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ELECTIONS AND LOTTERIES: RESPONSIVENESS, CAPTURE AND EFFICIENT POLICYMAKING

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Elections and Lotteries: Responsiveness, Capture and Efficient Policymaking

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Democracy by lot has been gaining support among political scientists as an alternative to replace electoral democracy due to its normative advantages. However, I argue that electoral democracy based on proportional representation can produce better or equal results than those based on political sortition regarding responsiveness and efficiency in policymaking while not increasing the probability of legislative capture. I build a formal model that describes the incentives faced by legislators selected by lotteries and elections and conclude that electoral rules can produce better legislative outcomes because of the dangers of biased sampling. Majority rules can achieve efficient policymaking through accountability in homogenous societies and proportional rules via representativeness in heterogenous communities.

I.   Introduction

Although electoral democracy has been highly criticized, most of the democratic literature has proposed 'smaller changes' to remedy these problems, such as complementing democratic regimes with institutions that promote deliberation and political equality (Bessette 1980; Cohen 1998, Fishkin 2009; Gutmann and Thompson 2004; Landemore 2013, McGann 2006). Yet, a few authors have proposed an alternative to electoral democracy in which representatives are chosen by voters in elections. Most notably, democracy by random selection of representatives has been advanced as an option to replace or reform electoral democracy (Guerrero 2014, López-Guerra 2014; Reybrouck 2016). Is democracy by lot a better alternative than electoral democracy in the selection of legislators?

If the benefits of implementing a lottery system to select the nation's legislative representatives outweigh the gains of electoral democracy, then we should seek to establish democracy by lot. My objective is to detect the advantages and disadvantages of both systems to make a case in favor of electoral democracy regarding three desirable characteristics: representative responsiveness to their constituents, a lower probability of outside interests capturing legislators, and efficiency in public policy programs. I choose these dimensions to

compare both alternatives as they are some of the most commonly championed by authors who favor political sortition over elections (Guerrero 2014, Reybrouck 2016).

Responsiveness describes how the values and preferences of the citizens influence political outcomes. In democratic regimes, legislators are expected to respond to the interests of the electorate. If legislators' political decisions match their constituents' preferences in some accurate way, the legislature is responsive. If political outcomes contradict their beliefs, then the system is unresponsive. "The basic idea is that political outcomes are responsive to the extent that they are tied to what the people living in the political jurisdictions actually believe, prefer, or value" (Guerrero 2014, 136). For simplicity, I assume that the interests and preferences of the electorate are the same. I claim that responsiveness is not likely to be attained in democracies by lot due to the problems of selecting a representative sample of citizens such as biased-sampling, self-selection bias, and the manipulation by experts.

A second desirable feature of a political system relies on reducing the probability that representatives may be captured by elites whose interests differ or opposes those from the average citizen[1]. "An elected official is captured if he or she uses his or her position to advance the interests of the powerful, rather than to create policy that is responsive or good" (Guerrero 2014, 142). In this paper, I focus on legislative capture within the regulatory capture theory first raised by Huntington (1952) and Bernstein (1955, 1972). I contend that legislative capture is equally likely in democracies based on both elections and lotteries because their legislative processes are almost identical.

Finally, I will define a political outcome as efficient based on epistemic grounds. That is, the criterium to evaluate a legislative outcome depends on the competence of those who deliberate, propose drafts, negotiate, and approve bills. These capacities, in turn, depend on the institutions and incentives built around the legislative process. I argue that electoral democracy yields better, or at least not worse, legislative outcomes than its lottery alternative due to its institutional framework which produces better incentives - such as reelection and political professionalism-to design and approve efficient results.

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[1] It's worth noting that capture implies a kind of unresponsiveness in the sense that representatives are advancing the interests of the powerful and not representing the interests of their voters. However, unresponsive outcomes do not imply legislative capture as these outcomes might be the product of inefficient institutions that are corruption-free.

This work is not a rejection of the use of political sortition as a democratic procedure. However, I will show that, even though random selection appears to have some normative advantages - such as the opportunity to include average citizens directly into the legislative process - in the end, democracy by lot succumbs to the same kinds of problems that afflict electoral representative institutions: unresponsiveness, corruption, and the potential for low quality legislative outcomes. I argue that electoral democracy based on proportional representation (PR)[2] can yield similar results to those of democracy by lot in pluralistic societies with high economic inequality and political and social cleavages. In contrast, in homogenous societies, majoritarian electoral rules can achieve responsiveness and efficiency through accountability since the citizens share similar preferences.

Electoral democracy potentially leads to responsive results via PR because this electoral rule maximizes the number of different views that can be represented in a decision-making body such as a parliament or congress. It can be argued that, even with a multiparty system, if parties in the legislature do not represent the people's interests, political sortition would be a better alternative to induce responsiveness in the political system. However, I sustain that electoral democracy generate incentives for parties to represent the preferences of the citizens as they can reward or punish parties' behavior while in office.

Additionally, efficiency in policymaking responds to other electoral incentives: political professionalism and parties. Politicians gather experience over time that enables them to identify problems and efficient solutions. Parties are "mechanisms for reducing the transaction costs of democracy" (Rosenblum 2008, 4) and "mediating institutions that bridge society and government" (Rosenblum 2008, 3). Political parties facilitate the flow of information and might overcome the problems of collective action by achieving and maintaining the majorities needed to accomplish goals in office (Aldrich 2007). "Parties may also reduce problems of 'social choice' that surface in unstable and cycling majority decisions in legislatures and governments by bundling and binding sets of politicians with different individual preference schedules to work together in pursuit of a single collective preference schedule ('party program')" (Kitschelt 2008). As politicians seek the support of parties to access power and advance their careers by winning elections, professional politicians face incentives to make efficient decisions. Reelection or access to more powerful positions function as incentives for politicians to make

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[2] Electoral rule that seeks to assign seats shares to parties in proportion to their vote totals (McGann 2006, 40)

more responsive and efficient policy. Debate and negotiation are vital in this process; thus, politicians must be informed to engage deliberation and should be open to consider other points of view through reasonable arguments. As Madison asserts in *Federalist 10*, representation acts as a filtering device, particularly in large regimes, where those elected as representatives tend to be talented people who are most capable of deliberation (Hamilton, Madison and Jay 1787/1961).

I build a formal model to compare the incentives faced by both types of representatives. While the incentives of elected legislators rest on the chances of advancing their political careers, the incentives of randomly-drawn legislators depend only on the benefits (or problems) derived from the bills they approve. I also show that the key to attain responsiveness and efficiency in democracy by lot is the measure of representativeness of the drawn sample, whereas in electoral democracy, the most important factor is the institutional incentives faced by legislators. If there is a biased sample, then electoral democracy produces better outcomes. In the case where a representative sample is selected and the institutional incentives for elected representatives are low, then the use of lotteries can achieve better results than elections.

The relevance of my work is two-fold. First, democracy by lot has been gaining support not only in a theoretical way, but there have been unprecedented experiments to implement political sortition in the real world. Citizens assemblies constituted by randomly selected citizens were installed in British Columbia, Netherlands, Ontario, Ireland and Iceland since 2004. The first three were entrusted with the important task to propose a new electoral system. The Irish Constitutional Convention led to a referendum on same-sex marriage, and the Icelandic Constitutional Assembly was selected to review and rewrite the constitution. Although most of these experiments were not successful to achieve their objectives, they represent proof that citizens around the world are unsatisfied with electoral democracy and that this could be improved through institutional innovation. Thus, democracy by lot deserves to be analyzed in a more 'empirical' way. Second, the majority of the literature on political sortition praises its normative advantages over elections but it does not offer institutional details on how this can be implemented in the real world. Likewise, this literature has not received any response from advocates of elected representational democracy, that is, there has not been an answer to their criticisms. So, this work establishes a dialogue between electoral democracy and democracy by

lot not only on a philosophical level but comparing the empirical implications and institutional contrasts presupposed by their driving principles.

This research is divided in five sections. In the next section, I review the literature on political ambition, the relationship between electoral rules and policymaking, and democracy by lot. Next, I focus on the *lottocratic alternative* proposed by Guerrero (2014). In the fourth section, I argue that electoral democracy with PR can generate outcomes as desirables as those attributed to political sortition. In the following section, I build a formal model which explains responsiveness and efficiency levels in policymaking in both types of democracies. Conclusions and a final consideration of how likely is that lottery would be implemented can be found in the last section.

II.   *Literature Review*

II.1. Political Ambition

The groundbreaking work of Schlesinger states that ambition lies at the heart of politics: "The central assumption of ambition theory is that a politician's behavior is a response to his office goals" (1966, 6). In this way, ambition is a function of the opportunities faced by politicians at certain moments of their careers. Schlesinger analyzes the career patterns of officials in the U.S. from 1914 to 1958 and holds that there are three types of ambition: discrete (the politician does not seek an office in the next period), static (the politician seeks reelection), and progressive (the politician seeks higher offices). He concludes that "American political careers do not proceed chaotically. There are patterns of movement from office to office" (Schlesinger 1966, 118).

Rhode revisits the theory proposed by Schlesinger and introduces testable hypotheses that "deal with the probability of winning a higher office, the value of the higher office, the value of the present office, and the impact of whether or not members are 'risk-takers.'" (1979, 1). He offers a reformulation of progressive ambition as he considers not only politicians who sought certain offices but also those who did not pursue to advance their career. Rhode infuses predictive power to ambition theory by examining data "from all members of the U.S. House of Representatives who were presented with an opportunity to run for either the Senate seat or the governorship in elections between 1954 and 1974 inclusive" (Rhode 1979, 12). He concludes that "ambition was widespread among members of the House, that House members are maximizers of expected utility, and that the decision on seeking higher office is dependent on the probability of winning, the value of an office and the costs of running" (Rhode 1979, 22).

Finally, Hibbing (1986) uses office goals as an independent variable to explain how candidates alter their roll call behavior. He analyzes data of U.S. representatives who have decide to run for the Senate to test the central assumption of ambition theory: "that a politician acts today in terms of the electorate he or she hopes to win tomorrow" (Hibbing 1986, 651). He concludes that "there is empirical evidence supporting the central assumption of ambition theory" (Hibbing 1986, 662). Ambitious candidates who seek to run for a new constituency change their behavior accordingly to the preferences of that constituency. "What is more, the extent to which the new constituency is different than the old is an able indicator of the size and direction of the anticipatory behavioral alterations" (Hibbing 1986, 663).

However, Knopff (1998) calls the attention to the dangers of ambition: "people of talent who run for public office are by definition ambitious. And ambition, while admirable and useful, is nevertheless dangerous. Political ambition, particularly in combination with genuine talent, can be served by demagoguery as well as by deliberation" (1998, 691). I argue that such ambition creates that very incentives which generate efficient results through representative institutions.

II.2. Electoral Systems and Policymaking.

Lijphart (1999/2012) distinguishes two kinds of electoral rules: plurality systems, commonly related to majoritarian democracy - and PR, typically implied by consensus democracy. Lijphart empirically tests the traditional literature which asserts that there is a trade-off between representativeness and effective policy-making:

> On one hand, the conventional wisdom concedes that PR and consensus democracy may provide more accurate representation and, in particular, better minority representation and protection of minority interests, as well as broader participation in decision-making. On the other hand, the conventional wisdom maintains that the one-party majority governments typically produced by plurality elections are more decisive and hence more effective policy-makers (Lijphart 1999/2012, 255).

His study on government forms and performance in thirty-six countries finds that majoritarian democracies do not yield superior results than those based on PR regarding effective government and policymaking.

Powell (2000) states that "the simplest and perhaps most fundamental role of elections is the evaluation of the incumbent government. Citizens consider the performance of an incumbent party of policymakers and decide to keep them in office or throw them out" (Powell 2000, 10). Therefore, the representatives worry about the next elections and they try to make policy with voter review in mind. In this view, elections enforce governmental accountability (Lippmann 1925), that is, the accountability model assumes that the citizens know who was responsible for policy making -what Powell calls *clarity of responsibility*. Clarity of responsibility is maximized when a political system presents a single and unified group of elected officials that control all the policymaking resources. In this situation, citizens could identify who is responsible for the good (or bad) performance of the representatives and they would reward (or punish) them. His main objective is to show that representative democracy rests on the relation between voter's preferences and the selection of policymakers: "The empirical claim of elections as instruments of democracy is that the competitive election forges connections between the wishes of citizens

and the behavior of policymakers" (Powell 2000, 14). His empirical evidence shows that political systems based on plurality rules tend to have higher clarity of responsibility and that voters react accordingly to the performance of incumbents.

However, proponents of disperse power challenge that elections are considered as the sole decisive stage. They claim that elections take place just at the beginning of the decision process while there are a lot of decisions to be made between elections. They are also against majority rule as it can generate and perpetuate the tyranny of the majority over minority groups. Powell operationalized a measure of effective authorized representation in the policymaking process. By empirical testing, he observes that, if we accept broad and effective authorized representation as in itself desirable, democracies based on majoritarian rules (MR) would have a worse democratic performance. Therefore, there is a tradeoff between the two ideal types of electoral systems in creating responsiveness connections in democratic regimes.

Powell concludes that majoritarian and proportional approaches imply substantial differences in their ideals of responsiveness. While advocates of the majoritarian perspective claim that "responsiveness requires providing unchecked policy-making control to the party that wins more votes than others" (Powell 2000, 153), proponents of the proportional view sustain that policymaking should be shared by all parties according to the distribution of the vote.

II.3. The Revival of Democracy by Lot

The use of political sortition as a seat-allocation rule has been gaining support as an alternative to elections on many grounds: equality, minority protection, cost efficiency, anticorruption potential, and fairness (Elster 1989, Mulgan 1984, 2011, Goodwin 1992, Stone 2007, 2009, Knag 2011). Bernard Manin's pathbreaking work, *The Principles of Representative Government*, is one of the main sources of the revival of political sortition as a desirable feature for contemporary political systems.[3] Manin (1997) shows that lottery voting was historically the democratic method by excellence, it was a central institution of "direct" democracy, and it implied several fundamental values such as equality, justice, and distrust of political professionalism. "The appointment of magistrates by lot is thought to be democratic, and the

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[3] See Reybrouck 2016.

election of them oligarchical" (Aristotle 1999, 93). Montesquieu agrees with Aristotle: "The suffrage by lot is natural to democracy; as that by choice is to aristocracy. The suffrage by lot is a method of electing that offends no one, but animates each citizen with the pleasing hope of serving his country" (1748/2010, 15). Montesquieu praised Athenian democracy because democracy by lot was amended by synthetizing offices conferred by choice and selected by lot. Montesquieu concurs with Aristotle that elections and sortition should be mixed to attain a better constitution. Rousseau also believes that both forms of selection should be mixed in a democracy as both have their virtues and vices. If morals, talents, principles and fortunes were equally distributed, then election by lot in a real democracy would have few disadvantages.

Manin describes that only a generation after the works of Harrington, Montesquieu, and Rousseau, the idea of allocating offices by lot was forgotten. While the French and American revolutions declared the equality between citizens, both established a method of selection historically regarded as aristocratic. Manin attributes the triumph of election over lot due to: "the principle that all legitimate authority stems from the consent of those over whom it is exercised […] The three modern revolutions were accomplished in the name of this principle" (1997, 83). Democracy by lot was forgotten because it could not fulfill the principles of consent and legitimacy. The elective system was an obvious option because the *consent of the people* is constantly reiterated. "Not only do the people agree to the selection method when they decide to use elections, but they also consent to each particular outcome when they elect" (Manin 1997, 85).

However, in recent years, political sortition has managed to escape oblivion and several authors have proposed different institutional arrangements to amend electoral democracy. For instance, Saunders (2010) defends democracy by lot because it grants minorities the opportunity to win elections in contrast with majority voting that always favors the majority and prevents the minorities to defend their interests. He criticizes how minorities are represented in electoral systems as he assumes that minorities are systematically ignored from political decisions under majority rule[4]. He outlines an alternative procedure, lottery voting, which fulfills the conditions

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[4] Saunders do not mention the role of legislative coalitions to alleviate such problem. Also, he does not consider that it's possible to be part of a minority every time there's a vote in congress, these are temporary minorities.

of *democracy* (political decisions are responsive) and *political equality* (everyone has an equal chance of influencing decisions). In lottery voting, each person casts a vote for their favorite option and a single vote randomly selected determines the winner. Saunders argue that this procedure is democratic, since all members share the same probability of determining the outcome, and egalitarian, because all of them have an equal chance of being selected (2010, 151). The majority still has higher odds to decide on political issues as there would be more votes supporting its preferred alternative, while minority groups have a higher chance to influence political decisions than in democracies based on majority rule. Therefore, Saunders defends the use of political sortition as an instrument to level the opportunities given to majorities and minorities to have a say in political outcomes.

Landemore (2013) offers a defense of the random selection of representatives on the grounds of the alleged benefits of having a cognitively diverse decision-making body. Her main argument is that democracy is a valuable decision-method because it channels citizens' collective wisdom. She advances this argument by comparing how political decisions are made in democracy and in other political regimes such as dictatorships or oligarchies. She argues that the descriptive representation[5] achieved by sortition is desirable because it preserves the cognitive diversity of the population. Her main contention is that the democratic alternative is better than the idealized dictatorship or the oligarchic alternatives but is not better than a system based on random selection of representatives (Landemore 2013, 4-5). So, although Landemore states that electoral democracy is a better collective decision-making procedure than its "real-world" alternatives -such as autocracies and oligarchies-, she asserts that the use of lotteries can improve the chances of making a "better" political decision.

López-Guerra (2014) also makes an epistemic argument and proposes a lottery system to disenfranchise most of the citizens to solve the problem of political ignorance. His proposal consists of two devices. "First, there would be a sortition to disenfranchise the vast majority of the citizenry […] I call this device the *exclusionary sortition* because it merely tells us who will *not* be entitled to vote" (López-Guerra 2014, 24). The second device is the *competence-building*

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[5] Descriptive representation between legislators and voters refers to the degree to which they share similar characteristics, such as their distribution of income, gender, preferences, etc.

process during which pre-voters "optimize their knowledge about the alternative on the ballot" (López-Guerra 2014, 24). This is democratic as it fulfills the condition that everybody shares the same chance of being selected to serve as a representative. Based on these two features, López-Guerra argues that the enfranchisement lottery is justified in some circumstances because it could yield better outcomes -due to the relative better competence of drawn representatives-, than universal suffrage as is now practiced. While he develops a moral justification to disenfranchise most of the population on the grounds of suboptimal competence, he explicitly refuses to provide detailed institutional specifications to support his argument (López-Guerra 2014, 25).

III.   Lottocracy in Theory.

The authors mentioned in the previous section, offer little or no institutional details to implement their theoretical proposals. In contrast, Guerrero (2014) envisions an institutional framework - called the *lottocratic alternative*- that is feasible and better than electoral democracy. I will study the model proposed by Guerrero as is one of the most institutionally detailed in the literature. Even though I focus on this model, my analysis and evaluation of this proposal can shed some light on understanding the main claims of supporters of democracy by lot and derive general conclusions of its overall performance compared to its electoral counterpart.

According to Guerrero, the legislative function would be carried by several "thematic legislatures" called single-issue lottery-selected legislatures (SILL). Members of these SILL are chosen by lottery and learns relevant topics from experts in order to make more informed decisions than those made by regular citizens in an electoral-representative democracy[6]. Guerrero goes beyond this institutional structure overview and suggests that members of the SILL would serve a three-year term, all adult citizens in the constituency would be eligible and that the financial incentives for SILL members should be considerable. Guerrero argues that lottocracy would produce better policy outcomes than those achieved by its electoral alternative because they will be more responsive and less prone to corruption.

First, Guerrero contends that lottocratic outcomes would be more responsive because lottery selection is likely to result in a more descriptively representative legislature than elections, particularly in those electoral systems based on plurality voting and single-member districts. Guerrero mentions that legislators within the US context are far wealthier than the average citizen and they are mostly white men (2014, 167). Indeed, Landemore affirms that "in practice, elections tend to bring to power socially and economically homogeneous people, suggesting that the assembly is not likely to be as cognitively diverse as it should" (2013, 108). In contrast, the lottocrattic system would be more likely to produce an ideological, demographic, and socioeconomic representative sample. Second, according to Guerrero, legislators in the SILL system would be less prone to corruption than those elected as the latter may own their political career to powerful agents. Elected officials use their positions to advance the interests of the

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[6] In the next section I will claim that legislatures selected by lot can fail to satisfy responsiveness due to experts manipulation

powerful, rather than to support responsive policy which promotes the interests of the community.

Guerrero (2014) claims that lottocracy can be implemented on modern nation-states with all their essential features such as private media and substantial inequality (2014, 154). First, there would be many legislatures and each one would focus on a different issue (e.g. Treasury, Defense, Labor, etc.). These SILLs would replace the single and generalist Congress. Second, each SILL would be constituted by three hundred members selected by lottery where all adult citizens from the relevant constituency would be eligible. Third, each member would serve for a three-year term. Terms would be staggered so that each year one hundred members are replaced. Fourth, citizens chosen would not be legally required to serve, but financial incentives would be substantial, and schedules would be flexible. Civic culture would need to be developed so that serving in the legislature is regarded as a significant civic duty. Fifth, a mechanism for removing bad behavior should be adopted but it should protect those who simply are unlikable or who hold different opinions.[7] Sixth, members of the SILL hear from experts on the relevant topic at the beginning of each legislative session. There would be two legislative sessions each year. The structure of the sessions would be: "agenda setting, a learning phase with expert presentations, community consultation, deliberation, drafting, revising, and voting." (Guerrero 2014, 157). During the *Agenda Setting Phase,* the "SILL decides what to work on in the next session by a process of agenda setting" (Guerrero 2014, 160). Then, during the *Expert Presentations* there would be a process by which a person is qualified to present at the SILL as an expert. In the final stages, c*onsultation, deliberation, drafting,* and *voting* would take place. After informing and gathering information with nonmembers, SILL's members would deliberate and write drafts in different committees within the SILL. Drafting consultants may participate in this process.

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[7] Guerrero does not develop such institutional mechanism.

IV.   Elections and Lotteries

In this section I seek to argue that electoral democracy generates superior, or at least equal, legislative outcomes than its alternative based on lot over the three dimensions mentioned above: responsiveness, capture, and efficiency. Each of these dimensions are analyzed in separate subsections.

IV.1. Responsiveness

Guerrero argues that a sample selected by lottery would be likely more representative -and therefore more responsive- than those that are elected. Nevertheless, lotteries can select biased samples of the population regarding various dimensions. For instance, they could select an assembly where legislators have a higher income in average than the people they are representing. Lotteries can also overrepresent men, white people, highly educated individuals, etc. Therefore, some recent experiments which have used political sortition to select its members -like the citizens' assemblies selected in British Columbia, Ontario, and the Netherlands[8]- established a gender proportion that ensured equal participation for men and women. Thus, *stratified sampling* can be advanced as a solution to biased samples in random selection. Stratified sampling means that the population is divided into subpopulations based upon the cultural and social features that are desirable to be proportionally represented in the political body (Stone 2011).

   However, stratification is problematic in diverse societies and even in identifying if a society is diverse. For example, a population can be very similar regarding ethnic and religious features, but very different with respect to income distribution. In an opposite case, the population can share similar economic conditions, but it may contain several groups that are culturally distinct from each other. The former society is economically diverse while the latter is culturally pluralistic. What dimension(s) should we consider when designing a stratified sample that best represents the relevant population? What groups should be represented? It is not clear what dimensions should be considered (gender, race, sexual preference, religion, income, age, education level, etc.) and how these dimensions should be translated into seats within a legislature.

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[8] For more information on these assemblies see Table 1 in the appendix

Besides, legislators randomly selected can suffer from self-selection bias. "The self-selected group that chooses to participate may well be made up of those with resources advantages (such as time and education) or those who have a disproportionate stake in the issue in question" (McGann 2009, 129). Hence, the average legislator in randomly selected bodies may have a higher income than the median voter or would be more educated, just as in elected legislatures. A possible solution for this problem has already being mentioned in the previous section:

> people would not be legally required to serve if selected, but the financial incentives would be considerable, efforts would be made to accommodate family and work schedules […], and the civic culture might need to be developed so that (unlike jury duty) serving is seen as one of the most significant civic duties and honors (Guerrero 2014, 156).

Several problems arise with this "solution". First, Guerrero admits that a civic culture should be developed so that the selected citizens accept to participate in the SILLs. So, in the best-case scenario, only the first generations of SILL would suffer from self-selection bias. Second, even when this civic culture is developed, citizens selected would have to modify their lives around their legislative duty or even abandon their regular jobs. Although financial incentives would be substantial, citizens in the SILL would serve only for three years. After this period, citizens would have to look for jobs and the labor market reintegration can prove very difficult for most of these former representatives. In sum, wages must be high enough for citizens to modify or even give up their regular lives for three years and seek to reintegrate into the labor market after this period. But these relatively high wages imply a third problem: by implementing this economic incentive, citizens selected in the legislature would no longer descriptively represent the average citizen. One of the main criticisms of electoral democracy is that politicians do not represent the people because of the socio-demographic gap between both. For instance, in the United States, the studies of Manning (2011) and Petersen (2012) show that Congressmen are mostly white men who are richer, older, and more educated than the average citizen. By increasing the salaries of randomly drawn legislators, the gap between both groups is enlarged and descriptive representation is hindered just as in the case of elected representatives. Hence, even when we suppose that the random selection of legislators can achieve an unbiased sample of citizens, some of these citizens may not want to participate in such democratic exercise, and those who accept this duty can have a self-selection bias and/or not represent the average citizen.

Now I focus on the studies mentioned above about the socio-demographic gap between representatives and the people represented. Petersen's (2012) report on the profiles of Senators

and Representatives in elected American Congresses since 1945 displays the trend characteristics of its members, including their age, sex, race and education. Regarding age, he shows that whereas the median ages of legislators are in the range between 50 (for representatives) to 60 (for senators), "the median age of the entire U.S. population was 30 years or less until the 102nd Congress" (2012, 4). As for gender, Petersen shows that the percentages of women in Congress were less than 7 percent until the 102nd Congress (1991-1992). For instance, from the 107th (2001-2002) to the 112th Congress (2011-2012) the percentages of women in the lower house were between twelve and eighteen. Regarding race and ethnicity, "for the selected Congresses, the House of Representatives was more than 95% white until the 97th Congress [1981-1992], and more than 90% white until the 107th Congress [2001-2002]" (Petersen 2012, 11), even though, according to the 2000 and 2010 U.S. Census, only 77.1% and 72.4% of the total population were white respectively. Meanwhile, Manning (2011) presents a report with statistical information about the demographic features of the 112th Congress (2011-2012). She asserts that "the vast majority of Members (92% of House Members and 99% of Senators) at the beginning of the 112th Congress held bachelor's degrees" (2011, 4). This contrast with the fact that in 2012 "less than one-third [of Americans aged 25 years or older] have completed four years of college or attended graduate school" (Petersen 2012, 13).

When observing this data, I agree that randomly-drawn legislatures would have better descriptive representation than elected ones. However, I contend that this feature does not translate itself into a more responsive body. For instance, as a SILL focuses its attention in a single issue, it may be the case that problems which require a multidimensional approach, such as poverty, would not be appropriately attended because of the absence of transversal coordination and cooperation between institutions. Nevertheless, I find that legislative capture and the efficiency of the bills passed in Congress are more pressing problems as they delineate how the interests of the citizens are represented. I will discuss both issues in the next subsections.

IV.2. Legislative Capture

I contend that lottery systems may not avoid legislative capture but, on the contrary, may maximize this possibility. Since SILL members would discuss just one issue, it might be easier for elites to locate members that have decision power over the matter they are concerned and to focus resources to affect the decisions made by that legislature. Additionally, if randomly drawn

legislators tend to have lower income and less education than the ones elected[9], as advocates of lotteries presume, the "price" for controlling them can be significantly lower and, thus, corruption may be more pervasive than in electoral systems. But it may be argued that legislative capture originates from campaign contributions and if campaigning is eliminated in democracies by lot there would be less capture or it can even be eliminated. This assertion is at least problematic in two ways. First, in some countries like Mexico, campaign funds do not legally come from private entities that represent particular interests such as corporations or industrial clusters. And despite this, legislative capture can emerge and develop in these countries. Second, if legislative capture originates in campaign contributions is only because is one of the first stages where private interests can influence political decisions. If the candidate is not elected, powerful groups do not give up and stop trying to capture politicians. They will try to take advantage of legal vacuums or other opportunities to advance their interests.

Legislative capture would be equally likely in democracies that use lot or elections because both legislative processes work almost the same way. In electoral democracies, bills are not discussed nor designed by all members of the legislature. Instead, committees are conformed by a few legislators and within these committees, bills are proposed, designed and drafted. After this process, bills are discussed, negotiated, modified, voted and accepted or rejected by the entire Congress. Following the description of the legislative process exposed by Guerrero, we can notice that they are practical the same in both systems. Thus, if SILL are implemented, powerful interests can focus on influencing committees instead of all Congress just as in regular legislatures. One can argue that since one of the principal attributes of SILL is to discuss just one issue, there might not be any need for committees. And if there are no committees, more representatives actively participate in the design and approval of bills, so it would be more difficult for powerful interests to manipulate bills. However, powerful agents do not need to control every single deputy, they just need to capture a sufficiently large number of them to influence the outcome of the vote, just as in electoral democracy.

Finally, randomly selected legislators can be greatly influenced by experts. The role of experts is central within the competence-building phase implied by political systems based on political sortition. Experts may have their own agenda they wish to advance and one of the best

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[9] Guerrero asserts that elected officials are not a representative sample since in the US context, 44 percent of congresspersons have a net worth of over $1 million and mo
re than half are lawyers and bankers, see Guerrero, *Against Elections: The Lottocratic Alternative*, 2014, pp. 167)

ways to do this is to make arguments that favor her perspectives on a particular issue. In this way, experts have a lot of power as they can persuade drawn representatives to favor certain legislative proposals. This problem may be solved if several experts with different preferences are invited to expose their views in front of drawn legislators. Nevertheless, it would be difficult to establish rules that define who should be considered an expert, how many should be invited and what perspectives should be considered in a certain debate. Hence, the lottocratic alternative may open the door to a new problem: the manipulation by experts. This possibility may also prevent responsiveness as the preferences of experts and citizens could be in clear contradiction.

In this subsection I have argued that legislative capture is likely to happen in democracies based on elections and lotteries because their legislative processes are nearly identical. Not only that, but I have contended that manipulation by experts can arise in a lottocratic system. In the next subsection, I analyze another consequence of the resemblance of the legislative process in both systems: the quality of the legislative outcomes.

IV.3. Efficiency

Electoral democracy can foster representativeness, responsiveness, deliberation, and efficient policy with properly designed institutions. In this section, I advance my argument that electoral democracy based on PR can yield better or at least equal results to those presumed by democracy by lot. Political professionalism and the incentives generated by parties play a fundamental role to enhance the quality of the legislative outcomes.

As stated above, the SILL's and electoral legislative processes are almost the same, so they can generate similar efficient outcomes through the constant generation and change of coalitions. Legislative procedures proposed by Guerrero are almost identical to the ones that already exist in most electoral democracies around the world. Members set the agenda, they hear from experts, they deliberate on the matter, they write drafts and then they vote in favor or against a reform. The one great difference is the existence of parties which are the protagonists in legislative settings. Guerrero does not explicitly tell us what would happen to parties in a lottocracy, but from his arguments we can conclude that their existence would be very problematic[10]. However, citizens selected by sortition at the SILLs would follow the same

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[10] The existence of parties as we know them would be problematic because no elections take place in a lottocracy, except maybe in presidential systems. Since one of the main objectives of parties is to win elections to carry out

procedures -setting the agenda, hearing from experts, deliberating, etc.- and is reasonable to think that they would look for peers with the same or similar views to form coalitions when they deliberate or vote. Such behavior is analogous to the one of parties, but the key difference is that parties remain across different elections as stable institutions while drawn citizens do not. This stability provides legislators with experience and proficiency in negotiating, deliberating and generating efficient results, an advantage over citizens selected by lottery. One may argue that a deliberative setting is necessary to adopt a better collective decision, but how is a SILL system better than an electoral one if the legislative processes are almost the same.

Seat allocation rules establish the way in which representatives are selected. A commonly used criterion to classify electoral systems divides them in majority and proportional models. Far from being a Manicheism classification, mixed electoral systems can be placed along this continuum and their position will depend upon three electoral factors: electoral formula, district magnitude, and thresholds (McGann 2006, 48-53)[11]. So, we can find in one extreme of this continuum those systems which rely heavily on majoritarian principles such as first-past the post or winner-takes-all.

Since a great part of my argument has been centered around representation, I won't defend electoral systems that are predominantly majoritarian. Instead, my contention that electoral and lottocratic systems can achieve similar benefits relies on the adoption of an electoral model based on PR. Indeed, Guerrero criticizes electoral systems in general but particularly elections like those held in the United States which employs plurality voting and single member districts (Guerrero 2014, 167). So, in the other extreme of the electoral continuum we find 'pure' PR which is just a theoretical concept since no system -electoral or lottocratic- can guarantee an exact reflection of the electorate's diversity. At this extreme, some difficulties are caused by PR systems as they tend to benefit small or big parties depending on the interaction of the three electoral elements mentioned above (Taagepera and Shugart 1989, Lijphart 1999/2012, Negretto 2013). For example, the Hare formula combined with large magnitude districts and no

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their political platform, it's difficult to imagine how parties could survive if they do not adapt to this new political environment.

[11] For a more developed literature about the classification of electoral systems see: Douglas Rae, *The Political Consequences of Electoral Laws* (1967), New Haven: Yale University Press; Rein Taagepera and Matthew Shugart, *Seats and Votes: The Effects and Determinants of Electoral Systems* (1989), New Haven: Yale University Press; and David Farrell, *Electoral Systems: A Comparative Introduction* (2001), Basing stoke, UK: Palgrave.

thresholds can generate an extremely fragmented party system which may compromise governability.

Neither electoral nor lottocratic seat allocation rules can be justified because they chose the best or most qualified legislators, but because they produce an assembly that can be considered representative of the citizens (Pitkin 1967). While Guerrero justifies SILL via descriptive representation, electoral systems seek to be representative as each citizen votes for her favorite candidate. 'The thought behind the lottocratic system is that members of the SILLs will be […] broadly descriptively and proportionately representative of the political community, simply because they have been chosen at random' (Guerrero 2014, 159). Although there is empirical evidence that suggests that PR provide accurate descriptive representation in some categories (Farrell 2001), it is problematic to suppose that random selection tends to produce assemblies that are not biased towards any group, can identify the 'relevant minorities' and, therefore, are more representative than those yielded by electoral rules. Even if one takes for granted these three crucial features in a random selected assembly, we still have to evaluate whether random selected citizens are more capable of taking informed decisions than individuals capable of winning elections.

That is, one can argue that random selection is more likely to generate a better descriptive representativeness than elections, but the similarity between the range of perspectives involved in policymaking and the range of perspectives of the citizenry doesn't imply a better policy. This similarity might produce responsive outcomes but the self-interest of politicians who seek another term may also produce this kind of results. Also, we must question if the competence-building process proposed by Guerrero and followed in great resemblance by the citizen's assemblies of British Columbia, Netherlands and Ontario produces more competent representatives than those elected[12]. We might also consider the argument that voters want representatives who are better educated than they:

> The aim of every political constitution is, or ought to be, first to obtain for rulers men who possess most wisdom to discern, and most virtue to pursue, the common good of the society; and in the next place, to take the most effectual precautions for keeping them virtuous whilst they continue to hold their public trust (Madison 1787/1961).

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[12] For a detailed study see Fournier (2011).

Is there a tradeoff between representativeness and competence? It is not clear if a political elite is better qualified to make binding decisions or if random citizens, who are a better proxy for the polity, may achieve a similar -or perhaps a better- level of competence than elected legislators. As Brennan (2016) noted, we face the problem of who decides what counts as competence. For instance, even between authors who favor the use of lotteries over elections based on epistemic grounds, there is no consensus on what level of competence should be required for citizens.[13] How to discriminate levels of competence between random selected and elected representatives? Furthermore, legislators with long careers may have the expertise that ordinary citizens lack. The main point here is that we cannot argue that lottocratic systems offered a superior democratic solution than electoral methods because we cannot assert that the former are more representative, legitimate, or make better decisions than the latter.

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[13] Brennan (2016) explicitly says that López-Guerra (2014) has lower standards for competence than him. He asserts that López-Guerra's disenfranchisement lottery is based on a more sanguine perspective about deliberative democracy's ability to produce capable voters. Brennan's position is that good voting requires social scientific knowledge about how policies are likely to work.

V. *A Formal Model of Legislator's Incentives*

In this section, I build a formal model that tries to explain and compare the performance of legislators selected by elections (*E*) and lot (*L*). In the first subsection, I build the model and describe its assumptions, utility functions and equilibrium. In the second subsection, I discuss its results from the theoretical perspective built so far in the previous sections.

V.1. Modeling Legislator's Incentives

In this model, both randomly drawn and elected legislators try to maximize their utility by determining how much effort (*e*) they will put in the designing and approval of bills. On one hand, in period *t*, they want to minimize their effort, that is, they want to spend time and resources as little as possible to maximize their utility while in office. On the other hand, in period *t+1*, they want to maximize their effort as representatives because good policy (*G*) can be profitable in the future. I normalize *e* where $e \in [0,1]$. The quality *q* of the bill depends on how much effort *e* is invested in it. Quality *q* is defined in terms of how responsive is the policy for the citizens. So, in the case where a deputy invests great resources to design and approve a bill that benefits only a negligible percentage of the population -for instance, the wealthiest-, *q* would be lowest as her effort is not consistent with the responsiveness condition. For simplicty, we can think that *q* represents the quality of a public good. So, *q* is a function of *e*:

$$q(e)=B+e^{1/2} \qquad\qquad (1)$$

where *B* represents a low-quality public good, a bad policy or it can also be interpreted as the status quo. This latter case implies that the legislator do nothing to approve(design) a new law. So, *B* is exogenous and represents the worst-case scenario where $e = 0$.

Figure 1. *Quality (q) as a function of Effort (e)*
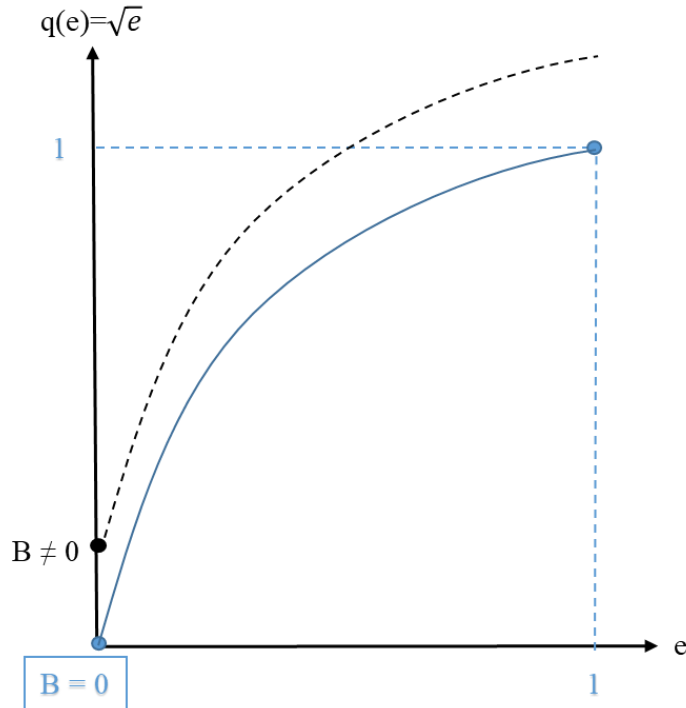
Source: Own elaboration

As the legislator spends more effort, quality q increases. Thus, there is a positive relationship between e and q as shown in Figure 1. This monotonically increasing function is also concave, meaning that it shows decreasing returns. So, in the first stages of the legislative process - polling, getting data, identifying the problem, etc.- the representatives increase the probability of designing a good policy at a faster pace than in latter stages where the same effort translates into lower returns. The relationship between e and q is summarized by the following inequalities:

$$(\partial q/\partial e)>0 \qquad (\partial^2 q/\partial e^2)<0$$

As discussed above, because the legislative process in both electoral (E) and lottocratic (L) democracies are fairly identical, I assume that both kind of representatives face this same function:

$$q_E=q_L=q(e)=e^{1/2}$$

I assume that q varies from B to G where G stands for the best-case scenario when the legislator put all the possible effort ($e=1$) into the designing and approval of the bill. So, we have that $B<q<G$ where:

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$$G=B+1 \qquad (2)$$

Therefore, for extreme values of *e* we have that:

$$q(0)=B \qquad\qquad q(1)=G$$

So far, I have described how the quality of legislative outcomes depend on how much effort is put by the representatives through the legislation process. Legislators need to identify and diagnose a problem, propose and discuss possible solutions, and draft, negotiate and approve legislation. These actions imply spending valuable resources as time and money. But if good policy is costly, why would representatives spend resources to make a good job? The main reason for legislators to choose an optimum level of *e* lies on the incentives they face. Now I define the utility functions of both kind of representatives.

The incentives of elected legislators are straight forward and depend on the institutional system they are in. For instance, good performance while in office can translate into a better opportunity for reelection and/or advancing her political career (*i*). So, *i* represents the incentives faced by elected legislators to put certain level of effort *e* in the designing and approving of bills while in office. If the electoral system rewards (or punishes) those representatives who spend high (or low) resources in policymaking, parameter *i* would be high (or low). In the next subsection, I'll discuss how different electoral systems can identify and reward legislators based upon their performance.

Now I continue with the model's assumptions. I assume that elected representatives have high incomes that enables them to avoid the effects of bad policy (*B*). For instance, they may be in charge of discussing, drafting and approving an education bill regarding public schools. But, since they are rich, they can send their children to private schools or even to study abroad. In this case, they will have little interest to do a good job in presenting and approving such bill, so we can expect that *e* will be zero. Equation 3 represents the utility received by elected legislators as a function of *e*. The subtraction of the first two parameters (*G-e*) is determined in period t when the representative is in office. The third parameter ($ie^{1/2}$) represents how the electoral system can reward the legislator in the next period, for instance, it can represent the opportunity to be reelected.

$$U_E(e)=G-e+ie^{1/2} \qquad (3)$$

In contrast, drawn legislators' incentives are quite different. As they cannot pursue a political career, their only incentives to pass efficient bills are that they will be affected by the consequences of such laws in the near future. Drawn legislators can only 'escape' from these legislative outcomes if they have a similar income than their elected counterparts. So, the incentives of representatives selected by lot can vary greatly depending on their economic status. However, one can argue that this economic factor is not the only one that can determine the incentives of drawn legislators. They can also be truly interested in the bills discussed in the legislature because they have certain preferences over these outcomes.

Therefore, a deputy selected by lot will increase her effort depending on how the bill affects her interests. In equation 4, r captures how representative is this kind of legislator. For example, if the sample of citizens selected is not biased and they descriptively represent the demos, we can expect high values of r and vice versa. So, r can also be thought as a measure of responsiveness if these conditions are met. Representativeness r is normalized where $r \in [0, 1]$ and 1 stands for perfect representation and 0 for no representation at all:

$$U_L(e)=rq+(1-r)G-e \qquad (4)$$

Equation 4 shows that r is a measure of how likely it is that a drawn deputy puts effort to design and approve a new bill. If the legislator is representative of the citizenry in a particular issue, she will have incentives to spend resources to pass a high-quality policy. If on the contrary, the deputy does not have incentives to approve a good law because its effects won't affect her interests, she will receive G. Therefore, I'm assuming that she won't spend resources because she can 'escape' a bad policy -just like elected representatives. To exemplify how the parameter r works, let's consider a plural society where two citizens are selected by political sortition to design a healthcare reform regarding public hospitals: one of them is rich -and little representative of such society- and the other is poor -and highly representative. The former would not have incentives to do a good job because she can escape and get a high-quality output G, that is, she can access medical services provided by private hospitals. The latter would have incentives to do a good job while in office because she wouldn't be able to escape a bad legislative outcome B. So, r is a flexible and general parameter of representation that can be related to income distribution within a society, but it can also capture citizen's preferences on different issues. We obtain the utility of drawn legislators by substituting equation 1 in 4:

$$U_L(e)=rB+re1/2+(1-r)G-e \qquad (5)$$

Finally, we can write the maximization problems of both types of legislators from equations 3 and 5:

$$\max\{e\}\,U_E(e)=G-e+ie^{1/2}$$

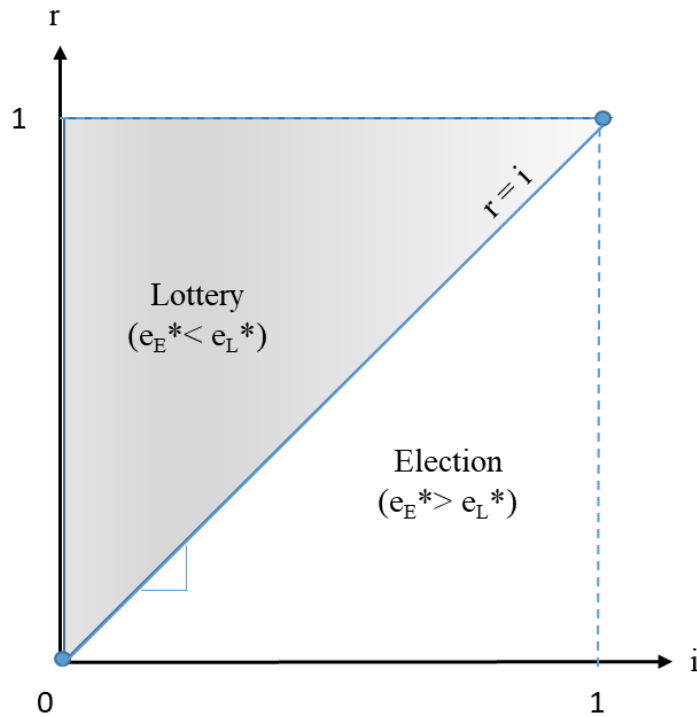$$\max\{e\}\,U_L(e)=rB+re^{1/2}+(1-r)G-e$$

And the optimums levels of effort for elected and randomly drawn legislators are[14]:

$$e^*_E=i^2/4 \qquad (6)$$

$$e^*_L=r^2/4 \qquad (7)$$

Figure 2. *Responsiveness and Efficiency in Policymaking*

Source: Own elaboration

V.2. Comparative Statics: Discussing the Outcome

Equations 6 and 7 imply that representatives in both systems will invest the same effort in policymaking when $i=r$. This relationship is graphed in Figure 2. The 45-degree line represents the coordinates where the incentives that a professional politician has for advancing her political

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[14] Calculations are in the appendix.

career match the level of representativeness of randomly selected legislators. If the institutional incentives offered by electoral systems are greater than the representativeness attained by lotteries, then policymaking would be better in elected legislatures as effort e would be greater than in randomly drawn bodies and vice versa.

At first glance, this result appears to be very abstract, but it has several implications and applications to the real world. First, we need to examine the determinants of r. Parameter r increases if the sample of citizens is not biased regarding a relevant dimension. So, we have to choose a dimension to determine r, for example, income. If we think of a country with high economic inequality, a wealthy legislator would have low representativeness since a great proportion of the population live in poverty. As this legislator has a lower income, he would be more representative of the society (r reaches its maximum level when the income of the legislator is equal to the income of the median citizen). In the same way, we can propose other dimensions of representativeness such as level of education or age. If we want to measure r over categorical variables such as gender or race, then we can consider the complete legislature and not only one official. In this way, the legislature would be more representative if it ensures proportional representation along the subgroup dimensions we are considering. In this case, e would be a measure of the mean effort in the entire legislature instead of an individual. In sum, r positively responds to a non-biased sample of representatives. So, in a society where citizens share similar characteristics in various dimensions -such as economic, social, demographic and cultural features-, the probability of achieving a non-biased sample is more likely and, thus, r is more likely to have high values.

Second, we must find the determinants of incentives i. As exposed above, ambition theory states that politicians' behavior is a response to their office goals. If they want to advance their career, politicians must do a good job while in office or they will be punished by the citizens in the next elections. So, the quality of the legislatives outcomes would depend not only on how well the legislators behaved while in office, but how easy it is for citizens to identify who is responsible for such legislation. Therefore, to determine the efficiency of policymaking in electoral democracies we should analyze how these two factors work together across electoral rules. For simplicity, and following the two-dimensional paradigm, I only compare electoral

democracies based on majoritarian and proportional rules (Lijphart 1999/2012; Powell 2000; Gallagher and Mitchell 2018)[15].

According to the accountability model, MR have an advantage over proportional ones in identifying who's responsible for policymaking. The *Clarity of Responsibility* measure operationalized by Powell (2000) shows that citizens can reward or punish the performance of officials with a higher probability in majoritarian democracies than in their proportional counterparts. PR can diffuse responsibility, so the probability that citizens favor representatives who worked hard during their term would be lower than in a majoritarian model. Diffusion in accountability can come from federalism, multiple cameras, multiparty systems, lack of government party cohesion, etc. Although these institutional features might be present in either system, in general, MR facilitates the clarity of responsibility for citizens' evaluations.

Therefore, a representative would have perform better in office if the probability of being rewarded for her job is higher. At one extreme, in a system where a unified, disciplined and coherent political group control all the resources for policymaking, i would be high. Parameter i would decrease if we add federalism, a fragmented Congress, ephemeral coalitions, and multiple cameras. Another instance where we can observe a small i is within an electoral system with PR and closed lists: deputies who managed to be at top of such lists would have few incentives to approve good bills since they have assured their seats in the next legislature.

As for the second factor, policy performance of democratic governments, consensus democracy may have an advantage over majoritarian democracy. Lijphart (1999/2000) holds that the latter do not offer superior results in effective policymaking. Besides, "consensus democracies do clearly outperform the majoritarian democracies with regard to the quality of democracy and democratic representation as well as with regard to what I have called the kindness and gentleness of their public policy orientations" (Lijphart 1999/2000, 295). Birchfield and Crepaz (1998) finds similar results regarding income inequality. They empirically test how constitutional structures impact income inequality among eighteen OECD countries. Their study "reveals that consensual political institutions are systematically related to lower income inequalities while the reverse is true for majoritarian political institutions" (Birchfield and Crepaz 1998, 175). They also offer a clever distinction between competitive and

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[15] To consult why scholarship on mixed-member systems has not reached consensus on their consequences see Herron, Nemoto and Nishikawa 2018.

collective veto points that explains the two-dimensions of consensual democracy defined by Lijphart. "Competitive veto points occur when different political actors operate through separate institutions with mutual veto powers, such as federalism, strong bicameralism, and presidential government" (Birchfield and Crepaz 1998, 181). In contrast, competitive veto points occur when different political actors interact within the same body such as in PR systems, multi-party legislatures and parliamentary regimes. While competitive veto points lead to immobilism and deadlock, collective veto points urge political actors to work together making compromises through deliberation and negotiation. PR increases the probability of having a multi-party system which, in turn, leads most likely to coalition governments where responsibility of approving good policy is shared among more political actors. "In such an environment, the pressure to produce responsive policies is much greater and partisan politics is also more muted […] institutions with collective veto points should indicate a higher responsiveness to the desires of the voters that institutions with competitive veto points" (Birchfield and Crepaz 1998, 182).

Therefore, the determinants of i work on different directions regarding the dichotomy of majoritarian and proportional electoral systems. Whereas the appeal of the former lies on the clarity of responsibility, the appeal of the latter lies on responsive results. In this way, i reflect the tradeoff between accountability and representativeness, but how does this tradeoff in electoral rules impact efficiency levels between electoral democracy and democracy by lot?

Going back to Figure 2, democracy by lot would offer higher efficiency in policymaking when $r>i$. Parameter r increases when the sample of citizens is not biased, that is, when the randomly drawn legislators share similar preferences with the rest of the population. In societies where inequality is low, r increases as the probability of biased sampling decreases. So, we can observe higher efficiency in policymaking in egalitarian societies. Nevertheless, advocates of democracy by lot sustain that lotteries are necessary in communities where there is a deep inequality. Their argument lies on the connection between representativeness and responsiveness. The use of political sortition would enable 'regular' citizens to become policymakers, they would attend the problems that affect the majority of the population. That is, since this kind of legislators are more descriptively representative of the average citizen, the connection between the preferences of the people and those in charge of policymaking would be stronger than in electoral settings. In sum, responsiveness would be higher if lotteries can select representative citizens.

However, as I have shown, different problems arise with the institutional implementation of political sortition. Among these problems are self-selection bias, legislative-capture and manipulation by experts. These three issues affect the responsive virtues praised by authors who defend democracy by lot. While self-selection bias reduces responsiveness even before the creation of a legislature, the other two negative factors act once the legislature is installed. Since I have argued that legislative-capture is likely to happen in democracies based on elections and lot, the challenges for the latter lie on how its institutions can deal with self-selection bias and the manipulation of experts. If these challenges are not attended properly, the use of political sortition may be relegated within egalitarian democracies where the probability of bias sampling and institutional incentives for elected legislators are low.

But responsiveness can be achieved through PR within electoral democracies as these rules tend to maximize representativeness. If the society contains various and different groups, these rules are useful to protect minorities via the promotion of deliberation and negotiation. Hence, PR would enhance responsiveness and efficiency of policymaking in plural societies characterized by political and social cleavages (Lijphart 1977). The caveat here is that citizens' interests must be appropriately represented by the parties in the legislature. That is, if PR yields a multiparty system but neither party properly articulates the preferences of the population, then proportional rules are of little use. This problem may support the adoption of political sortition since citizens are the best judges of their interests. The reasoning is simple: if citizens become policymakers, then responsiveness is attained.

However, even when we assume that the incentives faced by randomly selected legislators - the consequences of their policy- are strong enough, responsiveness would be at stake because of the existence of several institutional problems that cannot eliminate self-selection bias, biased sampling and the manipulation by experts. In contrast, PR can attain responsiveness via the incentives faced by political parties. If we suppose a legislature where all parties neglect citizens' interests, there would be huge incentives to become a party that represents them as citizens would reward it with more seats and power over policy. In the end, the objective of political parties is to gain votes, and those votes imply doing a good job while in office. Thus, electoral democracies can achieve efficiency via these incentives and responsiveness via PR. Proportional rules, combined with large districts and low thresholds, maximize the number of

views included in the legislative debate. Hence, PR offers a better chance for responsiveness than MR in diverse societies.

Table 1. *Responsiveness and Efficiency in Legislative Outcomes*

HOMOGENOUS SOCIETY

Representativeness in Sample

		Low	High
Electoral Incentives	**Low**	MR/Lot	Lot
	High	MR	MR/Lot

HETEROGENOUS SOCIETY

Representativeness in Sample

		Low	High
Electoral Incentives	**Low**	PR	Lot
	High	PR	PR

Source: Own elaboration

In contrast, MR can achieve similar results through accountability in homogenous societies. Countries that are culturally and ethnic homogenous and have low economic inequality can attain responsiveness and efficiency with MR. Since the population share similar sociodemographic conditions, it is easier to fulfill representativeness through single-member districts and plurality voting. MR make it easier for citizens to identify who is responsible for policymaking. This effect is intensified as the number of parties or relevant groups making policy decreases under MR. In this way, they can reward(punish) representatives who design and approve good(bad) legislative outcomes. In a homogenous society, the need for minorities' protection diminishes and responsiveness can be attained with a smaller number of political parties than in a pluralistic society. My argument is summarized in Table 1.

When democracy by lot generates unbiased samples, representativeness r translates into responsiveness and efficiency in policymaking since drawn legislators have the right incentives to do a good job while in office. If political sortition cannot overcome biased sampling, electoral rules are the best way to achieve responsiveness and efficiency in policymaking. In homogenous societies, MR can achieve these results, while in heterogenous environments PR is necessary. Table 2 shows that, even when we suppose that the consequences of legislation are sufficient incentives for drawn legislators to behave well in office, democracy by lot is recommended just when the electoral incentives it replaces are low or when the representativeness of the sample is high. In homogenous societies -where biased sampling is less likely-, MR and lot can produce

similar results: the first through accountability and the second via representativeness. In contrast, in heterogenous communities, lotteries should be implemented only when they produce unbiased samples and when PR carries low incentives for elected officials. In any other case, PR can generate better legislative outcomes because of the dangers implied by biased sampling.

VI.   Conclusions

My argument along this paper relied on casting reasonable doubts and questioning the supposed democratic benefits implied by lottocracy. Consequently, I strive to show that electoral schemes based on PR can generate similar or better results than democracy by lot in fragmented societies. The same is true for MR in egalitarian countries. Although my evaluation of lottocracy is not optimistic, I consider that institutional innovation is of utmost importance. Democratic reengineering is needed to encourage citizen participation, reasonable deliberation, responsiveness, better representation and efficiency in policymaking. Both the attempts at electoral reform -in British Columbia, Ontario and the Netherlands-, and the constitution-making processes in Iceland and Ireland reinvigorate new ways for citizen involvement in political decisions. The purpose of this work was to contribute to a most pressing need for a comprehensive account of these new forms of popular participation. My conclusion concurs with that contended by Brennan (2016) on the conservative argument for democracy: lottocracy might not work better than electoral institutions and, given that replacing the latter is too risky, maybe our best bet is on the institutional innovation within the electoral democracy paradigm.

As a final note, I wish to briefly comment on the plausibility of implementation of these new forms of democracy. If democracy by lot can overcome the institutional challenges implied by biased sampling, then I would conclude that lottocratic systems offer better legislative outcomes than electoral ones. In this case, the next step would be to establish them, but if parties are in control of the legislative branch, how can we adopt them in a legal and peaceful way? Political sortition greatly endangers the power that parties have claimed in modern democracies. In the extreme, the replacement of elections by lotteries implies the disappearance of party systems, so, it is logic to assume that parties would not willingly accept such a change. Supporters of random selection in politics praise the normative advantages of this kind of systems, but they fail to explain how these institutions can be adopted in democratic settings. A possible way is to wait for the right moment, a breaking point that forces citizens to look for political innovations as in the case of the Icelandic National Assembly in 2009. Maybe the only way is to rely on the 'constitutional moments' theory championed by Ackerman (1998), but even in this case political parties managed to stop the citizens' reform of the 'first crowdsourced constitution'. The same is true for the innovative experiments in Canada and The Netherlands. In sum, political parties make citizens' assemblies unlikely to happen. This is a key point that has not been studied

appropriately in the literature on democracy by lot and a crucial issue that goes beyond the instrumentalist reasons framed in the debate between democratic and epistocratic regimes. We can analyze which of these alternatives provide better normative conditions, but it should be complemented with the study of the likelihood that epistocratic models -like the one proposed by Guerrero- are feasible. Far for being a discouraging advise, I strongly believe that these democratic debacles are full of lessons that political scientists must evaluate in order to design better institutions if democracy is to be regarded as the best form of government.

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$$\max\{e\}\ U_E(e) = G - e + ae^{1/2}$$

$$\max\{e\}\ U_L(e) = rB + re^{1/2} + (1-r)G - e$$

F.O.C.:

F.O.C.:

$$\partial U_E/\partial e: -1 + a/(2e^{1/2}) = 0$$

$$\partial U_L/\partial e: r/(2e^{1/2}) - 1 = 0$$

$$a/(2e^{1/2}) = 1$$

$$r/(2e^{1/2}) = 1$$

$$a/2 = e^{1/2}$$

$$r/2 = e^{1/2}$$

$$e^*_E = a^2/4$$

$$e^*_L = r^2/4$$

Table 2. Composition, Process and Outcomes of Citizens' Assemblies

	BRITISH COLUMBIA	THE NETHERLANDS	ONTARIO
Number of Members	160	140	103
Gender Proportion	50/50	50/50	50/50
Selection phase	Members randomly picked among interested citizens		
Learning phase	Home Study +6 weekends (Jan-Mar 2004)	Home Study +6 weekends (Mar-June 2006)	Home Study +6 weekends (Sep-Nov 2006)
Consultation Phase	50 public hearings 1600 submissions (May-June 2004)	18 public hearings 1400 submissions (May-June 2006)	41 public hearings 1000 submissions (Oct 2006-Jan 2007)
Deliberation Phase	6 weekends (Sep-Nov 2004)	4 weekends (Sep-Nov 2006)	6 weekends (Feb-Apr 2007)
Destination of recommendation	Binding public referendum (May 2005/May 2009)	Submitted to government (Nov 2006)	Binding public referendum (Oct 2007)
Outcome	Narrowly failed / Failed decisively	Proposal rejected	Failed decisively

Source: Based on Fournier 2011