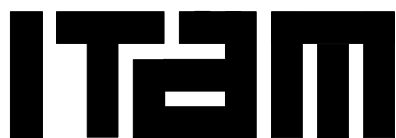# Documentos de Trabajo en Ciencia Política

WORKING PAPERS IN POLITICAL SCIENCE

Turnout as a Rationally Careless Investment Decision:
An Application to the Mexican Case in 1994

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Abstract

This paper addresses the debate on turnout on two simultaneous grounds. First, it is a theoretical assessment of the relative merits of alternative explanations of turnout in the United States. Also, since the explanatory power of any model or theory must be evaluated empirically, and especially, given the fact that we might learn a great deal if we test such models in settings different from those in which they were created, the second task is to test some of the hypotheses derived from the American debate to the Mexican reality. The paper shows, using a 1994 national poll, that turnout in Mexico is a positive function of voters' perceptions of their vote's marginal weight in an election, supporting a notion of turnout as a rationally careless endeavor. It casts these results in contrast to sociological and interest-based theories of turnout, which are likewise tested.

Síntesis

El presente trabajo aborda el debate de la participación electoral en dos terrenos simultáneos. Primero, se trata de una evaluación de alternativas teóricas que dominan el estudio de este fenómeno en los Estados Unidos. Asimismo, elabora y prueba empíricamente un conjunto de hipótesis derivadas del debate americano con datos de la realidad mexicana reciente. El ensayo muestra, usando una encuesta nacional para 1994, que la participación electoral en México es una función positiva de las percepciones que los electores tienen del peso marginal de su sufragio en una elección, reforzando una noción de participación electoral como una empresa de inversión racionalmente descuidada. El ensayo contrasta estos resultados con los derivados de teorías sociológicas y de interés político sobre la participación electoral.

Introduction

The literature on voting behavior in American politics is vast and complex, and this is perhaps the main reason why its theoretical and methodological contributions have been successfully applied in other contexts. Generally speaking, there are three major schools of research which follow the premises of sister social sciences: psychology, sociology and economics. The basic question to be answered in the area of voting behavior is two-fold: first, why vote?, second, who to vote for? Although the decision to vote is not clearly separable from the specific partisan or candidate choice,[1] certain aspects of turnout make it an object of analytical attention in its own right.

This paper addresses the debate on turnout on two simultaneous grounds. First, it is a theoretical assessment of the relative merits of recent alternative explanations of turnout in the United States. Also, since the explanatory power of any model or theory must be evaluated empirically, and especially, given the fact that we might learn a great deal if we test such models in settings different from those in which they were created, the second task is to test some of the hypotheses derived from the American debate to the recent Mexican reality. As a result, we shall have a better understanding of the Mexican voter, and an empirical evaluation of some of the recent American literature. In a comparative perspective, then, we conclude with a call for more theory-driven surveys for the Mexican case. For the American case, the task is to follow the path set out by John Aldrich,[2] and elaborate on the political components of the utility of voting.

The first section of this paper will briefly assess some of the relevant literature on voting behavior in American politics. The second section derives our guiding hypotheses from contrasting Aldrich's perspective to two influential articles published

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[1] Even if we assume the decision to be a two-step process, where the citizen first decides if he will attend the polls or not, and only determines who to vote for once his turnout choice is set, elementary backwards induction would have him compare the utility of not voting to that of casting a ballot for his most preferred candidate or party.

by Henry Brady, Kay L. Schlozman and Sidney Verba.[3] The third section tests the hypotheses based upon data coming from Mexico's 1994 Presidential election. A conclusion evaluates the findings and proposes the empirical and theoretical tasks to be followed.

Schools of Electoral Analysis

How do we explain the most basic and fundamental political act? This section works as a brief sketch of the most important theoretical views on voting behavior as summarized by Harrop and Miller,[4] while commenting on their relative merits and flaws.

Three large schools of thought have permeated electoral analysis in the United States, and consequently a lot of the scholarly literature on voting. These are the rational choice approach, the psychological view on voting, and the sociological perspective. To the latter, the elector is a sociological product, and her vote is an expression of socially derived preferences. Party systems reflect historic social cleavages, and individuals fundamentally respond to their social characteristics when confronting the electoral decision. In this view, there is little room for electoral volatility or for choice, because changes in voting patterns will usually reflect underlying changes in the social and economic structure of a polity. Likewise, sociological explanations of turnout have concentrated on the structural determinants of the vote: the socioeconomic status model of turnout stresses the effect of high levels of income, education and better occupations in participation. This perspective is the explicit target of SVB's resource model of political participation. In this model,

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[2]Aldrich, John; 1993. "Rational Choice and Turnout. " *American Journal of Political Science*, 37, pp. 246-278.

[3]Aldrich, *ibid*. Schlozman, Kay L.; Sidney Verba and Henry E. Brady, 1995a; "Participation's Not a Paradox: The View from American Activists", *British Journal of Political Science*, 25, pp. 1-36.; SVB, 1995b; "Beyond SES: a Resource Model of Political Participation", *American Political Science Review*, 89-2, pp. 271-294.

[4]Harrop, Martin and William Miller, 1987; Elections and Voters, London, Macmillan, ch. 6.

the authors contend that structural features do carry explanatory weight in explaining citizens' political activity, but they elaborate on the mechanisms through which these social characteristics actually explain behavior.[5]

As opposed to the sociological school of electoral behavior, both the psychological and rational choice schools construct their explanations from the standpoint of the individual. To the former, voters are partisans and their party allegiance (or identification) shapes the way they see and interpret the electoral world.[6] Party preferences are conceptual nets through which we filter all the politically relevant information, especially our views on candidates, policies and group benefits. These partisan preferences are transmitted from generation to generation through early socialization; and in an individual they usually grow stronger, rather than weaker through time. In other words, the vote is to some degree an expression of a psychologically-determined partisan evaluation of political events. In a similar fashion, psychological-type explanations of turnout talk about the degree of political engagement of an individual with her polity as being the thrust behind the decision to vote.[7] To this view, some citizens show higher levels of interest in politics, predicting a high probability of participation, while others may be completely alienated from electoral practices. This more general perspective on participation shares analytical grounds with the literature on political culture, where cultural traits of individuals determine their profile of political participation.[8]

The rational choice approach challenges these two perspectives on simple but solid grounds: how do we account for large electoral swings or changes in participation rates in a same polity in a short period of time? How do we explain changes in partisan preferences? How do we explain quick dealignment on cultural grounds? In other words, the rational choice approach attempts to offer a micro-logic

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[5]As we shall see, it is with regard to voting where their resource model turns out the least potent; SVB 1995b.

[6]Campbell, Angus, P. Converse, Warren Miller, Donald Stokes, 1960. The American Voter, Ann Arbor, University of Michigan Press; especially pp. 168-187.

[7]Here, party ID is one measure of political engagement.

of electoral decisions, analytical mechanisms through which social, psychological, cultural predispositions take shape and are converted into action. Voters are then rational evaluators of the benefits and costs of voting and decide accordingly.[9] Evaluations of candidates, parties, policies and promises are subject to the individual's self-interest; sociological and psychological pressures may exist, but in the end it is only the individual, not his group or psyque who casts a ballot.[10]

Harrop and Miller have argued that each of these agendas may have specific utility during diverse historical phases of electoral politics.[11] The sociological view may be more useful in times of realignment, the psychological one in times of alignment, and the rational choice approach in times of dealignment. While this hypothesis may be plausible, it is a fact that these perspectives are actually somewhat combined in empirical research, and sometimes treated as competing explanations.[12]

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[8]The landmark work is Gabriel Almond and Sidney Verba's The Civic Culture, 1963, Princeton.

[9]See Domínguez, Jorge I. and James A. McCann, 1996; Democratizing Mexico, Public Opinion and Electoral Choices, Johns Hopkins. These authors provide the first comprehensive analysis of Mexican electoral behavior, espousing a rational choice approach, although they explicitly reject the presence of retrospective economic voting in the 1988 and 1991 contests, and open room for psychological explanations of the vote. They argue that Mexicans (and probably more generally voters in a transitional setting) make a two-step decision: you first choose upon the institutional dimensions of the regime, that is whether you wish to support the political status quo or not, and only if you choose to withdraw support from the incumbent you assess ideological (or even strategic) concerns. Social cleavages, economic retrospective voting and policy issues are secondary. Party allegiances, also, go a long way in the explanation of why people choose one of these electoral avenues. I have argued elsewhere (Poiré, Alejandro, 1997; "Retrospective Voting, Party Loyalty and Risk Aversion in Presidential Elections: Mexico in 1994", mimeo.) that this model carries an endogeneity problem which may impede it from determining whether 'institutional variables' are actually just measuring party preference or a real "plebiscitarian" vote. In other words, institutional preferences are partly dependent on party preference, but also partly exogenous, and only this latter part would actually support a plebiscitarian thesis. Domínguez and McCann's model does not address the possibility of endogeneity, which may in turn bias their estimates.

[10]Although economic voting literature often treats citizens as sociotropic, where voters reward incumbents for prosperous collective conditions, as opposed to individual conditions. This perspective is equally rational, although the components of an individual's utility are determined by a public outcome. See Markus, Gregory, 1993, "The Impact of Personal and Economic Conditions on the Presidential Vote," in Niemi and Weisberg, eds., Controversies in Voting Behavior, pp. 152-165.

[11]*Ibid.*, p. 162.

[12]Also see Dennis, Jack, 1991, "The Study of Electoral Behavior", in William Grattz, ed., Political Science Looking to the Future. Vol. III: Political Behavior, Northwestern University Press, pp. 51-89; and Rossi, Peter H., 1959, "Four Landmarks on Voting Research", in Eugene Burdick, et.al., eds., American Voting Behavior, Glencoe, Illinois. The Free Press.

Arguably, since the rational choice approach does not inquire into the origins of preferences, it makes room for competing theories to account for them, and therefore, it may be a better framework to coherently incorporate findings from other schools.[13] What follows is an attempt to fulfill this expectation.

Rational Turnout Revisited

A strong challenge to the rational choice school of electoral behavior has come from the theoretical side, with turnout being its main target. Critics argue that the decision to vote can not be explained on a rational basis. Rational voting implies an expected utility net from costs. This utility is subject to both rational and so-called cultural evaluations. As we previously saw, some cultural or psychological standards offer the individual a reward for doing one's civic duty independent of the expected outcome of an election. Costs of voting are also present regardless of the outcome of such action, but the same is not true for the benefits. Since elections can be construed as the choice of a collectivity over a set of public goods, an individual's vote may or may not have an effect in the outcome of the election. Therefore, benefits from voting have to be discounted by the probability that one's vote will actually be decisive; otherwise, casting a ballot simply does not affect the outcome and the only rewards from voting will be the civic duty element minus the cost of voting. In Aldrich's simplified presentation, the calculus model of voting is:[14]

$$R = PB - C + D$$

Where R stands for net rewards of voting, P is the probability that the vote will be decisive, B are the benefits of having one's preferred option win over the second choice or "stakes" (B-A), C are the costs of voting and D is the civic duty term. A voter will cast a ballot if and only if R > 0. Obviously, though, in large

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[13]Fiorina's rational explanation of party identification is the best example of this idea. See his model in chapter 4 of Fiorina, Morris P., 1981, <u>Retrospective Voting in American National Elections</u>, Yale University Press, pp. 65-83.

electorates, P will be infinitesimally small, which opens the door for the so-called paradoxical stance of voting in rational choice theory.

It actually is collective action theory which most clearly challenges a calculus of voting analysis, since from this perspective it seems impossible to think that any voter would be willing to pay the cost of voting if her vote is clearly ineffectual to the electoral result. Therefore, if it is not the outcome of the decision what matters for the voter (it clearly can't, since in the limit PB tends to 0), and it must only be a matter of tastes, that is, the D term has to be larger than C. In other words, the rewards of voting are simply a computation of those costs and benefits which are *independent* of party choice, as lining up to vote and doing one's civic job. Then the decision to vote is simply an expression of preferences over participation, and no room is left for choice. In short, if voting is just an act of consumption, why analyze it from an investment perspective?

However, as Aldrich suggests, there is enough empirical evidence from the American case to show that it is not only the C and D terms that count, but that also the P and B terms have some impact in turnout decisions.[15] There is where the paradox lies: evidence suggests that turnout does respond to calculations of the utility of voting, but collective action puts such calculation into serious doubt. It is here that Aldrich's response offers pathways to abandon it.[16]

A number of facts call into question the collective action perspective on voting. Collective action problems imply people finding it difficult to establish mechanisms of interaction when goals are relatively shared and individual incentives are clearly opposed to cooperation, due to large costs of participation. On the contrary, the costs of voting are relatively low: ballots are usually full of choices, allowing for economies of scale in voting; registration and voting costs are relatively low; information is ever present during campaigns; and abstention does not make

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[14]*Ibid.,* p. 252.
[15]*Ibid.*
[16]See especially pages 261-266 of his already multi-cited work.

decision costs disappear. Benefits, as well, are pretty low: it is not really clear how much difference it makes to have congressman A instead of congressman B in office. So, since the voting decision is a marginal decision, slight changes in the margins will imply changes in turnout. Our original equation will actually never be carried out by the voters, but she will act as if *changes* in the parameters of such calculation were relevant in her voting decision. As one of the fathers of the rational choice approach to electoral behavior would argue,[17] the voter makes a minimal investment in information and decision-making, yielding a relatively volatile decision.

So how do we explain voting? Aldrich concludes that this very volatility may actually make it impossible to come up with a full explanation of turnout,[18] although he still believes that rational choice is the proper way to improve such understanding. His central finding is that "most of the action is, in fact, in the intrinsic value of voting per se".[19] In other words, citizens do vote because they derive utility from voting, in itself. But then where is the importance of choice left? Aldrich's answer is twofold: strategic politicians will do whatever they can to alter the expected costs and benefits of voting, so choice is dependent on a rational political logic, on the strategic interaction between these two sets of actors. In a more important sense, the decision to vote is not separable from the decision on who to vote for. That is, the utility derived from voting *per se*, i.e. non-instrumentally, still differs with partisan choice, and this notion will the adoption of a long-term perspective more appealing.

Following Aldrich, civic duty is not devoid of partisan considerations, but it is a set of elements subject to rational long-term political judgments. In other words, the paradox of voting is not such if we look at the way in which marginal evaluations of short *and* long term benefits shape the turnout decision. Moreover, rational choice may help explain which are the bases on which partisanship --which is a component

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[17]See Downs, Anthony; 1957; <u>An Economic Theory of Democracy</u>, Harper Collins, especially pp. 207-259.

[18]"it is very difficult, perhaps even impossible, to explain just who does and who does not vote in some absolute sense, precisely because marginal, small forces can be just enough to make the difference", *ibid.*, p. 274.

of the long-term benefits of voting-- may change due to the individual's calculations.[20] What this suggests is that a rational model of turnout must seek for a better disaggregation of the D term.[21] Schlozman, Verba and Brady will help us cope with such task.[22]

These authors' earlier article tries to disentangle the type of rationale behind certain kinds of political participation. According to their study, there are four such types of rationale: One is the production of collective goods; and the other three represent selective incentives, namely social, civic and strictly personal benefits derived from the action taken. Social and civic benefits, in turn, imply that the benefit is inherent to performing the action, and therefore the notion of *instrumental* rationality is absent.[23] They find that collective action accounts of participation, where selective incentives would be necessary for bearing the respective costs, are not supported by their evidence: people do expect policy outcomes from their actions, and they actually get rewards which are intrinsic to the action performed; the expectation of individual benefits is seldom the rule. In the case of voting, their evidence finds people participating overwhelmingly out of consumption reasons, that is for the civic rewards inherent in voting; this evidence would seem to reduce the question of voting to tastes. But seen in light of the previous discussion, it seems clear that these civic gratifications are not simply constants across one individual's life, or that they are not subject to some sort of political evaluation. First, if party identification has the role of

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[19]*Ibid.,* p. 266.

[20]Which is precisely part of Fiorina's enterprise in <u>Retrospective Voting…</u>, 1981.

[21]In particular, Aldrich suggests that it reflects both election-specific and long-term evaluations, and that "We should… begin to model turnout as a rational, long-term investment" *ibid.*, p. 275. What this paper seeks is to propose some of the elements to be considered in such an account.

[22]Their article on the non-paradoxical stance of political participation (1995a) might be misread as an explanation for participation. Their evidence is useless for such task, which they try to do in a different piece (1995b). In the former article, they only investigate participants' attitudes, which impedes any hypothesis test on the reasons for participation. It should be noted, accordingly, that the authors' stated "…main goal is to compare gratifications across political activities", *ibid.*, 1995a, p. 15.

[23]*Ibid.,* 1995a. See especially their footnote 15 on page 6. Here they argue that extensions of the intrinsic benefit of voting come very close to become a tautology, although still a potent one. We acknowledge this warning, but argue below that it is not an extension, but a *dissection* of the determinants of such utility which is needed.

shaping citizen's views as to follow the parties' lead, partisans should be more prone to feel some sort of duty to electoral institutions or democracy in general. Also, better functioning institutions may elicit a heightened sense of pride from the average citizen, just as corrupt officials may diminish the sense of duty one owes to his political system. And citizen judgments about such issues can hardly be understood as rigid cultural-psychological pre-dispositions or as unexplainable tastes. What is most important is the fact that the main players in electoral contests, parties and candidates, will obviously attempt to mobilize public opinion and assuming a marginal calculus of voting on behalf of the citizen, will try to manipulate turnout decisions just as they do with partisan choice decisions. It is during the heat of campaigns, where information is ever-present and least costly, where parties and politicians are investing heavily to inflict marginal changes in voters' rationally careless calculations, when the way in which citizens perceive the benefits derived from participation may actually be shaped.

A first mention upon the Mexican case is now particularly useful. Mexico's electoral history has changed dramatically in the last few years. After the highly contested election of 1988, and serious allegations of massive fraud, the runner-up Cuauhtémoc Cárdenas and his party (Party of the Democratic Revolution: PRD) devoted much of their energy to question the legitimacy of Carlos Salinas' presidency and transmitted an ambivalent message about the ability to transform the Mexican polity by the electoral way. Especially during the 1994 presidential campaign, where Cárdenas ran for the second consecutive time, factions of his own party were still crying fraud openly.[24] It is very reasonable to argue that this strategy could affect the voter's decision in two ways: from an investment perspective, it clearly undercuts the marginal probability of affecting the outcome, therefore discouraging turnout; from a consumption perspective though, it also diminishes the degree of engagement of a

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[24]An amusing and compelling insider's account of the way in which Cárdenas and his close aides confronted this dilemma in 1994 is found in Aguilar Zínzer, Adolfo, 1995; ¡Vamos a Ganar!, Océano, México.

citizen with his polity --why would anyone do his share (even if he does not care about the outcome) to support a corrupt system? It seems fair to argue that some of the intrinsic rewards of voting are also subject to political evaluations, which may be coherently modeled as rational, long-term investments on behalf of the voter.

It is curious, though, how SVB's evidence actually supports my perspective. A very interesting finding of their article is the endogenous status of the benefits of participation. The authors assert: "those who engage in different kinds of voluntary activity interpret the potential rewards of that activity in different ways".[25] So actually, political action depends on the utility you derive from it, but the *utility function used to evaluate such benefits depends* on *which kind of activity you are displaying*. This underscores the usefulness of modeling the act of voting through two main components: one being the marginal short-term investment characterized by the 'rationally careless' calculus of voting, which represents the exogenous element of the vote; and the second one being the endogenous part of voting, which might be modeled as dominated by long-term investment concerns.[26]

Asking the more general question about why people participate, these same authors developed a model based upon the intersection between sociological, psychological and economic theories of political behavior: the resource model.[27] Their evidence here again supports our general contentions, while adding some information to our model. Both methodologically and theoretically, they argue, participation is better explained by resources than by political interest or socioeconomic status. First, interest is a highly problematic concept to measure. Moreover, if socioeconomic status, most especially education, has been consistently related to political participation, it is still unclear which are the mechanisms through

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[25]*Ibid.,* 1995a, p. 24.

[26] For example, while 93% of SVB's sample cited civic rewards as their explanation for voting, a very high 61% also cited policy gratifications. These figures might be better interpreted in light of the following questions: did voters expect their ballot to imply *immediate* policy changes? Were civic gratifications the same for those who voted for a mainstream party than for those who voted for third parties or independent candidates? See the authors' chart on p. 16 (*Ibid.*, 1995a).

[27]*Ibid.*, 1995b.

which these variables translate into greater political activism. Their answer is "resources", namely time, money and civic skills. It is with regard to turnout that their findings shall prove very illustrative.

Consistent with the idea of turnout as a very low cost activity, it is a form of participation quite weakly explained by political resources.[28] The variable carrying the heaviest explanatory weight is political interest, although civic skills and free time are also relevant. Once controlling for resources, education and income are not statistically significant predictors of turnout. However, the central problem with this argument is that voting as determined by interest is an explanation dangerously bordering tautology. Just as SVB answer a theoretical call for the mechanisms linking socioeconomic status to political participation, their article is longing for a better specification of the means through which interest translates into turnout.

Why are people more interested in politics? Why do people who are more interested in politics participate more? Following Aldrich's path,[29] we shall explain interest as a composite measure of the D and B terms in the marginal political rationality model. First, it is worth emphasizing the fact that SVB's model establishes a causal arrow from education to political interest. From a rational perspective, education enhances the abilities of individuals at processing and accumulating information, thereby improving the decision-making process. Education should then be positively correlated to turnout via a better assessment of the components of the decision, especially for long-term investments. A better educated individual will better understand the value of voting today for her most preferred option regardless of its probable defeat, in order to maintain some specific issues in the political agenda for the future.

Abandoning these author's assessment of political interest, it is important to stress this concept's common features with the long-term components of the electoral decision. If the D term is understood in the broader long-term investment sense, it is

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[28]*Ibid.*, check Table 4 on p. 284.

reasonable to argue that a higher level of interest or engagement with politics might result *from* consistently better evaluations regarding the institutional workings of democracy,[30] as well as a higher degree of perceived external efficacy, namely the ability of government to come up with solutions to public maladies. Also, party identification explains political interest as much as it could explain expressive or long-term investments on behalf of voters. In a similar fashion, political interest can be modeled as depending upon election-specific elements, such as the stakes of a presidential race and the relative closeness of political races. Both dull and very lopsided races elicit little interest, just as close races or those where a lot is at play should increase political interest.[31]

In short, SVB offer fairly elaborate evidence in favor of a political-interest explanation of turnout. Their model, though, lacks the mechanisms through which interest translates into voting, and is therefore almost tautological. What the previous paragraph shows, though, is that the relationship they find between these two variables might be spurious, since a rational account of turnout establishes a causal link *from* the short and long term elements of the marginal calculus of voting *to both* political interest *and* the probability of voting. In terms of our model, then, we will prefer to leave political interest as a parallel dependent variable, instead of as a theoretically irrelevant explanatory variable.

The Model

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[29]As set forth in his propositions 9 and 11, *ibid.*, p. 273.

[30]Democracy may be judged in terms of its ability to defend basic freedoms, to represent certain values, etc. These considerations are based upon long-term institutional performance, and are analytically distinct from an almost immovable psychological predisposition.

[31]Here again, Aldrich's stress on the role of strategic parties and politicians is evident. Proposition 10, *ibid.,* p. 273.

As a summary to the previous section, we present an overview of an exploratory model of turnout as derived from it:[32]

- Turnout is a low-cost, low-benefit rational decision, which citizens make while keeping themselves relatively ignorant. It is therefore subject to a myriad of influences, especially on behalf of strategic politicians and parties, who shall try to take advantage of this fact.

- It is a mix of consumption and low-profit short and long term investments. Its marginality impedes a "correct" model specification.

- It depends upon three general types of considerations, encapsulated in a modified version of the calculus of voting formula;[33]

$$\partial\{R\} = \partial\{PB - C + D_x + D_i(\ldots)\}$$

    a) Perceived marginal changes in election-specific elements, which we simplify as the opportunity cost of voting (C), the relative efficacy of a vote as determined by the closeness of a race (P) and the stakes at play (B).

    b) Perceived marginal changes in long-term investment components of the vote (D_i), which is initially construed as party identification, and civic rewards influenced by value judgments about institutional performance and the overall efficacy of government.

    c) Explicit consumption or expressive reasons (D_x): social rewards of showing up at the polls, of expressing one's opinion, and the like.

- It is enhanced by information, which may be understood as diminishing the transaction costs of the decision-making process, therefore improving the accuracy of the investments inherent in voting, or as improving simple expressive decisions.

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[32]An adequate elaboration of Aldrich's proposals is a major job in formal modeling and is clearly out of the reach and interests of this paper. To this regard, the proper specification of the form and elements within the term $D_i(\ldots)$ would be the next task. What follows is a basic outline for empirical testing.

[33]The idea of a marginal change in the rewards of voting (as depicted by ∂ here), implies that a voter who perceives a positive significant change in any or a combination of the elements of the formula will attend the polls with increasing probability. Once again, the specific functional form to be used will not be addressed.

Mexico 1994. [34]

We now turn our attention to the Mexican case. It is a relevant illustration insofar as turnout is not compulsory and yet participation was impressive. Moreover, recent institutional changes will be especially useful in highlighting some of the arguments of this paper. The Mexican 1994 presidential contest had three central features: First, participation swelled, both in relative (78% of listed voters) and absolute terms (35.5 million citizens) well above historic standards.[35] Second, although still being biased in favor of the ruling party --especially in terms of the process leading to election day-- it earned the easy title of being the cleanest election in modern Mexican history. Third, it was characterized by previous institutional and political events that heightened its stance as a critical juncture in Mexico's contemporary history.[36]

In it, Ernesto Zedillo, candidate of the long-time ruling Institutional Revolutionary Party (PRI), obtained 49% of the vote, to be elected president of Mexico. The runner-up was Diego Fernández, who obtained a historic high of 26% for the long-time rightist opposition National Action Party (PAN), and the second time leftist candidate Cárdenas was debunked to the third place with 17% of the total vote. Minor parties garnered up to 6% of the vote, while around 2% were annulled.[37]

In general, a model of voter turnout for Mexico 1994 should acknowledge the effect of changes and continuities in Mexico's bumpy political environment. As we discussed earlier, the ambivalence between fraud and legality was still a prevalent

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[34]For a complete analytical narrative of the electoral contest of 1994 see Domínguez and McCann's Epilogue; *ibid.*, pp. 176-209.

[35]The largest previous number of voters in presidential contests had been 23.6 million in 1976, which represented 75% of the list. This figures, however, are subject to a justified great deal of suspicion, given the much lower costs of fraudulent practices still present in those years. Source: BANAMEX, 1996; México Social, pp. 628-629.

[36]The enactment of NAFTA and the Chiapas uprising in early January, the assassination of the PRI's original presidential candidate in March, and significant electoral reforms oriented to equalize the playing field were all precedents to the contest of August 21, 1994.

[37]See Domínguez and McCann, *ibid.*, p. 198.

concern. The increased sense of competitiveness, for example, buttressed by the first-ever presidential debate in which the ruling party's candidate was clearly the loser,[38] should have some effect in the perception of the efficacy of the vote. In short, some "transitional" considerations should be taken into account to develop the proper hypotheses to be tested.[39]

The Data

The data for this study comes from a nation-wide pre-electoral poll conducted by the Mexican daily newspaper Reforma on the month of June, 1994. Although this poll was not theory-driven, a number of indicators are very valuable in an exploratory assessment of the rationale behind the impressive turnout rate witnessed in Mexico in August 21st., 1994. What follows are the specific hypotheses derived from the previous section that could be tested given the database available.[40]

The Hypotheses

The hypotheses we derive for the Mexican case will be separated in three general clusters. The first one refers to the short-term components of the model, the second one to the long-term elements, and a third one to test socioeconomic determinants of turnout:

Short-term Considerations

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[38]I have presented statistically significant evidence that the debate in May 1994 hurt Zedillo's electoral prospects against both major opposing candidates. See Poiré 1997, *ibid.*, pp. 26, 31-32.

[39]Virtually no empirical analysis of Mexican turnout has addressed the question from the individual point of view. One of the most recent aggregate-level data analyses is Klesner, Joseph L., 1995; "The Enigma of Electoral Participation in Mexico: Electoral Reform, the Rise of Opposition Contestation, and Voter Turnout, 1967-1994", mimeo.

[40]A number of methodological issues are at stake in a study of this sort. These issues will be better addressed under the light of such data analyses as the ones presented here. In general, and although this survey was probably the best one to address the turnout question in 1994, the model should be under-specified, given the lack of a number of indicators. For a review of the major surveys conducted during the electoral process, see Pérez, Germán, ed.; 1994; Elecciones a Debate 1994, Diana, México; pp. 219-267.

1. The perception that the 1994 election would be mostly fair and clean increased the probability of casting a vote, given a marginal positive change in P.[41]

2. The closer the election was perceived, the more probably a voter would show at the polls; again, a marginal positive change in P.[42]

3. Mexicans foreseeing violence or protests after the elections would have diminished expectations about the efficacy of their votes, therefore reducing the probability of turnout, given a marginal negative change in P.[43]

4. Better information about the candidates will increase the probability of voting, due to a better assessment of the investment inherent in B.[44]

Long-term Considerations

1. Citizens mostly oriented by partisan concerns as opposed to candidate's image, will make long-term investments with increased probability, therefore turning out to vote out of a positive marginal change in D_i. (This variable comes from a straightforward question and is an admittedly poor proxy for Party Identification).[45]

2. An increased sense of governmental inefficacy will reduce the probability of a voter showing at the polls. Specifically, the probability of turnout should be lower for those who identify democracy as the most urgent problem to be tackled, due to a negative change in D_i.[46]

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[41]We have two indicators for this variable: in the first one the respondent was asked whether he thought the election would be fraudulent; in the second one, she was asked for the perceived probability of parties and government complying to specific political agreements to keep the election fair. See Appendix for a full translation of the relevant questions and the coding used.

[42]The indicator used for this question is straightforward. Also, although we here acknowledge Aldrich's insight on how this variable should only carry weight at the aggregate level, we believe that dramatic changes in competitiveness might still have an effect in individual behavior. See Aldrich, *ibid.*, p. 258.

[43]Two questions directly addressed each of these concerns.

[44]Voters were asked to report the names of the presidential candidates of each parties. The explanatory variable constructed was coded 1 for those who aptly recognized the names of the three major contenders, 0 for those who missed at least one of them.

[45]See Aldrich, *ibid.*, pp. 272-273.

[46]A question asks what is the most urgent problem to be solved. This indicator should be used rather carefully, since it might also hide a short-term consideration, namely a lower perceived level of P.

3. Turnout has a consumption or at least long-term investment component. Should Mexican voters behave mostly in a short-term investment fashion, there would exist a negative relationship between preferring a party that is expected to be a loser and turning out to vote.[47]

Socioeconomic factors

Overall, these factors are expected to be weakly related to turnout, and the only variable expected to have a direct effect on turnout is education:[48]

1. Higher levels of education might translate into better analytical tools for confronting the decision process and/or an increased interest in politics,[49] therefore education should be positively correlated to the probability of voting.

The statistical model we shall test, then, departs from our theoretical digression in four central respects which should be kept in mind. First, although there is reason to believe that costs of voting decreased and stakes increased previous to the 1994 election for a vast majority of Mexicans, our model lacks any indicator of such variable. Second, it also needs a better indicator of party identification, which should result in an under-determined estimation of the long-term investment elements. Third, it also fails to properly address the pure expressive component of voting, although it is able to test a hypothesis concerning exclusive short-term investment voting. Finally, the idea of marginal changes in the components of the vote implies a dynamic factor which is absent in most of the specific questions that were asked, therefore reasserting the need for better testing of our hypotheses.

The Results

We estimated the predicted probability of voting via maximum-likelihood logit estimation.[50] We first ran a saturated model of our dependent variable, "high

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[47]This variable is constructed as an interaction term between the question about the voters' preferred choice and his assessment of who shall win the elections.

[48]Given our previous assessments, levels of income should not be relevant in explaining turnout if it is not really costly.

probability of voting", on all the variables to be tested plus a number of social factors and retrospective evaluations.[51] The final model only included the relevant social variables plus the variables of theoretical interest.

Model's Predictive Power[*]

	Actual Response	
Model Prediction	No	Yes
No	26.8 %	7.7 %
Yes	73.2 %	92.3 %
Cases	183	1730

[*] Percentages are calculated per column. Dependent variable is high probability of voting.

Before we address the specific hypotheses in the model, we should start with a word about its overall fit. Indeed, its predictive power is anything but impressive (86%), since it is virtually unable to improve the results given by choosing the modal category in our dependent variable. The table above illustrates the poor performance of the model in correctly predicting those with a low probability of turnout.[52]

Although this model will serve as a first approach into the explanation of turnout in Mexico, it seems clear that a better specification is necessary. A number of

[49]See SVB, 1995b, *ibid.*, pp. 272 and 283.

[50]Demaris, Alfred; 1992; Logit Modeling, Practical Applications, SAGE, California; Hosmer, David W., and Stanley Lemeshow, 1989; Applied Logistic Regression, Wiley, New York.

[51]The social factors originally included were income, education, age, gender and rural/urban community. Retrospective evaluations were found to be the most important driving force behind party choice in 1994 (see Poiré, *ibid.*), and therefore their irrelevance in explaining participation supports the idea that turnout judgments are at least partially distinct from short-term party choice considerations. The initial retrospective measurements used were the opinion of changes in the economic and political state of affairs during the last year. None of the coefficients for these variables was significant.

[52]The cut-off point for the categorization of the predicted values was set at .808, which implies that half of the total cases incorrectly predicted will correspond to each of the categories of the dependent variable. The usual categorization, where the cut-off point is set at 0.5 was inappropriate given the high

omitted variables, which will be discussed in the conclusions, could put its results into question. Notwithstanding, and given the data available, the model still allows us to test for the specific effect of some of the variables in the sample. Especially, it provides evidence consistent with some of our hypotheses, which implies that some of the paths shown by our analysis should be carried into further work on the subject. Finally, and as the inspirer of this model clearly suggests, since turnout is a decision taken at the margins, a lot of errors inherent in turnout will make estimates inefficient by definition.[53]

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level of turnout (87% as predicted by the poll, 78% in the official result two months later). See <u>México Social</u>, *ibid.*, p. 625.

[53]Aldrich, *ibid.*, pp. 264-265.

Explanatory Variable	Coefficient[Ψ]	s.e.(coef.)
Short-term Components		
Clean elections	0.386**	0.16
Electoral agreements will be upheld	0.735***	0.16
Very close elections	0.522***	0.12
High probability of violence	-0.215*	0.11
Losers will not accept result	-0.176	0.16
Knows all major candidates	0.496***	0.17
Long-term components		
Refers to party over candidate	-0.083	0.18
Democracy most urgent problem	-0.569*	0.32
Preferred choice is expected loser	0.122	0.17
Socioeconomic Factors		
Education	0.143**	0.07
Rural community	-0.301*	0.17
Constant term	0.292	0.44

* statistically significant with $p < 0.1$ Initial Log Likelihood = -603.44

** statistically significant with $p < 0.05$ Final Log Likelihood = -559.48

*** statistically significant with $p < 0.01$ Number of observations = 1913

      The estimation yields support for most of the hypotheses presented in the model.[54] A perception of trust in the electoral process as a whole, as well as trust in the parties' ability to comply with pre-electoral agreements to increase the equity of competition had a positive significant effect on the probability of turnout (0.38 and

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[Ψ] Coefficients represent the effect of the presence of the explanatory variable on the logarithm of the odds of high probability of voting vs. the rest of the responses in the dependent variable, with all other instruments held at their means. See Hosmer and Lemeshow, *ibid.*, and Aldrich and Nelson, *ibid.*

[54]In the following paragraphs, the numbers in parentheses refer to the logit coefficients estimated by the model.

0.73, respectively). Mexican voters in 1994 actually responded to an environment of enhanced credibility in electoral institutions, in which they though ballots counted and were to be counted, with increased participation.

Closeness mattered, even at the individual level. Even if the probability of casting the deciding vote is infinitesimal, small perceived changes in such elements might be relevant explanations for turnout: For those Mexicans who perceived the election to be very close, the probability of going to cast a ballot increased as well (0.52).

Prospects of post-electoral violence had the effect of discouraging voters (-0.21). The conjecture is that it reduced the efficacy of a ballot cast, since outcomes were less likely to be determined by the vote and more likely to be resolved through other, less civilized, forms of politics. The effect of losers not accepting the electoral outcome, though, was not significant. It was only when violence was expected that turnout was actually discouraged.

Better informed voters were more prone to cast their ballots. Those who knew the names of the three candidates were more likely to report a high probability of voting (0.49). Whether this is a measure hiding a greater interest in politics or a better understanding of the workings of democracy, though, is unfortunately a matter of sole conjecture.

When analyzing the long-term investment elements of the vote our findings are also congruent, but less significant, overall. The only significant indicator relates the diminished external efficacy of the democratic system to the probability of casting a vote (-0.56). Our measure of partisanship is not a good proxy of party identification, so its results should not be taken at face value. Finally, though, we can reject the hypothesis that preferring an expected loser would discourage a citizen from voting. In sum, there is some evidence supporting two of our original hypotheses.

Socioeconomic factors, came out weak in the model, and only two of the five original variables endured the selection process. Education, as expected, is positively correlated with a high probability of turnout. Better educated Mexicans were more

likely to vote in 1994. A surprising and very interesting result is the negative impact of the rural variable in the probability of voting, even when controlling for the effect of education, which is correlated to rural communities (-0.26 in our sample). This finding is consistent with the variation in participation patterns that has accompanied Mexico's recent political change. While turnout levels in hegemonic Mexico were usually much higher in the rural localities, this profile has shifted to show higher levels of participation associated with urbanization.[55] The logic of this argument is simple, albeit rough: rural localities' results were the most easy to inflate by the PRI's corporatist machinery; likewise, opposition parties have flourished mainly in urban centers, where social differentiation is higher and the costs of defending the vote are smaller. Therefore, Aldrich's strategic political parties play a role both in the past and in the present effect of urbanization on turnout.

Summary

In 1994, turnout in Mexico was greatly enhanced by short-term considerations. Every political player shares some of the credit in this outcome: governmental efforts to reduce the costs of voting were exemplified by a massive campaign to provide photograph voter identifications and the installation of the highest number ever of voting precincts; parties and electoral authorities went to great lengths to construct and implement agreements which would foster credibility; citizens and foreigners organized observation brigades to supervise the process, and the media stressed the main achievements of recent electoral reforms. All of this must have had an impact in turnout, and our evidence reflects the great weight that efficacy considerations carried.

Less successful was the inclusion of the long-term components of the model. This is partly due to the lack of indicators, but it would be reasonable to argue that the

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[55]See Klesner, *ibid.*

transitional character of Mexican elections in 1994 should account for this finding. This would be true at two levels: first, the great recent increase in competitiveness and the perception of very high stakes being at play in 1994 might be enough to upset any longer-term investment decisions. Also, the change from an authoritarian setting to a semi-authoritarian one implies heightened levels of uncertainty,[56] which should undermine the desirability of long-term investments. This offers some insights for the study of turnout in the American case, since its adequate construction as a long *and* short-term investment decision will need to account for the divergent perceptions of risk and uncertainty present in the electorate.[57]

A set of strategic conclusions pertaining the Mexican case are also at hand. In 1997, the whole 500 seats from Congress and a quarter of the Senate will be renewed. Concurrently, the political heart of the country, Mexico City, will witness its first direct election of a head of the local executive power. Moreover, it will also be the first federal contest ever to be completely organized under an all-citizen electoral authority. Finally, the effects of the recent economic crisis and a still unconvincing performance by the incumbent president have nurtured the probability of a non-majority Congress, which would also imply the definite demise of the hegemonic-dominant phase of Mexico's party system history.

If our use of American theories for the analysis of the Mexican reality is accurate we shall witness a second consecutive overflow of voters into electoral precincts. Especially, higher levels of participation should be present in Mexico City, as well as in Nuevo León, Sonora, San Luis Potosí, Campeche, Colima and Querétaro, which are also staging concurrent gubernatorial races; not only will the stakes of voters be higher in these states, but parties will also invest more heavily in them to try to carry the cherished offices to their camps. Different levels of

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[56]See Przeworski, Adam, 1993; <u>Democracy and the Market</u>, Cambrigde.

[57]Although these two might be treated as exogenous, or culturally determined, it is clear that they also respond to politician's strategies. I have also shown that in the Mexican case in 1994 risk aversion only hurt the PRD, which has yet to conquer its first governorship, and it did not affect the PAN, which by that time had already won three of them. Poiré, *ibid.*

participation elsewhere will also depend upon party strategies. Only seven of the thirty two states carry more than half of the 300 single member districts (151),[58] therefore luring national parties to invest heavily in their congressional campaigns. Also, though, some parties might try to discourage doubtful voters from showing to the polls if they believe they might disfavor them. Following Aldrich's main conclusion, turnout will depend upon the interaction between voters and parties and politicians in the following months in Mexico: it is here where the flow of information, still far from free and equitable in our protracted democracy, will also play a crucial role. Hopefully, the coming election will help consolidate the transitional setting into a less uncertain and unfair electoral apparatus, which should enhance the prospects for long-term investments from voters, and more importantly improve the country's political life overall.

Conclusion

It is pertinent to conclude this paper with a summary of arguments. The evidence we present is consistent with a rational choice perspective on voting. Even if the model specification is weak, this is congruent with the 'rationally careless' evaluations of the voters, as much as with the lack of better indicators given the data available. At a theoretical level, a better model should consider the inclusion of party and candidate strategies in the form of spending, campaigning and advertising.[59] Also, we have seen how in order to understand the long-term aspects of voting, party identification and judgments upon institutional and governmental performance should be taken into

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[58]These states are also highly competitive ones: Michoacán's state capital has been alternately governed by the PRD, Guanajuato has had two consecutive PAN governors, Puebla's capital is governed by a PAN mayor, Jalisco has a PAN governor, Veracruz's capital and some major cities are governed by the PAN, and both the Federal District (Mexico City) and the State of Mexico feature non-majority tri-partisan legislatures.
[59]Data on campaign spending and funding is almost non-existent and highly dubious in Mexico, and will probably remain pretty poor for a few years to come. Given its still very controversial stance, it was the only aspect of the most recent electoral reform of 1996 that was approved solely by the PRI's majority in Congress.

account. To this regard, modeling strategies should make room for risk aversion and uncertainty about the future to show up. Centrally important as a modeling tool is to emphasize the role of marginal changes in parameters as the defining element in the calculus of voting, as opposed to an overall estimation of expected utilities.

In short, we have illustrated the use of a rational choice model of turnout in a specific context where short-term considerations should and do indeed loom large: where it should have, rationality ruled. Explanations of turnout in terms of political interest or purely civic rewards seem, under this perspective, either clumsy or uninteresting. The road ahead is clearer, though still intricate. The following are the steps to be taken.

In a theoretical sense, formal modeling should help us come up with a proper specification of the 'rationally careless' calculus of turnout, where voter tastes and perceptions about the short and long-term investment inherent in voting are subject to the strategic influence of political players. Time, uncertainty, risk aversion and especially a sense of 'marginality' must be properly incorporated. Such a model should lead to more precise instruments for testing hypotheses, whether it be in terms of model specification, where the pertinent data are already available, or as in the Mexican case, for the construction of better survey material.

Appendix

What follows is a translation of the indicators used from Reforma's survey, which had a total of 21 questions, along with the coding used for our model.

1. Area: 1 for *rural*, 0 for *urban*.
2. Socioeconomic level of the household, as perceived by the pollster: seven category variable, from *marginal*, coded 1, to *triple A*, coded 7.
3. Gender: 1 for *male*, 0 for *female*.
4. *How old are you?* Coded 1 for *18 to 30*, 2 for *31 to 50*, 3 for *50 or more*.
5. Education: 1 for *none*, 2 for *elementary*, 3 for *junior high or equivalent*, 4 for *high school or equivalent*, 5 for *college or equivalent*, 6 for *graduate studies*.
6. *Do you presently have your new photograph voting card?* Answers coded 1 for *yes*, 0 for *no*.
7. *How likely is it that you will vote in the coming presidential elections in August 21st?* Choices given were: *Very likely, little likely, not likely at all*. The dependent variable was constructed as 1 for those who answered *very likely*, 0 for *little* or *not likely*.
8. *Do you think that in the coming presidential elections there will be electoral fraud?* Answers were coded 0 for *yes*, 1 for *no*.
9. *The Federal Electoral Institute has approved a series of electoral reforms, some of the most important being an external audit on the voters' list and that the ballots will be numbered. Do you trust these agreements to be kept?* 1 for *yes*, 0 for *no*.
10. *When you vote, what draws your attention first, the candidate or the party?* 1 for *party*, 0 for *candidate*, *both*, or *none*.

11. *Do you know the name of the presidential candidate proposed by the (party's name)?* Coded 1 for correct answers for PRI, PAN and PRD; 0 for incorrect answers on one or more of these parties.

12. *If the federal elections were to be held today, which party would you vote for?* Respondents were given a card with the names and acronyms of the parties. This question was coded in conjunction with the following:

13. *Independently of whom you will vote for, which party do you think will win the elections?* Answers were given without the aid of a card, and were only coded for PRI, PAN and PRD. Coding for our explanatory variable "voting for a loser" was 1 for those who said they would vote for a party different from the one they expected to win.

14. *How close do you believe the coming federal electoral contest will be between the three major parties (PRI, PAN, PRD): very close, a little close, or not close at all?* 1 for *very close*, 0 else.

15. *Do you believe the losing parties will accept their defeat?* 1 for *no*, 0 for *yes*.

16. *How likely do you think it is that violent events will take place after the 21st of August stemming from the electoral process?* 1 for *very likely*, 0 else.

17. *Which do you think is the most urgent problem to be solved by the next President of the Republic?* Question was open-ended. 1 for *democracy*, 0 else.

18. *Comparing with the previous year, how do you consider the political state of affairs of the country: better, the same, or worse?* 1 for *better*, 0 else.

19. *Comparing with the previous year, how do you consider the economic state of affairs of the country: better, the same, or worse?* 1 for *better*, 0 else.