



Ballot access restrictions and candidate entry in elections

Thomas Stratmann

Department of Economics, George Mason University, 1D3 Carow Hall, Fairfax, VA 22030, USA

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Abstract

In many states of the United States, candidates must meet certain requirements in order to be listed on the ballot. Such requirements include filing fees and minimum number of collected signatures. Incumbents have incentives to use these requirements to protect themselves from competition by reducing entry of potential challengers. To date, there is very little evidence regarding whether such requirements have negative consequences for candidate competition in elections and challenger entry into electoral races. This paper examines the impact of filing fees and signature requirements on the number of candidates in U.S. state races in state Lower House elections in 1998 and 2000. The findings show that higher filing fees reduce both the number of major-party and minor-party candidates. However, filing fees are more effective in deterring minor-party candidates from contesting political office than major-party candidates. More stringent signature requirements reduce the number of major-party candidates.

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1. Introduction

Firms in an industry have incentives to lobby governments for entry restrictions because the restrictions protect incumbents from competition (see for example, [Stigler, 1971](#); [Demsetz, 1982](#)). At the same time, there can also be entry restrictions to political competition (see for example, [Tullock, 1965](#)). [Tullock \(1965\)](#) proposes that barriers to

E-mail address: tstratma@gmu.edu (T. Stratmann).

entry into politics are lowered when potential entrants are subsidized and when the financial rewards from office are increased, from which, it also follows that taxes on potential entrants can be expected to decrease political competition.

This paper explores whether entry barriers in the political process in the United States reduce competition at the electoral level. Barriers to entry for political candidates in elections in the U.S. take various forms and include party endorsement, filing fees and signature requirements. Thus, these barriers are similar to taxing potential entrants. While major-party (i.e., Democratic Party and Republican Party) and minor-party (e.g., the Green Party, the Libertarian Party) candidates face some or all of these requirements, the entry barriers to political competition are typically higher for minor-party candidates than for major-party candidates, which puts minor-party candidates at a competitive disadvantage.

To date, there is little research that examines the effects of ballot access restrictions. Research at the federal level (Abramson and Aldrich, 1995) has examined support levels for third-party presidential candidates¹ but does not analyze the effects of restrictions on appearing on the ballot. Other research at the federal level has examined whether filing fees and signature requirements determine whether an incumbent's reelection contest is uncontested and whether a seat is open (Ansolabehere and Gerber, 1996). At the state level, for example, Elliot et al. (1990) studied third parties in state governments but not the effects of ballot access restrictions.² Cook (2002) examines the effect of ballot access restrictions for third-party state candidates and finds that these measures have little explanatory power for explaining vote shares of these candidates. The "first report ever to take a comprehensive measure of the burdens of ballot access" (Brennan Center for Justice, 1997, p. 7) documents differences in state ballot access requirements for presidential candidates but provides no analysis of the effect of these differences.

This study takes a new approach to examine barriers to entry into political markets. I shall examine whether ballot access restrictions affect candidates' decision to run in an election. The hypothesis is tested using a subsample of the 50 states in the United States to evaluate whether restrictions contribute to explaining the number of candidates who enter electoral contests. Voters in each state in the United States elect representatives to their state assemblies. In the chosen subsample, elections are held every 2 years, representatives are elected via plurality rule and candidates for the state House run in single-member districts.

Entry restrictions for state and federal offices are regulated by the states. I shall examine the effect of the state regulations on candidates for state Lower Houses. Examining the effect of the restrictions on state races, as opposed to federal races, is more promising because there is a greater variability in minor-party candidates and greater variability in the degree of competition for state offices than for federal offices (Gillespie, 1993). Moreover, some states have only few federal congressional districts, providing less variability compared to states with many districts within their boundaries. The states provide a rich

¹ For example, John Anderson, Ross Perot, and George Wallace.

² Berry and Canon (1993) examine the determinants of the number of gubernatorial candidate by focusing on whether the incumbent governor runs for reelection, the strength of the opposition party, the type of the primary and endorsements.

environment to analyze entry restrictions because each state has many Lower House districts.

Thus, this study focuses on the effects of restrictions to the entry for the number of candidates to state Lower Houses. Low levels of competition have been documented at the state level, and it has been noted that uncontested races occur relatively frequently (Squire, 2000). Determining whether restrictive entry rules depress candidate competition in state races is one of the goals of this study.

The next section provides background on the recent court debates regarding ballot access restrictions and Section 3 presents the hypothesis. Section 4 sets out the empirical model and describes the data. Results are presented in Section 5, and Section 6 contains concluding remarks.

2. Background

In two landmark cases in the 1970s (*Bullock vs. Carter* and *Lubin vs. Panish*), the U.S. Supreme Court declared filing fees to be unconstitutional, unless the state provides low-income candidates who cannot afford the fee with alternative ways to gain access to the ballot. Otherwise, the fee would prevent participation by low-income candidates, which would violate the equal protection clause of the 14th amendment.

This, however, does not mean that the filing fees, for all practical purposes, are irrelevant, as those two U.S. Supreme Court filing fee decisions have had little impact. The courts have allowed states to limit exceptions to “paupers”, requiring payment of the fee unless the candidate can demonstrate that he or she is a “pauper”. Thus, the filing fee is a barrier to entry to those who cannot claim low-income status. As most candidates for office do not come from low-income groups, the filing fee applies to most potential candidates.³

Furthermore, the courts have also allowed the states to impose petitions in lieu of filing fees. However, meeting the petition requirements often costs more than paying the fees. One example is an old Florida regulation which allowed potential candidates for statewide office not to pay the fee if they obtain signatures of 3% of the eligible voters, to be collected within 21 days. This requires the collection of hundreds of thousands of signatures within 3 weeks. Thus, even for those with low income, the alternative to paying the filing fee is often costly in other ways, which in turn makes the fee binding for those individuals.⁴

Filing fees remain a subject of debate in the courts. For example, a mandatory \$200 filing fee in Pennsylvania was recently challenged in court because Pennsylvania provided no alternative for low-income candidates. In 2001, a U.S. district court ruled that the Pennsylvania filing fees were illegal and unconstitutional, unless the state provided an alternative way for low-income candidates to gain access to the ballot. In the judge’s

³ For those low-income candidates, the cost of demonstrating that they are paupers also represents a barrier to entry.

⁴ Unfortunately, we do not have data indicating in which states, in particular, individuals can avoid paying the fees and the corresponding (non-monetary) cost of avoiding the filing fee.

opinion, mandatory filing fees preclude some candidates from appearing on the ballot, which deprives a part of the electorate of the right to vote for its preferred candidates, so violating the equal protection clause.⁵

Although monetary fees have come under scrutiny, signature requirements have not. However, the monetary resources to obtain the required signatures often far exceed the filing fee requirement. For example, the average filing fee in the 30 states requiring such a fee was \$208 in the year 2000. Because the collection of signatures is likely to involve larger monetary and nonmonetary costs than the average filing fee, I shall test whether signature requirements constitute one form of entry restriction.

3. Hypotheses

A simple model that postulates that legislators act in their own interest predicts that incumbents vote for ballot access restrictions because they prefer to face as little political competition as possible in their reelection contest. Consistently with this hypothesis, previous research claims that legislators adopt electoral reform or electoral rules that put them in an advantageous position. Ware (2000), for example, argues that self-interested party elites pushed for the adoption of the Australian ballot in the United States. This change in the electoral rule has been important as it altered election outcomes (Rusk, 1970).⁶

The hypothesis that incumbent politicians of the main parties impose impediments to third-party participation through stringent ballot access requirements has appeared in the scholarly literature for a long time (Argersinger, 1980; Rosenstone et al., 1996; Rush, 2001).⁷ One recent example is Winger (1992, p. 7) who hypothesizes that “changes [in ballot access rules] began during the 1930’s when major-party politicians were eager to discourage labor from starting its own party. . . laws were again made more restrictive during the period of 1948–1953 when fear and hatred of the Communist Party were very strong, . . . [and] ballot access laws were tightened further during 1969–1975 after George Wallace’s 1968 third party showing of 13% shocked [major-party] politicians.”

I shall focus on two types of ballot access restrictions—signature requirements and filing fees. Higher filing fees reduce the demand for appearing on the ballot, leading to fewer candidates in electoral races. Obtaining signatures is costly, and higher signature requirements imply that larger funds are required to collect signatures. Consequently, higher signature requirements imply a more costly campaign and fewer candidates in electoral races.

Whether ballot access restrictions reduce the number of candidates in electoral races is of interest for several reasons. Low-entry restrictions can help ensure better representation

⁵ In the data set analyzed in this paper, filing fees range from \$0 to \$1580.

⁶ Most research analyzes the impact of electoral rules on voting behavior. One recent example of this line of research is Schaffner et al. (2001) who found that the removal of party identification from the ballot has the largest impact on less-informed citizens as they lose an important information shortcut.

⁷ Related is the hypothesis that incumbent Republicans and Democrats have enacted campaign finance laws that keep third parties out of the political process (Rakin and Bonifaz, 1993).

of voter preferences by elected officials. If an incumbent strays too far from the preferences of his constituency, another candidate can successfully challenge him by taking a position closer to the median voter or the majority of voters. If incumbents know that entry of challengers is easy, they are more likely to behave in accordance to the wishes of voters while in office. Conversely, if they believe that they will not face a strong challenge, they may feel free to depart from voter preferences. Scholars have examined electoral competition as a means to assure a closer mapping of constituency and representative preferences. Key (1949), for example, hypothesized that parties and candidates act differently with respect to their constituents when they face competition, and many others have examined this hypothesis (see Miller, 1964 and Fiorina, 1974 for some early studies).⁸ Thus, if incumbents do not expect to face a challenger, they have little incentive to represent the preferences of their constituency. The threat of challenger entry assures a close mapping between legislator voting records and constituency preferences. Thus, higher barriers to entry lead to more slack in the principal (constituency)–agent (legislator) relationship.

Another reason for concern about the effect of political entry restrictions has to do with the democratic goal of achieving equal access to the political process as manifested in the equal protection clause of the Fourteenth Amendment of the U.S. Constitution. Some believe that monetary ballot access restrictions are similar to purchasing a slot on the ballot and that the burden of paying this price is unevenly distributed across population groups. If the goal of democracy were to grant equal access to all citizens to being political candidates, a finding that restrictions deter entry would suggest that the goal of equal access is not being achieved.

While these considerations suggest that ballot access restrictions may be efficiency-reducing, it is possible that restrictions have a beneficial effect. Candidates who are of low quality may be unable to collect sufficient voter signatures to meet the signature requirements, or may not find it worthwhile to pay a filing fee. In this case, ballot access restrictions make it more likely that low-quality candidates do not appear on the ballot. Voters benefit because they have to become informed about fewer candidates on the ballot and because they can expect that those on the ballot are not of low quality. In this case, ballot access restrictions serve the useful purpose of economizing on voters' information costs.

While ballot access restrictions might change incentives to run as a candidate, there are other determinants of candidates' decisions to enter an electoral contest. One such determinant is the expected salary. The higher the expected salary, the more likely it is worthwhile for citizens to run as a candidate (McCormick and Tollison, 1978). However, higher salaries are also associated with more professional legislatures in which incumbents have more staff, monetary resources and other perquisites (Hibbing, 1999), making their work environment more attractive and increasing their incentive to desire a long career (Fiorina, 1994; Moncrief, 1999). These resources make

⁸ Recent research on the U.S. Senate shows that incumbents closer to elections pay closer attention to voter preferences (Levitt, 1996; Stratmann, 2000). This finding suggests that they are responsive because they expect a reelection fight as typical for U.S. Senate races.

incumbents less vulnerable to electoral tides (Squire, 1997) and this reduces challenges' incentive to enter the race.⁹

One important institution that can limit competition and the number of candidates is the type of electoral system. For example, a first-pass-the-post (FPTP) electoral rule is employed in state single-member districts. This electoral system has been hypothesized to lead to the dominance of two parties which is a pattern referred to as Duverger's Law. The FPTP electoral rule provides a barrier to entry for minor-party candidates, quite apart from ballot access restriction. Individuals considering entry as a minor-party candidate might simply decide not to enter given their small chance of being elected.

The nature of competition between major parties thus sometimes prevents the successful entry of a minor-party candidate. Using the analogy of a product market where incumbent firms innovate to prevent rival firms from entering, major parties tend to adopt versions of popular aspects of minor-party platforms (Gillespie, 1993). Such adaptation increases or maintains major-party support at the expense of minor parties.

4. Research design and methods

To analyze the effect of ballot access restrictions on candidates' entry decisions, I used the state House single-member district in the 1998 and 2000 elections as the unit of analysis. The empirical models are

$$Y_{major_{ijt}} = \beta BEmajor_{it} + X_{ijt}\gamma_i + v_t + \varepsilon_{ijt}, \quad (1)$$

$$Y_{minor_{ijt}} = \beta BEminor_{it} + X_{ijt}\gamma_i + v_t + \varepsilon_{ijt}, \quad (2)$$

where $Y_{major_{ijt}}$ is the number major-party candidates state i , district j and election year t and $Y_{minor_{ijt}}$ is the number of minor candidates. I adjust all standard errors for nonindependence of the observations within states.¹⁰

The variable $BEmajor_{it}$ is a measure for major candidate ballot access restriction and the $BEminor_{it}$ variable measures restrictions for minor-party candidates. We will analyze the impact of filing fees and signature requirements. In some specifications, I measure these restrictions with a simple indicator variable that measures whether a state has such a restrictions. In an alternative specification, the restriction variable is the number of signatures required or the filing fee dollar amount.

The X_{ijt} vector includes state candidate and district-specific variables such as the expected closeness of the electoral race. I include this variable because when the incumbent is expected to win with a large margin, fewer candidates have an incentive to enter the race.

As shown in Eqs. (1) and (2), the measure of electoral competition is the number of candidates in the electoral races. The number of candidates in a race is affected by many

⁹ Incumbents' probabilities of reelection are higher in states with more professional legislatures (Carey et al., 2000; Cox and Morgenstern, 1993; Holbrook and Tidmarch, 1991; Weber et al., 1991; Berry et al., 2000).

¹⁰ Standard errors are adjusted to allow for clustering by state.

observed and unobserved variables in a district. However, the advantage of this research design is that it requires fewer control variables than a design that would examine vote shares of, for example, incumbents. For example, whether ballot access restrictions influence the number of candidates in a race does not require controlling for the party affiliation of the incumbent or for coattail effects. However, one of the control variables used in this study is the expected closeness of the electoral race. This variable captures political extremism of a district as well as incumbent ability, as high-ability incumbents and incumbents in strong Republican- or strong Democrat-leaning districts tend to win with wide margins. Thus, we predict that the closer the expected margin of victory, the more candidates will enter the race.

Other variables included are state income and state population because a seat may be more valuable in a wealthy or populous state. I include salaries of legislators because higher salaries give candidates an incentive to enter the race. However, as discussed previously, salary is also a measure of legislature professionalism which is associated with a higher probability of incumbent reelection. This higher reelection probability could act as a deterrent to challenger entry.

The X_{ijt} vector also includes an indicator for those states that implemented term limits. Term limits reduce the lifespan of a legislator making public office less valuable, thus giving a candidate less incentive to enter the race. I predict that the passage of term limit laws reduces candidate entry.

Besides ballot access restrictions, there are other deterrents for challenger entry. For example, theoretical work suggests that incumbent fundraising deters challengers from entering the race (Epstein and Zemsky, 1995) and empirical support for this proposition has been found (Box-Steffensmeier, 1996). Unfortunately, no data on war chests for state House incumbents are available; thus, I cannot control this variable in this analysis.

Data on the 1998 and 2000 general elections in state House single-member districts come from each state's Elections Division or its State Board of Elections. I focus on single-member districts because over 80% of all state legislators are elected to these districts. Since, at the federal level, all House districts are single-member districts, the focus on single-member districts also allows one to more easily generalize the results to federal level.

Data for minor-party ballot access restrictions come from Cook (2002). For minor-party candidates, signature requirements are measured in terms of number of signature required, and filing fees are measured in dollars. The source for major-party ballot access restrictions is the editor of Ballot Access News, Richard Winger. This data set does not have the simple metrics that are available from the minor-party data set. For major parties, I use indicators for whether a state has a signature requirement and indicators for fees. In addition, I constructed a filing fee dollar measure which equals the filing fee listed in Ballot Access News or when the filing fee is a percentage of legislator salary, the dollar amount corresponding to this percentage.¹¹

¹¹ Because states did not change the filing fee and the signature requirements between 1998 and 2000, the empirical work can only exploit the crossstate variation and we cannot include state fixed effects. However, as noted previously, we correct non-independence of observations within states allowing for state clustering of observations.

5. Results

Table 1 describes the data. The correlation coefficient between the number of major- and minor-party candidates is 0.03 and is statistically significant at the 2% level. The coefficient indicates that races with more major-party candidates tend also to have more minor-party candidates. Table 1 also shows the correlation coefficients between the various ballot access restriction manures and the number of minor- and major-party candidates. With the exception of signature requirements, all major-party ballot access restrictions are negatively correlated with the number of major-party candidates in electoral races. This finding shows that fewer candidates in races are associated with higher barriers to entry. The finding for minor parties mirrors those for major-party candidates, in that the higher the minor-party candidate filing fees, the fewer the number of minor-party candidates. The correlation coefficient between signature requirements and candidate entry is not statistically significant.

Table 2 presents the regression results for major-party candidates. Because the dependent variable is the number of candidates, I employ a Poisson regression model. While I obtained similar results as reported here when I estimated the regressions with the ordinary least square estimator, the Poisson regression is the proper model to use when the dependent variable involves count data such as is the case here. In all regressions, the unit of observation is a state Lower House race between 1998 and 2000 where there is at least

Table 1

Correlation and sample statistics for alternative measures of ballot access restrictions for 1998 and 2000 (*p*-values below the Pearson correlation coefficient)

	Sample statistics	Correlation analysis	
	Mean [standard deviation]	Number of major-party candidates	Number of minor-party candidates
Number of major-party candidates	1.518 [0.500]	–	0.029 (0.023)
Number of minor-party candidates	0.223 [0.512]	–	–
Indicator for filing fee for major-party candidates	0.235 [0.424]	– 0.072 (<0.001)	–
Indicator for filing fee for major-party candidates if filing fee $> \$100$	0.097 [0.296]	– 0.094 (<0.001)	–
Indicator if fee for a major-party candidate is percent of salary	0.189 [0.391]	– 0.022 (0.082)	–
Filing fee for major-party candidates measured in real 2000 dollars.	148.30 [285.12]	– 0.034 (0.006)	–
Indicator for signature requirement for major-party candidates	0.405 [0.491]	0.004 (0.752)	–
Filing fee for minor-party candidates measured in real 2000 dollars	459.73 [1051.8]	–	– 0.119 (<0.001)
Signature requirement for minor-party candidates measured in number of signatures	29,003 [30,461]	–	0.012 (0.348)

$N=6641$ for the minor-party candidate variable and $N=6348$ for major-party candidate variable.

Table 2

Estimation relating the number of major-party candidates to various measures of ballot access restrictions for 1998 and 2000 state House elections

	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Indicator for filing fee for major-party candidates	– 0.017 (0.012)	–	–	–	– 0.031 (0.018)	–
Indicator for filing fee for major-party candidates if filing fee > \$100	– 0.031 (0.011)	–	–	–	– 0.037 (0.014)	–
Indicator if fee for a major-party candidate is percent of salary	–	– 0.030 (0.012)	–	–	– 0.011 (0.017)	–
Filing fee for major-party candidates, measured in real 2000 dollars.	–	–	– 0.039 (0.015)	–	–	– 0.053 (0.007)
Indicator for signature requirement for major-party candidates	–	–	–	– 0.024 (0.013)	– 0.035 (0.013)	– 0.030 (0.021)
Term limit = 1, 0 otherwise	– 0.007 (0.012)	– 0.008 (0.012)	– 0.008 (0.012)	– 0.016 (0.014)	– 0.014 (0.014)	– 0.011 (0.006)
Legislator salary	1.578 (0.030)	0.166 (0.032)	0.158 (0.030)	0.218 (0.034)	0.195 (0.027)	0.192 (0.040)
State population	1.042 (0.969)	0.728 (0.938)	1.511 (1.095)	– 0.318 (0.843)	1.295 (0.815)	1.740 (0.535)
State per capital income	– 0.136 (0.432)	0.244 (0.386)	0.203 (0.407)	0.156 (0.375)	– 0.020 (0.413)	0.111 (0.205)
Expected closeness of the election (measured as percent obtained by winning candidate)	– 0.015 (0.0004)	– 0.015 (0.0003)	– 0.015 (0.0003)	– 0.015 (0.0003)	– 0.015 (0.0004)	– 0.015 (0.0002)
Election year indicator	YES	YES	YES	YES	YES	YES
Log-likelihood	– 7482	– 7482	– 7482	– 7482	– 7481	– 7481

$N=6348$ member-years. Robust standard errors are in parentheses below coefficient estimates. Estimates adjusted for non-independence of observations within states. Means and (standard deviations) are for the term limit 0.181 (0.385), legislator salary 0.267 (0.218), state population 0.007 (0.006), per capita income 0.165 (0.024), expected closeness of the election 0.801 (19.15).

one major-party candidate. All regressions have the same control variables, namely term limits, legislator salary, state population, per capita income and the expected closeness of the election and an electoral cycle indicator.

The first four columns examine the various measures of ballot access restrictions separately, and the last two columns examine these restrictions jointly. All regressions are adjusted for nonindependence of observations within states. Without such corrections, the *t*-statistics on all coefficients more than tripled. Even with this adjustment, which puts the odds against finding statistically significant effects of ballot access restrictions on candidate entry (because observations are within states are positively correlated), the regression results show that monetary ballot access restrictions reduce the number of candidates in races.

The mere existence of a filing fee significantly lowers the number of major-party candidates by approximately 2%. Filing fees that are greater than \$100 further lower the number of major-party candidates by another 3%. Having a filing fee that is based on the expected legislator salary reduces the number of candidates by 3% and this finding is statistically significant. Using the dollar filing fee measure, the results show that a \$1000 increase in the filing fee leads to a 4% decrease in the number of major-party candidates. Higher signature requirements also lead to a decrease in the number of major-party candidates and this coefficient is statistically significant at the 7% level. In Table 2,

Table 3

Estimation relating the number of minor-party candidates to various measures of ballot access restrictions for 1998 and 2000 state House elections

	(i)	(ii)	(iii)	(iv)
Filing fee for minor-party candidates in real 2000 dollars	– 0.0007 (0.0004)	– 0.002 (0.001)	–	– 0.002 (0.001)
Filing fee for minor-party candidates squared		2.47e – 7 (1.43e – 7)	–	2.48e – 7 (1.35e – 7)
Signature requirement for minor-party candidates	–	–	– 7.78e – 6 (8.83e – 6)	1.25e – 6 (1.13e – 5)
Term limit = 1, 0 otherwise	0.313 (0.358)	0.237 (0.390)	0.277 (0.316)	0.249 (0.382)
Legislator salary	1.096 (0.902)	1.411 (0.914)	1.301 (0.987)	1.381 (1.009)
State population	5.548 (23.82)	– 3.983 (24.21)	28.89 (32.49)	– 7.534 (35.94)
State per capital income	– 12.03 (7.859)	– 13.76 (8.119)	– 10.18 (7.866)	– 13.73 (8.151)
Expected closeness of the election (measured as percent obtained by winning candidate)	– 0.021 (0.004)	– 0.021 (0.004)	– 0.020 (0.004)	– 0.021 (0.004)
Election year indicator	YES	YES	YES	YES
Log-likelihood	– 3571	– 3533	– 3655	– 3533

N = 6641 member-years. Robust standard errors are in parentheses below coefficient estimates. Estimates adjusted for nonindependence of observations within states.

Means and (standard deviations) are for the term limit 0.179 (0.384), legislator salary 0.262 (0.218), state population 0.007 (0.006), per capita income 0.164 (0.024), expected closeness of the election 0.80.1 (19.20).

column 5 combines the monetary ballot access restriction indicators with the signature requirements, and the previous results are strengthened. A fee over \$100 now reduces the number of candidates by 7%. The regression in the last column includes the fee variable, measured in dollars, along with the signature requirement variable. In this specification, a \$1000 increase in the fee reduces the number of candidates by over 5%.

As predicted, a larger higher salary in the state legislature increases the number of major-party candidates. Term limits, state population and state per capita income have no statistically significant effect on the decision to enter the race. However, if candidates perceive that the race is going to be close, they are more likely to enter the race.

Table 3 examines the effect of minor-party ballot access restrictions on minor-party candidates. Signature requirements have no statistically significant effect on a minor-party candidate's decision to enter the race. However, fees reduce the number of minor-party candidates. Columns 1 and 2 of Table 3 differ in that column 2 allows for a nonlinear effect of filing fees. Evaluated at the sample mean, a \$1000 increase in filing fees reduces the number of minor-party candidates by 43%. Thus, the entry decision of minor-party candidates is much more sensitive to monetary barriers to entry than major-party candidates. One possible explanation for this difference is that the filing fee for major-party candidates may be paid by their parties, while minor-party candidates may have to pay the fee out of their own pocket.

The higher the salary of state legislators, the more likely minor candidates are on the ballot. However, the point estimates are not statistically significant at conventional levels. This suggests that the monetary rewards from becoming a legislator are less of an incentive for minor-party candidates than for major-party candidates to enter the race. Similar with major-party candidates, minor-party candidates are more likely to enter the race when they perceive that the race is going to be close, and they are more responsive to the anticipated closeness of a race than major-party candidates. Because minor-party candidates rarely win an election, a minor party may enter the race for strategic reasons when it perceives that the race between the major-party candidates is going to be close.

6. Conclusions

This analysis has used a novel data set to test hypotheses about the effect of filing fees and signature requirements on candidate entry into electoral contests. The data analysis reveals that monetary ballot access restrictions are an impediment to both major- and minor-party candidate entries into electoral contests. Incumbents face more competition when filing fees are lower than when they are higher. Each dollar of a filing fee is a larger deterrent to entry for a minor-party candidate than for a major-party candidate.

Signature requirements also reduce candidate entry but this effect is concentrated among major-party candidates. The findings imply that a \$1000 increase in the filing fee leads to a 4% decrease in major-party candidates and a 43% percent decrease in minor-party candidates. The results are consistent with the hypothesis that incumbents set high barriers to entry in order to protect themselves from competition.

The findings have important implications regarding the candidates that run and the candidates most likely to represent the voting population. The results establish that fewer

candidates run in elections in the presence of filing fees. If filing fees are more likely to deter candidates with lower incomes, then the peer-concern that low-income individuals are not represented may be justified.

This paper does not answer the question whether barriers of entry benefit voters. Filing fees reduce voters' choices and competition among candidates, but it is possible that filing fees have kept low-quality candidates off the ballots. In the latter case, voters may have benefited because they will have had to seek less information about candidates when making their voting decisions. Future research could examine whether the benefits from erecting barriers to entry into politics are greater than the costs.

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