

Binomial Electoral Law and Multi-Party System: The Chilean Contradiction

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The post 1989 Chilean electoral law fosters the development of a two-party system. However, after almost a decade of democracy, the political party structure in place before the 1973 military coup has resurfaced. Today, as it was before 1973, there is a multi-party system in Chile. Political parties have formed broad coalitions for electoral purposes but have continued to retain their political independence and distinct basis of support. Parties have acted strategically to circumvent the binomial electoral law of 1989. The binomial electoral systems assigns two seats per district, thus forcing strategic coalition building on the part of the political parties. In this paper, using the electoral results of 1993 and 1997, we study the 60 electoral districts and identify the strength of all political parties in each of those districts. We test Duverger's law and map out the real electoral competition at the district level. We contend that although there are several strong national parties, at the district level the number of parties is smaller. While we acknowledge the existence of a national multiparty system, we argue that the party system in each district behaves more in accordance with Duverger's Law. Duverger Law suggests that electoral systems affect the number of parties. In the case of Chile, the binomial electoral law should have a reductive effect in the number of parties that exist. Our contention is that at the district level, the number of parties is smaller than the aggregate number of parties at the national level. However, we find that the number of parties competing at the district level increased from 1993 to 1997, thus violating the predictive effect of Duverger's Law.

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The question of how electoral laws affect the number of political parties is one of the oldest and most widely discussed in the field of political science (Cox 1997: 13). Perhaps the best known proposition is that of Maurice Duverger. The French political scientist suggested a causal link between electoral laws and the number of political parties. According to Duverger an electoral system based on simple-plurality rule favors a two-party system. Conversely, proportional representation favors multipartyism (Cox 1997: 14, Duverger 1954).

Duverger's controversial propositions have been criticized on several grounds. Cox summarizes one of the criticisms when he states that "some argue that Duverger simply mistook the direction of causality" because "party systems determine electoral systems, rather than the other way around" (1997: 15). A second major criticism, also summarized by Cox, suggests that Duverger "focused on an unimportant variable" because "party systems are determined primarily by the number and type of cleavages in society, with electoral structure playing either an inconsequential or at least a distinctly secondary and variable role" (1997: 15).

In general, the large body of literature that studies the interaction between electoral laws and the party system has not been conclusive (Riker 1982). In part this is due to the fact that electoral laws are adopted in countries with established political party structures. Often times parties act strategically to adapt to new electoral laws and thus resist the effect electoral laws might have on the number of parties. Perhaps more importantly, the effect of Duverger's Law is often wrongly measured at the national level, rather than the district level. As Duverger suggested "the true effect of the simple-majority system is limited to local bi-partism, that is, the creation of a two-party system inside the individual constituency, but the parties opposed may be different in different areas of the country" (in Cox 1997: 28).

Although Duverger's Law remains a controversial proposition and its implications and validity continue to be questioned, countries often consider changes to their existing electoral systems. There are several examples of countries that have changed their electoral systems over time (Riker 1982, Cox 1997). As Cox suggests "there would be no point in seeking a new electoral system if electoral systems did not matter" (1997: 17). Yet, Lijphart points out that despite the existence of countries where electoral systems have been modified, "one of the best known generalizations about electoral systems is that they tend to be very stable and to resist change" (1994: 59).

Many instances of electoral engineering have taken place in countries with well-established democratic traditions and party structures (Riker 1982). However, the recent transitions to democracy in Eastern Europe and Latin America have provided an interesting occasion to study electoral engineering in countries with little history of electoral politics (Lijphart and Waisman 1996: 2). In the case of Latin America, most countries adopted the same electoral systems they had before the democratic breakdown or, in some instances, have adopted systems that favor some type of proportional representation. A notable example is Chile "where the historical proportional representation system was replaced with a majoritarian system" (Siavelis and Valenzuela 1996: 77). The example of Chile thus presents an interesting case to test the validity of Duverger's proposition. According to Duverger's Law, a majoritarian system like the one adopted in Chile should influence the party structure by reducing the number of actual

parties. To be sure, and as we explain below, the Chilean system is not purely majoritarian as the largest minority is almost assured parliamentary representation.

Cox suggests (1997) that Duverger's Law can only empirically predict an upper-bound limit in the number of parties at the district level. That is, Duverger only placed a limit on the maximum number of parties that can exist in a country with a given electoral system. Two-party systems could emerge in countries with proportional representation but no multi-party system could exist at the district level in countries with single-member districts. That upper-bound limit discussed by Cox is the district magnitude (M) plus one (Cox 1997: 139-148).

$$M + 1$$

Taagepera and Shugart (1993: 455) suggest a more complicated formula, where the number of parties is determined by:

$$1.15(2 + \log M)$$

In the case of Chile, because the district magnitude is 2 (2 seats per district), both formulas yield 3 as the predicted number of parties per district. In what follows we test that assertion in each of the 60 electoral districts in Chile for the 1993 and 1997 elections and find that the equations do not correctly predict the number of parties. However, we find that the effective number of parties at the district level is lower than at the national level. In short, Duverger's Law has more predictive power when individual districts are analyzed than when the country as a whole is considered. Nonetheless, in the case of Chile the number of effective parties is higher than predicted by Duverger's Law. Moreover, we also find that rather than decreasing, the effective number of parties increased from 1993 to 1997.

The paper is divided into three sections. First we briefly summarize the political party structure in Chile before 1973. Then we discuss the transition to democracy and the 1989 elections. Those "founding elections" were characterized by the high number of political parties and the legal restrictions leftist parties had to compete. Finally, we consider the more normal elections of 1993 and 1997. We analyze the effect of Duverger's Law in the number of parties at the district rather than the national level. We finish by reporting the increase in the effective number of parties in 1997 when compared with 1993.

The Chilean Political Background

In the period leading up to 1973, Chile was generally regarded as a multiparty system with 5-6 strong political parties (Sartori 1976, Valenzuela and Valenzuela 1976). The Socialist (PS) and Communist (PC) parties in the left, the Christian Democratic (PDC) and Radical (PR) parties in the center and the National Party (PN), a 1967-fusion of the historical Conservative and Liberal parties, in the right comprised the core of the Chilean party system. Other parties, such as the Movimiento de Acción Popular Unitaria (MAPU) and Izquierda Cristiana (IC) originated as members of the PDC left the party and formed new parties in 1969 and 1971 respectively. The 1973 military coup put an abrupt end to party politics and thus the electoral fate of those new parties was artificially sealed.

Chile enjoyed uninterrupted democratic governance since 1932 until 1973. Eight presidents were elected democratically during the period and eleven parliamentary elections were held. For most of those elections (with the exception of a short period of time after 1949), the left was represented mainly by the Socialist Party and the Communist Party. When the Communist Party was outlawed in 1949 and during several periods when the Socialist Party was split into two or more groups, there were more than two parties in the left. The emergence of MAPU in 1969 and IC in 1971 increased the number of leftist parties to five.

The Radical Party (PR) occupied the political center. Thanks to an electoral alliance with the left, the Radical Party's Popular Front won the presidential elections of 1938, 1942 and 1946. However, after 1946 the emergence of the Christian Democratic Party (PDC) challenged the PR's hegemonic control of the center. By 1958, the Christian Democrats established themselves as the strongest party in the center and in 1964, with the support of the right and part of the PR, a Christian Democrat won the presidential election. A year later, Christian Democrats obtained the highest electoral support in any contemporary Chilean parliamentary elections. Despite their electoral decline in the parliamentary elections of 1969 and presidential elections of 1970, the PDC successfully pushed the PR out of the center causing it to split into two smaller parties, one associated with the left and another closely linked to the right. In 1973, the PDC held hegemonic control of the political center, although the PDC formed an electoral alliance with the right for the 1973 parliamentary elections.

The two traditional Chilean political parties comprised the political right. The Liberal Party (PL) and the Conservative Party (PCo) were formed in the 19th century and alternated power until the 1920s. With the emergence of the Radical Party, the socialists and communists, both the PL and the PCo moved to the political right and often aligned in parliament forming a coalition. The PL and the PCo supported Jorge Alessandri as their presidential candidate in the 1958 elections. Despite Alessandri's electoral success, the right decreased its share of the vote and in 1964 it threw its support behind the PDC's Eduardo Frei, mainly to prevent socialist Salvador Allende from winning. After their electoral demise in the parliamentary elections of 1965, the Liberal and Conservative parties united and formed the National Party (PN) in 1967.

At the time of the democratic breakdown of 1973, the number of political parties with parliamentary representation had increased, but the share of votes obtained by the largest four parties (PN, PDC, PS and PC) was larger than in any of the previous three elections as shown in Table 1. So while the number of parties with parliamentary representation was growing, the share of the vote obtained by the larger parties continued to increase. Naturally, it is impossible to determine if the trend towards the consolidation of fewer parties with stronger electoral support would have continued after 1973. Yet, the electoral alliance formed in 1973 by the Christian Democratic and National parties and the realignment of most leftist parties within the Popular Unity government effectively created two broad electoral coalitions in 1973.

By 1973, Chile's multiparty system was alive and well (although there might also have been some indications that some parties were merging into broader coalitions) with at least four major parties in existence. The PN occupied the right, the PDC the center and the PS and PC formed the left. And then, democracy was abruptly ended by the military

coup of September 11, 1973. The military government closed congress and ordered a political recess. Political parties were also ordered closed and their goods were confiscated. The PN welcomed the coup and voluntarily disbanded. Many PN members and leaders joined the military government as cabinet members, appointed city mayors, local governors and as government officials. The PDC lukewarmly welcomed the coup. A few PDC member also joined the military government but as time progresses and the military gave no indication of an intention to restore democratic rule, the PDC joined the opposition to the Pinochet dictatorship. The parties of the left suffered the most under military rule. Together with the PS and PC, the other leftist groups (MAPU, IC and the Leftist Revolutionary Movement) were targeted by the repressive police and signaled as responsible for the political crisis existing in Chile. PS and PC leaders and rank-and-file members were arrested, prosecuted, exiled, tortured and killed. The attack on the PC and PS lasted for years after 1973 and those parties had to go underground to continue operating. Many of the leaders who escaped prison and death attempted to reorganize their parties in exile and underground.

Table 1. 1961-1973 Parliamentary Election results

Political Party	1961	1965	1969	1973
Partido Liberal (R)	16.1	7.3	--	--
Partido Conservador (R)	14.3	5.2	--	--
Partido Nacional (R)	--	--	20.0	21.0
Democratacristiano (C)	15.4	42.3	29.8	32.4
Radical (C)	21.4	13.3	13.0	7.7*
Democratanaional (C)	6.9	3.2	1.9	0.4
MAPU (L)	--	--	--	2.5
IC (L)	--	--	--	1.2
Socialista (L)	10.7	10.3	12.2	18.4
Comunista (L)	11.4	12.4	13.9	16.0
Share of vote by largest four parties	67.2%	78.3%	76.7%	87.8%

* The PR was divided into three parties in 1973: PR, Izquierda Radical and Democracia Radical.

Although officially suspended, political activity continued during the military dictatorship (1973-1990) and party activity openly flourished after the 1982 economic crisis and social protests. Internal splits and political repression caused the number of political parties and groups to increase during the dictatorship as many parties struggled to stay active and new leaders emerged to form new political organizations. The PDC was able to maintain an internal cohesiveness and continued to act as a political organization during the Pinochet years. In fact, the PDC was more successful than any other party in maintaining a high level of regularity in its leadership and organization during those years (Scully 1992). Some members of the National Party attempted to stay active as a political organization, but the leadership of the party complied with the military order to suspend political activities. After a few unsuccessful attempts in the late 70's and early 80's, two groups emerged and consolidated as serious efforts to re-organize the conservative forces into political parties. The two groups, National Renovation (RN) and the Independent

Democratic Union (UDI), attempted to join into a single political party but internal differences caused them to split and form their own parties. RN grouped the more traditional conservative leaders while the UDI housed the forces that were more loyal to General Pinochet and his military regime (Cavallo 1990).

The left struggled to survive during the military coup and the two main parties, the PS and the PC formally re-organized in exile and attempted to develop links with their base militants still living in Chile. The effects of the political repression and the internal process of renovation experienced by the socialists in Europe caused the PS to split into several different factions. All the factions, however, claimed to be in search of the future unity of the PS. The PC, which had enjoyed a tradition of greater internal discipline, survived the repression and continued to operate as a single political party. And despite the fact that a majority of the PC leadership was in exile, Communists maintained a strong presence in local labor and student organizations (Cavallo 1990).

After 17 years of military dictatorship, Chile recovered democracy with the plebiscite of 1988. The return of electoral politics was accompanied by a resurgence of political party activity. The democratic forces that opposed General Pinochet's bid for a new 8-year term as president united and formed the *Concertación de Partidos por la Democracia*, a conglomerate that included 17 political parties and groups. A similar number of parties and political groups supported General Pinochet in his plebiscite bid. By the time the plebiscite was held, more than 30 political parties and groups were operating in the country, excluding the officially illegal Socialist Party, Communist Party and other Marxist and leftist groups. Altogether, Socialists, Communists and other leftist groups were divided into at least 7 parties and/or organizations (Friedmann 1988).

As the ban on political party activities disappeared after 1982 and was officially lifted in 1987, political parties were required to register with the Electoral Registry. Traditional and new parties rallied to position themselves in the new political arena for the presidential and parliamentary elections of 1989. A constitutional ban on Marxist parties (lifted only in 1989) prevented the several factions of the socialist and communist parties from officially registering with the Electoral Registry. Nonetheless, 15 registered political parties presented candidates for the 1989 parliamentary elections. Also, many of the political parties formed strategic alliances with other groups to face the elections. Some of the groups that nominally existed as parties, however, were outright attempts by the military to confuse the electorate and divert votes away from the center-left opposition. Altogether, including registered, unregistered, real and fake parties, there were more than 30 groups that claimed some type of political organization and electoral following (Friedmann 1988).

In the parliamentary elections of 1989 there was a total of 14 political parties running in different districts. Although only 7 parties gained representation in parliament, several independents also won seats. Many of these independents joined existing parties, some of which had failed to gain seats in the election. The *Concertación de Partidos por la Democracia*, the conglomerate that opposed General Pinochet in the 1988 plebiscite, clinched a majority of the seats. A smaller leftist coalition, the PAIS, later to merge with the *Concertación*, also clinched a few seats. The remaining seats were clinched by the *Democracia y Progreso* pact, an electoral alliance formed by RN and UDI and later re-named *Unión por el Progreso de Chile*.

The 1989 elections clarified several aspects of Chile's new political reality. The true electoral strength of most parties could be measured (excluding socialists and communists) and the parties existing before 1973 showed to be the most successful in obtaining votes. The *Concertación* was mainly composed of Christian Democrats, Socialists, Radicals and a new progressive party, the Partido por la Democracia (PPD). Christian Democrats led the *Concertación* in votes and obtained more votes than any other political party. The Socialist Party did not formally compete in the 1989 elections because of a political ban on Marxist parties, but some of their members ran in the PPD and the PAIS slates. The PAIS (Partido Amplio de Izquierda Socialista) was an effort to accommodate members of some socialist factions that had not officially joined the *Concertación* before 1988. Shortly after the 1989 elections the several groups that formed the Socialist Party, including most PAIS and PPD militants, merged into the newly officially registered *Partido Socialista (PS)*. With the official unification of all socialist groups, the *Concertación* effectively became a coalition with two major members, PDC and PS. The PPD and PS developed an interesting alliance whereby PS members could also be PPD militants. Such an arrangement lasted until 1992, when the PS and PPD formally excluded dual militancy but continued to operate as a coalition within the *Concertación* coalition. The PPD and the PS combined to form the second largest force within the *Concertación*. The PR, the SD (Social Democrats, later to merge with the PR) and the PH (Humanist Party) also gained electoral representation in 1989 and often aligned with the PDC within the *Concertación* coalition.

The 1989 elections also proved that the effort on the part of the military to foster the development of new political parties did not work. Out of the four congressional slates with conservative candidates the RN-UDI alliance successfully attracted a majority of the conservative vote. The other conservative coalitions failed to gain parliamentary representation. After 1989 most remaining conservative groups merged into the RN and UDI or disbanded. The Partido del Sur (PSur) and the Partido Nacional continued to exist but joined an electoral alliance with RN-UDI after 1989. Eventually, the PN disbanded after the 1993 elections and the PSur continued to have a small electoral presence only in southern Chile.

Finally, the 1989 elections consolidated the *Concertación* as the only viable alternative to the conservative vote. The *Concertación* successfully gained control of the center-left political spectrum as the PDC secured the center and the PS-PPD alliance dominated the left. The PC was prevented from participating in the elections and after 1989 they either did not want to join the *Concertación* or were not invited to join the alliance. In sum, the 1989 elections reduced the number of political conglomerates to three. In the right, the electoral alliance between RN and the UDI represented about 35% of the electorate. In the center-left the *Concertación* (PDC, PS-PPD, PR, SD and PH) with more than 55% of the vote became the government. And the Communist Party occupied the extreme left, but its electoral strength could not be measured in the 1989 elections. The remaining parties disappeared after the 1989 elections. The predicted effect of Duverger's Law was at work. A majoritarian electoral system tends to reduce the number of political parties. In the case of Chile in 1989, only two electoral coalitions survived after the elections: the *Concertación* and the *Democracia y Progreso* coalition (later to be renamed *Unión por el Progreso de Chile*). The Communist Party would first

compete electorally in 1992 and the PH would split from the *Concertación* and compete on its own starting in 1993.

Table 2. 1989 Parliamentary election Results by party and coalition

Party/ Coalition	% Party Vote	% Coalition vote
Christian Democratic Party (PDC)	26.04	
Partido por la Democracia (PPD)	11.48	
Radical Party (RP)	3.95	
Partido Humanista (PH)	0.99	
Social Democrats (SD) & Independents	9.14	
A.- Concertación de Partidos por la Democracia		51.60
National Renovation (RN)	18.32	
Independent Democratic Union (UDI)	10.30	
Independents	5.65	
B.- Democracia y Progreso (Unión por el Progreso –after 1992)		34.26
C.- Partido del Sur (pro-Pinochet)		0.70
Radical Democracy Party	0.42	
Avanzada Nacional	0.85	
Independents	1.35	
D.- Alianza de Centro (pro-Pinochet)		2.62
Partido Liberal	0.70	
Partido Socialista Chileno	0.15	
Independents	2.19	
E.- Liberal-Socialista Chileno (pro-Pinochet)		3.04
F.- Partido Nacional (pro-Pinochet)		0.79
Partido Amplio Izquierda Socialista (PAIS) (PS)	4.39	
Partido Los Verdes	0.02	
Independents	0.90	
G.- Unidad para la Democracia		5.32
I.- Independents		1.89
Total	100	100

The 1993 and the 1997 Elections

When PDC president Patricio Aylwin took office in March of 1990, he nominally led a 15-party *Concertación* coalition, but his cabinet post and other high appointments reflected the underlying reality of his coalition. A majority of Aylwin's appointments came from the PDC. The PS, PPD and PR also obtained cabinet post and other appointments. Only a handful of appointments went to representatives of the PH, and smaller groups. Because of a 5% electoral threshold requirement, many political parties had to regroup and reorganize after the 1989 elections.

The 1992 Municipal elections provided a new opportunity for parties to measure their electoral strength. The PC was allowed to participate in the 1992 elections and the PS participated as a single, unified political party. The real electoral strength of political parties was measured in the 1992 Municipal elections and immediately after the municipal results were known, preparations were underway for the 1993 presidential and parliamentary elections. In 1992, the *Concertación* was made up of six parties: the PDC, PPD, PS, PR, SD and PH. Shortly after the 1992 municipal elections, the PH withdrew from the *Concertación* and the government alliance was left with 5 parties.

The *Unión por el Progreso de Chile* (UPCh) was formed by RN and UDI, but they worked an electoral agreement with the Psur and the PN. The electoral field was completed with the conservative UCCP and the PC (officially grouped under the MIDA coalition –Movement of pro-Allende Democratic Left). The UCCP, called UCC at the time was the Unión de Centro-Centro, a political group organized around Francisco Javier Errázuriz, a wealthy businessman who ran an independent presidential campaign in 1989.

More than anything else, the 1992 Municipal elections allowed all parties to measure their strength at the local level as they could all field candidates for the local municipal councils without having to form coalitions to meet the more restrictive parliamentary elections requirements. In fact, all the political parties and coalitions gained representation in at least some municipalities in 1992. The *Concertación* and UPCh gained a large majority of the seats in municipal councils, but the PC and PH gained some seats in some cities and the PC even clinched more than one seat in several municipal councils.

The presidential and parliamentary elections of 1993 were the first held under democratic rule since 1973. The *Concertación* remained unified with the PDC, PPD and PS as the more important partners and the smaller PR and PSD taking on a secondary role. The PH having left the *Concertación* ran an independent slate claiming to represent the center-left as well. RN and the UDI maintained the Unión por el Progreso (UPCh) coalition and grouped the Psur and PN as minority partners in their slate. However, the most interesting development was the agreement reached between the UPCh and the UCCP (UCC at the time) to run as a coalition. The agreement with the UCC was reached as conservative parties attempted to avoid the division that characterized the conservative forces in the 1989 elections. Finally, the PC maintained its independence and ran under the MIDA coalition again. The results mirrored those of 1989. The *Concertación* obtained 57% of the vote (almost identical to the *Concertación* plus the PAIS in 1989), the UPCh gathered 32% of the vote and the PC and PH obtained 5% and 1% respectively.

As a result of the elections and because of the 5% threshold required for parties to continue to exist, the UCC incorporated smaller conservative groups to form the UCCP.

The SD and the PR joined to form the PRSD, thus reducing the actual number of *Concertación* parties to four: PDC, PS, PPD and PRSD.

Then in 1997, new parliamentary elections were held and the political arena did not significantly change from what was observed in 1993. The UCCP withdrew from the UPCH coalition and ran its own slate. The remaining conservative parties, RN, UDI and Psur stayed in the UPCH. The conservative PN had merged into RN after the 1993 elections. The remaining political parties aligned the same way as in 1993. The number of coalitions increased from 4 in 1993 to 5 in 1997, with the *Concertación* taking the center-left, the PC-MIDA and the PH to the left of the *Concertación* and the UPCH and UCP representing conservative forces. Yet, the number of political parties competing decreased from 12 in 1993 to 10 in 1997.

Table 3. Electoral Results by Party in Chile. Parliamentary elections of 1993 and 1997

Political Party	1993 Parliamentary %	1997 Parliamentary %
Renovación Nacional (RN) (right)	16.31	16.8
Unión Demócrata Independiente (UDI) (right)	12.11	14.43
Partido del Sur (Psur) (right)	0.20	0.36
Partido Nacional (PN) (right)	0.04	----
Unión de Centro Centro Progresista (UCCP) (r)	3.21	1.19
Partido Demócrata Cristiano (PDC) (<i>Concertación</i>)	27.12	22.98
Radical (93) Radical Socialdemocracia (97) (C)	2.98	3.13
Partido Socialdemocracia (PSD) (<i>Concertación</i>)	0.79	----
Partido por la Democracia (PPD) (<i>Concertación</i>)	11.84	12.55
Partido Socialista (PS) (<i>Concertación</i>)	11.93	11.10
Partido Comunista (MIDA) (left)	4.99	6.86
Partido Humanista (PH) (left)	1.01	2.9
Others	7.47	7.7

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Duverger's Law predicts that a majoritarian electoral system will tend to decrease the number of political parties competing in a country. According to the predictions by Cox (1997) or Taagepera and Shugart (1993), the Chilean binomial electoral law should push the number of political parties to 3. Let's recall that both models suggest that the District Magnitude (M), or the number of seats elected in each district, is the key determinant in the number of political parties competing in a given country. In the case of Chile, the district magnitude of the electoral system is 2. Each district elects two deputies. According to Cox, the number of parties in the Chilean system should be 3 (district magnitude plus 1). According to Taagepera and Shugart, the number of parties should be

$$1.15 (2 + \log 2) = 2.65.$$

However, we observe that 12 parties competed in the 1993 election. Although the number of parties in 1997 decreased to 10, the number is still much higher than predicted by either model. Moreover, even if we consider only the electoral coalitions rather than individual parties, we observe that the number of electoral coalitions in 1993 was 4 (*Concertación*, UPCh, PH and PC-MIDA). In 1997, the number of electoral coalitions increased to 5 (the above plus the UCCP). Using either parties or coalitions, the number of parties existing in Chile is still higher than what both models predict.

The Effective Number of Parties

As one can infer from Table 3, there are some political parties and coalitions whose electoral strength is minimal compared with other parties. Rather than focusing on the actual number of parties, one should then consider the number of relevant or effective parties. Taagepera and Shugart (1993) use an earlier formula proposed by Laakso and Taagepera to measure the effective number of parties. The objective is to establish “a non-arbitrary way to distinguish ‘significant’ parties from less significant ones” (1993: 455). The formula is stated as follows:

$$N=(\sum p_i^2)^{-1}$$

Where **N** is the effective number of parties and **p** is the share of the votes won by the *i*th party. If we sum up the values for all the parties competing in Chile in 1993, the effective number of parties is 6.77. For 1997, the number increased to 7.32. So, even when using the number of effective parties, contrary to the assertion of Duverger’s Law, the reductive effect of the electoral system does not exist. Moreover, compared to 1993, the number of effective parties increased in 1997. Yet, as we suggested above, instead of using the country as the unit of analysis, we should focus on what happens at the district level.

Chile binomial electoral system assigns two seats per district. Parties can form electoral coalitions or run independently. Electoral coalitions, or parties running independently, can present up to two candidates per district. Voters select one candidate and when votes are tallied, the candidate with the most votes in the party or coalition with the most votes is automatically elected. The second seat goes to the second candidate of the winning coalition if and only if that coalition or party doubled the number of votes of each other coalition or party. Otherwise, the party or coalition with the second largest number of votes elects its candidate with the most votes.

Such a system was designed to over represent the conservative forces in Chile in light of the electoral defeat suffered by Pinochet in the 1988 plebiscite (Siavelis and Valenzuela 1996). In practice, the system makes it very difficult for any given party or coalition to win both seats in any district. A 65%-35% electoral split between two political parties results in one seat for each party. Likewise, a 51%-49% split results in the same distribution. A 67%-33% split, however, would give both seats to the winning party. In the strictest sense and for the purpose of this analysis, the binomial electoral system can be viewed as a proportional representation system with a district magnitude of 2. Siavelis and Valenzuela (1996) have suggested that a small shift in the electoral away from the UPCh and towards the *Concertación* could create a significant distortion in the parliamentary representation of both groups. The *Concertación* could be significantly over represented

and the UPCh significantly under represented if a small percentage of the electorate moved from the UPCh to the *Concertación*.

In short, we can characterize the system as being proportional if no party or coalition doubles each other party in electoral preferences. In case a single party or coalition successfully doubles all other parties and coalitions, the system becomes majoritarian.

If we measure the effective number of political parties in the 1993 and 1997 elections by districts rather than nationally, we find that those numbers come closer to what is predicted in Duverger's Law. In 1993, the average number of effective parties taking into account the 60 districts was 3.67, higher than predicted by Duverger's Law but understandable given the electoral dynamics existing as a result of the binomial electoral laws. Yet, in 1997, the number of effective parties increased to an average of 4.50 per district. That contradicts the reductive effect predicted by Duverger's Law and it cannot be explained by the existence of the binomial electoral arrangement.

In the 1993 elections, the two largest electoral coalitions, the *Concertación* and the UPCh elected members to congress. The remaining electoral coalitions, the PH and the PC-MIDA failed to elect members and for the most part their candidates did not gather a significant share of the vote. In the 1997 elections, most seats went to *Concertación* and UPCH candidates, but the UCCP also clinched two of the 120 seats. The remaining coalitions, the PH and the PC-MIDA again failed to win seats in parliament. The best showing of the PC-MIDA in 1993 and 1997 was in district 28 (San Miguel). Not surprisingly, that district ranked highest nationally in the number of effective parties. In total, 44 of the 60 districts showed an effective number of parties of 4 or lower. The 16 remaining districts were all districts where the PC-MIDA candidates performed relatively well (although well short of competing for a seat).

Because of the nature of the binomial system there are two possible electoral results when there are two strong coalitions: one coalition wins both seats or the seats are split between the two coalitions. As it is extremely difficult for a coalition to double the vote of the other electoral coalitions, in most cases the seats are split between the two coalitions. The high likelihood that seats will be split between coalitions creates an additional element of competition within the coalitions. Each coalition can have up to two candidates. If the candidates know that it is highly likely that the two seats will be split between both coalitions, then competition arises within the coalition between the candidates to clinch the likely seat their coalition will obtain.

Two races, then, take place. First, coalitions attempt to double the votes of alternative coalitions. In the case of Chile in 1993, the *Concertación*, attempting to capitalize on its electoral majority, sought out to double the votes of the UPCh in as many districts as possible. In the end, they were able to double the votes of the UPCh in 11 districts. The UPCh was able to double the votes of the *Concertación* in 1 district. In the remaining 48 districts, the *Concertación* and the UPCh took one congressional seat each. The second race takes place within each electoral coalition. Aware of the likelihood that their coalition will secure at least one seat, the two candidates of the same coalition rally to obtain more votes than their slate-partner to win a seat in parliament. Unsurprisingly, the effective number of political parties in 1993 (3.67) reflected the dual nature of electoral competition. There are two seats per district and each seat will likely go to a

different coalition. Parties organize in coalitions and compete among coalitions and within coalitions. In a strict analysis, the reductive effect of Duverger's Law is observed with the qualification that the district magnitude and the existence of electoral coalitions creates an additional competition which can be understood as two separate elections in single-member districts, one among *Concertación* parties and one among UPCh parties. In such an arrangement, there should be two coalitions competing for seats in any given district and two parties (or candidates) competing within each coalition.

The results from the 1997 elections (shown in Table 4) indicate an increase in the number of effective parties from 3.67 to 4.5. The dynamics in place in 1993, where the *Concertación* sought to double the votes of the UPCh were also present in 1997. The *Concertación* doubled the UPCh in 10 districts and the opposite occurred in one district. Again, the PC-MIDA and the PH presented candidates in a majority of districts but failed to get any candidates elected to parliament.

If the results in 1993 corresponded to the expectations of the reductive effect of Duverger's Law combined with the distortion created by the binomial system, the 1997 results departed from the expected effect of Duverger's Law. The 1997 elections indicated an increase in the number of effective political parties rather than the expected decrease. In fact, only 7 districts observed a decrease in the number of effective parties, the remaining 53 districts observed an increase in the number of parties.

Not surprisingly, 4 out of the seven districts where there was a decrease in the number of effective parties were districts where the *Concertación* had doubled the UPCh in votes in 1993. The likelihood that the *Concertación* would again double the votes of the UPCh in those districts probably deterred many potential UPCh candidates from entering the race or from vigorous campaign strategies. On the average, there was an increase of 0.83 effective parties for the 1997 elections compared to 1993. For the most part, this increase results from higher internal competition between the UDI and RN in the UPCh ticket and the PDC and PPD-PS in the *Concertación* ticket. In addition, the positioning of the Communist Party as an electoral alternative in the country also had an effect on the increase of effective parties, district by district.

Why did the number of effective parties increase in Chile from 1993 to 1997?

Contrary to the predictions of Duverger's Law, the number of parties in Chile increased from 1993 to 1997. Rather than questioning the validity and applicability of Duverger's assertion, we suggest two possible explanations for the phenomenon.

First, we believe that the effect of the electoral system in place for Municipal Elections allows for the development of smaller parties to continue existing. Municipal elections were first conducted in post-Pinochet Chile in 1992 and then again in 1996. Voters went to the polls to elect member of city councils whom in turn would elect the city mayors. Depending on the size of the municipality, city councils had six, eight or ten members. Each municipality constitutes a single district and members are elected under a proportional representation system where each voter casts a ballot for one candidate. According to the complicated calculation used by Taagepera and Shugart, the number of effective parties, using the more permissive electoral laws for municipal elections, ranges between 3.19 (in 6-member city councils) to 3.45 (in 10-member councils). Although the predicted number of effective parties using Taagepera and Shugart is greater for municipal

elections than under the binomial electoral system, they still under predict the effective number of parties observed in the 1997 parliamentary elections. However, according to Cox's definition, the upper-bound limit in the number of political parties that the municipal electoral system allows is seven, nine or eleven respectively. Thus, according to Cox's prediction, the number of effective parties in Chile will have a higher upper-bound limit as a result of the more permissive electoral system for municipal elections. Parties might continue to exist and compete in parliamentary elections because they obtain results in municipal elections that allow them to get representation in local governments.

A second reason that helps explain the resistance of the Chilean political party system to reduce the number of parties is the expectations that the binomial system will not last much longer. The binomial electoral system was imposed upon the country by the outgoing military regime in 1989, several political parties expect the system to be eventually modified. Their belief is that the country will adopt the traditional proportional representation system with a larger district magnitude. The electoral strategy of those parties is to avoid merging into larger parties and to wait for the adoption of a more permissive proportional representation. To be sure, such an expectation is not only present within the PC-MIDA and PH, the parties that make up the *Concertación* and the UPCh have also avoided the issue of formally making the electoral coalitions political parties. Their ability to compete with each other within their electoral coalitions and the existence of a proportional representation municipal electoral system has allowed them to maintain their independent identities as political parties.

In the future, if an electoral reform is not adopted and the binomial electoral system continues to be used, there is a high likelihood that the smaller political parties will join one of the two larger electoral coalitions for parliamentary elections, but not necessarily for Municipal elections. An effort was made in 1993 and 1997 to reach an accord between the *Concertación* and the PC-MIDA, but internal divisions between the PDC and the PPD-PS prevented the accord from materializing. The PC-MIDA had welcomed the accord as it would have allowed them to gain some parliamentary representation.

As Lijphart has noted, electoral systems are difficult to change, they tend to stick around. Yet, as Cox has also suggested, parties do attempt to change the electoral arrangements under which parliamentary seats are assigned. Chile has a long tradition of proportional representation, but three parliamentary elections have already been conducted using the binomial system. The opposition of the UPCH to altering an electoral arrangement that has proved to be very beneficial to them makes an electoral reform an unlikely event. But the higher levels of polarization observed in the 1997 elections and the possibility that in the future the electoral strength of the *Concertación* decreases (and that, as a result, the binomial system no longer favors the UPCh) should lead us to avoid ruling out an electoral reform in Chile in the near future.

Table 4. Effective Number of parties by district in Chile 1993 and 1997.

District	1993	1997	Diference	District	1993	1997	Diference
	$N=(\sum p_i^2)^{-1}$	$N=(\sum p_i^2)^{-1}$	1997-93		$N=(\sum p_i^2)^{-1}$	$N=(\sum p_i^2)^{-1}$	1997-93
1-arica	3.23	5.10	1.87	31-talagante	3.84	3.17	(0.67)
2-iquique	3.61	5.14	1.53	32-rancagua	3.82	4.84	1.01
3-calama	3.62	3.83	0.21	33-rengo	3.20	2.68	(0.52)
4-antofaga	3.70	4.37	0.67	34-snferrand	2.77	3.92	1.14
5-copiapo	4.71	5.79	1.08	35-pichilemu	3.34	5.97	2.63
6-vallenar	4.31	4.45	0.15	36-curico	3.65	6.06	2.41
7-laserena	4.03	3.19	(0.84)	37-talca	2.96	3.08	*0.12
8-coquimbo	2.92	4.37	1.45	38-constituc	4.14	4.46	0.33
9-losvilos	4.23	5.17	0.94	39-linares	2.58	3.33	0.75
10-quillota	4.07	4.22	0.15	40-cauquen	4.52	4.91	0.39
11-losandes	3.95	2.65	(1.30)	41-chillan	3.04	4.52	1.49
12-quilpue	2.72	5.53	2.81	42-sancarlos	2.53	4.17	1.64
13-valpo	3.51	3.92	0.41	43-talcahuan	4.28	3.78	(0.51)
14-vina	3.27	6.00	2.73	44-concep	3.89	4.39	0.50
15-snanto	3.78	6.13	2.35	45-coronel	3.69	3.77	0.08
16-pudahuel	3.76	4.25	0.50	46-arauco	3.66	5.16	1.50
17-conchali	3.45	4.47	1.02	47-losangeles	3.79	2.79	(1.00)
18-qtanorma	3.69	2.17	(1.53)	48-angol	4.48	5.90	1.42
19-recoleta	4.27	4.43	0.16	49-victoria	4.01	4.70	0.69
20-cerrillos	3.60	4.89	1.29	50-temuco	2.87	3.27	0.40
21-nun/prov	2.73	4.99	2.26	51-carahue	4.11	5.97	1.87
22-stgo	3.80	5.07	1.26	52-villarrica	3.32	4.52	1.21
23-lcondes	3.34	4.36	1.02	53-valdivia	3.48	4.21	0.73
24-lareina	3.50	4.49	0.99	54-la union	3.72	4.93	1.21
25-macul	3.91	4.13	0.22	55-osorno	3.72	5.00	1.29
26-lflorida	3.45	3.69	0.24	56-pto varas	3.78	4.71	0.93
27-lacisterna	3.81	3.91	0.10	57-pto montt	4.13	5.47	1.35
28-sanmiguel	4.78	5.03	0.25	58-chiloe	4.26	6.08	1.82
29-pintana	4.07	4.43	0.36	59-coihaique	3.70	5.20	1.50
30-snbarnar	3.04	3.70	0.66	60-pta arenas	4.07	5.12	1.05
Average 60 districts	3.67	4.50	0.83				

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