

**Economic Voting in the Netherlands:
Voter Behavior in a Multiparty Democracy**

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Abstract

Economic voting has been studied extensively in American politics and other two-party democracies, with the general finding that the ruling party sees electoral gains when the economy is performing well and losses when the economy is performing poorly. However, studies of multiparty systems are generally less conclusive and treat the ruling coalition as a homogenous unit – but is it correct to think the voters reward or punish all governing parties equally? In this paper, I examine voter behavior in the Netherlands from 1971-2012.

Considering both electoral returns and individual vote choice, I find evidence that changes in the national unemployment rate and gross domestic product impact the electoral fortunes of the party of the incumbent Prime Minister to a greater degree than the other coalition partners.

Introduction

Economic voting has been a part of seemingly every American presidential campaign over the past half-century. In 1960 John F. Kennedy promised to “get America moving again,”¹ while two decades later Ronald Reagan focused on the perceived economic failings of the Carter administration (Skinner et al, 2008). Perhaps most famously, Bill Clinton and his 1992 campaign team parsed this relationship into the now oft-repeated cliché, “It’s the economy stupid.”² More recently, the 2012 presidential election in the United States saw both campaigns and the media devote a considerable amount of time and attention to the national unemployment rate, often focused on the eight percent cut-off.³

Within the more formal framework, the relationship between economic conditions and the electoral fortunes of the incumbent party has been studied extensively in numerous contexts within American politics. This analysis has also moved into other electoral systems, most notably Germany, France, and the United Kingdom. Similar to the American example, the political systems in these countries are dominated by two parties.

In these instances when voters are limited to two choices, one can easily reward the incumbent party when the economy is performing well, and turn to the opposition during economic downturns. Various measures of economic performance, such as change in gross domestic product or the unemployment rate, usually show robust effects on the vote share received by the incumbents in these cases. But how might these relationships apply to a multiparty democracy, where executive responsibility is divided among a coalition of partners? The current literature in this area is less conclusive.

¹ <http://www.whitehouse.gov/about/presidents/johnfkennedy>

² <http://www.nytimes.com/1992/10/31/us/1992-campaign-democrats-clinton-bush-compete-be-champion-change-democrat-fights.html>

³ <http://abcnews.go.com/blogs/politics/2012/01/unemployment-rate-key-to-2012-election/>

This paper will examine economic voting in the Netherlands. The Dutch situation offers a political and electoral model that is much different from the two-party system so widely studied. The Dutch parliament⁴ does not employ the single member district set-up that Duverger (1979) notes is generally conducive to the evolution of a two-party system. Rather, all one hundred and fifty members of the parliament are elected from one national district, with seats allocated to each political party in proportion to their share of the national vote. Unlike other proportional systems, there is no artificial electoral threshold a competing party must surpass in order to gain representation in parliament. Effectually a party need only gain two-thirds of one percent of all votes cast in order to enter the legislature.⁵ The second chamber of the Dutch parliament is described as one of the most proportional elected bodies in the world (Taagerpera & Shugart, 1989).

Since the end of World War II, no fewer than seven parties have held seats in the Dutch parliament. In the most recent election held in September 2012, a total of eleven parties won representation to the legislature.⁶ In no case has any one party come close to winning a majority of the seats; multiparty governing coalitions that share ministerial responsibility have long been the norm in the Netherlands.⁷

The main problem with many studies of economic voting in multiparty democracies is that they attempt to draw a direct extension from the American and other bipartisan examples, and treat the incumbent ruling coalition as one single cohesive and homogenous unit. In reality, executive responsibility within Dutch cabinets is divided among different actors with different

⁴ The first chamber of the Dutch parliament is a largely ceremonial body, in some ways similar to the British House of Lords. Throughout this paper, “parliament” will refer exclusively to the second chamber.

⁵ See Andeweg & Irwin (2009) for a more thorough English language introduction to Dutch elections and politics.

⁶ <http://www.bbc.co.uk/news/world-europe-19566165>

⁷ The University of Leiden’s parliamentary documentation center provides a full history of all Dutch governments since the post-WWI era; see <http://www.parlement.com/>.

magnitudes and areas of influence. The rest of this paper will focus on determining which of the government parties Dutch voters hold responsible for the state of the national economy - is responsibility assigned equally across all coalition partners, or do voters hone their focus?

The analysis will study the effect of economic indicators on the vote share received by the government coalition, considering the party of the sitting Prime Minister and the other government partners separately. As the Prime Minister is considered the leader of the government coalition, I expect that voters will reward their party when the economy is performing well and punish them when the economy is performing poorly to a greater extent than the other parties within the coalition.

I use macroeconomic data from the Dutch Central Bank, contextual controls from the Dutch Parliamentary Documentation Project, and electoral results from the Dutch National Election Board to analyze how changes in inflation, unemployment, and gross domestic product per capita effect the change in vote share realized by the coalition partners. I then use survey data from the Dutch Parliamentary Election Studies to determine how these economic indicators impact vote choice at the individual-level. I find evidence that voters do not reward or punish the incumbent government partners for changes in economic conditions equally, but rather focus on the party of the Prime Minister over the other supporting parties.

The rest of this paper is divided into five parts. Part 1 provides a brief review of the literature on economic voting, considers the specific case of the Netherlands, and places this research within the context of both. Part 2 goes through the operationalization of the dependent, control, and explanatory variables within both the macroeconomic and survey analyses. Part 3 breaks down the methodology and expectations behind the models used in analysis. Part 4

provides results and interpretations from both the objective and subjective models. Part 5 addresses possible extensions and provides final concluding thoughts.

1. Literature Review

1.1 American Tradition and Extensions to Other Systems

The study of economic voting dates back over half a century. In his seminal work *The Responsible Electorate*, Key (1968) first posited the reward-punishment hypothesis of voting behavior. Simply stated, an incumbent government is “rewarded” and experiences electoral gains when the economy is performing strongly. Conversely, the current government is “punished” by the electorate and loses votes during economic downswings.

Key’s general hypothesis has been applied extensively to the American experience. Among the more influential works, Tufte (1975) takes the case of midterm elections and finds that there is a strong correlation between the magnitude of loss experienced by the president’s party and the annual change in real disposable per-capita income. Similar results are found in Kramer’s (1971) analysis of on- and off-year congressional elections, where he uses unemployment and inflation as explanatory variables. Using survey data, Fiorina (1978), Kiewiet (1983), and Lewis-Beck (1988) find a similar relationship between individual perceptions of current economic conditions and respondent vote choice.

Recent work has shifted from historical analysis to attempting to predict the winner of the presidential election, most notably including Abramowitz (2012) and Hibbs (2012) among numerous others. Altogether, numerous studies illustrate a strong relationship between the state of the economy and electoral results in the United States.

Along with American elections, economic retrospective voting holds well for elections in other two party systems such as France, Germany, and the United Kingdom (Nannestad & Paldam, 1994). In these countries, (de facto) two party politics allow the electorate to more easily assign responsibility for economic conditions and provides them with a clear cut decision between the old and new guard. However, Lewis-Beck (1988) notes that support for the reward-punishment hypothesis generally becomes weaker for coalition governments (including the Netherlands), as economic responsibility becomes harder to definitively allocate among multiple parties.

Addressing the inconsistent effect of economic voting in a cross-national context, Powell & Whitten (1993) argue that a number of political contextual controls are necessary to more fully understand the nature of economic voting in multiparty democracies. Among others, a “political responsibility” control is added to their model. Operationalized as the number of parties within the government coalition, political responsibility should be harder to allocate among larger coalitions, where it may be less clear to voters which parties are responsible for the state of the national economy. Indeed, the authors find evidence that an increase in the number of government parties is associated with a decrease in vote loss among the coalition.

Numerous other studies borrow from the Powell & Whitten model and add other contextual controls. Anderson (2000) uses the “effective number of parties” calculation from Laakso and Taguepera (1978) as a way of identifying how many alternatives are available to the voter. As the effective number of parties increases, it becomes less clear what alternate new government would replace the incumbent one. Voters should then be less likely to desert the incumbent coalition when the effective number of parties is greater, thereby attenuating the

effects of economic performance. Anderson concludes that the economic effects are larger when the number of effective parties is smaller.

Nadeau et al (2002) include a government duration term to their model under the presumption that longer serving governments have had more time to enact their preferred policies, and hence have a higher degree of economic responsibility. The number of parliamentary seats the coalition partners hold is also controlled for, with a larger number of seats being associated with greater legislative control, and thus greater economic responsibility. These factors have their expected relationship with vote choice.

Finally, Bellucci (2010) adds a control for military deployment as one of the more salient issues that would draw voter attention away from the state of the national economy. It is not clear what the effect of military deployment should be, as it may induce a “rally around the flag” effect in the short term, or depress vote share as the effort drags on longer than anticipated. Bellucci finds a positive effect of military deployment on government approval.

While these controls help to explain the variation in electoral outcomes in relation to the state of the national economy, the analysis is still often confined to support for the government as an entire aggregate. This presumes that support is constant across coalition partners, and does not attempt to parse out the degree to which voters hold different government parties economically responsible at the ballot box. A few studies look specifically at the performance of the Prime Minister compared to the government as a whole (Anderson, 2000; Chappell & Veiga, 2003; Duch & Stevenson, 2005) but these studies include numerous countries and provide mixed results. The specific case of the Netherlands considered in this paper should help to parse out the nature of economic voting in an extremely proportional system, which may then help to make generalizations of multiparty governments more consistent.

1.2 Applications to the Netherlands

While economic voting studies in general have a vast literature, work regarding the Netherlands has been fairly limited. The reason for this is rather simple and straightforward: up until approximately twenty-five years ago elections in the Netherlands were quite predictable. The culture of the Netherlands was strictly structured, and it was very easy to predict which party one would vote for based upon their religion and social class. This phenomenon was known as pillarization and lasted well through the first half of the 20th century. Winning an election was less about courting voters to a party and more focused on simply making sure “your” people from “your” societal pillar showed up on the day of the parliamentary election (Andeweg and Irwin, 2009).

The hold of pillarization began to wane in the late 1960s, and the hold of the various subcultures on the voting population began to decline as well; the Dutch electoral system also became much more open and competitive during this time (Andeweg and Irwin, 2009). Voters no longer strictly adhered to whatever social pillar they belonged to, which introduced a new set of criteria on which to determine what political party to support, including the state of the national economy (Irwin and Van Holsteyn, 1989). Still, it was not until fairly recently that the “sample size” of Dutch elections of the de-pillarized electorate has been large enough to study formally.

Van Praag (1987) and Van Holsteyn and Irwin (1988) point to the 1986 parliamentary election as one of the clearest examples of economic voting in the Netherlands. The government under Prime Minister Ruud Lubbers had worked over the previous four years to stimulate a sluggish economy, and in an unprecedented move the coalition partners announced their desire to continue working together. Campaigning under the slogan, “Let Lubbers finish his job,” the

electorate gave the coalition the needed votes to continue their coalition, providing some anecdotal evidence that the Dutch electorate rewarded the government partners for what they perceived to be strong economic performance. Conversely, Kasshoek (1995) provides the parliamentary election of 1994 as an example of voters punishing the incumbent government. A sluggish economy necessitated large spending cuts, and the parties of both government partners suffered heavy losses at the ballot box. There is some qualitative evidence that voters in the Netherlands might be swayed to a certain degree by national economic conditions, supporting the application of the reward-punishment hypothesis to the Netherlands.

While some might expect the party of the Prime Minister to be held to a higher standard as the leader of the government, Baylis (1989) states that Dutch cabinets have historically been defined by a relatively weak position of the chief executive; all ministers are considered to be on equal footing, and the Prime Minister has very few formal powers over their cabinet. Daalder (1955) notes that ministers within a Dutch cabinet are considered to be working with, as opposed to under, the Prime Minister. To this extent, one might expect economic effects on electoral outcomes to be constant across both supporting parties and the Prime Minister.

On the other hand, Fiers and Krouwel (2005) contend that the position of the Prime Minister has been informally changing in the modern era. The increase of media coverage in national politics, and especially that of television, has shone a progressively brighter spotlight on the Prime Minister as the leader and voice of the Dutch government. Due to the increasing prominence of the office of the Prime Minister, Dutch voters might disproportionately assign responsibility for the state of the economy on the party of the incumbent Prime Minister; I am more inclined to expect Dutch voters to behave in this manner, rather than worry about formal rules and precedent among the political elite.

Irwin and Van Holsteyn (2008) find some evidence using survey data that voters place more economic responsibility onto the party of the Prime Minister than they do the other supporting parties. However, their analysis is limited to the five parliamentary elections held between 1989 and 2006 and contains only descriptive statistics with no formal tests involved. This paper seeks to more formally model and test the significance of these findings.

1.3 Summary and Extensions to Research

Altogether, the existing literature establishes two main points regarding economic voting and its applications to Dutch politics. First, objective macroeconomic indicators and subjective individual economic opinions often display a strong correlation with changes in support for the incumbent government, especially in two party systems. Adding controls for the political context within a country helps to extend economic voting into multiparty democracy where the electoral picture is often a bit more muddled. However, for the most part these studies treat the coalition government as a homogenous unit, and do not account for varying degrees of economic responsibility among the different coalition partners. Second, while there is some evidence that supports a certain degree of economic voting in the Netherlands, studies have been limited by the unique nature of Dutch pillarization. These studies often treat each election as an individual case study of Dutch politics; historical analysis on the scale of what is seen in American politics is very limited, and generally focuses upon survey data.

This paper adds to the current literature in two ways that are often neglected. Specific to the case of voting behavior in the Netherlands, this paper contributes to the sparse analysis of an often overlooked political system. Within the literature on economic voting as a whole, this work aims to help bridge the gap between two-party and multiparty retrospective economic

voting research. By focusing on the example of the most proportional system, these results may then help provide more consistent findings among multiparty systems as a whole.

2. Dataset & Variables of Interest

2.1 Data Sources

For the macroeconomic section of the analysis, a dataset that captures the thirteen parliamentary elections held from 1971-2012 is constructed from various sources.⁸ Full electoral results for each election are obtained from the public databank provided by the Dutch Electoral Council.⁹ Figures for inflation, registered unemployment, and gross domestic product are available from the Dutch Central Bureau of Statistics.¹⁰ Finally, the Parliamentary Documentation Center from the University of Leiden provides information on the formation and makeup for each governing coalition.¹¹

For the analysis at the individual-level, a cumulative dataset of the Dutch Parliamentary Election Study (DPES) from 1971-2006 is used.¹² The DPES is similar to the American National Election Studies, and asks a variety of questions on respondent demography, public opinion, and political inclinations. This dataset provides a total of 16,730 respondents over the eleven elections in this timeframe. In addition, some of the variables initially constructed for use in the electoral-level analysis are pulled into the individual-level DPES dataset.

⁸ The odd case of the 2003 snap election is omitted.

⁹ <http://verkiezingsuitslagen.nl>

¹⁰ <http://statline.cbs.nl>

¹¹ <http://parlement.com>

¹² <http://dans.knaw.nl>

2.2 Dependent Variables

For the electoral-level analysis, the dependent variable of interest is the vote share obtained in the current election by the incumbent coalition partners. As the public election database provides the total number of votes cast for each competing party, this variable was constructed for the governing coalition as a whole (“Govt.”) by dividing the total number of votes the coalition partners received by the total number of votes cast in the election. Similar constructs are used to create vote share received by the party of the Prime Minister (“PM”), and an aggregate of the other supporting coalition partners (“Supp.”).

At the individual-level, each edition of the DPES asks respondents which political party they voted for in the current parliamentary election. These responses are recoded for each election for whether one voted for the party of the incumbent Prime Minister, one of the other supporting government parties, or one of the opposition parties

2.3 Control Variables

2.3.1 Prior Vote History

As the dependent variable is simply based upon the electoral results in the “current” election, the vote share obtained in the election held immediately prior is used as a control variable in the electoral-level analysis. Using the same operationalization as before, the prior vote share received is constructed for the governing coalition as a whole, the Prime Minister, and the other supporting partners.

For the survey data, the DPES question that asked respondents which party they voted for in the prior parliamentary election was recoded to create a similar control variable. This operationalization of control does pose the problem that anyone who did not vote in the previous

election is excluded from analysis, which drops 2,652 respondents.¹³ However, the survey data does not appear to differ that greatly from the actual electoral results.

Table 1 provides the difference between the electoral-level vote share and the proportion of respondents who indicated that they voted for each party of interest. The two appear to match up fairly well with one another, with the difference between electoral and survey data generally less than five percentage points. The difference also oscillates between positive and negative, suggesting at least to a certain extent that the survey data is not systematically biased.¹⁴

2.3.2 Contextual Controls

A number of contextual variables that control for characteristics of each governing coalition are constructed for use in both levels of analysis; descriptive statistics are provided in Table 2. An indicator variable that noted if Dutch military troops were deployed overseas (“military”) is generated. This covers the time period from 1994-2010 when the Dutch took part in multinational operations in Bosnia, Kosovo, Iraq, and Afghanistan. An incumbency term that calculated the number of years the current coalition had held power (“coalition”) is generated by dividing the number of days the incumbent government partners had served together by 365.25. This ranges from a low of 0.61 years for the short-lived government of 1981 to a high of 7.35 years for the long serving “purple coalition” that was in power from 1994-2002.

The number of parliamentary seats the parliamentary coalition held as a whole is constructed for each government (“total seats”). This ranges from a bare majority of 76 seats to a high of 106 seats. The number of seats held by the party of the Prime Minister is also generated (“pm seats”); this ranged from a low of 13 to a high of 54.

¹³ Party identification was also considered, but this operationalization would have led to an even greater loss of data.

¹⁴ Survey data, especially when asking respondents about vote choice in previous elections, often has a tendency to overstate vote share for the “winners.”

The total number of parties taking part within the coalition government was coded (“govt. parties”), along with the effective number of parties (both governing and opposition) holding seats in the legislature (“eff. parties”). The effective number of parties was calculated using the formula set forth by Taagepera & Laakso (1979).

2.3.3 Individual-level Controls

Finally, a set of respondent-level controls are generated from the DPES dataset to use in the individual-level analyses: respondent age, gender, education, income, and religion. Respondent age is grouped into five year categories; i.e., 21-25, 26-30, etc. with the exception of a 17-20 and 76-99 block. Gender is a dummy variable that is coded “1” for male respondents (hence creating “male.”) Education is generated as an ordinal variable divided into five levels of educational attainment: elementary, lower vocational, secondary, higher vocational, and university. Income is operationalized on a twelve point ordinal scale from 0-11, with categories adjusted for inflation. Religion is an indicator coded “1” if the respondent is Christian and “0” otherwise. Excluding missing responses from the dataset excludes a total of 2,042 individuals. Table 3 and Table 4 provide individual-level descriptive statistics for the original dataset and when missing responses are deleted. The distribution of the variables considered does not appear to change appreciably.

2.4 Explanatory Variables

2.4.1 Macroeconomic Indicators: General Operationalization

Both the electoral and individual-level analyses will consider the annual change in three economic indicators: inflation, unemployment, and gross domestic product. The endpoint of reference for this operationalization is dependent upon the circumstances leading up to the

election. For governing coalitions that serve out their full four year term and resign as a formality before the election, the annual change for the macroeconomic indicator is calculated using the quarter before the election as an endpoint. For instance: in the case of the government that served from 1994-1998 and resigned right before the elections held in May, the annual change in the indicator is calculated using January 1998 as the endpoint. This quarter buffer borrows from the methods of Abramowitz (2012), under the understanding that these economic figures are neither immediately calculated and released, nor are their effects immediately felt by the public at large. To reduce the amount of “noise” around each monthly figure, a three month average for each indicator is employed. Continuing the use of the 1998 election as an example:

$$\Delta\text{inflation} = \frac{\text{inflation}_{\text{Nov97+Dec97+Jan98}}}{3} - \frac{\text{inflation}_{\text{Nov96+Dec96+Jan97}}}{3}.$$

In instances where the parliamentary election was necessitated by the early fall of the incumbent cabinet, the annual change in the indicator is calculated using the month before the resignation of the government as the endpoint of reference. That is, for the most recent election held in September 2012 where the government collapsed in April, the macroeconomic indicators are operationalized using March 2012 as the endpoint. In this case, the frame of reference ends well before the election, on the assumption that voters will not assign economic responsibility onto the shoulders of a demissionary cabinet. Likewise, now that there is gap between government resignation and when new elections are held, the quarter buffer is no longer employed. In the case of the election held in 2012, the indicators are calculated such that:

$$\Delta\text{inflation} = \frac{\text{inflation}_{\text{Jan12+Feb12+Mar12}}}{3} - \frac{\text{inflation}_{\text{Jan11+Feb11+Mar11}}}{3}$$

2.4.2 Macroeconomic Indicators: Inflation

The Dutch Central Bureau of Statistics provides monthly inflation figures, calculated as the annual percent change in the consumer price index (CPI). For example:

$$\text{inflation}_{\text{Mar}12} = \frac{\text{CPI}_{\text{Mar}12} - \text{CPI}_{\text{Mar}11}}{\text{CPI}_{\text{Mar}11}}; \text{ from these figures three month averages for the endpoint of}$$

interest are calculated for each election.

2.4.3 Macroeconomic Indicators: Unemployment

Monthly unemployment figures are provided as the number of registered unemployed citizens. These numbers do not take the total Dutch population into account, which grew by approximately four million people during the time period under consideration. However, yearly population numbers are also provided by the Central Bureau of Statistics. From these yearly figures, the total number of those who are “working age” (taken as those between ages 20-65) is calculated. Monthly population estimates are then interpolated from the yearly figures. That is, the “working age” population for March 2012 is operationalized as:

$$\frac{\text{working age population}_{11}}{9} + \frac{\text{working age population}_{12}}{3}.$$

An “unemployment rate” for each month is then calculated as:

$$\frac{\text{registered unemployed}_{\text{Mar}12}}{\text{working age population}_{\text{Mar}12}}. \text{ From these monthly figures, three month averages for the}$$

endpoints of interest are calculated. Annual change in unemployment is then operationalized as

$$\text{(keeping with the 2012 example): } \frac{\text{unemployment}_{\text{Jan}12+\text{Feb}12+\text{Mar}12}}{3} - \frac{\text{unemployment}_{\text{Jan}11+\text{Feb}11+\text{Mar}11}}{3}.$$

2.4.3 Macroeconomic Indicators: Gross Domestic Product

Yearly figures for gross domestic product (GDP) per capita, in constant 2000 US dollars are used. Similar to the yearly population measures, monthly GDP figures are interpolated.

Three month averages for GDP are calculated for the endpoints of interest. That is:

$$\text{GDP}_{\text{Mar}12} = \frac{\text{GDP}_{\text{Jan}12 + \text{Feb}12 + \text{Mar}12}}{3}. \text{ Annual percent change in gross domestic product is then}$$

$$\text{operationalized as: } \frac{\text{GDP}_{\text{Mar}12} - \text{GDP}_{\text{Mar}11}}{\text{GDP}_{\text{Mar}12}}.$$

3. Methodology

3.1 Election Level Regressions

The vote share received for is estimated as a linear regression of prior vote share, the macroeconomic indicator (GDP, inflation, and unemployment) of interest, and varying groups of control variables. Among the different control variables operationalized, how long the incumbent partners have served together (*coalition*) and the military deployment indicator (*military*) are included as a “Base Model.”

To this Base Model, two sets of party-specific controls that are designed to account for how voters may assign economic responsibility to the incumbent coalition are added. Finally, a full regression including the Base Model and both sets of addition controls is run, providing a total of four regression models to be estimated.

As was noted, the Base Model estimates party vote share as a function of prior vote share, coalition incumbency, military deployment, and the economic indicator in question. That is:

$$\mathbf{I: Party Vote Share} = \beta_0 + \beta_1(\text{Prior Vote Share}) + \beta_2(\text{Coalition}) + \beta_3(\text{Military}) + \beta_4(\text{Indicator}) + \varepsilon.$$

The two controls of *coalition* and *military* provide outside context to each election in question and should apply equally across coalition partners. As voters often display “incumbent fatigue,” the coefficient on *coalition* should be negative. As military engagement is usually an unpopular issue in the Netherlands, the effect of *military* is expected to be negative as well.

In Model II, the total number of legislative seats the governing coalition as a whole holds and the number of seats held by the party of the Prime Minister specifically are added to the Base Model. Party vote share will then be estimated as:

$$\text{II: Party Vote Share} = \beta_0 + \beta_1(\text{Prior Vote Share}) + \beta_2(\text{Coalition}) + \beta_3(\text{Military}) + \beta_4(\text{PM Seats}) + \beta_5(\text{Total Seats}) + \beta_6(\text{Indicator}) + \varepsilon$$

The two additional variables serve to account for voter’s legislative expectations, in that the degree of control the coalition holds in the legislature may impact how much one expects the government to accomplish.

In Model III, the effective number of total legislative parties (meaning both governing and opposition members) and the total number of parties comprising the governing coalition are added to the Base Model as control variables. That is:

$$\text{III: Party Vote Share} = \beta_0 + \beta_1(\text{Prior Vote Share}) + \beta_2(\text{Coalition}) + \beta_3(\text{Military}) + \beta_4(\text{Eff. Parties}) + \beta_5(\text{Govt. Parties}) + \beta_6(\text{Indicator}) + \varepsilon$$

These two additional variables are included to control for how easy or difficult it is for a voter to switch allegiance to a different party. As the effective number of parties increases, it becomes less clear what an alternative government might look like, thereby making a voter more hesitant to leave the coalition. When there are more partners within the governing coalition, a

voter has more options if they wish to continue supporting the coalition, possibly impacting vote share received by a particular party.

Lastly, in Model IV both sets of additional control variables are added to the Base Model to produce a final full regression. Party vote share is then estimated as:

$$\text{Party Vote Share} = \beta_0 + \beta_1(\text{Prior Vote Share}) + \beta_2(\text{Coalition}) + \beta_3(\text{Military}) + \beta_4(\text{PM Seats}) + \beta_5(\text{Total Seats}) + \beta_6(\text{Eff. Parties}) + \beta_7(\text{Govt. Parties}) + \beta_8(\text{Indicator}) + \varepsilon$$

IV:

Throughout all regressions, the coefficient on unemployment and inflation should be negative, such that an increase in these macroeconomic indicators is associated with a decrease in vote share received. Meanwhile, the coefficient on GDP should be positive, with an increase in GDP associated with an increase in vote share received. The coefficients should be larger in absolute magnitude for the party of the Prime Minister than the other supporting parties, so that the effect of economic conditions on vote share is greater for the party of the Prime Minister.

3.2 Individual-level Regressions

The individual-level regressions are run in four models that mirror the regression models of the macro-level data. Instead of party vote share, individual party vote choice is used as the dependent variable. Multinomial logit is used to predict the effect the economic indicator has on voting for the supporting parties and the party of the Prime Minister, using voting for the opposition as the baseline category of comparison; standard errors are clustered by election. Similarly, prior individual party vote choice is used as a control, opposed to prior party electoral vote share. This will be indexed out for the supporting parties and the party of the Prime Minister, again keeping voting for the opposition as the baseline category.

The three macroeconomic indicators will remain the explanatory variable of interest. A number of individual-level controls are also added to all models: age, gender, income, education completed, religion, and level of government satisfaction. The other control variables will be added in groups identical to those used in the prior section. While the substantive interpretations will vary from the election-level analysis, the direction of the coefficients on the variables considered should remain the same in the individual-level analysis and the absolute magnitude should remain larger for the party of the Prime Minister than the other coalition partners. The multinomial logit regression for the Base Model (Model V) is then:

$$\text{V: } \text{mlogit}(\text{Vote Choice}) = \beta_0 + \beta_1(\text{Ind.}) + \beta_2(\text{Supp. Prior}) + \beta_3(\text{PM Prior}) + \beta_4(\text{Coalition}) + \beta_5(\text{Military}) + \beta_6(\text{Indicator}) + \varepsilon$$

where β_1 represents the vector of individual-level control variables.

The rest of the multinomial logit models are estimated similarly:

Model VI:

$$\text{VI: } \text{mlogit}(\text{Vote Choice}) = \beta_0 + \beta_1(\text{Ind.}) + \beta_2(\text{Supp. Prior}) + \beta_3(\text{PM Prior}) + \beta_4(\text{Coalition}) + \beta_5(\text{Military}) + \beta_6(\text{PM Seats}) + \beta_7(\text{Total Seats}) + \beta_8(\text{Indicator}) + \varepsilon$$

Model VII:

$$\text{VII: } \text{mlogit}(\text{Vote Choice}) = \beta_0 + \beta_1(\text{Ind.}) + \beta_2(\text{Supp. Prior}) + \beta_3(\text{PM Prior}) + \beta_4(\text{Coalition}) + \beta_5(\text{Military}) + \beta_6(\text{Eff. Parties}) + \beta_7(\text{Govt. Parties}) + \beta_8(\text{Indicator}) + \varepsilon$$

Model VIII:

$$\text{VIII: } \text{mlogit}(\text{Vote Choice}) = \beta_0 + \beta_1(\text{Ind.}) + \beta_2(\text{Supp. Prior}) + \beta_3(\text{PM Prior}) + \beta_4(\text{Coalition}) + \beta_5(\text{Military}) + \beta_6(\text{PM Seats}) + \beta_7(\text{Total Seats}) + \beta_8(\text{Eff. Parties}) + \beta_9(\text{Govt. Parties}) + \beta_9(\text{Indicator}) + \varepsilon$$

3.3 Interaction Effects

After the initial analysis, two interaction terms will be added to the final full regression model for both electoral (Model IV) and individual-level (Model VIII) analyses. First, the total number of seats held by the governing coalition is interacted with the significant macroeconomic indicators. The more control the incumbent coalition holds in the legislature, the easier it should be for the government to enact its preferred policies. The effect of GDP, unemployment, and inflation on vote share and vote choice should then be larger when the coalition controls a greater number of parliamentary seats. That is, the coefficient on the interaction effect should be positive when interacting with GDP and negative when interacting with unemployment and inflation.

In a similar vein, the total number of seats held by the party of the Prime Minister is interacted with the economic indicators. As the party of the Prime Minister dominates the makeup of the governing coalition to a greater and greater extent, voters should increasingly assign economic responsibility to this party over the other government partners, thereby increasing the effect of the economic indicator for the Prime Minister over the other partners. That is, the coefficient on this interaction term should be positive on GDP and negative on unemployment and inflation for the party of the Prime Minister, with the signs of these interaction terms switched when considering the supporting government partners.

4. Results

4.1 Electoral-level Analysis

4.1.1 Base Model (Model 1)

The results from the Base Model regressions are presented in Table 5. In all cases, the coefficient on *military* is negative, such that vote share is expected to decrease when the military is deployed, controlling for the other explanatory variables. The coefficient on *coalition* is also negative, such that longer serving cabinets are expected to see a decrease in vote share, net of the other covariates in the model.

For the government coalition as whole, a one percent increase in GDP is predicted to increase vote share by 2.36 points, controlling for prior vote share, coalition duration, and military deployment; this relationship is statistically significant at the 0.05 level. Similarly, a one percentage point increase in unemployment is predicted to decrease vote share received by 7.78 points, net of the control variables included in the Base Model. This coefficient is also statistically significant at the 0.05 level. There is evidence in the Base Model that national economic conditions impact the electoral fortunes of the governing coalition as a whole. However, while the effect of inflation runs in the expected negative direction, the relationship is not statistically significant.

The results remain substantively similar when considering the party of the incumbent Prime Minister. In this case, a one percent increase in GDP is predicted to increase vote share received by 2.18 points, with the coefficient remaining statistically significant at the 0.05 level. Meanwhile, a one percentage point increase in unemployment is associated with a 7.78 point decrease in vote share received; this relationship is significant with $p < 0.01$. In this Base Model, change in GDP and unemployment appear to effect the electoral fortunes of the party of the

sitting Prime Minister. The coefficients on these macroeconomic indicators generally mirror the coefficients for the governing coalition as a whole. Once again, inflation runs in its expected direction, but this effect remains insignificant.

However, these results do not hold when considering the other supporting parties within the coalition. A one percent increase in GDP is predicted to increase vote share received between 0.34 points, while a one percentage point increase in unemployment is expected to decrease vote share by -1.03 points. Neither coefficient is statistically significant, and both point estimates for the coefficients are attenuated from the effects seen for the incumbent cabinet as a whole and the party of the Prime Minister. The coefficient on inflation is ostensibly zero, and predictably is statistically insignificant.

Altogether, the Base Model provides evidence in support of the hypothesis that voters reward and punish the party of the Prime Minister to a greater extent than they do the other coalition partners. Annual changes in GDP and unemployment have similar effects on the electoral fortunes of the government as a whole and the party of the Prime Minister, but do not seem to carry over and impact the vote share received by the other supporting parties.

4.1.2 – Models II, III, & IV

The regressions for Models II through IV provide results that are substantively similar with the Base Model. However, tests of joint significance suggest that the inclusion of the additional controls does not significantly improve the fit of the data in any instance. The results are presented in Tables 6-8. The coefficients on *coalition* and *military* remain negative for all cases considered, as they did in the Base Model.

For the governing coalition as whole, the effects of GDP and unemployment remain consistent with the results from the Base Model. A one percent increase in GDP is expected to

increase vote share between 2.60 and 2.87 points, while a one point increase in unemployment is predicted to decrease vote share between 7.96 and 8.88 points; both relationships remain statistically significant in all models. The point estimates on both coefficients remain similar to what they were in the Base Model; the additional control variables do not appear to impact the effects of the economic indicators. Inflation continues to have the correct direction but insignificant effect on vote share.

The results for the party of the Prime Minister also remain consistent with the results from the Base Model. The coefficients on GDP range between 2.31 and 3.01 while unemployment ranges from -7.60 and -8.41; both indicators remain statistically significant. The point estimates on both coefficients largely mirror those found in the original Base Model. Once again, inflation has the expected yet statistically insignificant effect on party vote share received in all three additional models estimated.

For the other supporting coalition partners, the coefficient on GDP ranges between 0.33 and 0.35, but fails to reach statistical significance in any instance. Similarly, a one point increase in unemployment is predicted to decrease vote share between 0.04 and 0.97 points, but these estimates too are statistically insignificant. Inflation remains a poor predictor.

Altogether, the electoral-level results provide evidence of economic voting that are robust through all four models estimated. Annual change in GDP and unemployment both have a significant effect on vote share received by the governing coalition as a whole throughout the addition of different control variables, while inflation is a poor predictor in all cases considered. These effects are similar when considering the electoral fortunes of the party of the Prime Minister, but are not present when considering the other supporting coalition members. This

supports the hypothesis that voters primarily assign economic responsibility to the party of the incumbent Prime Minister over the other government partners.

4.2. – Individual-level Analysis

4.2.1 – Base Model (Model V)

The results from the Base Model multinomial logistic regressions are presented in Table 9. Akin to the electoral-level analysis, the coefficients on *military* and *coalition* are negative in all cases, indicating that individual voters are less likely to back the supporting parties or the party of the Prime Minister, relative to the opposition parties.

The coefficients for unemployment are negative for both parties of interest, indicating that an increase in unemployment is associated with a decreased probability of voting for the supporting parties or the party of the Prime Minister, versus voting for an opposition party, net of the other included covariates. However, the point estimate for the party of the Prime Minister is larger in absolute magnitude and highly significant ($p < .001$) while the coefficient for the supporting parties is insignificant.

Holding the other explanatory variables at their mean values, simulated probabilities were calculated for the full range of real values for unemployment; results are presented in Figure 1. As unemployment increases from its minimum through to its maximum value, the probability that one voted for one of the opposition parties increases. Conversely, the probability that one voted for the party of the incumbent Prime Minister decreases as unemployment increases. However, the probability that one voted for the aggregate of opposition parties remains stagnant throughout the range of unemployment values. Consistent with the electoral-level analysis, change in unemployment appears to effect the probability of voting for the party of the Prime Minister, but not the other supporting parties

The coefficients for GDP are positive for both the supporting government partners and the Prime Minister, indicating that an increase in GDP increases the probability that an individual voted for one of the sitting coalition partners versus one of the opposition parties. The point estimate for the party of the Prime Minister is larger in magnitude and more statistically significant than that for the other supporting parties.

Graphing the simulated probabilities for the full range of GDP, the probability of voting for the opposition decreases as GDP increases (Figure 2). Meanwhile, the predicted probabilities for both the supporting parties and the party of the incumbent Prime Minister increases as GDP increases, but this effect does not appear to be identical for both parties. While the probability of voting for the supporting parties increases by about 3.5 points in total, the probability of voting for the Prime Minister increases by approximately 7.5 points. The effect of an increase in GDP appears to be greater for the Prime Minister than the other supporting parties.

For inflation, the coefficient for the supporting parties runs opposite of expectations, such that a one point increase in inflation actually increases the probability that one votes for one of these parties. However, the coefficient is not statistically significant. The coefficient for the party of the incumbent Prime Minister conforms to expectations, such that an increase in inflation decreases the probability of supporting the Prime Minister, although this point estimate also remains statistically insignificant.

Altogether, the individual-level results largely mirror those seen in the Base Model for the electoral-level analyses. The coefficient on inflation remains insignificant for both parties. The coefficients on GDP and unemployment remain significant for the party of the Prime Minister, much akin to the election results. While unemployment remains insignificant for the supporting parties, the effect of GDP is now significant, although remaining lesser in magnitude

than for Prime Minister. It appears that change in GDP and unemployment has a larger effect on the probability of voting for the party of the Prime Minister than for the supporting parties, consistent with the hypothesized relationship.

4.2.2 – Model VI

The multinomial logit results for Model VI are presented in Table 10. The two added control variables improve the fit of the data in all instances, with tests of the joint significance of these controls being highly significant in all cases.

The coefficients on GDP remain positive for both parties of interest; an increase in GDP is associated with an increase in the probability that one voted for one of the coalition partners versus one of the opposition parties. However, unlike the Base Model, the point estimates on the coefficients are similar for both the supporting parties and the Prime Minister (.300); both are now larger than in the Base Model and highly significant ($p < .001$). Calculating the predicted probabilities (Figure 3), an increase in GDP decreases the probability of voting for the opposition by about 20 points throughout the full range of GDP values. Meanwhile, the predicted probabilities of voting for the supporting parties and the Prime Minister each increase by about 10 points. In this instance, it appears that an increase in GDP has a similar effect on vote choice across all government partners, which conflicts with the previous findings.

The coefficients on unemployment remain negative for both parties of interest, although only the term for the party of the Prime Minister is significant. The predicted probabilities (Figure 4) continue suggest that unemployment has a greater effect on the probability of that one voted for the party of the Prime Minister than it does on the probability of voting for one of the supporting government parties. Inflation remains a poor predictor in all cases.

4.2.3 – Model VII

The individual-level results for Model VII are presented in Table 11. Adding the number of effective legislative parties and the total number of government partners to the Base Model improves the fit of the data in all instances.

The results using GDP as the indicator of interest more closely mirror the results of the Base Model than they do the case of Model VI. While the coefficient for the supporting parties remains positive, it is now statistically insignificant and smaller in magnitude than that seen for the Prime Minister. The coefficient for the party of the incumbent Prime Minister remains positive and statistically significant, and mirrors that from the Base Model. Graphing the predicted probabilities through the range of GDP (Figure 5), the probability of voting for the Prime Minister increases, while the probability of voting for the supporting parties remains stagnant. Once again, it appears that voters reward the party of the Prime Minister for an increase in GDP, while the supporting parties see little to no effect.

The coefficient on unemployment for the supporting remains statistically insignificant. The coefficient for the incumbent Prime Minister continues to conform to expectations, as it remains negative and statistically significant. The predicted probabilities (Figure 6) continue to meet expectations.

4.2.4 – Model VIII

Finally, a full multinomial logit regression was run that added both sets of control variables to the original Base Model; these additional covariates improve the fit of the data in all instances. The results (Table 12) generally mirror that of Model VI more than they do the other two models.

The coefficient on GDP for the supporting party is positive and once again highly significant ($p < .001$). Meanwhile, the coefficient for the party of the Prime Minister is similar in magnitude and also highly significant. Calculating the predicted probabilities (Figure 7) the probability of voting for both the party of the Prime Minister and the other supporting parties each increase by 10 points through the full range of GDP values. The effect of GDP in Model IV appears to be constant across both subsets of the incumbent coalition, which goes against expectations.

The coefficient on unemployment remains negative for the supporting parties, yet this point estimate still remains statistically insignificant. The coefficient for the Prime Minister remains negative and statistically significant. The predicted probabilities (Figure 8) continue to suggest that the party of the Prime Minister is punished for an increase in unemployment, while the other government parties remain largely unaffected.

Overall, the results from the individual-level vote choice data largely corroborate the findings from the electoral-level analysis. Similar to the macro-level analysis, unemployment remains an insignificant predictor of voting for one of the supporting parties. This supports the hypothesis that voters predominantly punish the party of the Prime Minister over the other supporting parties for poor economic performance. However, somewhat contrary to earlier results, GDP is significant for the supporting parties in the two models where government control of the legislature is controlled for. In these models, the predicted probabilities of an increase in GDP suggest a constant effect, where voters reward both the supporting and Prime Minister equally for an increase in GDP. While this goes against the hypothesized result, it is only present in a portion of the models. The results still generally favor the view that voters

focus economic responsibility onto the party of the Prime Minister rather than the ruling coalition as a whole.

4.3 Interaction Effects

4.3.1 – Electoral-level Interactions

The regression results including the interaction terms for GDP and unemployment with the seats controlled by the party of the Prime Minister and the total number of seats controlled by the coalition as a whole are presented in Table 13. However, in no case are these interaction terms statistically significant.

4.3.2 – Individual-level Interactions

At the individual-level analysis, the total number of parliamentary seats held by the incumbent government as a whole and the party of the Prime Minister separately were interacted with the significant macroeconomic indicators. These two interaction terms were then added to their respective full multinomial logit regressions (Model IV). Results are presented in Table 14.

Considering unemployment, the interaction term with *Total Seats* is negative and statistically significant for both supporting government parties and the party of the incumbent Prime Minister. Holding unemployment constant, an increase in the number of parliamentary seats held by the coalition decreases the probability of voting for either the supporting parties of the Prime Minister over the opposition parties. That is, the punishment for an increase in unemployment is magnified for both government partners when the coalition has a greater control of the legislature.

Meanwhile, the interaction term of unemployment with *PM Seats* is positive for the supporting parties and negative for the party of the Prime Minister; the coefficient on both terms

is statistically significant. For the supporting parties, this suggests that the negative effect of an increase in unemployment is mitigated as the party of the Prime Minister holds more control of the legislature. On the other hand, the negative effect of an increase in unemployment is magnified for the Prime Minister when his party holds a greater degree of control in parliament. Altogether, the results for the interaction terms for the unemployment model conform to expectations, with the effects of an increase in unemployment being impacted by how much control the government parties hold in the legislature.

Considering GDP, the interaction term with *Total Seats* is positive and statistically significant for the party of the Prime Minister, but negative and insignificant for the other supporting parties. That is, the reward for an increase in GDP is magnified for the party of the Prime Minister when the governing coalition holds more seats in the legislature.

Similarly, the interaction term with *PM Seats* is negative and statistically significant for the supporting parties, and positive and statistically significant for the party of the Prime Minister. This suggests that the reward for an increase in GDP is attenuated for the supporting parties when the Prime Minister holds more control of parliament. Similarly, the reward for the Prime Minister is greater when his party holds more seats in the legislature. Consistent with the results for the unemployment models, the effects of an increase in GDP are impacted by the degree of control the government partners hold in the legislature. It appears that voters hedge their economic expectations of the government partners on how much say they have within the governing coalition along with how strong or tenuous their control of the legislature is.

5. Conclusion

5.1 Limitations

In the same way that I criticized previous studies of economic voting in a multiparty context for treating the incumbent government as a single unit, so to may this paper be criticized for treating the supporting parties as a homogenous unit. Supporting coalition partners are not necessarily incorporated in the government simply due to their sheer size, but are rather based upon their political compatibility with the party of the incoming Prime Minister. This often includes smaller parties to give the government a majority of seats or bridge the political gap between two larger parties. It is reasonable to think that expectations are different for these smaller and less visible parties, and that their presence washes out the effects of economic voting among larger partners. However, with coalition sizes ranging from two to five partners, a reasonable and feasible division of supporting coalition partners for analysis did not seem readily feasible.

It may also be that the effects of economic voting may be based more upon political ideology than expectations placed explicitly on the party of the Prime Minister over the other parties. Historically, three parties have dominated the makeup of Dutch cabinets: the centrist Christian Democrats, the Labour Party, and the right-wing Liberals; until relatively recently Labour and Liberals had not been able to work together. In nine of the thirteen governments studied in this paper, the Prime Minister has been a Christian Democrat, making either a center-left or a center-right formation with Labor or the Liberals. The “catch-all” Christian Democrats may then be more susceptible to economic voting, with Labor and Liberals being expected to stick to their own areas of unemployment and inflation, respectively. The differing cabinet formations may then wash out the effects of economic voting among the supporting parties.

5.2 Concluding Remarks

In this paper, I found evidence at both the electoral and individual-level that economic voting in the Netherlands does not hold equally across all coalition members. Rather, it appears that voters reward and punish the party of the Prime Minister to a greater degree than they do the other supporting government parties.

At the electoral-level, an increase in GDP per capita increases the vote share received by the party of the Prime Minister through all four regression models estimated, but does not appear to impact the vote share received by the other supporting government partners. Conversely, an increase in unemployment decreases the vote share received by the Prime Minister in all models, but has no effect on the other coalition parties.

At the individual-level, an increase in unemployment decreases the probability that one voted for the Prime Minister, but does not impact the probability of voting for another government party. However, an increase in GDP per capita does appear to increase the probability that one voted for either the Prime Minister or a supporting government party. In two of the four models estimated, the magnitude of the effect is greater for the party of the Prime Minister. In the other two models, an increase in GDP has a similar effect on the supporting parties, compared to the party of the Prime Minister.

Overall, a majority of the models provide results in support of the hypothesis that voters predominantly assign responsibility for economic conditions onto the party of the Prime Minister over the rest of the coalition parties. Among the interaction effects, economic responsibility seems to be weighted by how much control the governing parties hold within the legislature. It appears that voters in the Netherlands do not treat the governing coalition as a single body, but rather differentiate among participating parties. These results, particular among the interaction

effects, may help to parse out more consistent patterns of economic voting in other multiparty systems.

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Table 1: Macro/Micro Difference (Electoral Vote Share - Individual Party Vote Choice)

Election Year	Govt. Prior	Govt.	PM Prior	PM	Supp. Prior	Supp.
1971	-1.0	-4.3	-0.8	-3.0	-0.3	-1.3
1972	0.1	-0.5	-3.7	-2.1	3.7	1.6
1977	-5.3	-4.8	-9.8	-2.1	4.4	-2.7
1981	0.2	-2.2	-2.8	-4.2	3.0	2.1
1982	-0.8	-0.7	-0.4	1.4	-0.5	-2.1
1986	3.6	2.3	1.7	2.1	1.9	0.2
1989	3.2	2.9	1.9	1.7	1.3	1.2
1994	4.6	-1.0	3.6	0.7	1.0	-1.7
1998	-6.4	-1.0	-4.9	-0.6	-1.5	-0.4
2002	1.0	-4.0	1.7	-3.1	-0.7	-0.8
2006	-1.3	-2.2	-0.1	-2.0	-1.2	-0.2

Table 2: Electoral-Level Descriptive Statistics

Variable	Mean	Std. Dev	Min	Max	N
Govt Prior	55.80	9.68	34.1	70.16	13
PM Prior	27.15	6.88	8.59	35.32	13
Supp. Prior	28.67	9.65	13.61	43.83	13
Govt. Parties	49.46	11.42	35.09	72.85	13
PM	25.20	8.44	8.84	35.32	13
Supp.	24.26	10.03	8.51	41.01	13
Military	0.38	0.51	0	1	13
Coalition	3.57	1.85	0.61	7.35	13
PM Seats	42.00	10.74	13	54	13
Total Seats	87.62	10.84	76	109	13
Eff. Parties	5	1.12	3.49	6.74	13
Govt. Parties	3.08	1.04	2	5	13
GDP	1.36	2.21	-3.74	3.74	13
Unemployment	0.1	0.73	-0.92	1.54	13
Inflation	3.89	2.88	0.47	8.43	13

Table 3: Individual-Level Descriptive Statistics (original data)

Variable	Mean	Std. Dev	Min	Max	N
Supp. Prior	0.29	0.45	0	1	16784
PM Prior	0.29	0.45	0	1	16784
Supp.	0.25	0.43	0	1	17587
PM	0.26	0.44	0	1	17587
Male	0.49	0.50	0	1	22820
Age	6.39	3.36	1	13	22804
Education	1.81	1.44	0	4	22305
Income	5.71	3.12	0	11	19261
Relig.	0.53	0.50	0	1	22821

Table 4: Individual-level Descriptive Statistics (dropping missing observations)

Variable	Mean	Std. Dev	Min	Max	N
Supp. Prior	0.28	0.45	0	1	12036
PM Prior	0.29	0.45	0	1	12036
Supp.	0.25	0.43	0	1	12036
PM	0.27	0.44	0	1	12036
Male	0.52	0.50	0	1	12036
Age	6.75	3.16	1	13	12036
Education	1.95	1.44	0	4	12036
Income	5.99	3.11	0	11	12036
Relig.	0.54	0.50	0	1	12036

Table 5: Model I Regression Results

	GDP			Unemployment			Inflation		
	Govt.	PM	Supp.	Govt.	PM	Supp.	Govt.	PM	Supp.
Prior Vote	0.870** (0.192)	1.141** (0.236)	0.953*** (0.104)	1.050*** (0.201)	1.291*** (0.220)	0.974*** (0.103)	0.911* (0.329)	0.812* (0.332)	0.970*** (0.162)
Military	-6.264 (3.991)	-4.911 (2.894)	-1.379 (2.160)	-8.961* (3.775)	-6.834* (2.415)	-1.819 (2.059)	-10.38 (6.582)	-9.228 (4.553)	-1.933 (2.923)
Coalition	-2.232 (1.093)	-1.917 (0.950)	-0.803 (0.598)	-2.776* (1.159)	-2.665* (0.915)	-0.807 (0.615)	-1.399 (1.507)	-0.590 (1.241)	-0.630 (0.581)
Indicator	2.360* (0.877)	2.178* (0.687)	0.385 (0.482)	-7.778* (2.832)	-7.780** (1.975)	-1.030 (1.456)	-0.285 (1.276)	-0.533 (0.822)	0.00869 (0.632)
Constant	8.081 (10.66)	-0.00973 (5.713)	-0.174 (3.820)	5.005 (10.67)	3.060 (4.742)	0.0546 (3.921)	8.743 (14.91)	10.88 (10.18)	-0.578 (3.936)
N	13	13	13	13	13	13	13	13	13
R²	0.803	0.808	0.927	0.806	0.853	0.926	0.626	0.588	0.921

Standard errors in parentheses

* p<0.05 ** p<0.01 ***p<0.001

Table 6: Model II Regression Results

	GDP			Unemployment			Inflation		
	Govt.	PM	Supp.	Govt.	PM	Supp.	Govt.	PM	Supp.
Vote Prior	1.035 (0.509)	-1.937 (5.313)	1.350*** (0.224)	1.155 (0.490)	5.160 (4.508)	1.365*** (0.223)	1.535 (0.787)	1.871 (8.024)	1.391** (0.251)
Military	-5.580 (4.307)	-3.404 (3.744)	-1.260 (1.953)	-8.547 (3.996)	-8.206* (2.966)	-1.555 (1.871)	-11.41 (7.943)	-9.246 (6.473)	-1.784 (2.591)
Coalition	-3.076 (1.421)	-2.362 (1.203)	-1.152 (0.650)	-3.747* (1.521)	-2.437 (1.032)	-1.142 (0.714)	-1.656 (1.826)	-0.518 (1.604)	-1.020 (0.607)
PM Seats	0.215 (0.237)	2.043 (3.464)	0.286 (0.165)	0.241 (0.237)	-2.514 (2.914)	0.289 (0.169)	-0.103 (0.376)	-0.673 (5.190)	0.284 (0.169)
Total Seats	-0.226 (0.442)	-0.129 (0.152)	-0.380 (0.198)	-0.152 (0.443)	0.107 (0.140)	-0.382 (0.206)	-0.513 (0.606)	-0.0145 (0.293)	-0.404 (0.197)
Indicator	2.602* (1.045)	2.308* (0.777)	0.243 (0.472)	-8.878* (3.458)	-8.414** (2.268)	-0.529 (1.622)	-0.671 (1.705)	-0.452 (1.240)	-0.0604 (0.561)
Constant	12.08 (18.79)	9.886 (13.11)	11.18 (8.584)	5.723 (19.32)	-6.064 (12.35)	11.21 (9.128)	25.99 (25.34)	11.09 (20.57)	12.45 (8.425)
N	13	13	13	13	13	13	13	13	13
R²	0.834	0.830	0.955	0.839	0.873	0.954	0.670	0.590	0.953

Standard errors in parentheses

* p<0.05 ** p<0.01 ***p<0.001

Table 7: Model III Regression Results

	GDP			Unemployment			Inflation		
	Govt.	PM	Supp.	Govt.	PM	Supp.	Govt.	PM	Supp.
Prior Vote	1.115* (0.314)	1.449** (0.283)	0.832** (0.200)	1.213* (0.334)	1.374** (0.344)	0.849** (0.204)	0.986 (0.472)	0.967 (0.551)	0.854** (0.222)
Military	-8.293 (4.687)	-5.690 (2.328)	-0.391 (2.747)	-10.43 (4.766)	-7.257* (2.786)	-0.703 (2.693)	-11.71 (7.989)	-9.279 (5.261)	-1.239 (3.297)
Coalition	-2.133 (1.256)	-1.918* (0.757)	-0.907 (0.729)	-3.022 (1.443)	-2.540 (1.043)	-0.978 (0.793)	-1.232 (1.790)	-0.516 (1.476)	-0.795 (0.716)
Eff. Parties	4.701 (4.692)	5.115* (1.984)	-1.351 (2.307)	2.167 (4.663)	1.630 (2.356)	-1.634 (2.329)	0.996 (6.779)	1.848 (4.591)	-1.628 (2.431)
Govt Parties	-5.140 (5.106)	-3.609 (1.847)	2.325 (3.184)	-3.477 (5.064)	-1.048 (2.255)	2.440 (3.181)	0.819 (7.883)	-0.857 (5.494)	2.863 (3.398)
Indicator	2.664* (0.997)	2.594** (0.567)	0.326 (0.539)	-8.670* (3.399)	-7.602* (2.215)	-0.969 (1.758)	-0.764 (1.824)	-0.411 (1.346)	-0.190 (0.726)
Constant	-13.29 (25.52)	-23.11 (14.03)	2.988 (8.623)	-2.710 (25.69)	-4.423 (16.37)	4.470 (9.151)	-1.196 (36.60)	-0.641 (28.66)	3.175 (8.919)
N	13	13	13	13	13	13	13	13	13
R²	0.832	0.910	0.933	0.824	0.864	0.932	0.643	0.602	0.930

Standard errors in parentheses

* p<0.05 ** p<0.01 ***p<0.001

Table 8: Model IV Regression Results

	GDP			Unemployment			Inflation		
	Govt.	PM	Supp.	Govt.	PM	Supp.	Govt.	PM	Supp.
Prior Vote	2.281* (0.755)	-8.931 (5.509)	1.714* (0.465)	1.967 (1.130)	6.870 (7.595)	1.736* (0.513)	2.601 (1.529)	5.697 (15.41)	1.742* (0.491)
Military	-9.865 (4.203)	-3.305 (2.497)	-2.427 (2.544)	-11.60 (5.969)	-8.906 (3.476)	-2.851 (2.661)	-14.52 (9.430)	-10.31 (8.534)	-2.711 (2.968)
Coalition	-3.094* (1.098)	-2.753* (0.814)	-1.192 (0.680)	-3.411 (1.746)	-2.262 (1.192)	-1.002 (0.790)	-1.479 (2.046)	-0.331 (1.952)	-0.984 (0.659)
PM Seats	0.332 (0.294)	6.535 (3.460)	0.560 (0.277)	0.200 (0.415)	-3.487 (4.728)	0.532 (0.294)	-0.0502 (0.573)	-2.943 (9.645)	0.538 (0.294)
Total Seats	-0.941 (0.477)	0.00651 (0.111)	-0.590 (0.293)	-0.628 (0.737)	0.117 (0.176)	-0.607 (0.334)	-1.150 (0.979)	-0.0183 (0.350)	-0.617 (0.316)
Eff. Parties	11.65 (4.917)	5.827* (1.886)	3.569 (3.060)	6.604 (7.319)	1.936 (2.676)	3.306 (3.333)	9.818 (10.37)	1.393 (5.735)	3.429 (3.366)
Govt. Parties	-10.29 (5.908)	-7.247 (2.813)	-3.159 (3.789)	-6.614 (8.732)	-0.340 (3.832)	-3.043 (4.112)	-9.519 (12.83)	1.293 (9.495)	-3.227 (4.298)
Indicator	2.870* (0.804)	3.064** (0.565)	0.349 (0.497)	-7.956 (3.981)	-8.355* (2.575)	-0.0380 (1.815)	-0.304 (2.007)	-0.577 (1.948)	0.0690 (0.647)
Constant	-24.93 (21.57)	-7.267 (16.07)	-0.110 (13.34)	-8.995 (29.90)	-21.45 (24.90)	2.886 (13.54)	-0.542 (41.75)	-7.853 (47.10)	2.893 (13.35)
N	13	13	13	13	13	13	13	13	13
R²	0.936	0.953	0.968	0.867	0.891	0.964	0.735	0.612	0.964

Standard errors in parentheses

* p<0.05 ** p<0.01 ***p<0.001

Table 9: Model V Multinomial Logit Results

	GDP		Unemployment		Inflation	
	PM	Supp.	PM	Supp.	PM	Supp.
Supp. Prior	2.244*** (0.231)	4.164*** (0.230)	2.221*** (0.237)	4.128*** (0.225)	2.217*** (0.239)	4.089*** (0.239)
PM Prior	4.401*** (0.141)	1.797*** (0.231)	4.422*** (0.144)	1.775*** (0.235)	4.383*** (0.169)	1.736*** (0.241)
Age	0.0348 (0.0246)	0.00343 (0.0179)	0.0296 (0.0244)	0.000430 (0.0189)	0.0289 (0.0286)	0.00120 (0.0195)
Male	-0.0660 (0.0502)	-0.0632 (0.0619)	-0.0832 (0.0516)	-0.0702 (0.0599)	-0.0816 (0.0497)	-0.0631 (0.0629)
Education	-0.00217 (0.0580)	-0.00621 (0.0283)	-0.0223 (0.0548)	-0.0203 (0.0350)	-0.0336 (0.0763)	-0.0119 (0.0435)
Income	0.0310* (0.0132)	0.0559 (0.0293)	0.0350* (0.0146)	0.0592 (0.0308)	0.0269 (0.0185)	0.0634* (0.0305)
Relig.	0.582* (0.240)	0.0212 (0.155)	0.596* (0.243)	0.0331 (0.159)	0.514* (0.247)	-0.0125 (0.142)
Military	-0.507** (0.194)	-0.505* (0.245)	-0.569*** (0.165)	-0.491 (0.256)	-0.693** (0.267)	-0.282 (0.241)
Coalition	-0.0861 (0.0672)	-0.175*** (0.0515)	-0.119 (0.0641)	-0.179** (0.0558)	-0.114* (0.0511)	-0.139* (0.0707)
Indicator	0.203** (0.0710)	0.138* (0.0680)	-0.491*** (0.104)	-0.170 (0.150)	-0.105 (0.0550)	0.0705 (0.0545)
Constant	-3.462*** (0.523)	-2.475*** (0.371)	-2.880*** (0.602)	-2.161*** (0.427)	-2.296*** (0.528)	-2.716*** (0.520)
N		12036		12036		12036
Log-Likelihood		-6904.60		-6905.53		-6905.34

Standard errors in parentheses
 * p<0.05 ** p<0.01 ***p<0.001

Figure 1: Model V Predicted Probabilities for Unemployment

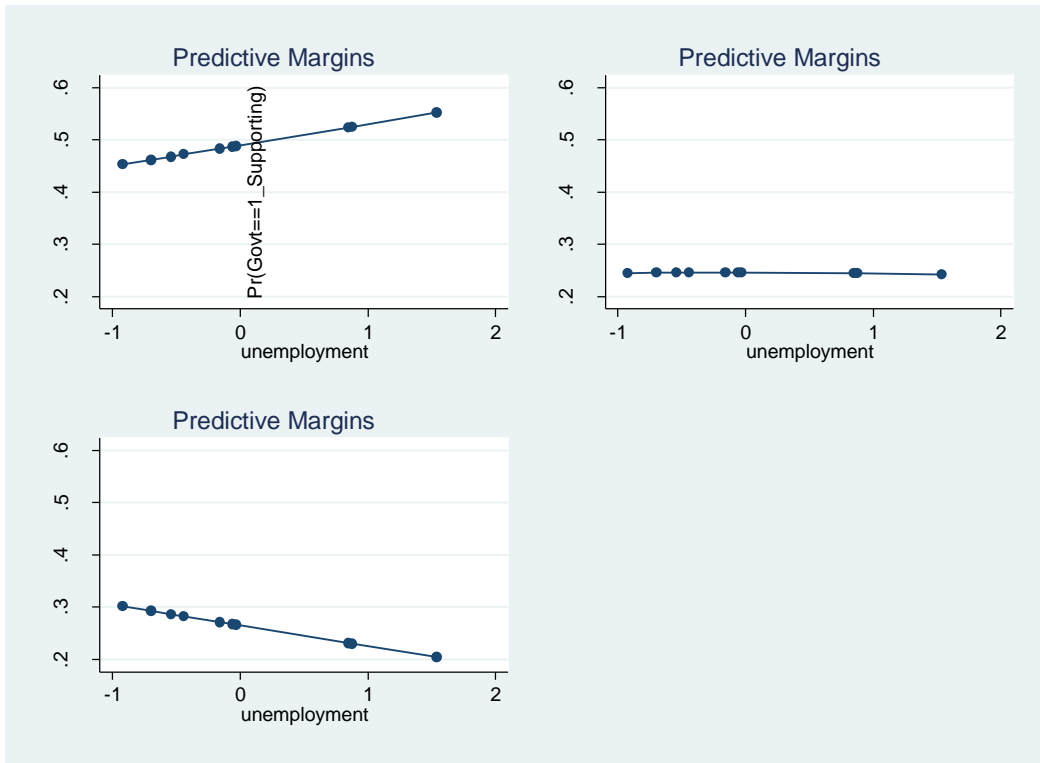


Figure 2: Model V Predicted Probabilities for GDP

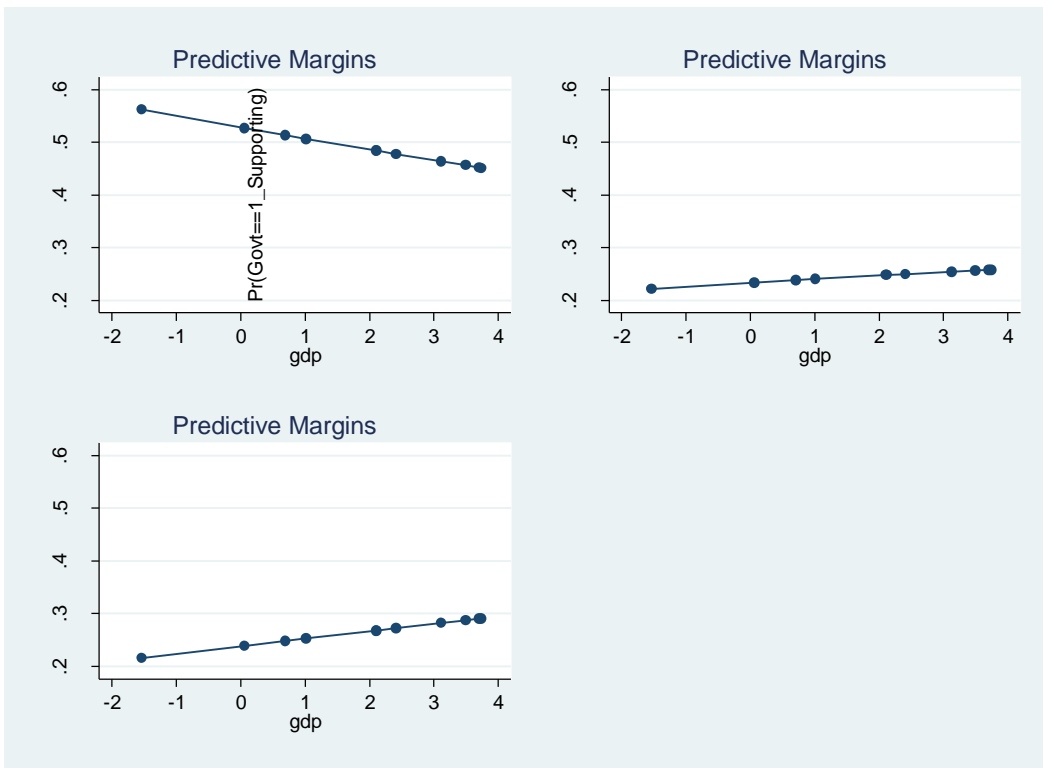


Table 10: Model VI Multinomial Logit Results

	GDP		Unemployment		Inflation	
	PM	Supp.	PM	Supp.	PM	Supp.
Supp. Prior	2.298*** (0.226)	4.099*** (0.229)	2.269*** (0.229)	4.056*** (0.225)	2.249*** (0.227)	4.055*** (0.234)
PM Prior	4.405*** (0.140)	1.721*** (0.240)	4.428*** (0.139)	1.727*** (0.241)	4.407*** (0.139)	1.718*** (0.243)
Age	0.0365 (0.0252)	0.0124 (0.0172)	0.0295 (0.0250)	0.00438 (0.0170)	0.0278 (0.0276)	0.00302 (0.0192)
Male	-0.0525 (0.0543)	-0.0584 (0.0687)	-0.0792 (0.0469)	-0.0776 (0.0599)	-0.0729 (0.0490)	-0.0692 (0.0610)
Education	-0.0166 (0.0605)	0.0310 (0.0454)	-0.0446 (0.0569)	0.000000637 (0.0426)	-0.0461 (0.0679)	0.000510 (0.0499)
Income	0.0248 (0.0136)	0.0580* (0.0257)	0.0315* (0.0158)	0.0621* (0.0292)	0.0274 (0.0181)	0.0632* (0.0299)
Relig.	0.552* (0.250)	0.00214 (0.163)	0.573* (0.253)	0.00308 (0.159)	0.495* (0.243)	-0.0116 (0.145)
Military	-0.469* (0.191)	-0.748*** (0.120)	-0.558*** (0.161)	-0.709*** (0.197)	-0.496** (0.191)	-0.497** (0.176)
Coalition	-0.176*** (0.0316)	-0.166*** (0.0348)	-0.241*** (0.0356)	-0.178** (0.0541)	-0.126*** (0.0364)	-0.115 (0.0696)
PM Seats	0.0361* (0.0177)	0.00302 (0.00936)	0.0428*** (0.00899)	-0.00326 (0.00717)	0.0109 (0.0207)	-0.0132 (0.0141)
Total Seats	-0.000295 (0.00845)	0.0409*** (0.00941)	0.00246 (0.0117)	0.0338* (0.0165)	-0.0165 (0.00922)	0.0155 (0.00905)
Indicator	0.301*** (0.0583)	0.300*** (0.0886)	-0.768*** (0.201)	-0.454 (0.258)	-0.0596 (0.0632)	0.0168 (0.0709)
Constant	-4.828*** (1.135)	-6.593*** (1.166)	-4.454*** (1.037)	-4.981*** (1.336)	-1.508 (1.059)	-3.326*** (0.998)
N		12036		12036		12036
Log Likelihood		-6816.61		-6809.46		-6879.93
Chow Test		64.95***		50.01***		37.44***

Standard errors in parentheses * p<0.05 ** p<0.01 ***p<0.001

Figure 3: Model VI Predicted Probabilities for Unemployment

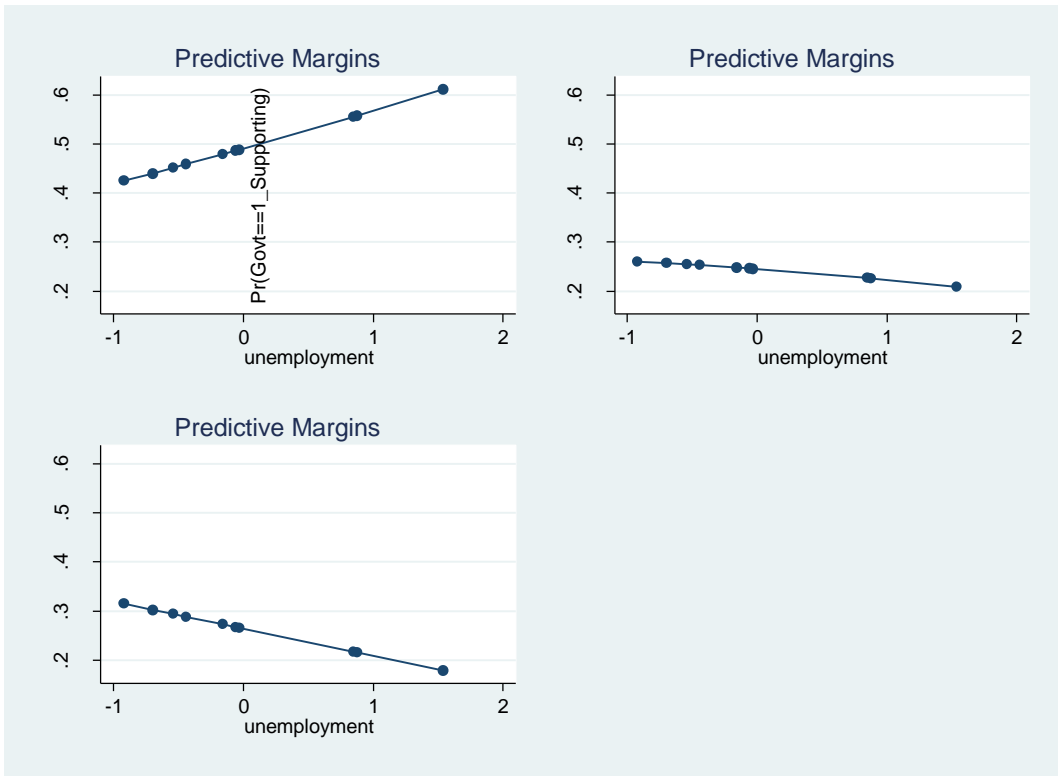


Figure 4: Model VI Predicted Probabilities for GDP

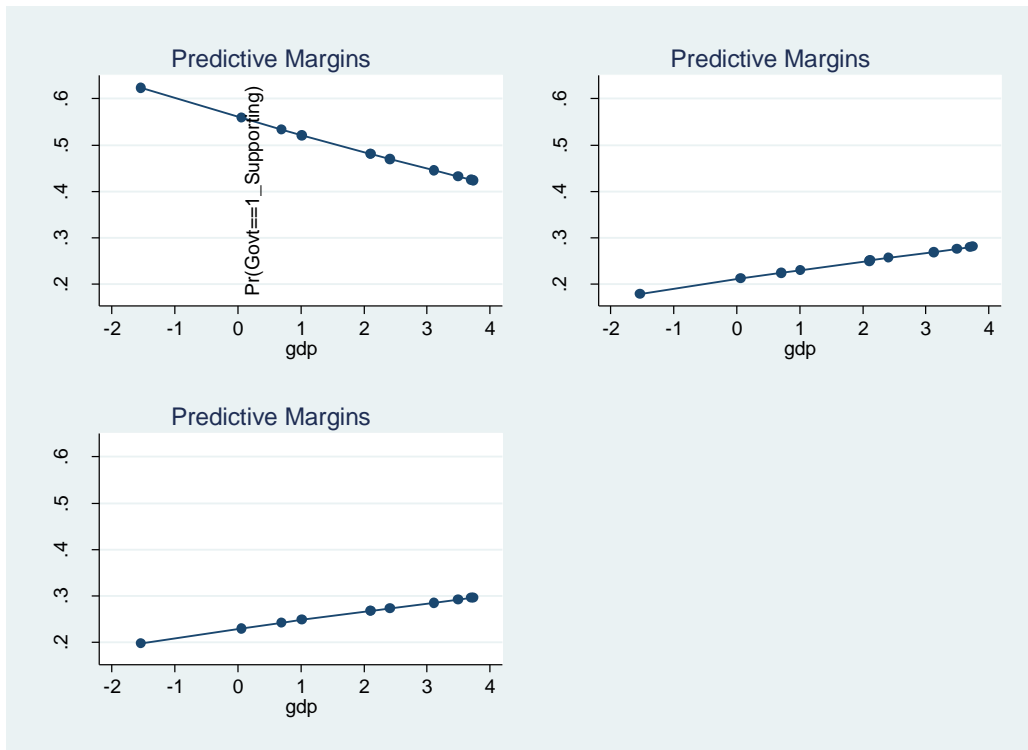


Table 11: Model VII Multinomial Logit Results

	GDP		Unemployment		Inflation	
	PM	Supp.	PM	Supp.	PM	Supp.
Supp. Prior	2.298*** (0.227)	4.127*** (0.226)	2.277*** (0.230)	4.093*** (0.229)	2.250*** (0.229)	4.102*** (0.228)
Govt. Prior	4.446*** (0.158)	1.794*** (0.230)	4.459*** (0.156)	1.758*** (0.235)	4.422*** (0.157)	1.767*** (0.234)
Age	0.0325 (0.0259)	0.00247 (0.0161)	0.0265 (0.0253)	0.00319 (0.0168)	0.0301 (0.0269)	0.00258 (0.0160)
Male	-0.0582 (0.0491)	-0.0839 (0.0536)	-0.0692 (0.0499)	-0.0933 (0.0535)	-0.0889 (0.0469)	-0.0838 (0.0577)
Education	-0.0196 (0.0581)	0.0106 (0.0286)	-0.0461 (0.0520)	0.0148 (0.0340)	-0.0258 (0.0644)	0.00474 (0.0309)
Income	0.0237 (0.0129)	0.0595* (0.0279)	0.0274 (0.0150)	0.0619* (0.0286)	0.0261 (0.0153)	0.0614* (0.0284)
Relig.	0.558* (0.246)	-0.0321 (0.153)	0.559* (0.251)	-0.0423 (0.151)	0.530* (0.244)	-0.0441 (0.147)
Military	-0.707** (0.229)	-0.604* (0.265)	-0.647*** (0.170)	-0.695*** (0.202)	-0.950*** (0.287)	-0.566* (0.243)
Coalition	-0.111* (0.0469)	-0.143** (0.0485)	-0.153*** (0.0435)	-0.112 (0.0613)	-0.0996 (0.0529)	-0.127* (0.0580)
Eff. Parties	0.597 (0.353)	0.526 (0.437)	0.224 (0.315)	1.029* (0.446)	0.903** (0.329)	0.805* (0.348)
Govt Parties	-0.731 (0.425)	-0.295 (0.457)	-0.409 (0.389)	-0.703 (0.419)	-0.832* (0.391)	-0.612 (0.366)
Indicator	0.187** (0.0670)	0.0618 (0.0636)	-0.510*** (0.105)	0.194 (0.155)	-0.0881 (0.0514)	0.0536 (0.0465)
Constant	-3.816*** (0.770)	-4.024*** (0.864)	-2.463*** (0.589)	-5.156*** (1.057)	-4.128*** (0.828)	-4.553*** (0.833)
N		12036		12036		12036
Likelihood		-6837.66		-6855.87		-6864.87
Chow Test		36.36***		23.00***		14.87**

Figure 5: Model VII Predicted Probabilities for Unemployment

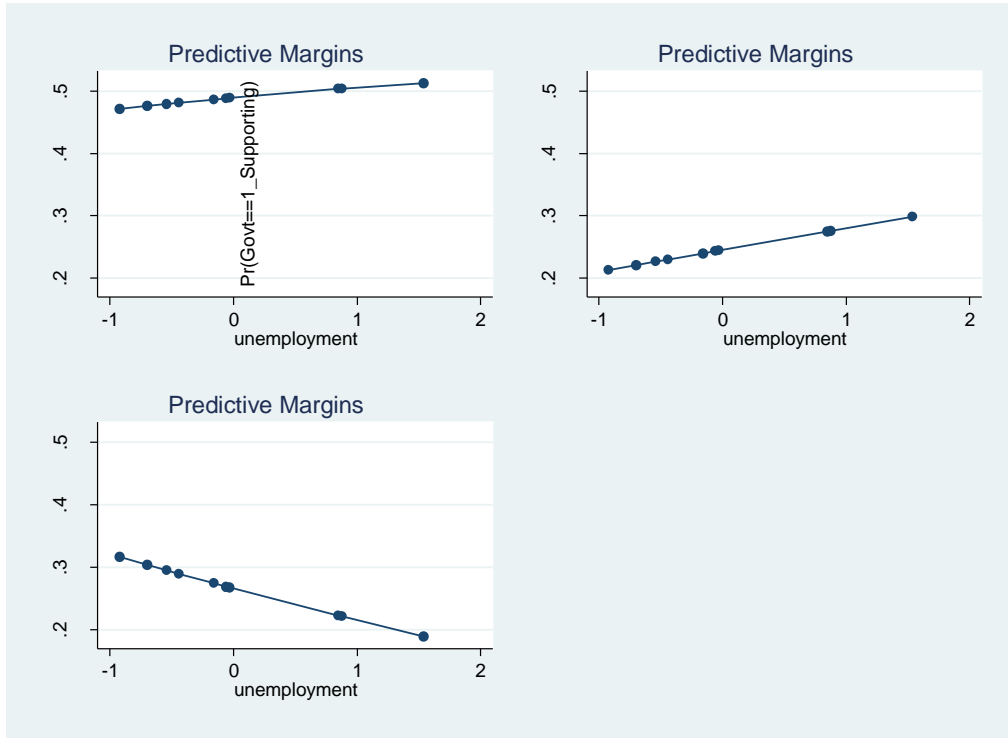


Figure 6: Model VII Predicted Probabilities for GDP

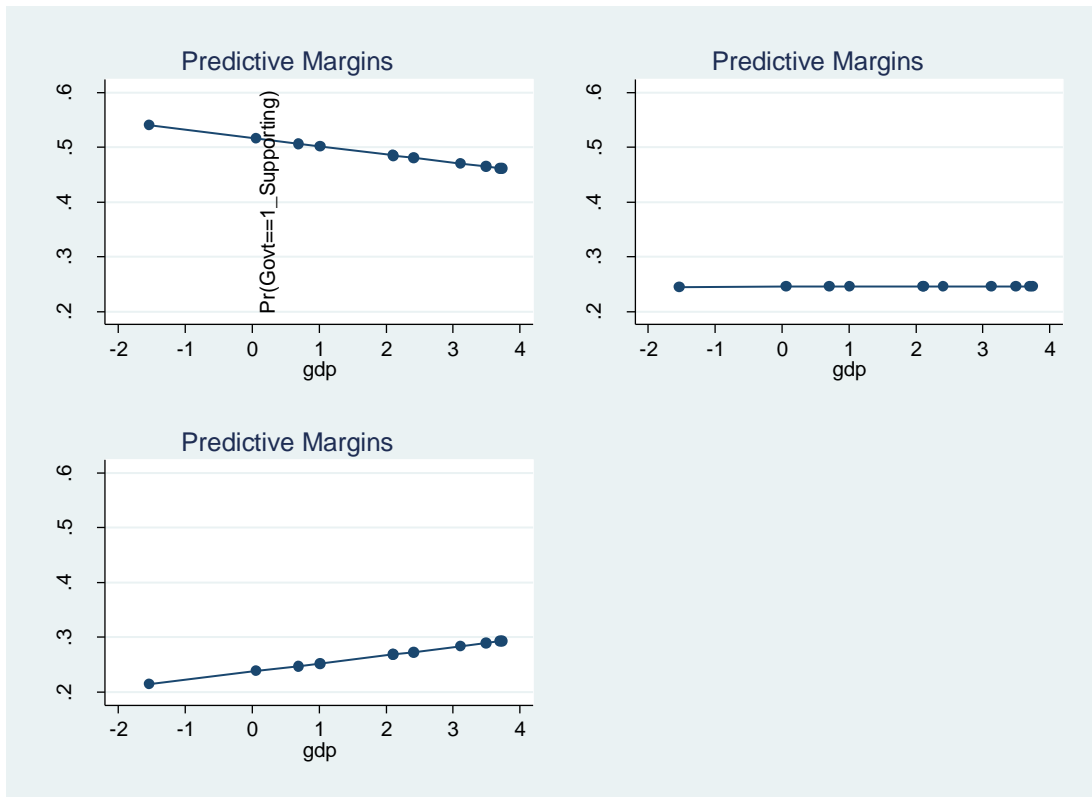


Table 12: Model VIII Multinomial Logit Results

	GDP		Unemployment		Inflation	
	PM	Supp.	PM	Supp.	PM	Supp.
Supp. Prior	2.302*** (0.232)	4.092*** (0.229)	2.277*** (0.233)	4.060*** (0.226)	2.278*** (0.231)	4.064*** (0.230)
Govt. Prior	4.408*** (0.139)	1.707*** (0.239)	4.423*** (0.139)	1.710*** (0.240)	4.415*** (0.137)	1.701*** (0.242)
Age	0.0385 (0.0251)	0.0124 (0.0162)	0.0311 (0.0246)	0.00563 (0.0160)	0.0329 (0.0252)	0.00608 (0.0160)
Male	-0.0770 (0.0457)	-0.0837 (0.0618)	-0.0878 (0.0470)	-0.0987 (0.0589)	-0.0963* (0.0469)	-0.0962 (0.0580)
Education	-0.00943 (0.0566)	0.0383 (0.0359)	-0.0385 (0.0531)	0.0161 (0.0406)	-0.0282 (0.0553)	0.0153 (0.0397)
Income	0.0256* (0.0123)	0.0608* (0.0251)	0.0305* (0.0142)	0.0641* (0.0278)	0.0294* (0.0141)	0.0641* (0.0278)
Relig.	0.553* (0.257)	-0.0274 (0.160)	0.567* (0.255)	-0.0297 (0.158)	0.531* (0.244)	-0.0356 (0.153)
Military	-0.736*** (0.157)	-0.834*** (0.0966)	-0.682*** (0.163)	-0.782*** (0.199)	-0.783** (0.264)	-0.738** (0.240)
Coalition	-0.194*** (0.0363)	-0.188*** (0.0148)	-0.226*** (0.0321)	-0.165** (0.0511)	-0.156*** (0.0290)	-0.150** (0.0514)
PM Seats	0.0659*** (0.00984)	0.0332*** (0.00322)	0.0556*** (0.0160)	0.0227 (0.0169)	0.0543** (0.0205)	0.0248 (0.0172)
Total Seats	-0.00521 (0.00756)	0.0327*** (0.00355)	-0.00465 (0.0105)	0.0179 (0.0127)	-0.0214*** (0.00560)	0.0111 (0.00676)
Eff. Parties	1.133*** (0.228)	0.727*** (0.111)	0.708 (0.469)	0.933 (0.491)	1.411*** (0.393)	1.145*** (0.334)
Govt. Parties	-0.806*** (0.168)	-0.328** (0.110)	-0.517 (0.329)	-0.515 (0.395)	-1.012*** (0.260)	-0.710** (0.260)
Indicator	0.251*** (0.0482)	0.255*** (0.0161)	-0.571** (0.217)	-0.119 (0.253)	-0.0336 (0.0428)	0.0266 (0.0465)
Cons.	-8.375*** (0.896)	-9.419*** (0.479)	-6.199*** (1.377)	-7.612*** (1.473)	-6.573*** (1.837)	-7.700*** (1.512)
N		12036		12036		12036
Log Likelihood		-6792.93		-6768.04		-6813.47
Chow Test		209.88***		6769.84***		145.20***

Standard errors in parentheses * p<0.05 ** p<0.01 ***p<0.001

Figure 7: Model VIII Predicted Probabilities for Unemployment

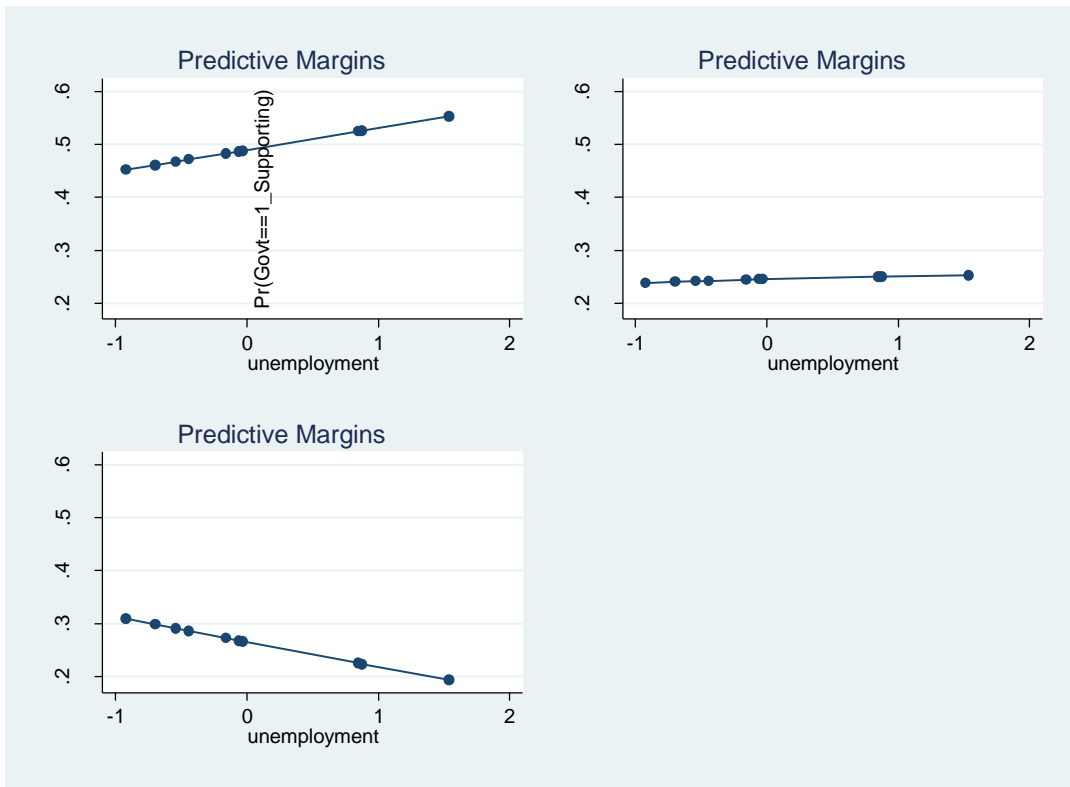


Figure 8: Model VIII Predicted Probabilities for GDP

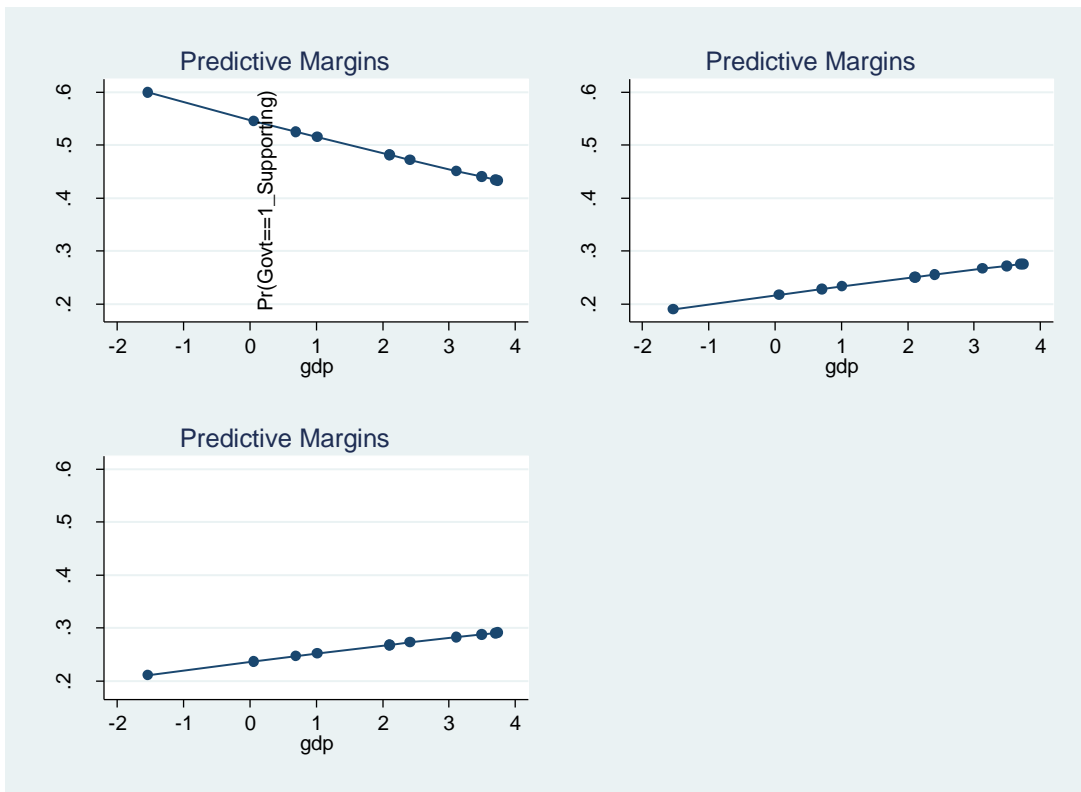


Table 13: Electoral-Level Interaction Effects

	GDP			Unemployment		
	Govt.	PM	Supp.	Govt.	PM	Supp.
Prior Vote	2.289 (1.961)	-5.858 (4.319)	1.203 (1.382)	-1.867 (1.065)	5.754 (8.758)	0.937 (1.218)
Military	-6.874 (6.182)	-2.234 (1.941)	-1.785 (4.517)	1.079 (4.325)	-8.344 (4.138)	-0.671 (4.895)
Coalition	-4.248 (2.690)	-3.911* (0.748)	-1.740 (1.934)	-14.77* (3.077)	-4.683 (2.801)	-3.121 (3.534)
PM Seats	-2.113 (2.664)	2.260 (3.221)	-0.110 (2.638)	0.783 (0.236)	-2.801 (5.457)	0.164 (0.611)
Total Seats	-0.479 (1.415)	0.410 (0.196)	-0.254 (1.027)	4.030 (1.218)	0.651 (0.590)	0.313 (1.399)
Eff. Parties	-0.588 (26.65)	-7.405 (5.558)	-2.793 (19.76)	-29.07 (9.517)	-1.460 (4.680)	-3.816 (10.96)
Govt. Parties	-4.201 (18.21)	-0.325 (3.679)	1.387 (13.74)	18.82 (7.349)	-0.769 (4.340)	2.534 (8.823)
Indicator	-26.68 (54.07)	-31.56 (13.94)	-12.22 (40.46)	308.4 (86.06)	66.15 (81.19)	57.52 (100.3)
PM Seats Interact.	0.661 (0.704)	0.613 (0.264)	0.0882 (0.547)	-2.610 (0.864)	-0.664 (1.004)	-0.388 (1.023)
Total Seats Interact.	0.0186 (0.347)	0.0986 (0.0602)	0.102 (0.248)	-2.410 (0.604)	-0.531 (0.498)	-0.484 (0.696)
Constant	85.16 (167.2)	105.2 (46.84)	33.40 (125.0)	-81.63 (23.62)	-37.75 (33.77)	-12.30 (29.37)
N	13	13	13	13	13	13

Standard errors in parentheses

* p<0.05 ** p<0.01 ***p<0.001

Table 14: Individual-Level Interaction Effects

	GDP		Unemployment	
	PM	Supp.	PM	Supp.
Supp. Prior	2.302*** (0.233)	4.098*** (0.230)	2.301*** (0.233)	4.104*** (0.233)
PM Prior	4.420*** (0.138)	1.708*** (0.237)	4.422*** (0.139)	1.710*** (0.237)
Age	0.0315 (0.0232)	0.0148 (0.0172)	0.0316 (0.0232)	0.0149 (0.0172)
Male	-0.0520 (0.0502)	-0.0945 (0.0652)	-0.0524 (0.0502)	-0.0916 (0.0644)
Education	-0.0555 (0.0450)	0.0654 (0.0481)	-0.0564 (0.0454)	0.0618 (0.0480)
Income	0.0302* (0.0121)	0.0605* (0.0251)	0.0325** (0.0118)	0.0610* (0.0246)
Relig.	0.609* (0.271)	-0.0281 (0.161)	0.608* (0.271)	-0.0326 (0.160)
Military	-0.118 (0.137)	-1.172*** (0.156)	0.0225 (0.124)	-0.804*** (0.121)
Coalition	-0.448*** (0.0429)	-0.0528 (0.0694)	-0.804*** (0.0615)	-0.322*** (0.0537)
PM Seats	-0.355*** (0.0668)	0.253** (0.0861)	0.0480*** (0.00280)	0.0321*** (0.00333)
Total Seats	0.0510*** (0.00669)	0.00817 (0.00747)	0.112*** (0.0124)	0.0619*** (0.00902)
Eff. Parties	-1.324** (0.445)	2.115*** (0.621)	-0.547** (0.188)	-1.698*** (0.192)
Govt. Parties	0.400 (0.225)	-1.029*** (0.295)	-0.0260 (0.203)	1.715*** (0.231)
Indicator	-6.331*** (1.204)	3.895* (1.722)	18.90*** (2.429)	-0.284 (2.092)
PM Seats Interact.	0.110*** (0.0172)	-0.0564** (0.0212)	-0.212*** (0.0349)	0.105** (0.0330)
Total Seats Interact.	0.0202*** (0.00523)	-0.0134 (0.00929)	-0.117*** (0.0110)	-0.0618*** (0.00816)
Constant	14.48*** (3.876)	-22.15*** (5.896)	-8.955*** (0.845)	-5.665*** (0.347)

Standard errors in parentheses

* p<0.05 ** p<0.01 ***p<0.001