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**Tilting the playing field.**  
**Do Double Simultaneous Voting System and Apparentment Lists contribute to subnational party hegemony?\***

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**Abstract.**

This paper contributes to the political competition literature by providing empirical evidence of the influence of Double Simultaneous Voting System (DSVS) and Apparentment Lists (AL), in force in several Argentine districts since 1987, on party hegemony and the concentration of the party system. Results from a panel data of 9 gubernatorial elections and all 24 Argentine subnational jurisdictions show that these electoral systems favor the persistence of the incumbent party in office, diminish the effective number of parties, and improve the probability of victory of the incumbent party. DSVS and AL generate a profusion of subgroups that take advantage of preexisting party fragmentation, clientelistic networks and large vertical fiscal imbalance

**JEL Classification Codes:** D72; P16

**Keywords:** Political competition; electoral systems; subnational politics; Double simultaneous voting system; Apparentment lists.

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## 1. Introduction

A few years after the restoration of democracy in 1983, Argentina witnessed an intense period of political reforms with the proclaimed objective of modernizing the electoral system and extending political rights to provinces' constituencies. Reforms included amendments in the electoral system, which ended up altering the political game and the strategies followed by political parties and, particularly, by the incumbents. Changes in the rules ranged from simple, and apparently *naïve*, modifications in election dates, to more complex and evident game-changers such as altering the electoral system. One of the central amendments adopted in various jurisdictions was the substitution of the traditional electoral arrangement, featuring the selection of each party's candidate by means of primary election or party committee appointment and later a general election to choose the local authorities, for the Double Simultaneous Voting System (henceforth, DSVS) that performs simultaneously primaries and general elections. In some provinces DSVS was implemented for all local elective categories: governor, legislator, mayor and city council, while in others only for legislators and local council members.

DSVS affects subnational political competition by favoring fragmented parties with large clientelistic networks. Under DSVS, each political party, or "*Lema*", can collect votes from as many subgroups, or "*Sub-lemas*", registered<sup>1</sup>. Since the cost of setting up and registering a subgroup is very low, every local political broker can lead a subgroup. This is a key distinction with respect to the traditional closed party list system in which each party can only present one candidate for governor and one list for legislators that include as many candidates as the number of disputed seats. Besides, in the closed list system, only candidates positioned at the top of the subgroup's lists have full incentive to campaign while the ones positioned lowest in the list and those partisans left aside from the official party ballot have lesser incentives to campaign as their chances to get elected are nil. Although each political party can set up as many subgroups as it desires, only the incumbent party can optimize the number of subgroups by making credible promises to compensate losing subgroups with public employment and subsidies. Governors take advantage of large vertical fiscal imbalances that not only allow them to spend public funds without taxing their constituencies but also encourage citizens to reward with their vote those who are effective at extracting resources

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<sup>1</sup> Lema and Sub-lema are terminologies used in the Argentine system to refer to Group and Subgroup, respectively.

from the central government rather than controlling public spending destiny (Jones et al, 2012). We conjecture that the larger the number of the incumbent subgroups, the higher the chances of the incumbent party to retain office. Conversely, as the number of opposition subgroups grows, the probability of defeating the incumbent augments, but opposition politicians anticipate small expected returns from setting up a subgroup with low chances of success, so the number and the geographical coverage of opposition subgroups is more limited than the incumbent's.

Moreover, DSVS usually moves the focus of the election from ideological issues to the personal characteristics of the candidate which helps the party with large number of subgroups to capture votes from individuals outside the ideological spectrum of the party.

The implementation of DSVS reached a maximum in 1995 when ten out of 24 electoral districts elected local authorities by means of this controversial system. After a wave of criticism, DSVS was eliminated in some provinces but soon emerged another questionable system known for the names of "*Colectoras*", "*Acoples*" or "*Adhesiones*". This alternative electoral system, that we grouped under the name of *Apparentment Lists* (AL), allows parties, usually small, to adhere their list of candidates for legislators to the candidacy of a governor from a given party. Comparing to DSVS, AL represents an increase in the cost of setting up subgroups under DSVS because forming a subgroup is much simpler, easy and cheaper than setting up a party.

Despite the fact that out of the 213 elections carried out in the 36 year period under study, the DSVS was used in 11.7% of the gubernatorial and 17.4% of the local legislative elections and the AL system in 24.9% of the elections, the extant literature on the topic is scarce, focusing mainly on theoretical considerations but offering mostly a descriptive analysis (Buquet, 2000 and 2003; Tibaldo, 2019; Urruty, 1991). This paper discusses analytically and empirically the role of DSVS and AL on political competition at subnational level. We work with a panel that spans all 24 Argentine electoral districts for the period 1983 – 2019.

To preview our results, we find that the profusion of incumbent subgroups for legislators generated by the DSVS favors party hegemony. On the contrary, the number of opposition subgroups for legislative seats are found to enhance political competition. We conjecture that incumbents implement DSVS to exploit preexisting conditions of: (a) party fragmentation, which *a-priori* may be termed as a negative feature but ended up accumulating votes for the

party, (b) clientelistic networks, which are empowered and expanded with DSVS, and (c) large vertical fiscal imbalance, that enable the financing of subgroups without taxing their constituency and discourage citizen's control of public funds usage. Likewise, the formation of several subgroups led by party brokers that otherwise would not be part of the party ballot, increase their incentive to campaign for their own candidacy. Furthermore, we presume that AL, featuring a smaller number of subgroups, also operate through the same channel, but we find that their statistics significances do not reach conventional levels. Interestingly, we detect that increasing the number of opposition subgroups for governor favors the incumbents instead of the challenger. A priori, registering various subgroups to collect votes from different candidates for governor looks a good strategy for the opposition but apparently is perceived as a symptom of excessive fragmentation by the independent voters. We also find that both, DSVS and AL, diminish the effective number of parties and increase the margin of victory of the incumbent party.

The paper is organized as follows. Section 2 describes how the DSVS and AL operate. Next, we explain the set of electoral systems that ruled in the Argentine Provinces since 1983. The empirical specification is presented in Section 4 and the discussion of the estimation's outcomes in section 5. Finally, section 6 concludes.

## **2. The Double Simultaneous Voting System and Apparentment Lists.**

The Double Simultaneous Voting System is an electoral mechanism in which primaries and the general election are held simultaneously. Each party, constituted as a "*Lema*" (group), is allowed to present as many "*Sub-lemas*" (subgroups) as it wishes, which implies that each party can present several candidates for the same position. Each list competes simultaneously within its own party's internal election and if it succeeds in collecting the intra-party majority, then the winner's list races against other parties' respective winners adding up to his/her candidacy all the votes that were directed to the other subgroups of his/her party. Hence, it is an accumulative process considering that all party votes go to the winner's subgroup.

As opposed to the traditional system in which the Executive and representatives are elected in two elections held in different dates, that is, a primary election to select each party candidates and a general election to designate the winners, DSVS minimizes administrative,

political and economic costs of running two or more elections in a short period of time, as well as shortens campaign periods. In addition, DSVS reduces political controversies or conflicts which could arise if two pre-candidates had to compete directly in primaries. Moreover, the system supposedly works against monolithic and hierarchical selection of party candidates. Therefore, the first impression would be that DSVS favors the consolidation of parties whereas primaries would tend to divide them. But, the system conceals a strong assumption regarding the voters' preferences. As stated by Buquet (2003), the DSVS is an intra-party preferential voting system which supposes that the voter aims its vote, first to the party and in second term to the candidate. This is the reason why the DSVS is presented as a mechanism that fosters the unification of the party system while promoting intra-party competition or fragmentation. In this same line of reasoning Urruty (1991) sustains that the electoral method of this system relies on the basic idea that the voter's motivation is to assure first the triumph of the political party he supports, and only then, the preferred candidates.

Summarizing, DSVS assumes that the best candidate of a rival party is inferior to the worst candidate of the own party. This is a bold hypothesis that has led many times to results that may have not occurred if the primaries and the general elections would have been carried out in different dates. It assumes that voters are party-oriented rather than candidate-oriented. If the electoral supply inside every political party is ideologically or programmatically coherent, then voter's choice with DSVS or primary elections would make no difference. But it is likely that in many cases the voter will choose other party if his/her preferred candidate were defeated in primaries, especially in countries where the party system is not consolidated and where the party embrace a wide range of the ideological spectrum and also where the independent electorate is large. In fact, under the DSVS voters cannot change their choice: it allows electors to take part of primaries but force them to keep their party choice no matter the primaries results.

As argued above, one of the strongest arguments supporting the DSVS is that it enables the party unity as well as fosters inner competition; however, critics claim that it can also generate fragmentation in the supply of each of the political parties, losing its ideological coherence, making significant preference distortions and confusing the voters. In this respect, the ideological coherence in a political party helps the voter to avoid a risk component into voters' decision. In fact, the lack of this desirable feature puts the legitimacy of the DSVS in the core

of the discussion. Without a party-oriented system and with no intra-party ideological coherence in the electoral supply, the DSVS electoral results can distort individual preferences or at least include a big degree of uncertainty in the process. In addition, it is noteworthy that in many cases the most individually voted candidate does not result winner under DSVS. Rather, under this scheme, party preferences come first, which can collide with the majority principle as a fundamental rule of democracy. Other factor which contributed to delegitimize DSVS, mainly in Argentina, is the belief that this kind of rule is adopted opportunistically in order to mitigate internal divisions and feed political hegemony. Contrasting the Argentine experience with the Uruguayan, Buquet (2003) concludes that if DSVS is meant to make the party system a more dynamic and democratic one in the long term, a broad agreement and understanding about this type of scheme has to be reached by politicians, relevant players and voters before putting it into effect. Otherwise, it could be perceived as a non-legitimate electoral rule. Another risk associated with DSVS is that, due to the low individual costs of presenting a candidacy, compared with other type of systems, there exist non trivial chances to generate more extremes candidates. Given different individual and party intertemporal utility functions, the DSVS tends to produce less moderate positions compared with the alternative scenario with primaries and general elections performing in different dates. The profusion of subgroups is meant to capture small segments of the constituency and it sometimes can be achieved with candidates making extreme positions. Thus, DSVS drives parties to be less ideologically coherent which in turn exacerbates the failure of the electoral system.

### **DSVS in Latin America**

Uruguay was the first nation that implemented DSVS for presidential and legislative elections so most of the studies analyze the Uruguayan experience and focus mainly on the impact of DSVS on proportionality of the representation and on the magnitude of the district (Vernazza 1989; Gonzalez 1991; Monestier 1999; Piñeiro, 2004). The Uruguayan case suggests that DSVS causes an excessive and growing fractionalization inside political parties, measured by the number of legislative lists for the election of Representatives. When DSVS is combined with proportional representation, fractionalization is enhanced because it reduces the expected cost of competition (González, 1991). Another country that adopted the DSVS was Honduras for the 1985 presidential election. In this case, as indicated by Sosa (2015), the incumbent



was reluctant to perform party internal elections, which were suggested but not institutionalized by the law. DSVS was adopted due to the resulting factionalism within the two major parties that made it extremely difficult to elect one candidate for presidency. To avoid the recurrence of this experience, party internal elections were formalized and incorporated for the subsequent elections.

As stated before, the DSVS aims to provide a mechanism under which there is no incentive to compete outside the party, since each list contributes to the party and the whole party supports the most voted list within each electoral category. Every candidate knows that competing outside the party would mean creating new political machinery which would imply a tremendous effort in terms of gaining supporters and fund raising. When DSVS is the rule, candidates know that performing inside the party will bring one of the candidates all the support of the rest (pull-effect). The advantage of keep playing inside the party is to use the whole party structure and the vote-support of the other subgroups that integrate the party.

### **2.1 Apparentment Lists (“Colectoras”, “Acoples” and “Adhesiones”)**

The discontent of the public opinion for the unsatisfactory performance of DSVS lead politician to abolish it but in some districts was replaced for the so-called “Colectoras”, “Acoples” and “Adhesiones”, which we grouped under the heading of *Apparentment Lists* (AL) which are a close variation of DSVS. With AL, any aspirant running for governor can have as many legislative lists as he/she is able to operate, and every list will “collect” votes for his/her candidacy. In this respect, the system works very similar to DSVS for the governor’s election although it has a different result for legislators since the less voted candidates do not add up their votes to those with greater support from the constituency. Therefore, one should expect a change in the incentives of political parties in the legislative races since it could be more effective to narrow the number of options within the political force to obtain more seats in the Legislature. These types of systems are the subterfuge used by major political parties to associate their own ballot list for Executive positions (governor or mayor) with many lists for legislative and city council positions. It is promoted by the main parties (mainly by the incumbent) in an attempt to capture the support of small political structures without incurring in high costs. In turn, there are incentives for small parties to belong to a broad electoral

coalition led by a major party because the participation cost diminishes as they elude the need of creating a professional organization for the campaign<sup>2</sup> (Gramson, 1961).

Importantly, AL allow parties to have as many candidates as they wish running for the same position, although all nominees (inside and outside the party) compete against each other but without the accumulative feature described in DSVS.

Let us note that these type of arrangements are, to some extent, perceived by the constituency as a manipulation of the electoral system that makes it easier for political actors to build up a clientelistic network that help putting obstacles to a transparent electoral process. In fact, the proliferation of options generated by DSVS and AL, contrary to what may be supposed, works in opposite direction to a clean and fair system as it increases the information costs that voters have to incur. Additionally, voters show disapproval for an obscure set of rules that denies, in some occasions, the access to power to the most voted list or candidates.

One of the key features of the DSVS and, in lesser extent, of AL, is the profusion of subgroups. This characteristic makes cumbersome to cast a ballot because frequently the voters finds various dozens of paper ballots in the voting booth, but more importantly the number of Subgroups and *Apparentment Lists* participating in the election are germane to the result of the election. As we show in the following sections, party hegemony, the effective number of parties and the incumbent's reelection probability, are affected by the number of subgroups and AL. Both, DSVS and AL, encourage local brokers to create a subgroup to compete in the elections. Depending on expected returns, brokers decide to set up a new subgroup or associate with other brokers to optimize the collection of electoral resources. The expected benefits of forming a subgroup are not only ego and leviathan rents (Solle-Olle, 2006) but also public employment, temporary contracts and subsidies to losing subgroups that do not obtain any seat in the election. Thus, local party brokers have an amplified incentive to promote their political party because they campaign their own candidacy. In the favorable case they got a

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<sup>2</sup> Another alternative, that was seldom used and was not analyzed in the estimations of our study, was the so call Mirror electoral list (*Listas Espejos*) which implies the creation of identical lists but representing more than one political party. The idea behind this electoral device was to collect votes for the same candidates but from supporters that identified themselves with different parties. By following this tactic, candidates speculated that they could obtain more votes by adding the results of the two or more parties instead of creating an alliance and running under only one ballot name. The electoral reform of 2011, which released Compulsory-Simultaneous-Open-Primaries (PASO for its acronym in Spanish) forbade the use of the "Espejos" lists, Mustapic et al. (2011).

seat in the legislature of city council; in the worst scenario, they are compensated with a contract in the public sector. Consequently, the abundance of subgroups contributes to increase the likelihood of victory of the incumbent because it gathers votes from an enlarged network of money -driven subgroups.

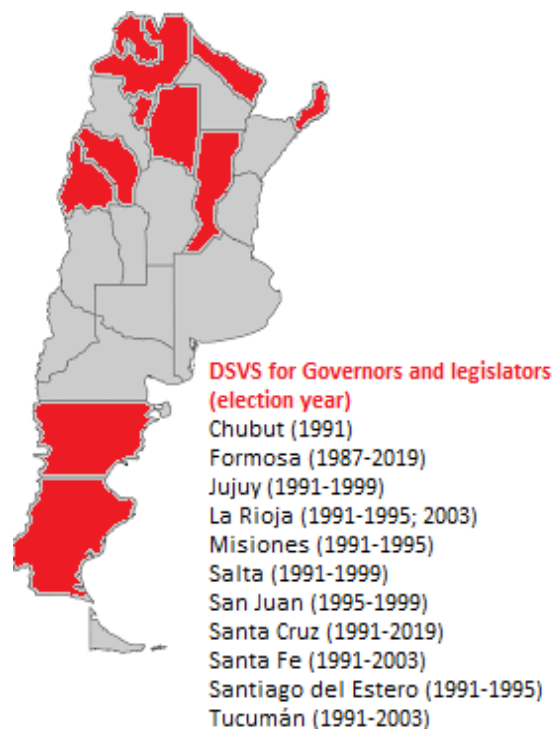
Facing the same incentives as the officeholder the opposition try to offset the incumbent's strategy by setting up several subgroups but it has less resources and, importantly, its promises to pay off the participation with public resources is less credible. As pointing out by Meloni (2022), the power of incumbents comes from a peculiar federal system featuring large vertical fiscal imbalances in most of the districts, which allow governors to feed their clientelistic networks without taxing their constituencies. At election time, incumbents encourage brokers to set up many subgroups to reach the largest possible electorate. A simple cost-benefit analysis indicates that most of the subgroups would not arise given the low probability of obtaining a seat in the legislature or the city council, so incumbents improve the returns of the investment by contributing with funds and other resources and by promising subsidies, temporary contracts and public employment to candidates positioned lowest in the winning subgroups' lists and to those candidates of defeated subgroups. The opposition parties cannot offer neither the resources nor can make reliable promises as the ones offered by the incumbents.

### **3. Electoral system and party hegemony in Argentina**

Politicians devote a great deal of effort and rely on a wide variety of strategies to remain in office. Governors in Argentina are not the exception. Short after the restoration of democracy, most of them started a process of political reforms that encompassed constitutional amendments that invariably included the reelection of the Executive, and modifications in the electoral system. An innovation in ten provinces was the inclusion of the Double Simultaneous Voting System. Interestingly, DSVS was only implemented at subnational level, for gubernatorial, local legislative and mayoral elections. That is, it was a subnational level affair. Allegedly, the objective of those reforms was to enhance political rights but it is difficult not to think about opportunism. Governors and members of local legislature took advantage of incumbency to amend rules that facilitate the retention of power. According to Calvo and Escolar (2005), the defeat of the Peronist party (PJ) in the 1983 Presidential election started, an inner fragmentation process despite PJ had won 14 out of 23

districts and the majorities of local Legislatures and the National Senate<sup>3</sup>. Therefore, local authorities found in DSVS a useful device to solve internal divisions within the party, without sacrificing incumbencies or majorities. The first Province to enact a “*Lemas Law*” was San Luis in 1986 that established the system in the election for the reform of the Provincial Constitution, but it was derogated immediately after that election. A few months later, in 1987, the DSVS was implemented in Formosa for all local executive and legislative positions. The success of the incumbent party encouraged governors from nine other provinces to put into practice the DSVS in the 1991 election. The popularity of DSVS peaked in 1995 when 10 out of 24 provinces held local elections using the system. Altogether, there were 11 sub national districts that implemented the DSVS in some local election in the period under study.

Figure 1: **Districts that implemented DSVS, 1987-2019**



From the incumbent’s point of view, the evaluation of DSVS is clearly positive considering that seven out of 10 districts that put into practice DSVS for governor won 100% of the elections while three out of four jurisdictions that implemented this electoral mechanism for legislators obtain the victory in all the elections. Apparently, the DSVS was an effective instrument to tilt the electoral playing field in favor of the incumbent. At the turn of the century, the implementation of DSVS raised a wave of criticisms regarding three mayor points: the decline

<sup>3</sup> From 1983 to May 1991, Tierra del Fuego was a National Territory and the governor was appointed by the President.

in political competition, the legitimacy of the winner and the proliferation of subgroups. Table 1 shows the number of elections and gubernatorial periods in which DSVS was in rule, by province, and the percentage of victories of the incumbent party for those elections. The association between the implementation of DSVS and incumbent victories seems unquestionable. Opponents to DSVS argued that it inhibited the alternation of the Executive and facilitated the predominance of the incumbent in local legislature. Such concentration of power was reflected not only in the modification of minor electoral rules such as the changing the voting dates to take some electoral advantage but mainly in the appointment of the judiciary.

**Table 1. Incumbent victories under DSVS**

Districts	Number of Gubernatorial elections	Incumbent victories (%)
DSVS for Governors		
Chubut	1	0
Formosa	6	100
Jujuy	3	100
La Rioja	3	100
Misiones	2	100
Salta	2	0
San Juan	2	50
Santa Fe	4	100
Santa Cruz	4	100
Santiago	2	100
DSVS for Legislative only		
Formosa	2	100
Salta	1	100
Santa Cruz	3	100
Tucumán	4	50

Source: own calculations based on official data (Dirección Nacional Electoral)

We conjecture that the number of party subgroups (in the case of the DSVS) and the allied parties (when it comes to AL) are critical to evaluate the performance of the incumbent. This is so since the proliferation of subgroups and AL contribute to develop a clientelistic network, because it is cheaper for the incumbent to use the governmental position to ensure the electoral support of subgroups. Furthermore, legislative elections, carried out by DSVS or AL, provide an accurate signal regarding the actual degree of support that a particular subgroup or *Apparentment Lists* deliver to the candidate. This is so, since the number of votes is a

precise measure of that support in contrast to the ex-ante promise made by the head of a subgroup or allied party. In other words, governors are able to “pay” exactly for the electoral support obtained.

Another strong criticism to the DSVS was that the election outcomes may not reflect the popular vote. In fact, there were five cases (out of 28) in which the most voted governor ticket lost the election. In the province of Santa Fe, the third electoral district of the country, the opposition candidate was defeated in the 1991, 1995 and 2003 elections despite obtaining the popular vote because the incumbent party collected the votes of subgroups. Similar outcomes occurred in the provinces of Jujuy and Santa Cruz in 1991 and 2015, respectively.

Society also manifested increasing discontent toward these electoral systems because of the large number of subgroups that had transformed elections into a nightmare. Actually, the combination of party paper ballots, in which each party is responsible for furnishing its own paper ballot, demands a tremendous mobilization of party member to control the suffrage<sup>4</sup>. Table 2 illustrates the problem. For instance, the province of Formosa’s two main parties competing in 2003 summed up 132 options which implied the need of paper ballots for each of the 132 subgroups in the polling booth and the presence of controllers of each subgroup in the polling place.

**Table 2. Number of subgroups. Category: legislators. Selected provinces and elections**

Election year	Formosa		Santa Fe		Tucumán	
	Incumbent party	Main Opposition party	Incumbent party	Main Opposition party	Incumbent party	Main Opposition party
1987	7	5	-	-	-	-
1991	14	12	3	17	21	1
1995	18	20	11	11	92	33
1999	21	25	12	1	34	65
2003	86	46	10	6	72	37
2007	47	12	-	-	-	-

Source: own calculations based on Andy Tow Electoral Atlas, Wikipedia, and *Dirección Nacional Electoral*.

Due to the above-mentioned critiques, the popularity of the DSVS declined thereafter and, therefore, it was gradually left aside in some jurisdictions. However, in other districts the

<sup>4</sup> Party paper ballots are subject to several unlawful strategies from rival parties such as the stealing of opponent’s ballots at the polling places.

system was replaced with the *Apparentment List* system. These electoral alternatives, as discussed before, were born in an attempt to manage the generalized critiques of the DSVS but ended up being a system embracing much of the negative features of the DSVS. Table 1A in the Appendix has a detailed description of jurisdictions and elections in which each system was implemented.

#### 4. Data description and empirical specification

To test the influence of DSVS and AL on subnational political competition we work with a panel data that comprises all 24 Argentine districts and nine consecutive provincial elections from 1987 to 2019. Since 1983, Argentina has held gubernatorial elections regularly every four years in most of its 24 provinces<sup>5</sup>. We exclude the initial 1983 election from our data set because there was no party allied with the military regime and therefore there was no incumbent in that election.

We propose the estimation of the following models:

$$\mathbf{Hegemony}_{it} = \alpha_0 + \alpha_1 \mathbf{Hegemony}_{it-1} + \alpha_j \mathbf{K}_{it} + \alpha_i \mathbf{Z}_{it} + \alpha_i \mathbf{X}_{it} + \varepsilon_{it} \quad (1)$$

$$\mathbf{GolosoV}_{it} = \alpha_0 + \alpha_j \mathbf{K}_{it} + \alpha_i \mathbf{Z}_{it} + \alpha_i \mathbf{X}_{it} + \varepsilon_{it} \quad (2)$$

Additionally, to check the robustness of our estimations of model (1), we evaluate the impact of DSVS and ALs on the incumbent's party probability of victory:

$$\mathbf{Winner}_{it} = \alpha_0 + \alpha_j \mathbf{K}_{it} + \alpha_i \mathbf{Z}_{it} + \alpha_i \mathbf{X}_{it} + \varepsilon_{it} \quad (3)$$

In all three models,  $K$  represents our key independent variables, related to DSVS and AL,  $Z$  the vector of socioeconomic control variables,  $X$  the vector of political control variables and  $\varepsilon$  the error term.

#### Dependent variables

We proxied political competition with two variables coded HEGEMONY and GOLOSOV. The former is defined as the number of gubernatorial consecutive periods ruled by the same political party in a given province. Table 3 shows the districts and periods governed consecutively by the same party. It is noteworthy that in six districts there was no alternation

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<sup>5</sup> The exceptions are the provinces of Corrientes and Santiago del Estero that were intervened twice by the Federal Government and Tierra del Fuego, and the City of Buenos Aires whose executive authorities were appointed by the President until 1991 and 1996 respectively. The provinces of Catamarca and Tucuman were also intervened by the Federal Government, but their electoral calendars were altered scarcely.

in power, in two of them the same party remained in office uninterruptedly for 32 years (eight periods) and in other two for 28 years (seven periods). Remarkably, the predominant electoral system in most of the districts with low number of party alternation was DSVS.

**Table 3. Districts and periods that were ruled by the same political party consecutively.**

Number of consecutive gubernatorial periods	Party				
	PJ	UCR/FCyS	Provincial party	PRO	PS
9	Formosa, 1983-2019		Neuquén, 1983-2019		
	La Pampa, 1983-2019				
	La Rioja, 1983-2019				
	San Luis, 1983-2019				
8	Santa Cruz, 1983-2019				
	Jujuy 1983-2015				
7	Misiones 1987-2019*				
	Buenos Aires 1987-2015	Río Negro, 1983-2011			
6	Salta 1995-2019				
	Santiago del Estero 1983-2002				
	Santa Fe, 1983-2007				
5	Córdoba, 1999-2019	Catamarca, 1991-2011	Corrientes, 1983-2001		
	Entre Ríos, 2003-2022	Corrientes, 2001-2022			
	Tucumán, 1999-2015				
4	San Juan, 2003-2019		Chubut, 2003-2019		
			Córdoba, 1983-1999		
			Santiago del Estero, 2002-2019		
3	Catamarca, 2011-2022	Chubut, 1991-2003	CABA, 2003-2019	Santa Fe, 2007-2019	
	Chaco, 2007-2019				
	Entre Ríos, 1987-1999				
	Mendoza, 1987-1999				

Note: PJ= Partido Justicialista; UCR= Unión Cívica Radical, FCyS= Frente Cívico y Social; MPN: Movimiento Popular Neuquino; PRO=Propuesta Republicana; PS= Partido Socialista.

Source: own estimations based on *Dirección Nacional Electoral*.

The variable GOLOSOV represents the well-known Golosov index of effective number of parties (ENP)<sup>6</sup>:

<sup>6</sup> Alternatively, we work with the classical Laakso and Taagepera index. However, we consider that Golosov index provides a better description of the effective number of parties for Argentine subnational districts. Although both indices report similar figures at critical junctures and during times of electoral upheaval, the Golosov index produces a more conservative results relative to Laakso-Taagepera, Golosov (2010) claims that his index is more sensitive to the relative weight of political parties in a given system, producing higher figures when competition is greater and smaller figures when there are fewer important parties.



$$ENP_{it} = \sum_{j=1}^n \frac{1}{1 + \left(\frac{p_j^2}{p_1}\right) - p_j}$$

Where  $n$  is the number of parties and  $p_j$  and  $p_1$  are the percentage of votes obtained by party  $j$  and the largest party ( $1$ ), respectively. Table 4 displays the evolution of the Golosov's effective number of parties averaged over districts that implemented DSVS and those that remained with the traditional electoral system in the period under study. The influence of DSVS in all elections is evident except for 1999 in which the difference is very small.

**Table 4. Average Golosov's Effective Number of Parties with and without DSVS**

Election Year	Average Golosov's Effective Number of Parties		Number of districts with DSVS for governor or Legislator
	With DSVS	Without DSVS	
1987	1.901	2.282	1
1991	1.824	2.253	10
1995	1.890	2.135	10
1999	1.930	1.963	7
2003	1.541	2.416	6
2007	1.034	2.172	2
2011	1.669	1.995	2
2015	1.688	2.264	2
2019	1.744	2.292	2

Source: own calculations based on *Dirección Nacional Electoral*.

Finally, the variable WINNER is constructed as a dummy that takes the value 1 if the incumbent party wins the gubernatorial election  $t$  in district  $i$ , and 0, otherwise.

### Key explanatory variables

In all models, the independent variables of primary interest in our analysis are the number of subgroups for governor and legislators generated by the incumbent and the main opposition party in jurisdiction  $i$  at election  $t$ . We coded these variables INCUMBENT-GOB, INCUMBENT-LEG, OPPOSITION-GOB and OPPOSITION-LEG. We also look at the number of *Apparentment Lists* registered by the incumbent and main opposition party, coded AL-INCUMBENT and AL-OPPOSITION. It is worth noting that DSVS and AL were never in force simultaneously (see Table 1A in the appendix). We expect the number of Incumbent subgroups of DSVS and AL to be positively associated with *HEGEMONY* and negatively related with *GOLOSOV*. Quite the reverse, the quantity of subgroups of the main opposition party are expected to decrease the

number of consecutive periods ruled by the incumbent and increase the effective number of parties.

It is important to observe that the electoral law mandates to register the number of subgroups and the respective candidates, various months in advance of the election date. Similarly, *Apparentment Lists* are also required to register in advance. This is important to assess the issue of simultaneity.

### **Control variables**

Our empirical study contains several socioeconomic and political control variables. In vector **Z**, we include the rate of Unemployment (coded U), the real gross domestic product per capita (GDP), and the amount of discretionary transfers that a district received from the federal government as percentage of total revenues (TRANSFERS), to test the responsiveness of voters to main macroeconomic and social indicators. All explanatory variables included in vector **Z** were lagged one year to prevent simultaneity bias. We expect **U** to be negatively associated to *Hegemony* and *Winner*, since higher rates of unemployment conspires against the reelection of the incumbent party, and positively to *Golosov*, because the social discontent generated by increasing unemployment is usually captured by various opposition parties. On the contrary, we anticipate that an increase in *GDP* per capita affects positively *Hegemony* and the probability that the incumbent party wins the election (**Winner**) because the party in office normally benefits from the good mood of constituencies when the economy grows in per capita terms. TRANSFERS is a measure of the vertical fiscal imbalance in each district, so indicates to what extent the incumbent party can increase expenditures without taxing voters (Jones et al., 2012). Thus, we expect a positive correlation with the probability that the incumbent party retains office but a negative one with *Golosov's ENP*. We also anticipate that governors use the additional low-cost spending power given by federal transfers to feed clientelistic networks, increase public employment and direct subsidies to constituencies, thus enhancing their chances to remain in office.

The set of political factors influencing party *hegemony*, the *Golosov* index of political concentration and party reelection includes a binary variable coded TERM that takes the value 1 for districts and elections in which the reelection of the incumbent governor was constitutionally banned after one, two or three periods, depending on the constitutional

provisions about reelection<sup>7</sup>. We speculate that last-term governors have lesser incentives to carry out policies affecting concentration<sup>8</sup>.

In the  $X$  vector we also include a dummy variable, called *BALLOTAGE* that takes the value 1 if the electoral system mandates runoff elections and 0, otherwise. Given that subnational districts are not characterized as a two-party system, we conjecture that the chance of a second round conspires against the incumbent's attempts to retain office since the opposition, that is usually fragmented in the first round, have incentive to collude to defeat the incumbent.

Table 5 shows the descriptive statistics for all the variables used in the empirical study. We observe that our dependent variables vary substantially across time and districts. Likewise, most control variables, in particular our key independent variables, display high dispersion.

Table 5. *Descriptive Statistics*

Variables	Obs.	Mean	Std. Dev.	Min	Max
<b>Dependent Variables</b>					
Hegemony	216	3.1343	2.2403	1	9
Golosov	213	2.1770	0.4948	1.1	3.8
Winner	211	0.8104	0.3929	0	1
<b>Key Explanatory Variables</b>					
Incumbent GOB	216	1.1852	0.8534	1	9
Opposition GOB	216	1.7674	3.9974	1	7
Incumbent LEG	216	4.3750	12.3184	1	92
Opposition LEG	216	3.0648	7.1727	1	65
AL INC	215	1.5442	4.6319	0	47
AL OPP	215	0.9488	2.6195	0	17
<b>Control Variables</b>					
Gross Domestic Product (GDP)	216	4536.0	3535.2	1121.2	20031.7
Unemployment	215	8.4	4.5	0.2	23.0
Transfers	216	8.8	7.8	0	40.0
Ballotage	216	0.13	0.34	0	1
Term	216	0.44	0.50	0	1

## 5. Discussion of Results

Results for our specifications (1), (2) and (3) are presented in Tables 6, 7 and 8. We estimate the dynamic panel model (1) with the two-step system GMM technique with robust standard

<sup>7</sup> Mendoza and Santa Fe were the only provinces in which governor's reelection remain banned.

<sup>8</sup> See Meloni (2016 and 2022).

errors to cope with a dataset that has many panels and few periods<sup>9</sup>. The instruments used are valid in all equations according to Hansen *J* test for joint validity of the instruments and, following Roodman (2009), we kept the number of instruments below the number of groups (districts) to avoid biasing coefficient estimates. To grasp the potential simultaneity problem between the dependent and explanatory variables, all economic controls (*U*, *GDP* and *Transfers*) are lagged one year. Bear in mind also that *Ballotage* and *Term* are institutional variables that were established before the elections and our key variables, the number of incumbent and opposition subgroups for governor and legislature seats, are determined various months before the ballots

Equation (2), instead, was estimated by Ordinary Least Squares (OLS) with fixed effects and robust standard errors and Model (3), featuring a binary dependent variable, was estimated with a probit function with random effects and robust standard errors.

### 5.1 Party Hegemony

The results of our estimation of *HEGEMONY* equation are shown in Table 6. Regression (I) includes all control variables and time effects so it is the one upon which we primarily focus on the discussion below. Regressions II, III and IV are intended to check the robustness of our main specification. In all three models, the estimated coefficient for our focal variables, *INCUMBENT-LEG* and *OPPOSITION-LEG* have the expected sign and are statistically significant at 1%. This provides clear support for the premise that the number of incumbent subgroups favors the political hegemony while the number of opposition subgroups helps breaking the dominance of incumbent party. Interestingly, the number of the opposition subgroups for governor, *OPPOSITION-GOB*, is positive, indicating that, contrary to our conjecture, fragmentation of the challenger's electoral supply rather than help collecting votes, may act in favor of the incumbent.

In regard to the control variables, equation IV shows that all economic controls and *Ballotage* move in the predicted direction and are statistically significant at usual levels but when included in the full model (regression I) only *Ballotage* is significant. As anticipated, runoff elections tend to decrease the hegemony of the incumbent party.

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<sup>9</sup> Strictly speaking, the number of periods in our dataset is 9 and the number of panels is 24.

The results obtained support the choice of the dynamic model. The lagged dependent variable is statistically significant, confirming that inertia is especially important in electoral studies.

**Table 6. The impact of DSVS and ALs on political hegemony**

Observations: 216

Districts: 24

Estimation method: two-step system GMM with robust standard errors

Explanatory Variables	Dependent Variable: <i>Ln Hegemony</i>			
	Full model (I)	Excluding time effects (II)	Only key explanatory variables (III)	Only control variables (IV)
Ln Hegemony (t-1)	0.51794*** (0.11667)	0.52828*** (0.08818)	0.52515*** (0.11879)	0.49186*** (0.08664)
AL Incumbent	0.00879 (0.01251)	0.00990 (0.00694)	0.00650 (0.01463)	
AL Opposition	-0.00934 (0.03197)	-0.01785 (0.01199)	-0.02328 (0.03765)	
Incumbent Leg	0.01272*** (0.00268)	0.01047*** (0.00226)	0.01134*** (0.00234)	
Opposition Leg	-0.02014*** (0.00726)	-0.02064*** (0.00515)	-0.02097*** (0.00673)	
Incumbent Gob	0.03802 (0.03647)	0.03756** (0.01793)	0.04634*** (0.01444)	
Opposition Gob	0.09828*** (0.03698)	0.06193* (0.03701)	0.04773 (0.04327)	
Transfers	0.01174 (0.00865)	0.00868** (0.00400)		0.01058** (0.00502)
GDP	0.00002 (0.00001)	0.00002* (0.00001)		0.00002** (0.00001)
Unemployment	-0.01046 (0.02425)	-0.01646 (0.01025)		-0.02300* (0.01236)
Ballotage	-0.40880*** (0.15375)	-0.45493*** (0.08829)		-0.51724*** (0.08398)
Term	0.12562 (0.11415)	0.04519 (0.11104)		0.03198 (0.10875)
Constant	0.34556 (0.38957)	0.52184*** (0.17220)	0.52476*** (3.2700)	0.65370*** (0.17918)
Time effects	Yes	No	Yes	Yes
# of Instruments	23	23	23	23
Arellano-Bond test for AR(1) in first differences:	z= -2.37 Pr>z=0.018	z= -3.49 Pr>z = 0.000	z= -3.45 Pr>z = 0.001	z= -3.29 Pr>z = 0.001
Arellano-Bond test for AR(2) in first differences:	z = 0.63 Pr>z= 0.531	z= 0.12 Pr>z = 0.902	z = 0.08 Pr>z = 0.940	z= -0.36 Pr>z = 0.716
Sargan test of overid. restrictions:	chi2(2) = 0.14 Prob>chi2= 0.933	chi2(10) = 4.07 Prob>chi2= 0.944	chi2(7) = 4.37 Prob>chi2= 0.736	chi2(8) = 6.14 Prob>chi2= 0.632

Hansen test of overid. restrictions:	chi2(7)= 0.38 Prob>chi2= 0.827	chi2(10)= 7.45 Prob>chi2= 0.682	chi2(7)= 9.29 Prob>chi2= 0.233	chi2(5)= 6.47 Prob>chi2= 0.594
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**Note:** Dependent variable is expressed in logarithms.

Standard errors in parenthesis below coefficient.

\*\*\* Significant at 1%; \*\* Significant at 5%; \* Significant at 10%.

## 5.2 Political concentration

Table 7 shows our estimation of equation (2) having Golosov's Effective number of parties as dependent variable. The results back our conjecture that DSVS and AL stimulate political concentration. The key variables AL-INCUMBENT, INCUMBENT-GOB and INCUMBENT-LEG are negatively associated with GOLOSOV, indicating that a growing number of incumbent's subgroups diminishes the ENP. Conversely, OPPOSITION-GOB and OPPOSITION-LEG enhance political competition.

As for control variables, as predicted, the rule sanctioning runoff elections tend to concentrate the dispute in fewer parties, so *Golosov's ENP* reduces in the first round. On the contrary, limiting incumbent governor to a certain number of periods (*Term*) is positively related to the effective number of parties.

**Table 7. The influence of DSVS and ALs on Golosov's effective number of parties**

Observations: 216

Districts: 24

Estimation method: OLS with fixed Effects and robust standard errors

Explanatory Variables	Dependent Variable: <i>Ln Golosov</i>			
	Full model	Excluding time effects	Only key independent Variables	Only control variables
AL Incumbent	-0.0044** (0.0021)	-0.00528** (0.002192)	-0.0067*** (0.0023)	
AL Opposition	0.0039 (0.0059)	0.004547 (0.00464)	0.0064 (0.0072)	
Incumbent Leg	-0.0033* (0.0018)	-0.00341** (0.001433)	-0.0033 (0.0023)	
Opposition Leg	0.0083*** (0.0014)	0.00644*** (0.001649)	0.0090*** (0.0012)	
Incumbent Gob	-0.0486*** (0.0129)	-0.05292*** (0.012587)	-0.0520*** (0.0143)	
Opposition Gob	0.0329* (0.0178)	0.032597 (0.02255)	0.0379*** (0.0124)	
Transfers	-0.0051* (0.0029)	-0.00425** (0.00176)		-0.00496* (0.00287)
GDP	0.00003*** (0.00001)	0.000022** (0.00001)		0.00003** (0.00001)

Unemployment	0.0086 (0.0052)	0.002192 (0.003215)		0.01028* (0.00580)
Ballotage	-0.1566*** (0.0522)	-0.189225*** (0.025669)		-0.17659*** (0.05187)
Term	0.0568* (0.0289)	0.075620*** (0.026086)		0.06511** (0.03116)
Constant	0.6234*** (0.0846)	0.688830*** (0.064018)	0.78594*** (0.03599)	0.58539*** (0.08506)
Time effects	Yes	No	Yes	Yes
R2 Within	0.2400	0.1607	0.1653	0.1734
R2 Between	0.0554	0.0352	0.2047	0.1352
R2 Overall	0.144	0.0905	0.0433	0.1431
F	F(19,23) = 41.26	F(11, 23)= 36.27	F(14, 23)= 41.40	F(13, 23)= 4.30

**Note:** Dependent variable is expressed in logarithms.

Standard errors in parenthesis below coefficient.

\*\*\* Significant at 1%; \*\* Significant at 5%; \* Significant at 10%.

### 5.3 Incumbent party reelection

To better evaluate the role of DSVS and AL on the political hegemony, we examine their impact on the probability of victory of the incumbent party. Table 8 exhibits the results from probit regression models. As in tables 6 and 7, regression (I) contains the full specification while regressions (II) (III) and (IV) check for the robustness of the estimations.

Our estimations of the full model suggest, as expected, that the implementation of DSVS and AL increased the probability of the incumbent's party reelection.

**Table 8. The influence of DSVS and ALs on the incumbent's probability of victory**

Observations: 216

Districts: 24

Estimation method: Probit with random effects and robust standard errors

Explanatory Variables	Dependent Variable: <i>Winner</i>			
	Full model	Excluding time effects	Only key independent Variables	Only control variables
AL Incumbent	0.10297** (0.04781)	0.10663** (0.04500)	0.09811*** (0.03469)	
AL Opposition	-0.14552** (0.06467)	-0.15415** (0.06253)	-0.19554*** (0.04831)	
Incumbent Leg	0.01156** (0.00791)	0.01164** (0.00556)	0.00831 (0.00871)	
Opposition Leg	-0.03816*** (0.01364)	-0.03360*** (0.00928)	-0.03309*** (0.01216)	
Incumbent Gob	1.08521	0.58642	0.83502**	

	(0.60560)	(0.36836)	(0.39362)
Opposition Gob	0.24902 (0.21445)	0.25765 (0.22498)	0.30752 (0.24829)
Transfers	0.03043* (0.01984)	0.02749* (0.01559)	0.04845** (0.02023)
GDP	0.00004 (0.00005)	0.00004 (0.00004)	0.00010* (0.00005)
Unemployment	-0.06435 (0.03182)	-0.01425 (0.02215)	-0.01836 (0.02594)
Ballotage	-0.99921** (0.37733)	-0.86941** (0.34274)	-1.02862*** (0.33715)
Term	-0.09308 (0.22637)	-0.17525 (0.19426)	-0.07315 (0.17910)

**Note:** Coefficients are odds ratios.

Standard errors in parenthesis below coefficient.

\*\*\* Significant at 1%; \*\* Significant at 5%; \* Significant at 10%.

## 6. Concluding remarks

This paper contributes to the political competition literature by providing empirical evidence of the influence of Double Simultaneous Voting System (DSVS) and Apparentment Lists (AL) on party hegemony and the concentration of the party system at subnational level in Argentina in the lapse 1987-2023.

We find that the profusion of subgroups for legislators generated by the DSVS tilts the political playing field in favor of the incumbent. Preexisting conditions of party fragmentation, clientelistic networks and large vertical fiscal imbalance were exploited by incumbents that implemented DSVS to remain in office. Party fragmentation helps accumulating votes through newly constituted subgroups. Additionally, party brokers that lead political clientele have also incentives to form subgroups, since the expected benefits of setting up and registering a subgroup are higher than the cost. At best, subgroups campaigning for the incumbent can get a seat at the legislature or city council; at worst, they get a temporary contract, a subsidy, or public employment, as consolation prizes. Large vertical fiscal imbalances, produced by a peculiar federal tax-sharing agreement, allow governors to feed their clientelistic networks without taxing their constituencies. This financing scheme is not available for the opposition groups which explain that they are usually a smaller number or shorter in territory coverage. Results from a panel data of 9 gubernatorial elections and all 24 Argentine subnational jurisdictions show that DSVS favors the persistence of the incumbent party in office, diminish



the effective number of parties, and improve the probability of victory of the incumbent party. AL are found to have no influence on our dependent variable *Hegemony*, perhaps due to the number of subgroups is smaller, but affect the Golosov's ENP and the incumbent's chances to win the election. Contrary to our beliefs, we detect that increasing the number of opposition DSVS subgroups for governor favors incumbent dominance possible because it is perceived by the constituency as a symptom of excessive fragmentation.

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## Appendix

**Table1A: DSVS and the *Apparentment Lists* systems in the Argentine Provinces.**

Province	Election year								
	1987	1991	1995	1999	2003	2007	2011	2015	2019
Buenos Aires				A					
City of Buenos Aires			A	A	A	A	A		
Catamarca									
Chaco			A	A	A	A			
Chubut		GLM	A	A	A	A			
Cordoba				A	A	A			
Corrientes					A	A	A	A	A
Entre Rios									
Formosa	GLM	GLM	GLM	GLM	GLM	GLM	LM	LM	LM
Jujuy		GLM	GLM	GLM				A	A
La Pampa									
La Rioja		GL	GLM		GLM		A	A	A
Misiones		GLM	GLM	M	M	M	M	M	M
Mendoza				A	A	A	A		
Neuquén					A	A	A	A	A
Rio Negro		M			A	A	A		
Salta		GLM	GLM	LM		A	A	A	
San Juan			GLM	LM	A	A			
San Luis									
Santa Cruz		GLM	GLM	GLM	LM	LM	LM	GLM	GLM
Santa Fe		GLM	GLM	GLM	GLM				
Santiago del Estero		GLM	GLM		M		A	A	
Tierra del Fuego						A	A	A	A
Tucuman		LM	LM	LM	LM	A	A	A	A

Notes: G: Gubernatorial DSVS; L: Legislative DSVS; M: Municipal DSVS; A: “*Apparentment*” mechanisms such as “*Colectoras*”, “*Acoples*” and “*Adhesiones*”.

The President appointed the governor of Tierra del Fuego in 1987 and the Chief of government of the City of Buenos Aires in 1987 and 1991.

Source: *Dirección Nacional Electoral*.