I. INTRODUCTION

In recent years most developing nations have experienced rapid economic development; however, widespread poverty still persists in most of these countries. In this paper I intend to explore the question of the persistence of poverty and poverty alleviation from a political institutional perspective. The main question explored here is what types of political institutions in developing nations are better able to change policy that affects poverty? While the poverty issue has been the focus of much research, inquiries into the institutional aspect of this question have looked at this issue simply in relation to democratic versus authoritarian institutions as opposed to analyzing the incentives created by the type of political institutions.

We are currently witnessing the so-called “third wave” of democratization (Huntington 1991). While advanced industrialized nations have firmly established democratic institutions, a large number of developing nations are now attempting to democratize. It is, thus, important to analyze how well these newly established institutions are functioning, especially as this pertains to serving those living in poverty who make up a significant percentage of the population in these regions. In most of these nations economic reforms imposed since the 1980s reduced public spending. These reforms, designed to stimulate economic growth, also typically meant a decline in public provisions for the needy. However, not every country reformed at the same speed and even while imposing reforms, some countries were able to maintain social safety nets, and
continued to provide for those citizens who depend on the government for services such as education and health care. The question that presents itself is: under what kind of political institutions did provisions to the poor continue and under what conditions did the governments cut spending on those programs that benefit the poor?

The comparative political institutions literature explores which political systems have the capacity to change policy by comparing parliamentary versus presidential systems or by examining the types of political parties in different countries. The ideological make up of the governments is also explored to explain the direction of these changes. The parliamentary versus presidential system debate concerns itself with which system is better for efficiency or representativeness of governments (Linz 1990, Jones 1995, Shugart and Carey 1992, Weaver and Rockmann 1993). Despite a great deal of study of which system has more capacity to produce policies, there is yet no consensus on this issue. The role of the institutionalization of political parties under these systems is another issue explored in relation to the capacity to make or change policy (Mainwaring and Scully 1995, Niles 1998). The political parties that are inchoate or hegemonic are deemed less able to function in democratic systems than institutionalized political parties. Mainwaring and Scully argue that institutionalized party systems facilitate governability in a democratic system.

All of these arguments regarding political institutions point to different parts of the institutional structure and each tries to explain the incentive mechanisms involved in the policy making capacity of the state; however, none offers a comprehensive picture of the ability of governments to change policy. One model that is able to capture the overall incentive structure of the policy-making capacity of governments is the "veto players" argument developed by Tsebelis
(1995) which focuses on the number of different actors who must consent to policy reform. "A veto player is an individual or collective actor whose agreement . . . is required for a change in policy (310)". The strength of this model is that it enables us to compare policy making capacity in a systematic way even in different institutional settings. For example, presidential or parliamentary systems could have similar policy changing capabilities based on how many veto players they have. The veto players argument also takes into consideration the policy space within which a veto player operates. Thus, the acceptable policy positions for each player are captured in this argument by adding the range of policy space for each player. The veto players argument is discussed in more detail in the second section of this paper.

While the application of the veto player’s model has thus far been limited to the fully developed western democracies, in this paper I apply the veto players argument to the developing nations to analyze the conditions under which poverty alleviating policies will be implemented.

In developing nations health and educational indicators are closely related to the reduction of poverty (De Geyndt 1996, Carvalho and White N.d., World Bank 1993). Since the early 1980s there has been a lot of pressure on the governments of the developing nations to cut down on public spending, such as that on health care and education, however, not every country reacted in the same way to these pressures to cut public spending. As a measure representative of poverty alleviation policy in general, I look at the change in public spending on health\footnote{Education spending has been viewed as human capital development by many economic advisors from the World Bank and other international institutions in the 1990s. Thus, many countries have been advised to focus on primary education to develop a skilled work force. At the same time, public spending on education, especially primary school education, helps reduce poverty. Because, the intention of human capital development is difficult to separate from the intention of poverty reduction when a government decides on education spending policy, I do not use this measure. In this case health care spending represents a better indicator of policy designed specifically to alleviate conditions of poverty.} in order to explore the type of political institutions under which health care spending increased or decreased. Do the
political institutions impact the ability of the governments in LCD's to change spending on health?

My expectations in regard to this question are based on the veto players argument. The main hypothesis proposed here is that the more veto players in a nation the less likely there will be a change in spending on public health. The policy space dimension also indicates the possibility of change. The more left leaning a government's make up, the less likely there will be a decrease in public health spending and vice versa.

In order to test this hypothesis, I created a data set made up of 42 developing nations. I counted the number of veto players in each of these nations in 1990, in addition to determining their policy space (or ideological position). I explored whether a government was left leaning, right leaning, centrist, or, as in some cases, made up of some combination of ideological forces. The alternation of government from the previous regime or government was also considered as an independent variable. The change in spending on public health as a percentage of GDP from 1990 to 1994 was used as the dependent variable. The findings of this test of whether the number of veto players and the policy space influence changes in health care spending in the developing nations are inconclusive. In the final section of this paper I discuss why the analysis did not yield the expected results, taking into consideration the particular model used here and the general applicability of the veto players approach to the political institutions in developing nations.

In the next section of this paper, I review the institutional literature in relation to the veto players approach and what it suggests regarding poverty reduction policies. In the third section I present the data set and the results. The final section is a discussion of why the results of this test might be inconclusive.
II. Political Institutions and Poverty: The Distribution of Public Goods

The institutional literature is organized in two sections in this paper. First is a discussion on why the on-going debate among the institutionalists does not provide a comprehensive framework for studying the effects of political institutions on policy changes by governments. Second, I provide an overview of the veto players argument and discuss how this approach offers a better alternative to previous methods.

The Political Institutions Debate:

There are three institutional variables used by scholars who explore the policy making capacity of governments: 1) regime type: parliamentary versus presidential, 2) the nature of the political parties: institutionalized and stable versus inchoate, fluid and fragmented, and 3) the ideology of the government in charge: left or right.

Regime Type: The debate among the scholars of political institutions over the pros and cons of parliamentary versus presidential systems is on going. According to Shugart and Carey (1992), the arguments in favor of the presidential system focus on accountability, identifiability and the mutual checks, which characterize such systems (44-49). The accountability of one elected representative to the entire electorate makes politics transparent; the electorate can readily identify the president as the person who is responsible for carrying out policies. In addition, the election process is more efficient when the candidates are more identifiable. The legislature has more flexibility in making and passing legislation, because they do not have to rely on a vote of confidence. The role of the assembly and president are clearly delineated, as legislators and the executive respectively make mutual checks possible.
However, the presidential systems have been criticized for having majoritarian tendencies and dual democratic legitimacy (Shugart and Carey 50-2). In regard to the dual democratic legitimacy, the roles of the assembly and the president may conflict possibly leading to policy making gridlock. Majoritarian tendencies occur when the president's party is in control of the assembly as well. This tends to lead to the rubber stamping of legislative proposals by the president and the assembly. In these systems representation tends to be narrow and party oriented.

As a reaction to the fact that many new democracies are adopting the presidential system, Jones (1995) argues that “when the executive lacks a legislative majority or near majority, the dynamics of presidential systems are quite distinct from those of parliamentary systems. Whereas the likely product of a lack of an executive legislative majority or near-majority in parliamentary systems is consensual coalition government, in presidential systems the outcome is more likely to be conflictual divided government” (18). Thus, one could conclude based on these factors that the presidential system could lead to policy stability or to the capacity to change policy easily given different sets of political parties and the legislative-executive make up of the government.

Linz (1990) argues in favor of the parliamentary systems by making the case that parliamentary democracies demonstrate a superior performance historically. The survival of the government depends on a vote of confidence in parliamentary regimes. This does not exist in a presidential system that is based on fixed terms in office. The parliamentary systems are more flexible; they can change in between elections or go to early elections, which is a positive trait when the government is not functioning well. If the presidential governing configuration is not working out well, the voters have to wait for another term to elect a new president with a new
cabinet. Another positive characteristic of the parliamentary systems is the fact that diverse views can be represented in the government or the opposition. In presidential systems the powerful executive gets elected by a plurality, which means that the large number of centrist voters tend to elect the president while leaving out the extreme views (Linz 1990, 51-69). Thus, parliamentary systems tend to be consensual rather than majoritarian and even extreme views are more likely to have some representation. Even though parliamentary systems may be good for representation, this says nothing about the ability to change policy in these systems. Under parliamentary systems there can be extreme policy stability when there are many interests represented in the government, such as in the old Italian system. When there is only one view represented in the government, as in Great Britain, the policies can easily be changed. Thus, there is no guarantee that a diverse number of views will be represented in all parliamentary systems. This mainly depends on the electoral system, whether they use a plurality or proportional representation.

The veto players argument is valuable in that it can easily resolve the conflicting results from the parliamentary versus presidential debate in regard to capacity to change policy. In any given presidential system, there can be one or many veto players and the same is true for the parliamentary systems. While the United Kingdom’s parliamentary system produces one veto player based on the plurality electoral system, the parliamentary system in Germany produces more based on their combination electoral system and bicameral houses and federalism. Similarly, many presidential systems in Latin America tend to create only one veto player, because the president’s party tends to control the house as well. However, some presidential systems, such as those in the United States, Brazil, and Chile, tend to create more veto players on legislation. Thus, a veto players model should be able to catch the differences between the regime types not
by their label as presidential or parliamentary, but by their function based on the incentive structures they create.

**Political Parties:** The regime type has to exist along with political parties which are central to representation in almost all countries with democratic systems and even in some authoritarian regimes. In the literature that deals with the developing nations, political parties have been identified as central to the democratic process (Mainwaring and Scully 1995). Mainwaring and Scully argue that “whether or not an institutionalized party system exists makes a big difference in the functioning of democratic politics. It is difficult to sustain modern mass democracy without an institutionalized party system” (1). They assert that political parties are the only actors with access to elected positions, which makes them the central agents of representation. Because the political parties are central agents of representation, in many developing countries, obtaining access to the state for the citizens generally takes place through the party system. However, the political parties in many developing nations are highly personalistic, and thus not institutionalized (3-4). In their study, Mainwaring and Scully differentiate between institutionalized party systems, inchoate party systems and hegemonic party systems in transition. They argue that an institutionalized party system is more desirable than the other two, because they tend to decrease personalism, help groups express interests, and channel conflict and participation into compromise solutions. The institutionalized parties also enjoy more legitimacy, and thus, are more accountable than the inchoate or hegemonic party systems. They also facilitate governability through linkages between the executive and the legislature, and tend to reduce corruption (Mainwaring and Scully 1995, 21-7).

We can also expect that, due to the established presence of party actors and these linkages
between the executive and the legislature, this kind of a system would facilitate easier policy changes relative to systems in which there are many political parties and little in the way of institutionalization. At this point a related issue, the party discipline, becomes relevant in the literature. While counting veto players, the discipline within the parties must be taken into consideration. If it is expected that parties (the members of the party collectively) behave in a certain way and that the members do not defect, we could count the control of this political party in both the legislature and the executive as one veto player. However, when the political party representatives do not adhere to party discipline and vote their own way, and the president cannot count on representatives of his/her own party to vote along with the agenda set by him/her, then it is appropriate to count the legislature and the executive as two separate veto players. Thus, the veto players model can capture the concerns about the party systems articulated by Mainwaring and Scully.

**Ideology:** A third area that is necessary to explore is the change in policy based on the ideological make up of a government. The possibility of having more or less public spending, or any policy change for that matter, depends on the ideological position of the government. Based on the literature from advanced industrialized nations, the location of a political party on the ideological spectrum matters in a system where power is concentrated. If power is concentrated in a political system and there is a left wing political party or president in charge of the government, we would expect to see more emphasis on social services, education, protecting the underprivileged, labor, and controlling the economy (Klingemann, Hofferbert and Budge 1994). The type of political party, on a left-right spectrum, makes a difference for the type of policies that these parties emphasize according to Klingemann, Hofferbert and Budge. In addition,
“Left’ parties tend to be more steady in their leftist commitment than ‘right’ parties are to their rightist commitments. Rarely do they cross over one another’s issue domains” (267). Thus, in addition to the regime type and type of political parties, a third variable, the ideological make up of the government, is proposed to make a difference in the government’s capacity to make policy.

On the whole, the veto players approach (Tsebelis 1995) is able to capture consistently all the arguments made by the institutions scholars reviewed above. The hypothesis, "as the number of veto players increases in a government, the ability to change or pass new legislation decreases", captures the conflict between the parliamentary versus presidential debate as well as the question of the institutionalization of the political parties. The ideological aspects of the debate is captured by the counting of the veto players and considering their issue positions when creating the data set pertaining to this variable. In the next section, I describe the "veto players" argument and relate to the model proposed in this paper.

**Veto Players:**

The veto players argument is about "the capacity to produce policy change" by governments in different political systems. Tsebelis (1999) defines veto players as "individuals or collective decision makers whose agreement is required for the change of the status quo" (1). The players can be institutional, such as presidents or chambers, or they can be partisan such as political parties. In this study, the use of the veto players approach is appropriate, because it is very difficult to argue for a parliamentary system over a presidential system when in fact their capacity to change spending on public health may be equivalent. Similarly, the number or the type of political parties and their ideological make up can be taken into account in a veto players model
together with the regime type. Thus, in this section I define the veto players argument as it pertains to the main hypothesis of this paper: that political institutions affect the ability to make changes in the public spending on poverty programs.

Tsebelis (1995, 297-301) proposed three hypotheses that together constitute the veto players model:

- As the number of veto players increases in a government, policy stability increases;
- When the veto players are more incongruent, we expect to see less policy stability, and;
- The more internally coherent the veto players, the more political stability we expect.

Policy stability, here, means that there is no change in the status quo. In this setting, while counting the number of veto players, there are certain details that should be considered. The veto players need to have constitutional powers to stop legislation. The congruence of veto players refers to the policy positions (preferences) of the different veto players and the distance between the veto players' preferences. The likelihood of changing the status quo on social welfare issues under a coalition government that contains a right wing and a left wing political party is less than it is under a coalition government that contains two political parties in a similar location on the ideological spectrum². This is given that they prefer change to the status quo.

"Cohesion refers to the difference of positions within a party before a discussion and a vote take place inside the party. Party discipline refers to the ability of a party to control the votes of its members inside parliament (Tsebelis 1995, 311)". For example, single member districts are more personalistic, thus more cohesive than proportional representation which has more discipline and less cohesiveness. Therefore, according to this definition, this factor takes into consideration

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² It is possible to have two parties one from the right and one from the left to be closer in policy space than for example an extreme left party and a center left party.
the cohesiveness of the issue positions of individual decision-makers within a veto player and "the individual players are merely a special case of collective players" (301). When the veto player is a political party, the ability of the party to make a unified decision and maintain discipline within the party decreases policy stability. This is because the veto player, in this case, the political party, can take decisive action on bills to change policy in unity rather than have internal defectors, of course only if the party prefers change to the status quo.

Another variable that is considered is the alternation of the government. Tsebelis (1999) proposes that "government duration and alternation of parties have a positive effect on the number of significant laws" (7) in European parliamentary systems. The longer a government is in place the more laws that they can pass. In addition, if there is a change in government make up, the likelihood of change in policy increases.

In compiling the following data set and setting up the veto players model, I take into consideration the above stated proposals.

Data

Dependent Variable: Public Spending on Health Care

The dependent variable in this study is the change in the percentage of gross domestic product (GDP) spent on public health from the year 1990 to 1994. The case selection for the study was based on data availability for the dependent variable. For many countries in the developing world, it is difficult to obtain data pertaining to public spending in any given year. Based on the World Bank statistics 1998 CD-ROM version, I used all those developing countries
that had information for 1990 and 1994.³

In measuring the dependent variable, I assume that the status quo is the reversion point of a policy. Bawn (1998) remarks that "the [veto players model] differs from other full responsiveness models⁴ in its emphasis on the reversion point, that is, the policy that obtains if any veto is exercised . . . In many cases . . . the reversion point is the status quo, and the model predicts that policy changes occur only when there exists a new policy that no veto player regards as worse than the status quo" (emphasis original, 4). According to the institutions literature, "[b]udgeting is incremental. The largest determining factor of the size and content of this year's budget is last year's budget" (Wildavsky 1964, 15). Expectations are that the public spending on a national budget item be as much as the previous year and deviations from that could be considered a change in status quo. This measure is controlled for the economic performance (GDP per capita) and the amount of money spent on health care originally.

Among the 159 countries that are classified as low, middle and upper middle income by the World Bank, public health expenditure declined from 3.04 percent of the GDP to 2.94 percent of the GDP from 1990 to 1994, with a standard deviation of 1.25. Meanwhile, the GDP of these nations was growing an average of 1.12 percent per year between 1990 and 1994 (calculated from the World Tables 1998, CD-ROM version). Thus, there is an average decline in the area of public spending that is generally considered to be helpful to reducing poverty among the developing nations. This average decline is consistent with our expectations that with the

³ I wanted to use the latest years available to be able to create a veto players measure for the independent variable that had the most variation. Many developing nations were under authoritarian rule in the 1980s and under authoritarian rule there is generally only one veto player. I wanted to use mostly democratic regimes for this study for the possibility of having more variation on the independent variable. While there are several authoritarian regimes among the 42 countries used for this study, this number would have increased tremendously had I counted the veto players dating back to 1980s.
pressures from the World Bank and the IMF, many developing nations started to curtail their public spending. But, there is variation in the decline in spending. While, the average decline is 0.125 percent between 1990 and 1994, the standard deviation of 1.25 indicates that not every country was lowering their public spending. I hypothesize that it is the political institutions in these countries that can explain this variation in change in public spending on health.

*Independent Variables:*

Given the three propositions included in the veto players hypothesis, three independent variables in this study are created to quantify the number of veto players, the ideology of the government in charge, and the alternation of the government. I take into consideration all three dimensions of the veto players argument when compiling data on the 42 countries included in this study. Tsebelis (1999) provides a good example of how to count veto players for a cross-sectional empirical analysis. In analyzing the production of significant labor laws in Europe, he does a comparative study of different parliamentary systems and looks at how the number of veto players in those systems affect the status quo consistent with the veto players theory that he developed. He finds that the number of veto players in a government significantly affects the number of laws passed in that country. He also finds that as the range of a coalition (the number of political parties in a coalition) increases, the number of laws passed decreases. "Government duration and alternation of parties have a positive effect on the number of significant laws" (Tsebelis 1999, 7). Tsebelis (1999) uses a host of pre-existing indices in quantifying the veto players, their duration, alternation and policy space.

In the developing nations, since there has not been any previous studies done on this topic,

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4 She refers to models that are based on spatial preferences as "full responsiveness" models, "reflecting their shared assumption that policy-oriented politicians fully respond to their strategic environment" (3).
I had to create a data set. Keeping within the spirit of the Tsebelis study, I created three variables to capture the essence of the veto players approach. One is the number of veto players in a government, the second one is the ideological make up the government, and the third one is the alternation of the parties\(^5\). The variables were created in the following way: 1) the form of government in 1990 for all the countries was obtained from the CIA World Factbook. In most of the 42 countries the governments were elected in 1989 or 1990. 2) The veto players and ideological make up of the government were quantified by using several references pertaining to the governments, political parties and historical information on the developing nations in different regions (Ameringer 1992; Fukio 1985; Legum 1992; Leifer 1995). \(^6\)

Following the logic of the veto players hypotheses, I counted the veto players in these countries considering the decision making capacity of each veto player and their cohesiveness. For example, in countries where there was a president, an upper house and a lower house that had veto powers (which many Latin American countries do), they would count as 3 veto players, if all the houses were controlled by a different political party or the same political party with weak party discipline. Accordingly, I counted Colombia as three veto players even though the house, the senate and the presidency were all controlled by the Liberal party. This number took into consideration that there is weak party discipline in Colombia, and that the political parties do not

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\(^5\) The measurements created here are a first cut in quantifying the veto players in the developing world. A lot of work remains to be done in this area in the new democracies. There needs to be more refined variables created in the future with more detailed information about each country. In this study I begin in this process with plans to expand it in the future.

\(^6\) For each government, I first examined what kind of institutions they had (parliamentary or presidential with how many houses that have veto power). Then, I determined the make up of the government in charge, i.e., there is a president from Party A and the two houses are controlled by the same party. Following this, I explored whether there is party discipline in this country in order to finally determine the number of veto players. In order to create the ideology variable, I researched each of the political parties in charge and their positions using reference materials. For the alternation variable, I checked to see if the previous government was the same government or whether it had changed according to the CIA World Factbook.
behave based upon one party goal, as cohesive partners. Also, in Chile the president and the chamber of deputies were from different political parties. The coalition of political parties in the Chamber of Deputies was made up of 3 separate parties and the senate was controlled by the same coalition. Thus, in Chile there were three veto players in 1990. However, in Costa Rica, based on the disciplined party system, I counted the president and the unicameral house as 1 veto player, because the same party controlled both the presidency and the house. Each of the 42 countries was counted consistently based upon these principles. The number of veto players ranged from a high of 4 to a low of 1. The average number of veto players was 1.7 among the countries included in this study in 1990. A copy of the data set created is included in Appendix A.

A second variable was developed in order to capture the ideological make up of the governments. This variable was coded 1 if the government was made up of a left leaning political party (or parties), -1 if it was made up of a right leaning political party (or parties), and 0 if the government was made up of a centrist political party or if a combination of ideological views were represented in the government with veto powers. By this I mean that in the case of a government in which the lower house was controlled by a left leaning party and the upper house had a right party majority, the government would be coded as zero on the ideological scale. As well, when the governments in parliamentary systems had two parties in a coalition, one from the left and one from the right, I coded this as a 0. Governments under centrist political parties, such as the PRI, were also coded 0.

The alternation variable is a measure that takes the value of 0 if the government has not changed from the previous regime and 1 if it has. Many countries experienced a switch from an authoritarian regime to a democracy with a competitively elected government. Others had a
change in regime from left to right or right to left governments. In either case, these countries were coded as 1. Many had the same political party win elections or the same authoritarian regime in charge throughout the time periods under consideration, and were thus coded as zero.

**Analysis**

I start the analysis of the hypothesis presented in this paper by exploring the relationship between the independent and dependent variables through a simple bivariate regression.

**Hypothesis I**: As the number of veto players increases, the amount of change in public health expenditure decreases. In order to test this hypothesis, I took the absolute value of the change value for public health expenditure. The veto players theory assumes that as the number of the veto players increases, any change from the status quo should be more difficult. The simple bivariate regression produce results in the anticipated direction, however, they are not of a level of significance to accept the hypothesis with confidence.

\[
\text{Absolute Value Change in Public Expenditure (} \% \text{GDP})_{1994-1990} = 0.70 - 0.09 \text{ (# of Veto Players)}
\]

\[
\begin{array}{c|c|c}
\text{t-value} & -0.09 & -1.05 \\
\text{Sig} & (0.00) & (0.303) \\
\end{array}
\]

\[ R^2 = 0.02 \]

As can be seen from the equation and Figure I\(^7\), as the number of veto players increases by one, the absolute value of the change in public expenditure decreases by 0.09 percentage points, however, this value is not statistically significant.

**Hypothesis II**: As the government make up becomes more liberal, the health expenditures increase, and as it becomes more conservative, this number decreases. For this bivariate regression, I use the actual values of the dependent variable.

\(^7\) Figure I raises the question of whether the data have problems with heteroskedasticity. However, a white's test was performed and this test revealed no evidence of heteroskedasticity.
Change in Public Expenditure (%GDP)_{1994-1990} = \mathbf{0.02} + \mathbf{0.33} \text{ (Ideology)}
\begin{align*}
t\text{-value} & \quad (0.16) \quad (2.03) \\
Sig & \quad (0.88) \quad (0.05)
\end{align*}
R^2=0.1

Among the left leaning governments, we anticipate the change in expenditure to increase by 0.33 percentage points more than among the moderate or mixed governments. Among the moderate or mixed governments, we would anticipate the expenditures to remain the same, and among the conservative governments we anticipated the expenditures to decrease by 0.33 percentage points on average. This finding yields statistically significant results at the 0.05 level (See Figure II\(^8\)).

**Hypothesis III:** If there is an alternation of government, we expect the likelihood of change to go up. For this bivariate regression I use the alternation of the government variable which is assigned a 1 if the government making the decisions in 1990 (generally elected in the 1989 or 1990 elections) was different than the regime previously elected or in charge. If the government did not change, this nation was assigned a score of 0. The dependent variable is the absolute value of the change in public health expenditures.

\[
\text{Change in Public Expenditure (%GDP)_{1994-1990} = 0.43 + 0.227 (Alternation)}
\begin{align*}
t\text{-value} & \quad (3.48) \quad (1.26) \\
Sig & \quad (0.001) \quad (0.22)
\end{align*}
R^2=0.04

This relationship yields insignificant results (See Figure III). The null-results maybe a result of the crudeness of the independent variable.

A more detailed alternation variable should take into consideration the direction of the government change and the distance between the different political parties that replace each other.

For example when a dictatorship is replaced by a democratically elected political party, we need

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\(^{8}\) Figure II also raises the question of whether the data have problems with heteroskedasticity. However, a white's test was performed and this test revealed no evidence of heteroskedasticity.
to know the policy stance of the dictator in order to define the direction of our alternation variable. As well, this value might be different when a center right party replaces a centrist party as opposed to a center right party replacing a party on the left. In the first case we would expect the change to be much less than the change potential of the second one. However, the measure created here as a first directional measure cannot capture these nuances.

**Encompassing Model**

In this section, I set up a larger veto players model with control variables taking into consideration the effects of the number of veto players and the ideology variables together in one regression model. However, in order to do this I have to set up a regression model where: 1) the absolute value of the change variable is taken into consideration when the number of veto players and alternation of government are being examined, and 2) the actual value of the change variable is taken into consideration when the ideology variable is being examined. The model (I) is:

\[
\text{Public Health Expenditure (\%GDP)} = \beta_1 + \beta_2 \text{(Veto Players} \times \beta_1) + \beta_3 \text{Ideology} + \beta_4 \text{Alternation} \times \beta_1 + \beta_5 \text{1990 Health Expenditure (\% GDP)} + \beta_6 \text{GDP Per Capita.}
\]

Where \( \beta_1 = 1 - 2 \times (\text{Public Health Expenditure < 0}) \), or \( \beta_1 = 1 \) if \( \text{Public Health Expenditure \geq 0} \), and \( \beta_1 = -1 \) if \( \text{Public Health Expenditure < 0} \).

The results of the model are reported in Table I. The results show that there is no conclusive evidence that the number of veto players and ideology have an impact on the change of the public health expenditures, however, the alternation of the government indicates statistical significance. When the government changes from the previous administration, the public health spending is anticipated to change by 0.47 percentage points. This number seems small, however, considering the average absolute change is 0.66 percent from 1990 to 1994, a 0.47 percentage point
represents a significant difference. The control variables are making changes in the correct
direction as well. As the percentage of GDP spent on public health in 1990 increases the amount
of change in spending decreases. Also, the richer the country the more increase there is in
spending on public health.

However, the model (1) has problems with heteroskedasticity. Since none of the
variables individually demonstrated a problem with heteroskedasticity, I ran a WLS analysis using
the square root of one over the expected values from the regression. The results, reported in
Table I: model (2), show no change. The two main independent variables, the number of veto
players and the ideology of the government in charge, are still insignificant. However, the WLS
analysis corrects for the direction of the ideology variable. In the OLS regression, according to
the hypothesis, the ideology variable should have been positively related to the dependent
variable. However, the OLS results were that the ideology variable was negatively related to the
change in public health spending. Under the WLS analysis, the ideology variable is positive, but
still insignificant. Questioning whether authoritarian and democratic systems make a difference,

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9 Belize and Uruguay were extreme outliers based on leverage measures, cook's distance, and the studentized residuals. They were excluded from this model.
### TABLE I
Dependent Variable:
Change in Health Expenditures as a Percentage of GDP (1994-1990)

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model (1)*</th>
<th>Model (2)*</th>
<th>Model (3)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dchange</td>
<td>0.343</td>
<td>0.38</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>2.43 (0.02)</td>
<td>3.01 (0.005)</td>
<td>1.14 (0.17)</td>
</tr>
<tr>
<td># Veto Players*dchange</td>
<td>-0.1</td>
<td>-0.09</td>
<td>-0.114</td>
</tr>
<tr>
<td></td>
<td>-1.45 (0.15)</td>
<td>-1.4 (0.18)</td>
<td>-0.609 (0.54)</td>
</tr>
<tr>
<td>Ideology</td>
<td>-0.006</td>
<td>0.01</td>
<td>-0.143</td>
</tr>
<tr>
<td></td>
<td>-0.07 (0.94)</td>
<td>0.1 (0.92)</td>
<td>-0.46 (0.64)</td>
</tr>
<tr>
<td>Alternation*dchange</td>
<td>0.47</td>
<td>0.41</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>3.06 (0.04)</td>
<td>2.6 (0.14)</td>
<td>0.61 (0.53)</td>
</tr>
<tr>
<td>1990 Health Expenditure</td>
<td>-.208</td>
<td>-0.15</td>
<td>-0.28</td>
</tr>
<tr>
<td></td>
<td>-5.16 (.000)</td>
<td>-3.4 (.001)</td>
<td>-2.6 (0.01)</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>0.00015</td>
<td>0.0001</td>
<td>0.00017</td>
</tr>
<tr>
<td></td>
<td>5.12 (.000)</td>
<td>3.6 (.001)</td>
<td>2.1 (0.04)</td>
</tr>
<tr>
<td></td>
<td>R²=.77</td>
<td>R²=.68</td>
<td>R²=.54</td>
</tr>
<tr>
<td></td>
<td>Adj R²=.73</td>
<td>Adj R²=.62</td>
<td>Adj R²=.42</td>
</tr>
</tbody>
</table>

*The values reported are the unstandardized coefficients, followed by the t-value and significance of the t-value in parenthesis.
Model (2) WLS with \( w = \sqrt{1/\text{expected value from Model (1)}}\), Model (3) is among the democratic regimes only.

The data set was divided into two groups: the authoritarian and democratic regimes. Model 3 reports the values of coefficients among the democratic regimes. Again, this did not make a difference

 Interaction effects between the independent variables did not provide significant results. The possible regional effects were considered for Latin America, Africa and Asia as dummy variables and these were also insignificant.

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10 Interaction effects between the independent variables did not provide significant results. The possible regional effects were considered for Latin America, Africa and Asia as dummy variables and these were also insignificant.
Discussion

As indicated before, this study is a first attempt at quantifying the variables necessary for a veto players analysis of budgetary issues in the developing nations. While much progress was made through the work that went into compiling the disparate data on developing nations necessary for this type of analysis, the null findings raise serious questions. Numerous attempts to rectify the results with the veto players hypothesis by refining the measures and building on the original model proved fruitless in the end. There are several possible explanations for the null-results generated by this study. In this section, I raise three issues that may explain why the veto players model developed above produced null-results. The issues discussed here are all related to the set up of the model. These will be used for future improvement of this study and can serve as a basis for other scholars interested in expanding the use of the veto players approach.

The first issue to consider is the measurement of the dependent variable. Here the issue is the fact that the dependent variable is based on one time point: change from 1990 to 1994. This may yield misleading conclusions. The second potential problem is the measurement of the independent variable, specifically in reference to the number of veto players and the lack of variation in this variable. The third issue is the (in)stability of the political institutions in many of the countries included in this study. I discuss each of these in more detail.

The dependent variable in this model takes into consideration the change from 1990 to 1994 for the public health expenditures in each nation. The change from 1990 to 1994 could be capturing something special about those two years for any given country that the model may be incapable of explaining. If the data dated back several years and if it could capture the general pattern in the fluctuations in spending over time along with the number of veto players, the model
would have better demonstrated the relationship between the veto players and change in public spending on poverty programs. A change over time and cross nationally could indicate the trend within a country as well as across nations. However, including such data would not be possible, as data dating back to the 1980s is scarce for many developing nations.

Another problem is evident when the changing nature of each government is taken into consideration. The number of veto players were counted for the year 1990, but when a president is impeached in the middle of his/her term or a government falls and is replaced by a new one between 1990 and 1994, this data set can not capture the changes made by this new government. Thus, the counting of veto players also needs to be refined for specific governments and more data points need to be obtained for the dependent variable in order to see changes immediately after a government takes office. The difficulty in finding data consistently for the developing world limits our ability to improve on this analysis.

There is a further limitation temporally on our dependent variable. As we go back in time, many of the developing nations that are now democratic and have several veto players were under authoritarian rule up until recently. Thus, the use of data prior to 1990 greatly limits the variation in our independent variable.

This point leads into the second reason why the results in this study may not be significant. In 62 percent of the sampled developing nations, the independent variable score indicating the number of veto players was “1”. The fact that we have so few observations with variation in the dependent variable creates a problem in producing significant results. The observation that among the developing countries there are many with a single veto player is an interesting one in itself, since among the western democratic nations there are so few with only one veto player.
Among the 17 countries included in the Tsebelis (1999) study, the average number of veto players was 2.2. There were only two countries with only one veto player: Great Britain and Greece. Thus, a great majority of the western democracies have more than one veto player. Among the 42 countries included in this study, the average number of veto players was 1.7 and over half had just one veto player.

The second observation relates to the third and final potential problem area. The third problem is the possibility that the veto players measurement for the countries that I have surveyed for this study does not capture all the veto players present in these countries. Many of the countries that I have included in the analysis are not consolidated democracies in which only legally ordained actors have power over government policy making.

There are many developing nations with strong militaries that have credible threats over the policy making capacity of governments. While many of these militaries do not have constitutional veto powers over public policy, they may have clear policy interests, which they make known to the government. Thus, strictly counting the veto players with constitutional power does not capture the informal veto players that exist in unconsolidated democracies.

The role of a mobilized public must also be taken into consideration. Some of the countries included in the sample were authoritarian countries where we would anticipate accountability to no one but the regime itself. But, this assumption could be highly misleading. Under many authoritarian and semi-authoritarian regimes the public has no way to create change, but through the overthrow of the regime. The authoritarian regimes use several tactics ranging from repression to patronage in order to stop opposition powers. But, if a regime is feeling pressure from the poor societal groups not to cut spending on public goods, they may actually
abide by this demand in order to keep their posts. An example of this is Indonesia where
President Suharto came under extreme public pressure not to cut aid to the poor. When he did
not abide by this demand, the public used its veto power to remove him from office through social
movement pressure and public unrest in which the people demanded more democratic institutions.
The public in this case did not have an official capacity to demand change, but they were able to
use their unofficial veto power to enact it nonetheless.

These kinds of extra-institutional veto powers exist more commonly in the developing
countries than in the highly institutionalized democracies of Europe. Thus, a veto players
argument that depends strictly on the de jure political institutions in the developing nations may
not be as useful. The null-results in this study could be overcome through more in depth analysis
of the developing nations’ political institutions. A cross national analysis might be missing the
important nuances in these countries’ institutional structure. Many of the unconsolidated
democracies, semi-authoritarian and authoritarian regimes still depend on informal structures to
run their political institutions. The veto players model built in this cross sectional analysis
depends on the formal constitutional veto power only, which falls short in exploring the
differences in each nations’ true institutional veto structures, one that depends on informal power.

Conclusion

The veto players model is a useful tool for understanding policy change in regard to
institutional structures. It has proven very effective in the European case. However, certain
institutional structures and the lack of data create difficulties in applying this model to the
developing world. In this paper, through a veto players set up, I attempted to answer the
question: under what kind of political institutions did provisions to the poor continue and under what conditions did the governments change spending on those programs that benefit the poor in the developing nations between 1990 and 1994? The evidence from the model set up in this paper is *inconclusive*. Future research on the developing world using this approach will require more in depth data on the specific characteristics of the governments under consideration and more attention to the particular conditions in each nation. Despite the inconclusive results, this study takes the first step towards expanding the use of the veto players model and effectively demonstrates some of the difficulties that can be anticipated in future research on the developing world. Data availability and the highly institutionalized democratic structures of the developed world allow for ready and effective application of the veto players model. However, given the lack of data, the newly formed political institutions and the potential presence of extra-institutional veto players, the application of the veto players model in the context of the developing nations requires a more refined analysis.
### Appendix A

<table>
<thead>
<tr>
<th>Country Name</th>
<th>Change in Expenditure (94-90)</th>
<th>Veto Player 90</th>
<th>Ideology 90</th>
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<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td>1.05</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Argentina</td>
<td>-0.07</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Bahamas, The</td>
<td>-0.03</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Barbados</td>
<td>1.31</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Belize</td>
<td>3.52</td>
<td>1</td>
<td>0</td>
</tr>
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<td>Bolivia</td>
<td>1.07</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Brazil</td>
<td>-0.29</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.07</td>
<td>1</td>
<td>-1</td>
</tr>
<tr>
<td>Chile</td>
<td>-0.55</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.03</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>-1.22</td>
<td>1</td>
<td>0</td>
</tr>
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<td>Dominican Republic</td>
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<td>2</td>
<td>-1</td>
</tr>
<tr>
<td>Ecuador</td>
<td>-0.31</td>
<td>2</td>
<td>-1</td>
</tr>
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<td>El Salvador</td>
<td>-0.47</td>
<td>2</td>
<td>0</td>
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<td>Ghana</td>
<td>-0.42</td>
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<td>0</td>
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<td>-1</td>
</tr>
<tr>
<td>Guinea</td>
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<td>-1</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>-0.02</td>
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<td>-1</td>
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<td>-1</td>
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<td>-1</td>
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<td>Senegal</td>
<td>-0.37</td>
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<td>-1</td>
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<td>Zambia</td>
<td>-0.79</td>
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Bibliography


FIGURE I
THE ABSOLUTE CHANGE IN THE PUBLIC HEALTH EXPENDITURE WITH THE NUMBER OF VETO PLAYERS
FIGURE II
THE IDEOLOGY OF THE GOVERNMENT WITH THE CHANGE IN PUBLIC HEALTH EXPENDITURES
FIGURE III
THE ALTERNATION OF GOVERNMENT
WITH ABSOLUTE CHANGE IN SPENDING ON PUBLIC HEALTH