magazines.

Next, I estimated a regression of turnout on perceived competition for the election of 1896 to test the hypothesis that perceived competition had a positive impact on turnout controlling for the vote in the 1892 election. The findings are consistent with expectations; the coefficient for perceived competition is statistically significant in the expected positive direction. In states where the betting odds accurately forecasted the election outcome, turnout increased by approximately 6 percentage points.

5.10 Conclusion

In the era before public opinion polls, the media relied on information from betting markets to forecast election outcomes. Research on historical betting markets shows these were fairly accurate prior to the advent of scientific public opinion polls. But most studies have focused on market predictions of national election outcomes. This chapter examined if market predictions of presidential elections at the state level were comparably accurate. My findings are in line with the existing research on historical election betting markets. I showed that for a sample of six states, there was a tight correlation between price and the vote for some states. I also looked at a larger dataset comparing market prices and the actual vote for the 1896 election and found that here the relationship was stronger, price-setters were able to forecast the1896 election approximately a month in advance for most states. Given that this information was heavily disseminated through the media, this findings suggest that the public was well aware of the electoral competitiveness of presidential contests in the states at least a month before the election. This means that the critical realignment of 1896 did not catch most by surprise that year. People were aware of the closeness of presidential races in their states, and since competition matters for turnout, they were more likely to register and vote in these states. I also found that perceived competition had a positive impact on turnout in the 1896 election, turnout was expected to increase in states where the betting markets accurately forecasted the election. These findings lay the groundwork for further research in this area. In future work, I plan to extend this research further to examine the effect of perceived competition on turnout with a larger dataset of election betting odds. The findings have important implications for registration and turnout, suggesting that perceptions of electoral competition positively influenced mobilization rates and in turn registration rates in states where perceived competition and turnout were positively correlated.

Table 5.1 Betting Market Predictions on September 26, 1896

Betting Market Predictions on September 26, 1896			
State	**Democratic % 2-Party Vote**	**Betting Odds**	**Predicted Winner**
Alabama	0.71	2 1/2 to 1	Bryan
Arkansas	0.8	4 to 1	Bryan
California	0.5	even	McKinley
Colorado	0.86	4 to 1	Bryan
Connecticut	0.34	even	McKinley
Delaware	0.45	10 to 7	McKinley
Florida	0.88	1 to 7	McKinley
Georgia	0.75	3 to 1	Bryan
Idaho	0.62	8 to 5	Bryan
Illinois	0.43	5 to 4	McKinley
Indiana	0.49	10 to 7	McKinley
Iowa	0.44	10 to 9	McKinley
Kansas	0.52	even	McKinley
Kentucky	0.5	even	McKinley
Louisiana	0.71	1 to 2 1/2	McKinley
Maine	0.3	4 to 1	McKinley
Maryland	0.43	even	McKinley
Massachusetts	0.27	6 to 1	McKinley
Michigan	0.48	10 to 7	McKinley
Minnesota	0.42	10 to 9	McKinley
Mississippi	0.75	3 to 1	Bryan
Missouri	0.54	7 to 10	McKinley
Montana	0.75	3 to 1	Bryan
Nebraska	0.53	4 to 5	McKinley
Nevada	0.81	3 to 1	Bryan
New Hampshire	0.27	4 to 1	McKinley
New Jersey	0.38	2 to 1	McKinley
New York	0.4	6 to 1	McKinley
North Carolina	0.71	1 to 2 1/2	McKinley
North Dakota	0.75	1 to 3	McKinley
Ohio	0.48	2 to 1	McKinley
Oregon	0.49	3 to 5	McKinley
Pennsylvania	0.37	10 to 1	McKinley
Rhode Island	0.28	2 to 1	McKinley
South Carolina	0.75	3 to 1	Bryan
South Dakota	0.67	1 to 2	McKinley
Tenessee	0.75	1 to 3	McKinley
Texas	0.81	3 to 1	Bryan
Vermont	0.17	6 to 1	McKinley
Virginia	0.67	1 to 2	McKinley
Washington	0.75	1 to 3	McKinley
West Virginia	0.47	even	McKinley
Wisconsin	0.38	10 to 7	McKinley
Wyoming	0.63	3 to 5	McKinley

Source: "McKinley Favorite in the Betting." Chicago Tribune September 27 1896.

Table 5.2 Correlations between Democratic Price and the Vote on Presidential Elections in the States 1880-1916

California	.79
Connecticut	-0.1
Illinois	.60
Indiana	-.64
New York	.47
Ohio	-.33

Figure 5.1 Market Predictions vs. Actual Vote in Six States 1880-1916

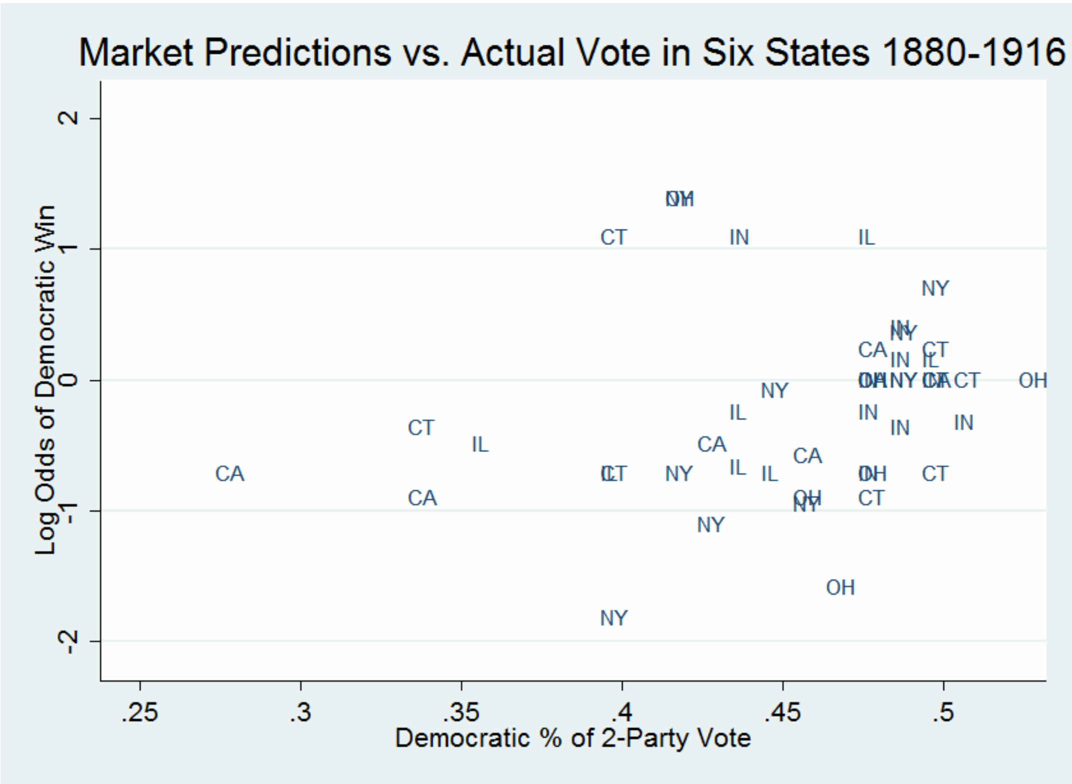


Figure 5.2 Market Predictions vs. Actual Vote in California

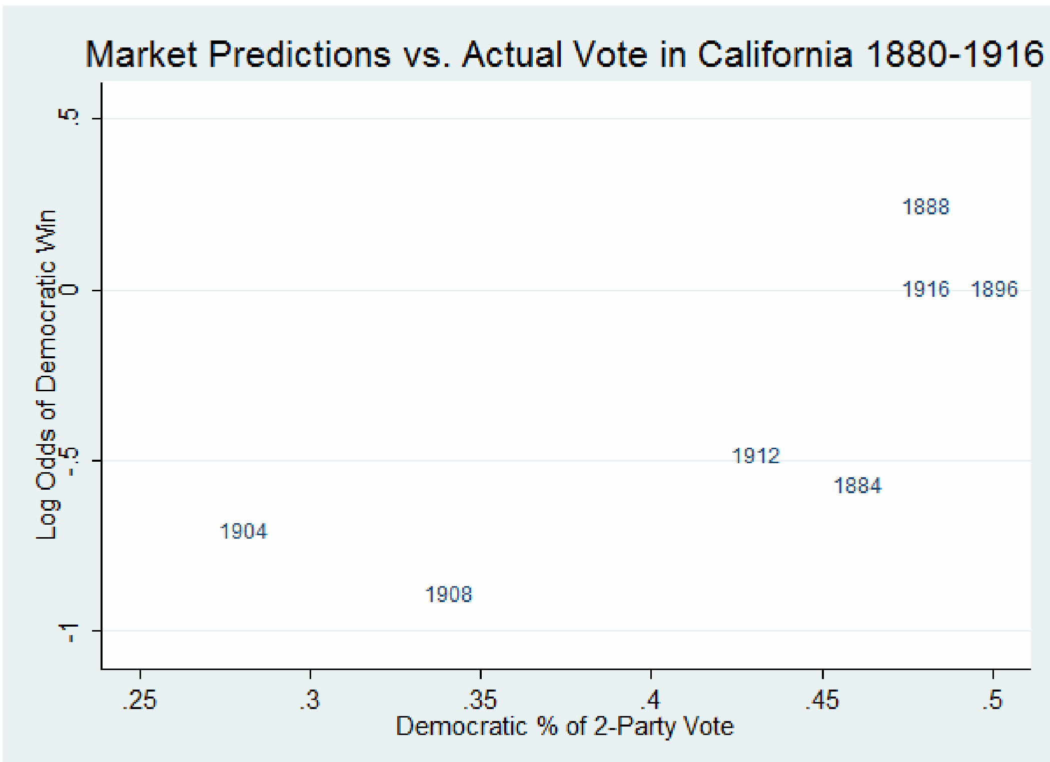


Figure 5.3 Market Predictions vs. Actual Vote in Connecticut

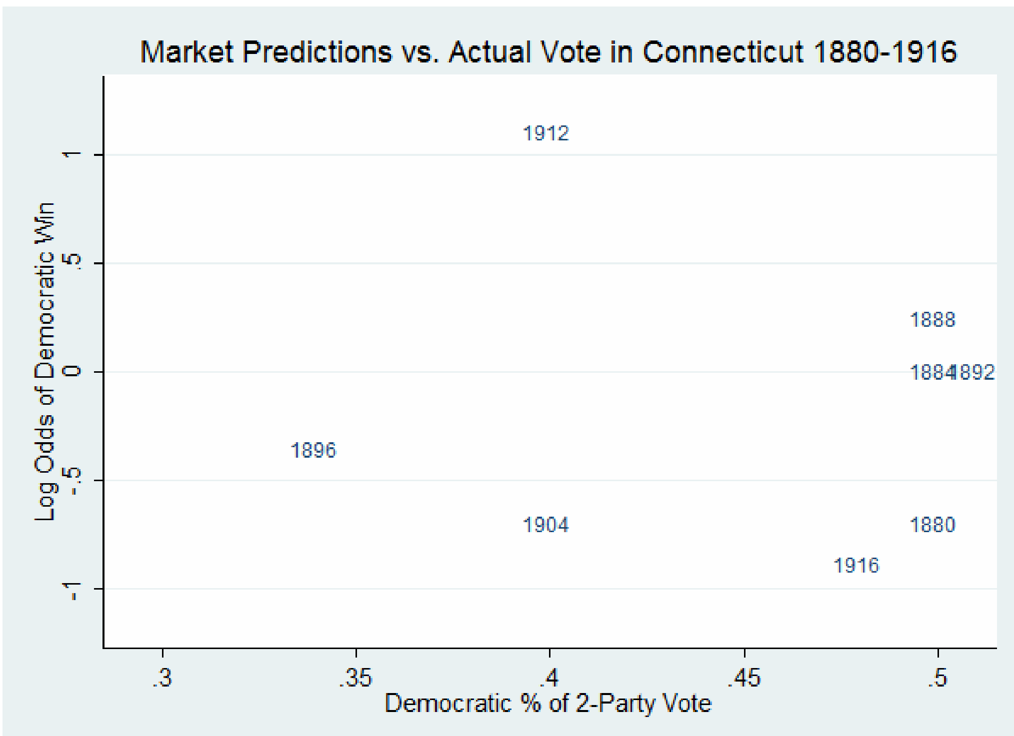


Figure 5.4 Market Predictions vs. Actual Vote in Illinois

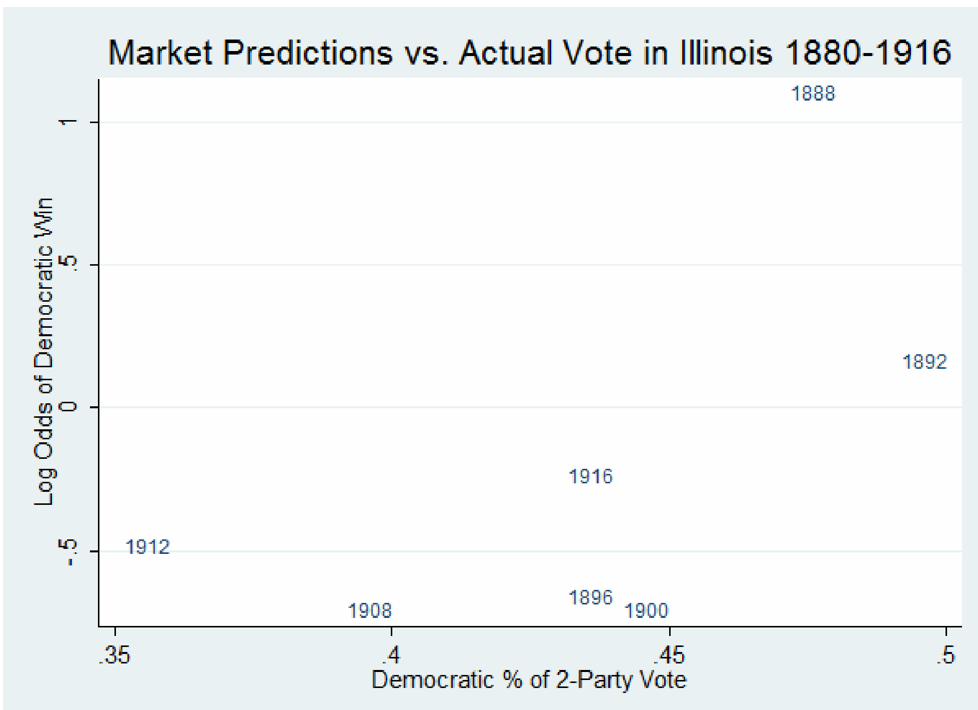


Figure 5.5 Market Predictions vs. Actual Vote in Indiana

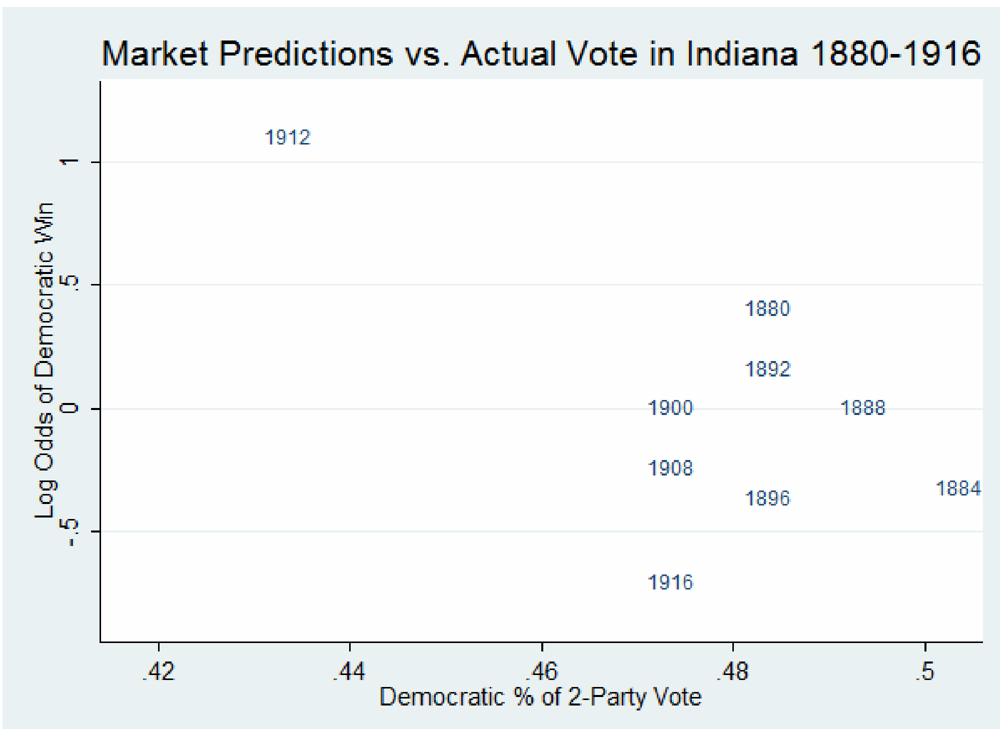


Figure 5.6 Market Predictions vs. Actual Vote in New York

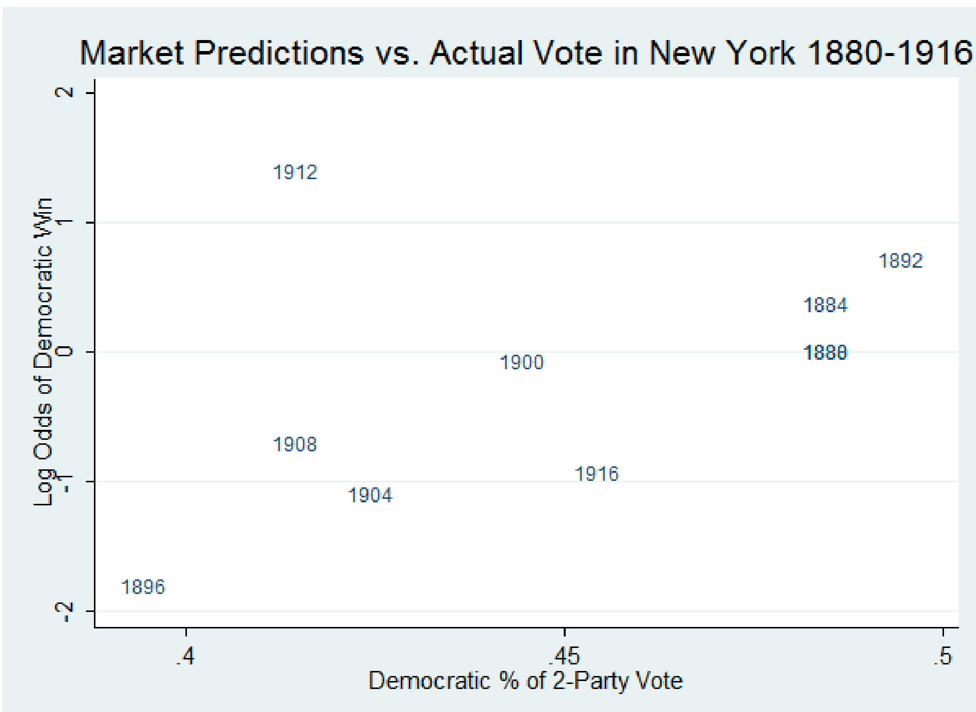


Figure 5.7 Market Predictions vs. Actual Vote in Ohio

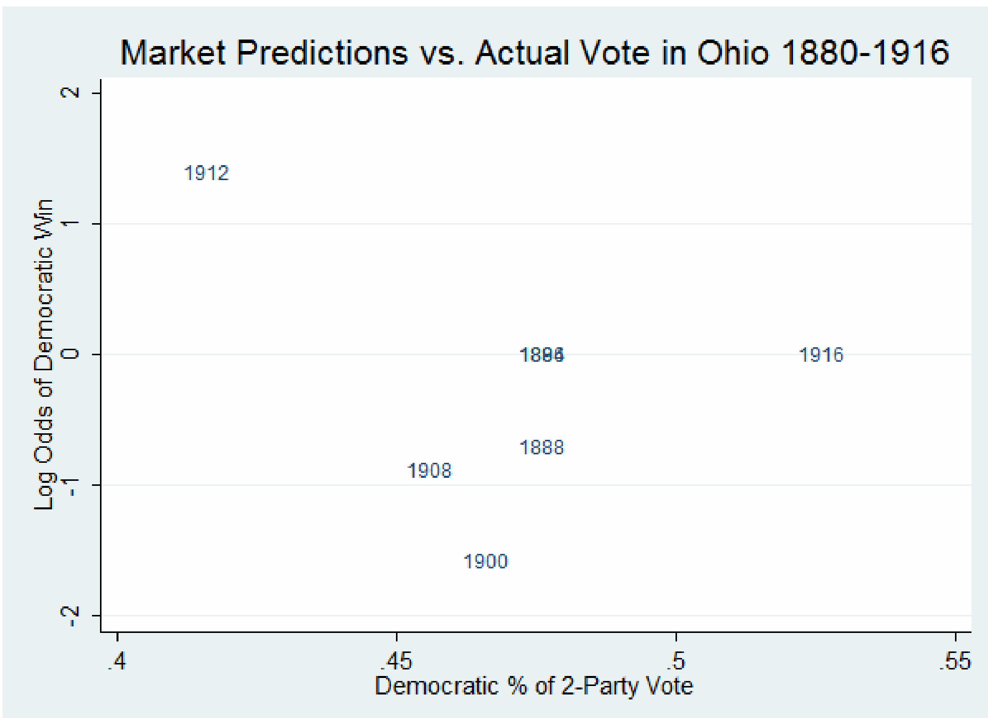


Figure 5.8 Market Predictions vs. Actual Vote in 1896 Presidential Election

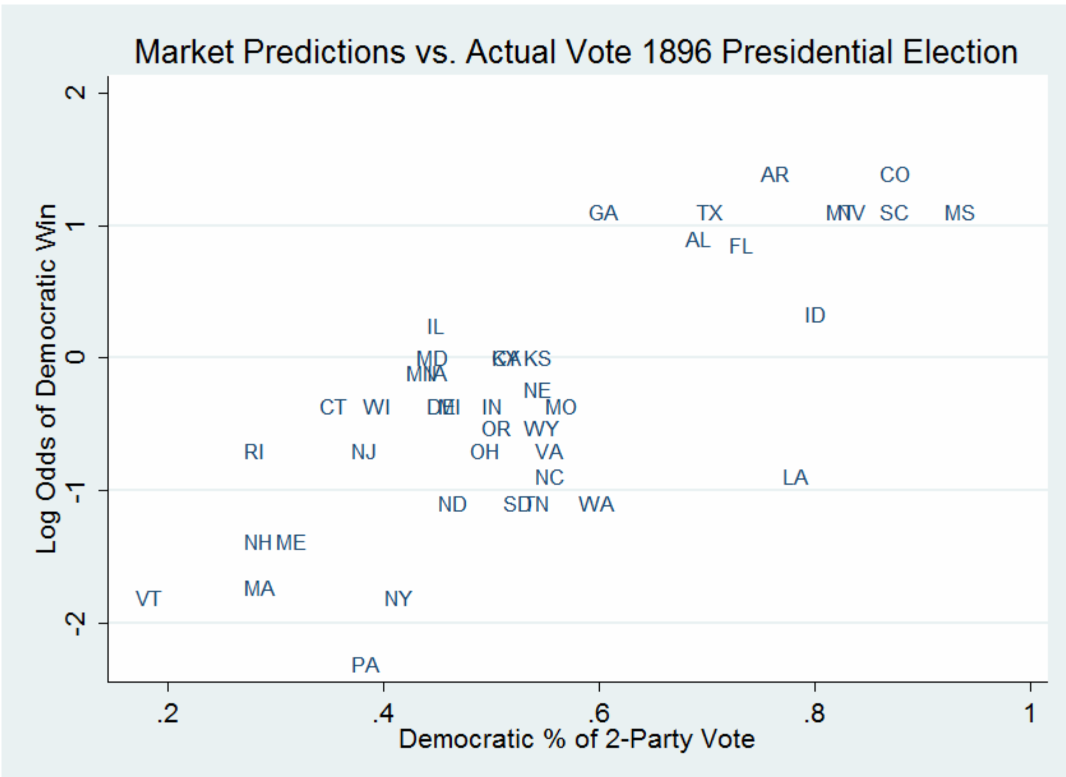


Figure 5.9 Election-eve Prices vs. Actual Vote: 1896 Presidential Election

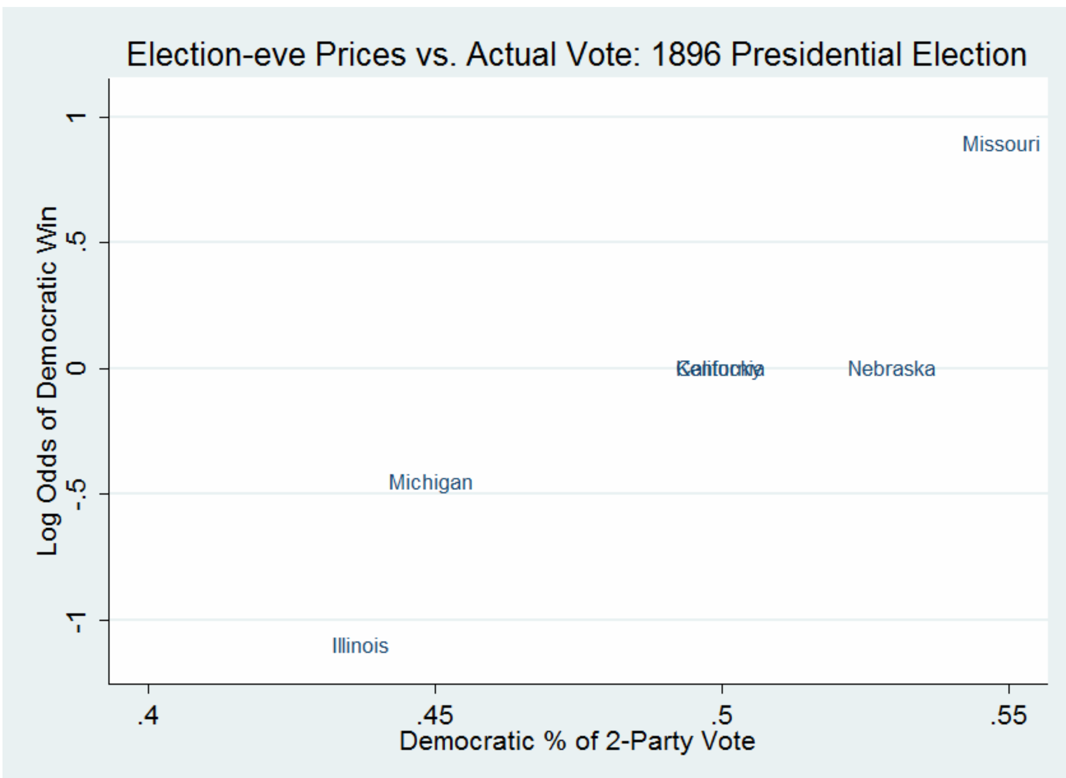


Table 5.3 Correlations between Democratic Price and the Vote on the 1896 Presidential Election

	Correlation Coefficient	Date
1896 N=43	.81	One month prior to election
1896 N=7	.92	Election-eve

Table 5.4 Effect of the 1896 and 1892 vote share of the Democratic Candidate on 1896 Prices

Explanatory Variable	Coefficient	Standard Error
Democratic Vote 1896	.6939*	(.1652)
Democratic Vote 1892	.3632	(.1898)
Constant	-.1292	(.0733)
N= 43		
R^2= 0.7086		

* p < .05

Table 5.5 The Effect of Perceived Competition on Turnout in the Presidential Election of 1896

Explanatory Variable	Coefficient	Standard Error
Perceived Competition in 1896	.2505*	.0593
Democratic Vote 1892	-.1090	.1352
Registration	-.0862*	.0403
Constant	.7489	.0860
N= 25		
R2= 0.4941		
Adj. R2= 0.4219		

* $p < .05$

Table 5.6 The Effect of Party Competition on Turnout in the Presidential Election of 1896

Explanatory Variable	Coefficient	Standard Error
Competition in 1896	.0040*	.0007
Democratic Vote 1892	.1150	.1248
Registration	-.0730*	.0347
Constant	.4754	.1040
N= 25		
R^2= 0.6153		
Adj. R^2= 0.5604		

* $p < .05$

Chapter 6: Conclusion

6.1 Introduction

Engaging the current policy debate in American electoral politics over contemporary changes to election laws in the states, this dissertation used a historical perspective to examine the impact of suffrage limitations on voter participation. In recent years, voting rights are continually making news. In 2013, the Supreme Court struck down historic parts of the Voting Rights Act, dismantling federal protections for African Americans and other minorities against potential abuses at the polls. Many states are making it increasingly more difficult to register, reducing registration periods and adding citizenship proof and other voter identification requirements (2014; Starkey 2014; Roth 2014). What is striking about these changes is that states are reversing many of the suffrage-expanding rights that came about after the 1960s, including the Voting Rights Act and the National Voter Registration Act of 1993. It is remarkable how much the new restrictions resemble the strict voting laws legislators passed in the late nineteenth century. The potential effects of these changes on turnout are concerning, particularly because marginalized populations are potentially the most likely affected.

Because these legal changes are relatively recent, it is difficult to systematically analyze their effects on voting behavior. But one way to better understand this issue is through historical analysis. This study explored this subject within the framework of another time in the nation's history when many states first implemented tough electoral laws that made participation more difficult. In this project, I revisited a well-known debate on the extent to which electoral institutions and political competition precipitated a steep decline in U.S. turnout after 1896. Institutionalists argued that most of the changes in electoral participation at the turn of the twentieth century resulted from the implementation of stringent Progressive reforms that both curbed fraud but also limited legitimate participation. Walther Dean Burnham and others favoring the political competition thesis argued instead that institutional reforms were only part of the explanation; changes in party competition were more likely associated with the decline in turnout.

The findings in this dissertation are in line with both the institutional and behavioral perspectives, but provide greater empirical support to Burnham's general theory. Restrictive voting laws certainly suppressed turnout. Thousands of individuals dropped out of the electorate as a direct result of these legal changes, but institutional factors do not alone account for the rapid 17 point drop in voting rates. This dissertation showed that political competition is highly significant for turnout, and when contests were close people were more likely to vote. But together these two variables only modestly explained the dramatic change in participation at the dawn of the Progressive Era.

Other factors were likely at play. As historian Mark Kornbluh (2000) showed, the electoral atmosphere at this time was dynamic. People were finding other ways of becoming politically engaged, particularly through memberships in community organizations. Campaign style also changed, and political machines failed to mobilize voters as they had in the past. It seems likely that these changes along with the shifts in political competition and the implementation of Progressive reforms together might account for the turnout decline after 1896.

One of the key contributions of this dissertation however, is that it is the first study to show how much of the decline is explained by registration and political party competition with new data and methods. I showed that while registration and competition do not alone explain the bulk of the decline, registration accounts for about a six point drop in turnout and political competition is positively associated with turnout. I also showed that competition mattered in elections long before Election Day. With election betting market data, I was able to show a strong relationship between perceived electoral competition and the actual vote. The data revealed that the public was likely well aware of the competitiveness of elections in the states, and this perception possibly positively influenced electoral participation in those states remaining competitive after 1896.

6.2 Voting Limitations Then and Now

In recent years, there have been numerous changes to election laws that are making it increasingly harder to vote. For example, the Supreme Court ruled against the constitutionality of section 5 of the Voting Rights Act of 19165, which provided safeguards for voting by preventing states with a history of voter suppression from changing election laws abruptly. Additionally, the voter identification requirements made possible through the Help America Vote Act, restrictions on voter registration, and attempts by some states to purge the voter rolls are arguably limiting the opportunity to vote for many people by making it more difficult to register and vote. This dissertation focused on this issue from the perspective of another time in America’s history when a similar situation was taking place.

The new voter identification laws requiring people to present proof of their identity and or citizenship before voting are similar to the late nineteenth century requirements. For example, limited days and hours of registration characterized many of the historical registration laws discussed in this dissertation. Today, legislators in some states are similarly passing laws that potentially restrict access to the polls. Some of these innovations come in the form of reduced registration days, and elimination of same-day registration opportunities. For example, Montana legislators passed a law that "ends same-day registration at 5:00 p.m. the Friday before Election Day, rather than the current deadline of 8:00 p.m. on Election Day." In Nebraska, legislators "reduce[d] [the] Early Voting Period by at least 5 days" (Voting Law Changes: Legislation Making It Harder to Vote: Brennan Center for Justice, 2013). Also, "Florida, Illinois and Texas passed laws restricting voter registration drives, and Florida and Wisconsin passed laws making it more difficult for people who move to stay registered and vote" (Weiser and Norden 2012).

Another common feature of the voter registration laws legislators passed at the dawn of the Progressive era, was the requirement for immigrants to produce proof of citizenship documentation. The twenty-first century is the first time in more than a hundred years that states are once again passing laws that make voting conditional on the provision of proof of citizenship documentation[40] (Weiser and Norden 2012). While the laws do not apply only to immigrants, they have surfaced in states with sizeable immigrant populations. Arizona first implemented a proof of citizenship requirement for registering. Other states, such as Alabama, Georgia, Indiana, Kansas, and South Carolina

[40] While the report by Wendy R. Weiser and Lawrence Norden (2012) notes that "until recently, no state has ever required any voter to produce documentary proof of citizenship" the statement is not quite accurate. As this dissertation shows, proof of citizenship requirements were part of many voter registration laws during the 1880 to 1916 time period. See p. 16 in Weiser, Wendy R., and Lawrence Norden. *Voting Law Changes in 2012*: Brennan Center for Justice, 2012, for a detailed discussion of the current legislation in some states.

soon followed suit (Weiser and Norden 2012), implementing what many consider are tough barriers to voting that are likely to reduce participation rates among minorities. The reason for this is that obtaining proof of citizenship documents (i.e., birth certificates, passports) is costly and marginalized populations are least likely to be able to afford the costs. This is concerning because the nation's immigrant population is growing at rates comparable to those of the late nineteenth century. The Pew Research Center notes that "since 2007 alone, the number of immigrants living in the U.S. increased by 2.4 million." (A Nation of Immigrants, 2013). That study also notes that over the years, most of the U.S. population will be majority non-white. What this means within the context of the contemporary changes in election laws is that if voting laws make it harder for minorities to register and vote, then the electorate is likely to become unrepresentative of the U.S. population.

The findings from this dissertation have implications for the current changes in election laws in the United States. On the one hand, the good news is that the results of this study suggest that the effect of strict regulations on turnout during the modern era might be small. While tough registration laws reduce turnout, they do not deter participation by as much as could be expected given the additional costs to voting that voter have to incur. But on a negative note, it is likely that the effect affects historically underrepresented minorities. That question is beyond the scope of this study, and a matter of further research. Another important finding is that political competition mattered for turnout. Because political competition results in greater mobilization efforts, it is probably the case that parties in competitive states mobilized voters to a greater extent than parties in uncompetitive states. This is good news when it comes to the implications of this study for the modern era. My findings suggest that if parties increase their efforts to get out the vote, they could counter the potential negative impact of voting limitations on turnout. One reason, perhaps, why voting limitations might not have a stronger effect on turnout could be that the laws provide an incentive for parties to mobilize voters, especially in the context of competitive elections. This means that in competitive elections, it is possible that the recent restrictions to voting might not have much of an effect on turnout rates, and might even encourage parties and other organizations to get out the vote.

6.3 Further Research

In future work, I will extend this research to look further at the relationship between registration, competition, and turnout. The rich dataset on voter registration laws can be exploited in several other ways. In describing the history of the evolution of personal registration systems in the states, this dissertation showed a relationship between the establishment of these systems and immigration. It seems these laws first appeared in sites with sizeable immigrant or black populations. One thing to consider in further work is an analysis using personal registration as the dependent variable. I hypothesize that in areas with large immigrant populations (who leaned Democratic), legislators were more likely to adopt stringent registration reforms.

Another important aspect of registration laws in need of further attention is the research on who supported these laws and why. In chapter three of this dissertation, I showed some of the reasons brought forth in legislatures or Congressional hearings related to the passage of these laws (i.e., fraud, immigration, the black vote), but there is more evidence on this in case law data. Much of the voter registration laws were challenged in state and federal courts at the time (this is one reason why the laws changed so frequently.) Case law data provides rich details on why the law came about, who supported it, and who opposed it. Adding information from the court cases to the dataset already provided here, I will elaborate on the participants who brought forth these changes and further illustrate the reasons the laws came about.

An importation aspect of elections during the time period studied here was the central role that state and local elections played in politics at the time. In further research, I plan to incorporate Congressional and gubernatorial elections in order to better assess the impact of these variables on turnout during this time period. It is possible that the effect of these variables is better understood within the context of these other types of elections.

I also plan to extend the research to focus on the county as the unit of analysis. I have collected the data for most variables, except the direct primary, at the county level. By focusing on the county, I can address any potential measurement error problems in the present study. In other work, I also plan to extend the research on election betting markets for the historical era. As I build a larger dataset of election betting odds for the 1880 to 1916 time period, I will be better able to more fully examine the effect of perceived electoral competition on turnout.

6.4 Conclusion

The findings in this dissertation increase our empirical and theoretical understanding of the causal factors influencing voting behavior and shaping democracy in America over time. This study made a reassessment of a classic puzzle in the American politics literature on the extent to which electoral institutions and political behavior influence turnout rates. I found that registration laws and political party competition both matter in the ways we would expect. Tough registration laws reduce electoral participation, and political competition increases turnout rates. In light of past and recent changes in American politics, the results of this study help to shed light on the health of American democracy today, particularly on the relationship between changes in demographics and increasing economic inequality in the U.S. I showed that for the years 1880 to 1916, there was a relationship between immigration and passage of stringent registration laws. Given today's immigration trends, it seems possible that the emergence of strict voting laws is associated to the changes in demographics. One of the implications of this dissertation's findings is that if voting limitations reduce turnout rates, then the electorate could become more unrepresentative of the general population. This is problematic because the policy preferences of many people are not reflected in the nation's laws, and economic inequality consequently results from this (Leighley and Nagler 2014). Some of the solutions to this potential problem, include making sure that new voting laws, however strict they might be, do not make it more difficult for people to vote. For example, states requiring voter identification for registration and voting could also provide free voter identification to people (as some states already do). Another solution is to increase mobilization in order to counter the potentially negative effects of stringent voting legislation.

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