

Can political gridlock undermine checks and balances? A lab experiment.

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Abstract

If checks and balances are aimed at protecting citizens from the government's abuse of power, why do they sometimes weaken them? We address this question in a laboratory experiment in which subjects choose between two decision rules: with and without checks and balances. Voters may prefer an unchecked executive if that enables a reform that, otherwise, is blocked by the legislature. Consistent with our predictions, we find that subjects are more likely to weaken checks and balances when there is political gridlock. However, subjects weaken the controls not only when the reform is beneficial but also when it is harmful.

Keywords: Political agency, separation of powers, checks and balances, lab experiment.

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*“In every region of the world,
changing times have boosted public demand
for more muscular, assertive leadership. (...)*
We’re now in the strongman era.”
Ian Bremmer TIME, May 2018.

1 Introduction

Episodes of weakening of checks and balances with citizens support represent a puzzle and a challenge for political economy. Although the general trend in last decades has been an increase in checks and balances, some developing democracies have experienced reverse trends (Besley and Persson 2011). This was the case of several Latin American countries during the 1990s and 2000s, Recep Erdoğan in Turkey, Viktor Orbán in Hungary, and Vladimir Putin in Russia (Acemoglu et al. 2013; Forteza and Pereyra 2019). If checks and balances are aimed at protecting citizens from governments abuse of power, why do citizens sometimes decide to remove them? In this paper, we build a model that explains citizens’ willingness to undermine controls on the executive, and present the results of a laboratory experiment to provide supportive evidence to our hypotheses.

We explore the idea that voters may support the loosening of checks and balances as a reaction to **political gridlock**. That is, to a situation where the executive proposes a reform and the legislature proposes to keep the status quo. In this environment, the basic trade-off voters face is between effective control of the executive and reform. Loosening controls facilitates the reform proposed by the executive but at the cost of increased corruption. Keeping the controls puts a break on corruption but at the cost of no reform.

We extend this argument with a model where voters have to decide between two institutional settings: **checks and balances** (*CB*), and **special powers** (*SP*). All voters have the same preferences over policies: they prefer the one that matches the state of nature. However, they do not observe the state of nature: they only know the probability with which a reform is beneficial. The executive and the legislature observe the state of nature and then propose and commit to a policy.¹ Each politician can be conservative (always proposes the status quo), reformist (always proposes the reform), or unbiased (proposes the policy to match the state of nature). Voters observe the type of the politicians in each branch and their proposals, and decide between *CB* and *SP*. Under *CB*, a reform is implemented if, and only if, both branches agree, otherwise the status quo remains. With *SP*, the policy proposed

¹We assume politicians credibly propose policies before voters decide over special powers. This timing is meant to capture real life episodes in which rulers demanded special powers to advance a reform program. In these episodes there was little doubt that the announced policies would be implemented, so there were no commitment issues. We represent this commitment ability assuming it stems from politicians types: some politicians prefer the status quo, some the reform and some the matching of the policy with the state of nature.

by the executive is always implemented. Additionally, the extraction of rents by the executive, which entails a cost for voters, takes place only under *SP*.

With the model in hand, we ask the question: does political gridlock increase the probability of *SP*? The answer depends on the nature of the political gridlock. On the one hand, political gridlock **raises** the probability of *SP* if either (i) the executive is reformist, the legislature is conservative and the reform is ex ante beneficial —this is our hypothesis 1 (H1)—, or (ii) the executive is unbiased and proposes reform, and the legislature is conservative (H2). On the other hand, political gridlock **reduces** the probability of *SP* if either (i) the executive is reformist, the legislature is conservative and the reform is ex ante harmful (H3), or (ii) the executive is reformist and the legislature is unbiased and proposes the status quo policy (H4).

Existing literature provides limited empirical evidence that political gridlock causes special powers. Using case studies, Forteza and Pereyra (2019) argue that several Latin American presidents weakened *CB* with strong popular support alleging that there was a political gridlock that impeded reform. The president of Peru, Alberto Fujimori, led an auto-coup in 1992. He argued that ‘the lack of identification of some fundamental institutions with the national interests, like the legislature and the judiciary, blocks the actions of the government oriented to national reconstruction and development’. Public opinion polls document the strong support he received (71% of respondents supported the closing of the legislature). In Argentina in the 90s, a very popular president, Carlos Menem, weakened the judiciary with similar arguments.² Hugo Chávez, president of Venezuela between 1999 and 2013, had an ambitious program of reforms. With strong popular support, he strengthened the executive power vis-à-vis the legislature and the judiciary. The weakening of *CB* was instrumental to advance his radical program. Rafael Correa, president of Ecuador between 2007 and 2017, also alleged that the strengthening of executive powers was necessary to advance reforms. Evo Morales, president of Bolivia between 2006 and 2019, also enjoyed strong popular support. In 2009 he obtained 61% of popular votes in a plebiscite to reform the Constitution. The reform included a significant strengthening of the powers of the Executive. These case studies are illustrative, but do not provide causal evidence. We thus appeal to a laboratory experiment.³

As voters in the model, participants of the experiment do **not** observe the state of nature, they only know the probability with which the reform is beneficial. They make decisions in 14 scenarios, which correspond to all possible combinations of the executive and legislature types and proposals. In each of them, subjects are informed of the policy proposals and politicians’ types. They have to (i) determine whether there is political gridlock and the policy implemented with each rule, and (ii) choose

²According to Menem’s minister of justice, ‘An administration . . . cannot govern with a judiciary whose views are antagonistic to those of the government. If the Court were to have a vision completely different from ours and to declare our laws unconstitutional, we could not implement our political and economic plans’ (Chavez 2004).

³In all of these cases, public opinion support was instrumental for the executive to obtain special powers. There have been, however, other cases where citizens were divided in support of the reforms (as is currently the case with the judicial reform in Israel). We are not considering these cases as we want to understand why citizens support the dismantling of checks and balances.

between *CB* and *SP*. We are especially interested in a scenario where the executive is reformist and the legislature is conservative. In this case, a political gridlock arises, and subjects are only aware that the reform is beneficial with a certain probability. Under checks and balances the executive cannot extract rents. In this regard, subjects are protected. However, this decision rule does not lead to any policy change. If subjects wish to implement a different policy, they must incur the costs associated with special powers. This is how we interpret the experiment in terms of our model.⁴

We find evidence supporting some but not all of our hypotheses. **Subjects are more likely to support the weakening of CB with than without political gridlock.** This occurs in the four scenarios of political gridlock, which grants support to H1 and H2 but not to H3 and H4. As expected, we find that political gridlock caused by biased politicians when the reform was ex ante beneficial raises the probability of *SP* (H1). Also, political gridlock with an unbiased executive raises the frequency of *SP* (H2). However, contradicting H3, subjects also grant *SP* in a higher proportion when faced with gridlock caused by biased politicians and the reform is ex ante harmful. Also, subjects grant *SP* more frequently when faced with gridlock where the legislature is unbiased and truthfully “warns” that the reform is not beneficial, contradicting H4.

Overall, the results of the experiment show an excess of support for *SP*. Participants undermine the controls on the executive even when this entails a loss in terms of their payoffs. We explore some possible factors driving this result. First, we explore if the excess of *SP* was driven by individuals who made more mistakes. We do not find statistically significant differences in the impact of the political gridlock associated with harmful reforms on the frequency of *SP*, chosen by subjects who did and did not make mistakes.⁵ Then, we replicate the analysis for the different variables and framing treatments: risk aversion, gender, political affiliation, support for strong leaders, and corruption and political framing. We do not find statistically significant differences in the excess of support for *SP* for these variables. However, as we discuss below, there could be power issues regarding these additional tests.

Finally, a motive for concern could be that our experiment induces the excess of *SP* by design. In each of the 14 scenarios where participants take decisions, we ask them if there is political gridlock. So we deliberately induced subjects to focus on it. However, we do it in a very mild way, much milder than what citizens in the real world are usually subject to. Indeed, executives suffering the blocking of their program by a legislature typically explicitly ask for special powers, and forcefully argue that the opposition does not allow them to do what has to be done (see Acemoglu et al. 2013; Forteza and

⁴In all but one of the treatments, the framing is neutral: the executive and the legislature were introduced as two decision-makers, checks and balances as rule 1, special powers as rule 2, and rents were explained as the cost of adopting rule 2. Nevertheless, we observe similar results in the treatment where we frame everything in terms of political decisions in a presidential system.

⁵In our setting, reforms can be ex-ante and ex-post harmful. Reforms are ex-ante harmful when both the executive and the legislature are biased and the probability that the reform is beneficial is low (this case corresponds to our hypothesis H3). Reforms are ex-post harmful when the executive is biased, the legislature is unbiased and warns that the reform is not beneficial (this case corresponds to our hypothesis H4).

Pereyra 2019, for some vivid narratives of this type of claims in the case of several strongmen in Latin America). In this regard, while our experiment does not directly explore the effects of rulers’ speeches on subjects willingness to support the weakening of checks and balances, it does show that subjects can easily be induced to do it by simply prompting them to think about political gridlocks.

Our paper is related to several strands of the literature. Citizens in our model and subjects in our experiment face a basic trade-off between political control and governmental delegation that is at the center of the extensive literature on separation of powers and checks and balances (see, among many others, Besley and Mueller 2018; Buisseret 2016; Fox and Van Weelden 2010; O’Donnell 1998; Persson et al. 1997, 2000; Stephenson and Nzelibe 2010).⁶ The main potential drawback of checks and balances in our environment is the impossibility of policy change caused by the legislative veto on executive proposals. In this regard, our paper also builds on the literature on “veto players” initiated by Tsebelis (see Aghion et al. 2004; Tommasi et al. 2014; Tsebelis 1995, among many others).

Our paper is also closely related to the recent literature aimed at explaining the weakening of democracy (Svolik 2020) and, more specifically, the weakening of checks and balances with voters support (Acemoglu et al. 2013; Forteza and Pereyra 2019; Ryvkin and Semykina 2017). Acemoglu et al. argue that the poor majority supports the dismantling of CB because politicians are less tempted to accept bribes from the rich elites if they can extract rents than if they cannot. Therefore, their story explains episodes in which voters support the weakening of CB under executives that favor the poor. But, in our view, it does not explain so well why equally popular politicians holding a pro-market agenda got the support of citizens to undermine these controls when the reform agenda was firmly supported by the elites. Our model can explain the loosening of CB that took place during both pro-market and anti-market reforms. Ryvkin and Semykina (2017) test a simplified version of Acemoglu et al. (2013) in a laboratory experiment. As in our design, subjects can shut down democracy through majority voting. They focus on the effect of inequality and productivity on the likelihood of democracy breakdown. Our paper complements Ryvkin and Semykina (2017) by analyzing the effect of political gridlock.

Finally, we owe much to the literature on experimental political economy. One of the main reasons to use a laboratory experiment as a tool to understand citizens’ decisions on the strengths of checks and balances lies in the difficulties of gathering observational data that allows for identifying causal relationships. Even when some data on checks on the executive is available for a set of countries (see, for example, the Polity IV index of executive constraints), it is more difficult to have reliable data on political gridlock, and, more importantly, it is very difficult to identify exogenous variation to test causal relationships.

The rest of the paper proceeds as follows. In Section 2 we present the model and the theoretical

⁶Classic writers also emphasized the role of checks and balances as a protection of minorities from “the tyranny of the majority” (Hamilton et al. 2009; Locke 2008; Secondat Montesquieu 1977). For recent papers that also discuss this theme see Aghion et al. (2004), Buchanan (1975), Buchanan, Tullock, et al. (1962), Hayek (2011), and Maskin and Tirole (2004).

predictions. Section 3 describes the experimental design. The results of the lab experiment are presented in Section 4. The paper ends with a few concluding remarks in Section 5. An online appendix contains the proofs of propositions, some descriptive statistics, balance tests, alternative Fisher tests, the experimental instructions, risk aversion measurement and the post-experimental questionnaire.

2 The model and theoretical predictions

In this section, we first introduce the model and then the main predictions to be tested.

2.1 The model

We use a probabilistic voting model to study voters' decision on executive special powers.

States of Nature There are two possible states of nature: $s = 0$ and $s = 1$. The a priori probability of $s = 1$ is $q \in [0, 1]$.

Government. There is a government composed of two branches, the executive (X) and the legislature (L). X and L observe the state of nature $s \in \{0, 1\}$, and make policy proposals $p_X, p_L \in \{0, 1\}$. For concreteness, we assume that the status quo policy is $p_0 = 0$. There are three types of politicians: (i) “conservative” (X_C, L_C) who always propose the status quo policy $p_i = 0, i \in \{X, L\}$, (ii) “reformist” (X_R, L_R) who always propose the reform $p_i = 1, i \in \{X, L\}$, and (iii) “unbiased” (X_U, L_U) who match the state of nature $p_i = s, i \in \{X, L\}$. Note that neither X nor L are strategic agents.⁷

Voters. Voters observe the politicians' types and their proposals. They **do not** observe the state of nature, they know q . Once they observe the type of each politician, and their proposals, voters choose one among two possible institutions that lead to different mappings from proposals to implemented policies: checks and balances (CB) and special powers (SP).

Institutional arrangements. With CB the implemented policy is equal to both branches proposals if there is agreement, and to the status quo policy otherwise. With SP , the will of the executive prevails. Equations (1) and Table 1 summarize how these two institutions work regarding policy p .

$$p(CB) = \begin{cases} p_X & \text{if } p_X = p_L \\ p_0 = 0 & \text{if } p_X \neq p_L \end{cases} \quad (1)$$

$$p(SP) = p_X$$

⁷Forteza and Pereyra (2019) present a model on similar lines and with strategic executive and legislature. The qualitative results regarding voters behavior are not different from what we find in the present simpler setting.

Table 1: From proposals to policies with CB and SP.

p_X	p_L	$p(CB)$	$p(SP)$
0	0	0	0
0	1	0	0
1	0	0	1
1	1	1	1

Rents. With CB , there is an effective control of the government and hence corruption does not arise ($r = 0$). With SP , the government extracts an amount of rents $r > 0$.

Preferences Citizens care about policies and rents. They prefer the policy that matches the state of nature, $p = s$, and no rent extraction. Their utility function is:

$$v(p, r) = -a\mathbb{E}_s [(p - s)^2] - r, \quad (2)$$

where the parameter $a \geq 0$ captures the relative weight citizens give to policy mismatch and rents.

Voter i expected utility gains from voting for CB rather than SP is:

$$v(CB) - v(SP) + \varepsilon_i$$

where $v(CB) = v(p(CB), r(CB))$, $v(SP) = v(p(SP), r(SP))$, $r(CB) = 0$, $r(SP) = r$, and $\varepsilon_i \in [-\infty, +\infty]$ is a random variable with mean 0, and distribution function F .⁸

The timing is as follows. First, X and L propose policies p_X and p_L . Second, voters decide whether or not to give X special powers. At this time, voters observe (i) X and L types, (ii) policy proposals of X and L , and (iii) the realization of their preference shock ε_i , but they **do not observe the state of nature**.

2.2 Predictions to be tested

Using the policy rules (1) in the utility function (2) we get:

$$v(CB) = \begin{cases} -a\mathbb{E}_s [(p_X - s)^2] & \text{if } p_X = p_L, \\ -a\mathbb{E}_s [(p_0 - s)^2] & \text{otherwise} \end{cases} \quad (3)$$

$$v(SP) = -a\mathbb{E}_s [(p_X - s)^2] - r$$

⁸ ε captures in a very stylized form voters' heterogeneity as well as the uncertainty that the analyst has about relevant citizens' traits, such as their preferences, attitudes, etc. The assumption is used in the tradition of random utility (McFadden 1975) and probabilistic voting models (Lindbeck and Weibull 1987). For a similar assumption in the context of a lab experiment on electoral accountability see Landa and Duell (2015).

Note that $v(SP) - v(CB) = -r$ if either $p_X = p_L$ or $p_X = 0$ and $p_L = 1$. The only remaining case is $p_X = 1$ and $p_L = 0$, that is, X proposes a policy change blocked by L , which we refer as **political gridlock**. If neither X nor L is unbiased, then voters have to rely on the prior probability q to compute the expected utility in the above equations. In this case we have: $v(SP) - v(CB) = -a[\mathbb{E}_s(1-s)^2 - \mathbb{E}_s(s^2)] - r = -a(1-2q) - r$. If at least one of the two rulers is unbiased, then voters can use Bayes rule to deduce the true state of nature from their policy proposals. Therefore, if X is unbiased $v(SP) - v(CB) = -r + a$, and if L is unbiased $v(SP) - v(CB) = -r - a$.

Using the previous observation and equations (3) we have that:

$$v(SP) - v(CB) = \begin{cases} -r - a(1-2q) & \text{if } X_R, L_C, \\ -r - a & \text{if } X_R, L_U, p_L = 0, \\ -r + a & \text{if } X_U, L_C, p_X = 1, \\ -r & \text{otherwise.} \end{cases} \quad (4)$$

We expect that i vote for SP iff $v(CB) - v(SP) + \varepsilon_i < 0$.⁹ Thus, the probability that citizen i votes for SP is:

$$Pr(SP) = Pr(\varepsilon_i < v(SP) - v(CB)) = F(v(SP) - v(CB)) \quad (5)$$

We can now derive several predictions of the model to be tested in the experiment.

In Proposition 1, we analyze the impact of political gridlock on the probability of SP . We show that, depending on the prevailing circumstances, political gridlock may raise or reduce the probability of SP and provide precise characterizations of these circumstances. In order to test the impact of political gridlock on the probability of SP , we use the benchmark of no political gridlock. This proposition provides our first four hypotheses: H1 to H4.

Proposition 1. *The effects of political gridlock.*

1. *Political gridlock (weakly) **raises** the probability of SP iff the gridlock occurs with*

- *H1: biased X and L (X_R and L_C) and the reform is ex ante beneficial ($q > 1/2$), or*
- *H2: unbiased X (X_U).*

2. *Political gridlock (weakly) **reduces** the probability of SP iff the gridlock occurs with*

- *H3: biased X and L (X_R and L_C) and the reform is ex ante harmful ($q \leq 1/2$), or*
- *H4: unbiased L (L_U).¹⁰*

⁹We assume voters prefer CB in case of indifference, so we use strict inequality.

¹⁰By “weakly raises” and “weakly reduces” we mean “does not reduce” and “does not raise”, respectively.

The next propositions study the effect of q and r on the probability of SP .

Proposition 2. *H5: The effects of q .*

The probability that voters grant SP is a non-decreasing function of the probability that the reform is beneficial for citizens iff the executive is reformist and the legislature is conservative. Otherwise, the probability of SP does not depend on the probability q .

Proposition 3. *H6: The effects of rents.*

The probability that voters grant SP is not increasing in the amount of rents.

The model is mute regarding the effect of the framing and of the previous exposure of subjects to political gridlock, but we were interested in exploring these conditions as well, given the political baggage the subjects may come with to the laboratory. As we explain in further detail below, in five of the seven treatments the framing is neutral, with X and L presented as two decision makers, and CB and SP as rule 1 and rule 2, respectively. Also in these treatments r is presented as the cost of rule 2. We conjectured that subjects might be less prone to granting SP if they were told that r are rents extracted by corrupt politicians rather than costs of the policy rule, even when their monetary gains were exactly the same with the corruption and neutral framing. Similarly, a political framing, that includes corruption plus the whole political wording, might have an impact on subjects willingness to grant SP . So we have the following additional hypotheses.

H7: The probability of SP is lower in the corruption than in the neutral framing.

H8: The probability of SP is lower in the political than in the neutral framing.

As we explain in detail in the next section, in the first part of the experiment where subjects are trained, they have to choose between CB and SP in ten different situations. We introduce variability in the frequency of political gridlock in the priming phase. The model predicts no impact of the history of political gridlock on subjects decisions. Indeed, if subjects understood the game perfectly and were rational, the history of stalemates in the priming phase should be irrelevant. However, subjects might behave differently depending on whether they were primed with frequent or infrequent political gridlock.

H9: Subjects exposed to a history of unfrequent political gridlock will be more willing to grant SP .

Notice that while H1 to H6 rest on the assumption that individuals maximize the utility function depicted in Equation (2), H7 to H9 depart from it.

2.3 Discussion

In this section, we make some remarks regarding the assumptions of the model, and based on these remarks we discuss some extensions.

Effectiveness of checks and balances. We assume that checks and balances are highly effective, implying zero rents when this mechanism is in place.¹¹ This assumption simplifies illustrating the mechanism we want to highlight and, more importantly, provides a lower bound on the weakening of checks and balances caused by political gridlock. Indeed, we show that voters are willing to grant special powers even when checks and balances are extremely effective in curbing rent extraction. This preference would be even more pronounced with less effective checks and balances.

Dynamic consequences of checks and balances. We consider costs linked to special powers within a single period. However, it is important to recognize that weakening checks and balances could have long-term consequences. Though we do not model these effects, the costs of rent extraction can be seen as a reduced form of the discounted expected costs of special powers. Future analysis might explicitly incorporate the decisions of voters and politicians in a dynamic model.

Accountability and the protection of minorities. Separation of powers and checks and balances serve two primary functions in modern representative democracies. Firstly, it controls deviations by elected officials, such as corruption or pursuing private agendas (see, among others, Forteza and Pereyra 2019; Persson et al. 1997, 2000; Stephenson and Nzelibe 2010). This “horizontal accountability” (O’Donnell 1998) or “internal control” (Besley and Mueller 2018) complements the “vertical accountability” or “external control” provided by elections. Secondly, separation of powers protects minorities against the “tyranny of the majority”. While this was emphasized by classical advocates of separation of powers (Locke, Montesquieu, Madison, Tocqueville) and is also emphasized in several highly influential modern papers (Aghion et al. 2004; Buchanan 1975; Buchanan, Tullock, et al. 1962; Hayek 2011; Maskin and Tirole 2004), our focus remains on scenarios where the protection of minorities is not a prominent concern (see Acemoglu et al. 2013; Forteza and Pereyra 2019, for a similar choice). Hence, in the present paper we abstract from this theme.

Strategic setting. In our model, we assume that both X and L are not strategic agents. A conservative (reformist) politician consistently proposes the status quo (reform), while an unbiased politician proposes policies aligned with the state of nature. This simplification allows us to concentrate on voters’ decisions. Nonetheless, extending the model to incorporate strategic behavior by X and L is feasible.

¹¹For this to be the case, the institutional design of separation of powers must guarantee appropriate opposition of interests (Persson et al. 1997, 2000).

In Forteza and Pereyra (2019), a conservative legislature supports the status quo, and an executive endogenously determines proposed policies. This strategic setup introduces endogenous policy proposals and strategic interaction between voters and politicians. In this setting, a reform is only possible when it is proposed by the executive, and voters grant special powers. The former occurs only when the executive is not strongly pro-status quo biased, and the latter when voters' expected gains from reform are larger than the costs of rent extraction.

In this extended setting, the choices of a politician j in the executive comes from the maximization of the following payoffs:

$$u_j = -(p - s - \delta_j)^2 + a_j r_X - b r_L,$$

where p is the implemented policy, s the state of nature, $\delta_j \in \mathbb{R}$ the bias of the politician, $a_j > 0$, r_X the rents extracted by the executive, $b > 0$, and r_L the rents extracted by the legislature. The key parameter in this setting is the bias of the politician in the executive, δ_j . For a sufficiently negative (positive) δ_j , the politician always proposes $p = 0$ ($p = 1$). For intermediate values, the policy proposal depends on the state of nature. The qualitative results of this model closely mirror those we presented earlier.

Commitment. We assume that politicians can commit to the policies they announce. As extensively discussed in Forteza and Pereyra (2019), it is possible to extend the model to study a situation where politicians cannot commit to their platforms. Although the results in this context depend on the bias of the executive, the qualitative results regarding the occurrence of special powers remain consistent with those we presented previously.

Elections. In the current model, we do not delve into the process of government election. When considering the identities of the politicians in the executive and legislature, one might question why the electorate would choose a conservative legislature and subsequently grant the executive special powers for further reforms. Would not it be preferable to avert political gridlock during elections? By doing so, voters could prevent gridlock without dismantling controls over the executive. In Forteza and Pereyra (2019), an equilibrium is demonstrated for intermediate values of q where voters opt for a reformist executive and a conservative legislature. In this equilibrium, voters refrain from granting the president the legislative majority required to implement their agenda. And yet they later vote for special powers with the added cost of rent extraction to advance the same proposed agenda. This behavior stems from the fact that, while voters only know that $s = 1$ occurs with probability q during the election period, they observe the realized state of nature at the time they have to decide between checks and balances and special powers.

3 Experimental design

The experiment implements the theoretical framework described above where subjects take the role of voters. As neither X nor L in our model are strategic agents, we design a decision making experiment without strategic interactions. Therefore, X and L in the experiment are not real subjects. There is no decision made by X and L as conservative, reformist, and unbiased types always propose $p = 0$, $p = 1$, and $p = s$, respectively, and these types are observed by subjects. This simplifies the decision environment, and allows us to focus on the impact of political gridlock on subjects' support to the loosening of checks and balances.

We have seven treatments, which vary based on the framing of the instructions and the combination of parameters in the model. As this is the first experimental design to address this question, we lack guidance regarding parameter values from previous studies. We simulated the theoretical model to choose a set of parameter values that should be detectable in our experiment, provided the variance of the preference parameter ε in the pool of subjects is not much higher than the variance assumed in the simulations. Table 2 summarizes the conditions that define each treatment (as well as the number of sessions conducted and the number of participants in each treatment).

Table 2: Treatments

Treatment	Rents	Probability reform is beneficial	Frequency of gridlock	Framing	# Sessions	#Subjects
1	$r_L < a$	q_H	0.3	neutral	2	26
2	$r_L < a$	q_L	0.2	neutral	1	16
3	$r_L < a$	q_H	0.6	neutral	4	40
4	$r_L < a$	q_L	0.6	neutral	5	49
5	$r_H > a$	q_H	0.6	neutral	7	46
6	$r_L < a$	q_H	0.6	corruption	5	33
7	$r_L < a$	q_H	0.6	political	6	33

Notes: r_H and r_L denote high and low rents, respectively. q_H , and q_L denote high and low probability of $s = 1$, respectively. In particular, we assume for the experiment the following values: $r_H = 96$, $r_L = 24$, $q_H = 0.9$, $q_L = 0.2$, and $a = 80$.

In the first five treatments, the framing is neutral: the executive and the legislature are introduced as two decision makers (X and L), CB are referred as “rule 1”, SP as “rule 2”, and rents are explained as the cost of adopting rule 2 (see Agranov and Palfrey 2015, 2020; Dal Bó et al. 2010; Ryvkin and Semykina 2017, for similar neutral wording). The cost of using rule 2 is low in the first four treatments,

and we vary the probability that the reform is beneficial and the frequency of gridlock in the priming phase. Treatment five has a high cost of implementing rule 2.

Treatment 6 has the same parameter combination as Treatment 3 with the difference that the cost of rule 2 is framed as the loss subjects have from corruption (the rents stolen by X). Only in Treatment 7 we frame everything in terms of political decisions in a presidential system: decision makers are the executive and the legislature, the subjects are citizens voting on checks on the executive, rules 1 and 2 are CB and SP , respectively, and the cost of special powers is corruption (see Leight et al. 2020, for a similar wording). These two treatments are introduced to understand how framing impacts politically-related decisions.

Each treatment is divided into three different stages, described in detail below.

Our experimental design allows us to make comparisons both between and within-subjects. The within-subject component of our design is aimed at reducing the variance of unobserved effects, increasing the precision of the estimation of treatment effects (List, Sadoff, et al. 2011).

3.1 Stage 1: Training + priming

In stage 1 of the experiment, subjects go through a training stage, where the decision making is explained and they face a series of scenarios they have to understand and respond to. Subjects face 10 different scenarios, each one consisting of two parts.

In the first part, subjects have to (i) predict policy proposals knowing politicians' types and the state of nature, (ii) tell whether there is political gridlock, and (iii) predict policies with and without SP . The answers to these questions are either correct or incorrect. This part is also both a learning and a priming phase, as different treatments expose subjects with different scenarios that have varying states of nature and types of politicians. For the purposes of both learning and incentivising subjects to correctly respond in each scenario, if subjects incorrectly answer the questions of a specific scenario (after four tries), the program automatically shows them the correct answers and allows them to move to the next part (and are penalized with a payment of 0 in that round).

In the second part of each scenario, subjects have to choose between CB and SP (or rule 1 or 2 depending on the treatment). For the purposes of decision-making, the decision screen gives subjects the opportunity to consult the cost associated to each rule (remember that the cost associated to rule 1 is 0 but for rule 2 the cost is positive).

At the end of this stage, subjects are asked about the frequency of political gridlock. They are presented with a question that ranges from 0 to 100 percent (in brackets of 10).

3.2 Stage 2: Uncertainty about the state of nature

The second stage is the relevant one to test the predictions of the model. Here, participants do not observe the state of nature. They only know the probability of $s = 1$ (i.e. q) and have to choose a rule based on this information. Subjects make decisions in 14 scenarios, each consisting of two parts.

In the first part, subjects are informed of the policy proposals and types of politicians, but not of the state of nature. Subjects have to answer: (i) whether there is political gridlock or not, and (ii) the policy implemented with each rule.¹² The answers to these questions are either correct or incorrect. If subjects incorrectly answer the questions of a specific scenario (after four tries), the program automatically shows them the correct answers and allows them to move to the next part (and are penalized with a payment of 0 for that scenario).

In the second part, subjects have to choose between CB and SP (or rule 1 or 2 depending on the treatment). For the purposes of decision-making, the decision screen gives subjects the opportunity to be reminded of the cost associated to each rule.

The 14 scenarios are all the possible consistent combinations of X and L types and proposals, and are common to all treatments. In Table 3, we present the characteristics associated with each of the 14 scenarios, and summarize the experimenter's rational expectation of citizens expected gains from SP in each treatment, i.e. $\mathbb{E}[v(SP) - v(CB) + \varepsilon_i] = v(SP) - v(CB)$.

¹²Notice that while we call players attention on the possibility that the legislature blocks a reform, we never tell subjects they benefit from granting SP . We do however, remind them in each case that choosing SP has a cost.

Table 3: Expected net gains from SP across treatments

Scenarios in Stage 2	Politicians types		Proposals		Expected net gains from SP in each treatment						
	X	L	p_X	p_L	1	2	3	4	5	6	7
1	Conservative	Conservative	0	0	-24	-24	-24	-24	-96	-24	-24
2	Conservative	Reformist	0	1	-24	-24	-24	-24	-96	-24	-24
3	Conservative	Unbiased	0	0	-24	-24	-24	-24	-96	-24	-24
4	Conservative	Unbiased	0	1	-24	-24	-24	-24	-96	-24	-24
5	Reformist	Conservative	1	0	40	-72	40	-72	-32	40	40
6	Reformist	Reformist	1	1	-24	-24	-24	-24	-96	-24	-24
7	Reformist	Unbiased	1	0	-104	-104	-104	-104	-176	-104	-104
8	Reformist	Unbiased	1	1	-24	-24	-24	-24	-96	-24	-24
9	Unbiased	Conservative	0	0	-24	-24	-24	-24	-96	-24	-24
10	Unbiased	Conservative	1	0	56	56	56	56	-16	56	56
11	Unbiased	Reformist	0	1	-24	-24	-24	-24	-96	-24	-24
12	Unbiased	Reformist	1	1	-24	-24	-24	-24	-96	-24	-24
13	Unbiased	Unbiased	0	0	-24	-24	-24	-24	-96	-24	-24
14	Unbiased	Unbiased	1	1	-24	-24	-24	-24	-96	-24	-24

Subjects might experience order effects —learning or getting tired— along the experiment. To avoid confounding the order and the treatment effects, experimenters sometimes randomize the order (List, Sadoff, et al. 2011). In our design we can control for order effects comparing the gridlock and non-gridlock rows that come both before and after the gridlock row. The effect of order can then be identified without randomizing the order of treatments. We have no evidence of such effects. Even though we did not perform a formal systematic analysis of order effects, we did check that our results are not sensitive to the inclusion of a control for the order of tasks in the experiment. We added a control for the order of the tasks in the experiment and found that (i) the coefficient of this control is not statistically different from zero and (ii) the coefficients that capture the impact of political gridlock on subjects decision to grant special powers did not change significantly after adding this new control.

3.3 Stage 3: Post-experimental survey

After the experiment is finished, subjects respond to a questionnaire. We capture a measure of individual risk aversion (or tolerance to risks) as well as demographic and socio-economic questions (age,

education, education of parents, gender), beliefs about different relevant topics, such as income distribution, competition, political leadership, and self-placement on an income scale. Most of the questions are taken from the world values survey (wvs), which facilitates the comparison of our sample with country wide survey results. To measure risk aversion, subjects are presented with a Multiple Price List (MPL) (Holt and Laury 2002). We use these variables as controls in our analysis, to account for the political and socio-economic baggage our subjects might come with into the lab. The questionnaire, including the risk aversion task can be found in the online Appendix (Section 7).

3.4 Experimental procedure

We conducted all experimental sessions in 2019, between August and October, at the Experimental Laboratory of the Faculty of Social Sciences at Universidad de la República, Uruguay. Participants were randomly assigned to one of seven treatments. Each session consisted of the same treatment. Instructions included a set of tables that explained how decision makers actions, proposals and the state of nature could be combined, as well as the payoffs for each combination. An example of those instructions can be found in the online Appendix (Section 5). Subjects were recruited using the online recruitment program ORSEE (Greiner 2015). We implemented the experiment using z-Tree (Fischbacher 2007). Questions before and during the experimental sessions were answered in private at the subject’s workspace by the experimenters.

We conducted 30 sessions, with a total of 243 subjects. No subject participated in more than one session. The experiment lasted, on average, 90 minutes, and subjects’ minimum and maximum earnings were equivalent to 3.5 and 15.4 American dollars, respectively.¹³ The final payment consists of one randomly selected decision for stage 1, one for stage 2 and one for Stage 3, plus a fee for filling out the post-experimental questionnaire and a reimbursement for transportation costs (the last two stages of the payment are in lieu of a show-up fee). The payments for stages 1 and 2 depend on the individual choices between rules 1 and 2, while the payment for Stage 3 depends on the option chosen by the individual in the selected row (A or B) and a random draw based on the probabilities of each potential outcome in the chosen option. The decisions selected for payment in Stages 1, 2 and 3 and the outcome draws for Stage 3 were randomly done by the computer during the experiment. As cash payments in experiments are not allowed in Uruguay, subjects were paid at the end of the experimental session, in private, with a gift card that could be used in one of the supermarkets in Uruguay with the largest number of branches.

¹³These earnings correspond to 130 and 568 Uruguayan pesos, respectively. The minimum wage in Uruguay in 2019 was 2 American dollars per hour.

4 Methods and Results

In this section, after a brief description of the methods, we present and discuss our results. Additionally, descriptive statistics of the results of the experiment, and an analysis of balance of some covariates between treatment arms can be found in sections 2 and 3 of the Appendix, respectively.

4.1 Hypothesis testing

We observe subjects binary choices over rules. Each subject is asked to choose between the two rules fourteen times, so the data has a panel structure with 14 periods. The characteristics of politicians and policy proposals varied across the fourteen periods, generating different environments or hypothetical situations, as indicated in Table 3. We exploit this longitudinal variation to study the impact of political gridlock on individuals choices in different environments.

To test our main hypotheses, we regress the binary variable SP on dummies that adopt value one when the conditions defining each hypothesis are fulfilled. Specifically, we run simple linear regressions of the following form:

$$SP_{it} = \sum_{k=1}^{k=9} \beta_k Hk_{it} + \beta_x x_{it} \quad (6)$$

where:

- $SP_{it} = 1$ if subject i chose rule 2 (SP) in period t , and zero otherwise;
- $Hk_{it} = 1$ if conditions that define hypothesis k are fulfilled in observation it , zero otherwise; and
- x_{it} is a set of controls described in Table 5.

Table 4 summarizes the conditions of the treatment and control groups in each of our nine main hypotheses.

We also explore differences in the response to political gridlock with harmful reforms among sub-groups of participants. To do that, we run the regression (7), where we interact the $H3_{it}$ and $H4_{it}$ variables with a set of dummy variables z that divide subjects along several dimensions, namely (i) whether the subject made mistakes in part 2, (ii) risk aversion, (iii) gender, (iv) ideological self identification, (v) preference for strong leader, and (vi) framing (corruption and political framing).¹⁴

$$SP_{it} = \sum_{k=3}^{k=4} \beta_{kz} Hk_{it} z_{it} + \sum_{k=3}^{k=4} \beta_k Hk_{it} + \beta_z z_{it} + \beta_x x_{it} \quad (7)$$

We run OLS regressions, and control for multiple hypotheses testing (mht) looking at Family-wise error rate (FWER) (Barsbai et al. 2020; List, Shaikh, et al. 2019) and False discovery rate (FDR) (An-

¹⁴See the note in Table 5 for a detailed description of these variables

derson 2008).¹⁵ The mht issue arises in our setting primarily due to the several arms of the experiment. It also arises in an exploratory analysis we conducted to study an unexpected result (see section 4.3). We do not have mht stemming from several outcomes or several estimators. In any case, as it is common practice, we also report the unadjusted p-values.

Random assignment of subjects to treatments minimizes the risk of confounding the impact of the treatment-defining characteristics with individual idiosyncratic preferences for rules (and other individual traits), and thus allows us to identify the impact of “time”-invariant treatments on the variable of interest.¹⁶ We cluster at subjects level to account for the fact that each subject plays several rounds.¹⁷

Table 4: Treatments and controls

Hypothesis	Treatment	Control
H1	$p_X = 1, p_L = 0, X_R, L_C, q > 0.5$	$p_X = 0 \ \& \ p_L = 0$ or $p_X = 0 \ \& \ p_L = 1$ or $p_X = 1 \ \& \ p_L = 1$
H2	$p_X = 1, p_L = 0, X_U$	$p_X = 0 \ \& \ p_L = 0$ or $p_X = 0 \ \& \ p_L = 1$ or $p_X = 1 \ \& \ p_L = 1$
H3	$p_X = 1, p_L = 0, X_R, L_C, q < 0.5$	$p_X = 0 \ \& \ p_L = 0$ or $p_X = 0 \ \& \ p_L = 1$ or $p_X = 1 \ \& \ p_L = 1$
H4	$p_X = 1, p_L = 0, L_U$	$p_X = 0 \ \& \ p_L = 0$ or $p_X = 0 \ \& \ p_L = 1$ or $p_X = 1 \ \& \ p_L = 1$
H5	$p_X = 1, p_L = 0, X_R, L_C, q > 0.5$	$p_X = 1, p_L = 0, X_R, L_C, q < 0.5$
H6	r_H	r_L
H7	$T = 6$ (corruption framing)	$T \neq 6$
H8	$T = 7$ (political framing)	$T \neq 7$
H9	$T \leq 2$	$T > 2$

As a robustness check, we also compute Fisher tests of differences in frequencies of SP between specific treatments that differed in one and only one dimension. This approach provides very clean comparisons of frequencies between treatments keeping all else equal, but at the cost of a dramatic drop in the number of observations in each test. While the Fisher test is appropriate with this type of data, the power is obviously smaller with the Fisher tests than with the regressions. In the next section, we present and discuss the results obtained with the regression analysis. The results obtained using Fisher tests are presented in the online Appendix (Section 4). The main results are the same with both approaches.

¹⁵FWER routines control the probability that there is one or more false rejections in the set of hypotheses. FDR routines focus on the frequency of false rejections. The former tends to be more conservative in the sense that it is usually less likely to reject H_0 with FWER than FDR routines, but this implies an increased probability of type II errors. McKenzie (2021) presents a very helpful overview of multiple hypothesis testing commands in STATA.

¹⁶Running panel fixed effect regressions with our data would impede the identification of these effects without adding consistency.

¹⁷We briefly comment below on the effects of clustering at session rather than individual level.

4.2 Main results

We summarize our main results in Table 5. The second column contains the difference in the frequency of *SP* under the treatment indicated in the first column and in the control group. These are our parameters of interest. The third to fifth columns present the p-values of these differences without and with mht adjustments. The last column contains the frequency of *SP* in the control groups. So, for example, introducing treatment H1 rose the frequency of *SP* by 31 percentage points from a baseline of 10.2 per cent.

The first four rows (H1 to H4) report the difference in frequencies of *SP* that are associated to political gridlock (the β_k coefficients in (6)). The control group is the set of decisions in which subjects were faced with no political gridlock.

As expected, in our experiment political gridlock caused by biased politicians raised the probability of *SP* when the reform was ex ante beneficial (H1). This type of gridlock caused a 31 percentage point rise in the frequency of political gridlock relative to the no gridlock case. Also, political gridlock caused by unbiased executives raised the frequency of *SP* by 49 percentage points (H2). These results are statistically highly significant at the usual significance levels.

Unexpectedly, subjects also granted *SP* in higher proportions when faced with gridlock caused by biased politicians even when the reform was ex ante harmful. This type of gridlock caused an almost 19 percentage point rise in the frequency of *SP*. This result contradicts our hypothesis 3.¹⁸ Also, subjects granted *SP* in higher proportions when faced with gridlock even when the legislature was unbiased and truthfully “warned” that the reform was not beneficial. This gridlock caused an almost 10 percentage point rise in the frequency of *SP*, contradicting our hypothesis 4. These effects are statistically significant at the usual significance levels (using the Barsbai et al mht-adjusted or the Anderson mht-adjusted p-values, H3 would not be statistically significant at 1 percent, but it would still be significant at 5 percent).

The picture that emerges from these results is thus only partially consistent with the predictions of our model: **subjects chose *SP* more frequently with than without political gridlock, but they did it even when the reform was ex ante harmful.** It is worth mentioning that these unexpected results seem not to be driven by subjects’ misunderstanding of the problem. Indeed, individuals learned in the priming phase, as the number of attempts needed to respond correctly the right-wrong type of questions gradually reduced along this phase. Almost 88 per cent of answers were correct on the first decision of the second stage of the experiment, suggesting that subjects understood the basics of the experiment quite well. These findings suggest that excess of special powers cannot be explained by lack of understanding of the game.

¹⁸Clustering at session rather than individual level, and using mht adjusted p-values, this coefficient became not significant at conventional levels. Other qualitative results did not change.

Table 5: Hypothesis testing: the impact of treatments on the frequency of SP .

Difference		p-values			Control
		Unadjusted	mht adjusted		mean
			Barsbai et al.	Anderson	
H1	0.310	0.000	0.000	0.003	0.102
H2	0.490	0.000	0.000	0.003	0.102
H3	0.187	0.003	0.041	0.013	0.102
H4	0.097	0.000	0.000	0.003	0.102
H5	0.098	0.187	0.945	0.531	0.347
H6	-0.072	0.053	0.570	0.165	0.179
H7	-0.029	0.423	0.995	0.944	0.168
H8	-0.063	0.018	0.250	0.064	0.172
H9	0.029	0.494	0.994	0.944	0.161

Notes: Number of observations = 3038. Added controls are: (i) mistakes (dummy variable indicating whether the individual needed to make more than one attempt to answer the correct-incorrect questions), (ii) risk averse (dummy variable indicating whether the individual is risk averse measured using a multiple price list, see Holt and Laury, 2002), (iii) female dummy, (iv) right wing dummy (= 1 if the individual ideological self identification lies to the right of the median in the experiment), (v) strong leader dummy (= 1 if the subject chose good or very good to the question regarding the convenience of having a strong leader), (vi) corruption dummy (= 1 in the treatment in which costs of rule 2 were presented as corruption), and (vii) political framing dummy (= 1 in the treatment in which the exercise was presented in political terms). Some of these are control variables in the testing of one or more hypotheses, and the treatment variable in the testing of another hypothesis. This is the case, for example, of the political framing dummy, which is the treatment variable in H8. As a robustness check, we ran the same regression substituting the tenor for the two-point scale estimates for risk aversion and ideological self-identification and obtained the same results.

In the fifth row of Table 5 we present a test of H5. According to this hypothesis, voters willingness to grant *SP* in the presence of political gridlock caused by biased politicians is increasing (more precisely, not decreasing) in the probability that the reform is beneficial. We set this probability at 0.2 and 0.9 in the control and treatment groups, respectively. The observed frequency of *SP* in the control group was 34.7 percent. The treatment caused a 9.8 percentage point rise in the estimated frequency of *SP*. While this represents a 28 percent increase relative to the control, it is not statistically significant.

Hypothesis H6 says that subjects willingness to grant *SP* is not increasing in the amount of rents the executive can extract. The difference between rents in the control and treatment groups was set at about 13 percent of the maximum payoff subjects could obtain in the whole experiment. High rents induced lower frequency of *SP* in more than 7 percentage points, on average. The estimated effect looks “large”, compared to the control mean of 17.9 percent, but the estimation is imprecise and we cannot reject the null of no effects.

Subjects were on average less willing to grant *SP* in the corruption (H7) and political (H8) framing treatments than in the control group, but the differences are not statistically significant at 5 percent according to the Barsbai et al mht- and the Anderson mht-adjusted pvalues.

Finally, exposing subjects to a low frequency of political gridlock in the priming phase caused an almost 3 percentage point increase in the frequency of *SP*, but this effect is not statistically significant at the usual significance levels.

4.3 Excess of special powers

Our experiment was designed to study how actual subjects deal with the trade-off between delegation and control. We showed that, as expected, subjects were willing to loosen control to facilitate reform, but they overreacted: they weakened checks and balances even when the reform in the government agenda was not beneficial, given that there is a cost of granting *SP*. In this sense, voters were excessively willing to grant special powers or, in short, there is an excess of special powers in our results. In this section we revise some possible factors that might be driving this unexpected result.

In Table 6, we present estimations of the differences among subgroups of subjects in the response to the two type of political gridlock that caused excess of *SP*, based on equation 7. Notice these are differences in differences, and the control mean is the average response to political gridlock —i.e. the difference in the frequency of *SP* with and without gridlock— in the control group.¹⁹

Mistakes. We first explore whether the excess of *SP* was driven by individuals who made more mistakes, i.e. individuals who had a poorer understanding of the tasks. To explore this possibility, we

¹⁹The results in Table 6 in the column entitled ‘Control mean’ are estimations of $\beta_k = \mathbb{E}[SP_i|Hj = 1, z = 0] - \mathbb{E}[SP_i|Hj = 0, z = 0]$ and in the column entitled ‘Difference’ are estimations of $\beta_{kz} = [\mathbb{E}[SP_i|Hj = 1, z = 1] - \mathbb{E}[SP_i|Hj = 0, z = 1]] - [\mathbb{E}[SP_i|Hj = 1, z = 0] - \mathbb{E}[SP_i|Hj = 0, z = 0]]$, $j \in \{3, 4\}$.

Table 6: Excess of special powers.

	Difference	p values			Control
		Unadjusted	Multiple hyp. testing adjusted		mean
			Barsbai et al	Anderson	
H3*mistakes	0.017	0.907	1.000	1.000	0.212
H4*mistakes	-0.065	0.443	0.994	0.944	0.107
H3*risk averse	0.016	0.922	0.995	1.000	0.204
H4*risk averse	-0.017	0.834	1.000	1.000	0.112
H3*female	0.136	0.236	0.957	0.547	0.147
H4*female	-0.001	0.987	0.987	1.000	0.096
H3*right wing	-0.102	0.374	0.994	0.944	0.264
H4*right wing	-0.022	0.686	1.000	1.000	0.108
H3*strong leader	-0.183	0.208	0.944	0.531	0.250
H4*strong leader	0.012	0.858	1.000	1.000	0.094
H4*corruption	0.100	0.188	0.933	0.531	0.081
H4*political framing	-0.013	0.876	1.000	1.000	0.093

See footnotes in table 5.

take advantage of a recorded registry of mistakes committed by subjects in the experiment.

We do not find statistically significant differences in the impact of political gridlock with harmful reforms on the frequency of *SP* chosen by subjects who did and did not make mistakes (rows 1 and 2 in Table 6). When confronted with political gridlock caused by biased politicians and harmful reforms, subjects who did and did not make mistakes raised the frequency of *SP* by about 0.231 and 0.212, respectively, so the difference in response is in the order of 0.017, which is not statistically significant (see the first row of Table 6). Similarly, the difference in the response to political gridlock with an unbiased legislature was not significantly different from zero.

Risk aversion. More than 82 per cent of subjects in our experiment were risk averse. They were on average less willing to grant *SP* (0.13) than other subjects (0.31). However, we do not find statistically significant differences in the frequency of *SP* between risk averse and other subjects in the presence of political gridlock with harmful reforms or with an unbiased legislature (rows 3 and 4 in Table 6, respectively).

Female. Women were on average more willing to grant *SP* than men (first row in Table 9 in the online Appendix), but they were not statistically significantly more responsive to political gridlock with harmful reforms than men.

Right wing. Subjects to the right of the median self-identification in the left-right ideological line were on average more willing to grant *SP* than subjects to the left (row 8 in Table 8 in the online Appendix). The reverse was true in the environment of political gridlock with harmful reforms, but the differences are not statistically significant (rows 7 and 8 in Table 6).

Strong leader. As expected, subjects who said that having a strong leader who disregards the congress and elections was good or very good, granted *SP* more frequently than subjects who did not support that claim. However, we cannot reject that their response to political gridlock with harmful reforms is the same as of other subjects.

Corruption and political framing. Framing the cost of *SP* as corruption and the whole environment in political terms did not cause statistically significant changes in the response to gridlock with unbiased legislatures.²⁰

A limitation we faced in the analysis of factors driving excess of *SP* was lack of power. For example, we only have 12 observations with the conditions of H3 and more than one check of the correct-incorrect

²⁰The experiment did not include treatments with corruption and political framing and a low probability that the reform is beneficial. Hence, we have no data to compute the impact of corruption and political framing on the response to gridlock with biased politicians and harmful reforms (H3).

answers, and this is far from the minimum number of observations needed to test a difference in proportions lower than 2 percent. In this environment, the frequency of *SP* was 0.212 among subjects who provided the correct answers at the first attempt, and 0.229 among subjects who needed more attempts. More than seven thousand subjects per group would be necessary to significantly detect this difference in proportions. This lack of statistical power is a direct consequence of the unexpected nature of the excess of special powers. Being this result totally unexpected, we did not design the experiment to test specific hypotheses regarding factors driving this result. Our analysis in this section is thus exploratory.

5 Concluding remarks

In this paper we present the results of a lab experiment in which subjects were asked to choose between two rules that resemble checks and balances and executive special powers. Under checks and balances, the legislature can block a reform proposed by the executive. Under special powers, the will of the executive prevails, so there is no political gridlock.

As expected, political gridlock emerged as an important driver of special powers. Subjects in the experiment were very willing to grant special powers in the presence of political gridlock, and they did it not only when the reform was beneficial but also when it was harmful. In this sense, there was an excess of special powers caused by political gridlock in our experiment.

The excess of special powers arose in two cases. First, when both politicians are biased —so no information can be elicited from their proposals— and the reform is *ex ante* harmful. Second, when an unbiased legislature proposes the status quo policy and a biased executive proposes reform.

In the first case, the probability that the reform matched the state of nature was only 20 percent and politicians proposals were not informative, so there should have been little doubt that granting special powers would most likely bring bad outcomes. And yet, many subjects voted for it. In the second case, subjects may have failed to realize that the legislature was revealing the true state of nature. However, in the symmetric case in which the executive was unbiased, subjects seem to have responded voting for special powers in higher proportions. So it does not seem to be the case that subjects totally failed to realize that unbiased politicians' proposals conveyed valuable information.

The results in this paper show how fragile checks and balances can be. It is enough in our experiment to ask subjects to report whether a reform proposed by the executive is being blocked by the legislature to induce them to vote for the weakening of checks and balances even when the reform is harmful. While we did not expect this result, we think it resembles many real world cases in which strong leaders convinced citizens to grant them special powers arguing the opposition was blocking much needed reforms. Because we did not anticipate the excess of special powers though, our design is not specially suited to study this deviation from optimal behaviour. Our experiment does provide a clear answer to

the question of why voters weaken checks and balances: to remove a political gridlock. But not always removing a gridlock is beneficial and we cannot say when or why the executive succeeds in making this case. We did not have enough statistical power to test heterogeneity in excess of SP among subgroups of subjects. Nevertheless, the analysis in this paper provides some guidance for future lines of research on this important topic. In particular, once we know that participants may grant SP in excess, we can design an experiment with two branches comparing the frequency of SP with and without an explicit argument that removing CB facilitates reform.

Finally, in the model and the experiment, we assume that politicians can commit to the policies they announce. This assumption allows us to focus on voters' behaviors. The interaction between commitment and the prevalence of special powers is an interesting topic for future research. Although Forteza and Pereyra (2019) present some theoretical advances in this direction, it would be interesting to incorporate a situation without commitment in the experimental design.

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Online Appendix (not for publication)

1 Proofs of the propositions

Proof of Proposition 1. Political gridlock may arise under three different configurations of politicians types, corresponding to the three first lines in equation (4). There is no gridlock under any other circumstances. Let $Pr(SP|gr)$ and $Pr(SP|No-gr)$ represent the probabilities of SP with and without political gridlock, respectively. Then, using equations (4) and (5) we have that:²¹

$$Pr(SP|gr) - Pr(SP|No-gr) = \begin{cases} F(-r - a(1 - 2q)) - F(-r) & \text{if } X_R, L_C, \\ F(-r + a) - F(-r) \geq 0 & \text{if } X_U, L_C, p_X = 1, \\ F(-r - a) - F(-r) \leq 0 & \text{if } X_R, L_U, p_L = 0. \end{cases} \quad (8)$$

If the gridlock occurs with X_R and L_C , then the probability of SP is greater with than without political gridlock iff $q > 1/2$ (first line in equation (8)). If the gridlock occurs with X_U , L_C and $p_X = 1$, then the probability of SP is greater with than without political gridlock (second line in Equation (8)). If the gridlock occurs with X_R , L_U and $p_L = 0$, then the probability of SP is lower with than without political gridlock (third line in equation (8)). $\square$

Proof of proposition 2. Equation (4) implies that $v(SP) - v(CB)$ is an increasing function of q , if X_R, L_C , and does not depend on q otherwise. Equation (5) says that $Pr(SP)$ is a non decreasing function of $v(SP) - v(CB)$. $\square$

Proof of proposition 3. The hypothesis follows directly from equations (4) and (5). $\square$

2 Descriptive statistics

Who are the subjects? We recruited 243 students from different faculties of the Universidad de la República, Uruguay. In Table 7, we summarize some characteristics and beliefs of this group of subjects and the country population, using our questionnaire and the results of the 2011 world values survey for Uruguay .

Our population is more feminized than the wvs sample (63 and 53 percent female, respectively). Sixty percent grew up in Montevideo,²² the capital city, where about 39 percent of the country population lives. About 36 and 43 percent of their fathers and mothers, respectively, attended the university. Almost two thirds went to public primary and secondary schools. The percentage of subjects who think their income is above the country median is 46 in our experiment and 26 in the wvs sample.

²¹As we mentioned before, when there is no political gridlock, $v(CB) - v(SP) = r$. Then voters support SP iff $\varepsilon_{it} < -r$.

²²More precisely, this is the percentage of the subjects responding they lived in Montevideo at the age of 10

What do they believe politically? Not surprisingly, beliefs are not alike in our convenience sample of university students and the Uruguayan population.²³ Based on self ideological identification, our subjects tend to be more left-wing than the average population. Accordingly, they show less support than the wvs respondents to assertions such that “we need larger income differences as incentives for individual effort”, “people should take more responsibility to provide for themselves” and it is good or very good to have a “strong leader who does not have to bother with Congress and elections”. Our subjects also provided stronger support than wvs respondents to the assertion that “government ownership of business and industry should be increased”. However, they show weaker support to the idea that “competition is harmful” and stronger support to the assertion that it is good “having experts, not government, make decisions according to what they think is best for the country”.

How did they decide in our experiment? In Table 8 we present the proportion of cases in which several subgroups of subjects chose *SP* rather than checks and balances. We obtained stronger support for *SP* among females than males, and subjects whose parents did not have tertiary education. The frequency of *SP* was higher among right- than left-wing self-identified participants, supporters of strong leaders and military government. It was lower among supporters of democratic government and individuals more interested in politics.

²³Recall we posed the same questions as the wvs. There are however some differences worth mentioning. First, the questionnaire is administered by an interviewer in the wvs and self-administered —i.e. the questions are presented in the screen of the computer— in our experiment. Second, the interviewer in the wvs receives the following instruction: “NOTE: Code but do not read out— here and throughout the interview: 1. Don’t know; 2. No answer; and 3. Not applicable”. Subjects in our experiment were allowed to skip a question, but we cannot distinguish the three options considered in the wvs protocol. We have no direct evidence on the impact that the different way of administering the survey may have had on responses. The percentage of answers in the lab was extremely high. Leaving aside 20 questionnaires entirely lost due to a software manipulation failure (with 223 questionnaires processed correctly), no question received less than 98.6 percent of answers.

Table 7: Descriptive statistics 1: some characteristics and beliefs of participants.

	Lab		WVS Uruguay		Definitions
	mean	sd	mean	sd	
CHARACTERISTICS					
Female	0.63	0.48	0.53	0.50	= 0, if male; = 1 if female.
Montevideo	0.60	0.49			= 1, if raised in Montevideo (capital city); = 0 otherwise.
Parents with tertiary education					
Father	0.36	0.48			= 0, if no; = 1 if yes, even if incomplete.
Mother	0.43	0.50			= 0, if no; = 1 if yes, even if incomplete.
Public Education					
Primary	0.64	0.48			= 0, if no; = 1 if yes.
High school	0.64	0.48			= 0, if no; = 1 if yes.
Income percentile (self perception)					
Ten-point scale	5.32	1.81	4.50	1.81	= 1, if poorest; . . . ; = 10, if richest decile.
Two-point scale	0.46	0.50	0.26	0.44	= 0, if deciles 1 to 5; = 1, otherwise.
BELIEFS					
Left- to right-wing					
Ten-point scale	3.68	2.31	4.68	2.49	= 0, if left; . . . ; =10 if right.
Two-point scale	0.19	0.39	0.28	0.45	= 0, if points 1 to 5 in the 10-point scale; = 1, otherwise.
We need larger income differences					
Ten-point scale	3.67	2.52	5.11	2.92	= 1, if more equal is better; . . . ; = 10, if larger differences are needed.
Two-point scale	0.22	0.41	0.40	0.49	= 0, if points 1 to 5 in the 10-point scale; = 1, otherwise.
Raise government ownership					
Ten-point scale	6.43	2.60	5.56	2.62	= 1, if private. . . ; . . . ; = 10, if government ownership should be increased.
Two-point scale	0.65	0.48	0.43	0.50	= 0, if points 1 to 5 in the 10-point scale; = 1, otherwise.
People take more responsibility					
Ten-point scale	3.79	2.60	5.07	3.04	= 1, if government. . . ; . . . ; = 10, people should take more responsibility.
Two-point scale	0.23	0.42	0.38	0.49	= 0, if points 1 to 5 in the 10-point scale; = 1, otherwise.
Competition is harmful					
Ten-point scale	4.63	2.64	5.04	2.90	= 1, if competition is good; . . . ; = 10, if competition is harmful.
Two-point scale	0.31	0.46	0.37	0.48	= 0, if points 1 to 5 in the 10-point scale; = 1, otherwise.
Luck and contacts					
Ten-point scale	5.54	2.84	5.48	2.89	= 1, if hard work brings a better life; . . . ; = 10, if it's luck and connections.
Two-point scale	0.48	0.50	0.44	0.50	= 0, if points 1 to 5 in the 10-point scale; = 1, otherwise.
Interested in politics	0.90	0.30	0.31	0.46	= 0, if not at all or not very interested; = 1, if somewhat or very interested in politics.
Strong leader	0.24	0.43	0.39	0.49	= 0, if very or fairly bad; = 1, if fairly or very good.
Experts rather than government	0.56	0.50	0.48	0.50	= 0, if very or fairly bad; = 1, if fairly or very good.
Military government	0.04	0.20	0.09	0.29	= 0, if very or fairly bad; = 1, if fairly or very good.
Democratic government	0.98	0.13	0.95	0.22	= 0, if very or fairly bad; = 1, if fairly or very good.

Source: Own computations based on experiment and the World Values Survey.

Table 8: Descriptive statistics 2: frequency of *SP*.

Gender		Raise government ownership	
Male	0.14	1 to 5	0.15
Female	0.18	6 to 10	0.16
Department		People take more responsibility	
Montevideo	0.16	1 to 5	0.17
Other	0.17	6 to 10	0.13
Father's Education Level		Competition is harmful	
Non tertiary	0.17	1 to 5	0.15
Tertiary	0.15	6 to 10	0.19
Mother's Education Level		Luck and contacts	
Non tertiary	0.19	1 to 5	0.17
Tertiary	0.13	6 to 10	0.16
Primary Education		Interest in politics	
Private	0.18	Not at all or not very interested	0.14
Public	0.15	Somewhat or very interested	0.17
High School Education		Strong leader	
Private	0.15	Very or fairly bad	0.16
Public	0.17	Fairly or very good	0.20
Income decile (self perception)		Experts rather than government	
1 to 5	0.17	Very or fairly bad	0.17
6 to 10	0.16	Fairly or very good	0.16
Left- to right-wing		Military government	
1 to 5	0.15	Very or fairly bad	0.15
6 to 10	0.24	Fairly or very good	0.44
We need larger income differences		Democratic government	
1 to 5	0.17	Very or fairly bad	0.20
6 to 10	0.16	Fairly or very good	0.16

Source: Own computations based on experiment and the World Values Survey.

3 Balance of covariates between treatment arms

In tables 9 and 10, we present an analysis of balance of some covariates between treatment arms.

We compare the frequencies of female, subjects aged 19 and less, subjects having attended private primary and secondary school, and subjects whose parents have some university education (even if not necessarily finished).²⁴

We do not estimate balance for hypotheses 2 and 4 because these are perfectly balanced by design. Indeed, these hypotheses are tested using only within-subjects comparisons and hence the treated and control groups include exactly the same subjects. The other hypotheses are tested using between- or between- and within-subjects comparisons and hence a balance of covariates can be performed.

²⁴We do not have finer individual data because of a concern raised by the ethics committee about the anonymity of subjects.

Table 9: Balance testing.

	Treated	Control	P-values
h1			
Female	0.682	0.631	0.246
Aged 19 and less	0.191	0.207	0.694
Private primary school	0.363	0.365	1.000
Private high school	0.353	0.362	0.868
Father attended university	0.389	0.360	0.507
Mother attended university	0.465	0.432	0.469
h3			
Female	0.508	0.631	0.054
Aged 19 and less	0.246	0.207	0.446
Private primary school	0.369	0.365	1.000
Private high school	0.385	0.362	0.701
Father attended university	0.292	0.360	0.302
Mother attended university	0.354	0.432	0.259
h5			
Female	0.682	0.508	0.215
Aged 19 and less	0.191	0.246	0.694
Private primary school	0.363	0.369	1.000
Private high school	0.353	0.385	0.868
Father attended university	0.389	0.292	0.456
Mother attended university	0.465	0.354	0.421
h6			
Female	0.674	0.619	0.647
Aged 19 and less	0.239	0.199	0.586
Private primary school	0.326	0.375	0.648
Private high school	0.283	0.383	0.287
Father attended university	0.196	0.403	0.021
Mother attended university	0.413	0.438	0.882

Columns 1 and 2 contain the proportions of individuals satisfying the condition described in the row name in the treated and control groups. Column 3 contains the P-values for two-tail Fisher tests for the null hypotheses that the proportions are the same in treated and control groups.

Table 10: Balance testing.

	Treated	Control	P-values
h7			
Female	0.727	0.614	0.283
Aged 19 and less	0.152	0.217	0.524
Private primary school	0.333	0.370	0.857
Private high school	0.303	0.372	0.588
Father attended university	0.455	0.344	0.279
Mother attended university	0.333	0.450	0.294
h8			
Female	0.679	0.624	0.698
Aged 19 and less	0.143	0.216	0.492
Private primary school	0.536	0.340	0.076
Private high school	0.500	0.342	0.167
Father attended university	0.464	0.345	0.325
Mother attended university	0.679	0.397	0.012
h9			
Female	0.538	0.643	0.417
Aged 19 and less	0.346	0.189	0.090
Private primary school	0.385	0.362	0.841
Private high school	0.385	0.359	0.840
Father attended university	0.192	0.383	0.100
Mother attended university	0.385	0.439	0.695

Columns 1 and 2 contain the proportions of individuals satisfying the condition described in the row name in the treated and control groups. Column 3 contains the P-values for two-tail Fisher tests for the null hypotheses that the proportions are the same in treated and control groups.

Most of the covariates are balanced. We find differences significant at 5 per cent for the proportion of subjects whose father attended the university in testing hypotheses 6 and 8, and the proportion of mothers who attended the university in testing hypotheses 9. None is significant at 1 per cent. We interpret these “findings” as the result of chance.

Following recommendations by Deaton and Cartwright (2018) and, more forcefully, Mutz et al. (2019), we did not modify our estimation procedures based on balance testing.²⁵

4 Fisher tests

Table 11: Frequency of special powers with ex-ante beneficial and harmful reforms.

Political gridlock status	Reform is ex ante...		
	Beneficial	Harmful	
No gridlock	0,08	0,12	(0,376)
Gridlock with ...			
reformist X and conservative L	0,50	0,33	(0,897)
	(0,004)	(0,066)	
unbiased X and conservative L	0,77	0,73	(0,685)
	(0,000)	(0,000)	
reformist X and unbiased L	0,20	0,27	(0,366)
	(0,176)	(0,140)	
Number of subjects	40	49	
Number of observations	80	98	

Notes: Data from treatments 3 and 4, corresponding to ex ante beneficial and harmful reforms, respectively. Under the heading “No gridlock”, we report results obtained with conservative X and L. The heading “Gridlock with reformist X and conservative L” is self explanatory. Under the heading “Gridlock with unbiased X and conservative L”, we report results with a unbiased X proposing reform and a conservative L. Under the heading “Gridlock with reformist X and unbiased L”, we report results with a reformist X and a unbiased L proposing the status quo policy. Below each frequency with political gridlock, we report the one-sided p-value of a Fisher test of difference in proportions in which the null is that the observed frequency is equal to the baseline presented in the no gridlock case and the alternative is that the frequency with gridlock is higher or lower than the baseline, depending on the model’s prediction in each condition. In the third column, we report the one-sided p-values of Fisher tests of differences of proportions in which the null is that the probability of *SP* is lower than or equal to in the ex ante harmful than in the beneficial reform environment and the alternative is that it is higher in the ex ante harmful reform environment. Source: Own computations based on experimental data.

²⁵Mutz et al. (2019) conclude that “Our central conclusion is that there is no statistical basis for advocating the Balance Test & Adjust procedure for analyzing randomized experiments. Although balance testing is widely advocated and is believed to produce more credible estimates of experimental effects, posthoc adjustments using covariates selected on the basis of failed balance tests have no basis in statistical theory. Covariates that are chosen after an experiment is conducted should produce greater rather than lesser skepticism about the results.”

Table 12: Frequency of special powers with low and high rents

Political gridlock status	Rents are . . .		
	Low	High	p-value
No gridlock	0,08	0,09	0,681
Gridlock with . . .			
reformist X and conservative L	0,50	0,13	0,006
unbiased X and conservative L	0,77	0,24	0,000
reformist X and unbiased L	0,20	0,09	0,212
Number of subjects	40	46	

Notes: Data from treatments 3 and 5, corresponding to low and high rents, respectively. Under the heading “No gridlock”, we report results obtained with conservative X and L. The heading “Gridlock with reformist X and conservative L” is self explanatory. Under the heading “Gridlock with unbiased X and conservative L”, we report results with a unbiased X proposing reform and a conservative L. Under the heading “Gridlock with reformist X and unbiased L”, we report results with a reformist X and a unbiased L proposing the status quo policy. In the third column we report the one-sided p-value of a Fisher test of difference in proportions in which the null is that the observed frequency is the same regardless of rents and the alternative is that the frequency is lower with high than low rents.

Source: Own computations based on experimental data.

Table 13: Frequency of special powers: the impact of framing

	Framing is ...				
	Neutral	Corruption	p-value	Political	p-value
	(1)	(2)	(3)	(4)	(5)
	H0: (1) = (2)			H0: (2) = (4)	
No gridlock	0,08	0,00	0,637	0,03	0,42
Gridlock with ...					
reformist X and conservative L	0,50	0,48	1,000	0,48	1,00
unbiased X and conservative L	0,77	0,45	0,799	0,55	0,73
reformist X and unbiased L	0,20	0,30	0,396	0,15	0,41
Number of subjects	40	33		33	

Notes: Data from treatments 3, 6 and 7, corresponding to neutral, corruption (i.e. neutral plus cost of rule 2 identified as corruption) and political framing, respectively. Under the heading “No gridlock”, we report results obtained with conservative X and L. The heading “Gridlock with reformist X and conservative L” is self explanatory. Under the heading “Gridlock with unbiased X and conservative L”, we report results with a unbiased X proposing reform and a conservative L. Under the heading “Gridlock with reformist X and unbiased L”, we report results with a reformist X and a unbiased L proposing the status quo policy. In columns (3) and (5) we report the two-sided p-value of a Fisher test of difference in proportions in which the null is that the observed frequency is the same regardless of framing and the alternative is that the frequency is different. Source: Own computations based on experimental data.

Table 14: Frequency of special powers: the impact of the frequency of gridlock in the priming phase

	Frequency of gridlock in priming phase ...		
	Low	High	p-value
Political gridlock status			
No gridlock	0,12	0,08	0,793
Gridlock with ...			
reformist X and conservative L	0,69	0,50	0,922
unbiased X and conservative L	0,77	0,77	0,559
reformist X and unbiased L	0,31	0,20	0,843
Number of subjects	26	40	

Notes: Data from treatments 1 and 3, corresponding to low and high frequency of political gridlock in the priming phase, respectively. Under the heading “No gridlock”, we report results obtained with conservative X and L. The heading “Gridlock with reformist X and conservative L” is self explanatory. Under the heading “Gridlock with unbiased X and conservative L”, we report results with a unbiased X proposing reform and a conservative L. Under the heading “Gridlock with reformist X and unbiased L”, we report results with a reformist X and a unbiased L proposing the status quo policy. In the third column we report the one-sided p-value of a Fisher test of difference in proportions in which the null is that the observed frequency of *SP* is the same regardless of priming and the alternative is that the frequency of *SP* is lower when political gridlock was less frequent in the priming phase. Source: Own computations based on experimental data.

5 Instructions of treatments 1 and 7 (translated from the original version in Spanish).

General Instructions

Welcome to this experiment in decision making.

Please read the consent form you were handed when you arrived to the experiment. If you want to participate in the experiment, please sign the form. Remember that your participation is voluntary. If you wish to leave the experiment before the session is over, you will forfeit any money you may have earned so far. You need to be at least 18 years to participate in this session.

The experiment will take around an hour and a half, and during this time you will make a series of decisions. At the end of the experiment we will pay you in cash and in private, based on the instructions we will explain to you in a moment.

We kindly ask you to not talk with anyone else but the experimentalists. If you have a question, please raise your hand and someone will be with you to answer your question shortly

Please turn off your cell phones.

During this experiment, we will refer to pesos uruguayos when we talk about benefits and payments.

Any questions?

Please turn to the next page.

This experiment is composed to three main parts and a questionnaire.

In parts 1 and 2 of this experiment, two individuals, which we will identify as X and L, propose actions that affect you. You must choose one of two possible rules that determine how the actions that these two individuals propose combine and the effect they have. We describe next who these individuals are and how their proposals relate to the decisions you will make.

Current state of affairs. There are two possible states of affairs, **BLUE** and **GREEN**. Individuals X and L always know the current state of affairs when they make their proposals.

Actions. There are two possible actions, **BLUE** and **GREEN**. The action which will be followed in the current period depends on the action proposals of X and L and a rule which you will choose (and which we will explain to you next).

Possible identities of X and L. The proposals chosen by individuals X and L depend on their identity. There are three possible identities: blue, green and blue-green (or mixed). The blue identity individuals always propose the **BLUE** action, the green identity always propose the **GREEN** action, and the blue-green identity (or mixed) propose the **BLUE** action when they observe that the current state of affairs is **BLUE** and **GREEN** when they observe which is **GREEN**.

The following table summarizes the previous information (Table 1).

Table 1: Proposals of X and L according to their identity and current state of affairs.

	<i>Individual's identity</i>		
<i>Current state of affairs</i>	Blue	Green	Blue-Green (or mixed)
BLUE	BLUE	GREEN	BLUE
GREEN	BLUE	GREEN	GREEN

Rules. In this experiment, there are only two possible rules:

Rule 1. X proposes an action. If X proposes **BLUE**, **BLUE** is implemented. If X proposes **GREEN**, L has the capacity to block or accept X's proposal: L blocks X by proposing **BLUE** and enables X by proposing **GREEN**.

Rule 2. X's proposal is adopted (regardless of what L proposes). The use of this rule has an associated cost which we will detail below.

Table 2 summarizes these rules.

Table 2: Action proposals and implemented actions under Rules 1 and 2

Action proposals		Implemented actions	
X	L	Rule 1	Rule 2
BLUE	BLUE	BLUE	BLUE
BLUE	GREEN	BLUE	BLUE
GREEN	BLUE	BLUE	GREEN
GREEN	GREEN	GREEN	GREEN

Payments. Each rule has a payment associated with it, which depends on the proposals and the current state of affairs. This payment is 200 pesos when the implemented action matches the current state of affairs (BLUE-BLUE or GREEN-GREEN) and 120 when it does not (BLUE-GREEN or GREEN-BLUE). However, the use of Rule 2 entails an associated cost of 24 pesos. This means that your payoff with Rule 2 is 176 when the implemented action and the current state of affairs match and 96 when they do not. **Table 3** summarizes the payments that would correspond to you under each rule. We will give you a few minutes to read the table and familiarize yourself with it.

Table 3: Payments according to action proposals, current state of affairs and decision rules.

Current state of affairs	Action proposals		Payments	
	X	L	Rule 1	Rule 2
BLUE	BLUE	BLUE	200	176
BLUE	BLUE	GREEN	200	176
BLUE	GREEN	BLUE	200	96
BLUE	GREEN	GREEN	120	96
GREEN	BLUE	BLUE	120	96
GREEN	BLUE	GREEN	120	96
GREEN	GREEN	BLUE	120	176
GREEN	GREEN	GREEN	200	176

Do you have any questions?

Part 1 Instructions

In this part of the experiment, you will have five tasks:

- Determine what are the expected action proposals of X and L.
- Determine if there is gridlock, meaning, if X proposes **GREEN** and L proposes **BLUE** at the same time
- Determine what is the action that will be implemented with each rule.
- You will tell us which is the rule that you prefer.
- Determine the frequency of gridlock, that is, the proportion of cases in which X proposes **GREEN** and L proposes **BLUE** at the same time.

You will complete a table like the following:

Current state of affairs	Identities of X and L		Action proposals		Is there a gridlock?	Implemented action			I choose rule	Cost associated to chosen rule	
	X	L	X	L		Rule 1	Rule 2				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	
GREEN	Blue-Green	Blue	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	☐ YES ☐ NO	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	Verify	☐ 1 ☐ 2		Cost Send response
BLUE	Blue-Green	Green	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	☐ YES ☐ NO	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	Verify	☐ 1 ☐ 2		Cost Send response
...								Verify			Cost Send response

The steps to complete the table are the following:

1. In columns (4) and (5) you will record the action proposals that you think individuals X and L would propose after observing the current state of affairs and knowing the identity of each individual.
2. In column (6), you will record whether there is gridlock or not. Remember that there is gridlock if X proposes **GREEN** and L proposes **BLUE**.
3. In columns (7) and (8) you will record the actions that you think will be implemented under rules 1 and 2.
4. To the right of column (8) you will see a button labeled “Verify”. You will click the button to verify if the responses you entered are correct. If you responses are correct, you will automatically see column (9), “I choose rule”. If any of the responses is incorrect, you will not be able to move on and you can correct your responses. You can correct your responses up to four times. If after the fourth verification your responses are not correct, then the program will correct your responses automatically and column (9) will appear. At this point you will not be able to modify your responses.
5. In column (9) you will record your choice, whether it is for Rule 1 or Rule 2. To help you in your decision, column (10) indicates what is the cost associated to the rule you chose. For this, you will have to click the button labeled “Cost”. When you choose the one you want,

click on the button “Send response”. After that, the next decision row will appear, and you will not be able to make changes on your responses.

6. At the end of this part, we will ask you what the frequency of gridlock is.

You will make decisions for **ten (10) periods**. To make these decisions you will use **Tables 1, 2 and 3** together.

In this part of the experiment, we will pay you for the benefits you get in one of these periods. The payment will be determined as follows. If the responses in columns (4) to (8) are not correct after four tries, you will have a payment of zero. If in any of the four tries you entered the correct answers your payment will be calculated based on the rule you chose in column (9). For this reason, we ask you to make your decisions bearing in mind that any of them can be chosen to determine your payment. The computer will randomly choose a decision to be paid at the end of the experiment.

So that you do not have to look for them in the instructions, we gave you **Tables 1, 2 and 3** separately. If you do not have them raise your hand and we will give them to you.

So you clearly understand what your decisions would be like, together we will go over the following examples of how to use these tables and how you would decide.

Part 1 Examples

Please make sure you have tables 1, 2 and 3 on hand to understand how you would make your decisions.

Example 1

In this example, the current state of affairs is **GREEN**. X observes the current state of affairs and as he is of the Blue-green type, proposes the **GREEN** action. L observes the same state of affairs but as he is of the Blue type, proposes the **BLUE** action. You can figure this out by looking at **Table 1**. **In this example, there is gridlock.**

If we look at **Table 2**, this implies that the resulting action depends on the rule chosen: the action is **BLUE** with Rule 1 and **GREEN** with Rule 2. The proposed actions of X and L, if there is gridlock or not and the actions under both Rules will be the first thing that you will fill in the box. These are the cells of columns (4) to (8) which in this example, we filled out for you. **We recommend you pay attention to the table on the screen to see how it would look like when you make your decisions.**

Current state of affairs	Identities of X and L		Action proposals		Is there a gridlock?	Implemented action		I choose rule	Cost associated to chosen rule
	X	L	X	L		Rule 1	Rule 2		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GREEN	Blue-Green	Blue	☒ GREEN ☐ BLUE	☐ GREEN ☒ BLUE	☒ YES ☐ NO	☐ GREEN ☒ BLUE	☒ GREEN ☐ BLUE	☐ 1 ☒ 2	

To determine your choice, you can use **Table 3**. In that table you will find the line corresponding to the current state of affairs **GREEN**, the **GREEN** action proposal for X and **BLUE** for L. You will see that the payment associated with Rule 1 is **120** and that of Rule 2 is **176**. You will next indicate the rule you chose in the empty cell of column (9). To help you in your decision, column (10) indicates what is the cost associated to the rule you chose.

If this period was chosen to determine the payment at the end of the experiment, your payment for Part 1 would be **120** if you chose Rule 1 and **176** if you chose Rule 2.

Example 2

In this example, the current state of affairs is **BLUE**. X observes the current state of affairs and, since it is of the Green type, proposes the **GREEN** action. L observes the same current state of affairs, but since it is of the Blue type, it proposes the **BLUE** action. You can figure this out by looking at **Table 1**. **In this example, there is gridlock.**

If we look at **Table 2**, this implies that the resulting action depends on the Rule chosen: the action is **BLUE** with Rule 1 and **GREEN** with Rule 2. The proposed actions of X and L, if there is gridlock or not and the actions under both Rules will be the first thing that you will fill in the box. These are the cells of columns (4) to (9) which in this example, we filled out for you. **We recommend you pay attention to the table on the screen to see how it would look like when you make your decisions.**

Current state of affairs	Identities of X and L		Action proposals		Is there a gridlock?	Implemented action		I choose rule	Cost associated to chosen rule
	X	L	X	L		Rule 1	Rule 2		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
BLUE	Green	Blue	☒ GREEN ☐ BLUE	☐ GREEN ☒ BLUE	☒ YES ☐ NO	☐ GREEN ☒ BLUE	☒ GREEN ☐ BLUE	☐ 1 ☒ 2	

To determine your choice, you **will use Table 3**. In **Table 3** you will find the line corresponding to the current state of affairs **BLUE**, the **GREEN** action proposal for X and **BLUE** for L. You will see that the payment associated with Rule 1 is **200** and that of Rule 2 is **96**. You will next indicate the rule you chose in the empty cell of column (9). To help you in your decision, column (10) indicates what is the cost associated to the rule you chose.

If this period was chosen to determine the payment at the end of the experiment, your payment for Part 1 would be **200** if you chose Rule 1 and **96** if you chose Rule 2.

You will see the box to be completed next. Remember that you will have to determine:

- The proposals that you expect from X and L
- If there is gridlock or not
- The actions that will result under each rule, given the proposals of X and L
- Your choice by rule 1 or 2
- The frequency of gridlock

Do you have any questions?

Everyone will begin making decisions at the same time in a minute.

Part 2 Instructions

In this part you will make decisions similar to those of the previous part, but with three differences:

- Now you will not observe the current state of affairs in each period. You only know that the frequency with which the current state of affairs **GREEN** occurs is 0.9. That means that in each row of the table in Part 2, there is a 9 in 10 chance that the state of affairs is **GREEN**.
- You will have information about the action proposals of X and L. Remember that X and L know the current state of affairs before choosing their proposals, but you do not.

Your task is to:

- Determine if there is gridlock or not in each decision row. Remember that there is a gridlock if X proposes **GREEN** and L proposes **BLUE** at the same time.
- Determine the resulting action under each rule
- Choose a rule.

You will make decisions for **fourteen (14) periods**. To make these decisions you will use **Tables 1, 2 and 3** together.

You will record your decisions in a table like the following one:

Identities of X and L		Action proposals		Is there a gridlock?	Implemented action			I choose rule	Cost associated to chosen rule	
X	L	X	L		Rule 1	Rule 2				
Blue	Blue	BLUE	BLUE	YES NO	GREEN BLUE	GREEN BLUE	Verify	1 2		Cost Send response

The way the payment for this part is determined is as follows:

1. You will first enter if there is gridlock or not and the action which would be implemented with each rule.
2. On the right of column “Implemented action” you will see a button labeled “Verify”. You will click on the button to verify if the responses you entered are correct. If the responses you entered are correct, you will see a new cell under “I choose rule” appear automatically. If any of the responses is incorrect, you can correct them and press the button “Verify”. You can verify up to four times. If by the fourth time your responses are incorrect, the program will correct your mistakes and the cell under “I choose rule” will appear automatically. At this point, you will not be able to modify your prior responses.
3. Under the column “I choose rule” you will enter your decision for either Rule 1 or Rule 2. To help you with your decision, we indicate in the last column of the table which is the associated cost based on the rule you chose. For that you will click on the

button labeled “Cost”. When your responses are definitive, click on the button labeled “Send response”. After that, the next decision row will appear, and you will not be able to make changes on your responses.

In this part of the experiment, we will pay you for the benefits you get in one of these periods. The payment will be determined as follows. If the responses in the first three columns are not correct after four tries, you will have a payment of zero. If in any of the four tries you entered the correct answers your payment will be calculated based on the rule you chose in column “I choose rule”. For this reason, we ask you to make your decisions bearing in mind that any of them can be chosen to determine your payment. At the end of this part you will know what the true current state of affairs is for each decision and the payment associated with the rule that you chose in each one. The computer will randomly choose a decision to be paid at the end of the experiment.

So that you understand clearly what your decisions would be, please read carefully the following examples of how to use these tables and how you would decide.

Part 2 Examples

Please make sure you have tables 1, 2 and 3 on hand to understand how you would make your decisions.

Example 3

In this example, X and L are of the Green type. Both propose the **GREEN** action and therefore, **there is no gridlock**.

If you look at **Table 2**, you will conclude that the resulting action will be **GREEN** with either of the two rules.

To determine your vote, you will compare the payments with both rules, but as you do not know the current state of affairs you have to decide which Rule to vote for without that information. For this you will look at **Table 3**. You will have two state of affairs to analyze, **GREEN** and **BLUE**.

If you are sure that the current state of affairs is **GREEN**, in **Table 3** you will find the current state of affairs **GREEN**, the action proposal of X **GREEN** and of L **GREEN**. In the table, you will see that the payment associated with Rule 1 is **200** and that of Rule 2 is **176**.

If you are sure that the current state of affairs is **BLUE**, in **Table 3** you will find the current state of affairs **BLUE**, the action of X **GREEN** and L **GREEN**. In the table, you will see that the payment associated with Rule 1 is **120** and that of Rule 2 is **96**.

If you are not sure what the current state of affairs is, consider the frequency of the **GREEN** state of affairs and the associated payments for each decision you will make.

Suppose that this period was chosen to determine your payment in Part 2. In this example, there is no gridlock. Suppose as well that at the end of the experiment it is revealed that the current state of affairs is **BLUE**. If you incorrectly answered any of the three first questions (existence of gridlock and implemented actions under rules 1 and 2), you will not get payment for this part. If you correctly answered these questions, your payment for Part 2 will be **120** if you chose Rule 1 and **96** if you chose Rule 2. Remember that the cost associated to using Rule 2 was considered already to calculate these payments.

Example 4

In this example, X proposes the **GREEN** action and L proposes the **BLUE** action. Therefore, **there is gridlock**.

According to **Table 2**, that X and L have proposed the **GREEN** and **BLUE** actions, respectively, implies that the resulting action with Rule 1 is **BLUE** and with Rule 2 is **GREEN**.

To determine your vote, you will compare the payments with both rules, but as you do not know the current state of affairs you have to decide which Rule to vote for without that information. For this you will look at **Table 3**. You will have two state of affairs to analyze, **GREEN** and **BLUE**.

If you are sure that the current state of affairs is **GREEN**, in **Table 3** you will find the current state of affairs **GREEN**, the proposed action of X **GREEN** and L **BLUE**. In the table, you will see that the payment associated with Rule 1 is **120** and that of Rule 2 is **176**.

If you are sure that the current state of affairs is **BLUE**, in Table 3 you will find the current state of affairs **BLUE**, the action of X **GREEN** and of **BLUE**. In the chart, you will see that the payment associated with Rule 1 is **200** and that of Rule 2 is **96**.

If you are not sure what the current state of affairs is, consider the frequency of the **GREEN** state of affairs and the associated payments for each decision you will make.

Suppose that this period was chosen to determine your payment in Part 2. In this example, there is gridlock. Suppose as well that at the end of the experiment it is revealed that the current state of affairs is **GREEN**. If you incorrectly answered any of the three first questions (existence of gridlock and implemented actions under rules 1 and 2), you will not get payment for this part. If you correctly answered these questions, your payment for Part 2 will be **120**, if you chose Rule 1, and **176**, if you chose Rule 2. Remember that the cost associated to using Rule 2 was considered already to calculate these payments.

Next, you will see a table with 14 periods. It is expected that you determine:

- If there is gridlock
- The action that will result in each period.
- The rule you prefer.

Do you have questions?

Everyone will begin making decisions at the same time in a minute.

Part 3 Instructions

Your decisions. In this part of the experiment, you will have to make ten (10) decisions between two lotteries, like the ones you see in the table below. The two lotteries are represented by two options, "Option A" to the left of the table and "Option B" to the right of the table. You will see the decisions presented in a table and you have to choose one of the two options in each decision. Each decision is a row of the table.

Take a minute to read the structure of the table.

Decision	Option A	A or B	Option B
1	\$20 with probability 1/10, \$16 with probability 9/10	☐ ☐	\$39 with probability 1/10, \$1 with probability 9/10
2	\$20 with probability 2/10, \$16 with probability 8/10	☐ ☐	\$39 with probability 2/10, \$1 with probability 8/10
...	...	...	...
10	\$20 with probability 10/10, \$16 with probability 0/10	☐ ☐	\$39 with probability 10/10, \$1 with probability 0/10

To give you an idea of how lotteries work in this part of the experiment, we describe some of the decisions below. In Decision 1, Option A, there is a one in ten chance to win \$ 20 and a nine in ten chance to win \$ 16. In Option B, there is a one in ten chance to win \$ 39 and a nine in ten chance to win \$ 1. In contrast, in Decision 10, Option A, there is a ten in ten chance to win \$ 20 and a zero in ten chance to win \$ 16. In Option B, there is a ten in ten chance to win \$ 39 and a zero in ten chance to win \$ 1

The relevant decision. At the end of the experiment, one of the ten decisions will be chosen by the computer as the relevant decision. That is why we ask you to make your decisions with care, as if any of them could be chosen to be paid with the same probability.

Determining your Part 3 payment. Once the decision is chosen, we will pay you based on your chosen option. For that the computer will also determine in a random way which of the two payments of the option that you chose is the one that corresponds to you.

Do you have any questions?

Please press the "Continue" button to make your decisions.

Part 4: Questionnaire

We ask you to fill out the questionnaire which will now show up in your screen. We will pay you an extra \$50 for filling it out completely. Thank you!

General Instructions

Welcome to this experiment in decision making.

Please read the consent form you were handed when you arrived to the experiment. If you want to participate in the experiment, please sign the form. Remember that your participation is voluntary. If you wish to leave the experiment before the session is over, you will forfeit any money you may have earned so far. You need to be at least 18 years to participate in this session.

The experiment will take around an hour and a half, and during this time you will make a series of decisions. At the end of the experiment we will pay you in cash and in private, based on the instructions we will explain to you in a moment.

We kindly ask you to not talk with anyone else but the experimentalists. If you have a question, please raise your hand and someone will be with you to answer your question shortly

Please turn off your cell phones.

During this experiment, we will refer to pesos uruguayos when we talk about benefits and payments.

Any questions?

Please turn to the next page.

This experiment is composed to three main parts and a questionnaire.

In parts 1 and 2 of this experiment, two individuals, which we will identify as P, the president and L, the legislator, propose policies that affect you. You must choose one of two possible institutions that determine how the policies that these two individuals propose combine and the effect they have. We describe next who these individuals are and how their proposals relate to the decisions you will make.

Current state of affairs. There are two possible states of affairs, **BLUE** and **GREEN**. The president and the legislator always know the current state of affairs when they make their proposals.

Policies. There are two possible policies, **BLUE** and **GREEN**. The policy which will be followed in the current period depends on the policy proposals of P and L and an institution which you will choose (and which we will explain to you next).

Possible identities of the president and the legislator. The policy proposals chosen by the president and the legislator depend on their identity. There are three possible identities: blue, green and blue-green (or mixed). The blue identity government officials always propose the **BLUE** policy, the green identity always propose the **GREEN** policy, and the blue-green identity (or mixed) propose the **BLUE** policy when they observe that the current state of affairs is **BLUE** and **GREEN** when they observe which is **GREEN**.

The following table summarizes the previous information (Table 1).

Table 1: Proposals of P and L according to their identity and current state of affairs.

<i>Current state of affairs</i>	<i>Individual's identity</i>		
	Blue	Green	Blue-Green (or mixed)
BLUE	BLUE	GREEN	BLUE
GREEN	BLUE	GREEN	GREEN

Institutions. In this experiment, there are only two possible and mutually exclusive institutions:

Institution 1 (checks and balances). The president proposes a policy. If they propose **BLUE**, **BLUE** is implemented. If the president proposes **GREEN**, the legislator has the capacity to block or accept the president's proposal, blocking the president by proposing **BLUE** and enabling them by proposing **GREEN**.

Institution 2 (strong president). The president's proposal is adopted (regardless of what the legislator proposes). With this institution, the president appropriates some of

your resources for themselves, meaning there is corruption. This has an associated cost which we will detail below.

Table 2 summarizes these institutions.

Table 2: Policy proposals and implemented policies under Institutions 1 and 2

Policy proposals		Implemented policies	
P	L	Checks and balances (Institution 1)	Strong president (Institution 2)
BLUE	BLUE	BLUE	BLUE
BLUE	GREEN	BLUE	BLUE
GREEN	BLUE	BLUE	GREEN
GREEN	GREEN	GREEN	GREEN

Payments. Each institution has a payment associated to it, which depends on the proposals and the current state of affairs. This payment is composed of two parts. The first part measures the payoffs based on the proposed policies and the state of affairs. This payment is 200 pesos when the implemented policy matches the current state of affairs (**BLUE-BLUE** or **GREEN-GREEN**) and 120 when it does not (**BLUE- GREEN** or **GREEN -BLUE**). The second part measures the loss you would have from corruption, which happens under institution 2 and it is 24 pesos. **Table 3** summarizes the payments that would correspond to you under each institution. We will give you a few minutes to read the table and familiarize yourself with it.

Table 3: Payments according to policy proposals, current state of affairs and decision institutions.

Current state of affairs	Policy proposals		Payments	
	P	L	Checks and balances (Institution 1)	Strong president (Institution 2)
BLUE	BLUE	BLUE	200	104
BLUE	BLUE	GREEN	200	104
BLUE	GREEN	BLUE	200	24
BLUE	GREEN	GREEN	120	24
GREEN	BLUE	BLUE	120	24
GREEN	BLUE	GREEN	120	24
GREEN	GREEN	BLUE	120	104
GREEN	GREEN	GREEN	200	104

Any questions?

Part 1 Instructions

In this part of the experiment, you will have five tasks:

- Determine what are the expected policy proposals of the president and the legislator
- Determine if there is a gridlock, meaning, if the president proposes **GREEN** and the legislator proposes **BLUE** at the same time
- Determine what is the policy that will be implemented with each institution.
- You will tell us which is the institution that you prefer.
- Determine the frequency of gridlocks, that is, the proportion of cases in which the president proposes **GREEN** and the legislator proposes **BLUE** at the same time.

You will complete a table like the following:

Current state of affairs	Identities of the president and the legislator		Policy proposals		Is there gridlock?	Implemented policy			I choose institution	Amount stolen by the president
	P	L	P	L		Checks and balances (Inst. 1)	Strong president (Inst. 2)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)
GREEN	Blue-Green	Blue	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	☐ YES ☐ NO	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	Verify	☐ 1 ☐ 2	Cost Send response

The steps to complete the table are the following:

1. In columns (4) and (5) you will record the policy proposals that you think the president and the legislator would propose after observing the current state of affairs and knowing the identity of each individual.
2. In column (6), you will record whether there is a gridlock or not. Remember that there is a gridlock if the president proposes **GREEN** and the legislator proposes **BLUE**.
3. In columns (7) and (8) you will record the policies that you think will be implemented under institutions 1 (checks and balances) and 2 (strong president).
4. To the right of column (8) you will see a button labelled “Verify”. You will click the button to verify if the responses you entered are correct. If you responses are correct, you will automatically see column (9), “I choose institution”. If any of the responses is incorrect, you will not be able to move on and you can correct your responses. You can correct your responses up to four times. If after the fourth verification your responses are not correct, then the program will correct your responses automatically and column (9) will appear. At this point you will not be able to modify your responses.

5. In column (9) you will record your choice, whether it is for Institution 1 or Institution 2. To help you in your decision, column (10) indicates what is the amount stolen by the president. For this, you will have to click the button labeled “Cost”. When you choose the one you want, click on the button “Send response”. After that, the next decision row will appear, and you will not be able to make changes on your responses.

6. At the end of this part, we will ask you what the frequency of gridlocks is.

You will make decisions for **ten (10) periods**. To make these decisions you will use **Tables 1, 2 and 3** together.

In this part of the experiment, we will pay you for the benefits you get in one of these periods. The payment will be determined as follows. If the responses in columns (4) to (8) are not correct after four tries, you will have a payment of zero. If in any of the four tries you entered the correct answers your payment will be calculated based on the institution you chose in column (9). For this reason, we ask you to make your decisions bearing in mind that any of them can be chosen to determine your payment. The computer will randomly choose a decision to be paid at the end of the experiment.

So that you do not have to look for them in the instructions, we gave you **Tables 1, 2 and 3** separately. If you do not have them raise your hand and we will give them to you.

So you clearly understand what your decisions would be like, together we will go over the following examples of how to use these tables and how you would decide.

Part 1 Examples

Please make sure you have tables 1, 2 and 3 on hand to understand how you would make your decisions.

Example 1

In this example, the current state of affairs is **GREEN**. The president observes the current state of affairs and as they are of the Blue-green type, proposes the **GREEN** policy. The legislator observes the same state of affairs but as they are of the Blue type, proposes the **BLUE** policy. You can figure this out by looking at **Table 1**. **In this example, there is gridlock.**

If we look at **Table 2**, this implies that the resulting policy depends on the institution chosen: the policy is **BLUE** with Institution 1 and **GREEN** with Institution 2. The proposed policies of P and L, if there is gridlock or not and the policies under both Institutions will be the first thing that you will fill in the box. These are the cells of columns (4) to (8) which in this example, we filled out for you. **We recommend you pay attention to the table on the screen to see how it would look like when you make your decisions.**

Current state of affairs	Identities of the president and the legislator		Policy proposals		Is there gridlock?	Implemented policy		I choose institution	Amount stolen by the president
	P	L	P	L		Checks and balances (Inst. 1)	Strong president (Inst. 2)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
GREEN	Blue-Green	Blue	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	☐ YES ☐ NO	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	☐ 1 ☐ 2	

Verify Cost Send response

To determine your choice, you can use **Table 3**. In that table you will find the line corresponding to the current state of affairs **GREEN**, the **GREEN** policy proposal for P and **BLUE** for L. You will see that the payment associated with Institution 1 is **120** and that of Institution 2 is **176**. You will next indicate the institution you chose in the empty cell of column (9). To help you in your decision, column (10) indicates what is the amount of money stolen by the president, associated to the institution you chose.

If this period was chosen to determine the payment at the end of the experiment, your payment for Part 1 would be **120** if you chose Institution 1 and **176** if you chose Institution 2.

Example 2

In this example, the current state of affairs is **BLUE**. The president observes the current state of affairs and, since they are of the Green type, proposes the **GREEN** policy. The legislator observes the same current state of affairs, but since they are of the Blue type, they propose the **BLUE** policy. You can figure this out by looking at **Table 1**. **In this example, there is gridlock.**

If we look at **Table 2**, this implies that the resulting policy depends on the Institution chosen: the policy is **BLUE** with Institution 1 and **GREEN** with Institution 2. The proposed policies of P and L, if there is gridlock or not and the policies under both Institutions will be the first thing that you will fill in the box. These are the cells of columns (4) to (9) which in this example, we filled out for you. **We recommend you pay attention to the table on the screen to see how it would look like when you make your decisions.**

Current state of affairs	Identities of the president and the legislator		Policy proposals		Is there gridlock?	Implemented policy		I choose institution	Amount stolen by the president
	P	L	P	L		Checks and balances (Inst. 1)	Strong president (Inst. 2)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
BLUE	Green	Blue	☒ GREEN ☐ BLUE	☐ GREEN ☒ BLUE	☒ YES ☐ NO	☐ GREEN ☒ BLUE	☒ GREEN ☐ BLUE	☐ 1 ☒ 2	

To determine your choice, you **will use Table 3**. In **Table 3** you will find the line corresponding to the current state of affairs **BLUE**, the **GREEN** policy proposal for P and **BLUE** for L. You will see that the payment associated with Institution 1 is **200** and that of Institution 2 is **96**. You will next indicate the institution you chose in the empty cell of column (9). To help you in your decision, column (10) indicates what is the amount of money stolen by the president, associated to the institution you chose.

If this period was chosen to determine the payment at the end of the experiment, your payment for Part 1 would be **200** if you chose Institution 1 and **96** if you chose Institution 2.

You will see the box to be completed next. Remember that you will have to determine:

- The proposals that you expect from P and L
- If there is gridlock or not
- The policies that will result under each institution, given the proposals of P and L
- Your choice for institution 1 or 2
- The frequency of gridlocks

Do you have any questions?

Everyone will begin making decisions at the same time in a minute.

Part 2 Instructions

In this part you will make decisions similar to those of the previous part, but with three differences:

- Now you will not observe the current state of affairs in each period. You only know that the frequency with which the current state of affairs **GREEN** occurs is 0.9. That means that in each row of the table in Part 2, there is a 9 in 10 chance that the state of affairs is **GREEN**.
- You will have information about the policy proposals of the president and the legislator. Remember that the president and the legislator know the current state of affairs before choosing their proposals, but you do not.

Your task is to:

- Determine if there is gridlock or not in each decision row. Remember that there is a gridlock if the president proposes **GREEN** and the legislator proposes **BLUE** at the same time.
- Determine the resulting policy under each institution
- Choose an institution.

You will make decisions for **fourteen (14) periods**. To make these decisions you will use **Tables 1, 2** and **3** together.

You will record your decisions in a table like the following one:

Identities of the president and the legislator		Policy proposals		Is there gridlock?	Implemented policy			I choose institution	Amount stolen by the president	
P	L	P	L		Checks and balances (Inst. 1)	Strong president (Inst. 2)				
Blue	Blue	BLUE	BLUE	☐ YES ☐ NO	☐ GREEN ☐ BLUE	☐ GREEN ☐ BLUE	Verify	☐ 1 ☐ 2		Cost Send response

The way the payment for this part is determined is as follows:

1. You will first enter if there is gridlock or not and the policy which would be implemented under each institution.
2. On the right of column “Implemented policy” you will see a button labeled “Verify”. You will click on the button to verify if the responses you entered are correct. If the responses you entered are correct, you will see a new cell under “I choose institution” appear automatically. If any of the responses is incorrect, you can correct them and press the button “Verify”. You can verify up to four times. If by the fourth time your responses are incorrect, the program will correct your mistakes and the cell under “I

choose institution” will appear automatically. At this point, you will not be able to modify your prior responses.

3. Under column “I choose institution” you will enter your decision for either Institution 1 or Institution 2. To help you in your decision, column (10) indicates what is the amount stolen by the president. For this, you will have to click the button labeled “Cost”. When you choose the one you want, click on the button “Send response”. After that, the next decision row will appear, and you will not be able to make changes on your responses.

In this part of the experiment, we will pay you for the benefits you get in one of these periods. The payment will be determined as follows. If the responses in the first three columns are not correct after four tries, you will have a payment of zero. If in any of the four tries you entered the correct answers your payment will be calculated based on the institution you chose in column “I choose institution”. For this reason, we ask you to make your decisions bearing in mind that any of them can be chosen to determine your payment. At the end of this part you will know what the true current state of affairs is for each decision and the payment associated with the institution that you chose in each one. The computer will randomly choose a decision to be paid at the end of the experiment.

So that you understand clearly what your decisions would be, please read carefully the following examples of how to use these tables and how you would decide.

Part 2 Examples

Please make sure you have tables 1, 2 and 3 on hand to understand how you would make your decisions.

Example 3

In this example, the president and the legislator are of the Green type. Both propose the **GREEN** policy and therefore, **there is no gridlock**.

If you look at **Table 2**, you will conclude that the resulting policy will be **GREEN** with either of the two institutions.

To determine your vote, you will compare the payments with both institutions, but as you do not know the current state of affairs you have to decide which Institution to vote for without that information. For this you will look at **Table 3**. You will have two state of affairs to analyze, **GREEN** and **BLUE**.

If you are sure that the current state of affairs is **GREEN**, in **Table 3** you will find the current state of affairs **GREEN**, the policy proposal of P **GREEN** and of L **GREEN**. In the table, you will see that the payment associated with Institution 1 is **200** and that of Institution 2 is **176**.

If you are sure that the current state of affairs is **BLUE**, in **Table 3** you will find the current state of affairs **BLUE**, the policy of P **GREEN** and L **GREEN**. In the table, you will see that the payment associated with Institution 1 is **120** and that of Institution 2 is **96**.

If you are not sure what the current state of affairs is, consider the frequency of the **GREEN** state of affairs and the associated payments for each decision you will make.

Suppose that this period was chosen to determine your payment in Part 2. In this example, there is no gridlock. Suppose as well that at the end of the experiment it is revealed that the current state of affairs is **BLUE**. If you incorrectly answered any of the three first questions (existence of gridlock and implemented policies under institutions 1 and 2), you will not get payment for this part. If you correctly answered these questions, your payment for Part 2 will be **120** if you chose Institution 1 and **96** if you chose Institution 2. Remember that the cost associated to using Institution 2 was considered already to calculate these payments.

Example 4

In this example, the president proposes the **GREEN** policy and the legislator proposes the **BLUE** policy. Therefore, **there is gridlock**.

According to **Table 2**, that the president and the legislator proposed the **GREEN** and **BLUE** policies, respectively, implies that the resulting policy with Institution 1 is **BLUE** and with Institution 2 is **GREEN**.

To determine your vote, you will compare the payments with both institutions, but as you do not know the current state of affairs you have to decide which Institution to vote for without that information. For this you will look at **Table 3**. You will have two state of affairs to analyze, **GREEN** and **BLUE**.

If you are sure that the current state of affairs is **GREEN**, in **Table 3** you will find the current state of affairs **GREEN**, the proposed policy of P **GREEN** and L **BLUE**. In the table, you will see that the payment associated with Institution 1 is **120** and that of Institution 2 is **176**.

If you are sure that the current state of affairs is **BLUE**, in Table 3 you will find the current state of affairs **BLUE**, the policy of P **GREEN** and of **BLUE**. In the chart, you will see that the payment associated with Institution 1 is **200** and that of Institution 2 is **96**.

If you are not sure what the current state of affairs is, consider the frequency of the **GREEN** state of affairs and the associated payments for each decision you will make.

Suppose that this period was chosen to determine your payment in Part 2. In this example, there is gridlock. Suppose as well that at the end of the experiment it is revealed that the current state of affairs is **GREEN**. If you incorrectly answered any of the three first questions (existence of gridlock and implemented policies under institutions 1 and 2), you will not get payment for this part. If you correctly answered these questions, your payment for Part 2 will be **120**, if you chose Institution 1, and **104**, if you chose Institution 2. Remember that the cost associated to using Institution 2 was considered already to calculate these payments.

Next, you will see a table with 14 periods. It is expected that you determine:

- If there is gridlock
- The policy that will result in each period.
- The institution you prefer.

Do you have questions?

Everyone will begin making decisions at the same time in a minute.

Part 3 Instructions

Your decisions. In this part of the experiment, you will have to make ten (10) decisions between two lotteries, like the ones you see in the table below. The two lotteries are represented by two options, "Option A" to the left of the table and "Option B" to the right of the table. You will see the decisions presented in a table and you have to choose one of the two options in each decision. Each decision is a row of the table.

Take a minute to read the structure of the table.

Decision	Option A	A or B	Option B
1	\$20 with probability 1/10, \$16 with probability 9/10	☐ ☐	\$39 with probability 1/10, \$1 with probability 9/10
2	\$20 with probability 2/10, \$16 with probability 8/10	☐ ☐	\$39 with probability 2/10, \$1 with probability 8/10
...	...	...	...
10	\$20 with probability 10/10, \$16 with probability 0/10	☐ ☐	\$39 with probability 10/10, \$1 with probability 0/10

To give you an idea of how lotteries work in this part of the experiment, we describe some of the decisions below. In Decision 1, Option A, there is a one in ten chance to win \$ 20 and a nine in ten chance to win \$ 16. In Option B, there is a one in ten chance to win \$ 39 and a nine in ten chance to win \$ 1. In contrast, in Decision 10, Option A, there is a ten in ten chance to win \$ 20 and a zero in ten chance to win \$ 16. In Option B, there is a ten in ten chance to win \$ 39 and a zero in ten chance to win \$ 1

The relevant decision. At the end of the experiment, one of the ten decisions will be chosen by the computer as the relevant decision. That is why we ask you to make your decisions with care, as if any of them could be chosen to be paid with the same probability.

Determining your Part 3 payment. Once the decision is chosen, we will pay you based on your chosen option. For that the computer will also determine in a random way which of the two payments of the option that you chose is the one that corresponds to you.

Do you have any questions?

Please press the "Continue" button to make your decisions.

Part 4: Questionnaire

We ask you to fill out the questionnaire which will now show up in your screen. We will pay you an extra \$50 for filling it out completely. Thank you!

6 Risk aversion measurement.

Part 3

Decision	Option A	A o B	Option B
1	\$20 with probability 1/10, \$16 with probability 9/10	☐ ☐	\$39 with probability 1/10, \$1 with probability 9/10
2	\$20 with probability 2/10, \$16 with probability 8/10	☐ ☐	\$39 with probability 2/10, \$1 with probability 8/10
3	\$20 with probability 3/10, \$16 with probability 7/10	☐ ☐	\$39 with probability 3/10, \$1 with probability 7/10
4	\$20 with probability 4/10, \$16 with probability 6/10	☐ ☐	\$39 with probability 4/10, \$1 with probability 6/10
5	\$20 with probability 5/10, \$16 with probability 5/10	☐ ☐	\$39 with probability 5/10, \$1 with probability 5/10
6	\$20 with probability 6/10, \$16 with probability 4/10	☐ ☐	\$39 with probability 6/10, \$1 with probability 4/10
7	\$20 with probability 7/10, \$16 with probability 3/10	☐ ☐	\$39 with probability 7/10, \$1 with probability 3/10
8	\$20 with probability 8/10, \$16 with probability 2/10	☐ ☐	\$39 with probability 8/10, \$1 with probability 2/10
9	\$20 with probability 9/10, \$16 with probability 1/10	☐ ☐	\$39 with probability 9/10, \$1 with probability 1/10
10	\$20 with probability 10/10, \$16 with probability 0/10	☐ ☐	\$39 with probability 10/10, \$1 with probability 0/10

7 Post-experimental questionnaire

POST-EXPERIMENTAL QUESTIONNAIRE

1. What is the gender that was assigned to you at birth, which is in your birth certificate?
 - ☐ Male
 - ☐ Female
 - ☐ Other
 - ☐ I prefer not to answer

2. What is the gender you associate the most with today?
 - ☐ Male
 - ☐ Female
 - ☐ Transgender
 - ☐ Other: _____
 - ☐ I prefer not to answer

3. In which year where you born? 19__

4. What is your nationality?

5. If you are Uruguayan, where were you living when you were 10 years old?

6. In which department you currently live most of the year?

7. If you live in Montevideo, in which neighborhood or town do you live?

8. What is the highest educational level of your father?
9. What is the highest educational level of your mother?

	Father	Mother
Incomplete primary		
Complete primary		
Incomplete secondary		
Complete secondary		

Incomplete tertiary		
Complete tertiary		
I don't know		

10. Your primary education was? Public/private

11. Your secondary education was mainly? Public / private

12. How interested would you say you are in politics? Are you:

1 Very interested

2 Somewhat interested

3 Not very interested

4 Not at all interested

13. In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?

Left							Right		
1	2	3	4	5	6	7	8	9	10

14. Now I'd like you to tell me your views on various issues. How would you place your views on this scale? If you choose the option on the far left, it means you agree completely with the statement on the left; If you choose the option on the far right, it means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.:

14.1. Incomes should be made more equal							We need larger income differences as incentives for individual effort		
1	2	3	4	5	6	7	8	9	10

14.2. Private ownership of business and industry should be increased							Government ownership of business and industry should be increased		
1	2	3	4	5	6	7	8	9	10

14.3 Government should take more responsibility to ensure that everyone is provided for							People should take more responsibility to provide for themselves		
1	2	3	4	5	6	7	8	9	10

14.4 Competition is good. It stimulates people to work hard and develop new ideas.							Competition is harmful. It brings out the worst in people.		
1	2	3	4	5	6	7	8	9	10

14.5 In the long run, hard work usually brings a better life.							Hard work doesn't generally bring success – it's more a matter of luck and connections.		
1	2	3	4	5	6	7	8	9	10

14.6 People can only get rich at the expense of others.							Wealth can grow so there's enough for everyone.		
1	2	3	4	5	6	7	8	9	10

15. If there were a national election tomorrow, for which party on this list would you vote? If you don't know, think about which party appeals to you the most nowadays:

1. Frente Amplio

2. Partido Nacional
3. Partido Colorado
4. Partido Independiente
5. Asamblea Popular
6. Other: _____

16. Would you say that the following ways of governing this country are very good, fairly good, fairly bad or very bad way?

	Very Good	Fairly Good	Fairly Bad	Very Bad
Having a strong leader who does not have to bother with parliament and elections				
Having experts, not government, make decisions according to what they think is best for the country				
Having the army rule				
Having a democratic political system				

17. In which place of the scale is does your household fit in (accounting for wages, salaries, pensions and other incomes that come in)?

Lowest income							Highest income		
1	2	3	4	5	6	7	8	9	10