Why Is Promise of Stability Bad for Voters?*

Sergei Mikhalishchev[†1] and Vladimír Novák[2,3]

[1]Durham University[‡]
[2]National Bank of Slovakia[§]
[3]Prague University of Economics and Business[¶]

March 28, 2024

Abstract

Many successful political leaders promise stability during their election campaigns. Several explanations have been offered for the increased support for such politicians, but less is known about future development once they are in office. We develop a model with rationally inattentive voters and investigate how an office-seeking politician designs a political platform in the presence of an incumbent who offers a simple stability-providing policy that preserves the status quo. We show that this policy, while not in the best interest of the electorate, creates negative externalities by encouraging the challenger to propose a more moderate platform, which is sub-optimal for the voter. The model also explains why and when the incumbent could benefit from and prefer the high uncertainty and high cost of information.

Keywords: Stability, populism, rational inattention, simple policies
JEL classification codes: H0, P16, D72, D83

---

*This project has received funding from the European Research Council under the European Union's Horizon 2020 research and innovation programme (grant agreements No. 101002898). We thank Paola Conconi, Pavel Illinov, Ole Jann, Filip Matějka, Gérard Roland, Ekaterina Travova, Stephane Wolton, Ming Yang, and Jan Zápal for their comments and suggestions.

†Corresponding author. E-mail address: sergei.mikhalishchev@cerge-ei.cz.

‡Durham University Business School, Department of Economics, Mill Hill Lane, Durham, UK, DH1 3LB.

§Department of Economic and Monetary Analyses, National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia. The views expressed in this paper are those of the authors and should not be attributed to the National Bank of Slovakia, its Executive Board, or its management.

¶Faculty of Business Administration, Prague University of Economics and Business, Nám. W. Churchilla 1938/4, Prague, Czech Republic.

1 Introduction

Numerous political leaders have built their success on the promise of stability, especially in the wake of information availability and rising policy uncertainty.[1] A notable characteristic of these stability-promising political platforms is their simplicity and assurances against significant changes or reforms that could destabilize the status quo. This phenomenon is particularly salient in young democracies in Central and Eastern Europe (Wagstyl and Christopher, 2006)[2] as well as for emerging authoritarian leaders who feign democratic principles, often termed as 'spin dictators' (Guriev and Treisman, 2022).[3] The reasons for the success and demand of simple political platforms promising stability have been investigated in several recent papers.[4] However, the literature falls short on the consequences of such political platforms, their impact on political competition, and the exact role of information availability and uncertainty in supporting these policies.

This paper addresses this gap in the research. We develop a model with rationally inattentive risk-neutral voters and an office-seeking politician who designs a political platform in the presence of an incumbent promoting a simple policy,[5] one that guarantees the status quo regardless of the state of the world. We show that even if the voters and politicians do not have particular political preferences and are purely outcome-driven, the incumbent's simple policy creates negative externalities by encouraging the office-driven challenger to propose a platform that is not the

[1]See Davis (2019) for a review and evidence on rising policy uncertainty worldwide.

[2]A representative example offers Slovakia's 2012 elections, where voters elected Robert Fico as a prime minister, and his party SMER ('Direction') had more than 50% of the seats in the parliament, based on an anti-reform ticket offering security and stability.

[3]Examples include authoritarian regimes such as in Russia (Matovski, 2018) or illiberal democracies as, for instance, in Turkey (Reuters, 2015).

[4]One explanation is the reform fatigue, see, e.g., Bowen et al. (2016); Lora et al. (2004). In addition, there is a well-documented preference of people for simple and certain information structures, see, e.g., Ambuehl and Li (2018); Novák et al. (2024). See also Levy and Razin (2012) who, in a model of a debate, show that simple policies could be more beneficial when the decision maker has limited attention slots and Bellodi et al. (2022, 2023) who show that when voters lose trust in representative democracy, politicians strategically supply unconditional policy commitments that are easier to monitor for voters.

[5]We call the policy simple if its entropy is zero. Thus, there is no information needed to be acquired or understood about such a policy.

most beneficial for the voters. Furthermore, the model suggests conditions under which it might be advantageous for the incumbent to foster increased uncertainty and support a higher cost of information acquisition for voters. These insights contribute to our understanding of why politicians might endorse the proliferation of fake news and restrict free media in democratic political competition.

We consider the following setup. In our benchmark model, there is an incumbent politician who proposes a policy that brings the same result independently of the state of the world. We are agnostic about how such an incumbent came to office in the first place, but once in office, the incumbent would stick to his political platform.[6] The incumbent is challenged by a politician who is purely office-motivated. The challenger can propose a risky political platform that will benefit the voters more compared to the incumbent's policy in one state of the world and, hence, it will be less beneficial in another state of the world. However, these proposals are constrained by rationally justified claims. We consider a representative rationally inattentive voter (see, e.g., Sims, 2003). It allows us to focus on the effect of attention, cost of information, and uncertainty on the choice of the political platform rather than the effect of the individual preferences between voters. Importantly, the previous theoretical work studying the interplay between voters' attention, economic conditions, and political constraints mainly focuses on the situation when the voters are inattentive to the candidates' policies. In contrast, our theory is unique in focusing on the situation when a voter knows the politicians' platforms but is uncertain about the possible outcomes of proposed policies. Specifically, the voter can acquire any information about the future state of the world and thus about the expected benefits of the offered policies, but given that the voter has limited attention, doing so is costly. Therefore, the voter's incentive to pay attention to the state of the world directly depends on politicians' equilibrium political platform

[6]Morelli et al. (2021) in different settings analyze a model with a politician who rationally commits to a simple policy to mitigate voters' distrust in government and shows that the committed delegate chooses the strategies associated with populism in the literature.

choice, which in turn responds to voters' attention.

First, we analyze how the optimal political platform choice of the challenger depends on uncertainty, political power, and the cost of acquiring new information. In times of high uncertainty and when the challenger has limited political power, he tends to propose an extreme platform that is most beneficial for the voter. Interestingly, we show that when states are a priory equally likely, even the slightest change in the likelihood of a possible future situation can switch the challenger's political agenda from one extreme to another. In contrast, when the uncertainty is lower, and the challenger is more powerful, he proposes a less extreme and, hence, less beneficial platform for the voter. Importantly, we characterize when the challenger proposes such a policy platform that incentivizes the voter not to acquire any information and just select a candidate based on prior knowledge. These results are driven by the voter's inattention and the politicians' capacity to influence it through their platform proposals. Thus, the challenger selects a platform that, on one hand, reduces the stakes of the choice, discouraging the voter from seeking information, and on the other hand, remains sufficiently attractive compared to the incumbent's platform.

Secondly, we discuss the effect that the cost of information and uncertainty has on the politicians' chances of being elected. The effect of uncertainty is unambiguous, and the incumbent always prefers higher uncertainty as it decreases the chance that the challenger would propose a platform that is better than the incumbent's in expectations. The optimal cost of information would depend on the status of the politician, whether he is preferred or not by the voter ex-ante. If the incumbent is strong, i.e., he would be chosen if the voters would not be able to acquire additional information, then he would like to increase the cost of information as high as possible. Interestingly, if the incumbent is weak, i.e., he is a priory less popular than the challenger, then he prefers to allow some but not full information freedom.

Finally, we discuss how the behavior of politicians affects voters' welfare. We show that simple policies, while not in the best interest of the electorate, could also force the office-driven challenger to propose a sub-optimal policy. Moreover, if the incumbent proposes an extreme benevolent platform, focusing resources on the most probable state, the challenger adopts an equally extreme but opposite political platform. It results in a political landscape where voters are always presented with the most advantageous platform choices. In addition, there is a nuanced interplay between political platform decisions and voter utility. In scenarios with high uncertainty, the challenger proposes policies that are more risky and more aligned with voter welfare. This trend reverses as certainty about the state of the world increases, leading the challenger to diverge from benevolent policy choice. Therefore, voters can prefer high uncertainty, as it aligns the challenger's policy more closely with the ideal benevolent platform.

Our results have broader policy implications. As we mentioned above, while the simple political platform focusing on stability is not restricted to a particular political regime, it is often adopted by democrats with autocratic tendencies. Therefore, our paper compliments and provides an alternative explanation of why governments that provide less information to their citizens are more stable (Hollyer et al., 2015) and why autocratic incumbents could allow for some amount of information freedom (Egorov et al., 2009; Gratton and Lee, 2023). Moreover, our results show that politicians may prefer to limit the information available to voters once they have accumulated enough political power. Therefore, it contributes to understanding the mechanisms of democratic backsliding (Waldner and Lust, 2018). In particular, it provides an explanation why many dictators, authoritarian and illiberal leaders who come to power using democratic mechanisms and free media, once in office, limit the available information if able to accumulate enough power.

In addition, in light of the saying: "populism is simple, democracy is complex" (Dahrendorf et al., 2003), while the definition of populism is multidimensional, one of the certain distinctive patterns of populism is simplicity, i.e., there is no place for sophisticated arguments and discussions about trade-offs (Guriev and Papaioannou, 2022). Thus, we can consider the incumbent's policy also as populist, and, therefore, the model could be useful for analyzing the consequences of populism on the challenger's political platform choice and voters' welfare. Thus, the model's predictions go against the conventional wisdom that parties always shift their platform toward populism when the populist sentiments are strong, but they could help to explain the mixed empirical evidence on the issue (Haegel and Mayer, 2018). Particularly, we would see the convergence of political platforms between the populist and the challenger when the challenger is relatively more powerful and there is more certainty, while there will be divergence otherwise.

The rest of the paper is organized as follows. In the next section, we review the related literature. Section 3 presents the formal model. In section 4, we derive the challenger's optimal policy platform. Then, in section 5 we study the effect of the cost of information and uncertainty on election results. Finally, in section 6 we investigate the voters' welfare. Section 7 concludes.

2 Related literature

This paper contributes to the literature studying how the voter's preferences and attention influence candidates' policy platforms as well as to the broader literature on endogenous information acquisition. The literature on voter behavior has long been interested in examining voter competence that is detrimental to the democracy rooted in electoral accountability. There is significant empirical evidence in favor of voters' irrationality and lack of information (Achen and Bartels, 2017). At the same time, some studies argue that voters are rational, and we need to consider the interplay between voters' behavior, which could be subject to some constraints, and the candidates' incentives and actions (Ashworth and De Mesquita, 2014; Prato and Wolton, 2016; Ashworth et al., 2020). We contribute to this literature and provide the theoretical framework where the rational voters with endogenous attention and politicians' platform choice could lead to both informed and uninformed electoral choices conditional on the situation.

Joining a growing literature, our paper focuses on the role of voters' attention in shaping candidates' behavior. Downs (1960) suggests partial ignorance, in which voters know all the actual or potential items in the budget but not all the benefits and costs attached to each item. He suggests that while a well-informed electorate would lead to implementing the welfare-enhancing policy, electoral competition with poorly informed voters about the state of the world can lead office-motivated politicians to pander, offering the policy that a decisive voter expects to be better for her. Similarly, Eguia and Nicolò (2019), finds that a more informed electorate induces candidates to target funds only to specific constituencies, which can reduce aggregate welfare. Nunnari and Zápal (2017) show that when voters focus disproportionately on and, hence, overweight specific attributes of policies, more focused voters and larger and more sensitive to changes on either issue social groups are more influential, and resources are channeled towards divisive issues. Part of this literature, which is closer to our work, considers models with endogenous attention, i.e., when voters look for recommendations.[7] Prato and Wolton (2018) argue that when rationally ignorant voters' demand for reform is high, candidates with unobservable competence engage in the form of populism and propose reformist agendas regardless of their ability to carry them out successfully. Similarly, Trombetta (2020) finds that when attention to the action of the politician is endogenous, inattentive voters may choose to pay too much attention in equilibrium, and it induces too much political pandering. Matějka and Tabellini (2021) show that the selective ignorance to politicians' platforms empowers voters with extreme preferences and small groups, that

[7] See also Avoyan and Romagnoli (2023), who propose a novel method for eliciting the attention level solely by observing the decision maker's incentive redistribution choice. Similar to the mechanism in our paper, they show that by reducing the gap between payoffs in different states, the decision-maker, who can directly influence the payoff distribution across states, can affect her incentives to pay attention: the smaller the gap, the less attentive the decision-maker needs to be.

divisive issues attract the most attention, and that public goods are underfunded. Yuksel (2022) demonstrates that the learning technology, which allows the voters to learn more about issues that might be particularly important to them, increases political polarization and welfare loss. Li and Hu (2023) show that the voters' endogenous information acquisition could potentially enhance electoral accountability and selection conditional on the trade-off between incentive power and partisan disagreement generated by the extreme voters' signals. Bandyopadhyay et al. (2020) present how profit-seeking media can lead to creation of the extremist political platforms. The presented paper complements and differs from the stated literature in several aspects. First, we analyze how uncertainty affects policy outcomes via politicians' electoral incentives in the presence of an incumbent who proposes a simple anti-reformist policy. Second, we focus on the uncertainty of the state rather than the political platform.[8][9]

Our paper borrows analytical tools from the literature on rational inattention following Sims (2003).[10] Yang and Zeng (2019) study the entrepreneur who designs and offers security to a potential investor in exchange for financing. The authors show that when the project's ex-ante market prospects are good and not very uncertain, the optimal security is debt, which does not induce information acquisition. In contrast, when the project's ex-ante market prospects are obscure, the optimal security is the combination of debt and equity that induces the investor to acquire information.[11] The attention manipulation mechanism behind our results is similar.

[8] Trombetta (2020) considers the situation when attention to the action and the state of the world are both endogenous and shows that voters may not pay enough attention to the state compared to the ex-ante optimum.

[9] Hu et al. (2023) study the choice of an attention-maximizing infomediary which aggregates data about candidates with uncertain fit to the office and program, and its effect on the equilibrium choice of politicians and voters. It generates policy polarization even if candidates are office-motivated. In their model, voters are uncertain which candidate is a better fit for office, which could be interpreted as state uncertainty in terms of our model. In Hu et al. (2023), candidates cannot affect the fit. In contrast, we focus on a politician who directly manipulates possible outcomes.

[10] A detailed review of the rational inattention literature can be found in Maćkowiak et al. (2023).

[11] See also Yang (2020) who studies the situation where the seller maximizes profit by choosing simultaneously both the price and design of security. Facing different securities, the buyer has incentives to acquire information from the different aspects of the fundamental, which in turn

However, we analyze a situation when there is no given possible realization of payoffs, and the politician, who, in contrast to the entrepreneur, is purely office-driven, allocates the possible benefits for voters across states. Further, on a technical level, this paper uses a quadratic information cost as in (Wei, 2021; Lipnowski et al., 2022; Jain and Whitmeyer, 2020) that provides us with the model tractability.[12] However, we also document the same results for the Shannon cost function usually used in the rational inattention literature.

3 The model

We consider a representative voter who faces a discrete choice problem between two politicians: an incumbent (henceforth I) and a challenger (henceforth C). There are two states of the world $\Omega = \{\omega_1, \omega_2\}$, with $\omega \in \Omega$ denoting a generic state. The voter's action $a \in A = \{I, C\}$ is a mapping from states of the world to utilities. Before the choice is made, each politician proposes its political platform, i.e., the state-dependent utility their policy delivers to the voter, given that the particular politician is selected. The incumbent provides a simple policy delivering R utils to the voter in both states $\omega \in \Omega$. We assume the incumbent committed to this policy before the election and cannot change it. The challenger selects his policy platform offering $v(\omega)$ utils to the voter in each state $\omega \in \Omega$.

The voter knows the proposed policy platforms, but she is uncertain about the realization of the state of the world. The voter's prior knowledge is characterized by a prior distribution $\mu \in \Delta(\Omega)$. Let $\mu(\omega)$ denote the probability of state ω at prior belief μ. We model the voter to be rationally inattentive (Sims, 2003). Before making her decision, she can acquire a costly signal from a chosen information structure about the state of the world. The more accurate the information, the more costly it is to obtain it. After the voter receives a signal from the selected information structure,

affects security design. He finds that debt is uniquely optimal security for the seller.

[12] See also Ely et al. (2015); Augenblick and Rabin (2021) who use the quadratic difference between prior and posterior in utility functions.

she updates her belief using the Bayes rule and chooses between the incumbent and the challenger. The voter's objective is to maximize the expected payoff less the cost of information.

Timing. The timing of the game is as follows:

1. The challenger commits to the policy.

2. The voter observes the policy platforms of both politicians and decides what kind of information to acquire.

3. The voter receives the signal and makes a choice.

3.1 The voter's decision problem

The information strategy of the voter is a set of signal realizations together with a joint distribution between the signal realizations and the state realizations. As was shown by Caplin and Dean (2013), equivalently, we can work instead with the distributions of the posterior beliefs that the signals induce. Consequently, the voter's information strategy is characterized by a vector function of posterior probabilities of a particular state given the choice of either the challenger or the incumbent $\gamma = \{\gamma(\omega|a)|a \in \{I, C\}; \omega \in \{\omega_1, \omega_2\}\}$.[13] Given the selected policy platform by the challenger, the voter solves

$$\max_{\{\gamma(\omega|a)|a\in A;\omega\in\Omega\}} \left\{ \sum_{a\in A} \sum_{\omega\in\Omega} v(a|\omega)\gamma(\omega|a)\mathcal{P}(a) - \frac{\lambda}{2}\kappa(\gamma) \right\}, \tag{1}$$

subject to

$$\forall\omega \in \Omega,\ \forall a \in A : 0 \leq \gamma(\omega|a) \leq 1, \tag{2}$$

$$\forall\omega \in \Omega : \sum_{a\in A} \gamma(\omega|a)\mathcal{P}(a) = \mu(\omega), \tag{3}$$

[13] We use the property of rational inattention, that under the optimal strategy, there is a one-to-one mapping between an action and a posterior because obtaining multiple signals leading to the same action would be wasteful and thus sub-optimal (Matějka and McKay, 2015).

where $\mathcal{P}(a)$ is unconditional choice probability of choosing option a. For a given unit cost of information $\frac{\lambda}{2} > 0$, we define a learning cost function κ as

$$\kappa(\gamma) = \sum_{a \in A} \sum_{\omega \in \Omega} \mathcal{P}(a)(\gamma(\omega|a) - \mu(\omega))^2. \tag{4}$$

We use a quadratic information cost function.[14] It falls into the widely used class of posterior separable cost functions; therefore, it is linear in the induced distribution of posterior beliefs.[15]

3.2 The policy platform selection problem

The incumbent's policy platform is assumed to be simple and provides the voter with the certainty of receiving $R > 0$ utils irrespective of the state of the world. The challenger takes into account the voter's decision problem and decides how many utils his policy platform $v(\omega) \geq 0$, $\forall \omega \in \Omega$ will deliver in each state of the world. To rule out uninteresting cases, when the challenger or the incumbent can guarantee victory with certainty for any prior belief, we make the following assumption.

Assumption 1. *The challenger's policy platform can provide the voter with fewer utils across states than the incumbent. The maximum amount of utils that the challenger can provide is bounded by available political budget $B \in (R, 2R)$, i.e., $R < \sum_{\omega \in \Omega} v(\omega) \leq B < 2R$.*

The political budget B represents the political power of the challenger. For instance, the political power may express the amount of direct transfers the challenger can promise to deliver to the voter, such that the policy is trustworthy.

[14]This information cost function is also used in Wei (2021); Lipnowski et al. (2022); Jain and Whitmeyer (2020) among others. The quadratic cost function provides us with the model tractability and thus obtaining the closed-form solution. In Appendix F, we present a numerical example and show that the results with the attention cost modeled as the expected reduction in the entropy (Shannon, 1948; Cover and Thomas, 2012), that is most often considered in the literature, are equivalent.

[15]For the discussion of the posterior separable cost functions and its decision theoretic foundations see Hébert and Woodford (2021); Morris and Strack (2019); Caplin et al. (2022).

Both politicians are purely office-motivated and want to be elected independently on the realized state of the world. Therefore, the challenger selects his policy platform such that he maximizes the unconditional probability of being selected by the voter. Consequently, the challenger always uses the whole available budget in the equilibrium, i.e., $\sum_{\omega\in\Omega} v(\omega) = B$. The challenger solves

$$\max_{\{v(\omega)|\omega\in\Omega\}} \mathcal{P}(a = C) \tag{5}$$

subject to

$$R \leq \underbrace{\sum_{\omega\in\Omega} v(\omega)}_{=B} < 2R. \tag{6}$$

We can simplify the analysis by stating that the challenger selects $\theta \in \left[-\frac{B}{2}, \frac{B}{2}\right]$ and $v(\omega_1) = \frac{B}{2} - \theta$, $v(\omega_2) = \frac{B}{2} + \theta$. The policy platforms are summarized in Table 1.

Politician/State	ω_1	ω_2
Incumbent (I)	R	R
Challenger (C)	$v(\omega_1) = \frac{B}{2} - \theta$	$v(\omega_2) = \frac{B}{2} + \theta$

Table 1: Policy platforms of the incumbent and the challenger.

In the following section, we focus on the main part of our analysis: how the challenger selects its policy platform when the voter is rationally inattentive and the incumbent proposes a simple policy providing certainty to the voter.

4 Optimal policy platform

We focus on the politician-preferred subgame perfect equilibria of this game. First, in the following proposition, we characterize the optimal posterior beliefs of the voter who takes the political platform of both politicians as given.

Proposition 1. *The voter's optimal posterior beliefs $\gamma(\omega|a)$, given the policy platforms of both the challenger and the incumbent, are*

a) When $\gamma_1^* < \mu(\omega_1) < \gamma_2^*$

$$\begin{aligned}
\gamma(\omega_1|C) &= \max\left(0, \min\left(1, \frac{1}{4}\left(2 + \frac{B-2R}{\theta} - \frac{2\theta}{\lambda}\right)\right)\right), \\
\gamma(\omega_1|I) &= \max\left(0, \min\left(1, \frac{1}{4}\left(2 + \frac{B-2R}{\theta} + \frac{2\theta}{\lambda}\right)\right)\right), \\
\gamma(\omega_2|C) &= 1 - \gamma(\omega_1|C), \\
\gamma(\omega_2|I) &= 1 - \gamma(\omega_1|I).
\end{aligned}$$

b) Otherwise

$$\begin{aligned}
\gamma(\omega_1|C) &= \gamma(\omega_1|I) = \mu(\omega_1), \\
\gamma(\omega_2|C) &= \gamma(\omega_2|I) = 1 - \mu(\omega_1),
\end{aligned}$$

where $\gamma_1^* = \min(\gamma(\omega_1|I), \gamma(\omega_1|C))$ and $\gamma_2^* = \max(\gamma(\omega_1|I), \gamma(\omega_1|C))$.

Proof. See Appendix A. □

Proposition 1 distinguishes between two possibilities. In case (a), the voter acquires information, learns either fully or partially about the realization of the state of the world, and makes a choice based on this information. In case (b), the incentives to acquire information, i.e., the difference between the payoffs from political platforms of different politicians, are so low compared to the cost of acquiring information that the voter prefers to choose a politician based on her prior belief without acquiring additional information.

In Proposition 2, we characterize the optimal policy platform of the challenger, who is ex-ante aware of how the voter decides to acquire information given the policy platform.

Proposition 2. *The challenger's optimal policy platform is*

a) $\theta = \frac{B}{2}$ *for* $\mu(\omega_1) \in [\hat{\mu}_1, \frac{1}{2}]$,

b) $\theta = -\frac{B}{2}$ *for* $\mu(\omega_1) \in (\frac{1}{2}, \hat{\mu}_2]$,

c) $\theta = \frac{B-2R}{2\mu(\omega_1)-1}$ *for* $\mu(\omega_1) \in [\bar{\mu}_1, \hat{\mu}_1] \cup [\hat{\mu}_2, \bar{\mu}_2]$,

d) $\theta : \theta \in [T_1, T_2]$ *for* $\mu(\omega_1) \in [0, \bar{\mu}_1] \cup [\bar{\mu}_2, 1]$ *if* $2R - B \leq \frac{\lambda}{2}$.

Proof. We provide proof of proposition and corollaries and specify the formulas for $\bar{\mu}_1$, $\bar{\mu}_2$, $\hat{\mu}_1$, $\hat{\mu}_2$, T_1, T_2 in Appendix B. □

Proposition 2 highlights several situations. First, when the difference between the total political budgets of the incumbent and the challenger $(2R - B)$ is greater than the marginal cost of information $\left(\frac{\lambda}{2}\right)$, then for each prior belief exist a unique equilibrium, because $\bar{\mu}_1 = 0$ and $\bar{\mu}_2 = 1$ and thus the challenger's optimal policy platform is one of the options a) - c) defined in Proposition 2. If the difference in the total political budgets of the incumbent and the challenger is lower or equal to the marginal cost of information, then for low uncertainty $(\mu(\omega_1) \in [0, \bar{\mu}_1] \cup [\bar{\mu}_2, 1])$ the challenger can propose multiple platforms that dissuade the voter from acquiring information and, hence, to always choose him (see Corollary 1).

Corollary 1. ***(Non-learning regions)*** *If* $2R - B \leq \frac{\lambda}{2}$, *then for prior beliefs* $\mu(\omega_1) \in [0, \bar{\mu}_1) \cup (\bar{\mu}_2, 1]$, *the voter does not acquire information given the challenger's optimal policy platform.*

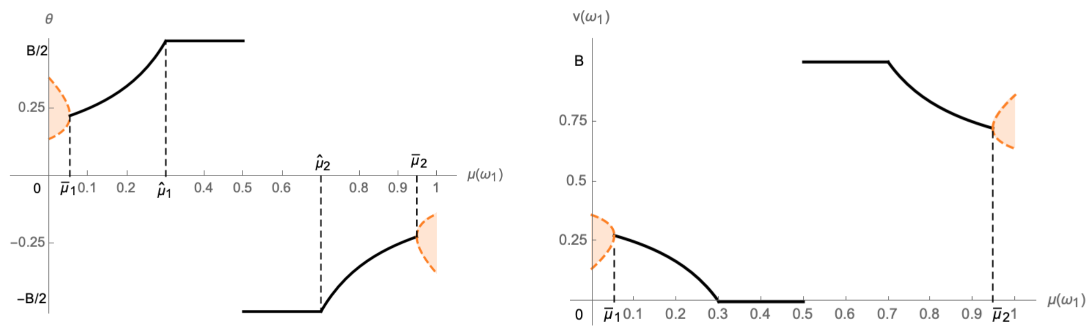
Second, suppose the challenger cannot provide a political platform that deters any information acquisition and guarantees victory. In that case, the optimal budget allocation for the state weakly decreases with the probability of the state happening (Corollary 2). The voter's inattention drives these results. The challenger chooses a political platform that, on the one hand, decreases the stakes from the choice, which discourages the voter from acquiring information and, on the other hand, is still attractive enough compared to the incumbent platform. When the uncertainty is high enough ($\mu(\omega_1) \in [\hat{\mu}_1, \hat{\mu}_2]$), the challenger proposes the extreme political platform by allocating the whole budget to one state. Thus, the challenger maximizes the stakes between states to incentivize the voter to acquire as much information about the state as possible.

Corollary 2. ***(Monotonicity)*** *For prior beliefs $\mu(\omega_1) \in [\bar{\mu}_1, 0.5] \cup (0.5, \bar{\mu}_2]$, the optimal policy platform θ weakly increases in $\mu(\omega_1)$.*

When the uncertainty is the highest possible ($\mu(\omega) = 0.5$), then even the slightest change in the likelihood of a future situation can switch the challenger's optimal political agenda from one extreme to another (Corollary 3). Hence, when the uncertainty is high, the challenger goes in line with the voter's prior belief and switches from promising all his utils from one state to another.

Figure 1 illustrates the results stated in Corollaries (1)-(3) for given parameters.

Corollary 3. ***(Switch of extreme platforms)*** *The challenger's optimal policy platform is discontinuous for the uninformative prior belief $\mu(\omega_1)^* = 0.5$. Simultaneously, $\theta = B/2$ for $\mu(\omega_1)^* + \epsilon$ when $\epsilon \to 0^-$ and $\theta = -B/2$ for $\epsilon \to 0^+$.*



(a) Optimal platform θ

(b) Voter's payoff $v(\omega_1)$ generated by θ

Figure 1: The challenger's optimal policy platform (1a) and the voter's payoff (1b) as functions of $\mu(\omega_1)$ and $\lambda = 0.5$, $R = 0.6$, $B = 1$. The orange area depicts optimal θ and $v(\omega_1)$ that dissuade the voter from acquiring any information.

Until now, we have focused on the challenger's optimal policy platform for a given political budget B and cost of information λ. In the rest of this section, we study how the optimal policy platform is influenced when these two model's primitives vary.

When the challenger has a lower political budget, he has fewer opportunities to propose a platform that will be attractive to the voter. Hence, Corollary 4 shows that the challenger with a lower political budget would propose an extreme platform even for more certain situations. Figure 2 illustrates these results for given parameters. The intervals $[\hat{\mu}_{A1}, \hat{\mu}_{A2}]$ and $[\hat{\mu}_{B1}, \hat{\mu}_{B2}]$ indicate the range of prior beliefs $\mu(\omega_1)$ for which the challenger selects an extreme policy platform when $B_A = 1$ and $B_B = 0.85$. For these particular parameters also holds that as the political budget decreases, the condition $2R - B \leq \frac{\lambda}{2}$ no longer holds. Consequently, for $B_B = 0.85$, the equilibrium is unique for all $\mu(\omega_1)$, so the challenger cannot dissuade the voter from acquiring information.

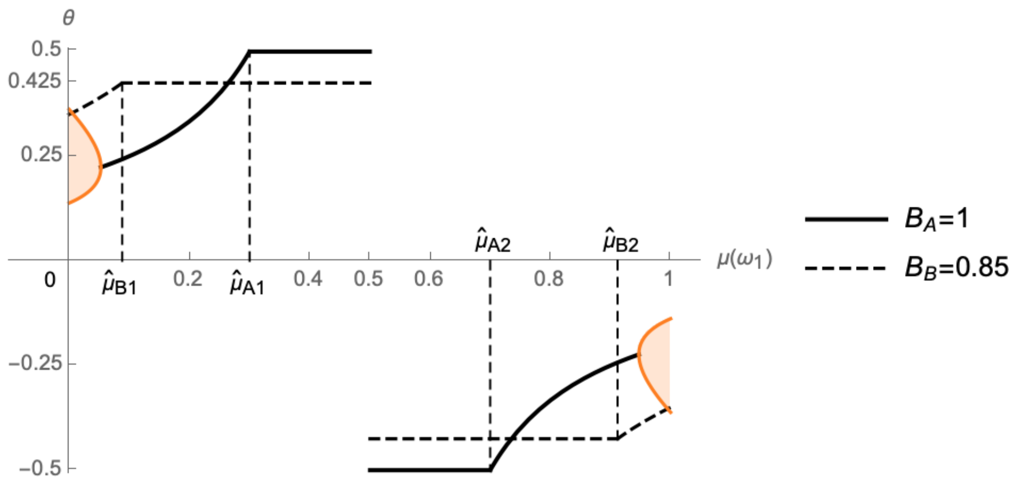


Figure 2: The challenger's optimal policy platform as a function of $\mu(\omega_1)$ for $B_A = 1$, $B_B = 0.85$ and $\lambda = 0.5$, $R = 0.6$. The orange area depicts optimal θ that for $B_A = 1$ dissuades the voter from acquiring any information, whereas for $B_B = 0.85$ the voter always acquires information.

Corollary 4. ***(Effect of the change in political power)*** *The reduction in the available budget B, increases the range of prior beliefs $\mu(\omega_1)$ for which the challenger selects an extreme policy platform $\theta \in \left\{-\frac{B}{2}, \frac{B}{2}\right\}$.*

Finally, the change in the cost of information does not affect the choice of the interior political platform (i.e., θ for $\mu(\omega_1) \in [\bar{\mu}_1, \bar{\mu}_2]$) by the challenger. However, the range of prior beliefs for which the challenger will be chosen without acquiring information ($\mathcal{P}(C) = 1$) increases in λ (Corollary 5). Figure 3 illustrates these results for given parameters. The intervals $[0, \bar{\mu}_{A1}] \cup [\bar{\mu}_{A2}, 1]$ and $[0, \bar{\mu}_{B1}] \cup [\bar{\mu}_{B2}, 1]$ indicate the range of prior beliefs $\mu(\omega_1)$ for which the challenger dissuades the voter from acquiring any information when $\lambda_A = 0.8$ and $\lambda_B = 0.5$.

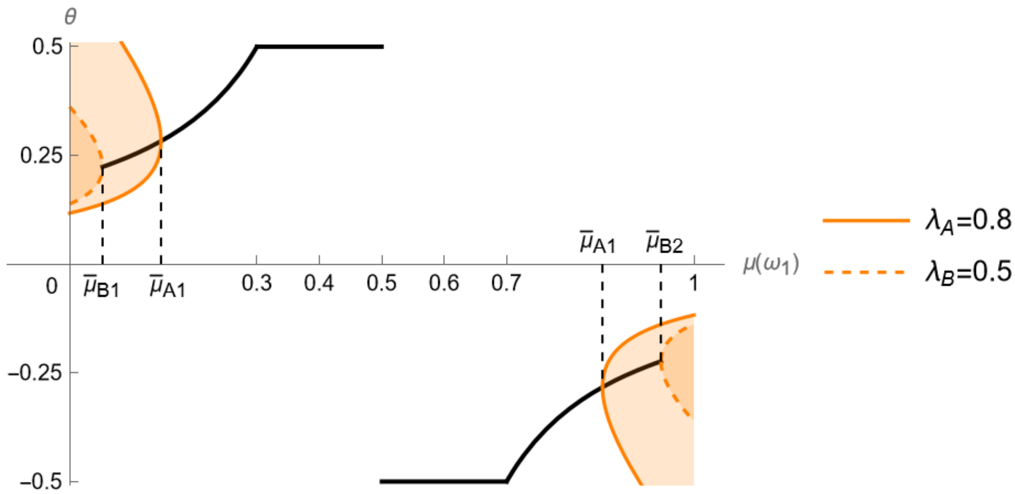


Figure 3: The challenger's optimal policy platform as a function of $\mu(\omega_1)$ for $\lambda_A = 0.8$, $\lambda_B = 0.5$ and $B = 1$, $R = 0.6$. The orange area depicts optimal θ that dissuades the voter from acquiring any information.

Corollary 5. ***(Effect of the change in the cost of information)*** *The range of prior beliefs* $\mu(\omega_1) \in [0, \bar{\mu}_1] \cup [\bar{\mu}_2, 1]$ *for which the challenger achieves* $\mathcal{P}(C) = 1$ *increases in* λ.

5 Optimal cost of information and uncertainty

In this section, we show how the change in the cost of information and uncertainty influence the chances of the politician being elected. First, we define the strong politician, i.e., the politician who is the most favorable candidate ex-ante, and, hence, the voter would choose him with certainty if further information acquisition is not possible.

Definition 1. *The challenger is **strong** and the incumbent is **weak** if*

$$\max\{\mu(\omega_1), \mu(\omega_2)\}B > R.$$

*Otherwise, the challenger is **weak** and the incumbent is **strong**.*

5.1 Effect of the change in the cost of information

If the challenger is weak, he would prefer the information to be as accessible as possible. As we have shown in Section 4, the cost of information does not influence the selected challenger's policy platform, except for the expanding non-learning regions. Also, for the fixed R, the challenger is weak either because the political budget or the maximal prior belief is low. In such situations, it is more probable that he offers the extreme platform. Thus, a weak challenger attempts to increase the stakes against the incumbent as much as possible to make the voter choose to acquire a significant amount of information, and hence he prefers the low cost of information.

If the challenger is strong, the effect of the cost of information is nonlinear. Thus, if the cost of information is high enough to start with $\left(\lambda > \frac{2\theta^2}{B-2(R+\theta)}\right)$, then a strong challenger prefers the information to be as costly as possible. In this situation, the voter would choose him with certainty since he is a priory preferable and the voter would not acquire any information, or the voter would acquire less information and choose more in line with ex-ante preferences. However, when the cost of information is not that high $\left(\lambda \leq \frac{2\theta^2}{B-2(R+\theta)}\right)$, the challenger would prefer that the voters face a lower cost of information, as the strong challenger can offer policy platform offering more than the incumbent in a particular state and thus it is beneficial for the challenger if the voter learns which state is more probable.

Proposition 3 formalizes these results. Figure 4 illustrates these results for given parameters. In addition, Figure 5 illustrates that when the challenger is weak, he prefers the lower cost of information, and accordingly, when he is strong, he benefits from a higher cost of information.

Proposition 3. *The unconditional probability of the challenger being elected by the voter* $P(C)$*,*

a) if $\lambda \leq \frac{2\theta^2}{B-2(R-|\theta|)}$*, weakly decreases in* λ*,*

b) if $\lambda > \frac{2\theta^2}{B-2(R-|\theta|)}$*,*

i) decreases in λ *if* $B \max\{\mu(\omega_1), \mu(\omega_2)\} < R$*, and*

ii) weakly increases in λ *otherwise.*

Proof. See Appendix C. □

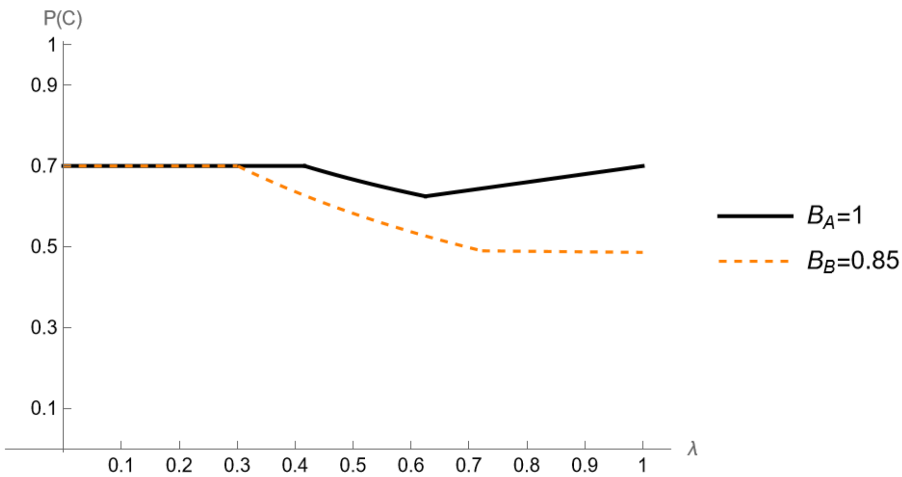


Figure 4: The unconditional probability of the challenger being selected by the voter as a function of a cost of information λ for $B_A = 1$, $B_B = 0.85$ and $\mu(\omega_1) = 0.7$, $R = 0.6$. B_A represents election with the strong and B_B with the weak challenger.

5.2 Effect of the change in uncertainty

The change in uncertainty has an unambiguous effect on the chances of the challenger being elected. Rising uncertainty makes the challenger weak and decreases the probability that he is going to be elected. Accordingly, the challenger has less opportunity to propose a political platform that is better than the incumbent's platform in expectation or that dissuades the voter from acquiring information.

Proposition 4 formalizes this result, and Figure 5 illustrates these results for given parameters.

Proposition 4. *The unconditional probability of the challenger being elected by the voter $P(C)$,*

a) for $\mu(\omega_1) \leq 0.5$, weakly decreases in $\mu(\omega_1)$,

b) for $\mu(\omega_1) > 0.5$, weakly increases in $\mu(\omega_1)$.

Proof. See Appendix C. □

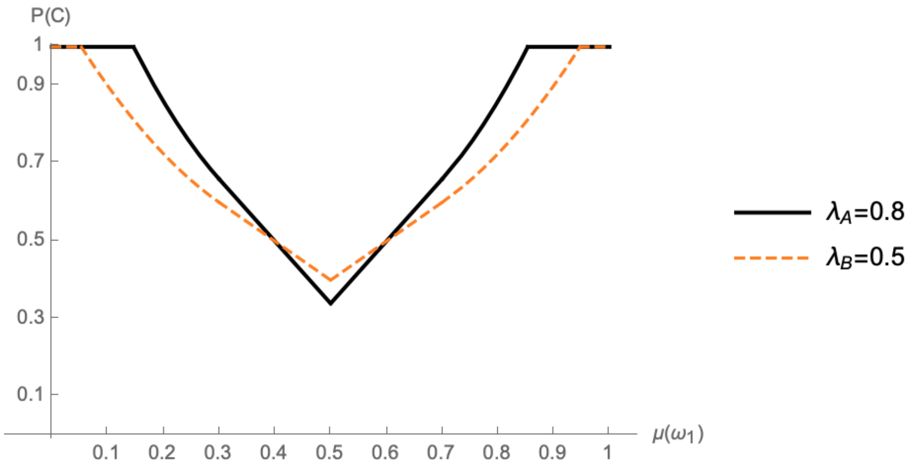


Figure 5: The unconditional probability of the challenger being selected by the voter as a function of $\mu(\omega_1)$ for $\lambda_A = 0.8$, $\lambda_B = 0.5$ and $B = 1$, $R = 0.6$.

6 Implications for the voter's welfare

This section discusses the effect of the incumbent with the simple stability platform on the voter's welfare. First, note that since the voter is risk-neutral, she would always prefer that two politicians would propose extreme platforms. It is so because whenever she faces two extreme politicians, i.e., when the incumbent proposes $v(I|\omega_i) = 2R$ and the challenger $v(C|\omega_i) = 0$ whenever $\mu(\omega_i) \geq 0.5$ for $i \in \{1, 2\}$, she can always choose any convex combination of them, including the safe policy proposed by the incumbent, but also has a positive probability of getting the maximum of $2R$. At the same time, whenever the incumbent proposes a simple policy in one state of the world the maximum payoff would be restricted by $R < B < 2R$. Therefore, the incumbent's simple policy is not in the best interest of the electorate. Now we show that it also creates negative externalities by encouraging the challenger to propose a more moderate platform, which is sub-optimal for the voter. We start by highlighting the optimal political platform of the benevolent challenger who has the same utility function as a voter. Proposition 5 states that the optimal policy for the voter is the extreme one for any incumbent's policy platform.[16]

Proposition 5. *The benevolent challenger proposes an extreme policy platform:*

a) $\theta = \frac{B}{2}$ *for* $\mu(\omega_1) \in [0, \tilde{\mu}(\omega_1))$,

b) $\theta = -\frac{B}{2}$ *for* $\mu(\omega_1) \in [\tilde{\mu}(\omega_1), 1]$.

Proof. We specify the formula for $\tilde{\mu}(\omega_1)$[17] and the proof in Appendix D. □

Figure 6 displays the comparison of the voter's utilities for the optimal challenger's political platform and the extreme platform chosen by the benevolent challenger. While simple stability offering policy is inferior to the voter, it also creates an additional externality. Namely, the challenger who faces an incumbent with a stability platform could as well propose a less risky policy. Thus, the challenger proposes a benevolent platform when the uncertainty is sufficiently high. However, when the voter is more certain about the state of the world, the challenger moves his platform away from the benevolent policy. Thus, as Figure 6 shows, the voter may prefer more uncertain times as in such a situation the challenger promises the same policy platform as the benevolent one.

In Appendix E, we show that when the incumbent proposes the benevolent extreme platform, i.e., he allocates the whole budget to the more probable state, the

[16]This result holds for a risk-neutral voter whom we consider as a benchmark to highlight the role of information.

[17]Note that $\tilde{\mu}(\omega_1) = 0.5$ when the incumbent offers R in both states.

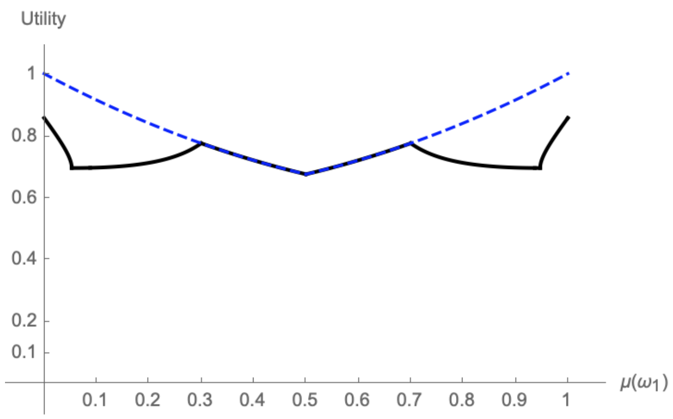


Figure 6: Comparison of the voter's utility for the optimal challenger 's policy platform θ (black line) and of the voter's utility for the benevolent politician offering and extreme platform (blue line) as a function of $\mu(\omega_1)$ for $B = 1, R = 0.6, \lambda = 0.5$. For the non-learning region, the most extreme θ is used.

office-driven challenger as well proposes the extreme platform and allocates all his budget to the state, where the incumbent's policy brings no utils to the voter. Therefore, the voter faces the best possible political platform choice for any parameters.

7 Discussion and Conclusion

The main assumption of our model is that the incumbent is committed to a political platform offering a simple, stability-oriented policy, regardless of the world's state. However, it is plausible to assume that such an incumbent in electoral competition may have access to mechanisms that alter either the voters' perception of uncertainty or the costs of information borne by the voters. As examples of such tools, one might consider media censorship and the support for the proliferation of fake news. According to our findings, the incumbent always prefers greater uncertainty, but the impact on the cost of information is more nuanced. Specifically, a strong incumbent (ex-ante preferred) in our model would benefit from the highest possible cost of information, while a weak one would seek to limit such costs without going as far as allowing complete freedom of information. Thus, this simple attention mechanism could offer an alternative explanation for why incumbents might adopt different media strategies compared to their stronger counterparts, potentially explaining why resource-poor dictators might permit freer media (Egorov et al., 2009). Moreover, the findings suggest that once politicians attain a significant degree of political power, they may be inclined to restrict the flow of information to the public. It sheds light on the mechanisms underlying the phenomenon of democratic backsliding (Waldner and Lust, 2018). Specifically, it helps to explain why many dictators, authoritarian leaders, and illiberal politicians who have risen to power through democratic means and with the aid of free media tend to restrict the availability of information during their office and provide the underlying mechanism for the observed behavior of 'spin dictators' (Guriev and Treisman, 2022).

In this paper, we intentionally exclude the political preferences of both voters and politicians, as we aim to demonstrate the role of attention manipulation. We argue that even if all parties are rational and driven solely by outcomes, the mere existence of an incumbent proposing the status quo, coupled with costly information, is sufficient to produce an equilibrium that is sub-optimal for voters. For future work, it would be interesting to consider the heterogeneity of voters and analyze how their inattention to states would influence redistribution policies. For instance, there is an established result indicating that when voters are inattentive to politicians' platforms, more radical groups tend to pay more attention and, consequently, wield greater influence in elections (see, e.g., Matějka and Tabellini (2021). However, when the outcome of the proposed policy is uncertain, the politician's platform could dissuade voters from these groups from paying attention to the election. Consequently, the results of such a model could differ significantly from those of established models, potentially providing further explanation for controversial empirical observations.

References

Achen, C. and Bartels, L. (2017). *Democracy for realists.* Princeton University Press.

Ambuehl, S. and Li, S. (2018). Belief updating and the demand for information. *Games and Economic Behavior*, 109:21–39.

Ashworth, S. and De Mesquita, E. B. (2014). Is voter competence good for voters?: Information, rationality, and democratic performance. *American Political Science Review*, 108(3):565–587.

Ashworth, S., Fowler, A., et al. (2020). Electorates versus voters. *Journal of Political Institutions and Political Economy*, 1(3):477–505.

Augenblick, N. and Rabin, M. (2021). Belief movement, uncertainty reduction, and rational updating. *The Quarterly Journal of Economics*, 136(2):933–985.

Avoyan, A. and Romagnoli, G. (2023). Paying for inattention. *Economics Letters*, 226:111114.

Bandyopadhyay, S., Chatterjee, K., and Roy, J. (2020). Extremist platforms: Political consequences of profit-seeking media. *International Economic Review*, 61(3):1173–1193.

Bellodi, L., Morelli, M., Nicolò, A., and Roberti, P. (2023). The shift to commitment politics and populism: Theory and evidence. *BAFFI CAREFIN Centre Research Paper*, (204).

Bellodi, L., Morelli, M., and Vannoni, M. (2022). A costly commitment: Populism, economic performance, and the quality of bureaucracy. *American Journal of Political Science.*

Bowen, T. R., Chan, J., Dube, O., and Lambert, N. S. (2016). Reform fatigue.

Caplin, A. and Dean, M. (2013). Behavioral implications of rational inattention with shannon entropy. Technical report, National Bureau of Economic Research.

Caplin, A., Dean, M., and Leahy, J. (2019). Rational inattention, optimal consideration sets, and stochastic choice. *The Review of Economic Studies*, 86(3):1061–1094.

Caplin, A., Dean, M., and Leahy, J. (2022). Rationally inattentive behavior: Characterizing and generalizing shannon entropy. *Journal of Political Economy*, 130(6):1676–1715.

Cover, T. M. and Thomas, J. A. (2012). *Elements of information theory*. John Wiley & Sons.

Dahrendorf, R. et al. (2003). Acht anmerkungen zum populismus. *Transit*, (25):156–163.

Davis, S. J. (2019). Rising policy uncertainty. *National Bureau of Economic Research*, No. w26243.

Downs, A. (1960). Why the government budget is too small in a democracy. *World Politics*, 12(4):541–563.

Egorov, G., Guriev, S., and Sonin, K. (2009). Why resource-poor dictators allow freer media: A theory and evidence from panel data. *American political science Review*, 103(4):645–668.

Eguia, J. X. and Nicolò, A. (2019). Information and targeted spending. *Theoretical Economics*, 14(2):373–402.

Ely, J., Frankel, A., and Kamenica, E. (2015). Suspense and surprise. *Journal of Political Economy*, 123(1):215–260.

Gratton, G. and Lee, B. E. (2023). Liberty, Security, and Accountability: The Rise and Fall of Illiberal Democracies. *The Review of Economic Studies*, 90(5):26–74.

Guriev, S. and Papaioannou, E. (2022). The political economy of populism. *Journal of Economic Literature*, 60(3):753–832.

Guriev, S. and Treisman, D. (2022). *Spin dictators: The changing face of tyranny in the 21st century*. Princeton University Press.

Haegel, F. and Mayer, N. (2018). So close, yet so far: The french front national and les républicains (2007–2017). In *Trumping the Mainstream*, pages 222–245. Routledge.

Hébert, B. and Woodford, M. (2021). Neighborhood-based information costs. *American Economic Review*, 111(10):3225–3255.

Hollyer, J. R., Rosendorff, B. P., and Vreeland, J. R. (2015). Transparency, protest, and autocratic instability. *American Political Science Review*, 109(4):764–784.

Hu, L., Li, A., and Segal, I. (2023). The politics of personalized news aggregation. *Journal of Political Economy Microeconomics*, 1(3):463–505.

Jain, V. and Whitmeyer, M. (2020). Competitive disclosure of information to a rationally inattentive consumer.

Levy, G. and Razin, R. (2012). When do simple policies win? *Economic Theory*, 49:621–637.

Li, A. and Hu, L. (2023). Electoral accountability and selection with personalized information aggregation. *Games and Economic Behavior*, 140:296–315.

Lipnowski, E., Mathevet, L., and Wei, D. (2022). Optimal attention management: A tractable framework. *Games and Economic Behavior*, 133:170–180.

Lora, E. A., Panizza, U., and Quispe-Agnoli, M. (2004). Reform fatigue: symptoms, reasons, implications.

Maćkowiak, B., Matějka, F., and Wiederholt, M. (2023). Rational inattention: A review. *Journal of Economic Literature*, 61(1):226–273.

Matějka, F. and McKay, A. (2015). Rational inattention to discrete choices: A new foundation for the multinomial logit model. *American Economic Review*, 105(1):272–298.

Matějka, F. and Tabellini, G. (2021). Electoral competition with rationally inattentive voters. *Journal of the European Economic Association*, 19(3):1899–1935.

Matovski, A. (2018). It's the stability, stupid! how the quest to restore order after the soviet collapse shaped russian popular opinion. *Comparative Politics*, 50(3):347–390.

Morelli, M., Nicolò, A., and Roberti, P. (2021). A commitment theory of populism.

Morris, S. and Strack, P. (2019). The wald problem and the relation of sequential sampling and ex-ante information costs. *Available at SSRN 2991567*.

Novák, V., Matveenko, A., and Ravaioli, S. (2024). The status quo and belief polarization of inattentive agents: Theory and experiment. *American Economic Journal: Microeconomics, forthcoming*.

Nunnari, S. and Zápal, J. (2017). A model of focusing in political choice.

Prato, C. and Wolton, S. (2016). The voters' curses: why we need goldilocks voters. *American Journal of Political Science*, 60(3):726–737.

Prato, C. and Wolton, S. (2018). Rational ignorance, populism, and reform. *European Journal of Political Economy*, 55:119–135.

Reuters (2015). Turkey's erdogan says election outcome was a vote for stability. *Reuters*.

Shannon, C. E. (1948). A mathematical theory of communication. *Bell system technical journal*, 27(3):379–423.

Sims, C. A. (2003). Implications of rational inattention. *Journal of Monetary Economics*, 50(3):665–690.

Trombetta, F. (2020). When the light shines too much: Rational inattention and pandering. *Journal of Public Economic Theory*, 22(1):98–145.

Wagstyl, S. and Christopher, C. (2006). Why reform fatigue has hit the east. *Financial Times*.

Waldner, D. and Lust, E. (2018). Unwelcome change: Coming to terms with democratic backsliding. *Annual Review of Political Science*, 21:93–113.

Wei, D. (2021). Persuasion under costly learning. *Journal of Mathematical Economics*, 94:102451.

Yang, M. (2020). Optimality of debt under flexible information acquisition. *The Review of Economic Studies*, 87(1):487–536.

Yang, M. and Zeng, Y. (2019). Financing entrepreneurial production: security design with flexible information acquisition. *The Review of Financial Studies*, 32(3):819–863.

Yuksel, S. (2022). Specialized learning and political polarization. *International Economic Review*, 63(1):457–474.

A Proof of Proposition 1

We follow Caplin et al. (2019); Caplin and Dean (2013) and solve the model by directly identifying the posterior beliefs and deriving the state-dependent choice probabilities. Note that two voters' posterior beliefs could not lead to the same action as the cost of information is strictly monotone in its informativeness. Hence, the voter's attention strategy is specified by a subset of actions $A' \subset A$ which have a strictly positive unconditional probability of being selected $\mathcal{P}(a) > 0$ and corresponding posteriors $\gamma(\omega|a)$ $\forall a \in A'$, i.e., the *attention strategy* is a triplet $(A', \mathcal{P}, \gamma(\omega|a))$. Simultaneously, the posterior and prior beliefs must satisfy the Bayes' law $\mu(\omega) = \sum_{a \in A'} \mathcal{P}(a)\gamma(\omega|a)$.

First, let us focus on the posterior beliefs leading to the actions selected with the non-zero probability, i.e., the set of actions $a \in A'$. An attention strategy $(A', \mathcal{P}(a), \gamma(\omega|a))$ is associated with the gross benefit $\sum_{a \in A'} \mathcal{P}(a) \sum_{\omega \in \Omega} \gamma(\omega|a)v(a|\omega)$ and the cost of information. Thus, we can write the objective function in terms of the *net utility*

$$\sum_{a \in A'} \mathcal{P}(a) \sum_{\omega \in \Omega} v(a|\omega)\gamma(\omega|a) - \frac{\lambda}{2} \sum_{a \in A'} \sum_{\omega \in \Omega} \mathcal{P}(a)(\gamma(\omega|a) - \mu(\omega))^2 = \sum_{a \in A'} \mathcal{P}(a)N(\gamma(a))$$

where 'net utility' $N(\gamma(a))$ is

$$N(\gamma(a)) = \sum_{\omega \in \Omega} \gamma(\omega|a)v(a|\omega) - \frac{\lambda}{2} \sum_{\omega \in \Omega} (\gamma(\omega|a) - \mu(\omega))^2 .$$

Thus, instead of maximizing the expected utility minus the cost of information for each action and corresponding posterior belief pair, we can characterize the voter's problem as a maximization of the weighted average of act-specific net utilities. As Caplin et al. (2019) show, a necessary condition for optimality is that the slope of the net utility function is the same for each chosen action at its associated posterior. We denote the posterior beliefs for the action a as $\gamma(\omega_1|a)$ and $\gamma(\omega_2|a) = 1 - \gamma(\omega_1|a)$.

The slope of the net utility function is

$$\frac{\partial N(\gamma(a))}{\partial \gamma(\omega_1|a)} = v(a|\omega_1) - v(a|\omega_2) - 2\lambda(\gamma(\omega_1|a) - \mu(\omega_1)),$$

and the same slope condition gives

$$\gamma(\omega_1|I) - \gamma(\omega_1|C) = \frac{v(I|\omega_1) - v(I|\omega_2) - v(C|\omega_1) + v(C|\omega_2)}{2\lambda} = \frac{\theta}{\lambda}. \tag{7}$$

Further, when both posterior beliefs $\gamma(\omega_1|a)\,\forall a \in A$ lie between 0 and 1, we can apply the concavification method to find out the posterior beliefs. Specifically, when the action space is binary, the binary attention strategy is incentive compatible, if and only if the affine function connecting $(\gamma(\omega_1|I), N(\gamma(I)))$ and $(\gamma(\omega_1|C), N(\gamma(I)))$ lies above the $N(\gamma(\cdot))$ on an interval $[\gamma(\omega_1|I), \gamma(\omega_1|C)]$. For a fixed $\gamma(\omega_1|I)$, the smallest posterior $\gamma(\omega_1|C)$ satisfying this property holds when the affine function is tangent to $N(\gamma(\cdot))$ at $\gamma(\omega_1|I)$. Note that lower $\gamma(\omega_1|C)$ would decrease the instrumental value of the information, making it sub-optimal. Thus, in particular, the tangency condition of concavification requires that

$$\frac{\partial N'(\gamma(I))}{\partial \gamma(\omega_1|I)} = \frac{N(\gamma(C)) - N(\gamma(I))}{\gamma(\omega_1|C) - \gamma(\omega_1|I)}.$$

After substituting the previous results, we obtain the optimal posteriors that are between 0 and 1

$$\begin{aligned}
\gamma(\omega_1|C) &= \frac{1}{4}\left(2 + \frac{B-2R}{\theta} - \frac{2\theta}{\lambda}\right), \\
\gamma(\omega_1|I) &= \frac{1}{4}\left(2 + \frac{B-2R}{\theta} + \frac{2\theta}{\lambda}\right).
\end{aligned}$$

The previous equations characterize the optimal interior posteriors. Otherwise, the posteriors are in the corner solutions. Thus, the full characterization of the posteriors is given by

$$\gamma(\omega_1|C) = \max\left(0, \min\left(1, \frac{1}{4}\left(2 + \frac{B-2R}{\theta} - \frac{2\theta}{\lambda}\right)\right)\right),$$
$$\gamma(\omega_1|I) = \max\left(0, \min\left(1, \frac{1}{4}\left(2 + \frac{B-2R}{\theta} + \frac{2\theta}{\lambda}\right)\right)\right).$$

So far, we focused only on the cases when the voter acquires information, i.e., when the prior belief $\mu(\omega_1)$ is between the posterior beliefs, when $\min(\gamma(\omega_1|I), \gamma(\omega_1|C)) < \mu(\omega_1) < \max(\gamma(\omega_1|I), \gamma(\omega_1|C))$. When the voter does not acquire any information, the posterior belief equals the prior belief.

B Proof of Proposition 2

Firstly, we focus on the case when both voters are selected with a non-zero probability, i.e., $\mathcal{P}(a) > 0 \;\forall a \in \{I, C\}$. The challenger C selects his policy platform such that he maximizes the unconditional probability of being selected. Applying equation (3) and equation (7), we obtain that the challenger's objective function is:

$$\max_{\theta \in \left[-\frac{B}{2}, \frac{B}{2}\right]} \frac{\mu(\omega_1) - \gamma(\omega_1|I)}{\gamma(\omega_1|C) - \gamma(\omega_1|I)}.$$

Note that the posterior belief $\gamma(\omega_1|I)$ is also a function of θ. The first order condition of the objective function equals zero for

$$\theta = \frac{B-2R}{2\mu(\omega_1) - 1}. \tag{8}$$

Given condition (6), we know that $B < 2R$, hence, the nominator of the formula (8) is always negative. The sign of the optimal θ is thus determined by the voter's prior belief. Specifically, if $\mu(\omega_1) > \frac{1}{2}$ then the optimal $\theta < 0$; if $\mu(\omega_1) < \frac{1}{2}$ then the optimal $\theta > 0$; and if $\mu(\omega_1) = \frac{1}{2}$ there is a discontinuity that we will investigate separately. Note also that all three candidates for the optimal $\theta = \left\{-\frac{B}{2}, \frac{B}{2}, \frac{B-2R}{2\mu(\omega_1)-1}\right\}$

are independent of λ. As we will show later, λ influences the parameter space in which the voter decides not to acquire any information.

As we have shown, the objective attains maximum at $\theta = \frac{B-2R}{2\mu(\omega_1)-1}$ unless it achieves the boundary. Thus, we can characterize when $\frac{B-2R}{2\mu(\omega_1)-1} \geq \frac{B}{2}$ and when $\frac{B-2R}{2\mu(\omega_1)-1} \leq -\frac{B}{2}$. It is straightforward to obtain that if $\mu(\omega_1) < \frac{1}{2}$ and $R \geq \frac{B(3-2\mu(\omega_1))}{4}$ then $\frac{B-2R}{2\mu(\omega_1)-1} \geq \frac{B}{2}$. Analogously, if $\mu(\omega_1) > \frac{1}{2}$ and $R \geq \frac{B(1+2\mu(\omega_1))}{4}$ then $\frac{B-2R}{2\mu(\omega_1)-1} \leq -\frac{B}{2}$.

To sum up, conditional on the voter acquiring information, the optimal policy platform of the challenger is $\theta = \frac{B-2R}{2\mu(\omega_1)-1}$ if $\mu(\omega_1) \leq \hat{\mu}_1 = \frac{3}{2} - \frac{2R}{B} \vee \mu(\omega_1) \geq \hat{\mu}_2 = \frac{2R}{B} - \frac{1}{2}$; otherwise, $\theta = \frac{B}{2}$ if $\hat{\mu}_1 < \mu(\omega_1) \leq \frac{1}{2}$ and $\theta = -\frac{B}{2}$ if $\frac{1}{2} < \mu(\omega_1) \leq \hat{\mu}_2$.

Secondly, we consider when the challenger can offer such a policy platform that he is selected with the unconditional probability 1. It happens when the voter does not acquire any information and, hence, her posterior belief equals the prior belief. For the rationally inattentive voter, it holds that she is in the non-learning region when $P(a = C) = \{0, 1\}$. Given condition 6, the challenger can always offer the policy platform that would outperform the incumbent's proposal in the more probable state. Thus, we can narrow our focus on the case when $P(C) = 1$.

According to Proposition 1, the voter does not acquire information when i) $\mu(\omega_1) < \gamma_1^*$ or ii) $\gamma_2^* < \mu(\omega_1)$, where

$$\gamma_1^* = \min(\gamma(\omega_1|I), \gamma(\omega_1|C)),$$
$$\gamma_2^* = \max(\gamma(\omega_1|I), \gamma(\omega_1|C)).$$

By comparing the posteriors we get that $\gamma(\omega_1|C) < \gamma(\omega_1|I)$ if $\theta > 0$ and $\gamma(\omega_1|C) > \gamma(\omega_1|I)$ if $\theta < 0$. We know that $\theta > 0$ for $\mu(\omega_1) < \frac{1}{2}$. Without loss of generality, we focus on case i) and, hence, we can consider $\mu(\omega_1) < \gamma(\omega_1|C)$. Therefore, the voter does not acquire information when her prior belief is

$$\mu(\omega_1) \leq \frac{(B-2R)}{4\theta} + \frac{(\lambda-\theta)}{2\lambda}.$$

The right-hand side of this condition depends on the voter's policy platform θ. By rearranging we get that in the non-learning region the optimal policy θ has to satisfy

$$2\theta[\theta + \lambda(2\mu(\omega_1) - 1)] \leq (B-2R)\lambda.$$

There exist multiple optimal policy platforms θ satisfying this condition. We solve the quadratic equation given by the previous condition and apply Condition (6). We obtain that all policy platforms θ that satisfy $\theta \in [T_1, T_2]$ are optimal and lead the voter not to acquire any information, where

$$T_1 = \max\left(-\frac{B}{2}, \frac{1}{4}\left(2\lambda - 4\lambda\mu(\omega_1) - \sqrt{(2\lambda - 4\lambda\mu(\omega_1))^2 + 8\lambda(B-2R)}\right)\right),$$
$$T_2 = \min\left(\frac{B}{2}, \frac{1}{4}\left(2\lambda - 4\lambda\mu(\omega_1) + \sqrt{(2\lambda - 4\lambda\mu(\omega_1))^2 + 8\lambda(B-2R)}\right)\right).$$

We can now identify the set of prior beliefs for which such θ exists. By solving $T1 = T2 = \frac{B-2R}{2\mu(\omega_1)-1}$ we can find these priors when the non-learning region ends. Therefore, the voter does not acquire information for $\mu(\omega_1) \in [0, \bar{\mu}_1] \cup [\bar{\mu}_2, 1]$, where

$$\bar{\mu}_1 = \max\left\{0, \frac{\lambda(B-2R) + \sqrt{2}\sqrt{6B\lambda R(B-2R) + \lambda(8R^3 - B^3)}}{2\lambda(B-2R)}\right\},$$
$$\bar{\mu}_2 = \max\left\{0, \frac{\lambda(B-2R) - \sqrt{2}\sqrt{6B\lambda R(B-2R) + \lambda(8R^3 - B^3)}}{2\lambda(B-2R)}\right\}.$$

Note that $\bar{\mu}_1 = 0$ and $\bar{\mu}_2 = 1$ if $2R - B > \frac{\lambda}{2}$.

Next, we prove Corollary 2. We know that for $\mu(\omega_1) \in [\bar{\mu}_1, 0.5] \cup (0.5, \bar{\mu}_2)$, i.e., when the voter acquires information, the optimal policy is either on the boundary and independent of $\mu(\omega_1)$, $\theta \in \{\frac{B}{2}, -\frac{B}{2}\}$, or has an interior solution, $\theta = \frac{B-2R}{2\mu(\omega_1)-1}$.

The first derivative of the interior solution for θ is

$$\frac{\partial}{\partial\mu(\omega_1)}\frac{B-2R}{2\mu(\omega_1)-1}=-\frac{2(B-2R)}{(1-2\mu(\omega_1))^2}>0.$$

Therefore, the optimal policy platform θ weakly increases in $\mu(\omega_1)$.

Further, we prove Corollary 4. The set of prior beliefs for which the challenger's optimal policy platform is $\theta=\frac{B}{2}$ is $\mu(\omega_1)\in[\hat{\mu}_1,0.5]$ and $\theta=-\frac{B}{2}$ for $\mu(\omega_1)\in(0.5,\hat{\mu}_2]$. By investigating dependence of $\hat{\mu}_1$ and $\hat{\mu}_2$ on B we obtain that

$$\frac{\partial\hat{\mu}_1}{\partial B}=\frac{2R}{B^2}>0,$$
$$\frac{\partial\hat{\mu}_2}{\partial B}=-\frac{2R}{B^2}<0.$$

Therefore, when B decreases the set of prior beliefs for which the optimal policy platform is on the boundary, i.e., $\theta\in\left\{-\frac{B}{2},\frac{B}{2}\right\}$, gets larger.

Finally, we prove Corollary 5. Proposition 2 shows, that when the voter does not acquire information, the challenger achieves $\mathcal{P}(C)=1$ by the optimally selected policy platform for all prior beliefs $\mu(\omega_1)\in[0,\bar{\mu}_1]\cup[\bar{\mu}_2,1]$. A simple derivation reveals that,

$$\frac{\partial\bar{\mu}_1}{\partial\lambda}=-\frac{(B-2R)^5}{2\sqrt{2}\left(-\lambda(B-2R)^3\right)^{3/2}}>0,$$

and

$$\frac{\partial\bar{\mu}_2}{\partial\lambda}=\frac{(B-2R)^5}{2\sqrt{2}\left(-\lambda(B-2R)^3\right)^{3/2}}<0.$$

Therefore, because $\bar{\mu}_1$ increases and $\bar{\mu}_2$ decreases in λ, the range of prior beliefs for which $\mathcal{P}(C)=1$ can be achieved increases in λ.

C Proof of results in Section 5

Proof of Proposition 3

Proof. First, Proposition 2 shows that the range of prior beliefs for which $\mathcal{P}(C)=1$

can be achieved increases in λ.

Second, when the voter does not choose to receive a perfect signal for any state, i.e., when $0 < \{\gamma(\omega_1|I), \gamma(\omega_1|C)$, we obtain that

$$\frac{\partial \mathcal{P}(C)}{\partial \lambda} = \frac{2(B\mu(\omega_2) - R + B/2 - \theta - 2\mu(\omega_2)(B/2 - \theta))}{\theta^2}.$$

Therefore, for $B\mu(\omega_1) > R$ this derivative is strictly negative $\frac{\partial \mathcal{P}(C)}{\partial \lambda} > 0$, and for $B\mu(\omega_1) < R$ it is strictly positive $\frac{\partial \mathcal{P}(C)}{\partial \lambda} < 0$.

Finally, we consider the situation when the voter would acquire only one perfect signal. Thus, for $\mu(\omega_1) > 0.5$ her optimal posteriors are $\gamma(\omega_1|C) = 1$ and $0 < \{\gamma(\omega_1|I)\} < 1$. Then, we obtain that

$$\frac{\partial \mathcal{P}(C)}{\partial \lambda} = \frac{8\mu(\omega_2)\theta^3}{(B\lambda + 2\theta^2 - 2\lambda(R + \theta))^2}.$$

Proposition 2 shows that for $\mu(\omega_1) \in (0.5, 1]$ the challenger's optimal policy platform $\theta < 0$. Therefore, the derivative is strictly negative $\frac{\partial \mathcal{P}(C)}{\partial \lambda} < 0$. Similarly, for $\mu(\omega_1) > 0.5$ voter's optimal posteriors are $\gamma(\omega_1|C) = 0$ and $0 < \gamma(\omega_1|I) < 1$. Then, we obtain that

$$\frac{\partial \mathcal{P}(C)}{\partial \lambda} = \frac{8(-1 + \mu(\omega_2))\theta^3}{(B\lambda + 2\theta^2 + 2\lambda(-R + \theta))^2}.$$

Proposition 2 shows that for $\mu(\omega_1) \in [0, 0.5]$ the challenger's optimal policy platform $\theta > 0$. Therefore, the derivative is also strictly negative $\frac{\partial \mathcal{P}(C)}{\partial \lambda} < 0$.

By using Proposition 1, we have that the voter acquires only one perfect signal when

$$-\frac{2\theta^2}{B - 2(R + |\theta|)} < \lambda < \frac{2\theta^2}{B - 2(R - |\theta|)}.$$

$\square$

Proof of Proposition 4

Proof. We say that the uncertainty increases if $\mu(\omega_1)$ increases for $\mu(\omega_1) < 0.5$ and if $\mu(\omega_1)$ decreases for $\mu(\omega_1) > 0.5$.

First, note that by Proposition 2, if $B > \frac{-\lambda+4R}{2}$, then the challenger dissuades the voter to acquire any information and achieves $\mathcal{P}(C) = 1$ by the optimally selected policy platform for all prior beliefs $\mu(\omega_1) \in [0, \bar{\mu}_1] \cup [\bar{\mu}_2, 1]$. Therefore, when uncertainty is low the challenger is chosen blindly.

Second, when the voter acquires information, but does not choose to receive a perfect signal for any state, i.e., when $0 < \gamma(\omega_1|I), \gamma(\omega_1|C)$, there are several cases to consider.

i) The challenger proposes interior political platform, i.e., $-\frac{B}{2} < \theta < \frac{B}{2}$. Then, we obtain

$$\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} = \frac{\lambda(1 - 2\mu(\omega_1))}{B - 2R}.$$

Therefore, since denominator is negative by assumption, for $\mu(\omega_1) < 0.5$ this derivative is strictly negative $\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} < 0$, and for $\mu(\omega_1) > 0.5$ it is strictly positive $\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} > 0$.

ii) The challenger proposes extreme political platform, i.e., $\theta = \frac{B}{2}$ for $\mu(\omega_1) \in [\hat{\mu}_1, 0.5]$. Then, we have $\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} = -\frac{2\lambda}{B} < 0$. Similarly, for $\mu(\omega_1) \in (0.5, \hat{\mu}_2]$ the challenger proposes $\theta = -\frac{B}{2}$ and we obtain that $\mu(\omega_1) = \frac{2\lambda}{B} > 0$.

Finally, when the voter receives one perfect signal, i.e., for $\mu(\omega_1) < 0.5$ voter's optimal posteriors will be $\gamma(\omega_1|C) = 0$ and $0 < \{\gamma(\omega_1|I)\} < 1$, we obtain that

i) if $\mu(\omega_1) < \hat{\mu}_1$

$$\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} = -\frac{4\lambda(B(-2 + 8\mu(\omega_1)) + (1 - 2\mu(\omega_1))^2\lambda + 4(1 - 4\mu(\omega_1))R)}{(2B + (-1 + 4\mu(\omega_1)^2)\lambda - 4R)^2} < 0.$$

ii) if $\mu(\omega_1) \in [\hat{\mu}_1, 0.5]$

$$\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} = -\frac{4B\lambda}{B^2 + 4B\lambda - 4\lambda R} < 0.$$

Similarly, for $\mu(\omega_1) > 0.5$ voter's optimal posteriors will be $\gamma(\omega_1|C) = 1$ and $0 < \{\gamma(\omega_1|I)\} < 1$. Then, we obtain that

i) if $\mu(\omega_1) > \hat{\mu}_2$

$$\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} = \frac{4\lambda(B(6-8\mu(\omega_1)) + (1-2\mu(\omega_1))^2\lambda + 4(-3+4\mu(\omega_1))R)}{(2B + (3-8\mu(\omega_1)+4\mu(\omega_1)^2)\lambda - 4R)^2} > 0.$$

ii) if $\mu(\omega_1) \in (0.5, \hat{\mu}_2]$

$$\frac{\partial \mathcal{P}(C)}{\partial \mu(\omega_1)} = \frac{4B\lambda}{B^2 + 4B\lambda - 4\lambda R} > 0.$$

□

D Proof of Proposition 5

Without loss of generality, we assume that the incumbent proposes the policy platform R_1 in the state ω_1 and $R_2 = 2R - R1$ in the state ω_2, where $0 \leq R_1 \leq 2R$. See Table 2.

Politician/State	ω_1	ω_2
Incumbent (I)	R_1	$R_2 = 2R - R_1$
Challenger (C)	$v(\omega_1) = \frac{B}{2} - \theta$	$v(\omega_2) = \frac{B}{2} + \theta$

Table 2: Policy platforms of the incumbent and the challenger.

We proceed analogously as in Appendix A and B and obtain that the difference of posterior beliefs is

$$\gamma(\omega_1|I) - \gamma(\omega_1|C) = \frac{R_1 - R_2 + 2\theta}{2\lambda}.$$

Using the tangency condition of concavification we obtain the following optimal posteriors:

$$\gamma(\omega_1|C) = \max\left(0, \min\left(1, \frac{1}{4}\left(2 + \frac{2(R - R_1 - \theta)}{\lambda} + \frac{B - 2R}{R_1 - R + \theta}\right)\right)\right),$$
$$\gamma(\omega_1|I) = \max\left(0, \min\left(1, \frac{1}{4}\left(2 + \frac{B - 2R}{R_1 - R + \theta} + \frac{2(R_1 - R + \theta)}{\lambda}\right)\right)\right).$$

The benevolent challenger maximizes the same objective function as the voter

$$\max_{\theta \in \left[-\frac{B}{2}, \frac{B}{2}\right]} \sum_{a \in \{I,C\}} \mathcal{P}(a) N(\gamma(a)) \tag{9}$$

where

$$N(\gamma(a)) = \sum_{\omega \in \{\omega_1, \omega_2\}} \gamma(\omega|a) v(a|\omega) - \frac{\lambda}{2} \sum_{\omega \in \{\omega_1, \omega_2\}} \left(\gamma(\omega|a) - \mu(\omega)\right)^2.$$

From this maximization problem we receive six possible candidates for the optimal θ. Four interior θ's:

$$\theta_1 = -\frac{\sqrt{\lambda|(B - 2R)|}}{\sqrt{2}} + R - R_1,$$
$$\theta_2 = \frac{\sqrt{\lambda|(B - 2R)|}}{\sqrt{2}} + R - R_1,$$
$$\theta_3 = -\frac{\lambda}{2} + \lambda\mu(\omega_1) + R - \frac{1}{2}\sqrt{\lambda(-2B + \lambda(1 - 2\mu(\omega_1))^2 + 4R)} - R_1,$$
$$\theta_4 = -\frac{\lambda}{2} + \lambda\mu(\omega_1) + R + \frac{1}{2}\sqrt{\lambda(-2B + \lambda(1 - 2\mu(\omega_1))^2 + 4R)} - R_1.$$

and two corner solutions $\theta_5 = \frac{B}{2}$ and $\theta_6 = -\frac{B}{2}$.

First, we can evaluate the value of the objective function for the corner solutions. We obtain that for $\mu(\omega_1) \leq \tilde{\mu}(\omega_1)$ optimal $\theta^* = \frac{B}{2}$ and for $\mu(\omega_1) > \tilde{\mu}(\omega_1)$ optimal $\theta^* = -\frac{B}{2}$, where

$$\tilde{\mu}(\omega_1) = \frac{1}{4}\left(2 + 2(R - R_1)\left(-\frac{1}{\lambda} + \frac{2(B - 2R)}{B^2 - 4R^2 + 8RR_1 - 4R_1^2}\right)\right).$$

Note that $\tilde{\mu}(\omega_1) = 0.5$ for $R_1 = R$. By comparing the values of the objective function generated by the corner θ's with the values of the objective for the interior θ's we get that the interior θ's are always sub-optimal.

E Solution with the incumbent who proposes an extreme platform

We study how the challenger's optimal policy platform changes when he faces the incumbent with an extreme policy platform. Without loss of generality, we consider the situation when the incumbent allocates all his political budget to the state ω_2. We summarize the policy platforms in Table 3.

Politician/State	ω_1	ω_2
Incumbent (I)	0	$2R$
Challenger (C)	$v(\omega_1) = \frac{B}{2} - \theta$	$v(\omega_2) = \frac{B}{2} + \theta$

Table 3: Policy platforms of the extreme incumbent and the challenger.

Proposition 6 characterizes the optimal policy platform of the challenger. There are several situations. First, when the incumbent proposes the extreme platform that will pay off in the more probable state (when $\mu(\omega_1) < 0.5$), the challenger proposes another extreme platform by putting all his budget into another state. It is important to note that the voter always acquires information in this situation. When the uncertainty is still high (when $\mu(\omega_1) < \hat{\mu}^{IE}$), the challenger proposes the same extreme policy. Then he begins to diversify the budget between states and decrease the voter's incentives to acquire information, up to the point (when $\mu = \bar{\mu}^{IE}$) when he can guarantee himself a victory by proposing several different policies. Figure 7 illustrates these results.

Proposition 6. *The challenger's optimal policy platform, when the incumbent has the extreme policy platform* $\{0, 2R\}$*, is* *a)* $\theta = -\frac{B}{2}$ *for* $\mu(\omega_1) \in (0, \hat{\mu}^{IE}]$*,*

b) $\theta = \frac{B+(2\mu(\omega_1)-3)R}{2\mu(\omega_1)-1}$ *for* $\mu(\omega_1) \in [\hat{\mu}^{IE}, \bar{\mu}^{IE}]$ *and*

c) $\theta: \theta \in [T_1^{IE}, T_2^{IE}]$ *for* $[\bar{\mu}^{IE}, 1]$*.*

Proof. We proceed analogously as in Appendix A and B. When incumbent's platform is 0 in the state ω_1 and $2R$ in ω_2, then the slope of the net utility equals to

$$\frac{\partial N(\gamma(I))}{\partial\gamma(\omega_1|I)} = -2R - 2\lambda(\gamma(\omega_1|I) - \mu(\omega_1)),$$

and, hence, the difference in posterior beliefs is

$$\gamma(\omega_1|I) - \gamma(\omega_1|C) = \frac{\theta - R}{\lambda}.$$

Using the tangency condition of concavification we obtain the following optimal posteriors:

$$\begin{aligned}\gamma(\omega_1|C) &= \max\left(0, \min\left(1, -\frac{B\lambda + 2\left((R-\theta)^2 + \lambda(2R-\theta)\right)}{4\lambda(R-\theta)}\right)\right),\\ \gamma(\omega_1|I) &= \max\left(0, \min\left(1, -\frac{B\lambda + 2\left((R-\theta)^2 - \lambda(2R-\theta)\right)}{4\lambda(R-\theta)}\right)\right).\end{aligned}$$

It is then straightforward to obtain that the optimal interior challenger's policy platform is given by

$$\theta = \frac{B + (2\mu(\omega_1) - 3)}{2\mu(\omega_1) - 1}.$$

Further, by comparing the values of the objective function for different extreme θ's and the optimal interior θ, we obtain that for $\mu(\omega_1) \leq \hat{\mu}^{IE}$ optimal $\theta = -\frac{B}{2}$, where $\hat{\mu}^{IE} = -\frac{B+12R}{4(B+2R)}$; and for $\mu(\omega_1) \in [\hat{\mu}^{IE}, \bar{\mu}^{IE}]$ optimal $\theta = \frac{B+(2\mu(\omega_1)-3)}{2\mu(\omega_1)-1}$.

To find $\bar{\mu}^{IE}$, we characterize when the voter does not acquire any information. Similarly to Appendix B, we get that all policy platforms θ's which satisfy $\theta \in$

$[T_1^{IE}, T_2^{IE}]$ are optimal, where

$$T_1^{IE} = \frac{1}{2}\left(\lambda - 2\lambda\mu(\omega_1) - \sqrt{\lambda(2B + \lambda(1-2\mu(\omega_1))^2 - 4R)} + 2R\right),$$
$$T_2^{IE} = \frac{1}{2}\left(\lambda - 2\lambda\mu(\omega_1) + \sqrt{\lambda(2B + \lambda(1-2\mu(\omega_1))^2 - 4R)} + 2R\right).$$

Then, by solving $T_1 = T_2 = \frac{B+(2\mu(\omega_1)-3)}{2\mu(\omega_1)-1}$ we get that $\bar{\mu}^{IE} = \frac{\left(B\lambda - \sqrt{2}\sqrt{-\lambda(B-2R)^3} - 2\lambda R\right)}{(2B\lambda - 4\lambda R)}$. Note that, in contrast to the situation when the incumbent has a stability platform, the voter always acquires information for $\mu(\omega_1) \leq \frac{1}{2}$. It could be observed from T_1^{IE} and T_2^{IE} that when $\mu(\omega_1) \leq \frac{1}{2}$ optimal θ's, for which the voter would not acquire any information, are less than $-\frac{B}{2}$. □

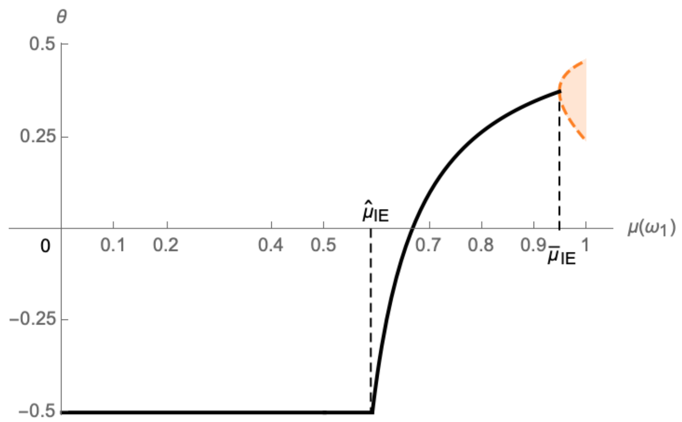


Figure 7: The challenger's optimal policy platform, when the incumbent offers an extreme policy platform, as a function of $\mu(\omega_1)$ and $\lambda = 0.5$, $R = 0.6$, $B = 1$. The orange area depicts optimal θ that dissuades the voter not to acquire any information.

F Solution with the entropy cost function

We consider the same setup as in Section 3. However, now we use the entropy cost function (Shannon, 1948; Cover and Thomas, 2012). For simplicity, we reformulate the voter's problem as a problem of choosing conditional choice probabilities rather than the choice of posterior probabilities (Matějka and McKay, 2015).

RI voter's problem. *The voter's problem is to find a vector function of conditional choice probabilities* $\mathcal{P} = \{\mathcal{P}(a|\omega)\}_{a\in A=\{I,C\}}$ *that maximizes expected payoff less the information cost:*

$$\max_{\{\mathcal{P}(a|\omega)\}_{a\in A}} \left\{ \sum_{a\in A}\sum_{\omega\in\Omega} v(a|\omega)\mathcal{P}(a|\omega)\mu(\omega) - \lambda\kappa(\mathcal{P}) \right\}$$

subject to

$$\forall a \in A: \quad \mathcal{P}(a|\omega) \geq 0 \quad \forall\omega \in \Omega, \tag{10}$$

$$\sum_{a\in A} \mathcal{P}(a|\omega) = 1 \quad \forall\omega \in \Omega, \tag{11}$$

where the unconditional choice probabilities are

$$\mathcal{P}(a) = \sum_{\omega\in\Omega} \mathcal{P}(a|\omega)\mu(\omega), \quad a \in A.$$

The cost of information is $\lambda\kappa(\mathcal{P})$*, where* $\lambda > 0$ *is the given unit cost of information and* κ *is the amount of information that the agent processes, which is measured by the expected reduction in the entropy:*

$$\kappa(\mathcal{P}) = -\sum_{a\in A} \mathcal{P}(a)\log\mathcal{P}(a) + \sum_{a\in A}\sum_{\omega\in\Omega} \mathcal{P}(a|\omega)\log\mathcal{P}(a|\omega)\mu(\omega). \tag{12}$$

Using the results of Matějka and McKay (2015) we obtain the voter's optimal conditional probabilities:

$$\mathcal{P}(a|\omega) = \frac{\mathcal{P}(a)e^{v(a|\omega)/\lambda}}{\sum_{a\in A}\mathcal{P}(a)e^{v(a|\omega)/\lambda}},$$

where

$$\mathcal{P}(C) = \max\left(0, \min\left(1, \frac{e^{\frac{R}{\lambda}}\left(e^{\frac{R+\theta}{\lambda}} + e^{\frac{B+4\theta}{2\lambda}}(-1+\mu(\omega_1)) - e^{\frac{B}{2\lambda}}\mu(\omega_1)\right)}{-e^{\frac{B+2R}{2\lambda}} + e^{\frac{B+v}{\lambda}} + e^{\frac{2R+\theta}{\lambda}} - e^{\frac{B+2R+4\theta}{2\lambda}}}\right)\right),$$

$$\mathcal{P}(I) = 1 - \mathcal{P}(C).$$

The politician solves the same problem as in Equation (5). Applying the same steps as in Appendix B we obtain:

a) When the voter acquires information:

$$\theta = \min\Big(\frac{B}{2}, \max\Big(-\frac{B}{2}, A\Big)\Big),$$

where

$$A = \lambda \log \frac{-\sqrt{-(e^{\frac{B}{\lambda}} - e^{\frac{2R}{\lambda}})^2(-1+\mu(\omega_1))\mu(\omega_1)} + e^{\frac{B+2R}{2\lambda}}(-1+2\mu(\omega_1))}{e^{\frac{B}{\lambda}}(-1+\mu(\omega_1)) + e^{\frac{2R}{\lambda}}\mu(\omega_1)}.$$

b) When the voter does not acquire information:

- and $\mu(w_1) < 0.5$

$$\theta \in \Big[A, \min\Big(\frac{B}{2}, \lambda \log \frac{e^{\frac{-R}{\lambda}}(e^{\frac{B}{2\lambda}} + \sqrt{e^{\frac{B}{\lambda}} + 4e^{\frac{2R}{\lambda}}(-1+\mu(\omega_1))\mu(\omega_1)})}{2\mu(\omega_1)}\Big)\Big].$$

- and $\mu(w_1) > 0.5$

$$\theta \in \Big[\max\Big(-\frac{B}{2}, \lambda \log \frac{e^{\frac{-R}{\lambda}}(e^{\frac{B}{2\lambda}} - \sqrt{e^{\frac{B}{\lambda}} + 4e^{\frac{2R}{\lambda}}(-1+\mu(\omega_1))\mu(\omega_1)})}{2\mu(\omega_1)}\Big), A\Big].$$

Then, we use a numerical example and illustrate the solution for given parameters. Figure 8 presents the optimal choices of the political platform by the challenger. These platforms are similar to the one described in Section 3. Particularly, Figure 8 illustrates that when the challenger has enough political budget and uncertainty is low, he can propose multiple platforms that dissuade the voter from choosing him with certainty and not acquire information (Corollary 1); when the victory can not be guaranteed, the optimal allocation of the budget for the state weakly decreases with the probability of the state happening (Corollary 2); finally, when the prior belief is uninformative ($\mu(\omega)^* = 0.5$), even the slightest change in the likelihood of the state switches the optimal political platform from one extreme to another (Corollary 3). It also shows that when the challenger has a limited political budget his opportunities to dissuade the voter from acquiring less information are limited and, hence, he proposes an extreme political platform even when uncertainty is low (Corollary 4). Figure 10 show that the range of prior beliefs for which the challenger will be chosen blindly ($\mathcal{P}(C) = 1$) increases in λ (Corollary 5). Figure 9 shows that when the challenger is strong, then the lowest probability of him being elected is achieved for some interior cost of information $0 < \lambda < 0.5$. After that, the increase in the cost of information increases his probability of being elected. At the same time, when the challenger is weak, any increase in the cost of information decreases the probability that he is going to be elected (Proposition 3). Further, Figure 10 illustrates that the increase in uncertainty makes the challenger weak, and decreases his chances of being elected (Proposition 4).

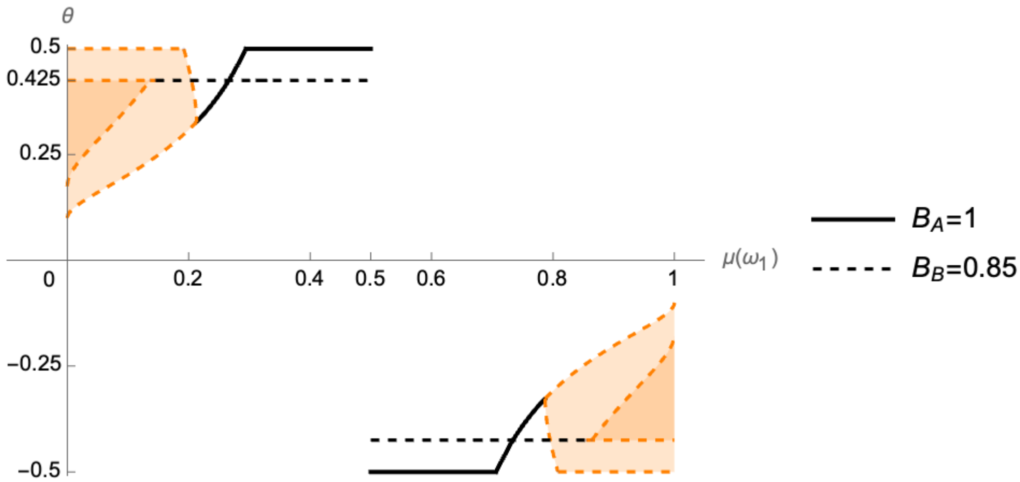


Figure 8: The challenger's optimal policy platform as a function of $\mu(\omega_1)$ for $B_A = 1$, $B_B = 0.85$ and $\lambda = 0.5$, $R = 0.6$. The light (for $B_A = 1$) and dark ($B_B = 0.85$) orange areas depict optimal θ's that dissuade the voter from acquiring any information.

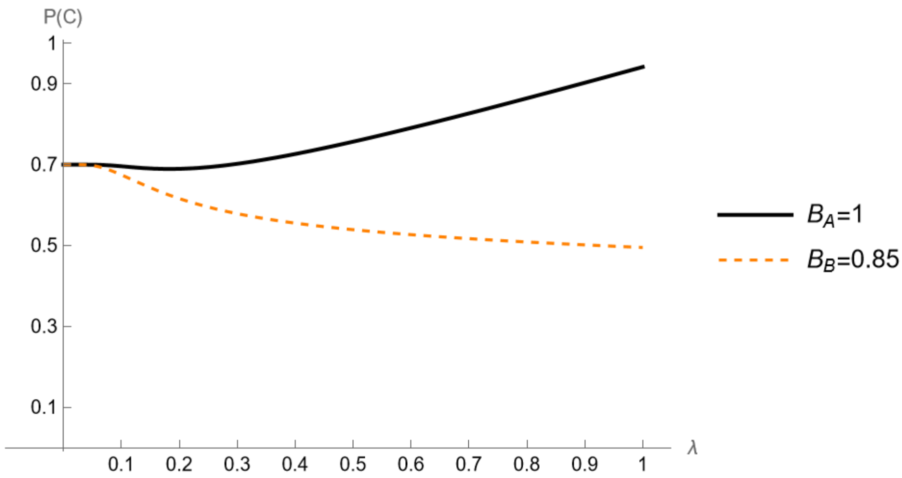


Figure 9: The unconditional probability of the challenger being selected by the voter as a function of λ for $B_A = 1,\ B_B = 0.85$ and $\mu(\omega_1) = 0.7,\ R = 0.6$.

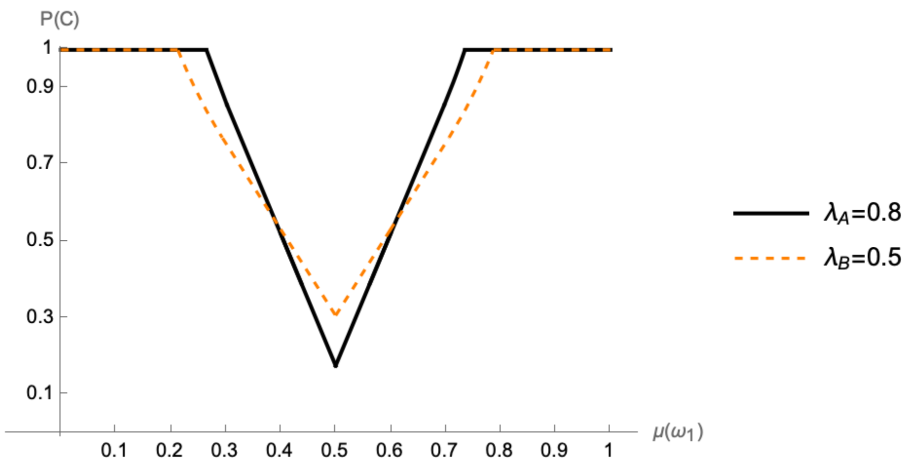


Figure 10: The unconditional probability of the challenger being selected by the voter as a function of $\mu(\omega_1)$ for $\lambda_A = 0.8,\ \lambda_B = 0.5$ and $B = 1,\ R = 0.6$.