On ignorant voters and busy(?) politicians
- Preliminary draft. Do not quote. -

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February 15, 2015

Abstract
It is often argued that ignorant voters cannot hold elected politicians accountable. While this may be true in case of few voters, we show that a large electorate of ignorant voters can succeed in establishing high levels of accountability. In our model an incumbent politician is confronted with a large number of voters who receive very noisy signals about his performance. We find that the accountability problem can be solved well in the sense that the incumbent exerts effort as if she faced a representative voter who receives a perfect signal about her performance. Our results thus shed light on another potential blessing of large electorates in addition to information aggregation as postulated by the jury theorem.

JEL-Codes: D72, D82, H41
Keywords: accountability, elections, information, jury theorem

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1 Introduction

Elected politicians are responsible for a wide array of policies that affect the well-being of their voters. From a voter’s perspective, the ideal incumbent would be competent and he would work hard for the voter’s well-being. Accordingly, the political economy literature attributes two different functions to elections: they can serve to select good types of politicians and to discipline incumbents by creating accountability. For both functions, the information an election is based upon is a key element to achieve good outcomes.

However, voters are often questioned whether they have sufficient knowledge and motivation required to successfully evaluate politicians in order to incentivize incumbents and getting rid of incompetent but retaining competent ones. Since Downs (1957) economists and political scientists have argued that a voter cannot be expected to spend considerable amounts of time in order to grasp complex political and economic issues in depth because their vote will usually hardly matter at all when the electorate is large. So, if voters tend to be relatively ignorant, are elections nothing but a rusty blade in the hand of voters that hardly frightens politicians?

When it comes to selecting talented politicians the literature offers an elegant solution for the case of large electorates: the jury theorem. Since Condorcet, many studies (see e.g. Young (1988)) have shown that even if each individual voter has very little knowledge about which alternative is the right choice, the collective decision of a large electorate can be correct in the sense that a perfectly informed social planner would have made the same decision.

The jury theorem reduces the worries about voters’ lack of knowledge and understanding when it comes to selecting good types of politicians. However, it is silent about whether an elected competent politician will indeed work sufficiently in the direction of voters’ will. In other words, the jury theorem ignores one of the two main roles attributed to the elections: to discipline incumbents by creating accountability.

If voters receive very noisy signals about a politician’s performance, then their opinions can hardly be affected by a little boost of performance resulting from the politician’s effort. So should we expect politicians to be lazy because they know that the voters have very little understanding of a politician’s performance? In this paper, we try to answer this question.

We use a political agency model of the career concern type (see Persson and Tabellini 2002) with two periods. An incumbent who provides a public good faces a large electorate where each voter has little incentives to pay attention to political issues. As already discussed by Downs (1957), however, we assume that voters receive some bits of information about the incumbent’s performance just by living their everyday life (When scanning the newspaper, for example, they can stumble over news about the incumbent although they do not seek to consume these news). This is modelled as follows: each voter receives for free a very noisy private signal about the incumbent’s performance before deciding
whether to vote for the incumbent or a challenger.

As usual, an incumbent in period 2 will not exert any effort and thus each voter votes for the candidate who appears to be more competent. The incumbent can try to manipulate the voters’ beliefs about her competence by exerting costly effort which boosts performance in public good production. Due to the very noisy signals, however, additional effort has but little effect on the observed performance and thus on the voters’ opinions about the incumbent. So the payoff of effort is low regarding this effect. But there is another effect that makes appearing even a little more competent valuable: Due to the law of large numbers, the incumbent has relatively good knowledge about the median voter’s opinion. When voters are indifferent between the incumbent and a challenger ex ante, then it is very likely that the median voter’s opinion is around the threshold for reelection. Thus, it is relatively likely that changing his opinion by exerting more effort can shift the opinion over the threshold. We find that because of these two effects, the incumbent will exert effort as if she were confronted with a representative voter who receives a perfect signal about performance.

Thus, it is possible that a large electorate of almost ignorant voters can establish high levels of accountability. Further, in analogy to the jury theorem, the electoral decision is such that an incumbent who is more competent than average is reelected with probability one. In summary, when the electorate is large, ignorant voters can enjoy high levels of public goods because incumbents are both: talented and hard-working.

Next, we extend the model in order to allow for some ideological bias for voters in the sense that, if for instance they have a positive bias for the incumbent, they may prefer the incumbent even if they think the challenger is more competent. This bias distorts both the selection and the accountability problems in the sense that a perfectly informed voter would be more successful to select a more competent politician and to induce the incumbent to work harder. As in the case without any ideological bias, the incumbent knows that the noise part of the median voter’s signal is nil. However, when the median voter has a bias, the precision of his signal matters for the incumbent’s behavior. This implies that the less precise the median voter’s signal, the less the incumbent is motivated to exert effort, and the less likely that the right type of politician is elected.

The paper connects two strands of the literature: career concerns model and the jury theorem. In political economy, the career concerns model (initiated by Holmström (1999)) is used to analyze to which degree a politician can be held accountable through reelection pressures (see e.g. Alesina and Tabellini (2007)). The main idea is that a politician can change positively a voter’s perception about her, increasing her chances of reelection thereby. It is shown in this literature that the precision of the voter’s signal about the politician plays a crucial role: The lower the precision, the harder for the politician to influence the voter’s perception, and the lower her incentive to work consequently. Hence, it is legitimate to worry about a voter’s lack of knowledge or interest. However, this literature considers only a representative voter. In this paper, we study the case with a large number of voters and question whether the collective decision can be appropriate. On the other hand, the jury theorem
considers a large number of voters as in our paper and how their signals are aggregated to result in a collective decision. However, as already discussed, this literature ignores the accountability problem. We are bringing together these two strands in order to evaluate the potential effectiveness of elections from a more thorough perspective incorporating both of the main roles of elections.

The career concerns model has been used extensively in the political economy literature to study various issues. Ashworth (2005) and Ashworth and Bueno de Mesquita (2008) use the framework to analyze the determinants and consequences of the incumbency advantage. Alesina and Tabellini (2007, 2008) discuss the types of policy tasks better suited for a bureaucrat versus a politician, whereas Dewatripont et al. (1999) study the organization of government agencies.

The jury theorem has been formalized by Young (1988) and Ladha (1992) among others. The standard assumptions of the theorem are an infinitely large electorate, the conditional independence of voters' signals, majority voting, and sincere voting. Ladha (1992) generalizes the theorem to correlated signals. Austen-Smith and Banks (1996) shows that sincere voting does not constitute a Nash equilibrium. However, Feddersen and Pesendorfer (1997, 1998) show that this does not create a problem for the jury theorem, since it is robust to strategic voting. They show as well the robustness to supermajority requirements. Martinelli (2006) does not assume exogenously that a voter receives a noisy signal, instead shows that a voter has an incentive to acquire a costly signal in spite of low pivotal probability and that the collective decision can be efficient under some conditions on the cost of information acquisition. However, in all this literature, only the selection problem is considered by leaving the accountability problem aside.

The paper is structured as follows. Section 2 presents the model. Section 3 includes the equilibrium analysis, whereas Section 4 extends the model to the case of ideological bias. Section 5 concludes.

2 The model

Our model follows the 'career concern' approach of political agency problems as described in Persson and Tabellini (2002). There are two time periods and a continuum of citizens with unit mass. In period 1, there is an incumbent politician (I) who provides a public good. At the end of period 1 an election takes place, where the citizens can either re-elect the incumbent or elect a challenger (C) and the winner of the election provides the public good in period 2. The candidate who receives the majority of the votes is the winner. Ties are broken fairly. Before the election, each citizen receives a private signal about the incumbent’s performance.
2.1 Production of the public good

The level of the public good in period \( t \in \{1, 2\} \) is

\[
g_j^t = e_j^t + \theta^j \quad \text{with } j \in \{I, C\}.
\]  

The variable \( e_j^t \geq 0 \) denotes the effort of the politician in power in period \( t \) and \( \theta^j \) his competence. So the level of effort is a period-specific choice whereas competence remains constant over time.

A politician’s competence is a realized value of the random variable \( \Theta^j \) and we assume that politicians and voters share the common prior belief that \( \Theta^j \sim N(0, 1/\tau) \). Thus, as usual in models of the career concern type an incumbent does not know his own competence, so we will not have to deal with signaling issues in the analysis.

So the level of the public good results from the realization of the random variable competence and the action effort level chosen by the incumbent. This action can be interpreted in various ways. For instance, we can say that effort denotes how much time an incumbent devotes to activities like attracting grant monies, monitoring bureaucrats or negotiating contracts. According to this interpretation, working hard reduces the time that is left for enjoying the amenities associated with political office and we introduce the cost function \( c(e) \) that measures the foregone pleasure of these unproductive activities. We assume that \( c(e) \) is strictly convex with \( c(0) = 0, c'(e) > 0, c''(e) > 0 \) and \( \lim_{e \to 0} c'(e) = 0 \).

When deciding on his effort level, the incumbent knows that the citizens can use information about his performance in public good production in period 1 to help decide whether or not to re-elect him. By exerting more effort, the incumbent can increase public good provision and try to improve citizens’ perception about his competence in order to raise the probability of his re-election \( p(e_1) \). The incumbent’s objective in period 1 is to maximize

\[
p(e_1) \cdot [R - c(e_2)] - c(e_1),
\]

where \( R > 0 \) denotes an exogenous rent from being in office. So the incumbent weighs the cost of effort in period 1 against the expected net rent in period 2. The level of effort he chooses depends on the mapping of effort into the probability of re-election which depends on the electoral decision.

2.2 Voting decision of a citizen

Each citizen either votes for the incumbent or for the challenger and we label citizen \( i \)’s decision \( v_i \in \{I, C\} \). There is no abstention. We assume that each citizen votes sincerely given his information.

\footnote{We abstract from discounting throughout the analysis because including it would not generate any interesting insight.}
We assume that each citizen’s utility in period $t$ is

$$u_t = g_t$$

so utility is linear in the level of the public good. Each citizen will vote for the candidate whom he expects to provide more of the public good in period 2.

Before the election, each citizen $i$ will receive a private signal

$$s_i = g_1 + x_i$$

about the incumbent’s performance and the citizens can use this information when making their electoral decisions. We assume that the noise terms $x_i$ are realized values of the random variable $X \sim N(0, 1/\tau_x)$ where $\tau_x$ measures the clarity of the signal. The noise terms $x_i$ are independent so the signals are independent conditional on a realized level of the public good in period 1.

We can interpret this signal structure as follows: Even if a voter is not interested in politics or not willing to spend time to get informed, it is rather safe to assume that he is not completely ignorant, i.e. he has a signal about the incumbent’s performance however noisy the signal is. A signal can result from living their everyday life. When scanning the newspaper, for example, a voter can stumble over news about the incumbent although he does not seek to consume these news and is not willing to pay more attention to it than it takes to scan the pages in order to find interesting articles. Even from noticing headlines and pictures voters can learn something. From this perspective, $x_i$ measures the extent by which a voter misunderstands the message in the newspaper which can easily happen due to a low willingness to pay attention. Actually, Martinelli (2006) shows that a rational voter is willing to pay a little attention to a given source of information in spite of very low pivotal probability when acquiring the first bits of information is sufficiently cheap. It could also be the case that voters are not informed well about the extent to which an incumbent is responsible for a public good and thus each voter miscalculates the incumbent’s performance.

### 2.3 Timing of the game

**Period 1:**

- Nature selects the competence of the incumbent $\theta^I$ which remains unknown to all players.
- The incumbent chooses the effort level $e_1$, and $g_1 = e_1 + \theta^I$ is realized but not observed by the citizens.
- Each citizen receives a private signal $s_i = g_1 + x_i$ and updates the belief about the incumbent’s talent.
- The election takes place.

Period 2:

- The winner of the election chooses an effort level, and either \( g_2^I = \theta^I + \theta^I \) or \( g_2^C = \theta^C + \theta^C \) is realized.

### 3 Equilibrium

As the game ends after period 2 there will be no gain of exerting effort in period 2 and, consequently, the winner of the election will not exert any effort. Thus, we have \( e_2^I = e_2^C = 0 \) and the competence of the elected politician is the only determinant of the level of the public good in period 2:

\[
g_2 = \begin{cases} 
\theta^I & \text{for } v = I \\
\theta^C & \text{for } v = C 
\end{cases}
\]

where \( v \) denotes the winner of the election. It follows that each citizen votes for the candidate whom he expects to be more competent.

Citizens update their beliefs in a Bayesian way. Thus, the expected competence of the incumbent after having observed a signal \( s_i \) is

\[
E(\Theta^I|s_i) = \frac{\tau_x}{\tau_x + \tau_\theta} \cdot (s_i - \tilde{e})
\]

where \( \tilde{e} \) denotes a citizen’s expectation about the incumbent’s effort.

As the challenger’s expected competence is 0, citizen \( i \)’s voting decision is

\[
v_i = \begin{cases} 
I & \text{for } E(\Theta^I|s_i) \geq 0 \\
C & \text{for } E(\Theta^I|s_i) < 0
\end{cases}
\]

### 3.1 Accountability of the incumbent

To derive the incumbent’s effort in period 1, we have to determine the relation between \( p^I \) and effort. From now on, we drop the subscript and denote the first period’s effort simply by \( e \). Since the second period’s effort is trivial, there is no risk of confusion.

From the incumbent’s perspective, a citizen \( i \)’s posterior expectation of his talent is

\[
E(\Theta^I|s_i) = \frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I + x_i).
\]
The incumbent considers how much effort to spend before the signals $s_i$ are realized and thus a citizen’s opinion is a random variable for him. The incumbent needs at least half of the votes and he will achieve this number of votes if the voter who receives the median value of signal realizations, whom we call the median voter, votes for him. It follows from the law of large numbers and the fact that the mean of a noise term $x_i$ equals zero that the median voter’s signal is $s_m = g + 0$ and that the median voter’s opinion about the incumbent’s competence equals

$$E(\Theta^I | s_m) = \frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I).$$

Thus, although the incumbent’s knowledge of some citizen’s opinion is very noisy, his knowledge of the decisive voter’s opinion is relatively precise because of the law of large numbers. From the incumbent’s perspective, the only remaining source of uncertainty is the random variable $\Theta^I$.

Given this knowledge about the median voter’s opinion the incumbent knows that he will be reelected if

$$\frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I) \geq 0.$$ 

From the incumbent’s perspective, $\frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I)$, the opinion of the median voter, is a normal random variable with mean $\mu = \frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e})$ and variance $\sigma^2 = \frac{\tau^2_x}{(\tau_x + \tau_\theta)^2 \tau_\theta}$.

It follows that the probability of reelection is

$$p^I = 1 - F(0; \mu, \sigma^2)$$

where $F$ denotes the distribution function of the median voter’s opinion.

The incumbent chooses effort in order to maximize

$$p^I(e) \cdot R - c(e) = (1 - F(0; \mu, \sigma^2)) \cdot R - c(e)$$

and thus optimal effort solves

$$-\left(\frac{\partial F}{\partial \mu} \frac{\partial \mu}{\partial e} + \frac{\partial F}{\partial \sigma^2} \frac{\partial \sigma^2}{\partial e}\right) R = c'(e).$$

Two factors determine the effect of an additional unit of effort on the probability of reelection: (1) $\frac{\partial \mu}{\partial e}$ says by how much an additional unit of effort increases the mean and (2) $\frac{\partial F}{\partial \mu}$ says how increasing the mean changes the probability of reelection.
We obtain that optimal effort for given \( \tilde{e} \) solves

\[
  f(0; \mu, \sigma^2) \frac{\tau_x}{\tau_x + \tau_0} \cdot R = c'(e),
\]

where \( f \) denotes the density function of the median voter's opinion.

In equilibrium, we have \( e = \tilde{e} \), and thus the incumbent’s optimal effort in period 1 solves

\[
  \phi(0) \sqrt{\tau_0} R = c'(e^*), \quad (4)
\]

where \( \phi \) denotes the density function of the standard normal distribution. As \( c' \) is a strictly increasing function, effort is higher the larger \( \sqrt{\tau \theta} R \).

Thus, we find that equilibrium effort is independent of the clarity of the signals (\( \tau_x \)). This is because the respective effects of \( \tau_x \) on \( \frac{\partial \mu}{\partial e} \) and \( \frac{\partial F}{\partial \mu} \) cancel out each other. On the one hand, a lower \( \tau_x \) implies a lower impact of effort on \( \mu \), but, on the other hand, shifting \( \mu \) pushes more probability mass over the threshold at zero. Put into more intuitive terms, a low clarity of the signal implies that effort is less effective in changing a voter’s opinion, but a low clarity also implies that changing the opinion has a stronger impact on the probability of relection. This is the case because with low-clarity signals the median voter’s opinion is more likely to be around the decisive threshold of zero.

The effort level described by equation (4) is identical to the effort level that the incumbent would choose were he confronted with a single citizen who receives a perfect signal \( s = g_1 \) of his performance in period 1 (see Alesina and Tabellini 2007). Notice that the above equivalence holds irrespective of the value of \( \tau_x \). In other words, even if the precision of individual private signals is arbitrarily small, the incumbent behaves as if he is confronted with a single decisive citizen who receives a perfect signal \( s = g_1 \).

Such a voter’s estimate of the incumbent’s competence is \( s - \tilde{e} = e - \tilde{e} + \theta^I \) and thus he will reelect the incumbent if \( e - \tilde{e} + \theta^I \geq 0 \). A comparison with the median voter’s decision reveals that the probability that the median voter estimates the incumbent’s competence to be larger than 0 is the same as the probability that a single voter with a perfect signal estimates the incumbent’s competence to be larger than 0:

\[
  Pr[\frac{\tau_x}{\tau_x + \tau_0} \cdot (e - \tilde{e} + \theta^I) \geq 0] = Pr[e - \tilde{e} + \theta^I \geq 0].
\]

Of course, the private signal of voters is noisy, and not perfect. However, the decisive voter’s signal has exactly \( x_i = 0 \), therefore any positive signal \( e - \tilde{e} + \theta^I \geq 0 \), however noisy the signal is, is sufficient to tilt the vote in favor of the incumbent. But then, it is as if the election is decided by a single voter receiving a signal \( s = e + \theta^I \), i.e. a voter with a perfect signal.

Hence, we establish an accountability counterpart of the jury theorem: Even if each individual
voter is very poorly informed about the incumbent’s performance, a large electorate is able to hold the politician accountable as much as a perfectly informed representative voter would.

It is also instructive to study to which extent the collective decision can solve the problem of selecting competent politicians. From the prior perspective, the probability that the incumbent will be reelected is $p^I = 1 - \Phi(0) = 1/2$. It is interesting, however, to analyze the probability that the collective decision will be correct for given realizations of the incumbent’s talent.

Definition (Information aggregation): We say that information is perfectly aggregated if the collective decision is the same decision that a single decisive and risk-neutral citizen who is perfectly informed about the incumbent’s talent would make.\(^2\)

We are interested in the probability that the collective decision is correct in the sense that

\[
v = \begin{cases} 
I & \text{for } \theta^I \geq 0 \\
C & \text{for } \theta^I < 0.
\end{cases}
\]

In equilibrium, we have $c = \tilde{c}$ and thus, for some given realized value of $\theta^I$ it follows that

\[
v = \begin{cases} 
I & \text{for } \frac{\tau_x + \tau_0}{\tau_x + \tau_0} \cdot \theta^I \geq 0 \\
C & \text{for } \frac{\tau_x + \tau_0}{\tau_x + \tau_0} \cdot \theta^I < 0
\end{cases}
\]

and thus

\[
v = \begin{cases} 
I & \text{for } \theta^I \geq 0 \\
C & \text{for } \theta^I < 0.
\end{cases}
\]

Thus, for every possible value of $\theta^I$ the collective decision is correct in the sense described above.

Although the incumbent can manipulate the signals received by the citizens, in equilibrium the citizens correctly anticipate the incumbent’s manipulation. In equilibrium, information aggregation is not adversely affected by the incumbent’s manipulation.

To sum up, the jury theorem continues to hold in our framework where the politician is a strategic player in contrast to the standard setup of the literature on the jury theorem. Therefore, we find that a large electorate is able to accomplish both tasks of elections successfully even when each voter hardly knows about the incumbent’s performance: electing the right candidate and making sure that the elected politician performs in accordance to the electorate’s will. We will see, however, in the next section where we introduce an ideological bias of the electorate, the ideal outcome does not continue

\(^2\)When the decision is made, the challenger’s competence is not known. Hence, naturally, there still is the possibility that for $v = I$ the challenger will be more competent or that for $v = C$ the incumbent will be more competent. The correct decision to be made is to reelect the incumbent with a higher competence than 0, the expected competence of the challenger.
to fully hold, and we need to qualify our results.

4 The Model with Ideology

In this section, we add another dimension in voters’ decision problem: ideology. A voter does not only care about the competence of a politician, but also about her ideological closeness. We assume an additively separable utility function for citizens. Utility of a citizen $i$ in period $t$ is given by

$$u_i^t = g_t + \beta_i,$$

where $\beta_i$ denotes ideological closeness of the incumbent to citizen $i$ relative to the challenger. For instance, a positive value of $\beta_i$ implies that citizen $i$ prefers the incumbent in the ideological dimension. We assume that for the incumbent $\beta_i \sim N(b, 1/\tau_3)$.

As in the previous section, each citizen receives a private signal, and updates her belief about the incumbent’s competence. However, she does not necessarily vote for the candidate with higher competence in expectation, since ideology also plays a role in her decision. Hence, she votes for the incumbent if

$$E(\Theta^I | s_i) + \beta_i \geq 0,$$

and for the challenger otherwise.

From the incumbent’s perspective, citizen $i$’s posterior expectation of his talent is the same as in the previous section, and given by

$$E(\Theta^I | s_i) = \frac{\tau_x}{\tau_x + \tau_0} \cdot (e - \tilde{e} + \theta^I + x_i).$$

Thus, citizen $i$ will vote for the incumbent if

$$\frac{\tau_x}{\tau_x + \tau_0} \cdot (e - \tilde{e} + \theta^I + x_i) + \beta_i \geq 0.$$

By rearranging, we obtain

$$\frac{\tau_x}{\tau_x + \tau_0} \cdot (e - \tilde{e} + \theta^I) + \frac{\tau_x}{\tau_x + \tau_0} x_i + \beta_i \geq 0,$$

individual component

\[3\text{We omit the subscript } t \text{ for this parameter without any confusion, since it matters only for the voting decision at the end of the first period.}\]
where for the individual component on the left-hand side we have
\[
\frac{\tau_x}{\tau_x + \tau_\theta} x_i + \beta_i \sim N(b, \frac{\tau_x}{(\tau_x + \tau_\theta)^2} + \frac{1}{\tau_\beta})
\]

It follows that the median voter’s evaluation of the incumbent will be
\[
\frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I) + b
\]
and thus he will be reelected if
\[
\frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I) \geq -b.
\]
So the probability of reelection is
\[
p_I = \Pr\left[\frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I) \geq -b\right] = 1 - F(-b; \mu, \sigma^2)
\]
Consequently, the effort level maximizing the incumbent’s expected payoff solves
\[
f(-b; \mu, \sigma^2) \frac{\tau_x}{\tau_x + \tau_\theta} \cdot R = c'(e)
\]
and with \(e = \tilde{e}\) in equilibrium, we have
\[
\phi \left[ -b \cdot \frac{\tau_x + \tau_\theta}{\tau_x} \sqrt{\tau_\theta} \right] \sqrt{\tau_\theta} R = c'(e).
\]
We can make the following observations: First, if the ideological leanings of voters are balanced in the sense that \(b = 0\), then we obtain the same result as in the previous section so the electorate still can establish a high level of accountability despite the ideological preferences of voters. Second, if \(b \neq 0\), effort will be lower than in the model without ideology.

In the second case, the effect of effort on a voter’s belief about the incumbent’s competence remains the same as before. Manipulating the median voter’s belief, however, is not as valuable as before, because a small shift of his belief is not very likely to change the outcome of the election. From the incumbent’s perspective, the median voter’s aggregate evaluation of the incumbent
\[
\frac{\tau_x}{\tau_x + \tau_\theta} \cdot (e - \tilde{e} + \theta^I) + b
\]
is likely to be around \(b\) in equilibrium. Thus the payoff of effort is lower the larger \(|b|\) because then the median voter’s evaluation is farther away from the reelection threshold. To conclude, large electorates
can successfully hold incumbents accountable if the ideological preferences of voters are neutral in the sense that there is not a large advantage of one candidate due to ideology. If, however, a majority of voters has strong leanings for one of the candidates, accountability levels will be low.

We have derived this result under the assumption of sincere voting. For the traditional framework of the literature on the jury theorem (where politicians are parameters), Krishna and Morgan (2011) show that the adverse influence of ideology on information aggregation need not appear if voting is not mandatory. It will be very interesting to study the implications of their analysis for accountability considerations.

5 Conclusion

The celebrated jury theorem is reassuring since it tell us that we can trust the decision of a large electorate in choosing the right candidate even if every individual voter is very poorly informed. However, the jury theorem does not address another fundamental role of elections: holding politicians accountable. In this paper, we analyze the trustworthiness of a poorly informed large electorate in accomplishing both objective simultaneously, namely electing the right candidate and motivating the incumbent to work hard for reelection. In case of no ideological bias of the electorate, we conclude in addition to electing the right candidate (the jury theorem), the electorate is successful as well in holding the incumbent accountable as much as a perfectly informed representative voter would, even if each individual voter is poorly informed. When the electorate has an ideological bias, the level of knowledge of the electorate regains importance, and the outcome is more favorable when the electorate is better informed.

References


