

SPLIT-TICKET VOTING:
THE RELATIVE UNCERTAINTY HYPOTHESIS.
EVIDENCE FROM THE 2000 MEXICAN ELECTION

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First Draft: April 20, 2006

This Draft: February 01, 2007

Abstract

This paper seeks to continue a line of research on split-ticket voting and suggests two alternative hypothesis that might shed new light on this phenomenon. Departing from simultaneous-choice explanations, I test whether split-ticket votes can be a consequence of economic performance evaluations for the incumbent on the Executive (Economic Voting hypothesis), and whether split-ticket votes can be a consequence of having more certainty about the positions/traits of candidates from different parties for different offices (Relative Uncertainty hypothesis). I also incorporate Fiorina's Policy-Balancing model and derive six *Implications* from these hypotheses which are empirically tested using survey data from the 2000 Mexican election. With this data I seek to assess whether Mexican voters were seeking to balance government, to oust PRI based on its past economic performance, or simply knew one presidential candidate better than the others? Initial evidence supports both Economic Voting and Relative Uncertainty hypotheses.

An earlier version of this paper was delivered at the Annual Meeting of the Midwest Political Science Association, April 20-22, 2006, Chicago, Illinois. I am indebted to Sergio Ramírez Robles for conversations since 2000 that have been crucial for shaping the ideas set forth in this paper. I also thank Anna Harvey, Jonathan Nagler, Alejandro Poiré, Julio Ríos, Bob Shapiro, and Josh Tucker for very useful comments and suggestions. Usual disclaimers apply.

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Introduction

Nearly fifty years of research on split-ticket voting have produced very few conclusive results. For the most part, the topic has been discontinuously researched over time, and most theoretically sound hypotheses have quickly shown their limited explanatory power when confronted with different sets of data. Yet, scholars have documented high proportions of split-ticket voters in the U.S. electorate over time. It could be that we have not found consistent results because voters have too many different motivations to split their tickets, or it could just be that we have not yet devised the “right” theory. But when such high proportions of voters consistently cast votes for one party for the Executive branch and for a different party for Congress, there seems to be an interesting question worth looking into.

The 2000 Presidential election in Mexico gives us a new chance to analyze split ticket voting on a setting that is similar enough to the American case to generate some interesting intuitions that could potentially be generalized to the other presidential systems, and also provides a convenient opportunity to exploit the transitional condition of the election to analyze economic voting. The 2000 Mexican election was embedded in a context where voters were likely to have had a purpose when splitting their tickets, and also took place under a highly competitive setting that generated a high-information environment. The election was a transitional one, and voters knew before Election Day that the dominant PRI could finally lose the Presidency after more than 70 years of single-party dominance. The PRI candidate was defeated, and the winning candidate - Vicente Fox - obtained almost 4% more votes than his party’s congressional candidates altogether, suggesting that the election might have had an important share of split-ticket votes. Interestingly enough there have not been previous attempts to explain split-ticket voting in the Mexican context to the best of my knowledge.

So, by using the Mexican 2000 presidential election as a source of empirical evidence, I attempt to identify whether there is any evidence that voters intentionally split their tickets by asking: *Were voters seeking to balance government? Were they seeking to oust PRI? Or did they simply know*

one presidential candidate better than the others? This paper seeks to address these questions by applying previously devised hypotheses, and by suggesting the use of an economic voting rationale, as well as the uncertainty framework to assess whether they can provide a plausible explanation to split-ticket voting. Section 1 reviews the literature that has sought to explain split-ticket voting in the U.S. and sets forth a set of empirically testable *Implications*. Section 2 briefly reviews the setting of the 2000 election and provides some initial evidence of the occurrence of split-ticket voting among the Mexican electorate. Section 3 describes the data used to test these *Implications*. Sections 4 and 5, respectively, show and discuss the results from the analysis.

1 Split-ticket voting: the hypotheses

Campbell & Miller's (1957) empirical analysis of the 1956 U.S. Presidential election initiated a line of research on split-ticket voting that produced a clear-cut characterization that would permeate the literature for the next half century: voters either split their tickets to achieve a particular outcome, or they do so as a by-product of dissonant preferences.¹ Scholars have, since then, asked themselves what does a voter expect to accomplish by splitting the ticket? or, when no clear intentionality is assumed, why would a voter cast votes for different parties on the same election? Despite the conflicting motivations of both characterizations - and a spell of divided governments throughout the last half of the XX Century in the U.S. - the literature has failed to tilt the scale on either direction. Also, as will become evident, the main hypotheses developed to explain split-ticket voting generate high informational requirements that voters typically may not fulfill. This allows for the incorporation of the role of information as an alternative explanation for split-ticket voting. Let us, then, look at what the literature has devised as explanations for split-ticket voting.

¹In general, the intentional explanation is usually equated with a simultaneous vote choice, while the by-product explanations have no such requirement.

1.1 The Policy-Balancing Hypothesis

If we characterize split-ticket voters as seeking to achieve a specific outcome, we need a theory that is able to determine what the purpose is and how it can be achieved. If we assume that voters are concerned with the overall orientation of the policy implemented by a government, a plausible story can be found in Fiorina's (1988) policy-balancing model. If parties hold different positions on the ideological spectrum, the moderate voters (*i.e.* in a bipartisan system, those who locate themselves between the parties) will be more likely to split their vote to achieve non-extreme policies, while the extreme voters (*i.e.* those located on the extremes of the spectrum but not between parties) will be less likely to cast a straight ticket, since they maximize their utilities by obtaining extreme policies.² Therefore, split-ticket voting can be understood as a function of voters' ideological extremism relative to the parties' positions.³

Fiorina (1996) would later argue - and others would implement (Garand & Lichtl 2000) - that a voter's political knowledge should be a requisite for policy-balancing. That is, to the extent that voters have insights on the political processes and policy orientations of parties, they will be able to establish a connection between their vote and policy outcomes, and thus be more likely to split their tickets if that leads them to attain their most preferred outcome.

In sum, the policy-balancing hypothesis and related developments have produced a series of empirically testable implications :

²While initially this would seem to be a purpose-driven theory, it does not assume that voters act consciously to achieve a divided government but that, in the aggregate, voters' individual decisions generate results "as if" they had been seeking to balance policies or party ideologies. Nonetheless, Brady & Ansolabehere (1989) show that the plausibility of these results is a function of voter's information. The more information they have, the more likely it is that a single-dimension type of scenario would arise that would facilitate coordination.

³The setup of the policy-balancing model is more complex, though. It assumes that voters perceive policy to be the "weighted" average of the policies of the parties controlling each branch. That is $\text{National Policy} = q(\text{presidential position}) + (1 - q)(\text{congressional position})$, where $1/2 < q < 1$ is the relative weight of the executive. Therefore, q serves to calculate the midpoints (m^*) that would theoretically signal where voters become indifferent between splitting their ticket or casting a straight vote. But Fiorina (1994) recognizes that the "most novel implication" of the model is a function of a parameter (q) which cannot be effectively calculated, thus making it impossible to operationalize this specific part of the theory. Yet, for interpretation purposes, it is just assumed that $q > .5$, signalling that the executive is more powerful than the legislative.

Implication 1 *Ticket-splitters will be more likely among voters whose preferred positions lie between those of the two parties (Fiorina 1988, 1992, 1994).*

Implication 2 *The more polarized the parties are relative to the voters, the higher the incidence of split-ticket voting (Fiorina 1988, 1992).*

Implication 3 *The more politically knowledgeable voters will be more likely to split their tickets since they will be better able to gauge the consequences of their decision to favor different parties for different offices (Fiorina 1996, Garand & Lichtl 2000).*

This has perhaps been the most prolific vein of research for split-ticket voting, yet the evidence produced by the literature is mixed and varies widely depending on the election as well as the models employed to analyze it.

Regarding *Implication 1* some studies have found support for the in-between parties hypothesis for the same (1972-1992) elections (Fiorina 1988, Born 1994, Garand & Lichtl 2000) which suggest that individuals in-between parties are more likely to split their tickets.⁴ But other pieces have also found weak or null effects of ticket-splitting from those locating themselves in-between parties for the 1972-1996 elections (Alvarez & Schousen 1993, Born 1994, Sigelman, Wahlbeck & Buell Jr 1997, Born 2000, Mattei & Howes 2000) suggesting that these individuals *are not* more likely to split their tickets.⁵

Support for *Implication 2* has been found as well linked to *Implication 1* (Fiorina 1988, Born 1994). But when measured directly, no effects of party polarization have been found for the elections between 1972 and 1992 (Born 2000) and for the 1996 election (Mattei & Howes 2000).⁶ Quite contrary to expectations, it has been found that the more polarized parties are perceived to be, the less likely it is that a voter will split her ticket in the 1992 election (Garand & Lichtl 2000).

⁴The operationalization is indirect, either the “weighted average of a respondent’s distance from the presidential and House party positions” leading to $q|X - P| + (1 - q)|X - C|$ (Fiorina 1988) or the “respondent’s distance from the weighted average of these positions” leading to $|X - [qP + (1 - q)C]|$ (Born 1994). While capturing a closer feature to Fiorina’s model, it also makes it hard to distinguish between *Implication 1* and *Implication 2*.

⁵Born’s (1994) results are referred twice as supporting and not supporting since he does find in-between effects when replicating or correcting Fiorina’s (1988) model, but virtually none when using a simple in-between dummy.

⁶In any case, Born (2000) specifically points out that when *Implications 2* and *1* are tested together, all effects from both variables disappear.

Implication 3 has been even more controversial. It is only recently that scholars have taken note of this feature and incorporated political knowledge to their models. Yet evidence is inconclusive. For the same 1996 election, Garand & Lichtl (2000) find strong effects of political knowledge on split ticket voting, and Mattei & Howes (2000) find none.

Rigorously speaking, these *Implications* make it clear that for the Policy-Balancing hypothesis to operate, it would be necessary to assume:

- i) that the voter can distinguish each one of the offices being elected and know the powers associated to each office,
- ii) that the voter has clear preferences on the issues (or at least a clear direction of the policies that he/she prefers),
- iii) that the voter has enough information on the positions of the candidates of each party, and
- iv) that the voters are certain - or believe - that policy will be pulled in the direction signaled by the promises made by candidates during their campaigns.

As should be clear by now, information is implied as an element of the argument, and these requirements are the strongest imposed by the theories.

1.2 Economic Voting Hypothesis

By moving away from purposeful explanations of split-ticket voting, we come closer to a scenario where voters make distinct - and independent - choices for President and Congress which may not share all predictors. Let's assume that voters do not care primarily about policy, but have a stronger taste for economic welfare.⁷ Let us also assume that voters identify the executive branch as primarily responsible for the economy. If this were to be the case, and economic performance were

⁷This lessens the informational burden on the voter, since it is more likely that every voter has an assessment of the state of the economy or, at least, of his/her own personal well-being either in the past or in the future.

an important criteria to favor a specific Presidential candidate but not Congressional candidates, the possibility arises that voters would cast a vote for Congress based on some considerations (*i.e.* their party ID) and for the Presidency based on different factors (*i.e.* expected economic performance). This could also produce split-ticket votes when the Presidential candidate that produces the better expected economic performance in the Presidency belongs to a different party than the candidate that maximizes expected utility for Congress.

The general theoretical roots for this hypothesis can be found in the standard economic voting theories devised originally to explain votes for the incumbent party. Downs' (1957) expected utility theory of voting - while restricting "government performance" only to the economic arena - claims that a voter would favor the presidential candidate that renders the highest expected utility.⁸ In other words, all a voter would need to do is compare - in the current term - the economic performance of the incumbent and the expected economic performance of the challenger(s) to make a vote choice.⁹ Fiorina (1981) extends the Downsian logic and reinterprets the relationship between past economic performance of the incumbent and the assessment of its future economic performance (*i.e.* retrospective voting) by arguing that it works as a "bias" in the individual's utility calculations that lead to vote choice. That is, when there is an incumbent with a positive record, the bias would operate in its favor. Logically, the bias would be negative when economic performance is not good.

The bare-bones intuition that I seek to emphasize here is that an incumbent party reaching an election under good economic conditions might be more likely to be reelected, while an incumbent party reaching an election under bad economic conditions would be less likely to be reelected, *cæteris paribus*.¹⁰ If we were to apply this intuition to a concurrent election, where the economy falls under

⁸In Downsian terms, the vote would favor the candidate from the party with a positive *current party differential*: $U_t^A - E(U_t^B)$, where A is the incumbent party, B is the challenger and t denotes the current period.

⁹Downs also notes an interesting feature of his model: when future projections of party policies are equal (since there are no perceived substantive differences between platforms), voters would rate the incumbent's performance using some abstract criterion. If the evaluation is positive, the incumbent will be rewarded. The challenger would get the vote otherwise. Think of this criterion as Fiorina's (1981) bias (α_{p-1}) term. See next.

¹⁰Fiorina's argument is certainly more complex and involves comparative calculations over more than one period. But I prefer to use the intuition to make a first assessment of this hypothesis that might be refined - and formalized - in the future, particularly to aim at generating predictions of the direction of the split-ticket in multipartisan contexts.

the responsibility of the executive - but not of Congress - we may be able to predict whether a split-ticket favors the either the incumbent or the challenger(s) for the presidency. Let me illustrate the mechanics with simple examples. Think of a voter that perceives the current - or immediate past - economic conditions as positive and would want to maintain these conditions by keeping the current incumbent party in power, while her most preferred candidate for Congress belongs to a different party. Applying the economic voting framework we could predict a split-ticket, but also one that favors the incumbent in the presidency.¹¹ Take the case where the current economic conditions are negative and need to change, but the current incumbent party is the same as that from the voter's most preferred candidate for Congress. A split-ticket would also be expected, but favoring the challenger for the presidency.

Therefore it would not be surprising that a voter casts a split-ticket when the candidates of the same party for different offices are not likely to produce the most desirable outcome - *i.e.* a vigorous economy produced by the executive and acceptable policies produced by Congress. The argument boils down to an assessments of the economy having an impact on split-ticket voting via its direct effect on vote choice for the executive. To the best of my knowledge, economic voting has not appeared in the literature as an explanation for split-ticket voting; therefore no previous results are available. Yet, from the preceding discussion, the following implication arises:

Implication 4 *When the incumbent is perceived as presiding over a vigorous economy and the most preferred candidate for Congress belongs to a different party, a split-ticket favoring the incumbent for the presidency would be likely to be cast. When the incumbent is perceived as presiding over a troubled economy and the most preferred candidate for Congress belongs to the incumbent's party, a split-ticket favoring the challenger for the presidency is likely to be cast. A straight-ticket will be likely otherwise.*

While the *Policy Balancing Hypothesis* argues that voters seek to maintain a balance of policies derived from voting for candidates that belong to different parties for different offices, the *Economic Voting Hypothesis* posits that the vote choice reflects a decision for a particular office, not

¹¹Obviously, if they both belong to the same party a straight ticket would be cast, but I'm interested in an explanation for split-tickets.

between offices. In other words, it is an instrumental choice between the competing candidates for a particular office. Still, the information requirements for split-ticket voting under this framework have some burdensome informational requirements, though not as burdensome as in the *Policy Balancing* framework:

- i) the voter has a clear notion of the policies proposed by the incumbent party and of its results in terms of economic performance,
- ii) the voter knows the platform of the challenger or has the necessary information to perform a forecast on expected performance,¹² and
- iii) the voter perceives utility from casting a vote for each one of the offices being elected in a particular election.

In fact, both of the general hypotheses presented so far assume that individuals have some amount of information - even if it is minimal - that allows them to accomplish the assessments that drive the discrimination between parties. If this is the case, it may be useful to incorporate the lack of information - also defined as uncertainty (Alvarez 1998) - in any alternative explanation for split-ticket voting. If the average voter possesses a relatively low level of information (Converse 1964, Delli-Carpini & Keeter 1996) and is “rationally ignorant” (Downs 1957), it is difficult to defend the idea of an ubiquitous voter that is sufficiently informed to make the necessary calculations to cast a vote. This means that both the *Policy-Balancing* and the *Economic Voting* Hypotheses may not be able to explain the behavior of the majority the voters, who are not fully or highly informed.

1.3 The Relative Uncertainty Hypothesis

If most voters have low levels of information, then it would be unrealistic to model vote choice excluding this feature. We can explore split-ticket voting that is motivated by the possession - or

¹²Although Downs (1957) notes that it would be rational for most voters to be uninformed, it is also true that his argument is contingent upon the voter evaluating experts that have views consistent with the voter’s own. So implicitly, Downs also makes some informational requirement for the voter even if it is for choosing on whom to rely in order to avoid investing in becoming informed.

lack - of information that voters have regarding each party's positions in the ideological spectrum or candidate's personality traits. If we think of information as a continuous variable, it is possible that a voter has more information (*i.e.* is less uncertain) about one party/candidate relative to other parties/candidates. In this case, any expected utility calculation for this candidate would produce higher utilities than for other more uncertain parties/candidates.¹³

If we consider that the election for different offices has different levels of information - and of uncertainty - it is possible that voters do not cast a vote for the same party for each office in a concurrent election since voters might differentiate their votes based on their level of uncertainty. That is, they will tend to cast a vote for the candidates of parties they are more certain about.

Although some caveats should apply when dealing with uncertainty in cases where it is not only certainty about a party's position, but also the direction in which policy would be shifted that might have an impact on vote choice. For example, if a Jewish voter in Nazi Germany were very certain that the Nazi party would conduct Jewish extermination, while not knowing the exact position of the rest of the parties, it could be problematic to ascertain that our voter would prefer the Nazi party over *any* other uncertain alternative. Fortunately, these are extreme cases that not always appear in practice, and this was certainly not the case on this election.¹⁴ Since no life threatening situations were at stake in this election, it seems reasonable to assume that voters would *not* favor a candidate whose positions or traits are unknown when there is another candidate that the individual knows better. Under these conditions, uncertainty seems to be a likely candidate to provide a plausible explanation for split-ticket voting.

It has been shown that information is an important determinant of vote choice in a single election: voters tend to favor presidential candidates whose positions they are less uncertain about (Alvarez

¹³Take the framework developed by Enelow & Hinich (1981) - and later used by Bartels (1986) - to define expected utility for party j as a function of the relationship between the distance between the candidate's and the voter's position, and the uncertainty about this position by $E(U_j) = -(\bar{x}_j - x_i)^2 - \sigma_{ij}^2$ where \bar{x} is the "true" position of a given candidate on a given issue, x_i is the ideal position of individual i on this issue, and σ_{ij}^2 is the uncertainty that individual i has about the position of candidate j . This would mean that, even when two candidates - A and B - are equidistant from a voter, the higher the uncertainty about the position of one of the candidates - say candidate A - would increase the utility loss for the voter with regards to this candidate, and the voter would prefer the remaining candidate.

¹⁴I thank Josh Tucker for pointing this out to me with this very illustrative example.

1998) or whose personality traits they are less uncertain about (Glasgow & Alvarez 2000). There is no reason to believe that this same line of reasoning could not be applied to concurrent elections.¹⁵

Table 1: Likely types of vote as a result of relative uncertainty

Exec/Leg	D	R
D	<i>straight</i>	split
R	split	<i>straight</i>

Table 1 shows the pattern of types of vote suggested by the *Uncertainty Hypothesis*. Labels of rows and columns denote that a given choice produces the lowest level of uncertainty for a given office. For example, the intersection between row *D* and column *R* denotes that an individual is less uncertain about the positions of the presidential candidate of party *D* relative to the other presidential candidates, and is also less uncertain about the positions of the candidate of party *R* for Congress relative to the candidates of other parties for the same legislative office. The *Uncertainty Hypothesis* would predict a split-ticket in this case, and the same would be true for all off-diagonal combinations. Consequently, all on-diagonal combinations would produce straight tickets since those individuals are less uncertain about the position of the candidates of given party for congress and the presidency. By presenting the hypothesis in this manner we have specific predictions on whether a vote would be straight or split, and what specific combinations of split-tickets should be produced. Evidently, this setup is applicable to larger tables as well.

By incorporating uncertainty, we are modeling the relative quality of utility assessments that is a function of information. While distinct, the *Relative Uncertainty* hypothesis would not necessarily contradict the *Policy Balancing* and the *Economic Voting* hypotheses. Even if a voter attempted to achieve policy balance or reward the incumbent party, a better utility calculation would be performed for those candidates of which they have more certainty. This leads us to an additional

¹⁵Take, for example, the case of a presidential election in which both candidates are highly visible, but a voter - as a result of the campaign strategy in a given state - receives more information from one candidate (say, the Democratic one) than from the other candidate. But at the same time, the incumbent legislator (say, a Republican) has a much richer war chest that has allowed her to provide much more information on policy positions for a long time. Under these circumstances, it would not be unlikely that a voter be more certain on the positions or characteristics of the Democratic candidate for president and the Republican candidate for congress. Since his utility calculations would be more precise for those candidates for which he has more information, it is more likely that a split-ticket vote would be cast favoring these two candidates who incidentally belong to different parties.

Implication that would need empirical testing.

Implication 5 *Voters would be more likely to cast a straight-ticket when they are more certain about the personality traits of the Presidential candidate and the position of the Congressional candidate of the same party, and a split-ticket otherwise.*

To the best of my knowledge, the uncertainty framework has not been previously employed as a plausible explanation for split-ticket voting.

I have argued, that the traditional theories that seek to explain split ticket-voting might have high informational requirements that not all voters fulfill. So the need to incorporate lack of information arises, possibly through the *Relative Uncertainty* hypothesis. This is an interesting hypothesis - and worthy of empirical verification - since, as was argued before, both the *Policy Balancing* and the *Expected Utility Optimization* hypotheses assume that voters have information - or low levels of uncertainty - that allow them to make a more precise evaluation of each candidate, on the expected utility derived from each party winning or on the policy combination that must be achieved. But, to the best of my knowledge, the uncertainty framework has not been used yet to explain split-ticket voting.

1.4 The role of Party ID

Campbell & Miller (1957) suggested a specific role for Party ID when dealing with split-ticket voting. By their account, a voter with strong ties to a political party would tend to cast all of her votes for this particular party. That is, assuming that a voter who strongly identifies with a party does so because she strongly prefers that party's position, the most efficient way to achieve that particular outcome is voting for the most preferred party for *all* offices.

As is evident, this theoretical account would help explain the behavior of voters that do *not* split their tickets, and would only point out a reason for not casting a straight ticket - *i.e.* weak partisan

ties. Unfortunately it gives little guidance as to which specific split-ticket combination should be preferred. Despite this fact, virtually all econometric specifications to test for split-ticket voting explanations include this variable. Therefore I will also include it along with the other theoretical accounts of interest in this study. The final implication would then read as:

Implication 6 *Voters with a stronger Party Identification would be more likely to prefer unified governments, assuming that they get the highest utility from their most preferred party controlling both branches of government. Conversely, those with a weaker Party Identification will be more likely to split their tickets (Campbell & Miller 1957).*

According to expectations, it has been found that independents - *i.e.* those with a weaker Party ID - were more likely to split their tickets in elections between 1972 and 1996 (Fiorina 1988, Born 2000, Mattei & Howes 2000, Garand & Lichtl 2000, Lewis-Beck & Nadeau 2004). Yet support has also been found for the opposite: a consistent positive relationship between partisanship strength and split-ticket voting between 1972 and 1988 (Alvarez & Schousen 1993). Again, evidence is not without a challenge.

2 Mexico: the 2000 election

Let us begin by looking at the particulars of the 2000 Mexican election, and show the initial evidence of split-ticket voting taking place, before proceeding to give a more detailed theoretical explanation for the patterns shown by the data.

2.1 The political context

The 2000 election was a benchmark in the Mexican political history, mostly because it constituted the effective end of the one-party rule.¹⁶ The three main political parties ran candidates in the

¹⁶Since its creation in 1929, PRI and its predecessor party structures - PNR and PNR - have held the Presidency and a tight control of Congress. It was until 1997 that PRI lost a majority on a chamber of Congress, and it took

2000 federal election: the Institutional Revolutionary Party (*Partido Revolucionario Institucional*, PRI) which had undergone a constant process of vote share reduction over the previous decade, the National Action Party (*Partido Acción Nacional*, PAN) which had gained a significant amount of seats in Congress as well as mayorships and governorships, and the Democratic Revolution Party (*Partido de la Revolución Democrática*, PRD) which had recently achieved its first decade as a political party and had won Mexico City's mayorship. Two other new parties also ran their own candidates, namely the Party of the Democratic Center (*Partido del Centro Democrático*, PCD) and the Social Democratic Party (*Democracia Social Partido Político Nacional*, DSPPN).¹⁷

Unlike the other two parties which resorted to party coalitions to participate in the election, PRI ran with its own candidate, Francisco Labastida. PAN coalesced with the Mexican Green Ecologist Party (*Partido Verde Ecologista de México*, PVEM) to form the Alliance for Change (*Alianza por el Cambio*, AC) with Vicente Fox as their presidential candidate.¹⁸ PRD coalesced with the Labor Party (*Partido del Trabajo*, PT), the Social Alliance Party (*Partido Alianza Social*, PAS), the Nationalist Society Party (*Partido de la Sociedad Nacionalista*, PSN) and the Democratic Convergence Party (*Convergencia Democrática Partido Político Nacional*, CDPPN) to form the Alliance for Mexico (*Alianza por México*, AM) with Cuauhtémoc Cárdenas as their presidential candidate.¹⁹

It is also noteworthy that the candidates were well known politicians and all of them had a recent public record behind them. Francisco Labastida had been the Governor of the state of Sinaloa, a Cabinet member on various occasions, and became the PRI candidate after a highly publicized primary election in November of 1999.²⁰ Vicente Fox, the AC candidate, had begun campaigning al-

three more years for a presidential candidate from a party other than PRI to terminate more than 70 years of a dominant-party regime.

¹⁷A third minor political party, the Authentic Party of the Mexican Revolution (*Partido Auténtico de la Revolución Mexicana*, PARM) entered the race as well, but its candidate declined in favor of Vicente Fox a couple of months before the election.

¹⁸PVEM had attempted to become a national political party since the 1990's, but it was until the 1994 election that it overcame the electoral threshold. Since then, it has not been out of a coalition on any federal elections. Their own best guess for 2000 was that they would not carry more than 5% of the national vote.

¹⁹Except for PT, which carries a significant amount of votes only in some northern states, the rest of the members of the coalition were new parties and it is thus hard to assess their contribution to the alliance. Therefore it is not extreme to assume that their main contribution was in the form of campaign funds.

²⁰See Estévez & Poiré (2001) for a suggestive recount of the effects of the primary process in the general election

most three years before the election while he was Governor of the state of Guanajuato. Cuauhtémoc Cárdenas, the AM candidate, had been Presidential candidate in 1988 and 1994 and the mayor of Mexico City for nearly two years before the election. And finally, this was the first time in recent history that it was clear throughout the campaign that a non-PRI candidate had a real chance to win the Presidency.²¹

2.2 Split-ticket voting: some initial evidence from 2000

In order to analyze voting patterns it is necessary to make a distinction between straight-ticket and split-ticket voting. For the case at hand, a minimal definition would state that in a concurrent election an individual engages in split-ticket voting when casting a vote for party A for one office (*v.gr.* the Presidency) and a vote for a party different from A for a different office (*v.gr.* a chamber of Congress).

In the Mexican case, three offices (*i.e.* the Presidency, the Chamber of Deputies and the Senate) at the federal level are chosen in the same election every six years. Under the previous definition, split-ticket voting would occur if, in at least one of the offices being elected, a vote was cast for a party that is different from the party receiving votes for the remaining two offices. The official results for the 2000 election, reported in Table 2, show the difference in number and vote shares for the same party in the elections for President, Deputy and Senator which would initially suggest that effectively split-ticket voting took place.²²

Available survey data that recorded individual vote choices for each of the 3 federal offices confirms based on the 2000 Mexican Election Panel Study data.

²¹For data on these trends for 2000, see Moreno (2003). Cárdenas claims to have won the election in 1988, but no surveys were publicly available throughout the campaign to show his stand in the polls relative to Carlos Salinas, who became President (Molinar & Vergara 1998). Also, in 1994, the polls showed that the PAN candidate had a major spike in preferences right after the first presidential debate, but this advantage was diluted after the candidate made no public appearances during the following weeks and trailed the PRI candidate afterwards.

²²Note that these differences may be due to voters not casting ballots for all three offices, annulled votes or simple accounting mistakes. But it could also be the case that people engaged in split-ticket voting that is undetectable in aggregate data due to “defections” canceling each other out. Therefore, a more detailed analysis is required that would cope with the “Ecological fallacy” which correspond to a completely different project and are thus not shown here.

Table 2: Official Results for the 2000 Federal Election.

	AC	PRI	AM	PARM	PCD	DSPPN	Total
President	15,989,636 (42.52%)	13,579,718 (36.11%)	6,256,780 (16.64%)	206,589 (0.55%)	156,896 (0.42%)	592,381 (1.58%)	37,601,618
Deputy	14,321,975 (38.29%)	13,800,145 (36.89%)	6,984,126 (18.67%)	429,426 (1.15%)	272,968 (0.73%)	703,689 (1.88%)	37,165,393
Senator	14,334,559 (38.20%)	13,756,671 (36.66%)	7,072,263 (18.85%)	521,159 (1.39%)	275,667 (0.73%)	676,492 (1.80%)	37,259,720

Source: *Instituto Federal Electoral*, 2000

that split-ticket voting occurred. *Reforma's* exit poll (July 2, 2000; n=3,380) reveals that 21% of the sample split their ticket in some form.²³

Table 3: Distribution of split-ticket votes.

Pres/Cong	AC	PRI	AM	PCD	DSPPN	PARM
AC	0.842	0.052	0.022	0.006	0.009	0.002
PRI	0.053	0.891	0.030	0.008	0.013	0.002
AM	0.057	0.027	0.883	0.009	0.015	0.005
PCD	0.200	0.133	0.066	0.533	0.006	0.000
DSPPN	0.183	0.050	0.200	0.050	0.516	0.000

Source: *Reforma* National Exit Poll, 2000

Table 3 calculates the proportions of voters who reported casting straight-ticket and split-ticket votes.^{24,25} The estimates should be read horizontally, as the proportions of presidential votes for party i (rows) that shared congressional votes with the corresponding party j (columns). From these

²³*Reforma* is a one of the largest national newspapers, which is also one most reputable polling entities in the country. It regularly participates on academic surveys, such as the Mexico 2000 & 2006 Panel Studies, as well as the World Values Survey. I report survey estimates from the *Reforma* exit poll here, instead of the dataset that I will use for the empirical tests for two reasons. First, because they correspond to an exit poll taken during election day, so it might reflect vote choices more accurately and be less affected by “desirability bias” than a survey conducted at a later time. Second, the sample size of the exit poll is almost three times larger than my empirical dataset, since it aimed at having precise estimates of vote choice, and not an in-depth survey of attitudes to explain vote choice. For these reasons, it is likely that the *Reforma* exit poll produces better estimates of the amount of split-ticket votes in the election. Assuming that the differences between both surveys are not systematic, the corrections performed by the ReLogit estimation (explained in Section 3) would suffice to produce consistent parameter estimates. Readers interested in the split-ticket estimates for the dataset used in the econometric should consult Table 19 on Appendix 1.

²⁴Note that the PARM presidential candidate declined three months before the election, so no votes were cast for that candidate. None of the PARM votes then straight-tickets. They are included in the table to fully account for split-ticket votes.

²⁵While there are reasons to think that there could be a difference between a split-ticket vote for the Presidency and the Chamber of Deputies and the Senate, to facilitate the analysis and produce results comparable with most of the literature, from this point on Congressional vote is equated with vote for the Chamber of Deputies.

estimates we see that most of the PRI voters cast straight tickets (*i.e.* 89% of voters who cast a vote for PRI’s Presidential candidate also cast votes for the same party’s lower house candidates). Assuming that people cast their votes sincerely for congressional seats, we could interpret the off-diagonal estimates as “defections” from the corresponding party in the presidential election.²⁶ Following on the PRI example on Table 3, over 5% of the PRI votes for the Presidency come from AC “defectors” and 3% from AM “defectors”. The table also indicates that the AC received the highest proportion of “defections” (around 5% come from PRI and only 2% from AM) from split-ticket voters which give us a hint as to where the “additional” Fox votes might have come from. Finally, the AM received almost 6% of its votes from AC splitters, but around 3% from PRI.

In sum, individual-level data confirm that split-ticket voting occurred in the 2000 election and accounts for over a fifth of the choices made by the electorate. It also shows that the AC received the most of this split-ticket defections and that PRI benefitted the least from it. In terms of proportions (which do not necessarily correspond to comparable amounts of votes), AC received more “defections” from PRI, PRI from AC, and AM from AC. With this in mind, testing the hypotheses to explain split-ticket voting is in place.

3 Evaluating the adequacy of the hypotheses

Having set forth a series of testable implications that derive from theories that seek to explain split-ticket voting, and given the survey data available for the 2000 Mexican election, we can proceed to operationalize variables in order to test them. I use the *Poselectoral Attitude Survey 2000* to test the Implications, since it is the only available comprehensive source of data suited for this

²⁶Unlike the U.S. case where it is argued that voters defect from their partisanship to favor Congressional candidates (Burden & Kimball 2002), it seems safe to assume the opposite for the Mexican case. This is mostly due to the fact that the Presidency is the more visible race, member of Congress have a one-term limit and cannot be immediately reelected, which means that there is no incumbency advantage, and congressional races attract much less visible candidates. Furthermore, in this particular election, given the importance of the Presidential election to determine ousting of PRI from office, the incentive to act strategically on the Presidential race can be credibly assumed to be stronger than the incentive to do so on the congressional elections.

purpose.²⁷

3.1 Dependent variable

Let me begin by addressing the coding of the dependent variable and the constraints imposed by the data, which determine my empirical testing strategy. Overall, the dependent variable seeks to capture split-ticket voting behavior. While having a tripartisan competition in 2000 allows for a wider variety econometric of specifications, data restrictions limit my modeling choices. Ideally, I should have sought to produce simultaneous estimates related to each of the six possible combinations of split-ticket voting²⁸ relative to casting a straight ticket, and test my hypothesis accordingly. Unfortunately, the dataset does not have enough observations for each of the split-vote categories, and a multinomial analysis becomes impossible to estimate.

I therefore employ a dichotomous choice model, where the dependent variable is coded 1 for particular combinations of split-ticket votes and 0 for straight tickets. This operationalization of the dependent variable allows me to capture the basic behavior I seek to analyze (split-ticket votes) and separate it from its alternative (straight ticket votes). With this coding, I will be able to capture some of the dynamics of split-ticket voting in general terms, but I would also have to assume that all combinations of split-tickets are determined by the same variables equally.²⁹ In sum, by lumping choices together, I might be obscuring some interesting dynamics that might be worth looking into.

²⁷Conducted by the Office of the Presidency on July 15-20, 2000, currently at the *Centro de Investigación y Docencia Económicas*, A.C. While this may seem an odd source, some background might help mitigate concerns with the quality of the data. The Survey Research Unit (SRU) on the Office of the Presidency had been conducting monthly surveys since 1988 under the direction of Ulises Beltrán, who is now associate professor of Political Science at CIDE where he continues to conduct research on public opinion and voting behavior. The aim of the surveys was not only to obtain raw approval ratings, but conducting thorough investigations on public opinion and elections, so the questionnaire design shows comparable characteristics, formats and scales to ANES. Since 1990, SRU had been associated with the late Warren Mitofksy who continually provided input and advice on polling. The *Poselectoral Attitude Survey 2000*, as well as the monthly series of surveys conducted by the office of the Presidency over 12 years (1988-2000), were not publicly available until their donation in 2000 to CIDE, and later to the Roper Center. To this date, they constitute one of the most reputable time series in Mexico for academic research.

²⁸Namely, PAN-PRI, PAN-PRD, PRI-PAN, PRI-PRD, PRD-PRI, or PRD-PAN, ordered as Executive-Legislative. It is also important to note that I dropped all observations from parties other than PRI, PAN and PRD given the small proportions they represented in the electorate.

²⁹And this might not be such a realistic assumption, considering that split-ticket votes might have favored the PAN candidate in an effort to oust PRI from the Presidency, to give an example.

Fortunately, the phrasing of the hypotheses adapted to the case at hand require using certain combinations of split-ticket votes and straight tickets that will be explained below.³⁰ By using different codings for the dependent variables, I will be partially compensating for the impossibility to use a multinomial analysis. To further compensate for these losses, I will also provide some patterns in the data to give additional support to the findings in the models. On that note, I move on to detail the Variables used to test the Hypothesis and their corresponding dependent variables.

3.2 Policy-Balancing Variables

In order to test the first two Implications, some extensions to Fiorina’s policy-balancing framework are in place to render it a plausible model for a multipartisan context. On a two-party system, it is clear that the voter can only choose between two options for each office. This allows for two possibilities: either the government is a unified one or it is divided, and when it is divided one party necessarily has to hold a majority of votes or seats in one branch.³¹ Therefore the relative weight of the Executive branch (q) “cleanly” overlaps with the policy position of the party controlling that branch; and the same is true for the weight of the Legislative branch ($1 - q$). This feature of the bipartisan system allows for (a) a clean calculation of the “weighted average” of policy that results from one party controlling each branch of government, and (b) voters easily placing themselves between the *only two* parties.

But in a multiparty system (*i.e.* roughly those with more than two effective parties), this is not necessarily the case. Take Mexico as a tripartisan example. Given that only one party controls the Executive branch, there is no conflict as to the meaning of (q). But considering that the Legislative branch could either have one majoritarian party or could require a coalition to conform majorities depending on the proportion of seats that each of the three parties has, it is clear that the ($1 - q$) weight remains as a the relative power of the legislative branch, but the policy to be implemented

³⁰I thank Anna Harvey for suggesting to test the hypothesis with a series of reduced models by changing the coding of the dependent variable to test the hypothesis more cleanly.

³¹In the American case, there is no chance of having evenly divided chambers since the House is composed of an odd number of voting members and the Vicepresident casts the tie-breaking votes in the Senate. And even the independent members usually align themselves with one of the parties and are *de facto* members of that party.

by the Legislature is not so straightforward. The policy advocated by Congress would be a result of the relative strength (*i.e.* most likely a function of the share of seats) of each party, at the very least.³²

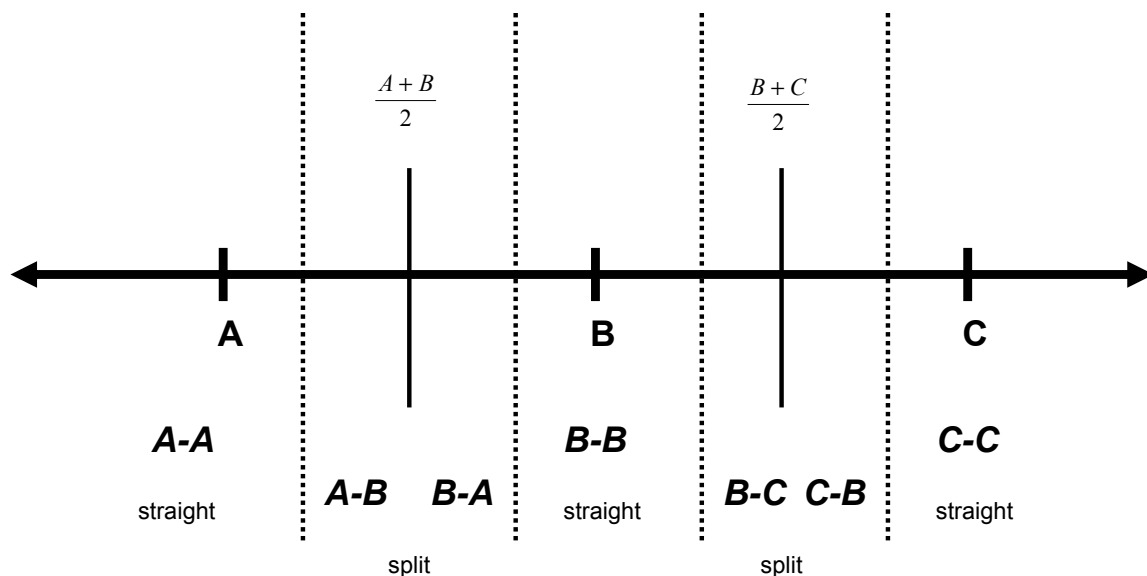


Figure 1: Policy-balancing Model extension for 3 parties

Distinctively, a tripartisan system where no two parties take the same position generates more than one “in-between parties” area producing the policy space shown in Figure 1. To illustrate this extension of Fiorina’s model, take the space between parties A and B. The interesting feature of the model is the particular policy combination that results from the relative weight of the executive (q) relative to Congress that is assumed to be strictly larger than $1/2$. The point $\frac{A+B}{2}$ corresponds to the point where both branches have an equal weight - *i.e.* $q = 0.5$. The dotted line to the right of this point represents the policy that would be implemented if A held the presidency and B controlled Congress - $qA + (1 - q)B$ - with $q > 0.5$. Therefore a voter within the region limited by the midpoint between parties - $\frac{A+B}{2}$ - and the dotted line - $qA + (1 - q)B$ - to its right would prefer a policy not as extreme as A, but closer to her own preferred point. Therefore she would split her

³²Alesina & Rosenthal (1996) advance a framework along this lines that takes into account each party’s position and their relative power derived from the seats it controls. But my aim here is not to assess the cutpoints that make voters indifferent between voting a straight and a split-ticket. It is rather to loosely assess whether voters placing themselves between parties are more likely to split their ticket.

ticket voting for party A for the Presidency and for party B for Congress to produce $qA + (1 - q)B$ which is closer to her on preferred policy position. If her preferred position were between A and $qA + (1 - q)B$ she would cast a straight ticket for A . The same logic applies for the dotted line to the left of point $\frac{A+B}{2}$, and for the region enclosed by parties B and C . This setup produces, from left to right, the shown series of alternated straight/split-vote regions.³³

To employ the policy-balancing model, I will assume that voters think of a split-ticket vote as likely to produce a particular weighted policy average between the most preferred parties. I will limit the application of *Implication 1* to an expectation that voters who locate themselves between their *two* most preferred (*i.e.* closest) parties be more likely to split their tickets. Otherwise, they would be more likely to cast a straight ticket. Or in Fiorina’s (1994) more lax explanation: given the directional nature of the model, there should be more voters splitting their ticket inside this region than outside of the region. In order to test *Implication 1*, a dummy variable is included to denote voters who perceive themselves to be located between the average position of their *two most preferred* parties. Table 4 gives a distribution of cases of voters in-between parties and the average positions of each party. In total, 11.3% of the voters in the sample locate themselves between parties.

Table 4: Voters in between parties

PAN	V	PRI	V	PRD
6.8	5.20%	5.4	6.10%	3.9
	(37)		(43)	

Number of cases in parenthesis

Implication 2 will be tested using a variable that measures the absolute perceived distance between a voter’s *two* most preferred parties positions. The expectation is that, the larger the perceived distance, the more likely it would be that voters be located in this region and the more likely this would be a predictor of split-ticket votes.

³³Note that this extension of the policy-balancing model can only account for ticket-splitting between the most proximal parties (*i.e.* the combinations AB, BA, BC or CB) but not between the extreme parties (*i.e.* AC or CA). I will not address this issue here, but only note that further work is needed to account for this type of behavior not predicted by the model.

To test *Implication 3* I employ an additive index to account for political knowledge (Delli-Carpini & Keeter 1996, Zaller 1992). The index measures whether respondents can correctly name the Governor of their state, know the length of the term for Deputies, correctly name the party with a majority in the Senate and the number of chambers in the Mexican Congress. Higher scores indicate higher level of political knowledge.³⁴ A positive relation is expected of this variable; that is, individuals with higher political information should be better able to assess the effects of casting a split ticket and thus might be more likely to engage in this type of behavior.

Since *Implications 1* and *2* specifically refer to an individual's *most preferred* parties, the dependent variable is coded accordingly as 1 for split ticket votes between an individual's most preferred parties and 0 for straight tickets for her most preferred parties.

3.3 Economic Voting Variables

Economic voting has gone a long way in explaining vote choice for the presidency. But it is worth noting that in systems where there is no high turnover in the presidency, challengers face a serious disadvantage derived from voters lacking a clear assessment of their performance, or an evaluation of the viability of the changes they propose. At the same time, incumbents disproportionately benefit from the "evidence" of their performance.

It has been argued that this asymmetry of information was an important factor for the permanence of PRI in power in Mexico (Magaloni 1999, 2006). But the most interesting feature of this framework is that it also incorporates information on previous performance by the incumbent. The more "consistent" the previous performance, the higher the weight on those evaluations, and the higher the "variance" of previous economic performance, the lower the weight on past performance.³⁵ Therefore, a consistently good past performance by the incumbent (*i.e.* that generates a small

³⁴See Appendix 1 for the reliability analysis for this variable.

³⁵In Magaloni's (2006) framework, the incumbent's past performance over the voter's lifetime (\bar{P}_{t0}^I) is weighted by the inverse of the variance of the perceived past economic performance ($w_0 = \frac{1}{\sigma_0^2}$), and the current economic performance (P_t^I) - as well as the future economic performance (P_{t+1}^I) - are weighted by the inverse of the variance thought to be achievable by the country ($w_1 = w_2 = \frac{1}{\sigma^2}$) to produce a rate of change of the posterior distribution for

variance) will be weighted more heavily by the voter than a sometimes-good-sometimes-bad performance (*i.e.* that generates a large variance). In sum, a vote for a party other than PRI derives either from a sufficiently high discount of PRI's past performance or a sufficiently good assessment of the challenger's expected performance.

Therefore, a dominant party with a consistently good economic record (*i.e.* PRI before 1970's) should be more difficult to defeat than a party with an erratic record (*i.e.* PRI after 1970's).³⁶ But also, despite the high uncertainty regarding the challenger's performance, an erratic record by the hegemonic party would increase the likelihood that a challenger produces a higher expected utility evaluation and increases its vote share. So the story goes, as economic crises arose since the 1980's, voters updated their assessments of the economic performance of PRI and decreased the weight to previous economic performance that lead to a gradual process of dealignment from PRI (Magaloni 2006). At the same time, as voters began having experience with local governments from parties other than PRI, they acquired information to proxy for challengers' national performance evaluations (Magaloni 2006, De Remes 1999).³⁷ Following the logic of the argument, voters could risk casting a split-ticket that would not favor the PRI presidential candidate if they perceived that under either challenger the economy would perform a bit better than under PRI, and there were no risks of economic turmoil.³⁸

In order to test *Implication 4* I employ sociotropic evaluations of the economy during year prior to the election, and expected performance of the economy for the year after the election. Data limitations impede testing for a more accurate evaluation of the economic voting hypothesis à la Fiorina (1981) as no expected evaluations of the economy under the incumbent and the challenger the incumbent that is determined by:

$$\bar{P}_t = \frac{1}{w_0 + w_1 + w_2} (w_0 \bar{P}_{i0}^I + w_1 P_t^I + w_2 P_{P_{t+1}}^I)$$

³⁶Also, Magaloni's (2006) model predicts that the older cohorts (*i.e.* those who lived throughout the economic prosperity years) would be less likely to "defect" from PRI, while the younger cohorts (*i.e.* those who began their political life in the crisis years of the 1970's to 1990's) would be more likely to cast a non-PRI vote.

³⁷It is noteworthy that the first states that had a non-PRI governor were primarily rich ones that elected PAN governors (*i.e.* Baja California, Chihuahua, Yucatán, Nuevo León, etc.).

³⁸To an extent, this explanation provides a suggestion for the mechanics of the two-step voting process in which Mexican voters would engage to oust PRI from the Presidency, as was suggested by Domínguez & McCann (1995).

are available. For this reason my interpretation of results would need to be a “scaled-down” version of the mainstream economic voting. I resort to using general perceptions of the economy and derive some conclusions from these results assuming that a voter expects her candidate to win and thus the general evaluation of the economy becomes equals the evaluation of the economy under her preferred candidate for the presidency.³⁹ The hypothesis calls for different effects depending on whether the presidential vote was cast for the incumbent or not, so I proceed by using the full sample and include a dummy variable that signals whether the individual’s presidential vote was cast for the incumbent or not, and interact it with the economic evaluations to obtain these conditional effects.

3.4 Uncertainty Variables

Informational requirements have been pointed out before in the literature as requisites for split-ticket voting (Alvarez & Schousen 1993) and some scholars have tried to solve this problem indirectly by incorporating the logical consequences of information (Mattei & Howes 2000) or directly by adding measures of uncertainty to the models (Garand & Lichtl 2000).

My approach here will be different. Since I not only argue that uncertainty reduces the likelihood of voting for a particular candidate, but that relative uncertainty should make voters more likely to split their tickets, it follows that voters who are more certain about Presidential and Congressional candidates from different parties should be more likely to split their tickets. Therefore, just incorporating uncertainty measures would prove hard to evaluate the plausibility of this hypothesis. To evaluate *Implication 5*, I turn instead to including a dummy variable that takes the value of 0 when voters are more certain about Presidential and Congressional candidates from different parties and 1 when they are more certain about the candidates of the same party for both races.⁴⁰

While in the U.S. case it makes perfect sense to compare the uncertainty regarding the Presidential

³⁹For an insightful discussion on economic voting and its variants, see Tucker (2006, ch. 9).

⁴⁰More elaborate measures could be employed, such as the difference between the degree of uncertainty for the presidential and congressional candidates for which uncertainty is minimal, but it is unclear what would these operationalizations add that is consistent to the raw theory I am testing. The hypothesis only states that a voter will be more likely to split her ticket when she is more certain about the candidates for different offices from different parties, so a dummy variable that indicates this condition seems adequate.

candidate and the House candidate's traits, this might not be the most adequate setup for the Mexican case. While both the President and legislators face a one-term limit in Mexico, they face different incentives to base their campaigns on personality traits. Legislators have little incentive either to develop a constituency or to become more visible than their parties during the campaign since they tag along to the umbrella campaign, which is traditionally the one for the presidency. Therefore, they run mainly on the general national platform and seldom focus their campaigns on self-promotion. Presidential candidates usually come from a more visible background, having previously served in local offices, or as Governors and members of cabinet. And once they become their party's presidential candidates, they tend to focus on the characteristics that distinguish them from the rest of the candidates, thus campaigning on their particular skills, or traits. I will, therefore, assume that Congressional votes are more likely to be driven by evaluations of the parties. Conversely, the high visibility of Presidential candidates relative to their parties would make it more likely that candidate evaluations would be a more important predictor of Presidential vote than party evaluations.⁴¹ To add clarity, Table 5 shows what the *Relative Uncertainty* Hypothesis would predict for the Mexican case in 2000. Whenever an individual had the least uncertainty (*i.e.* was more certain) about the policy positions of a party and its presidential candidate's traits, a straight ticket would be cast. All other off-diagonal combinations would produce a split-ticket.⁴²

Table 5: Likely types of vote as a result of relative uncertainty for the Mexican case

President/Congress	PAN	PRI	PRD
VFQ (PAN)	<i>straight</i>	split	split
FLO (PRI)	split	<i>straight</i>	split
CCS (PRD)	split	split	<i>straight</i>

I follow Alvarez (1998) to measure uncertainty.⁴³ For party positions, I employ individual place-

⁴¹This assumption seems quite reasonable for the 2000 Mexican election given its nature and dynamics. Campaigns were strongly media-oriented and made extensive use of campaign ads and two highly-publicized televised debates that focused on presidential candidates, as well as some events surrounding them where media focused on their attributes to face contingencies. This might have tilted messages toward the personalities of the candidates instead of policy suggestions and could have spurred split-ticket votes.

⁴²From this point on, for clarity I use PAN interchangeably with AC, and PRD with AM since it is not clear that a differentiation is called for, especially since it is hard to assume that the parties they coalesced with to form the alliances did provide a significant amount of votes.

⁴³Although direct measures of uncertainty have been formulated and devised, available surveys only include indirect

ments of parties on an 11-point left-right scale and indirectly calculate the degree of uncertainty of their placements.⁴⁴ To measure uncertainty of candidate’s personality traits I employ individual placements of candidates on 11-point scales that measure “honesty”, “experience in government”, and “candidate leading to change”.⁴⁵ Figures 2 and 3 show the distributions and densities for the uncertainty measures for party positions and candidate uncertainty traits.⁴⁶

Figure 2 confirms that individuals perceive parties with different degrees of uncertainty. PAN has the lower median (10.94), although it also has an important concentration of individuals with high uncertainty in the upper end of the plot (which is also higher than the other two parties). It is interesting to note that PRI has a higher median than PRD (21.44 vs. 15.35), which suggests that a large proportion of individuals are more uncertain about PRI than PRD. Nonetheless, uncertainty about PRI is more “compact”; that is, the highest uncertainty for PRI is still lower than that for PRD or PAN.

Figure 3 shows that individuals were less uncertain on the personal traits of Vicente Fox, as shown by the high concentration around the median (4.80), which is lower than the other candidates. It also shows that individuals had more uncertainty regarding traits for Labastida and Cárdenas, but the distributions are more even and similar when compared with the distribution for Fox.⁴⁷

In this case, the hypothesis does not discriminate between types of split ticket votes, so the dependent variable is coded accordingly as 1 for all types of split-tickets, and 0 for all types of straight-tickets.

measures. But Alvarez (1998) and Glasgow & Alvarez (2000) have shown that indirect measures are a good proxy for direct measures. Yet, while these measures capture variance around the mean, it is interesting to note that its behavior (*i.e.* less variance for traits than policy positions, or relatively less variance for the newest party) reflects what would be expected of uncertainty as well.

⁴⁴That is $u_{ik} = (v_{ik} - c_k)^2$ where u_{ik} is uncertainty for individual i on the position of a given party k , v_{ik} is the perceived location by individual i of the position of the party k , and c_k is the location of party k operationalized as the average of the perceptions of the position of that party by all voters.

⁴⁵The measure of uncertainty of personality traits equals the average uncertainty for these three traits, calculated as $u_{ij} = \frac{1}{J} \sum_{j=1}^J (v_{ij} - c_j)^2$, where j is each one of the traits being measured.

⁴⁶Figures 2 and 3 show violin plots (Hintze & Nelson 1998, Steichen 2001) for these variables. Violin plots combine the usual box-plots that give the minimum and maximum values, as well as the median (50th percentile) with the surrounding density plots which give additional information on the concentration of data between these data points.

⁴⁷Note also that individuals are much less uncertain about candidate’s traits than they are of party positions. This finding is consistent with the pattern found by Glasgow & Alvarez (2000) when analyzing U.S. data.

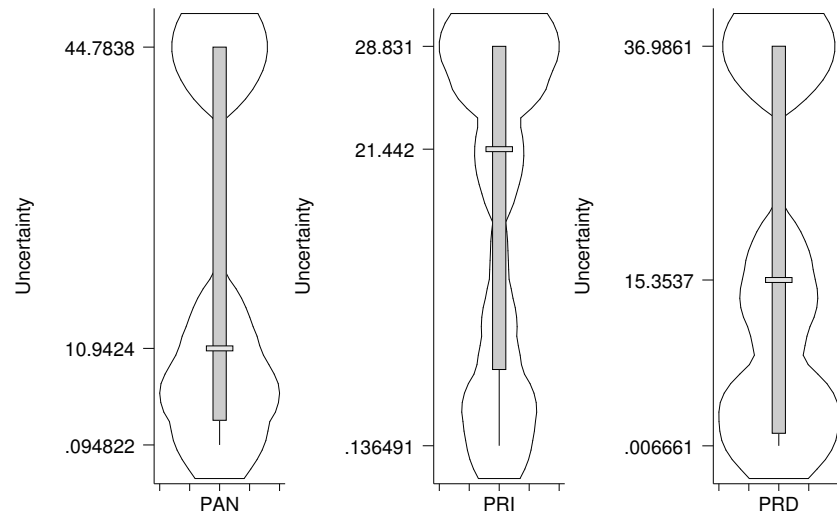


Figure 2: Uncertainty about party positions

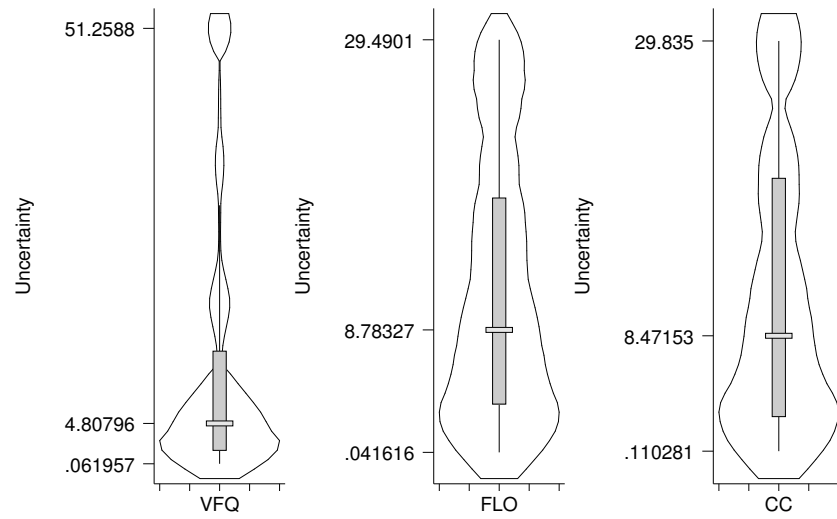


Figure 3: Uncertainty about candidate traits

3.5 Party ID variables

To test *Implication 6* I include a couple of dummy variables that signal whether respondents are independents or weak leaners. With these variables, I seek to assess whether weaker partisan ties are good predictors for split-ticket voting. To account for the fact the *Implication 6* would predict that strong identifiers should cast a straight ticket favoring their most preferred party, the dependent variable is coded accordingly by coding 0 *only* straight tickets favoring the party that individuals identify with, and 1 for all split-tickets, thus excluding straight tickets for not preferred parties from the analysis.

3.6 Restating the Implications

Mostly due to the tripartisan nature of the 2000 Mexican election, a brief restatement of the Implications is in place. Some of these changes have been suggested throughout this section. Table 6 synthesizes what I will be testing for in the next section.

Table 6: Restatement of the Implications adapted to the Mexican case

Hypotheses	Implications
Policy-Balancing	<ol style="list-style-type: none"> 1. Ticket-splitters will be more likely among voters whose preferred positions lie between those of their <i>two closest</i> parties. 2. The more polarized the <i>two closest</i> parties are perceived to be relative to each voter, the more likely a split-ticket is to be cast. 3. The more politically knowledgeable voters would be more likely to split their tickets since they are better able to gauge the consequences of favoring different parties for different offices.
Economic Voting	<ol style="list-style-type: none"> 4. A split-ticket favoring the incumbent for the presidency is likely when the economy is perceived as vigorous and the most preferred candidate for congress belongs to a different party. A split-ticket favoring the challenger for the presidency is likely when the economy is in trouble and the most preferred candidate for Congress belongs to the incumbent's party.
Relative Uncertainty	<ol style="list-style-type: none"> 5. Voters who are more certain about the <i>personality traits</i> of the Presidential candidate and the <i>position</i> of the Congressional candidates from different parties would be more likely to cast split-ticket votes.
Party ID	<ol style="list-style-type: none"> 6. Voters with a weaker partisan tie would be more likely to split their tickets since they might not get the highest utility from their most preferred party controlling both branches of government.

4 Results

As was mentioned earlier, the dependent variable has many more zeroes than ones (nearly by a 5:1 ratio). Therefore, using a binary model could potentially produce an inconsistent estimate of β (including the constant term) as well as an incorrect covariance matrix producing inefficient standard errors (King & Zeng 2001a, 2001b). If no correction of this problem is made, the $Pr(Y = 1)$ would be underestimated, and correspondingly the $Pr(Y = 0)$ would be overestimated since they both would be using inconsistent estimates of β . Therefore, I performed the analysis using a series of Rare Events Logistic Regression (ReLogit) models to address these biases (Tomz, King & Zeng 2003). Estimates were corrected by the “weighting” method.⁴⁸

Since some of the analyses call for a different codification of the dependent variable, I present the results for each hypothesis with their corresponding subsample of dependent variables. Nonetheless, to keep the estimates comparable to an extent, I use the same specification in all models.

4.1 Policy-Balancing Hypothesis

The results presented on Table 7 to test for the implications on the Policy Balancing Hypothesis are estimates on a subsample composed of those individuals who cast either a straight or a split-ticket for their *two most preferred* parties, as suggested by the formulation of the Implications. Therefore the model is estimated on a subsample of voters that cast straight and split-tickets among their two most preferred parties.

Note that the estimates show no support for *Implications 1, 2 or 3*. Evidence fails to support a claim that Mexican voters in 2000 explicitly sought to generate a divided government to achieve policy balance between their most preferred parties. Neither the estimates for voters who placed themselves between parties nor for those who perceived the parties as more polarized achieved the traditional levels of statistical significance, so no inferences can be drawn from them. In other

⁴⁸Readers interested in the differences between Logit and ReLogit models, and the specifics of the estimation presented hereafter should consult Appendix 3.

Table 7: Model testing for Policy-Balancing Hypothesis

DV: Split vote	coefficient	s.e.
Between parties	-0.056	(0.529)
Party polarization	-0.059	(0.104)
Political info	0.086	(0.790)
Leaner	-0.284	(0.651)
Independent	0.615	(0.600)
Retrospective	0.038	(0.143)
Prospective	0.108	(0.135)
Same uncertainty	-0.692	(0.536)
Woman	0.370	(0.481)
Urban	-0.324	(0.611)
Age 18-25	-1.261*	(0.764)
Age 26-40	-1.176*	(0.683)
Age 41-60	-1.011	(0.650)
Primary	0.222	(1.239)
Junior High	1.259	(1.362)
High School	1.391	(1.172)
College or more	0.993	(1.337)
Intercept	-0.732	(1.236)
log-likelihood	-203.35	
LR-test	$\chi^2_{[17]} = 55.6^{***}$	
τ	0.21	
n	407	
MI sets	15	

Significance: 1% *** / 5% ** / 10%*

ReLogit estimates, robust SE in parenthesis.

words, Fiorina’s (1988, 1992, 1996) policy-balancing hypothesis (*Implications 1 & 2*) fails to provide a plausible explanation for split-ticket voting, at least for this election.⁴⁹ Surprisingly, the estimates show that voters were not more likely to split their tickets (*Implication 3*) as political information levels increased.

4.2 Economic Voting Hypothesis

According to the theoretical expectation that different effects for evaluations of the economy would be found conditional on whether the split-ticket included a defection for PRI and non-PRI presidential candidates, I included a variable that signalled whether the split-ticket vote favored PRI for the presidency and interactions with both retrospective and prospective evaluations of the economy. The analysis was performed on the full sample. Results are presented on Table 8.

The variables of interest to evaluate *Implication 4* are the interaction terms between the dummy that signals whether the vote for the presidency was cast for the incumbent party (Incumbent), the economic evaluations (Retrospective and Prospective), and the interactions between them (Incumbent*Prospective or Incumbent*Retrospective). The “correct” way to interpret results in Table 8 would be by presenting the marginal effects of the interaction terms - and their corresponding standard errors - to assess the joint significance of the interactions and their constitutive terms (Greene 2003, Brambor, Clark & Golder 2006). But in order to take estimation uncertainty into account and improve the precision of the estimates, I will resort to simulation and produce the expected - average - probabilities of casting a split-ticket for given combinations of values in the interaction and constitutive terms, as well as their first differences - instead of the marginal effects.⁵⁰

⁴⁹The analysis was also performed substituting these two variables by a different specification that might capture some of the same dynamics by using $|x_i - \frac{a+b}{2}|$ - where x_i is the individual’s ideological position, and a and b are the individual’s most preferred parties - to capture an individual’s distance from her most preferred parties’ midpoint. No statistically significant results were achieved. For some additional evidence on a different model using data from the *Reforma* exit poll that suggests that actually those who preferred a divided government were more likely to split their tickets, see Appendix 2 for details of estimates with this data and its limitations.

⁵⁰I chose to present simulations and first differences for computational ease and the higher precision - relative to the Delta method - that can be achieved through simulation (King, Tomz & Wittenberg 2000). The simulations correspond to an “average” individual, thus setting all other variables to their means, and age and education to the modal category (26-40 years and primary education). The expected probabilities are the results of 1,000 simulations in each case.

Table 8: Model testing for Economic Voting Hypothesis

DV: Split vote	coefficient	s.e.
Between parties	0.332	(0.268)
Party polarization	-0.005	(0.052)
Political info	0.011	(0.435)
Leaner	-0.248	(0.375)
Independent	0.573*	(0.322)
Retrospective	0.192**	(0.079)
Prospective	0.010	(0.077)
Same uncertainty	-0.377	(0.252)
Woman	0.231	(0.254)
Urban	-0.146	(0.350)
Age 18-25	-0.007	(0.584)
Age 26-40	-0.044	(0.518)
Age 41-60	0.259	(0.515)
Primary	-0.487	(0.573)
Junior High	0.238	(0.625)
High School	0.2184	(0.648)
College or more	0.408	(0.679)
Incumbent	-0.957***	(0.360)
Incumbent*Retro	-0.286	(0.225)
Incumbent*Prosp	0.294	(0.193)
Intercept	-1.293	(0.837)
log-likelihood	-524.00	
LR-test	$\chi^2_{[20]} = 80^{***}$	
τ	0.21	
n	948	
MI sets	15	

Significance: 1% *** / 5% ** / 10%*

ReLogit estimates, robust SE in parenthesis.

The interpretation is straightforward: first differences of the expected probabilities close to zero suggest a negligible effect, while those different from zero suggest an effect. The accompanying confidence intervals provide the ranges where these effects are more likely to happen.

Table 9 presents the expected probabilities of casting a split-ticket for a given retrospective economic evaluation, conditional on having voted for the presidency for either the incumbent (PRI) or the challengers (PAN or PRD). The first result is that improvements in the perception of the economy in the last year increase the probability of “defections” towards non-PRI presidential candidates by nearly 10%. But expected probability of casting a split-ticket with a presidential vote favoring PRI seems to be reduced by nearly 2%. Note that the confidence interval for this first difference contains zero, making it very likely that the difference is negligible. Evidence then suggests that improvements in the perceived economic conditions on the year before the election increased the probability of casting a split-ticket that favors a party other than PRI for the presidency.

Table 9: Estimates of probability of split-ticket vote for retrospective economic evaluations

	Incumbent	Non-incumbent
	Pr(split) [95% CI]	Pr(split) [95% CI]
Worsened	0.091 [0.028, 0.210]	0.105 [0.057, 0.182]
Just as bad	0.078 [0.032, 0.159]	0.123 [0.065, 0.208]
Just as good	0.068 [0.025, 0.139]	0.173 [0.093, 0.279]
Improved	0.066 [0.016, 0.164]	0.204 [0.104, 0.338]
Difference	-0.024	0.095
(Improved-Worsened)	[-0.143, 0.084]	[0.019, 0.199]

Probabilities calculated with other variables at median value.

Table 10 initially suggests a different story for prospective economic evaluations: as the perceived economic conditions for the following year improved, individuals became more likely - around 7% - to cast a split-ticket where the favored presidential candidate belonged to the incumbent party (PRI), but seem to have no effect in the probability of casting a split-ticket with a non-incumbent

presidential candidate. Note again that the confidence intervals for the first differences also include zero, suggesting a high likelihood of nihil effects.

Table 10: Estimates of probability of split-ticket vote for prospective economic evaluations

	Incumbent	Non-incumbent
	Pr(split) [95% CI]	Pr(split) [95% CI]
Worse	0.040 [0.00952 0.1024]	0.139 [0.066, 0.238]
Just as bad	0.051 [0.016, 0.112]	0.141 [0.069, 0.233]
Just as good	0.085 [0.037, 0.158]	0.141 [0.079, 0.224]
Improve	0.115 [0.048, 0.225]	0.142 [0.076, 0.229]
Difference	0.071	0.002
(Improved-Worsened)	[-0.015, 0.177]	[-0.077, 0.072]

Probabilities calculated with other variables at median value.

The results above would seem counterintuitive at first. Why would voters be *more* likely to “defect” to one of the challengers when the economy is perceived as being good in the previous year? An answer seems consistent with Magaloni’s (2006) Bayesian-learning story: even when the economy in the last year was perceived as good, the preference for a challenger over the incumbent might be explained by more informative priors on the challenger’s economic performance due to their performance in local governments. This could certainly be the case with Vicente Fox who was governor of Guanajuato, and with Cuauhtémoc Cárdenas who was Mayor of Mexico City. Thus, at the very least, we have some evidence suggesting that (a) the perceived performance of the economy is a factor with a promising future explaining split-ticket voting, and (b) that it might explain split-tickets favoring Fox, the PAN candidate.

4.3 Relative Uncertainty Hypothesis

I tested for *Implication 5* by including a dummy variable that signals whether a voter has minimum uncertainty about the position of a party and the traits of the candidate of that same party with a value of 1 and 0 when different minimum uncertainty correspond to different parties. The results from this model performed on the full dataset are shown on Table 11.

Table 11: Model testing for Relative Uncertainty Hypothesis

DV: Split vote	coefficient	s.e.
Between parties	0.428	(0.280)
Party polarization	-0.021	(0.044)
Political info	-0.137	(0.418)
Leaner	-0.246	(0.373)
Independent	0.579*	(0.329)
Retrospective	0.122*	(0.072)
Prospective	0.096	(0.071)
Same uncertainty	-0.416*	(0.250)
Woman	0.218	(0.251)
Urban	-0.141	(0.344)
Age 18-25	-0.082	(0.551)
Age 26-40	-0.030	(0.500)
Age 41-60	0.346	(0.509)
Primary	-0.384	(0.576)
Junior High	0.283	(0.625)
High School	0.304	(0.649)
College or more	0.574	(0.571)
Intercept	-1.476**	(0.838)
log-likelihood	-491.50	
LR-test	$\chi^2_{[17]} = 145^{***}$	
τ	0.21	
n	948	
MI sets	15	

Significance: 1% *** / 5% ** / 10%*
 ReLogit estimates, robust SE in parenthesis.

The negative and statistically significant coefficient for the variable of interest (Same uncertainty) points to the fact that individuals whose relative uncertainty is the lowest for one party and its presidential candidate are less likely to split their tickets. On the other hand, individuals who have their smallest uncertainty about the position of one party and about the traits of the candidate of

a different party are almost 5% more likely to split their tickets as shown in Table 12. Yet, it is important to note that the confidence interval on the expected value of the first difference includes zero, suggesting that one we take the estimation uncertainty into account, we could not rule out that the effect is null.

Table 12: Estimates of probability of split-ticket vote for relative uncertainty

Relative Uncertainty	Pr(split)	[95% CI]
Different parties	0.148	[0.080, 0.242]
Same parties	0.104	[0.054, 0.180]
Difference (Different-Same)	0.046	[-0.002, 0.104]

Probabilities were calculated with other variables set at their median value.

But how were these votes distributed? Table 13 shows the proportions of *all* split-ticket votes cast by individuals that were more certain about the traits of the presidential candidate of one party and the positions of a different party (*i.e.* off-diagonal combinations from Table 5). Note that the variable of interest does not distinguish between combinations of uncertainties. Interestingly enough, split-ticket votes for individuals with different relative uncertainty were concentrated in “defections” from PRD to PAN (42.9%), and from PRI to PAN (32.1%).

Table 13: Split-ticket votes of individuals with different relative uncertainty

President/Congress	PAN	PRI	PRD
VFQ(PAN)	–	0.321	0.429
FLO(PRI)	0.054	–	0.089
CCS(PRD)	0.054	0.054	–

Source: *Poselectoral Attitude Survey 2000*

Yet, the setup of this model does not allow for distinctions between combinations of split-tickets either. It is likely that not all candidates benefitted equally from higher certainty. Those candidates investing the most in clarifying their positions could have had a stronger effect. One strategy to overcome this problem would be to estimate the model for subsamples with a common characteristic, say voting for a given candidate for the presidency and assessing if split and straight-tickets conform

to the predictions of *Implication 5*. The subsamples for each estimated model would obviously be smaller, and the proportions of 1's even more reduced which could pose a problem for estimation. I performed these analysis for presidential vote for PAN and PRD, since an estimation for PRI was not possible due to the small sample size and the even smaller proportion of 1's. The results (not shown) are discouraging. The variable of interest is no longer statistically significant on either estimation, although by a small margin in the PAN subsample ($p = 0.114$) and by a much larger margin in the PRD subsample ($p = 0.989$).

A closer look at the actual distribution of split and straight-tickets according to what would be predicted by the *Relative Uncertainty Hypothesis* suggest why this could be the case. Table 14 shows the proportions of votes that conform to the predictions of the *Relative Uncertainty Hypothesis* for given combinations of minimum uncertainty. For example, 55% of individuals who were more certain about Vicente Fox and PAN cast a straight-ticket that would be consistent with Table 5. Similarly, none of the voters that were more certain about the characteristics of Cuauhtémoc Cárdenas and PAN split their ticket as was predicted by *Implication 5*.

Table 14: Observed proportion of voters behaving according to hypothesis

President/Congress	PAN	PRI	PRD
VFQ(PAN)	0.550	0.009	0.040
FLO(PRI)	0.000	0.333	0.000
CCS(PRD)	0.000	0.006	0.108

Source: *Poselectoral Attitude Survey 2000*

In sum, what we observe is that individuals who had the lowest uncertainty about the traits of the presidential candidate of one party and the position of a different party are more likely to split their ticket (Table 13), although not necessarily as predicted by the current formulation of the *Relative Uncertainty Hypothesis* (Table 14). Although further testing would be required, this results suggest the possibility of the reformulation of the hypothesis.

4.4 Party ID

The party ID hypothesis states that individuals that identify strongly with a given party would be more likely to cast a straight ticket for this party, while independents would be more likely to split their tickets. For this reason, the test is performed on a subset of the data that reflects this constraints. Table 15 shows the estimates from the model.

Table 15: Model testing for Party ID Hypothesis

DV: Split vote	coefficient	s.e.
Between parties	0.182	(0.320)
Party polarization	-0.015	(0.055)
Political info	-0.282	(0.514)
Leaner	0.088	(0.442)
Independent	0.879**	(0.445)
Retrospective	0.143	(0.089)
Prospective	0.006	(0.071)
Same uncertainty	-0.343	(0.323)
Woman	0.148	(0.314)
Urban	0.744	(0.446)
Age 18-25	0.367	(0.658)
Age 26-40	0.139	(0.604)
Age 41-60	0.595	(0.618)
Primary	-0.802	(0.752)
Junior High	-0.443	(0.789)
High School	-0.043	(0.786)
College or more	0.163	(0.818)
Intercept	-2.079**	(0.960)
log-likelihood	-245.00	
LR-test	$\chi^2_{[17]} = 44.4^{***}$	
τ	0.21	
n	553	
MI sets	15	

Significance: 1% *** / 5% ** / 10%*

ReLogit estimates, robust SE in parenthesis.

The estimates from the model show that only independents were more likely to split their votes relative to their partisan counterparts, as expected according to *Implication 6*. Although the estimates from the model do not allow for the same inference with regards to leaners.

Table 16: Estimates of probability of split-ticket vote for partisanship strength

	Pr(split)	[95% CI]
Independents	0.173	[0.072, 0.324]
Partisans	0.076	[0.025, 0.164]
Difference (Independent-Partisan)	0.094	[0.003, 0.209]

Probabilities were calculated with other variables set at their median value.

Table 16 shows the estimates of the probabilities of casting a split ticket by levels of partisanship strength. An independent is more likely to cast a straight ticket. The expected probability that an independent would cast a split-ticket is 17% compared to only 7% by partisans, which translates on a difference in the probability of splitting the ticket of 9% due to partisanship strength.

5 Discussion

Caution should be exercised when drawing inferences to general behavior of voters from the results presented here. As I mentioned before, 2000 was a peculiar election since it was a “transitional” one. Voters might not have just simply sought policy balance or balance of powers, but expelling PRI from the Presidency might have been an important concern that could have worked against more substantive *Policy-Balancing* findings.⁵¹

With this caveats in mind, evidence suggests that split-ticket voting in 2000 was, to a degree, motivated by the desire to reward - or punish - good economic performance. So, it could be the case that voters made a Presidency-related decision that might have been independent from Congressional vote. Although this matter should be investigated further.⁵²

⁵¹It is worth considering that the lack of findings to support any Implication derived from the *Policy Balancing* hypothesis might stem from inadequate measures for the exact constructs I attempted to capture. Nonetheless, those are the only available measures that allowed for a simultaneous test of all hypotheses, so this should call for a survey design specifically suited for this purpose. But also, see Appendix 2 for results using *Reforma* Exit Poll 2000 for additional considerations.

⁵²There is also a link that I did not address between economic evaluations and risk aversion. And I did not venture into this given the imperfect measures to make further claims. But interested readers should look into the work in this topic on previous Mexican elections by Buendía (1996), Cinta (1999) and Poiré (1999).

But also, an interesting fact is that the relative uncertainty hypothesis gives some traction to the claim that information provided by the campaigns does matter.⁵³ The findings suggest that, to a certain extent, the Presidential candidate that can clearly convey his/her traits - or that can impede that other candidates can do so, for that matter - could impact the proportion of ticket-splitting in the electorate, although the proportion of these split-tickets that would benefit him are not clearly supported by the data. In any case, there is some evidence of the effects of negative campaigns in the 2000 election (Moreno 2004), and the impact of information on vote choice (Moreno 2003, Lawson & McCann 2004), but virtually none on the impact of information on split-ticket votes. On an additional note, my results suggest that accounting in a different way for information, by directly measuring uncertainty and explicitly incorporating it into the models of vote choice can provide some suitable explanations, which do not “assume” a specific degree of knowledge for voters.

Finally, a Mexico-in-2000 specific note. There is an alternative explanation for split-ticket voting that was not explored in this paper: the so-then-called “useful vote” (*voto útil*, which is “Mexican” for strategic voting). An individual votes strategically - in a three-party race - when her vote does not favor her most preferred candidate, but her second-best in an attempt to prevent her least preferred alternative from gaining office. During the campaign, the Fox camp explicitly called to exercise a “useful vote” to motivate Cárdenas’ voters to switch their vote for Fox and “expel PRI from *Los Pinos*”. It has, therefore, been suggested that strategic behavior by voters is the main reason to explain Fox’s victory, and could also help explain why voters split their tickets. Unfortunately, neither of the available surveys are suited to cope with the basic problem when analyzing strategic voting, namely identifying “sincere” preferences, and an ordering of these preferences to compare them to actual vote choices that allows - at the individual level - for strategic behavior to be parsed out. That is, surveys either have direct measures for vote choice, but do not ask individuals to rank-order parties in order to determine which party is a “most preferred, or a “least preferred” alternative. It is not possible, then, to generate direct tests for this hypothesis on

⁵³Whether positive or negative information matter and whether they have different effects on voters, or what is the impact of unbalanced information from three sources on voters are matters worth looking into, but are out of the scope of this paper.

this election.⁵⁴

But back to the limitations of this study, future research on the topic would have to look into the particular combinations of split-ticket votes. By grouping all split-ticket votes into one category, I may have obscured some particularly interesting dynamics that would permit to see whether all determinants have the same predictive power for each of the 6 possible combinations of split-ticket vote in 2000. Although I tried to clarify some patterns by performing analyses on subsamples and looking directly into the data, some interesting dynamics might have slipped through. Evidence from *Implications 4& 5* suggests that this might be the case. Unfortunately, the available surveys have either too few observations to perform a reliable statistical analysis or lack all the necessary questions to perform a deeper analysis in this direction.

6 Conclusions

The aim of this paper was to set forth two alternative explanations for split-ticket voting, one related to expected economic performance and the other related to uncertainty about parties and candidates. By reviewing the literature, I formulated six implications related to four general hypotheses to assess their explanatory power.

The *Policy-Balancing* hypothesis would claim that voters engage in split-ticket voting “as if” to achieve a given combination of policies . The *Economic Voting* hypothesis would suggest that economic evaluations should determine presidential vote rewarding the incumbent with a good performance. And the *Relative Uncertainty* hypothesis would suggests that voters split their tickets because they are more certain about the positions of one party and the traits of the candidate of a different party and each one of these corresponds to a different office.

⁵⁴To the best of my knowledge, only Magaloni & Poiré (2004b) have looked into strategic voting in the 2000 election. By creatively taking advantage of the early waves of the Mexico 2000 Panel study, they proxy for sincere preferences and show that strategic voting was important for Fox’s victory but was not the only force at work. Nevertheless, strategic voting also imposes information requirements on voters: individuals should know which candidate is more likely to win, and which among the challengers is more likely to defeat the least liked alternative.

I find no evidence to support the Implications from the *Policy-Balancing* hypothesis. But I find evidence some initial evidence that does not contradict the *Expected Utility* and the *Economic Voting* Hypotheses. Individuals who perceive that the economy has a good performance are more likely to split their ticket in a combination that does not favor PRI, possibly playing along a Bayesian logic. But also, voters will tend to vote for the candidates they are less uncertain about, and when this candidate belongs to a party about which the voter is not less uncertain about, a split-ticket vote is more likely to be cast.

These preliminary results shed some light on the dynamics of split-ticket voting in the 2000 Mexican election, and hopefully contribute to a more robust explanation of split-ticket voting. While generalization of these results would require further testing on a wider range of years, countries and/or datasets, results do suggest that the two alternative hypothesis might be promising venues to explore.

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Appendix 1: Variables

Data come from the *Postelectoral Attitude Survey 2000* conducted by the Office of the Presidency on July 15-20, 2000, currently at CIDE in Mexico City. The variables described as:

- *Between Parties*; Dummy variable coded 1 if individuals perceive themselves to be located between their two most preferred (closest) parties and zero otherwise.
- *Party Polarization*; measures the distance that individuals perceive between their two most preferred (closest) parties.
- *Political Information*; Additive index for factual questions on political facts: correctly naming the governor of their state, correctly stating the length of the term of a Deputy, correctly stating the number of chambers in Congress, and correctly stating which party held the majority in the Senate. Ranges from 0 (did not give any correct answers) to 1 (answered the four questions correctly.)
- *Leaner*; dummy variable that takes the value of 1 if an individual reported not identifying with a political party.
- *Independent*; dummy variable that takes the value of 1 if an individual reported identifying slightly with a party.
- *Retrospective*; categorical variable that captures the perception of the economy in the previous year. The categories are “worsened” (-2), “just as bad” (-1), “just as good” (1), and “improved” (2).
- *Prospective* ; categorical variable that captures the perception of the economy in the following year. The categories are “worsened” (-2), “just as bad” (-1), “just as good” (1), and “improved” (2).
- *Relative uncertainty*; dummy variable that takes the value 1 if a voter had the lowest uncertainty on the position of a given party and on the traits of the candidate of the same parties and 0 otherwise.
- *Women*; dummy variable that takes the value of 1 if the respondent was female.
- *Urban*; dummy variable that takes the value of 1 if the respondent lived in an urban area
- *Age*; dummy variables that signal whether the respondent belonged to a given age group.
- *education*; dummy variables that signals an individual’s highest education level.
- *Incumbent*; dummy variables that signals voting for the incumbent for the presidency.

Table 17 gives the descriptive statistics of these variables for the whole population, and only for those voters who split their ticket. The survey includes a variable that allows pollsters to verify

whether an individual bears a mark of voting on the Voter Registration ID. Therefore, only those individuals who showed this ID and had the mark were included in dataset (948 cases out of 1,766). Missing values were later imputed using Amelia II (Honaker, King & Blackwell 2006, King et al. 2001).

Table 17: Descriptive Statistics

Variable	Min	Max	All voters			STV		
			Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Between parties	0	1	732	0.225	0.418	77	0.312	0.466
Party polarization	0	10	661	2.738	2.975	73	2.329	2.561
Political Information	0	1	948	0.472	0.308	90	0.486	0.288
Leaner	0	1	643	0.320	0.467	51	0.235	0.428
Independent	0	1	643	0.300	0.459	51	0.451	0.503
Retrospective	1	4	922	2.347	1.112	86	2.535	1.134
Prospective	1	4	748	3.416	1.054	73	3.726	0.750
Same uncertainty	0	1	948	0.387	0.487	90	0.289	0.456
Woman	0	1	948	0.489	0.500	90	0.522	0.502
Urban	0	1	948	0.824	0.381	90	0.833	0.375
Age 18-25	0	1	948	0.220	0.415	90	0.244	0.432
Age 26-40	0	1	948	0.393	0.489	90	0.400	0.493
Age 41-60	0	1	948	0.291	0.455	90	0.300	0.461
Primary	0	1	948	0.342	0.475	90	0.211	0.410
Junior High	0	1	948	0.228	0.420	90	0.256	0.439
High School	0	1	948	0.204	0.403	90	0.256	0.439
College or more	0	1	948	0.174	0.379	90	0.244	0.432

Table 18 shows reliability estimates for the political knowledge scale, showing an *alpha* of 0.555.

Table 18: Reliability Estimates (Cronbach's alpha) for political information

Item	Obs	item-test correlation	item-retest correlation	avg inter-item covariance	alpha
No. Chambers	948	0.740	0.447	0.037	0.384
Term of Deputy	948	0.680	0.351	0.049	0.473
Name governor	948	0.631	0.317	0.057	0.501
Majority in Senate	948	0.555	0.246	0.069	0.552
Political Information				0.053	0.555

Table 19 shows the distribution of split-ticket votes for the Poselectoral Attitude Survey 2000. Note that given the smaller sample size (n=948) relative to the *Reforma* Exit Poll (n=3,380) the estimates differ by a small margin for the three major parties, but the differences become notorious

for the small parties. Another factor to take into account is that relative to the 21% of voters splitting their ticket reported on the *Reforma* Exit Poll, the Poselectoral Attitude Survey only produces 15% of ticket splitters among confirmed voters.

Table 19: Distribution of split-ticket votes.

Pres/Cong	AC	PRI	AM	PCD	DSPPN	PARM
AC	0.878	0.057	0.061	0.000	0.004	0.000
PRI	0.020	0.957	0.020	0.000	0.004	0.000
AM	0.050	0.041	0.876	0.000	0.033	0.000
PCD	0.000	0.000	0.000	1.000	0.000	0.000
DSPPN	0.063	0.125	0.063	0.063	0.625	0.063

Source: Poselectoral Attitude Survey, 2000

Appendix 2: Testing further for Madisonian motivations

Alternative explanations for split-ticket voting can be derived from a Madisonian setup (Hamilton, Madison & Jay 1999[1787]). An institutional Madisonian motivation variant would state that voters deliberately split their votes to ensure that one party controls the Executive branch and a different party controls the Legislative branch in order to guarantee that the checks-and-balances system would work properly.⁵⁵ Variants of the institutional motivation have been explored by Siegelman et al. (1997) and Lewis-Beck & Nadeau (2004). A policy Madisonian motivation variant would state that voters who are concerned with a specific combination of public goods, and perceive that certain parties are more effective at achieving some results (*i.e.* a better social security system) and that others are more efficient at achieving a different set of results (*i.e.* fiscal discipline), will seek a combination of parties in government that ensures the closest result to their ideal world. This variant has been explored by Cox & McCubbins (1991) and Alesina & Rosenthal (1995). Alternatively, if Presidential and Congressional candidates are evaluated with different criteria (*i.e.* candidates for the Executive branch evaluated on their ability to provide collective goods, while Congressional candidates judged on their ability to provide particular goods) split-ticket voting would also arise. Jacobson (1990, 1991) devised and exploited this variant.

Clearly, the most adequate variables to evaluate the Madisonian motivation to split the ticket would be those asking directly if the individual prefers that: (a) a single party controls both the Executive and the Legislative branches, (b) that the control of the Executive or Legislative branches is divided among more than one party or (c) if these considerations are irrelevant.⁵⁶ Unfortunately, to the best of my knowledge, the only publicly available survey that explicitly asks respondents whether they prefer a divided or a unified government for the 2000 election is the *Reforma* exit poll. Given that its purpose was not being extensive, but getting a sense of voting results, it contains a limited

⁵⁵Adequately characterized by Fiorina (1992) as “a pox on both your houses” explanation.

⁵⁶But it is important to note that the empirical research on the US has not been able to provide consistent evidence that those who claim that a divided government is a better alternative, consistently split their tickets (Beck et al. 1992, Garand & Lichtl 2000).

number of variables. This made it impossible to test a more complete model to explain split-ticket voting, but it offers an opportunity to assess whether voter who split their tickets had a clear purpose to generate a divided government. Given that the explicit Madisonian motivation makes theoretical sense, but has received little empirical support in the U.S., I wanted to assess whether this was also the case in Mexico in 2000.

Table 20 shows the results of a model that includes the available measures to test a explicit Madisonian motivation for split-tickets. I therefore, included a variable that measures whether a respondent reported that it is best for the country that the Presidency is controlled by one party and a different party has a majority in the Chamber of Deputies (Divided government). Similarly, I included a variable that measures whether the respondent foresees an economic crisis at the end of the Presidential term or not (Crisis). And also a measure of strength of Party ID (*Implication 4*). I also included the same sociodemographic control variables as in the model in the paper. Surprisingly, the coefficients for all three variables are statistically significant at the traditional levels, as well as the coefficient for the younger cohort of voters (18 to 24 years of age).

To get a better sense of the results in the model, Table 21 presents the estimated probabilities of casting a split-ticket vote for an average individual depending on specific values for variables of interest. The table shows that an average individual has a 17% probability of casting a split-ticket vote. Surprisingly, though, most of these predictors have a very small impact on the probability of casting a split-ticket. The strongest effect comes from age: relative to older cohorts, the youngest voters were much more likely to cast a split-ticket. An average young voter had a probability of 32% of casting a split-ticket. The second strongest predictor was partisanship strength: relative to strong partisans, independents are 13% more likely to cast a split-ticket and leaners are also 5% more likely. Interestingly enough, an individual who prefers a divided government was over 8% more likely to cast a split-ticket than someone who prefers a unified government.

But it is interesting to note that individuals who prefer a divided government do not have the highest probability of casting a split-ticket. Along the same lines, an individual who thought there

Table 20: Model testing for Madisonian motivation

DV: split-ticket vote	
Divided Government	0.608*** (0.138)
No crisis	0.284** (0.129)
Leaner	0.430*** (0.154)
Independent	0.906*** (0.144)
Women	-0.103 (0.115)
Urban resident	0.257* (0.133)
Age1824	1.209*** (0.298)
Age2539	0.241 (0.288)
Age4059	-0.179 (0.296)
Primary	-0.277 (0.263)
Junior High	0.183 (0.260)
High School	0.209 (0.265)
College	0.327 (0.261)
Intercept	-3.050*** (0.354)
log-likelihood	-1719.33
AIC	3467
n	3,380
MI sets	15

Significance: 1% *** / 5% ** / 10%*

ReLogit estimates weighted with $\tau = 0.21$, robust SE in parenthesis.

would be no economic crisis at the end of the “sexenio”, was almost 4% more likely to cast a split ticket than someone who thought there would be a crisis. An urban voter was over 3% more likely to cast a split-ticket than a rural voter.

Table 21: Estimates of the probability of casting a split-ticket vote

	Pr(split)	[95% CI]
<i>Divided government</i>		
Prefers divided	0.214	[0.187, 0.241]
Prefers unified	0.129	[0.105, 0.155]
Difference	0.085	[0.049, 0.122]
<i>Economic crisis</i>		
Foreseeable	0.189	[0.163, 0.214]
Not foreseeable	0.150	[0.124, 0.177]
Difference	0.039	[0.005, 0.073]
<i>PID strength</i>		
Partisan	0.124	[0.099, 0.149]
Leaner	0.177	[0.146, 0.214]
Independent	0.259	[0.224, 0.295]
Difference (Leaner-partisan)	0.055	[0.016, 0.093]
Difference (Independent-partisan)	0.134	[0.094, 0.178]
<i>Community type</i>		
Urban	0.186	[0.163, 0.211]
Other	0.150	[0.123, 0.179]
Difference	0.034	[0.000, 0.069]
<i>Age</i>		
18-24	0.326	[0.284, 0.374]
25-39	0.154	[0.131, 0.179]
40-50	0.147	[0.118, 0.180]
60-plus	0.129	[0.078, 0.192]
Baseline	0.173	[0.155, 0.191]

Probabilities were calculated with other variables set at their median value.

These results should be taken with caution, since the estimates are not comparable to the split-ticket voting model presented above. The different specifications that result from the different availability of variables in both surveys should lead to caution when attempting to generalize these results.

The available data allows for an additional test of some combinations of split-ticket votes. Con-

Table 22: Model testing for “defections”

DV: split-ticket defections	PAN/straight	PRI/straight	PRD/straight
Divided Government	1.130*** (0.217)	-0.202 (0.241)	0.221 (0.384)
No crisis	0.852*** (0.207)	-0.123 (0.239)	-0.006 (0.347)
Leaner	0.316*** (0.219)	0.711*** (0.217)	0.624 (0.459)
Independent	0.701*** (0.195)	0.450 (0.293)	1.342*** (0.445)
Women	-0.111 (0.163)	-0.081 (0.222)	-0.354 (0.323)
Urban resident	0.283 (0.188)	0.077 (0.261)	0.456 (0.384)
Age1824	0.607 (0.449)	0.119 (0.595)	-0.214 (0.578)
Age2539	0.502 (0.429)	0.450 (0.558)	-0.941* (0.546)
Age4059	0.363 (0.445)	0.390 (0.552)	-0.365 (0.550)
Primary	-0.137 (0.415)	-0.817* (0.486)	-0.040 (0.693)
Junior High	0.547 (0.393)	-0.094 (0.481)	0.306 (0.722)
High School	0.248 (0.412)	0.511 (0.493)	0.382 (0.725)
College	0.797* (0.395)	0.396 (0.483)	0.086 (0.737)
Intercept	-5.568*** (0.642)	-4.141*** (0.573)	-4.940*** (0.691)
n	3,380		
MI sets	15		

Significance: 1% *** / 5% ** / 10%*

Multinomial logit estimates, robust SE in parenthesis.

tinuing with the assumption that the presidential vote on a split-ticket combination signals the direction of a “defection”, I grouped split ticket votes according to the vote cast for the Presidency and performed the same analysis on an unordered four-category dependent variable. The results, shown in Table 22, give a better sense of the motivations for defections to a given presidential candidate. Voters who “defected” to Vicente Fox, did so because they wanted different parties controlling different branches. Similarly, those voters who did not foresee an end-of-administration economic crisis defected towards the same candidate. The same was true for leaners and independent voters as well as for the more educated voters. Estimates suggest, though, that defections towards PRI’s Labastida or PRD’s Cárdenas had no Madisonian motivation.

Appendix 3: Re-Logit vs. Logit

Estimates from a Logit model can be inconsistent and inefficient when the proportion of 1's in the sample is smaller than 50%. The inconsistency and inefficiency derives from deviations from samples equally divided between 1's and 0's, as well as from a finite sample size. Monte Carlo simulations by King & Zeng (2001a) show the differences in estimates between Logit and ReLogit for various combinations of sample sizes and proportions of 1's that confirm that the presence of bias is particularly severe in small samples, and increases also as the proportion of ones is less than 50%. While they do not venture rules of thumb to guide the use of rare event corrections, they note that "no sample size is large enough to evade finite sample problems if the events are sufficiently rare". My sample size is 948 cases, and my proportion of 1's is around 10%.

This inconsistency can be addressed either by correcting the estimates with a function of the proportion of 1's in the population and the sample ("prior correction method"), or by weighting the likelihood function ("weighting method"). The weighting method has been shown by King & Zeng (2001a) to outperform the alternative prior correction method. This method weights the log-likelihood by:

$$\ln L_w(\beta|y) = - \sum_{i=1}^n w_i \ln(1 + e^{(1-2y_i)x_i\beta})$$

where $w_i = w_1 Y_i + w_0(1 - Y_i)$, $w_1 = \frac{\tau}{\bar{y}}$, $w_0 = \frac{(1-\tau)}{(1-\bar{y})}$. τ is the fraction of ones in the population and \bar{y} is the observed fraction of ones in the sample. The estimations were weighted by a $\tau = 0.21$, assuming that the observed proportion of split-ticket votes in the *Reforma* Exit Poll is an accurate reflection of the true population value. Reported standard errors are White-corrected (robust).