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FISCAL CONSERVATISM IN A NEW DEMOCRACY: 'SOPHISTICATED' VERSUS 'NAÏVE' VOTERS

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ABSTRACT

Fiscal Conservatism in a New Democracy: 'Sophisticated' versus 'Naïve' Voters*

Several authors claim that voters in new democracies reward deficits at the polls and this fact is due to a lack of 'voter sophistication'. We test this claim for gubernatorial elections in Brazil, an important case study since it is the fourth most populous democracy in the world, displays a high variance in economic and social characteristics across states, and effectively imposes mandatory voting. Our evidence shows that voters are fiscally conservative, that is, they reward lower deficits, which is in contradiction to the literature. We do find that, when we use state income per capita, education and income inequality as proxies for 'voter sophistication', 'naïve' voters do not reward low deficits as opposed to 'sophisticated' voters, and education is the key element for this distinction. We propose that education rather than the youth of the democracy, is the key element for assessing voter 'sophistication'.

JEL Classification: D72, E62 and H72
Keywords: budget deficits, elections, fiscal conservatism and political cycles

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1. Motivation

Since Nordhaus (1975), the idea that government incumbents can manipulate the economy to seek re-election by increasing budget deficits just before elections has taken root. Nordhaus´ model assumes "naïve" voters who do not anticipate the future costs of current deficits.[1] Though later models introduced rational, "sophisticated" voters that used information more efficiently, the evidence on electoral fiscal cycles is far from consensual. Peltzman (1992) suggests that American voters are "fiscal conservatives" and tend to penalize cabinets which are not, and Alesina et al. (1998) show that deficit cuts do not harm re-election probabilities or the popularity of cabinets for OECD countries. In a recent paper covering a wide range of developed and developing countries, Brender and Drazen (2005a) suggest that only in "new democracies" are electoral fiscal cycles reflected in higher re-election prospects.[2] In sum, the Nordhaus argument springs back to life: the lack of "voter sophistication", necessary for pre-election profligacy to pay off, is present only in new democracies and disappears with political development.

This paper tests how voter "sophistication" correlates with the degree of "fiscal conservativeness" using data from four state gubernatorial elections in Brazil from 1990 to 2002, a period in which Brazil could be considered a "new democracy"[3] Several reasons make Brazil an excellent case for studying the fiscal preferences of voters in new democracies. Brazil is the fourth largest democracy in the world - after the United States, India, and Indonesia - established in the late 1980´s, it is a large developing economy with substantial economic and social diversity across states, and shows a recent history of large budget deficits at both federal and state levels. Importantly, Brazil imposes mandatory voting on the whole population, so that neither the "sophisticated" nor the "naïve" can abstain from expressing their electoral preferences. We rely on these unique country characteristics and find that while governing parties and coalitions that run larger deficits were in general harmed at the polls through lower re-election probabilities, in states with lower than average education and, to some extent, lower

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[1] This motivation for running a deficit is non-partisan, or "opportunistic", in that it does not depend on the ideological preferences of policy-makers.

[2] Veiga and Veiga (2007) find that the political payoff to opportunistic spending before municipal elections increased after democracy became well-established in Portugal. Brender (2003) uses information on local elections in Israel to argue for an important connection between the level of voter information and their response to fiscal stimuli.

[3] Brazil has democratized in 1985 and has since experienced four gubernatorial democratic elections up to 2003. This condition qualifies Brazil as a new democracy according to the criteria of four democratic elections established by Brender and Drazen (2005a and 2005b). One advantage of a sub-national analysis is that we can examine the choice of the deficit levels within the same national institutional and economic context. In addition, there is strong evidence that the governor´s ability to manipulate fiscal policy is similar across all states. See Santos (2001).

average income and higher than average inequality, fiscal profligacy was not as detrimental for re-election probabilities.

2. Evidence

Figure 1 below shows the average deficits for parties that are re-elected compared to their counterparts that are not re-elected.[4] In spite of large average deficits, in the 1990, 1994 and 1998 elections, governors that ran lower deficits increased their chances of re-election, which constitutes *prima-facie* evidence that voters are “fiscal conservatives”. In the 1999 to 2002 term, states transformed an average deficit of 2.5% into an average surplus of around 1% of state GDP. This was the effect of a process of debt restructuring that severely hardened budget constraints. The comparison of the 1990 and 2002 elections also shows indirect evidence of fiscal conservativeness, as the rate of re-election of the governors´ party increased from 26 percent to 44 percent when compared to the 1990 election. The new institutional context of hard budget constraints did not harm re-election probabilities in general, quite the contrary.

[Figure 1 About Here.]

We use the value of three state-level indicators as proxies for voter “sophistication”: lower than average individual income, fewer than average years of education, and higher income inequality at the state level. The idea is that poorer, less-educated voters in more unequal contexts may be more vulnerable to fiscal profligacy and reward deficits at the ballot box. In Table 1 we interact the fiscal surplus variable with state-level indicators that take the value 1 if the state presents lower than average state income, lower than average years of study or a higher than average state Gini index.[5] Our results are very clear: voters are fiscal conservatives in that the coefficient on the fiscal surplus variable is positive and statistically significant throughout. However, for “less sophisticated” states, the coefficient on the interacted fiscal surplus variable is always negative, suggesting that “naïve” voters might punish deficits less serverely than “sophisticated” voters. Note, however, that only some of the coefficients on the interacted fiscal surplus are statistically significant. When that is the case, such as with years of study, the size of the coefficient suggests that “naïve” voters are indeed indifferent to fiscal policy and neither

[4] Results for a multivariate probit estimation can be provided upon request.
[5] Averages are defined for the whole sample, that is, across states and time.

reward nor punish profligate incumbents.[6] In sum, though the evidence strongly favors the view that voters are fiscal conservative, there are differences between “sophisticated” and “naïve” voters, even in a new democracy like Brazil.

[Table 1 About Here.]

3. Conclusion

This paper tests the recent claim that voters in new democracies reward deficits at the polls by analyzing an important case study, Brazil. We examine all elections for state governor in Brazil since it became a democracy in the late 1980’s and find evidence that voters are fiscal conservatives, i.e., they reward state governor’s that run lower deficits. Re-elected parties ran lower deficits than did their non-re-elected counterparts. Moreover, following a severe process of debt restructuring after 1998, states quickly moved from deficit to surpluses. The result is that the re-election probabilities increased significantly relative to years when deficits were the rule. All these facts run counter to the suggestion in Brender and Drazen (2005b) that voters in new democracies reward deficits.

In addition, we divided the sample of state-years into “high sophistication” and “low sophistication” sub-samples, according to three different criteria, state GDP per capita, state average years of study, and income inequality at state level. States that ranked low in individual education and high on inequality displayed a different electoral behavior: they rewarded surpluses less than the “sophisticated states”. Education stands out as the most important indicator of voter “sophistication”. This second empirical fact does not change the qualitative emphasis in Brender and Drazen (2005a), but suggests an important new direction for research.

There are two avenues for further analysis of the issues under discussion here. The first, derived directly from our results, is to refine the indicators of “voter sophistication”, especially as regards education, to provide additional tests of the relationship between voter sophistication and electoral behavior in response to deficits. The second is to analyze how the changing institutional environment affects voters´ perceptions of fiscal policy as well as voter behavior. We believe both avenues are worth exploring in the near future.

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[6] The impact of fiscal policy on re-election probabilities is given by the sum of the coefficients on the fiscal surplus and the interacted fiscal surplus variables.

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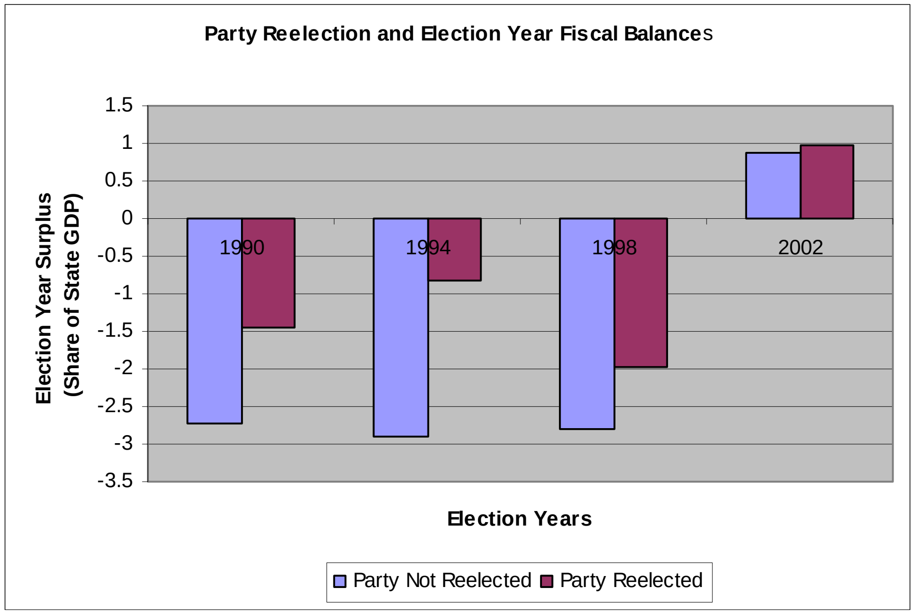
Table 1
REELECTION AND FISCAL POLICY IN BRAZIL - "SOPHISTICATED" VERSUS "UNSOPHISTICATED" VOTERS
Estimation Method: PROBIT

	Dependent Variable: REELECTION OF PARTY COALITION					
	Definition of Fiscal Surplus					
Independent Variables	**Election Year**			**Whole Term**		
Fiscal Surplus	**4.89***	**8.30***	**11.64****	**2.41****	**1.90**	**4.47****
	(1.90)	**(1.85)**	**(2.54)**	**(2.73)**	**(1.25)**	**(2.49)**
Fiscal Surplus * Gini Index ABOVE MEDIAN	**-5.80***			-2.07		
	(-1.78)			(-1.49)		
Fiscal Surplus * State GDP pc BELOW MEDIAN		-7.55			-0.58	
		(-1.58)			(-0.39)	
Fiscal Surplus * Years of Study BELOW MEDIAN			**-11.79****			**-3.87***
			(-2.42)			**(-1.98)**
Observations	103	103	103	103	103	103
Log L	-57.77	-57.76	-56.05	-57.49	-58.38	-56.12
Pseudo R2	0.11	0.11	0.14	0.11	0.10	0.14
Observed P	0.33	0.33	0.33	0.33	0.33	0.33
Predicted P	0.29	0.28	0.25	0.29	0.30	0.28

Note: For each independent variable we report (dF/dx), i.e., the marginal change in the probability of success for the average values of the independent variables. In parentheses we report the t-statistics based on robust, heteroskedastic-consistent standard errors (Huber/White/Sandwich). In addition to the independent variables reported, the specifications also included State GDPpc growth, Discretionary Federal Grants, Constitutional Federal Grants, and the period after Debt Restructuring. * means significant at the 10% level, ** at the 5% level. The variables noted ABOVE MEDIAN and BELOW MEDIAN are indicator variables taking the value 1 whenever the value for the state and year observation is, respectively, above or below the median value in the sample. The median state Gini index is 0.578, median state GDPpc 3.954 and median years of study is 5 years.

Figure 1
Voters as Fiscal Conservatives
Fiscal Policy in Election Years and Re-election



Appendix A - Data Description

Governing Party – a binary variable receiving the value 1 if an incumbent leader (the governor) transfers votes to another candidate from the same party and he/she is elected (zero otherwise). As the law was modified in 1997 and the leader could run for re-election, the leader can be the candidate on the 1998 and 2002 election. The data are retrieved from Tribunal Superior Eleitoral (TSE – www.tse.gov.br) .

Fiscal Surplus is the difference between the Primary Revenue and the Primary Expenditure (excluding both finance revenue and finance expenditure - services). This variable is presented as a percentage of state GDP which is also taken from IPEA (Instituto de Pesquisas Economicas Aplicadas – www.ipeadata.gov.br). .

Fiscal Surplus Election Year is the Fiscal Surplus variable in the election year (1990, 1994, 1998 and 2002)

Fiscal Surplus Term is the accumulated surplus of the Fiscal result on the four-year term in the office.

Federal Grants Discretionary are transfers to define by either lobbying or negotiation from federal government to the states in terms of the current revenue of each state. The data are taken from STN (Secretaria do Tesouro Nacional – www.fazenda.tesouro.gov.br).

Federal Grants Constitutional are transfers to define by law (the distribution of resources is defined by Constitution). This variable is in terms of the current revenue for each state. The data are taken from STN (Secretaria do Tesouro Nacional – www.fazenda.tesouro.gov.br).

State GDPpc is the real (base 2000 =100) per capita GDP for each state, which is taken from IPEA (Instituto de Pesquisas Economicas Aplicadas – www.ipeadata.gov.br).

State GDPpc growth is the rate of growth of ***State GDPpc*** variable.

GINI Index: the degree of inequality of states. The data come from IPEA (Instituto de Pesquisas Economicas Aplicadas – www.ipeadata.gov.br).

Study Years is the number of years studied of people over 25 years old (Instituto de Pesquisas Economicas Aplicadas – www.ipeadata.gov.br).

Appendix B - Descriptive Statistics for the Full Sample (1987-2003)

Variable	*Observations*	*Mean*	*Std. Dev.*	*Minimum*	*Maximum*
Governing Party	454	0.325991	0.469261	0	1
Fiscal Surplus	482	-0.00744	0.029747	-0.32241	0.093616
State GDP pc	483	4.769378	2.603419	1.320272	14.59899
State GDP pc growth	482	0.012872	0.079159	-0.23272	0.420937
Federal Grants Discretionary	477	0.137955	0.134116	0.005162	0.83934
Federal Grants Constitutional	483	0.405721	0.237589	0.004	0.998
Inflation Rate National	486	5.569227	7.518851	0.024873	24.89111
Average Years of Study	400	5.004594	1.265953	2.18727	8.707885
Gini Index	427	0.577032	0.041258	0.425567	0.666481