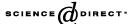


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# Indigenous voters and party system fragmentation in Latin America

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#### Abstract

This article shows that ethnic cleavages have contributed to electoral fragmentation in Latin America, but not in the way that the social cleavages literature would expect. It finds that party system fragmentation in the region is not correlated with ethnic diversity, but rather with the proportion of the population that is indigenous. The failure of the main parties to adequately represent indigenous people, it argues, has led indigenous voters to shift their support to a variety of smaller populist and leftist parties, which has produced high levels of party system fragmentation in indigenous areas. Where a significant indigenous party has emerged, however, indigenous voters have flocked to that party, which has reduced party system fragmentation. Analyses of sub-national electoral data from Bolivia, Ecuador, Guatemala, and Peru provide support for these arguments.

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Party system fragmentation is widely associated with a variety of political and economic ills. Countries with high levels of party system fragmentation are commonly thought to be less governable and more prone to populism, economic crisis, executive-legislative deadlock, and democratic breakdown (Kaufman and Stallings, 1989; Linz, 1994; Haggard and Kaufman, 1995). Multi-party systems may be particularly

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pernicious in Latin America because of the prevalence of presidential systems in the region, which Mainwaring (1993) suggests tends to exacerbate the problems associated with party system fragmentation. Indeed, a large number of Latin American nations, including Bolivia, Brazil, Chile, Ecuador, Guatemala, Panama, and Venezuela, have highly fragmented party systems, and these nations have at times experienced the economic and political problems associated with such systems.

The myriad problems associated with multi-party systems in Latin America make it crucial that we understand the causes of party system fragmentation in the region. With the exception of Coppedge (1997), existing studies of party system fragmentation in Latin America have focused exclusively on institutional causes, such as the existence of majority run-off presidential elections, non-concurrent presidential-legislative elections, high district magnitude, and direct elections of governors (Shugart and Carey, 1992; Jones, 1995; Mainwaring and Shugart, 1997; Payne et al., 2002; Moreno, 2003). The current emphasis on the institutional roots of party system fragmentation in Latin America is surprising considering that the literature on the causes of party system fragmentation coming from other regions has long stressed the important role played by social cleavages in shaping party systems (Lipset and Rokkan, 1967; Powell, 1982; Ordeshook and Shvetsova, 1994; Amorim Neto and Cox, 1997; Moser, 2001).

This article examines how social cleavages—in particular the voting patterns of the indigenous population—have affected party system fragmentation in the region. It finds that the proportion of the population that is indigenous is highly correlated with party system fragmentation at the sub-national level in the region, especially in those countries where indigenous identities are highly salient. As this study shows, indigenous people have tended to vote for the main parties at lower levels than non-indigenous people in large part because these parties have failed to adequately represent them. Where no significant indigenous party exists, indigenous voters have typically split their votes between the main parties and a variety of smaller populist and leftist parties, which has produced high levels of party system fragmentation. Where an indigenous party has emerged, however, indigenous voters have typically flocked to it in large numbers, which has reduced party system fragmentation. The findings of this article thus parallel earlier studies by Van Cott (2000) and Madrid (in press), which found that the political exclusion of the indigenous has led to low levels of party system institutionalization and high levels of electoral volatility.

Section 1 of this article discusses why, contrary to the expectations of the social cleavages literature, ethnic diversity is not likely to cause party system fragmentation in Latin America. It then explains why party system fragmentation is likely to worsen with increases in the proportion of the population that is indigenous, except where important indigenous parties exist. Section 2 tests these hypotheses through quantitative analyses of the determinants of party system fragmentation at the subnational level in four Latin American countries with large indigenous populations. The conclusion explores the implications of these findings.

<sup>&</sup>lt;sup>1</sup> Coppedge (1997) suggests that a variety of political and social cleavages shape party system fragmentation in Latin America, but he does not seek to measure such cleavages.

### 1. Social cleavages and party system fragmentation

Proponents of the social cleavages approach argue that social identities create common interests and partisan sympathies (Lipset and Rokkan, 1967; Powell, 1982; Ordeshook and Shvetsova, 1994; Amorim Neto and Cox, 1997). Party systems will therefore often divide along class, religious, territorial, or ethnic lines, and voters from different social groups will frequently vote in a bloc for the party that "represents" their social group. As a result, the more social cleavages there are in a given society, the greater the number of parties there will be. Empirical support for this theory has come from a variety of quantitative analyses, which have found, for example, that ethnic diversity increases party system fragmentation (Powell, 1982; Ordeshook and Shvetsova, 1994; Amorim Neto and Cox, 1997; Moser, 2001).<sup>2</sup>

As social cleavage theorists acknowledge, however, ethnic cleavages and other types of social divisions are not always translated into political cleavages. Ethnic parties, which I define as parties that are oriented principally to a single ethnic group and draw the bulk of their leaders from that group, often fail to form because the financial and political barriers to the creation of ethnic parties are high. Indeed, ethnic parties are relatively rare in Latin America in spite of the existence of important ethnic cleavages in the region. Significant indigenous parties, for example, did not emerge in Latin America until the mid-1990s in part because of electoral rules that have hurt regionally concentrated groups, but also because of the limited economic resources and internal divisions of the indigenous population (Birnir, 2004; Van Cott, in press).<sup>3</sup>

The dearth of ethnic parties in Latin America means that there is little reason to expect a correlation between ethnic diversity and party system fragmentation in the region. Where there are no ethnic parties, individuals from the same ethnic group will not necessarily vote in a bloc for the same party. Nor will individuals from different ethnic groups necessarily vote for different parties. Hence:

**Hypothesis 1.** Contrary to the expectations of social cleavage theory, high levels of ethnic diversity will not lead to high degrees of party system fragmentation in Latin America.

This does not mean, however, that the region's ethnic cleavages have no effect on party system fragmentation or that members of different ethnic groups vote in precisely the same ways. To the contrary, this article shows that the indigenous population in Latin America has typically voted in a distinct way from the rest of the population and that the voting patterns of the indigenous population have tended to exacerbate party system fragmentation. I argue that electoral fragmentation has been higher in indigenous areas in large part because the existing party systems, and, in particular, the major parties have failed to adequately represent the indigenous population.

<sup>&</sup>lt;sup>2</sup> Jones (2004), however, found no relationship between ethnic diversity and party system fragmentation in his analyses of presidential elections around the world.

<sup>&</sup>lt;sup>3</sup> I define a significant party as one that receives at least 5% of the overall vote.

The failure of the existing party systems to adequately represent the indigenous is readily apparent throughout most of the region. Survey data on the political views of the indigenous population in Latin America is relatively scarce, but the data that does exist supports the notion that the indigenous are frustrated with the political system and do not feel well-represented by the existing parties. In a 1988 survey of the Ecuadorian indigenous population, for example, 46.1% of the respondents said that no party represented their interests (Chiriboga and Rivera, 1989: 213). In surveys in Bolivia and Peru in the late 1990s, the indigenous expressed less confidence in political parties and institutions than did the non-indigenous (Democracy Survey Database, 2004). Similarly, a survey carried out in Guatemala in 2001 found that the indigenous expressed significantly less support for the political system, including political parties, than did the non-indigenous (Azpuru, 2003).

Not only are there no significant indigenous parties in most Latin American countries, but the major non-ethnic parties that have governed Latin American nations in recent decades have failed to advance the interests of the indigenous population. (I define a major or main party as one that typically receives at least 15% of the national vote.) The major parties have, for example, failed to embrace indigenous demands for agrarian reform, regional autonomy and affirmative action programs—measures that many indigenous leaders believe are necessary to improve the socio-economic status of the indigenous population, which continues to lag behind in terms of income, education, housing, and health care (Patrinos, 2000). Nor have the main parties recruited significant numbers of indigenous candidates and leaders. The three largest political parties in Bolivia, the Movimiento Nacionalista Revolucionario (MNR), the Acción Democrática Nacionalista (ADN), and the Movimiento Izquierda Revolucionario (MIR), had only one indigenous representative and no indigenous senators in the 1997-2002 legislature even though indigenous people represent approximately 60% of the Bolivian population (Albó, 2002: 95). In the 2000-2004 legislature in Guatemala, only 10% of the legislators from the two largest parties, the Frente Revolucionario Guatemalteco (FRG) and the Partido de Avanzada Nacional (PAN), were indigenous, which constitutes a shockingly low number in a country where the indigenous population comprise approximately half of the population (ASIES, 2000: 74).

As we shall see, the failure of the main political parties to adequately represent the indigenous has weakened the support for these parties among the indigenous, which has contributed to party system fragmentation in indigenous areas. Some indigenous people have voted for the main parties for clientelist reasons or because these parties represent their views on other policy issues, but many indigenous voters have opted for other parties that have made greater efforts to cater to the needs of indigenous communities.

<sup>&</sup>lt;sup>4</sup> The failure of the party system to adequately represent the indigenous may also explain why voter turnout is lower and electoral volatility is higher in indigenous areas in Latin America (see Lehoucq and Wall, 2004; Madrid, in press; Ticona et al., 1995).

Where no significant indigenous party exists, a fair number of indigenous voters have voted for small leftist or populist parties instead of the main parties. Indeed, these parties have frequently fared better in indigenous than non-indigenous areas. Leftist and populist parties have attracted indigenous votes because of their class-based appeals and criticisms of the existing parties and policies. Moreover, some of these parties have made greater efforts than the major parties to recruit indigenous leaders and to adopt the demands of indigenous social movements. No single leftist or populist party has typically been able to win a large percentage of the indigenous vote, however. First, in most Latin American countries, there are multiple leftist or populist parties that have vied for indigenous voters. Second, the leftist and populist parties have not typically embraced the indigenous agenda in its entirety, which has limited their appeal to many indigenous voters. The left-wing and populist parties, for example, have usually focused on class rather than ethnic issues, and their leadership has been largely non-indigenous (Van Cott, in press; Yashar, 2005).

Thus, in countries that do not have significant indigenous parties, indigenous voters have typically divided their votes between the major parties and a variety of left-wing and populist parties, whereas non-indigenous voters have tended to concentrate their votes more heavily on the major parties. The tendency of indigenous voters to split their votes in this manner has led to high levels of party system fragmentation in indigenous areas. Hence:

**Hypothesis 2.** In those Latin American countries where there are no significant indigenous parties, the level of party system fragmentation will increase steadily with the proportion of the population that is indigenous.

In those Latin American countries where a significant indigenous party has emerged, however, numerous indigenous voters have flocked to that party. Indigenous voters have heavily supported indigenous parties for a number of reasons. First, indigenous parties have typically recruited large numbers of indigenous leaders as candidates, and these leaders, and their organizational ties, have attracted numerous indigenous voters. Indeed, a 1996 survey in Ecuador found that indigenous voters cited the ethnic identity of the candidate more than any other factor as an important determinant of their vote (Wray, 1996: 25). Second, indigenous parties have usually advocated policies aimed specifically at satisfying the traditional demands of the indigenous population and improving their socioeconomic position. The indigenous parties have also typically embraced the left-wing policies that are popular among many indigenous voters. Third and finally, the traditional failure of the non-indigenous parties to cater to indigenous interests has made it difficult for these parties to effectively compete with indigenous parties for indigenous votes as long as the indigenous parties are seen as politically viable. Nonindigenous parties have used patronage to purchase indigenous votes, but the emergence of significant indigenous parties may reduce the number of indigenous voters who are willing to sell their votes by giving them a greater political stake in elections.

Where indigenous voters concentrate their votes on an indigenous party, increases in the proportion of the population that is indigenous will tend to have a curvilinear (inverted u-shaped) effect on party system fragmentation at the sub-national level.<sup>5</sup> More specifically, in countries that have significant indigenous parties, municipalities or provinces in which the indigenous population represents a medium-sized proportion of the population should have a greater degree of party system fragmentation than polities in which the indigenous represent a small proportion or a large proportion of the population. The logic behind this hypothesis is relatively simple. In countries that have a significant indigenous party, the indigenous population will typically support it in large numbers, but the non-indigenous population will vote for it at much lower levels. Therefore, where the indigenous proportion of the population is quite low, the vote share of the indigenous party tends to be quite small. As the proportion of the population that is indigenous increases, the vote share of the indigenous party will rise and thereby increase the degree of party system fragmentation. At a certain point, however, the vote share of the indigenous party becomes so great that further increases in the proportion of the population that is indigenous will only reduce party system fragmentation by concentrating the vote even more narrowly on the indigenous party. Hence:

**Hypothesis 3.** Where there are significant indigenous parties, the proportion of the population that is indigenous will have a curvilinear (inverted u-shaped) relationship with party system fragmentation.

## 2. Research design and measurement

These hypotheses were tested through analyses of sub-national electoral data in four countries: Bolivia, Ecuador, Guatemala, and Peru. To date, studies of party system fragmentation in Latin America have focused on the national level, but this has created a degrees of freedom problem because of the limited number of countries in Latin America (Jones, 1995). Shifting to the sub-national level, however, dramatically increases the number of observations, while also ensuring that there is sufficient variance on the main variables of interest. (The proportion of the population that is indigenous, for example, typically varies from 0 to almost 100% across the sub-national units in each country.) A sub-national analysis also controls for electoral laws that do not vary within countries, such as the existence of majority run-off presidential elections and concurrent presidential-legislative elections, as well as other national level characteristics (Moser, 2001). Finally, as Jones (1997: 350–351) has argued, examining these questions at the sub-national level reduces the probability of non-random measurement error because data on race or ethnicity tend to be much more consistent within countries than across countries.

<sup>&</sup>lt;sup>5</sup> The emergence of more than one important indigenous party may reduce the extent to which indigenous voters concentrate their votes on a single party.

<sup>&</sup>lt;sup>6</sup> The sample included 112 provinces in Bolivia, 187 provinces in Peru, 216 counties in Ecuador, and 330 municipalities in Guatemala. For each country, I used data at the lowest level of aggregation available.

These four countries constitute appropriate cases for a couple of reasons. First, they account for approximately two-thirds of the total indigenous population in Latin America and include all of the countries where the indigenous population is of sufficient size to have a consistently important impact on national-level electoral outcomes (Hopenhayn and Bello, 2001). An analysis of these four countries therefore offers a relatively comprehensive look at indigenous voting in the region. Second, this selection of cases includes countries that have significant indigenous parties as well as countries that do not. A significant indigenous party, the Movimiento Unidad Plurinacional Pachakutik — Nuevo País (MUPP-NP), has competed in national-level elections in Ecuador since 1996. Bolivia has had small indigenous parties since the 1970s, but it was not until the 2002 elections that significant indigenous parties emerged: namely, the Movimiento al Socialismo (MAS) and the Movimiento Indígena Pachakutik (MIP). To date, no significant indigenous parties have arisen in Guatemala or Peru.

Following the conventional approach, party system fragmentation is measured using Laakso-Taagepera's effective number of parties averaged across elections and calculated with regard to each party's share of the vote in a given province or municipality. The data correspond to the 1985–2002 elections of deputies by proportional representation in Bolivia, the 1992–2002 elections for provincial deputies in Ecuador, and the 1985–1999 elections of deputies from departmental districts in Guatemala, and the 1980–2000 presidential elections in Peru. (Provincial level data on legislative elections were not available for the entire period for Peru.)

This study uses census data to measure the proportion of the population that is indigenous because it is the only data available at the municipal or provincial level. These data come from the 2001 census in Bolivia (INE, 2001), the 2001 census in Ecuador (Secretaría Técnica de Frente Social, 2003), the 1994 census in Guatemala (INE, 1994), and the 1993 census in Peru (INEI, 1993). The census data are based either on self-identification (Bolivia, Ecuador, and Guatemala) or language (Peru). The census data, like any data that seek to identify the size of the indigenous population in Latin America, are the subject of some controversy. The use of language data will typically understate the size of the indigenous population because many of those people who identify as indigenous or have indigenous ancestry do not speak indigenous languages. Even data based on self-identification may

<sup>&</sup>lt;sup>7</sup> Estimates of the proportion of the population that is indigenous in these countries range from 60 to 80% in Bolivia, 40 to 60% in Guatemala, 25 to 40% in Peru, 10 to 35% in Ecuador (Deruyttere, 1999; Hopenhayn and Bello, 2001).

<sup>&</sup>lt;sup>8</sup> Considerable debate exists about which parties might appropriately be considered indigenous. MAS is classified here as an indigenous party because its leadership is mostly indigenous and it has clearly embraced indigenous demands. CONDEPA, by contrast, is not classified as indigenous because most of its top leaders, including its founder, were not indigenous.

<sup>&</sup>lt;sup>9</sup> The electoral data for 1992–2002 elections in Ecuador and the 2002 elections in Bolivia were generously furnished to the author by the electoral institutes in those countries. The remaining electoral data came from Fundemos (1998), the Tribunal Supremo Electoral in Guatemala (TSE, 2000, 1996, 1991, 1986), and Tuesta Soldevilla (2001).

underestimate the true size of the indigenous population since discrimination may make people reluctant to identify themselves as indigenous (González, 1994). Fortunately, underestimates of the size of the indigenous population should not bias the statistical results as long as the geographical distribution of the indigenous population is accurate, and there appears to be much more agreement on how the indigenous population is distributed across municipalities or provinces than there is on its absolute size. <sup>10</sup> Indeed, different measures of the size of the indigenous population, including self-identification and language data, tend to be highly correlated at the sub-national level. Thus, any of these measures should make a good proxy for the relative size of the indigenous population for the purposes of this study.

Following the conventional approach, the degree of ethnic diversity in each province or municipality was calculated using the index of the effective number of ethnic groups. Owing to the limitations of the census data, these calculations treat the non-indigenous population as a single ethnic group in all of the countries, except Ecuador. Belivian and Peruvian censuses provide data on a number of different indigenous categories, such as the Quechua and the Aymara population, and, as a result, the indices of the effective number of ethnic groups for these two countries do take into account the ethnic diversity within the indigenous communities of these two countries. Unfortunately, municipal level data on the different indigenous groups in Ecuador and Guatemala were unavailable. This is less problematic for this study than it would be for a national-level study, however, because most municipalities do not contain substantial numbers of people from different indigenous categories.

As noted above, most of the institutional variables that are said to influence party system fragmentation do not vary within countries and they therefore cannot explain sub-national variation in the degree of party system fragmentation. The principal exception is district magnitude. District magnitude does not vary in presidential elections so this variable was only included in the analyses of party system fragmentation in Bolivia, Ecuador, and Guatemala. Following the literature on this topic, I expect district magnitude to be positively correlated with the degree of party system fragmentation. Low district magnitude is said to reduce party system fragmentation because in single member or small multi-member districts citizens will tend to concentrate their votes on those few parties or candidates that have a reasonable chance of being elected (Ordeshook and Shvetsova, 1994; Coppedge, 1997; Amorim Neto and Cox, 1997).

<sup>&</sup>lt;sup>10</sup> Where they use the same criteria, different surveys and censuses provide similar estimates of the size of the indigenous population at the national level in various Latin American countries, which also provides some degree of confidence in these figures (see Mejía and Moncada, 2000).

<sup>&</sup>lt;sup>11</sup> The effective number of ethnic groups is calculated as the inverse of the sum of squares of each ethnic group's share of the population.

<sup>&</sup>lt;sup>12</sup> The Ecuadorian census provides data on the European-origin population, the *mestizo* population, the mulatto population, and the black population.

## 3. Data analysis

Table 1 presents a simple comparison of means between sub-national units with varying proportions of indigenous populations in all four countries. As Hypothesis 2 predicted, where no significant indigenous parties competed in the elections, namely Bolivia (1985–1997), Ecuador (1992), Guatemala (1985–1999), and Peru (1980–2000), the effective number of parties rises steadily with the proportion of the population that is indigenous. Not all of the differences in means shown in the table are statistically significant, but the difference in means between majority indigenous and majority non-indigenous municipalities (or provinces) is highly statistically significant in all four countries.

Table 1 also shows that, as Hypothesis 3 predicted, in those elections where significant indigenous parties competed, namely Bolivia (2002) and Ecuador (1996—2002), a curvilinear relationship exists between party system fragmentation and the proportion of the population that is indigenous. That is, counties or provinces in which the indigenous population represented between one-third and two-thirds of the population had a higher effective number of parties than did those counties or provinces where the indigenous population represented less than one-third or more than two-thirds of the population. All of the differences in means for elections with indigenous parties are statistically significant except one in Bolivia, which falls barely short of conventional levels of statistical significance. As Table 1 also shows, in both Bolivia and Ecuador, the level of party system fragmentation declined in highly indigenous areas (but not in other areas) after the emergence of indigenous parties.

Table 2 presents a series of multivariate regression analyses which control for other variables that are thought to influence the degree of party system fragmentation. As the table indicates, the proportion of the population that is indigenous is a highly statistically significant predictor of the degree of party system fragmentation at the sub-national level in Bolivia (1985–1997), Ecuador (1992), Guatemala (1985–1999), and Peru (1980–2000). The relationship between the relative size of the indigenous population and the effective number of parties, moreover, is relatively consistent across elections. Indeed, the proportion of the population that is indigenous is a positive and statistically significant predictor of the effective number of parties for each election analyzed separately, with the exception of the 1985 legislative elections in Guatemala and the 1980 presidential elections in Peru.

The strong relationship between the proportion of the population that is indigenous and party system fragmentation is not simply a product of the peripheral or underdeveloped status of indigenous areas. Indeed, the proportion of the indigenous population remains a highly statistically significant predictor of party

<sup>&</sup>lt;sup>13</sup> The proportion of the population that is indigenous remains a highly statistically significant determinant of the level of party system fragmentation in all of the countries examined (except for Bolivia in 2002) if the districts are weighted by the number of votes cast.

	Indigenous population as a percent of total population			
	Less than 33%	Between 33 and 67%	Greater than 67%	
Elections without significan	t indigenous parties			
Bolivia 1985-1997	3.32	3.76	4.73	
Ecuador 1992	5.29	5.68	6.26	
Guatemala 1985-1999	4.18	4.26	4.41	
Peru 1980-2000	2.45	2.55	2.68	
Mean	3.81	4.06	4.52	
Elections with significant in	digenous parties			
Bolivia 2002	3.73	4.30	3.98	
Ecuador 1996-2002	5.31	5.89	4.08	
Mean	4.52	5.10	4.03	

Table 1
The effective number of parties in sub-national units with varying indigenous populations

Figures represent average effective number of parties calculated in terms of each party's share of the total vote at the municipal or provincial level.

system fragmentation even controlling for the urbanization rate, the literacy rate, and the poverty rate.<sup>14</sup>

The substantive impact of the size of the indigenous population on party system fragmentation is particularly strong in Bolivia and Ecuador. Nevertheless, in Guatemala and Peru the relative size of the indigenous population also has an appreciable impact on the effective number of parties. According to the analyses, provinces or municipalities that are entirely indigenous would have 2.3 more effective parties in Ecuador and 1.8 more parties in Bolivia than municipalities or provinces that have no indigenous people. By contrast, the difference between entirely indigenous and non-indigenous provinces or municipalities would be approximately 0.7 effective parties in Guatemala, and 0.6 parties in Peru.

To examine whether the proportion of the population that is indigenous has a curvilinear relationship with the effective number of parties where there are ethnic parties, the square of the indigenous population variable was included in the regression equations for the elections where significant indigenous parties competed.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> The results of the analyses with the poverty variables are not reported here because the poverty rate is highly correlated with some of the other variables, notably the urbanization and literacy rates, and because municipal level poverty data were not available for Guatemala. The variables used as the proxy for the poverty rate in the other countries included the percentage of homes below the poverty line (Ecuador and Peru), and the median wage (Bolivia).

<sup>&</sup>lt;sup>15</sup> The squared term was excluded from the other models because there was no theoretical reason to include it and because it is extremely highly correlated with the proportion of the population that is indigenous in Bolivia (r=0.98), Guatemala (r=0.98), Peru (r=0.98), and Ecuador (r=0.94). If the squared term is included in the statistical models for those elections where no significant indigenous parties are competing, neither the indigenous proportion variable nor its squared term is statistically significant in any of the countries except for Ecuador (1992). However, for each of these four models, partial *F*-tests reject the null hypothesis that the indigenous proportion variable and the squared term of this variable have no impact on party system fragmentation.

Table 2
The determinants of party system fragmentation at the sub-national level in four Latin American countries
(OLS estimates)

	Bolivia 1985—1997	Ecuador 1992	Guatemala 1985–1999	Peru 1980–2000	Bolivia 2002	Ecuador 1996–2002
Constant	3.327***	4.825*	2.754***	1.625***	2.317*	6.490***
	(0.654)	(2.113)	(0.259)	(0.320)	(0.902)	(1.568)
Indigenous	1.797***	2.337**	0.747***	0.576***	5.574*	7.381***
population/total population	(0.254)	(0.761)	(0.131)	(0.113)	(2.414)	(1.643)
Effective number of	-0.362**	-0.056	0.043	-0.051	-0.232	-0.167
ethnic groups	(0.130)	(0.279)	(0.116)	(0.077)	(0.262)	(0.270)
Urbanization rate	0.085	0.837	0.089	0.086	0.227	0.403
	(0.291)	(0.560)	(0.184)	(0.139)	(0.420)	(0.457)
Literacy rate	0.025	-0.275	1.504***	0.906*	1.133	-1.272
·	(0.806)	(2.359)	(0.313)	(0.433)	(1.123)	(1.744)
District magnitude	0.019	0.070	0.056**	, , ,	-0.001	-0.045*
· ·	(0.012)	(0.041)	(0.019)		(0.023)	(0.022)
(Indigenous					-4.869*	-10.594***
population/total population) <sup>2</sup>					(2.241)	(2.034)
$R^2$	0.520	0.088	0.142	0.165	0.123	0.181
Adjusted R <sup>2</sup>	0.497	0.061	0.129	0.146	0.072	0.157
N	112	174	330	187	112	216

Standard errors in parentheses.

The results support Hypothesis 3. As Table 2 indicates, the indigenous proportion variable has a positive sign and the square of this variable has a negative sign in the 1996–2002 Ecuadorian and the 2002 Bolivian elections and they are statistically significant in both cases. This suggests that the proportion of the population that is indigenous will tend to increase party system fragmentation where the indigenous proportion of the population is small but decrease it where it is large. The Bolivian 2002 model, for example, predicts that the effective number of parties would grow from 2.4 to 4.0 and then drop to 3.1 as the proportion of the population that is indigenous in a province rises from 0 to 50 to 100% (with other variables held at their means).

As Hypothesis 1 predicted, however, high levels of ethnic diversity do not appear to increase party system fragmentation in Latin America. Indeed, the effective number of ethnic groups is actually negatively correlated with the degree of party system fragmentation in Bolivia (1985–2002), Ecuador (1992–2002) and Peru (1980–2000), although the correlation is only statistically significant in Bolivia (1985–1997). This study also failed to find a clear relationship between district magnitude and party system fragmentation in the region. District magnitude only had a positive and statistically significant relationship with the effective number of parties in Guatemala. Some previous studies of party system fragmentation (Ordeshook and Shvetsova, 1994; Amorim Neto and Cox, 1997) found that district magnitude and ethnic diversity had an interactive effect on the effective number of

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001 (two-tailed t-tests).

Country	Vote for small p	arties (%) <sup>a</sup>	Vote for two largest parties (%)		
	Indigenous majority areas	Non-indigenous majority areas	Indigenous majority areas	Non-indigenous majority areas	
Bolivia 1985–2002	30.2	16.6	43.8	64.4	
Ecuador 1992-2002	84.7	60.7	14.5	35.7	
Guatemala 1985-1999	44.8	38.7	51.3	56.6	
Peru 1980-2000	21.5	16.6	75.4	78.7	
Four country average	45.3	33.2	46.3	58.9	

Table 3 Share of the vote for largest and smallest parties in indigenous and non-indigenous areas

parties, but this study did not find such an effect when an interactive term was added to the models.

# 4. Weak support for the major parties

Sub-national data for Bolivia, Ecuador, Guatemala, and Peru thus show that the proportion of population that is indigenous has tended to increase party system fragmentation, except in those elections where a significant indigenous party has competed. This relationship is largely the result of the failure of the major parties to adequately represent the indigenous population, which has led to widespread disenchantment with these parties in indigenous areas. Indeed, as Table 3 indicates, the major parties have fared much more poorly in indigenous areas than in non-indigenous areas in recent decades. Overall, the two largest parties have won only 46.3% of the vote in majority indigenous areas as opposed to 58.9% of the vote in areas where the indigenous represent a minority of the population. <sup>16</sup> The differences in the means between majority and minority indigenous districts in all four countries are highly statistically significant.

Small parties, by contrast, have done much better in indigenous than in non-indigenous areas. As Table 3 shows, the parties that won less than 15% of the national vote accounted for 45.3% of the vote in majority indigenous areas and only 33.2% of the vote in majority non-indigenous areas during the elections under examination. These differences in means are also highly statistically significant in all four countries. The smaller parties that have fared well in indigenous areas have been predominantly leftist or populist. Indeed, center-left and far-left parties accounted for 40.6% of the vote in majority indigenous areas and 28.5% of the vote in majority non-indigenous areas during this period.

<sup>&</sup>lt;sup>a</sup> Parties that received less than 15% of the national vote.

<sup>&</sup>lt;sup>16</sup> The two largest parties refer to the parties that finished first and second in the national vote for each election. All data in the table refer to simple averages for the relevant sub-national districts.

As might be expected, the major parties have fared worst, and small parties, especially leftist and populist parties, have performed best in indigenous areas in Bolivia and Ecuador—the two countries where the indigenous population is the most mobilized. In these two countries, the indigenous population is relatively politicized and powerful indigenous movements have long denounced the traditional parties (Van Cott, in press; Yashar, 2005). The major parties performed poorly in indigenous areas in Ecuador even before the emergence of Pachakutik in 1996, but they have done worse since that time. Leftist and populist parties usually won the majority of votes in indigenous areas before 1996, but no single one of these parties was typically able to win a large share of the vote. In 1992, the largest party in majority indigenous counties was the center left-party, Izquierda Democrática, which won 18.7% of the vote. Eight other parties, mostly populist or left-wing organizations, won between 5 and 10% of the vote in majority indigenous counties in 1992, thereby seriously fragmenting the vote. The emergence of Pachakutik in 1996, however, reversed this tendency toward fragmentation. Pachakutik won an average of 23.5% of the legislative vote in majority indigenous counties in 1996, 36.8% in 1998, and 37.3% in 2002, which significantly reduced the effective number of parties in highly indigenous areas.<sup>17</sup>

In Bolivia, the largest parties—traditionally the Movimiento Nacionalista Revolucionario (MNR) and Acción Democrática Nacionalista (ADN)—have also fared relatively poorly in indigenous areas. Between 1985 and 2002, the largest two vote-getting parties in Bolivia won only 43.8% of the vote in provinces that were a majority indigenous, as opposed to 64.4% in areas where the indigenous are in the minority. As in Ecuador, the share of the vote accounted for by the two largest parties in indigenous areas in Bolivia has dropped sharply over time, falling from 55.3% in 1985 to 31.0% in 2002. Between 1989 and 1997, a mix of leftist and populist parties, such as the Movimiento Izquierda Revolucionario (MIR), Conciencia de Patria (CONDEPA), Unión Cívica Solidaridad (UCS), and the Movimiento Bolivia Libre (MBL), performed relatively well in indigenous areas, but each of these parties typically won only 5–20% of the vote in the majority indigenous provinces, which exacerbated party system fragmentation. In the 2002 elections, however, a significant indigenous party, Movimiento al Socialismo, emerged that won 33.4% of the vote in the majority

<sup>&</sup>lt;sup>17</sup> In areas that were more than two-thirds indigenous, Pachakutik won 34.7% of the legislative vote in 1996, 46.8% of the vote in 1998, and 42.2% in 2002. In some provinces Pachakutik ran jointly on a list with one or more other parties and the data listed here for Pachakutik includes the vote for these alliances.

<sup>&</sup>lt;sup>18</sup> The data for the two largest parties in the 2002 Bolivian elections represent data for MNR and the NFR, even though the NFR actually finished in third place in this election, less than one-tenth of a percentage point behind the indigenous party, MAS. The vote for the NFR rather than MAS is provided here because the objective is to show how the main non-indigenous parties fared in indigenous and non-indigenous areas.

<sup>&</sup>lt;sup>19</sup> The one exception was the MIR, which won 24% of the vote in majority indigenous provinces in 1989. The MIR's share of the vote in the indigenous areas dropped substantially in the years that followed, however, as it embraced neoliberal policies and became one of the main governing parties in Bolivia.

indigenous provinces, which helped reduce party system fragmentation in these areas.  $^{20}$ 

The major parties have also increasingly encountered problems in indigenous areas in Guatemala, although not to the same degree as in Ecuador and Bolivia. In the 1985 and 1990 elections, both majority indigenous and majority non-indigenous municipalities in Guatemala voted in large numbers for Democrácia Cristiana Guatemalteca (DCG) and the Unión del Centro Nacional (UCN), the two principal parties during this period. However, a significant voting gap opened up between indigenous and ladino areas during the 1990s as the DCG and UCN gradually disintegrated and two other parties, the Partido de Avanzada Nacional (PAN) and the Frente Republicano Guatemalteco (FRG), became dominant. The PAN and FRG fared better in non-indigenous than in indigenous areas in both the 1995 and 1999 elections, winning an average of 63.5% of the vote in municipalities where the indigenous are in the minority, as opposed to 51.4% of the vote in majority indigenous municipalities.<sup>21</sup> By contrast, left-wing parties, such as the Frente Democrático Nueva Guatemalteca (FDNG), Desarrollo Integral Auténtico (DIA), and the Unidad Revolucionaria Nacional Guatemalteca (URNG), which emerged as the peace process in Guatemala took hold in the mid-1990s, together won an average of more than 15% of the vote in majority indigenous municipalities in these elections, as opposed to only 8.5% in minority indigenous municipalities. The higher levels of party fragmentation in indigenous areas in Guatemala was thus a product of both the reduced support for the largest parties and the higher levels of support for smaller left-wing parties found in these areas.

In Peru, as in Guatemala, the major parties have had mixed results in indigenous areas. Between 1980 and 1990, the two largest parties in Peru won only 63.8% of the vote in majority indigenous provinces in contrast to 70.1% of the vote in provinces where the indigenous constituted a minority. During this period, a significant portion of voters in indigenous areas cast their votes for smaller leftwing parties, such as Izquierda Unida, Izquierda Socialista, and the Partido Revolucionario de los Trabajadores. Indeed, the left won approximately 25.4% of the vote in majority indigenous provinces between 1980 and 1990, as opposed to 16.5% in minority indigenous provinces. This exacerbated party system fragmentation in indigenous areas in Peru, especially in 1980 and 1990 when the left was divided. The demise of the left in Peru in the 1990s and the rise of Alberto

<sup>&</sup>lt;sup>20</sup> MAS sprang from the Asamblea de la Soberanía de los Pueblos (ASP), which was created in 1995, but MAS did not emerge as a significant party until the 2002 elections. Another significant indigenous party, Movimiento Indígena Pachacuti (MIP), also emerged in the 2002 elections. However, this party, which won 8.4% of the vote in majority indigenous provinces, worsened party system fragmentation in most areas by taking away votes from MAS.

<sup>&</sup>lt;sup>21</sup> Many observers, however, were surprised that the FRG won as many indigenous votes as it did. The FRG was led by former General Efrain Rios Montt who as the military ruler of Guatemala in the early 1980s had presided over a counter-insurgency campaign that had led to the slaughter of thousands of Mayan Indians.

<sup>&</sup>lt;sup>22</sup> These data exclude votes for APRA, which is typically classified as a center-left or populist party. APRA has traditionally fared worse in indigenous than in non-indigenous areas.

Table 4
Ecological inference estimates of the share of the indigenous and non-indigenous vote received by the two largest parties (as a percent of total valid votes in each category)

	Share of indigenous vote (%)	Share of non-indigenous vote (%)
Mean of 1985–2002 Bolivian elections	38.8 (1.2)	74.2 (2.2)
Mean of 1992-2002 Ecuadorian elections	5.4 (1.0)	41.0 (0.1)
Mean of 1985-1999 Guatemalan elections	50.0 (0.4)	56.3 (0.2)
Mean of 1980-2000 Peruvian elections	74.4 (1.0)	78.0 (0.2)
Mean of all four countries	42.2	62.4

Standard errors in parentheses.

Fujimori reduced party system fragmentation in indigenous areas, however. Indeed, in the 1995 and 2000 presidential elections the two largest parties earned approximately 86% of the vote in majority indigenous as well as in majority non-indigenous provinces.<sup>23</sup>

Aggregate sub-national electoral data thus shows that the largest parties have typically fared quite worse in indigenous areas, especially in those countries where the indigenous population is highly mobilized. Nevertheless, without individual level data one cannot be sure whether indigenous voters are responsible for the poor showing of the major parties in majority indigenous areas. In the absence of individual-level survey data, King's (1997) method of Ecological Inference (EI) provides the best approach to estimating indigenous voting patterns. According to estimates produced with EI, only 42.2% of indigenous voters supported the two largest parties on average, as opposed to 62.4% of non-indigenous voters.<sup>24</sup> As Table 4 indicates, the gap between the indigenous and non-indigenous vote for the two largest parties is particularly pronounced in Bolivia and Ecuador, but it is also noticeable in Peru and Guatemala. EI estimates, as well as survey data, also suggest that indigenous people have voted relatively heavily for significant indigenous parties where they have competed (Democracy Survey Database, 2004; Beck and Mijeski, 2004; Mijeski and Beck, 2004). Ecological Inference thus provides additional support for some of the central arguments of this study.

#### 5. Conclusion

Social cleavage theory has long argued that ethnic diversity will lead to party system fragmentation, but this article found little evidence to support that claim. In

<sup>&</sup>lt;sup>23</sup> Observers have attributed the relative popularity of Alberto Fujimori in indigenous areas to a variety of factors, including Fujimori's Japanese (as opposed to European) ancestry, his use of indigenous cultural symbols, and his vote-buying tactics. In the 2000 elections, however, Fujimori lost considerable ground in indigenous areas to his main rival, Alejandro Toledo, who was able to capitalize on his indigenous appearance.

<sup>&</sup>lt;sup>24</sup> Unfortunately, Ecological Inference is less effective at producing estimates for smaller parties.

none of the four Latin American countries examined here did ethnic diversity have a positive and statistically significant relationship with the effective number of parties at the sub-national level. This suggests that the predictions of social cleavage theory regarding the effects of ethnic diversity on party system fragmentation may not hold in those regions, such as Latin America, where party systems are not structured along ethnic lines.

Ethnic cleavages do affect party system fragmentation in Latin America, however; just not in the way that social cleavage theory would expect. This study found the proportion of the population that is indigenous to be highly correlated with party system fragmentation in Latin American countries that had no significant indigenous parties. Indigenous people have tended to fragment their votes in these countries because they are poorly represented by the main political parties, which have traditionally not recruited numerous indigenous candidates or embraced indigenous demands. As a result, indigenous voters have provided less support for the major parties and more support for minor parties, especially leftist parties, than non-indigenous voters, particularly in those countries, such as Bolivia and Ecuador, where the indigenous community is highly mobilized. The low level of support for the major parties and high level of support for minor parties among indigenous voters has typically led to high levels of party system fragmentation in indigenous areas. Where significant indigenous parties have emerged, however, as in Ecuador since 1996 and Bolivia since 2002, they have been able to attract a large share of the indigenous vote, which has reduced party system fragmentation in indigenous areas.

These findings suggest that ethnic cleavages may contribute to party system fragmentation in two very different ways. In the classic manner identified by social cleavage theorists, ethnic cleavages may bring about party system fragmentation by leading to the creation of ethnic parties. As this study has shown, however, ethnic cleavages may also bring about party system fragmentation where there are no ethnic parties because members of politically and socio-economically marginalized ethnic groups may vote for the main parties at lower rates than the rest of the population. The failure of the party system to incorporate an ethnic cleavage will not always result in party system fragmentation, but it may well do so where ethnic identities are highly salient and where members of a disadvantaged ethnic group believe that the party system, especially the major parties, has done a poor job of representing their interests.

This finding suggests that efforts to reduce party system fragmentation in Latin America should not focus solely on changing electoral laws as they have traditionally done, but should also consider how closer ties might be developed between the major political parties and indigenous voters. In order to develop these ties, the major parties will presumably need to develop a programmatic appeal to the indigenous population, recruit more indigenous candidates, establish links with indigenous organizations, and channel more resources directly to the indigenous population. Some important political parties in Latin America have already begun to take important steps in this direction, but it remains to be seen whether these steps are too little or too late.

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