Partisan Optimism and Political Bargaining

(Preliminary and incomplete draft)

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Abstract

Anecdotal and empirical evidence suggest that strong supporters of different political candidates or parties differ substantially in their expectations about electoral outcomes. We explore the implications of partisan optimism for political bargaining in a simple game theoretic model. We show that optimistic beliefs about electoral outcomes among supporters of a party leads to a stronger bargaining position and therefore better policy outcomes for the party, but may hurt its electoral prospects. An interesting observation is that even with high levels of partisan optimism on both sides of the political spectrum, parties are still able to reach an agreement and avoid costly delay.

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1 Introduction

Anecdotal and empirical evidence suggest that citizens’ beliefs about the likelihood of different electoral outcomes vary systematically with their political preferences. During the final months of the 2012 US presidential campaign, many partisans on either side seemed to truly believe that their candidate was on the road to victory and that polls and forecasts suggesting otherwise were methodologically skewed. Delavande and Manski (2012) demonstrate that, during campaigns for US presidential and statewide elections in 2008 and 2010, citizens stating that they would likely support a particular candidate estimated his or her probability of winning to be twenty to thirty percentage points higher than likely supporters of the other candidate. Poll numbers from other countries suggest that this is a widespread and not just a US phenomenon.

Systematic divergence of beliefs about electoral outcomes between citizens with opposing political preferences could have potentially large consequences for political bargaining. When supporters of a party (or candidate) evaluate important political bargaining outcomes, they are likely to take into account the electoral outlook for the next election. A particular outcome is likely to be less well received among supporters the better they believe that their party will do in the next election, because this makes the alternative of delaying the agreement look better (assuming that better electoral outcomes translate into more bargaining power). With the realistic assumption that supporters are less likely to turn out when they are less satisfied with bargaining outcomes, this means that a party with optimistic supporters will demand more in the bargaining process in order not to hurt its electoral prospects. Thus, partisan optimism has the potential to significantly influence political bargaining processes, even when politicians themselves do not have biased expectations.

In this paper we explore the implications of partisan optimism for political bargaining by setting up and analyzing a simple game theoretic model. Two parties bargain over whether to finance a major new policy measure by taxes or cuts in existing government spending. All citizens agree that the policy measure should be implemented as soon as possible (delay is costly), but there is disagreement over how it should be financed. One party and its supporters prefer that it is financed by taxes, for the other party and supporters it is the other way around. Independents are indifferent. The bargaining process is simple: In the first period, one party makes an offer for the other party to accept or reject. At the end of the first period an election is held. If an agreement has already been reached, the election only matters for the distribution of political office rents. Otherwise the winner of the election will be agenda setter in the second period. If an agreement is not reached in period two, the policy measure is no longer feasible, so the model ends after the second period.

The specific bargaining issue in the model corresponds, in a stylized way, to the

\[1\] References to come
\[2\] References to come
disagreement over fiscal consolidation plans in both the US and European countries after the financial crisis of 2008. The assumption that the policy measure can only be implemented if an agreement between the two parties is reached can simply reflect a situation with some form of divided government. However, the assumption can even be relevant in situations without divided government if the policy measure is much less desirable if not supported by a broad coalition. This is likely to be the case for fiscal consolidation plans, which are clearly more credible in the long term if they have broad support on both sides of the political spectrum. While bargaining over fiscal consolidation is the main example we have in mind, the model can easily be reformulated to describe bargaining over other major policy measures.

A key feature of the model is that, after an agreement in period one, partisans will only turn out to vote for their party if they are satisfied with the bargaining outcome. More precisely, a partisan group will turn out if their utility from the agreement is at least as high as their estimate of the utility they would have ended up with if no agreement was reached in period one. Since their estimate of the probability of electoral victory for their party is inflated relative to the true probability, their estimate of their final utility without an agreement in period one is also inflated. Loosely speaking, because of partisan optimism, the supporters of each party demand more to turn out than if they had objective beliefs. This implies that the range of period one agreements that each party is willing to accept changes. If a particular proposal would make one group of partisans dissatisfied because of partisan optimism, then the party may not be willing to accept it because it would worsen its electoral prospects. So partisan optimism clearly changes the bargaining situation even though the parties themselves are not prone to optimism.

Surprisingly, no matter how optimistic the two groups of partisans are, an agreement will always be reached in period one. So even though the introduction of partisan optimism makes it harder for each party to satisfy their supporters, this will not in itself lead to costly delay. There always exist period one agreements that both parties prefer to delay. For high levels of optimism, an agreement necessarily lead to disappointed partisans on at least one side. However, this does not shrink the pie available for the parties to share (policy utility from period one agreement and office rents in period two), so they are still able reach an agreement. In an extension of the model we show that partisan optimism can indeed lead to delay if parties are directly negatively affected by partisan disappointment, for example because they care about political contributions beyond their effect on electoral outcomes or because low partisan enthusiasm about the party’s current representatives makes them more vulnerable to challenges "from their own" in primaries or internal elections.

Another interesting finding from the model is that while each partisan group always does (weakly) better when it is more optimistic, a party can become worse off when its supporters become more optimistic. More precisely, a higher level of optimism among a group of partisans will result in a better bargaining agreement for that side, but at the
same time it can result in worse electoral prospects for the party (note that partisans do not care about office rents, they only care about the bargaining outcome). So increased optimism among its partisans is a mixed blessing for a party. It benefits from the better bargaining outcome, but in some cases it will incur a severe loss due to lower expected future office rents.

In sum, the model reveals that partisan optimism does indeed change political bargaining outcomes. While it does not lead to costly delay (assuming parties do not care about partisan enthusiasm beyond its effect on electoral outcomes), it does lead to changes in the distribution of policy utility and political office rents. In particular, optimism on one side of the political spectrum provides that side with more policy utility, but may lead to worse electoral prospects for the party.

Going a bit beyond the model, the findings have interesting implications for the question of how political leaders should try to manage expectations among supporters. It suggests that expectation management is very much a delicate issue because increased partisan optimism has both positive and negative consequences. Immediately it seems attractive to try to boost optimism levels because increased optimism leads to a better bargaining position, but such a strategy may backfire and lead to future electoral losses.

2 Related Literature

To come

3 The Model

Two political parties, \( L \) and \( R \), are bargaining over how to finance a major urgent policy measure. It can either be financed by new taxes or by cuts in existing government spending. We let \( t \in [0, 1] \) denote the share of costs financed by taxes. There are three types of voters, \( L \)-partisans, \( R \)-partisans, and independents. They all agree that the policy measure should be implemented as soon as possible, but the two partisan groups disagree on how it should be financed. \( L \)-partisans prefer that the policy measure is financed by taxes, \( R \)-partisans prefer that it is financed by spending cuts. Independents are indifferent.

The model consists of two periods. If an agreement is reached in period one, the final utility of the two types of partisans are, respectively,

\[ u_L = t \quad \text{and} \quad u_R = 1 - t. \]

The behavior of independents will be exogenously defined, so we will not model their preferences explicitly. The policy measure is less efficient the later it is implemented, so delay is costly. More precisely, if an agreement is not reached until period two, the final utilities of the partisans are discounted by \( \delta \in (0, 1) \). If an agreement is not reached in
period two, implementation of the policy measure is no longer feasible and all partisans receive a utility of zero.

The bargaining game played by the parties is simple: The agenda setter makes a take-it-or-leave-it offer $t \in [0, 1]$ to the follower. In period one, $L$ is the agenda setter. If $R$ accepts the offer then there is nothing further to bargain over and thus nothing will happen in period two. If $R$ rejects the offer then a similar bargaining game will take place in period two. At the end of period one an election is held. If there was no agreement in period one then the winner of the election will be agenda setter in period two. Otherwise the outcome of the election only matters for the distribution of political office rents.

The parties have the same preferences over bargaining outcomes as their supporters. On top of this, they also care about office rents. Each party’s utility of being in office in period two is $r > 0$. So, for example, if a bargaining agreement is reached in period one and $L$ wins the election, the final utilities of the two of parties are, respectively,

$$U_L = t + r \quad \text{and} \quad U_R = 1 - t.$$ 

Note that we use lower case $u$’s for partisans’ utilities (policy utility) and upper case $U$’s for parties’ utilities (policy utility plus expected office rents).

The outcome of the election at the end of period one depends on the voting behavior of the two groups of partisans and the independents. If the rate of turnout is similar for the opposing partisan groups then the election will be decided by the independents. On the other hand, if there are substantial differences in enthusiasm and therefore in turnout between the partisan groups, then this decides the election and the independents are irrelevant. As this paper focuses on the consequences of partisan beliefs and behavior, the behavior of independents will be exogenously defined: The independents will, no matter what the period one bargaining outcome is, break for $L$ with probability $p \in (0, 1)$ and for $R$ with the residual probability $1 - p$. So unless there are substantial differences enthusiasm between the partisan groups, these are the winning probabilities for the two parties. Since independents are indifferent with respect to the financing of the policy measure, it seems natural to assume that their voting behavior is the same after any agreement. The assumption that their voting behavior in case of delay does not depend on the offer that $R$ rejected is less natural. It could be argued that independents should be less likely to break for $L$ the less it offered to $R$, because then $L$ is seen as being more responsible for the delay. However, any specific voting behavior depending on the rejected offer would be somewhat arbitrary because of the independents’ indifference with respect to the content of the agreement. And since our purpose in this paper is to explore the consequences of partisan optimism, we prefer to keep independents’ voting behavior the same no matter what happens in period one.

The partisans are primarily forward looking. Loosely speaking, if there is anything at stake in the election they will turn out to vote for their party in large numbers. Thus, if the parties do not reach a bargaining agreement in period one, turnout will be
high among both partisan groups and the election will be decided by the independents. If an agreement is reached in period one, all voters are indifferent with respect to the electoral outcome. Therefore, we assume that partisans will decide whether to vote or not based on a retrospective evaluation of the bargaining outcome. An outcome that a partisan group generally sees as satisfactory will lead to enthusiasm and a high level of turnout. A non-satisfactory outcome will lead to low levels of turnout. Thus, an agreement that only satisfies the partisan group of one party will result in that party winning the election with certainty.

The question is then, of course, how partisans decide whether an agreement outcome is satisfactory or not. It is natural to assume that they compare their actual utility to their estimated utility had an agreement not been reached in period one. If their actual utility is higher than their estimate of what they would have received without a period one agreement, then they are generally satisfied and will turn out to vote in large numbers. Otherwise there will be partisan disappointment, and turnout among the partisan group will be low. If an agreement is not reached in period one, the winner of the election will take it all in period two (since the policy measure is worthless after period two, the follower cannot credibly decline any offer). Thus, a partisan will, after a period one agreement, compare his actual utility to an estimated counterfactual utility equal to $\delta$ times the probability of his party winning the election after delay (no period one agreement). The objective win probabilities for $L$ and $R$ are, respectively, $p$ and $1 - p$. However, consistent with the findings in Delavande and Manski (2012) we assume that partisans’ beliefs are biased: $L$-partisans believe that the true probability of their party winning is $p + x_L > p$, $R$-partisans believe that their party will win with probability $1 - p + x_R > 1 - p$. For example because each group of partisans overestimate the likelihood that independents will break for their party, which is consistent with the so-called False Consensus Effect (Ross, Greene and House 1977). So, after a period one agreement $t$, $L$-partisans will turn out to vote in large numbers if

$$t > (p + x_L)\delta$$

For $L$-partisans it could be argued that the level of utility to which the actual utility from the agreement should be compared is not the estimated expected utility of delay. If the partisans fully understand the bargaining proces and think that their belief about the probability of victory should be obvious to everyone, then they might only be satisfied if their actual utility is at least

$$1 - (1 - p - x_L)\delta.$$ 

Because if everyone has the same belief as $L$-partisans, $R$ should accept such an offer. So $L$-partisans could believe that an agreement providing less utility reflects incompetent bargaining by $L$. However, the alternative assumption requires substantially more reflection among $L$-partisans about the bargaining proces and the beliefs of others. Further, the alternative assumption would not fundamentally change the model, it would simply correspond to introducing a strictly positive lower bound on $L$-partisans’ level of optimism (more precisely, $x_L > 1 - \delta$).
and $R$-partisans will do the same if

$$
1 - t > (1 - p + x_R)\delta.
$$

Define

$$
t^*_L = (p + x_L)\delta \quad \text{and} \quad t^*_R = 1 - (1 - p + x_R)\delta.
$$

Then turnout will be high among $L$- and $R$-partisans if, respectively,

$$
t > t^*_L \quad \text{and} \quad t < t^*_R,
$$

and low if we have the opposite inequalities. In case of equality, we assume that both high and low turnout is possible.

The parties are fully informed about how voting behavior depends on the period one bargaining outcome. In particular, they are fully aware of the partisan optimism on either side, but they do not themselves have optimistic beliefs. So when they bargain they take into account that partisans are biased and that this is common knowledge among the parties, but they use the objective win probabilities to make their decisions.

Clearly, the way we model voting behavior is simplistic and not fully micro founded. However, our primary aim is to study how partisan optimism affects high stakes political bargaining and we think that our model is suitable for this purpose, at least a reasonable first step. It incorporates the findings of Delavande and Manski (2012) in a model where partisans are forward looking and therefore turn out in large numbers when the stakes are high, while they vote retrospectively based on subjective valuations of past performance when future stakes are low.

A diagram of the model is shown in figure 1. It includes all decision nodes for the two parties, while voting behavior is, for simplicity, black boxed. For all possible outcomes, the utilities for the two parties are specified. The utility for each partisan group is simply the policy part of their party’s utility.
Since we have already specified voting behavior, we can consider the model as a dynamic game of complete information with only the two parties as players. We solve the model for all subgame perfect Nash equilibria.

First, the stage two subgames are easy to solve. The follower’s utility of rejecting the agenda setters offer is zero, so the follower will accept any offer providing a positive

4 Equilibrium Behavior and Implications

Since we have already specified voting behavior, we can consider the model as a dynamic game of complete information with only the two parties as players. We solve the model for all subgame perfect Nash equilibria.

First, the stage two subgames are easy to solve. The follower’s utility of rejecting the agenda setters offer is zero, so the follower will accept any offer providing a positive
utility. Thus, the unique outcome of each stage two subgame is that the agenda setter takes it all, i.e., \( t_{2R} = 0 \) and \( t_{2L} = 1 \). Thus it follows that if \( R \) rejects the offer in period one, the expected utilities of the two parties will be, respectively,

\[
U_L^{\text{Delay}} = p(\delta + r) \quad \text{and} \quad U_R^{\text{Delay}} = (1 - p)(\delta + r).
\]

So the parties will reach an agreement in period one precisely if accepting the offer of \( L \) provides \( R \) with a utility of at least \((1 - p)(\delta + r)\) (we assume that \( R \) accepts if indifferent). Clearly, whether \( R \) will accept a particular offer or not depends on the implied partisan voting behavior. For example, \( R \) may accept a particular offer \( t \) if it will satisfy \( R \)-partisans, but reject the same offer if it will not. Because accepting an offer that supporters will not be happy with means that expected office rents will be lower than if supporters will find the same offer satisfactory. The range of offers that partisans find satisfactory depends, of course, on their level of optimism. The higher \( x_R \) is, the lower \( t \) has to be in order to make them turn out in high numbers.

Had we not assumed that partisans are optimistic about the probability that independents will break for their party, the outcome of the model would be straightforward. Then \( L \) would simply make the offer that provides \( R \) with the same policy utility as it would get from delay. More precisely, \( L \) would offer \( t = 1 - (1 - p)\delta \), \( R \) would accept, and turnout among both partisan groups would be high. With optimistic partisans, this is no longer the outcome. Because if \( R \) accepts the offer considered above, turnout among \( R \)-partisans will be low and \( L \) will win the election with certainty. This leaves \( R \) with a utility of only \( U_R = (1 - p)\delta \), which implies that \( R \) would rather reject the offer. So optimistic \( R \)-partisans makes it possible for \( R \) to credibly threaten to reject offers that it would otherwise accept. We formulate this important albeit simple finding as an observation.

**Observation 1** Having an optimistic partisan group makes it possible for the follower \((R)\) to credibly threaten to reject a wider range of offers in period one.

Thus, partisan optimism clearly changes the outcome of the bargaining game. However, for low levels of optimism (values of \( x_L \) and \( x_R \) that are relatively close to zero) the outcome is quite similar to the one with unbiased partisans. More precisely, \( L \) will offer just enough to keep \( R \)-partisans satisfied \((t = 1 - (1 - p + x_R)\delta)\), \( R \) will accept, and turnout will be high among both groups of partisans. For larger levels of optimism, this is not necessarily the equilibrium outcome. For example, for sufficiently large levels of optimism, offering enough to keep \( R \)-partisans satisfied will make \( L \)-partisans dissatisfied, which makes this option unattractive for \( L \). So a more extensive analysis is needed to find the equilibrium outcome for all possible parameter constellations.

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4Even if we introduced an election at the end of stage two, this would still be the case because implementing the policy measure is infeasible after the second stage.
We split the analysis into two cases: $t^*_L < t^*_R$ and $t^*_L > t^*_R$.\footnote{For simplicity we ignore the boundary case $t^*_L = t^*_R$.} In the former case there exist a range of agreements that satisfies both partisan groups, in the latter no such agreements exist. However, before we analyse these two cases in depth we make an important observation: No matter how optimistic partisans are, an agreement will always be reached in period one. If $t^*_L < t^*_R$ then the offer $t = t^*_R$ leads to agreement and high turnout among both partisan groups. This option provides $L$ with the utility $U_L = t^*_R + pr > t^*_L + pr > U_L^{\text{Delay}}$ and thus it is better than making an offer that $R$ will reject ($t = 1$, for example). If $t^*_L > t^*_R$ then an agreement that makes both partisan groups satisfied is no longer possible. However, the parties can still reach an agreement that each of them prefer to costly delay. An offer below $t^*_L$ will, if accepted, make both partisan groups dissatisfied. This means that the win probabilities for the parties will be the same as if no agreement is reached ($p$ and $1 - p$). Therefore, $R$ will accept such an offer if it provides at least as much policy utility as delay, i.e., if $1 - t \geq (1 - p)\delta$. Thus $L$ can simply offer $t = 1 - (1 - p)\delta$ if this is below $t^*_L$ and $t = t^*_L - \varepsilon$ (for a small $\varepsilon > 0$) otherwise. Then both parties will be better off than with delay. Thus, again, the parties will reach an agreement in period one.

**Observation 2** No matter how optimistic the partisan groups are, costly delay is not possible in equilibrium.

Suppose $t^*_L < t^*_R$, which is easy seen to be equivalent to

$$x_L + x_R < \frac{1 - \delta}{\delta}.$$  

So this corresponds to a situation where the total level of partisan optimism is relatively low. From above we know that $L$ obtains the utility $U_L = t^*_R + pr$ by offering $t = t^*_R$. The question then is if there are other offers that will make $L$ better (or equally well) off? First note that all offers $t < t^*_R$ make $L$ worse off. Such an offer will be accepted and make $R$-partisans satisfied. Thus the offer will result in a strictly lower policy utility and weakly lower office rents for $L$. Offers $t > t^*_R$ will, if accepted, clearly make $L$ better off. If $R$ accepts such an offer it will lose the election because $R$-partisans will turn out in lower numbers than $L$-partisans. So $R$ will only accept if its policy utility is higher than its utility from delay:

$$1 - t \geq (1 - p)(\delta + r),$$

which is equivalent to

$$t \leq 1 - (1 - p)(\delta + r).$$

So there are offers above $t^*_R$ that $R$ will accept precisely if

$$1 - (1 - p)(\delta + r) > t^*_R,$$
which is equivalent to
\[ x_R > \frac{r(1-p)}{\delta}. \]

Clearly, if there are offers above \( t^*_R \) that \( R \) will accept, \( L \) will make the highest such offer:
\[ t = 1 - (1-p)(\delta + r). \]

We summarize our results for the case \( t^*_L < t^*_R \) in the proposition below.

**Proposition 1 (Equilibrium outcomes for the case \( t^*_L < t^*_R \))**

1. Suppose \( x_R < \frac{r(1-p)}{\delta} \). Then \( L \) will offer \( t = t^*_R \), \( R \) will accept, and turnout will be high among both partisan groups. Thus \( L \) wins the election with probability \( p \).

2. Suppose \( x_R > \frac{r(1-p)}{\delta} \). Then \( L \) will offer \( t = 1 - (1-p)(\delta + r) \), \( R \) will accept, and turnout will be high among \( L \)-partisans and low among \( R \)-partisans. Thus \( L \) wins the election with certainty.

(\textit{In the boundary case } \( x_R = \frac{r(1-p)}{\delta} \), both types of equilibria exist.)

We then move on to the second case: \( t^*_L > t^*_R \). Suppose first that \( 1 - (1-p)\delta < t^*_L \), which is equivalent to \( x_L > \frac{1-\delta}{\delta} \). Then, if \( L \) offers
\[ t = 1 - (1-p)\delta, \]
\( R \) will accept and turnout will be low among both partisan groups. This provides \( L \) with more utility than delay, so it is better for \( L \) than any higher offer, because such an offer would make \( R \) reject. Further, any lower offer will clearly make \( L \) worse off, so the offer above is indeed optimal.

Then suppose \( 1 - (1-p)\delta \geq t^*_L \). If \( L \) offers \( t = t^*_L \) and we assume that such an agreement will make \( L \)-partisans dissatisfied (which is admissible behavior because we are exactly at the cut-off point) then \( R \) will accept and \( L \) will win with probability \( p \). This is better for \( L \) than delay, so the question is if there are other offers that are acceptable for \( R \) and will make \( L \) better (or equally well) off? Clearly, lower offers will result in a lower utility. Higher offers will make \( L \) better off if accepted. So are there acceptable offers above \( t^*_L \)? If \( R \) accepts a \( t > t^*_L \), it will lose the election with certainty. So \( R \) will only accept if \( 1 - t \geq U^\text{Delay}_R \). Thus there exist acceptable offers \( t > t^*_L \) precisely if \( 1 - U^\text{Delay}_R > t^*_L \), which is equivalent to
\[ x_L < \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta}. \]

In this case, \( L \) will clearly make the highest acceptable offer:
\[ t = 1 - U^\text{Delay}_R = 1 - (1-p)(r + \delta). \]

Our results for the case \( t^*_L > t^*_R \) are summarized in the proposition below.
Proposition 2 (Equilibrium outcomes for the case $t^*_L > t^*_R$)

1. Suppose $x_L < \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta}$. Then $L$ will offer $t = 1 - (1 - p)(r + \delta)$, $R$ will accept, and turnout will be high among $L$-partisans and low among $R$-partisans. Thus $L$ wins the election with certainty.

2. Suppose $\frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta} < x_L < \frac{1-\delta}{\delta}$. Then $L$ will offer $t = t^*_L$, $R$ will accept, and turnout will be low among both partisan groups. Thus $L$ wins the election with probability $p$.

3. Suppose $x_L \geq \frac{1-\delta}{\delta}$. Then $L$ will offer $t = 1 - (1 - p)\delta$, $R$ will accept, and turnout will be low among both partisan groups. Thus $L$ wins the election with probability $p$.

(In the boundary case $x_L = \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta}$, the equilibria from part one and two both exist.)

Figure 2 shows how the equilibrium outcome depend on the optimism parameters $x_L$ and $x_R$. It is assumed that the other parameters of the models satisfy

$$\frac{(1-p)r}{\delta} < \frac{1 - \delta}{\delta} < \min\{p, 1-p\}.$$
The equilibrium results above lead to an interesting finding. Intuitively it seems reasonable to expect \( R \) to do better the more optimistic its partisan group is. It requires a higher policy utility to make a more optimistic partisan group turn out, and \( R \) should be able to use this to credibly demand more from \( L \). Further, we know from Observation 2 that increased optimism will not lead to costly delay. However, counter to intuition, an increase in \( x_R \) can make \( R \) worse off. Suppose \( x_L < \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta} \) and consider the equilibrium outcome as we increase \( x_R \). As long as \( x_R > \frac{r(1-p)}{\delta} \), \( L \) will offer \( t = t^*_R \), \( R \) will accept, and both partisan groups will turn out to vote. Thus the equilibrium utility of \( R \) will be

\[
(1 - p + x_R)\delta + (1 - p)r.
\]

So for relatively low levels of optimism for \( R \)-partisans, the effect of an increase in \( x_R \) is straightforward: \( R \) can credibly threaten to reject a wider range of offers, and this forces \( L \) to make a better offer. However, at \( x_R = \frac{r(1-p)}{\delta} \) there is a discontinuity in the equilibrium utility of \( R \). When \( x_R > \frac{r(1-p)}{\delta} \) it is possible for \( L \) to achieve the same utility as if \( R \)-supporters were not optimistic at all (\( x_R = 0 \)). It can do so by offering \( R \) a policy utility equal to its total utility after delay, i.e., \( t = 1 - U^\text{Delay}_R \). Thus \( R \) will accept it even though this will lead to a certain electoral loss (no office utility). This is only optimal for \( L \) when \( R \)-partisans are very optimistic, because otherwise the offer that compensates \( R \) for a certain loss will satisfy \( R \)-partisans. So it is the severe optimism of \( R \)-supporters that makes it possible for \( L \) to extract the maximum amount of agenda setter rents by giving up policy utility in return for a certain electoral win. Figure 3 and 4 illustrates, respectively, the equilibrium offer and the equilibrium utility of \( R \) as a function of \( x_R \) (for a fixed \( x_L < \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta} \)). Note that, since the equilibrium offer is decreasing in \( x_R \) (constant for \( x_R > \frac{r(1-p)}{\delta} \)), \( R \)-partisans themselves benefit from being more optimistic. For \( x_L \)'s above \( \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta} \) it is easy to check that the equilibrium utilities of both \( R \) and \( R \)-partisans are weakly increasing with respect to \( x_R \).

![Figure 3: Equilibrium offer as a function of the level of optimism among \( R \)-partisans](image)

(for a fixed \( x_L < \frac{1-\delta}{\delta} - \frac{(1-p)r}{\delta} \))
For $L$ it is also the case that an increase in optimism among its supporters can lead to a decrease in equilibrium utility. For any fixed $x_R > \frac{r(1-p)}{\delta}$ there is a downward discontinuity in $L$’s equilibrium utility at $x_L = \frac{1}{\delta} - \frac{(1-p)r}{\delta}$. At this point the equilibrium changes from one where $L$ wins with certainty to one where it only wins with probability $p$. Since the equilibrium offer is a continuous function of $x_L$, this leads to a downward jump in $L$’s utility. As with $R$-partisans, the group of $L$-partisans (weakly) benefits from being more optimistic (the equilibrium offer is weakly increasing in $x_L$ for all values of $x_R$). Figure 5 and 6 shows how, respectively, the equilibrium offer and $L$’s equilibrium utility depend on $x_L$ for a fixed $x_R > \frac{r(1-p)}{\delta}$. Observation 3 sums up our findings about the dependence of equilibrium utilities on partisan optimism.
Observation 3 For each party, it is possible for increased optimism among its partisans to result in lower equilibrium utility. This happens when an increase in partisan optimism changes the equilibrium outcome in a way that makes the party less likely to win the election. The equilibrium utility of each partisan group is weakly increasing in its level of optimism.

5 An Extended Model Where Delay Is Possible

So far we have assumed that partisan enthusiasm matters for electoral outcomes, but does not directly affect parties’ utilities. However, it could be argued that a low level of enthusiasm among a partisan group hurts the party beyond its negative effect on electoral outcomes. For example, it is likely that dissatisfied partisans contribute less financially to their party. And the party may well care about financial support beyond the positive effect it has on its electoral prospects. If this is the case, lower partisan enthusiasm has a direct negative effect on the party’s utility. In this section we extend the model by introducing a direct cost of partisan dissatisfaction for each party. For simplicity we assume that this cost is the same for the two parties. The cost is denoted $c$.

We can analyse the extended model similarly to the original model, although the analysis is slightly more complicated. Here we focus on the most important results and intuitive explanations, the full analysis can be found in the appendix (to come).

First note that if $2c > 1 - \delta$ then the aggregate cost (among the parties) of dissatisfaction among both partisan groups is higher than the aggregate cost of delay. Thus it is not surprising that when this inequality is satisfied and the other parameters are such that the outcome of the original model involves low turnout among both partisan
groups, then the outcome of the extended model is delayed agreement. Therefore, in the rest of this section we will focus on the case

$$2c < 1 - \delta.$$  

Furthermore, we will also use the following restriction of parameters:

$$\frac{(1 - p)r + c}{\delta} < \frac{1 - \delta}{\delta} < \min\{p, 1 - p\},$$

which is slightly stronger than the restriction used to draw the equilibrium outcomes for the original model in figure 2 (for $c = 0$ they are identical).

When $1 - \delta - (1 - p)r < 2c < 1 - \delta$, the equilibrium outcomes of the model are as illustrated in figure 7.

![Figure 7: Equilibrium outcomes for the extended model (see the main text for specific parameter restrictions)](image)

To a large extent, the outcomes are similar to the ones from the original model. However, there will be costly delay when

$$x_L + x_R > \frac{1 - \delta}{\delta} \quad \text{and} \quad \frac{1 - \delta}{\delta} - \frac{(1 - p)r + c}{\delta} < x_L < \frac{c}{\delta}.$$
In words, this means that there will be delay when the following three conditions are satisfied. First, there are no agreements that satisfies both partisan groups. Second, L-partisans have to be sufficiently optimistic that it is not possible for L to make an offer that R will accept and only L-partisans will be happy with. Third, L-partisans cannot be so optimistic that the best possible offer for L that makes R accept and both partisan groups dissatisfied provides more utility than the outside option of delay. Taken together, the second and third conditions implies that L has no options that will provide R with only its utility of delay plus its cost of partisan dissatisfaction and leave the rest for L itself. And this is exactly why there is delayed agreement even though it is, in the aggregate, more costly for the parties than generally low partisan enthusiasm.

**Observation 4** With direct costs of low partisan enthusiasm for the parties, costly delay is possible in equilibrium. This is the case even for aggregate costs of low partisan enthusiasm that are lower than the costs of delay.

A more minor consequence of the extension of the model is that the parameter area where only R-partisans are dissatisfied (and thus turn out in lower numbers) shrinks, which also means that the area where a period one agreement is reached and both partisan groups are satisfied grows. This happens because a direct cost of partisan disappointment makes R demand more to accept an offer that will only satisfy L-partisans.

**6 Conclusion**

We have demonstrated that partisan optimism about electoral outcomes can significantly change the outcomes of political bargaining processes. While the model is evidently stylized, we think that our results provide a solid first step in understanding how this well documented bias among voters influences the behavior of politicians and how this translates into policy- and electoral outcomes. Particularly interesting observations were that optimism among a party’s supporters leads to a stronger bargaining position and therefore better policy outcomes for the party, but may hurt its electoral prospects. Further, it is an important observation that even high levels of partisan optimism does not necessarily lead to costly delay of agreement. When optimism is high on both sides of the political spectrum, the parties can reach an agreement that leads to low partisan enthusiasm on both sides and therefore does not change the electoral prospects of the parties relative to a situation with delay. However, when parties value partisan enthusiasm directly (beyond its electoral effect), partisan optimism can lead to costly delay, even when the aggregate costs of partisan dissatisfaction among the parties are lower than the costs of delay.
7 References

Incomplete


8 Appendix

To come