Losing to Win

How Partisan Candidates Help Parties Win in the Future

Kai Steverson

Abstract

I study an infinite horizon model of political competition where parties face a trade-off between winning today and winning tomorrow. Parties choose between nominating moderates or partisans. Partisans can energize the base and draw in new voters which helps win future elections. Only moderates can win in equilibrium and so the winning party fails to invest in its base and has a weaker future. Hence the longer a party is in power the more likely it is to lose, a pattern strongly supported in the data. This dynamic creates an electoral cycle where parties regularly take turns in power.

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†cstevers@princeton.edu; Department of Economics, 001 Fisher Hall Princeton University, Princeton, NJ 08544;
1 Introduction

In the 1964 U.S. presidential election, Republican nominee Barry Goldwater was widely considered too ideologically extreme to be elected. The New York Times said Goldwater threatened to turn the GOP into a "right-wing splinter group" and had "minimal" chance of winning\(^1\). As predicted, Goldwater lost in a landslide with less than 40\% of the vote, winning only six states. However, conservatives now argue that Goldwater’s nomination energized the base and gave the party a momentum that led to future victories (Middendorf (2006) p.xii; Will (1994)). Goldwater himself writes in his autobiography that he never believed he had a chance of winning, yet decided his candidacy could rally the base and give voice to the conservative cause (Goldwater (1988), p. 154).

Goldwater’s case exemplifies the thesis of this work: partisan candidates are less electorally viable but energize the base, helping to win future elections. This creates a trade-off between winning today and winning tomorrow. The goal of this paper is to formalize this trade-off and explore its consequence. I build an infinite horizon model of two party competition, where in each period both parties nominate a citizen candidate to represent them in an election. In the unique subgame perfect equilibrium moderate candidates always win, and yet partisan candidates are nominated to help the party win future elections.

The model has two key ingredients: that partisan candidates energize the base and that this lasts until the next election. Energizing the base potentially has many dimensions, but for the purposes of this work I specifically mean increasing turnout. Both of these ingredients find strong support in the empirical literature. Partisan candidates increasing turnout among their base finds support in the literature on "abstention due to alienation". The idea that increasing turnout today impacts turnout tomorrow is found in the literature on "habitual voting". Section 2 further discusses the evidence underlying these assumptions.

The most striking feature of the equilibrium is that parties cycle in and out of power in a regular and predictable fashion, a pattern which has strong empirical support. This

cycling is a natural consequence of the core trade-off of the model. In order to win, a party has to nominate a moderate, but in doing so it neglects its base and sets itself up for a weaker future. Thus the longer a party is in power the weaker and more likely to lose it becomes. This prediction has been strongly empirically verified and given various names: the "cost of ruling" (Paldam (1986); Lewis-Beck & Nadeau (2004)), "the time for a change effect" (Abramowitz (1988, 1996); Abramowitz & Saunders (2008)), the "electoral pendulum" (Norpoth (1996, 2004)), and "realigngment theory" (Key (1959); Merrill et al. (2008)).

This paper provides a new explanation for the observed cycling and provides an equilibrium model that produces this behavior. The most common explanation given is the natural variation in the business cycle. However, the papers cited above include economic controls and still conclude that there is a separate penalty for being in power. Other explanations given for the cycling are over-reach by the party in power and an innate desire for novelty by voters. In this paper I give a novel reason: the tension between nominating a viable candidate or one that will energize the base. Moreover, the previous literature has focused on estimating this phenomenon and providing econometric models. Since parties will manipulate and respond to any electoral force of importance, a strategic model is needed, which I provide in this paper.

The model also predicts cycles in two other areas: ideology of nominees and turnout. In equilibrium, the parties oscillate between partisan and moderate candidates. In particular, a party that just lost power will be more ideologically extreme and gradually move to the center over time. This oscillation will create a companion cycle in the turnout of the ideological base of that party. The longer a party remains in power the less energized its base becomes, and turnout falls. Once the party leaves power it focuses on energizing its base and turnout rises again. These novel and testable predictions highlight potentially interesting empirical relationships produced by the model. As far as I know, little to no empirical work has been done on these predictions, and they present an interesting direction for future work.
As remarked above, the infinite horizon model presented here will have a unique subgame perfect equilibrium. This is important, since it allows for the distinct testable predictions that I emphasized as the key results. Uniqueness holds even as the discount rate goes to one, which is striking considering the model belongs to a class games for which a folk theorem has been proved (Dutta (1995)). This can occur because there is only a single set of payoffs that are both feasible and above the appropriately defined min-max. The intuition behind this and a sketch of the proof will be discussed in more detail in section 4.

The rest of the paper is organized as follows. Section 1.1 briefly reviews the formal literature on candidate selection. Section 2 motivates and discusses the key mechanism of the model. Section 3 formally describes the model. Section 4 characterizes the equilibrium and discusses its key features and predictions. Section 5 checks robustness by looking at purely office motivated parties with varying levels of patience. Section 6 concludes.

1.1 Related Literature

The formal literature on candidate selection began with the insights of the median voter theorem, which goes back at least as far as Downs (1957). The median voter theorem delivers two distinct testable implications: moderate candidates perform better in election and both parties should converge to the same position. The empirical evidence strongly supports the first of these claims and strongly disagrees with the second (see Ansolabehere et al. (2001) and Erikson & Wright (2005)). The subsequent literature has worked on modifying the model to explain divergence. To do so it must address the following question: if moderates perform better in elections why are partisans candidates ever nominated?

The most direct way to explain divergence is assuming that parties have an intrinsic preference for partisan candidates, i.e., a policy motive. This tack was first taken by Wittman (1983) and later developed by Calvert (1985) and Roemer (1994). This works if the basic Downsian model is modified to include uncertainty. Another tack, taken by Palfrey (1984), argues that the possibility of entry by a third party cause divergence. Adams & Merrill
III (2003) argue that partisan candidates will beat moderates by increasing turnout in the base which compensates for votes lost from the center. However, this explains divergence at the cost of contradicting the evidence that moderate candidates do better in elections. And while the focus on turnout resembles the argument in this paper, they conclude partisan candidates win in the present while I conclude they help parties win in the future.

The key innovation of this paper is the use of a multi-period setting to address candidate selection. All of the models discussed above are one period, and in a one-period model parties can only care about two things: winning today and policy today. And each of the above models gives one of those two reasons as to why partisan candidates are nominated. Because my model is multi-period parties can care about something new: winning and policy in the future. This allows for the central story of this paper: partisans energize the base which helps parties win in the future. A multi-period model also has the advantage that it can explain inter-temporal patterns in elections. This allows my model to explore phenomenon such as the electoral cycling highlighted in the introduction.

2 Motivating the Model: Evidence and Theory

In this section I discuss and motivate the two key ingredients of the model: that partisan candidates increase the turnout of the base and that this effect lasts until the next election. The first ingredient links to the literature on "abstention due to alienation" and the second to "habitual voting". These are discussed in sections 2.1 and 2.2 respectively. Crucially these literatures connect in that people who did not vote previously are more likely to have their turnout decision affected by the ideology of the candidate. In other words "habitual voters" are less likely to "abstain due to alienation". This connection leads to the key mechanism of the model: that partisan candidates can influence whether voters acquire the habit of voting. This mechanism is fully discussed in 2.3.
2.1 Abstention due to Alienation

Zipp (1985) examined how the ideological position of the candidates relative to the voter influences turnout. Zipp scored the ideological position of each individual and each candidate on a range of policy issues. He found that individuals who were far from either candidate voted less, an effect referred to as "abstention due to alienation". Of course the flip side of this effect is that people who are ideologically close to at least one candidate vote more. This captures the idea that a partisan candidate is capable of energizing the base.

More recently Plane & Gershtenson (2004) and Adams et al. (2006) have conducted similar studies and also found a significant "abstention due to alienation" effect. Adams et al. assumes the effect works through a threshold, that is an individual votes only if the closest candidate is close enough. Using maximum likelihood they estimated the determinants of this threshold. They find that having voted in the past election significantly reduces how close the candidate has to be. In other words non-voters are more likely to require a candidate with similar ideology to decide to vote.

2.2 Habitual Voting

Plutzer (2002) notes: "[v]irtually all major works on turnout have concluded that voting behavior is, in part, a gradually acquired habit". The observation that underlies this conclusion is that voting is a highly stable behavior. This can be observed from both cross sectional and panel data. Miller & Shanks (1996) look at cross sectional cohort data and finds cohort turnout rises for the first two or three election before hitting a long "turnout plateau" and then tailing off at old age. Similarly Plutzer (2002) looks at panel data from U.S. presidential elections and notes that of the 516 respondents who voted in both 1968 and 1972 97% voted again in 1976. More generally numerous studies show previous voting is a robust predictor of current voting in multivariate analysis (e.g. Franklin (2004); Brody (1977)). The interpretation given to these results is that the population can be divided into two groups: voters and non-voters. During young adulthood individual citizens sorts
themselves into these groups and, once settled, are high unlikely to shift from one to the other.

For the purposes of this work what matters is that there is a causal link between voting today and voting tomorrow. That such a link exists has been confirmed by both the instrumental variable and experimental approach. Green & Shachar (2000) instrumented for past voting using aggregate variables from the past elections known to influence voting, such as perceived closeness of the election or the ideological gap between candidates. They concluded that past voting causes current voting. Gerber et al. (2003) conducted an experiment where the treatment groups was urged to vote through direct mail or face to face canvassing. The treatment was more likely to vote in the current election and this difference persisted in subsequent elections. In fact those who voted in the treatment group became indistinguishable from those who voted in the control group. These two studies point to something intrinsic to voting that makes future voting more likely.

2.3 The Mechanism

The most common explanation given for habitual voting is that voting involves a one time fixed cost. Plutzer (2002) puts it as follows:

As young citizens confront their first election, all of the costs of voting are magnified: they have never gone through the process of registration, may not know the location of their polling place, and may not have yet developed an understanding of party differences and key issues. Moreover, their peer group consists almost entirely of other nonvoters: their friends cannot assure them that voting has been easy, enjoyable, or satisfying.

Of course there is variation, some people enjoy engaging in the political process, even in their first election. The crucial point is, all else equal, having experience with voting makes it easier, and hence more likely.
This explanation of habitual voting connects in a crucial way with the evidence mentioned above that non-voters have a much higher "abstention due to alienation" threshold. In other words those who still face the fixed cost to voting are more likely to require a candidate with a similar ideology to be convinced to vote. This evidence isn’t perfect in that non-voters are defined as someone who didn’t vote last period, not someone who has never voted. Nevertheless this highly suggests that a partisan candidate brings first time voters from the political base to the polls, overcoming the initial cost to voting, and pushing them onto the path of habitual voting. More habitual voters in the base leads to higher turnout in the future, enhancing the party’s future election prospects. This is the key mechanism by which partisan candidates help parties win in the future.

3 The Model

3.1 Basics

I start with an overlapping generations model with citizens who live for 2 periods and discount the future at $\beta \in (0, 1)$. Each generation contains a continuum of citizens of measure .5. Each period there is an election in which each citizen has the right, but not the obligation, to vote. Each generation of citizens is split into three equally sized groups based on ideology \{l, m, r\}².

The l and r groups are called partisan citizens, and form the base of two infinitely lived parties L and R. Type m citizens don’t have a party and are referred to as moderate citizens. Each period the parties nominate a citizen candidate from one of the three groups to represent it in the election. For simplicity I suppose the parties will not choose a candidate from the other party’s base. Thus parties make a binary choice between a moderate candidate or a partisan candidate from its own base. In order to avoid mixed strategy equilibrium, the party that won last period has to choose its candidate first.

²The assumption that all three groups are the same size is not essential. It is important that the l and r groups are the same size.
The candidate with a larger measure of votes wins the election. If the party that won last period decides to keep the same candidate, then that candidate is known as an incumbent. In the event of a tie, incumbent candidates win with probability $p \in (.5, 1)$. If there is no incumbent then ties are decided by a 50-50 coin flip.

The parties are infinitely lived with discount rate $\beta$ and are both policy and office motivated. A party receives payoff $\gamma > 0$ for winning an election and 0 for losing. The policy payoff of a party is 0 if someone from its base wins, $-0.25$ if a moderate wins and $-1$ if someone from the opposite base wins. This is consistent with quadratic loss in a spatial model. To write this out formally, in any period $t$ let $w_t, y_t$ be the party and ideology, respectively, of the winning candidate. Thus $w_t \in \{L, R\}$ and $y_t \in \{l, m, r\}$. Party $L$ maximizes:

$$\sum_{t=0}^{\infty} \beta^t (v_L(w_t) + u_L(y_t))$$

where $v_L(L) = \gamma > 0, v_L(R) = 0$ and $u_L(l) = 0, u_L(m) = -0.25, u_L(r) = -1$. $R$ has symmetric preferences.

### 3.2 The Decision to Vote

I follow Riker & Ordeshook (1968) and assume people vote because they gain consumption value from voting. This could take many forms: voters could enjoy expressing their opinion, fulfilling their moral or civic duty (as in Feddersen & Sandroni (2006)) or feel social pressure to vote. The alternative approach would be to assume people vote because they might change the outcome. This view is implausible in a large election and becomes even more implausible if there is a cost to voting. And since the motivation of this model, discussed in section 2, involves a fixed cost of voting, the pivotal voter view is an unpalatable choice.

Citizens choose whether to vote and who to vote for after observing which candidates have been nominated. In each period, voting yields utility of $D > 0$ which is net of costs such as time spent driving to the polling place, waiting in line etc. A citizen $i$, when voting
for the first time, face an additional cost of \( \alpha_i \). Candidates energize the ideological group they come from and reduce the first time cost by \( \delta > 0^3 \).

I restrict \( \alpha_i \) to two values \( \alpha^L < \alpha^H \). These two types are evenly distributed throughout the three ideological groups and there is strictly positive mass of both. The \( \alpha^L \) types find engaging with the political process relatively painless (or even enjoyable) and always vote in both periods of their life. For simplicity set \( \alpha^L = 0 \). The \( \alpha^H \) types need to be energized or else they will "abstain due to alienation" and fail to gain the habit of voting. Specifically, if a candidate from their own ideological group is nominated in their first period of life, then they become habitual voters and will always vote. In all other cases they never vote. Formally, this is given by \( (1 + \beta)D < \alpha^H < \delta + (1 + \beta)D \).

Conditional on voting, all citizens vote their sincere preference. Every citizen’s first choice is a candidate with the same ideology. Partisan citizens (\( l \) and \( r \) types) prefer a moderate to a candidate with the opposite ideology. And moderate citizens are indifferent between \( l \) and \( r \) candidates. When faced with two moderate candidates, partisan citizens vote with their own party. Moderates break indifference on ideology using 50-50 randomization. These preferences lead to the following result.

**Lemma 1** In every election the following statements hold:

1. A moderate candidate will always defeat a partisan candidate.

2. Suppose both parties choose moderate candidates. Then if party \( i \) chose a partisan candidate last period and party \( j \) chose a moderate last period than party \( i \)'s candidate will win. If both parties chose a partisan candidate last period, or neither did, then the election is a tie.

**Proof.** In appendix. □

Lemma 1 formalizes the central logic of this work: that partisan candidates aren’t as electorally viable as moderate candidates but help parties win in the future. Part 1 says a

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3Alternatively the citizen utility’s from voting could increase by \( \delta \) when energized.
partisan can never defeat a moderate, which makes specific how they are electorally unviable. Part 2 explains what happens if both parties pick a moderate. In that case, moderate citizens will split their vote evenly and partisan citizen will vote with their own party. Thus the election is won by the party with higher turnout from their base, which in turn is determined by which party energized their base last period. In this way, partisan candidates help parties win future election by drawing in new voters and raising future turnout. In the next section, I study how these forces play out in the strategic interaction of the two parties.

4 Equilibrium

In this section I analyze the game described above using the solution concept of subgame perfect equilibrium. The model above will have a unique subgame perfect equilibrium, which allows for sharp predictions. This section is split into three parts. 4.1 discusses two key assumptions. 4.2 presents the unique equilibrium in detail and gives a discussion of its important features. 4.3 provides a sketch of the proof.

4.1 Assumptions

Throughout this section the following two assumptions are maintained

**Assumption 1**: \( \gamma < \frac{1 + \beta^2}{2\beta(1 - \beta)} \); \n
**Assumption 2**: \( \beta > \frac{1 - p}{p} \)

The first assumption says the parties can’t be too office motivated and the second says that they can’t be too impatient. If the parties are patient enough \( (\beta \to 1) \), both conditions are always satisfied. Assumption 1 gives the allowed level of office motivation as a function of the patience of the parties and always holds for \( \beta \) is close enough to 1 or close enough to 0. Moreover any \( \gamma \leq 2.4 \) satisfies assumption 1 no matter the level of \( \beta \). Assumption 2 says the parties have to be patient compared to the advantage incumbents get in the case of ties. As \( p \to 1 \) any level of \( \beta \) works, as \( p \to .5 \) then \( \beta \) needs to approach 1.
Assumption 1 is not essential; in section 5 I show purely office motivated parties still retain the central characteristics of the equilibrium. The main difference with purely office motivated parties is partisan candidates manage to win in equilibrium. Counterintuitively this implies a policy motive makes it less likely for partisan policies to get enacted. On the other hand, assumption 2 is essential. In section 5 I show that impatient parties always pick moderate candidates in every period. It is intuitive that short sighted parties won’t invest in future elections. And without this forward looking behavior my model largely resembles a standard one shot spatial model and the logic of the median voter theorem applies.

4.2 Characterization and Discussion

Here I characterize and discuss the unique subgame perfect equilibrium, with strategies denoted by \( \sigma^* = (\sigma_L^*, \sigma_R^*) \). The equilibrium ends up being Markovian, so it can be described using a state that includes the party that won and the positions taken in the previous period. To denote these states I will use the notation \((I, x, y)\) where \(I\) is the party that won last period, \(x\) is that party’s last period position, and \(y\) is the losing party’s previous position. For example \((R, m, l)\) means the \(R\) party won last period with a moderate candidate, and the \(L\) party lost with a partisan candidate.

In the equilibrium the parties will use symmetric strategies, so only the states where the \(L\) party is the incumbent need to be described. This is done in the following table:

<table>
<thead>
<tr>
<th>State</th>
<th>(L)'s Position</th>
<th>(R)'s Position</th>
<th>(R)'s Position if (L) deviates</th>
</tr>
</thead>
<tbody>
<tr>
<td>((L, m, m))</td>
<td>(m)</td>
<td>(r)</td>
<td>(m)</td>
</tr>
<tr>
<td>((L, m, r))</td>
<td>(m)</td>
<td>(m)</td>
<td>(r)</td>
</tr>
<tr>
<td>((L, l, r))</td>
<td>(m)</td>
<td>(m)</td>
<td>(m)</td>
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</tbody>
</table>

Note the table doesn’t include state \((L, l, m)\) because it is impossible since the moderate candidate picked by party \(R\) can’t lose to the partisan candidates picked by \(L\).

**Proposition 1** Both parties employing strategy \(\sigma^*\) is the unique subgame perfect equilibrium.

**Proof.** In appendix. \(\square\)
By examining the table it can be seen that this equilibrium has the property that after any history the cyclical pattern displayed in figure 1 below will result. Each box in the figure represents a period. The first line in the box is the state, and the second line describes what happens.

Figure 1: Cycle in Equilibrium

The first thing to notice is a moderate candidate wins in every period, and yet partisan candidates are regularly nominated. To see why consider the lower left hand box with state $(R, m, m)$ which means $L$ is out of power and neither party has the advantage of an energized base. $R$ goes first and picks a moderate candidate. $L$ could pick a moderate candidate which would result in a tie and give $L$ probability $1 - p < \frac{1}{2}$ of winning. Instead $L$ decides to concede the current election and pick a partisan. This leads to the upper left hand box (state $(R, m, l)$) where both parties pick moderates, but $L$ wins for certain because they energized their base last period. Hence $L$ trades off a chance of victory (at state $(R, m, m)$) for certain victory in the next period (at state $(R, m, l)$). Notice that $1 - p$ represents how much $L$ is giving up by picking a partisan. This makes clear the role of assumption 2, the parties have to be sufficiently patient relative to what they are giving up by conceding the election. In the remaining two boxes, $(L, m, m)$ and $(L, m, r)$, the same story occurs with the role of the two parties switched.

One feature that might seem puzzling is that $R$ chooses a moderate candidate in the upper left box in state $(R, m, l)$. $R$ knows $L$’s base is energized, and can foresee defeat, so
why doesn’t he choose a partisan candidate to build a stronger future? Well if $R$ chooses a partisan then party $L$ can also choose a partisan and win for sure (recall $R$ has to go first). And since $R$ has a policy motive he prefers to lose to a moderate than lose to a partisan. That $R$ acts in this way is the content of assumption 1. Thus the policy motive of the parties acts to prevent partisan candidates from winning, which is a counterintuitive result. This point is exactly how the equilibrium with purely office motivated differs from the above cycle, and will be discussed in more detail in section 5.

The most distinctive result that comes out of the equilibrium is that parties cycle in power in a predictable fashion. This is a result of the fundamental tension between winning today and tomorrow. In equilibrium, only moderates ever win, but they fail to energize the base leaving the winning party with a weakened future. As discussed in the introduction, this result finds strong support in data. The paper contributes to the literature by providing a novel reason why this cycling occurs as well providing a model with strategic interaction that produces this result.

The equilibrium cycle also creates patterns in the ideology of the candidates nominated and turnout among the parties’ bases. The logic of the model requires parties neglect their base while in power. So once out of office they need to reenergize their base before being able to win elections. This implies that newly out of power parties should nominate more partisan candidates and see a surge in turnout among young voter in their base. As far as I know, little empirical work has been done on these question and represents strong testable predictions of the model. Cohen et al. (2008) (pg. 92) provides some suggestive evidence, but this is a direction that warrants further investigation.

A third feature of the equilibrium is that parties only manage to elect moderates despite nominating partisan candidates. The median convergence theorem holds more strongly in policies implemented than in candidates chosen. This can occur because parties nominate partisan candidates to invest in the future, not to win today. There is limited evidence to suggest parties converge in policy outcomes (see Imbeau (2001) for a survey) and quite strong
evidence they diverge in candidates nominated (see Ansolabehere et al. (2001) and Erikson & Wright (2005)). But this is another testable prediction that requires further study.

4.3 Sketch of Proof

Verifying that $\sigma^*$ is an equilibrium is simply an application of the one shot deviation principle: see appendix for calculations. The calculations are made manageable by the fact the equilibrium is Markovian. Additionally the strict inequalities in the assumptions implies the one shot deviation principle holds strictly at every history, which will be used to prove the equilibrium is unique.

The intuition for why the equilibrium is unique is the model is almost a zero sum game. To see this note that if a moderate always wins then the only variation in payoffs comes from who get the office motivated payoff, which is zero sum. And as seen in Lemma 1 a moderate always defeats a partisan, so a partisan can only win if the other party allows it. And the parties won’t allow it as long as they are sufficiently policy motivated, which is guaranteed by assumption 1.

The key step of the proof of uniqueness is showing that $\sigma^*$ is both strongly efficient and pushes both players to their min-max payoff. Thus the equilibrium is the only arrangement of strategies that is individually rational for both players. Consider any history $h$ that begins a period, so that it is the party in power’s turn to move. Let $V_i^* (h)$ be the continuation payoff party $i$ receives at history $h$ if both parties are employing strategy $\sigma^*$. The proof establishes the following three statements:

1. At history $h$, each party can achieve at least $V_i^* (h)$, no matter the strategy of the other party.

2. $\sigma^*$ is strongly efficient in the sense that the sum of continuation payoffs at history $h$ can never exceed $V_L^* (h) + V_R^* (h)$

3. In any equilibrium the continuation payoff of both parties at history $h$ must be $V_i^* (h)$. 

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That statement 3 follows from 1 and 2 is obvious. Statement 2 can be seen by noting that if a partisan candidate wins the parties combined payoff is $\gamma - 1$ and if a moderate candidate wins it is $\gamma - .5$ and these are the only two possibilities. Thus combined payoff is maximized when a moderate always win, which happens in equilibrium $\sigma^*$ starting from any history that begins a period. To see statement 1 suppose that party $L$ commits to playing strategy $\sigma^*_L$, then notice that, no matter what $R$ does, $\sigma^*_L$ ensures an $r$ type will never win. Thus it is intuitive the worst case for $L$ will have a moderate winning in every period\(^4\). But when a moderate always wins the game is zero sum, and so the strategy that minimizes $L$’s payoff is the strategy that maximizes $R$’s payoff, which is $\sigma^*_R$. Thus $L$’s worst case is $V^*_L(h)$ and hence he can always achieve this payoff by playing $\sigma^*_L$.

Given statement 3 the rest of the proof proceed as follows. Take any history $h$ that doesn’t start a period, i.e. where it is the out of power party’s turn to move. Without loss of generality let it be $L$’s turn to move. Once $L$ moves the next history will be one that starts a period. Using statement 3, for any action $a$, $L$’s continuation payoff must be $V^*_L((h, a))$. This, plus the fact that the one shot deviation principle holds strictly for $\sigma^*_L$, means that in any equilibrium $L$ must take the same action as $\sigma^*_L$ at history $h$. And this can be used to show the continuation payoffs for both parties at $h$ must be $V^*_i(h)$. And then this same argument can be applied again on histories that start a period, which completes the proof.

5 Office Motivated Parties

In this section I consider purely office motivated parties with varying level of patience. The key feature, that parties concede elections to invest in the future, is preserved with patient office motivated parties but not when they are short sighted. This shows that assumption 2 was essential while assumption 1 was not. The only change to the model is to the parties’ payoff. Each party gets a payoff of 1 for winning and 0 for losing and discount the future at

\(^4\)Showing this step is somewhat involved and requires assumption 1. See Lemma B.1 in the appendix for full details.
The needed level of patience is defined as:

$$ \beta^*(p) = \frac{p - (p^2 - 4(1 - p)(p - \frac{1}{2}))^{1/2}}{4(p - \frac{1}{2})} $$

It can be easily verified that for any $p \in (.5, 1)$ we have that $\beta^*(p) \in (0,1)$ and $\beta^*(p)$ is decreasing in $p$. When the parties are patient they follow strategy pair $\sigma_{office}^* = (\sigma_{L,office}^*, \sigma_{R,office}^*)$, which is described in the following matrix. Just as in $\sigma^*$ the equilibrium is symmetric so I only describe the states where $L$ is in power.

<table>
<thead>
<tr>
<th>State</th>
<th>L’s Action</th>
<th>R’s Action</th>
<th>R’s Action if L deviates</th>
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<td>$(L, m, m)$</td>
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<td>$m$</td>
</tr>
<tr>
<td>$(L, m, r)$</td>
<td>$l$</td>
<td>$r$</td>
<td>$m$</td>
</tr>
<tr>
<td>$(L, l, r)$</td>
<td>$m$</td>
<td>$m$</td>
<td>$m$</td>
</tr>
</tbody>
</table>

**Proposition 2** If $\beta > \beta^*(p)$ then $\sigma_{office}^*$ is the unique sub game perfect equilibrium. If $\beta < \beta^*(p)$ then in the unique sub game perfect equilibrium, after any history, within two period both parties will nominate moderate candidate forever.

**Proof:** In Appendix. $\square$

By examining $\sigma_{office}^*$ it can be seen that, after any history and within 2 periods, the cycle displayed in Figure 2 below results.

Unlike the previous cycle this one involve ties. Where the ties occur the party in power did not keep their incumbent candidate, so the election is decided by a fair coin flip. The boxes where the ties occur have two arrows coming out to indicate the two possibilities, each of which occur with probability $\frac{1}{2}$. Conceding the current election to invest in the future still occurs at states $(R, m, m)$ and $(L, m, m)$ (the two center boxes), which is the same states where it happened in the original equilibrium. Thus the central feature of the original equilibrium is maintained with purely office motivated parties.

The main difference from the original equilibrium occurs at states $(R, m, l)$ and $(L, m, r)$, which are the lower left and upper right boxes respectively. Under $\sigma^*$, in these states both
parties move to the middle and the side with the energized base wins with certainty. In \( \sigma_{\text{office}} \) the side with the energized base still wins, but both parties choose partisan candidates. The reason for this is the party without the energized base knows they are going to lose no matter what. Their only motive for taking a moderate position is to keep a partisan from the other side out of power. Since there is no policy motive they don’t care about that and choose instead to pick a partisan candidate to build a stronger future. This provides the counterintuitive result that a policy motive prevents partisan candidates from winning.

Proposition 2 also says that impatient parties converge to the center in every period. Myopic parties do not care about investing in the future and thus have no incentive to pick partisan candidates. If parties ignore the future my model reduces to a Downsian model where a median voter theorem type result holds. This result could be extended to impatient parties with a policy motive.
6 Conclusion

In this work I formalized the idea that partisan candidates are less electorally viable, but energize the base which is valuable for future elections. I motivated this mechanism with empirical evidence on habitual voting and abstention due to alienation. The key result of the model is it provides a novel reason for why parties cycle in power in a regular fashion. That the party in power has trouble energizing their base and so their electoral strength erodes over time.

The core innovation of this work is that it builds a strategic model of candidate selection where parties care about future as well as the present. That is parties are patient enough to consider the ramification of their actions on future elections. This work has focused specifically on the mechanism of partisan candidates energizing the base. But this is just one example of a larger principle; exploring other ways forward looking behavior can impact political strategies presents an important direction for future work.
References


Franklin, M.N. 2004. *Voter turnout and the dynamics of electoral competition in established democracies since 1945*. Cambridge Univ Pr.


