**Government Responsiveness in Words and Actions:**

**Policy Promises and Public Spending in Comparative Perspective**

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2 March 2006

*Draft paper. Please do not cite without permission from the authors.*

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**Abstract:** We expect governments in democratic systems to respond to the issue preferences of citizens. Yet, we have a limited understanding of the factors that cause levels of responsiveness to vary over time and between countries. In this paper, we suggest that political contestation is the primary mechanism driving policy responsiveness and that this, in turn, is mediated by political institutions. To test this proposition, we analyze the responsiveness of executive policy promises (speeches) and policy actions (public expenditure) in Britain, Denmark and the USA in the period 1970-2005. These time series analyses show that higher levels of political contestation are associated with more responsive executives.

* Previous versions of this paper have been presented at the 2005 MPSA conference and at seminars at the University of Michigan and the University of Oxford. We would like to thank Scott Blinder, Tom Flores, Rob Franzese, Ken Kollman, Tony Mughan, Keiko Ono, Mark Pickup, Colin Provost and Robert Trager for insightful comments and suggestions.
By definition, a government has no conscience. Sometimes it has a policy, but nothing more.

- Albert Camus

As Dahl writes, ‘a key characteristic of democracy is the continued responsiveness of the government to the preferences of the people’ (Dahl 1971:1). In this ‘delegate’ view of representation,¹ elected representatives are expected to act responsively to the needs of their constituents. If elections are freely contested, governments will act in the best interest of the people, since parties and candidates engage in a competitive struggle for votes. There are, however, competing views on the nature of this struggle. The classical Downsian proximity view of elections contends that parties compete by shifting their ideological stances, since voters will support the party closest to their ideal point on a single issue-dimension (Downs 1957). Yet, other work on party competition argues that rather than shifting position on issues, parties compete by emphasizing certain issue dimensions (see for example Budge and Farlie 1983; Riker 1996; Petrocik 1996). According to this ‘saliency’ or ‘issue ownership’ theory, political competition is not primarily about competing ideological positions, but about selective emphasis on issues. Assuming that issue saliency is a key component of political competition, an important aspect of democratic responsiveness concerns how politicians *prioritize* different issues and how this corresponds with the public’s issue preferences. Moreover, if policy responsiveness is driven by political competition, we would expect the level of responsiveness to depend on the degree of contestation. When political contestation is fierce – that is, when executives feel uncertain about their ability to retain office and pass legislation – we would expect governments to have greater incentives to follow public opinion. There is a large body of literature on how levels of political competition vary between countries (see Strøm 1989; Franklin 2004), but little empirical work examining how such differences affect policy responsiveness. This paper seeks to address this question by examining variation in responsiveness across different systems and over time. We argue that political institutions, such as rules governing elections and legislative behavior, influence levels of political contestation and, in turn, affect responsiveness. In particular, we examine how variation in electoral contestation and executive power vis-à-vis the legislature affects the responsiveness of governments. Whereas studies of representation, with very few exceptions, focus solely on one aspect of responsiveness, this paper examines two stages of the opinion-policy nexus – from public preferences over policy programs to policy action – in parliamentary and presidential democracies. We thus distinguish between *rhetorical responsiveness* – that is, the extent to which government’s selective policy emphases in speeches reflect public issue preferences – and *effective responsiveness* – that is the correspondence between public preferences and budgetary priorities in public spending. At both stages of the representation process, we examine how different levels and types of political contestation influence responsiveness.

¹ The delegate model of representation is often contrasted with the ‘trustee’ model of representation. Whereas delegates follow ‘instructions’ (from the electorate), trustees make decision based upon their own judgments (see Pitkin 1967).
We test our hypotheses in a two-stage comparative analysis of policy responsiveness in Denmark (proportional parliamentarism), the United Kingdom (majoritarian parliamentarism) and the United States (presidentialism) in the period 1970-2005. The selection of three countries with very different institutional structures makes it possible for us to draw some preliminary conclusions about the impact of institutions on both rhetorical and effective responsiveness. We also look at the mediating effect of contestation on variations in responsiveness over time. To analyze rhetorical responsiveness, we conduct quantitative content analysis to code and classify policy emphases within the prime ministers’ and presidents’ speeches. Using time series analysis, we firstly analyze the impact of changing public preferences (using survey data) on the priorities set out in the speeches, and thereafter we examine the factors that influence public expenditure on major policy areas during the same period. The findings suggest that greater electoral uncertainty and constraints on executive discretion of power lead to higher levels of government responsiveness.

The opinion-policy nexus

There is an extensive literature on the correspondence between public opinion and policy behavior. The general finding in the literature is that elites are responsive to public preferences (see Page and Shapiro 1983, 1992; Stimson et al. 1995; Wlezien 1995, 1996). Some studies have even argued that governments have become more responsive due to developments such as polling technology (see for example Geer 1996). Unfortunately, most of the empirical work on policy responsiveness focuses solely on the US (Burstein 2003; Weakliem 2003). Therefore we know little about whether responsiveness is the same in other countries and systems and more importantly, we have a limited understanding of how institutions influence the degree of representation. Recent studies have examined policy responsiveness in a European context and some of these works have also considered the impact of institutional variations (see Brooks 1985, 1987; Soroka and Wlezien 2004; Hobolt and Klemmensen 2005). Brooks (1987) explores the effects of institutional change on effective responsiveness in France and finds that the institutional changes from the Fourth to the Fifth Republic does not have an impact on the responsiveness of French prime ministers. In contrast, Hobolt and Klemmensen’s (2005) study of responsiveness in Denmark and the United Kingdom shows that that policy promises are affected by institutional factors (electoral institutions), but their study does not examine whether these institutional differences have similar consequences for actual policy behavior. Soroka and Wlezien (2004) present a comparative study of responsiveness in Britain, Canada and the US. They suggest that institutions may influence the differences they observe, yet, do not develop a theoretical framework of how we may expect institutions to impact responsiveness.

This study aims to contribute to the literature on policy responsiveness by examining the responsiveness of policy promises and policy action in countries with very different electoral and legislative institutions. The key question is thus how institutions mediate the impact of public preferences.
on government behaviour. Importantly, Wlezien (1995, 1996, 2003) points out that the relationship between public preferences and spending is best understood as a reciprocal relationship. He has developed a ‘thermostatic’ model of the dynamic relationship between the public spending preferences and actual spending levels, arguing that the public reacts to changing spending levels by adjusting their preferences for further spending in a given policy area. While we agree with this view of the opinion-policy nexus as essentially a reciprocal relationship, this paper focuses on one side of this relationship, namely the extent to which policy programs and policy actions are influenced by public opinion. Our main focus is how this relationship varies depending on the institutionally mediated structure of political contestation.

**Political contestation and responsiveness**

Political institutions mediate the relationship between voters and parties and between government and opposition and thus shape the incentives for governments to respond to the wishes of the public. According to Strøm (2000), two stages of the democratic process of delegation are of particular importance. The first is the delegation from voters to the legislature. This delegation is shaped by the electoral rules. The second is the delegation from the legislature to the executive. In this stage, the distribution of power between the government and the opposition is determined. Following this logic, we distinguish between two parts of the representation process: the responsiveness of policy programs and of policy action. The first type of responsiveness is rhetorical responsiveness. This refers to whether the policy promises made by the executives in speeches reflect public preferences. The second type of responsiveness is effective responsiveness, defined as the extent to which budgetary priorities correspond with the policy preferences of the public.

Institutions are important at both stages of the responsiveness chain because they mediate the competitive pressure on political elites and consequently influence how responsive they are to the public (see Persson et al. 1997; Powell 2000, 2004). The competitive struggle for office is a key feature of democratic politics (Lipset 1981; Stigler 1972; Strøm 1992). Ferejohn (1986), for example, argues that incumbent governments provide the policies the electorate demands due to the fear of being replaced in the next election. Following the assumption of theories of democratic competition, we expect that higher levels of contestation lead to higher levels of responsiveness. According to spatial economic theories of democracy, parties will converge to the position of the median voter to maximize votes (Downs 1957). This mechanism should imply that in a perfectly competitive system governments are maximally constrained by the popular will. Equally, the policy program and policy actions of government are likely to be more responsive to changes in the preferences of majority of the electorate if the competitive pressure is high.

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2 For a critical position on competition as the mechanism providing sound democracy see Bartolini (1999).
Political contestation has been defined in many different ways (see Bartolini 1999 and Strøm 1989 for an overview). We focus on two aspects of competition that may influence responsiveness: electoral contestability and executive discretion. By *electoral contestability* we refer to the uncertainty facing the executive in electoral contests. Assuming that a primary aim of governments is to retain office, higher levels of electoral contestability should lead to higher levels of responsiveness to public preferences. *Executive discretion* refers to the level of constraints placed on the executive in the legislative process. This dimension of political competition is primarily determined by the balance of power between the executive and the legislature. Both of these dimensions of competition are influenced by formal institutions. Electoral laws shape levels of electoral contestability and constitutional provisions for divisions of power influence the balance of power between the executive and the legislature. The next section develops specific hypotheses of the impact of institutions on responsiveness.

*Rhetorical Responsiveness*

We focus on two aspects of electoral contestability: the clarity and attribution of responsibility in electoral contests and the uncertainty associated with future elections. We expect that executives who are held responsible for their actions in elections and who are very uncertain about being re-elected will have greater incentives to be responsive in their policy promises. Both mechanisms are shaped by formal institutions. The procedure for appointing the executive is direct in a presidential system, but indirect through the legislature in a parliamentary system. Scholars have suggested that clarity and attribution of responsibility is more pronounced in presidential systems, even when controlling for the complexity of the system, and that consequently, executives are more responsive to public priorities (Powell and Whitten 1993; Persson et al. 1997; Samuel and Hellwig 2004). On this basis, we can formulate the first hypothesis:

**H1:** Directly elected executives are more responsive to public preferences in their policy promises than indirectly elected executives.

Another aspect of electoral contestability is the uncertainty associated with future election contests. In general, we expect that higher uncertainty leads to greater responsiveness. The expected closeness of electoral contests is an apposite proxy for this uncertainty. But the operationalisation of this concept it is not as straight forward. High levels of competition in the last election send a signal to the government about future elections, and we can therefore use the winning margin in the most recent election as a measure (Strøm 1989). In parliamentary systems, the winning margin of the governing party or parties in the legislature or the presence of a minority or majority government can be used as a measure. In presidential systems, a more appropriate operationalisation is either the balance of power in the legislature (if the executive does not control the legislature, this should increase uncertainty) or the

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3 We define contestability somewhat differently from the definition proposed by Strøm (1989). Strøm argues that contestability is determined by the ease with which new parties can enter elections.
winning margin in the last presidential election. In this paper, we opt for the former measure. We would thus expect that governments that do not have a majority in the legislature feel more vulnerable, whereas governments with safe majorities will feel less uncertain about re-election, and thus have lower incentives to be responsive. Hence, our second hypothesis can be specified as follows:

**H2:** The larger the majority of the executive's party (or coalition of parties) in the legislature, the lower the rhetorical responsiveness to public preferences.

Institutional features, such as the electoral system, mediate levels of uncertainty. In parliamentary regimes, for example, plurality systems tend to produce a larger “winning bonus” for the executive than proportional systems (Norris 2004). In Britain, a combination of factors has resulted in an unusually high ‘winning party bonus’ for the party in first place (particularly since 1974). The Labour Party, in particular, has benefited from this in the last three elections with a votes-to-seats ratio of over 1.4 (Mitchell 2005). Even a close election can thus lead to a very sizable majority for the winning party in the Westminster system. We thus expect Danish executives to be the more rhetorically responsive than their British counterparts, since minority governments have been the norm in Denmark since the early 1970s. The literature on executive survival shows that the majority status of governments is important in explaining their length of time in office, suggesting that minority governments have poorer survival prospects than their majority counterparts (Warwick 1994; Laver and Shepsle 1998). In presidential systems, we expect ‘divided government’ – where the legislature is controlled by party in opposition to the president – to have a similar impact on executive uncertainty. Just as minority governments, have been the norm in Denmark, divided government has been common in post-war American politics. This suggests a high level of electoral contestability, and we would thus expect American governments to be highly responsive.

By focusing on electoral contestability, we seek to go beyond the dichotomies of parliamentarianism versus presidentialism and majoritarian versus proportional systems, which are often employed in the literature. Instead we highlight how a combination of these institutional characteristics promotes different degrees of political contestation. Denmark and Britain are both parliamentary systems, yet, a British Labour government with a 100+ majority faces a different level of uncertainty than a minority coalition government in Denmark. Equally, Britain and the US both have plurality systems, yet in one system the executive is directly elected, and faces the judgment of a national constituency, whereas in the other system the executive is elected by parliament. To examine how contestability affects responsiveness, it is useful to look not only at between-country variation, but also at within-country variation. In the Danish case, we would expect that majority governments are less

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4 In the United States, divided government refers to a situation where one party controls the White House and another party controls one or both houses of Congress. We have coded divided government as the situation where either the Senate or the House of Representatives is controlled by another party than the presidency. The phenomenon of Republican presidents and Democratic Congresses has been particularly common since 1953.
rhetorically responsive than minority governments. Equally, we would expect US presidents in office under divided government to be more rhetorically responsive than president under unified government. Finally, we expect that British governments with a small majority will be more responsive than governments with a large majority.

*Effective responsiveness*

Political contestation is likely to affect policy actions as well as policy promises. But when it comes to effective responsiveness, that is the association between public preferences and changes in public policy, we also expect the relationship between the executive and the legislature to be of great importance. We argue that the policies of governments that enjoy high levels of executive discretion and are consequently unconstrained by opposition parties and legislative institutions, are less in tune with the electorate as a whole, compared with the policies of governments with low levels of discretion. Of course, it can equally be argued that since high executive discretion increases both clarity of responsibility and the ability of governments to execute their policies, this should make them more capable of responding to the changing demands of the public (see Franklin 2004; Soroka and Wlezien 2004). Yet, while we agree that institutions that ensure high level of executive discretion may enhance the *ability* of executives to act responsively to the wishes of the electorate, we argue that they reduce the executive’s *incentives* to do so.

There are two key institutional features that can constrain executive discretion. The first is separation of powers where legislative decision-making requires joint agreement by both bodies. The second feature, which may or may not coincide with the first, is conflict of interests between the executive and the legislature. Formal models of decision-making have shown that, ‘separation of powers improves the accountability of elected officials and thereby the utility of voters’ (Persson et al. 1997:1166). The core argument is that separation of powers curtails the executive powers and enhances the incentives of the president to propose a budget that is more closely aligned with the preferences of voters (Persson et al. 1997). This leads to the following expectation:

**H3:** Executives in systems with (horizontal) separation of power are more responsive in their policy behavior than executives in systems where policies are implemented unilaterally.

Just as separation of power can enhance policy responsiveness, so can the conflict of interests between the executive and the legislature, since a conflict of interests constrains the power of the executive and encourages policy compromise. In presidential systems, conflict of interests arises when there is divided government. In parliamentary systems, there is a conflict of interests when the governing party (or coalition of parties) does not control a majority in parliament. An executive controlling a sizeable majority of seats in parliament has few – if any – incentives to make compromises, whereas an executive without a majority in the legislature is forced to compromise. In the latter situation, a wider range of opinions are accommodated, and the result is likely to be closer to the preferences of the majority of the
electorate. This logic follows Ferejohn (1986:18-19) who shows that when the number of parties competing in an elections declines, the welfare of the electorate declines. At the very least, extremist policies are more unlikely in situations with low executive discretion (Strom 1992). If an executive controls a majority in the legislature we expect the cabinet to use this majority to legislate according to policy objectives and ideology. The more executive power is constrained, the less opportunity governments have to pursue their own interests, and assuming that these interests will not always coincide with the preferences of the majority of the electorate, this should lead to higher responsiveness. We thus have the following expectation:

H4: When there is a conflict of interests between the executive and the legislature, executive policy behavior is more responsive to public preferences.

On the basis of these hypotheses, we expect effective responsiveness to be highest in the US where there is separation of powers and where divided government is common. Moreover, minority governments in parliamentary systems, such as the Danish, are expected to be more responsive in their policy actions, since they are forced to make compromises and consequently have an incentive to address issues which are beyond the preferences of their core voters. In the British system, where there is limited horizontal (although increasing vertical) division of power and the governing party as a rule controls an absolute majority of seats in parliament, executives have a high degree of discretion to pursue specific interests of the party. Hence, budgetary policy in Britain is expected to be the least responsive to public preferences. This logic can also be extended to explain within-country variation in the levels of effective responsiveness. If it is correct that the relationship between the executive and the legislature shapes the level of effective responsiveness, we should expect that the weaker the governing party or governing coalition, the more effectively responsive the government. In the American case, we expect that divided government increases the level of effective responsiveness. Table 8 gives an overview of the theoretical expectations outlined in this section. The next section discusses how we test these propositions.

Data and Methodology

To examine rhetorical and effective responsiveness in our three cases, we need valid and reliable measures of public preferences, government policy promises and policy action across various policy categories over time. The operationalization and measurement of these time series are discussed in this section.

Measuring public preferences
The policy priorities of citizens are estimated on the basis of the survey question: ‘what do you consider to be the most important problem facing your country’. In this question, respondents are asked to mention which policy problem(s) they see as the most important and salient. This ‘most-important-problem’ question is used widely in the literature to characterize the broader public salience of issues (see McCombs and Shaw 1972; MacKuen and Coombs 1981; McDonald et al. 2004; Pennings 2005). The distinct advantage of this survey question is that it has been asked in several polls and elections surveys across the world and repeated over time and can thus be used for cross-national and cross-temporal analysis. Moreover, it captures the public’s relative concerns with different policy areas on the ‘popular agenda’ (Pennings 2005:34). This is not to say that it is a perfect measure of the public’s policy preferences. In particular, it has been criticized for emphasizing the ‘problem’ status of an issue over the ‘importance’ due to the particular wording that emphasizes the most important problem rather than issue (see Wlezien 2005). This is indeed a valid concern and to reduce this ‘problem-bias’ in the measure, our model includes controls for unemployment levels and the involvement in war, since these factors are seen as particularly important in driving “problem status” (Wlezien 2005).

Since this analysis focuses on the chain of responsiveness from public preferences over policy programs to policy implementation, we focus on the policy categories that can effectively be implemented by governments. Hence, we have chosen to limit our analysis to six policy categories that constitute a very salient part of the public agenda as well as a substantial part of the public expenditure budgets: Defense, Law and Order (and other protective services), Public Health, Housing, Education and Social Services. The public preferences concerning these six policy areas have been estimated by recoding the responses to the ‘most-important-problem’-question and calculating the percentages of respondents choosing each of the six categories as the most important political issue in a particular year covering the period 1970 to 2005.

Measuring government policy promises

Policy promises are estimated by conducting content analysis of the annual speeches in which the head of government outlines the government’s policy priorities to the legislature. While the format of these speeches may vary slightly from country to country, they are comparable in their content, as they all focus on the policy intentions of the executive in the forthcoming year (or parliamentary session). The State of the Union is an annual address presented by the US President before a joint session of Congress. This address not only reports on the condition of the nation, but also allows the president to outline his policy agenda and the national priorities of Congress. In Britain, every session of Parliament begins with an address from the monarch, therefore commonly known as the Queen’s Speech (or King’s Speech), even though the content of the speech is entirely drawn up by the government and approved by the

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5 The environment is another important policy category that had to be omitted because of lack of spending data from the entire period. Housing is not included in US analysis, because of lack of variation in public opinion data (this is not a salient concern to the US public and therefore this policy area takes a value of zero in most years).

6 Wood et al. (2005) use presidential remarks to study whether the tone of the remarks has any effects on the economy.
In Denmark, the Prime Minister’s opening speech is written and delivered by the prime minister at the annual opening of parliament and outlines the policy agenda of the government.

In each of these speeches, the executive’s policy priorities for the legislative session are outlined, and this enables us to investigate how the government prioritizes different issues by analyzing the emphasis given to each policy area. We have employed computer-aided content analysis of the speeches to get reliable estimates of the governments’ policy preferences. This quantitative method of content analysis is often used when large amounts of textual data are processed and when the interest lies primarily in manifest rather than latent content (see, for example, Laver 2001). Studies have shown that this technique is suitable for generating both valid and reliable estimates of policy positions (Krippendorff 1980; Garry 2001; Laver and Garry 2000; Bara 2001). In our analysis, the policy preference time-series was obtained by calculating the relative frequency of all coded words and quasi-sentences, corresponding to the six policy categories in a ‘dictionary’ file. The dictionary is validated by means of the keyword-in-context (KWIC) procedure, which highlights keywords within the context in which they are used. By locating keywords in the text file the most appropriate category is determined and ambiguous words are excluded or disambiguated. The six coding categories were created so they were mutually exclusive and exhaustive and no word or word string was allocated to more than one coding category.

By coding all of the manifest policy terms used in the speeches (e.g. armed forces, police, hospitals, schools), this analysis captures the relative weighting given to each category as a percentage of the overall frequency of policy terms. Since the government is required to outline its policy intentions in these speeches, a content analysis of the speeches is a good proxy of the government’s policy promises. Several studies have shown that quantitative content analysis is an appropriate method of capturing policy priorities, since politicians tend to express their policy priorities in speeches and manifestoes by emphasizing certain policies over others, rather than endorsing particular policy stands and commitments (see Budge 1993; Hofferbert and Budge 1992). The executive speeches thus provide valuable data to test our hypotheses by comparing the policy-weighting of the speeches with the policy-ranking in the public opinion survey data. This measure of the relative emphasis given to different policy categories in a speech is, however, not identical to the measure of public preferences. Whereas the former measures the relative weight given to different policies, the latter explicitly measures a ranking of policy areas. Yet, although these measures are not identical, they still enable us to measure the extent to which the government responds to public concerns at least rhetorically. If the public is very concerned with public health at a particular time, this would be reflected in the survey data, and - assuming rhetorical

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7 The software program TEXTPACK 7.5 was used in our content analysis of the speeches.
8 Two separate dictionaries, in (American/British) English and in Danish, have been created for the series of speeches, and they only vary to the extent that it was necessary in order to capture variations in the political context. To alleviate problems associated with context and homography, keywords in the dictionary have been ‘disambiguated’ by using word strings and alternative signifiers to aid in contextualisation.
9 Moreover, to enhance the validity of the analysis, the dictionary has been cross-validated with the public opinion dictionary used for the analysis reported in Bara (2001).
responsiveness - the government would emphasize health relatively more than other policy areas in its speeches. However, this rhetoric does not necessarily translate into actual policy behavior.

Measuring budgetary policy

Public expenditure is often used in the literature as a proxy for policy behavior (see Bräuninger 2005; Cusack 1997; Soroka and Wlezien 2005). By measuring changes in level of spending, we can assess how the government prioritizes different policy areas. This may not be the most appropriate measure of policies that are mainly regulatory in nature. But the policy categories examined in this paper are predominantly redistributive and changes in policy priorities should thus be reflected in the budget. We use the budgetary functional data from the OECD database on national accounts. By using these data we get a comparable measure of the expenditures across spending areas and between countries and over time (OECD 2004).

Descriptive statistics

Before we analyze the relationship between these three time series, we present the descriptive statistics of each time series. Table 1 presents the mean value of public policy concerns, executive policy emphases and public expenditure (with standard deviations in brackets) in the US, the UK and Denmark during the past three decades. To make a cross-national comparison easier, public expenditure in each policy area is presented as a percentage of overall spending in these six categories, rather than presenting the spending figures as absolutes or % of GDP (but the latter measure is used in the analyses).

Table 1 illustrates that the policy priorities vary considerably between countries. Whereas American citizens are mostly concerned about law and order and defense issues, the Britons worry about health care and education, and the Danes are mainly preoccupied with welfare issues, such as support for the elderly. But the high standard deviations also imply that these priorities vary considerably over time. Looking at executive priorities across countries and over time, we find that the American and the British executives focus on issues related to defense, whereas the Danish prime ministers emphasize welfare and education issues. These cross-national differences in citizens and governments’ policy priorities appear to be reflected in public expenditure. The US spent four times more on defense than Denmark in relative terms during this period, whereas Denmark spent twice as much on social services. As a percentage of GDP, the US spent 7 percent on social services in the period 1970-2004 compared with 15 and 22 percent in the UK and Denmark respectively. In contrast, the US spent an average of 5 percent of its GDP on defense in this period, compared with 4 percent in Britain and 2 percent in Denmark. Hence, these descriptive statistics seem to imply some overall relationship between the public preferences, the policy promises and spending in these three countries. The question is, of course, whether this
relationship holds when we analyze the data and whether the degree of executive responsiveness varies between countries.

**Modeling responsiveness**

As discussed above, we want to examine two types of responsiveness - rhetorical and effective responsiveness - and how institutions impact these. *Rhetorical responsiveness* refers to extent to which the policy promises made by governments reflect the concerns of the public. If governments are responsive to public preferences, the relative policy emphases in speeches $S$ will be associated with the public’s relative preferences $P$. We can express this expectation in the following way:

$$S_t = \alpha + \beta_1 P_{t-1} + \beta_2 Z_t + \varepsilon$$

where the parameter $\beta_1$ captures the degree to which the policy promises made by governments are associated with public preferences in the previous year. $Z$ represents the set of other determinants of policy, such as the ideology of the government and economic factors, and $\alpha$ is the intercept term. In model 2, we also include an interaction between public preferences and a measure of electoral contestation (as discussed above) in order to assess whether responsiveness is higher when political contestation is high:

$$S_t = \alpha + \beta_3 P_{t-1} + \beta_4 Z_t + \beta_5 W_t + \beta_6 W_t \times P_{t-1} + \varepsilon$$

The parameter $\beta_6$ captures the interaction effect of the winning margin of the executive, $W$, and the public preferences of the public, $P_{t-1}$ on policy priorities in the speeches $S$. Research on responsiveness typically recommends using a one-year time-lag for the public preference predictor (see Page and Shapiro 1983; Brooks 1990; Hobolt and Klemmensen 2005), and we have followed this convention in this study, since the causal argument implies that the public preferences come *before* policy promises, and moreover it may take some months for public preferences to feed into the policy priorities of the government. The implication of this model is thus that the greater the impact of public preference in year $t-1$ on policy promises in year $t$, the higher is rhetorical responsiveness.

We also want to measure *effective responsiveness*, that is the extent to which *changes* in (budgetary) policy actions taken by governments $B$ reflect the preferences of the public $P$. This can be expressed as follows:

$$\Delta B_t = \alpha + \beta_7 P_{t-1} + \beta_8 Z_t + \varepsilon$$
where the coefficient $\beta_7$ captures the degree to which the changes in spending are associated with public preferences in the previous year. $Z$ represents the set of other determinants of policy, such as the partisan control of the government and unemployment. If effective policy responsiveness exists, we would expect public preferences in year $t-1$ to have a significant impact on changes in public expenditure $\Delta B$ in year $t$. As in equation 2, we also estimate a second model with an interaction term, capturing the joint effect of winning margin and public preferences on changes in policy behavior.

$$\Delta B_t = \alpha + \beta_9 P_{t-1} + \beta_{10} Z_t + \beta_{11} W_t + \beta_{12} W_t^* P_{t-1} + \epsilon$$

These four models of responsiveness will be tested in the next sections using the time series data from Britain, Denmark and the USA.

**Analyzing rhetorical responsiveness**

To analyze rhetorical responsiveness, we specify a regression model with the policy emphases in executive speeches as our dependent variable and public policy preferences as our key explanatory variable (both measured as a proportion ranging from 0 to 1). Yet, if we only examine the relationship between these two variables, there is a danger that we find a spurious relationship due to the impact of other factors. We therefore specify a multiple regression model, controlling for the most important variables that may influence government’s policy programs. As we are interested in how responsive governments are to the public irrespective of their ideological stance, we include a dummy variable for the left-right position of governments. This is simple in the case of one-party executives in the US and the UK, where Republican and Conservative governments take the value of 1, while Democrat and Labour executives take the value of 0. In the Danish case, we have chosen to distinguish between center-right and center-left coalition governments in the same manner. Since the engagement in war is likely to influence how much executives talk about defense-related issues in their speeches, we include a dummy variable representing involvement in inter-state war in the analysis of defense rhetoric. In our analysis of the domestic policy areas (law and order, health, housing, education and welfare), we include the unemployment rate (as a percentage of the labor force) as a general indicator of the state of the economy. We also estimated this model with various other control variables, but this did not affect the

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10 Following Tsebelis and Chang (2004), we do not include a time lag and therefore assume that the current government is responsible for the budget. Whilst budgets are often voted on the previous year, the government of the day has a substantial degree of discretion over the final budget allocation (Tsebelis and Chang 2004).

11 In 1978-9, a coalition government consisting of the Social Democrats (left-wing) and the Liberals (right-wing) was in office in Denmark. We have coded this government as a center-left government, based on the party affiliation of the prime minister, assuming that the prime minister is first among equals (see Huber 1996 for a similar assumption).

12 We use OECD data in order to ensure comparability across countries.
parameters of interest, and given the limited number of observations, we have opted for a relatively parsimonious model. To evaluate whether higher levels of uncertainty about future electoral contests induces higher levels of responsiveness, we include an interaction between public preferences and the winning margin of the executive (model 2). In the parliamentary systems, this is measured as the proportion of seats controlled by the governing parties in the legislature. In the presidential system, this has been operationalised as a “divided government” dummy, that is, uncertainty (and thus responsiveness) is hypothesized to be higher when the legislature is controlled by the opposition party.

Since our data are time series data, we need to take into account time-series dependencies. Failure to attend to these dependencies is very apt to lead to spurious results, since the ‘goodness of fit’ measures will appear much better than is actually the case, if the data series are trended and autocorrelated (Granger and Newbold 1977; Ostrom 1978; Clarke et al. 1998). To avoid these problems, we rely on the Box-Jenkins model building procedure of identification-estimation-diagnosis (Box and Jenkins 1976). We identify the dynamics of the input series, using a univariate Autoregressive, Integrated, Moving Average (ARIMA) model. Checking for trending, we find that whilst the executive preference time series are stationary, the expenditure time series are all non-stationary, as are several of the public preference time series. Hence, OLS would most likely produce spurious results. By differencing the non-stationary time series one time, we transform the trended series into stationary series. Subsequently, by examining the autocorrelation and partial autocorrelation functions, we find that autocorrelation is no longer present in the differenced time-series, and we can therefore proceed to the estimation stage using these series. Finally, we perform post-estimation diagnostic to ensure that autocorrelation is not a problem. The results of estimating the rhetorical responsiveness model using American data across 5 policy areas are shown in table 2.

TABLE 2 ABOUT HERE

In model 1, we test the effect of public policy preferences (lagged) on executive policy priorities in their speeches, controlling for war/unemployment and the ideology of the government. Table 2 shows that American presidents are generally responsive to public preferences in their speeches. At least their emphases on policy areas are significantly associated with public policy preferences in all areas except health care. For example, a 10 percentage points’ increase in public salience of law and order would lead to a just under 2 percentage point increase in the emphases on this issue in the president’s address. Model 2 tests whether changes in contestation over time affects levels of responsiveness by including an interaction between public policy preference and divided government. Our expectation is that responsiveness is higher when there is divided government, and hence the coefficient should be positive

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13 Other controls included in previous estimations of the model are: election year (dummy), first-term president (in the USA), GDP per capita and inflation rate. None of these controls altered the main results of the model, and we therefore chose to leave them out of the analysis presented here.

14 In addition to the expenditure time series, the following public opinion time series are non-stationary: Danish public opinion: defense, housing and welfare. US public opinion: defense, law and education.
and significant. This expectation is corroborated in 3 of the 5 policy areas. Figure 1 presents a graphical illustration of how responsiveness of the presidents varies depending on whether government is divided or unified, in the areas of defense and education.¹⁵

**FIGURE 1 ABOUT HERE**

As Figure 1 shows, the presidents display substantively greater responsiveness when faced with the uncertainty of Congress controlled by the opposition party in these two policy areas. Table 2 shows that this interaction effect is also significant in the area of defense and that the model fit generally improves when we include a ‘divided government’ interaction. The results also demonstrate a weak effect of party ideology on issue emphases. Republican presidents put more emphasis on law and order, whereas Democrats are keener to talk about health care and education. In general, these results are supportive of our hypotheses, since US presidents appear to be generally responsive to public preferences, and more so when faced with the competitive pressure of a Congress controlled by the opposition party.

According to our theoretical propositions, we would expect much lower policy responsiveness in the UK, where the parliamentary majoritarian system shields governments more from the electoral verdict. The results in table 3 corroborate this proposition.

**TABLE 3 ABOUT HERE**

Model 1 in table 3 shows the effect of public policy preferences on the political rhetoric of British governments. Public preferences are only reflected in the speeches in the area of health policy. But if public preferences are mostly irrelevant, what drives the political rhetoric of British governments? Mainly ideology, it seems. Conservative governments are more likely to talk about defense and law and order, whereas Labour governments talk more about health care and social services. The speech of a Tory cabinet will contain over 10 percent more references to defense than a speech of a Labour cabinet, for example. Model 2 also includes an interaction between the governing party’s seats in parliament and public preferences. Whilst the interaction term coefficient is negative, as hypothesized, it is only significant in the areas of defense and education. Hence, a smaller majority in Parliament does not appear to have a robust effect on the responsiveness of British governments.

In the previous section, we argued that the Danish prime ministers would be more responsive in their policy statements than British prime ministers, since Danish minority governments are vulnerable to electoral defeat if they do not appeal to the broad electorate. Table 4 shows the results from the Danish case.

**TABLE 4 ABOUT HERE**

¹⁵ The predicted values are calculated assuming a Democrat president, no war and an average level of unemployment.
As expected, the Danish prime ministers display a high degree of responsiveness to public opinion in their legislative speeches in all areas of domestic politics. Model 1 shows that a 10 percentage points' increase in public issue salience is associated with an increase of around 5 percentage points in the prime minister’s emphasis on the issue. Defense priorities, however, seem to be entirely driven by the ideology of the government. As in the British case, center-right governments talk considerably more about defense than center-left governments. The ideology of the government does not have a significant impact in domestic policy areas, yet the direction of the coefficients is as we would expect. In model 2, the interaction between public preferences and percentage of seats controlled by the governing parties is evaluated. As expected, the coefficients are negative, indicating that responsiveness is higher among the weaker governments. But only in three out of six areas is this coefficient significant (housing, health and social services).

In sum, these propositions seem to confirm our theoretical expectation about rhetorical responsiveness across countries. As expected, the directly elected American president and the prime minister of minority governments appear to be more responsive in their speeches than the majority governments in the Westminster system. There is no clear pattern of variation in responsiveness across policy areas. It is, however, interesting to note that the general public salience of an issue seems to matter to the level of responsiveness. For example, US governments are responsive on defense and law and order issues, which are generally highly salient to the American public, whereas the rhetoric on defense in the Danish case seems entirely driven by ideology, but responsiveness is high in the salient area of social services. Tables 2 to 4 also lend some support to our propositions about within-country variation in responsiveness. They suggest that governments with smaller support base in the legislature are more responsive to public preferences. This is in line with our expectation that uncertainty generates higher incentives for responsiveness. The next question is whether we find the same patterns when we examine the impact of public preferences on actual policy behavior.

**Analyzing effective responsiveness**

In the previous section, we argued that the effective responsiveness of budgetary policies is not only affected by the incentives created by the electoral system, but also by the constraints imposed by the legislature on the execution of the government’s policy program. We focused on the separation of powers and conflict of interests between the legislature and executive. These constraints on executive power are greatest in the US, where legislative decision-making requires joint agreement by both bodies, and where conflict of interests between the two are common. Danish executives are also constrained by opposition parties in parliament that normally control a majority of the seats. In contrast, British one-party governments have limited constraints on their power. To test whether these institutional differences influence responsiveness, we test the models outlined in equations 3 and 4 where the dependent variable
is the percentage point change in the budgetary allocation to each of the 6 policy areas (as a percentage of GDP). Table 5 shows the results of estimating effective responsiveness in the US.

**TABLE 5 ABOUT HERE**

Model 1 shows that US budgetary policy changes are affected by public preferences in 4 out of 5 policy areas. The effect is greatest in the area of defense where a 10 percentage points’ increase in public issue salience leads to a .3 percentage point change in the budgetary allocation on defense (which is a quite substantive effect given that the change in expenditure only ranges 4 percentage points). Changes in public expenditure also seem to reflect the ideology of the president. During periods with Republican presidents, changes is made to the budget towards more spending on defense, whereas budgets during Democratic presidencies increase spending on law and order and education during Democratic presidencies. In model 2, an interaction between divided government and public preferences is included. The positive and significant coefficients suggest that divided government produces more responsive budgetary policies, as hypothesized. This is also illustrated in Figure 2a, which shows the substantive difference in effective responsiveness depending on whether government is unified and divided in the area of welfare policy.

**TABLE 6 ABOUT HERE**

Table 6 indicates low effective responsiveness in the British case. The public policy preference variable only has a significant impact on spending in the areas of defense and health care. This lack of responsiveness is in line with findings in other studies of public expenditure in the UK that show almost no responsiveness to public opinion in British budgetary policies (see Soroka and Wlezien 2005). We suggest that this is influenced by the executives’ high level of discretion. We would expect ideology-driven expenditure changes in the UK, since the ability to execute policy programs should enable governments to act ideologically when they are not pandering to public interests. We find some evidence of this impact of ideology in the areas of law and order and education (Conservative governments spend more on law and order, whilst Labour governments spend more on education). Model 2 includes an interaction between public preferences and number of seats in parliament, but this is only significant in the area of defense and health (at the .10 level). Hence, as with rhetorical responsiveness, we do find some indication that the size of the majority in parliament matters, but not across all policy areas.

Do we find higher effective responsiveness in the Danish proportional parliamentary system with minority governments?

**TABLE 7 ABOUT HERE**
The results presented in table 7 indicate that public preferences have a direct and statistically significant impact on changes in public expenditure in the areas of law and order and health care, whereas the effect in insignificant in other policy areas and the coefficient is negative in the area of welfare spending (model 1). There is thus only limited evidence of effective responsiveness in Denmark, compared with the analysis of rhetorical responsiveness (table 4). This may be because only one of the institutional conditions of effective responsiveness – conflict of interests – is fulfilled. As Persson et al. have argued: ‘a mere conflict of interests between the executive and the legislature is not sufficient to improve accountability. The key condition to make separation of powers work in favor of voters is that no policy can be implemented unilaterally’ (1997:1166). In Denmark, budgetary decisions are taken unilaterally by the legislature which may, according to Persson et al., create a problem where actors with opposing interests make independent claims on government resources without responding to public wishes.

In model 2, where the interaction with seats is included, we can see that responsiveness in the areas of law and order, education and welfare is lower when the government has a more seats in parliament. This lends support to our institutional explanation of effective responsiveness: the more limited the discretion of the government (combined with electoral incentives), the higher the responsiveness of budgetary policies to public preferences. This is illustrated graphically in figure 2, which shows the conditioning effect of executive discretion in the US (social services), UK (defense) and Denmark (law and order). Figure 2 shows that the conditioning effect of divided government in the US has a greater magnitude than the conditioning effect of seats. This is perhaps not surprising given that majority governments have been the norm in the UK and minority governments the norm in Denmark, and the difference between a slightly smaller/larger majority/minority is not likely to have a great effect on budgetary outcomes. It would thus be interesting for future research to test this interaction effect in a parliamentary system, where the minority/majority status of governments have changed over time.

FIGURE 2 ABOUT HERE

As a summary, table 8 gives an overview of our theoretical expectations and our results.

TABLE 8 ABOUT HERE

Both rhetorical and effective responsiveness is high in the US, which suggests that the directly elected president and separation of powers enhance responsiveness. In contrast, responsiveness levels are low in Britain, where the institutional set-up reduces executive uncertainty and enhances discretion. In Denmark, rhetorical responsiveness is high, as expected, but effective responsiveness is more limited. This suggests that conflict of interests may not have the expected positive impact on effective responsiveness in unitary parliamentary systems. The conditioning impact of the relative strength of the executive on

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16 The predicted values are calculated assuming a left-wing government and a mean level of unemployment and no war.
responsiveness also indicate that institutional factors may have an impact on determining responsiveness, although this effect is not robust across all policy areas.

Conclusion

In this paper, we have argued that it is important to consider the impact of political institutions when examining the responsiveness of government priorities to public issue preferences. As a starting point for considering the effect of institutions on responsiveness, we have focused on their mediating impact on political contestation. Contestation is the key mechanism that encourages governments to respond to the preferences of the public. The harder the competitive struggle for votes and policies, the more likely executives are to pander to public preferences, and the less opportunity governments have to pursue their own interests. Consequently, we suggest that institutions, which enhance the executives’ uncertainty about remaining in office and constrain their power, will increase levels of executive responsiveness in both words and action.

Our empirical analyses of executive speeches and budgetary behaviour largely corroborate these propositions. Whereas most empirical research has focused solely on one stage in the chain of representation, e.g. the responsiveness of manifesto promises or budgetary policies, our study has examined both rhetorical and effective responsiveness. We find that rhetorical responsiveness is highest in the Danish system, which has a predominance of minority governments, followed by the directly elected presidents of the United States, whereas rhetorical responsiveness is low in the majoritarian British system. Effective responsiveness is higher in the presidential system in US than in parliamentary systems of Denmark and Britain. These findings thus corroborate previous studies of representation that show that US presidents are generally responsive to the wishes of the people. More surprisingly and importantly, these results imply that types of representation differ across parliamentary systems, suggesting that while governments in consensual proportional democracies are highly responsive to public preferences in their policy statements, governments in the majoritarian parliamentary system in Britain appear to pay little attention to public preferences at either stage of the representation chain.

The small number of cases examined in this study does not enable us to reach any firm conclusions about institutional effects based on these empirical results alone. But the suggestive findings in this study are important, because they illustrate that all democratic systems are not created equal when it comes to representing public issue preferences and that institutions may play a role in explaining these differences. Moreover, the examination of within-country differences lends further support to the suggestion that governments display greater responsiveness, when political contestation is high. Further research should extend this study to wider variety of institutional settings. In particular, it would be fruitful to apply this framework to other parliamentary systems with different levels of executive uncertainty and discretion. A more detailed analysis is also needed to examine the actual causal micro-mechanisms at work. How do the different institutional mechanisms affect elite responsiveness?
and why do voters assign responsibility to elected representatives in different institutional settings? Only by analyzing responsiveness in a comparative perspective can we address some of these important questions about modern democracy.
Appendix: Data sources

The analyses in the present article are based on data from the speeches and surveys referenced below. The responsibility for the analyses and interpretations presented in this article rests solely with the authors.

Legislative speeches

**UK:** The Queen’s Speech at the state opening of Parliament 1970-2005

**Denmark:** The Prime Minister’s opening speech in Parliament (*Statsministerens Åbningstale*) 1970-2005

**USA:** The State of the Union Address, 1970-2005

Public opinion data

**United Kingdom:**
Selected British Gallup Opinion Polls 1958-1991 (UKDA 3803)

**Denmark:**
Danish Midway Election Studies 1996, 2000, 2001
European Election Study 1972, 1989, 1999
Danish Gallup pre- and post-Maastricht referendum interviews 1992 (DDA 1835/1839)
Eurobarometer surveys 57, 59 & 61

**United States**

Budgetary data
OECD functional budgetary data on national accounts (see OECD 2004).
References


### Table 1. Descriptive statistics of policy priorities, 1970-2005

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<th>UK</th>
<th>Denmark</th>
</tr>
</thead>
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<td>Executive emphases</td>
<td>Public expenditure</td>
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**Note:** Figures in cells are percentages with standard deviations in brackets. Public expenditure in this table is calculated as a percentage of overall expenditure in these six policy areas.
Table 2. Rhetorical responsiveness in the US, 1970-2005

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*p < .10

Note: Figures in cells are unstandardized coefficients with standard errors in brackets. Housing is not included in US analysis, because of lack of variation in public opinion data (this is not a salient concern to the US public and therefore the this policy area takes a value of zero in most years).
<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Defense</th>
<th>Law and order</th>
<th>Housing</th>
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| N                     | 35      | 35            | 35      | 35     | 35        | 35              |
| R squared             | .34     | .44           | .09     | .24    | .25       | .29             |
| Adjusted R squared    | .27     | .34           | 0       | .08    | .15       | .14             |
| Durbin-Watson         | 1.78    | 1.95          | 1.72    | 1.67   | 2.26      | 2.20            |

* p<.10

Note: Figures in cells are unstandardized coefficients with standard errors in brackets.
Table 4. Rhetorical responsiveness in Denmark, 1970-2005

<table>
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<td>2.03</td>
<td>2.03</td>
<td>1.72</td>
</tr>
</tbody>
</table>

* \(p<.10\)

Note: Figures in cells are unstandardized coefficients with standard errors in brackets.
Table 5. Effective responsiveness in the US, 1970-2004

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Defense</th>
<th>Law and order</th>
<th>Health</th>
<th>Education</th>
<th>Social services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 2</td>
<td>Model 1</td>
</tr>
<tr>
<td>Public policy preferences $jt^{-1}$</td>
<td>3.174*</td>
<td>2.375*</td>
<td>1.462*</td>
<td>1.295*</td>
<td>1.525*</td>
</tr>
<tr>
<td></td>
<td>(.849)</td>
<td>(.931)</td>
<td>(.309)</td>
<td>(.292)</td>
<td>(.701)</td>
</tr>
<tr>
<td>Unemployment $t$</td>
<td>--</td>
<td>--</td>
<td>-.019*</td>
<td>-.014*</td>
<td>-.533*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.091)</td>
<td>(0.080)</td>
<td>(0.220)</td>
</tr>
<tr>
<td>War involvement $t$</td>
<td>.468*</td>
<td>.648*</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(.321)</td>
<td>(.327)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideology of government $t$</td>
<td>.270*</td>
<td>.317*</td>
<td>-.077*</td>
<td>-.126*</td>
<td>.070</td>
</tr>
<tr>
<td></td>
<td>(.107)</td>
<td>(.141)</td>
<td>(.037)</td>
<td>(.011)</td>
<td>(.106)</td>
</tr>
<tr>
<td>Divided government $t$</td>
<td>--</td>
<td>-.189</td>
<td>--</td>
<td>-.159*</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.455)</td>
<td></td>
<td>(0.052)</td>
<td></td>
</tr>
<tr>
<td>Public preferences $jt^{-1}$*Divided government $t$</td>
<td>--</td>
<td>1.985*</td>
<td>--</td>
<td>.232*</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.998)</td>
<td></td>
<td>(0.101)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.447*</td>
<td>.516*</td>
<td>.144*</td>
<td>.215</td>
<td>.541*</td>
</tr>
<tr>
<td></td>
<td>(.226)</td>
<td>(.277)</td>
<td>(.077)</td>
<td>(.073)</td>
<td>(.169)</td>
</tr>
</tbody>
</table>

N 33 33 33 33 33 33 33 33 33 33 33 33

R squared .37 .46 .44 .58 .13 .38 .22 .29

Adjusted R squared .30 .36 .39 .50 .04 .27 .14 .16

Durbin-Watson 1.73 1.72 1.78 1.75 1.86 2.16 1.67 1.99 1.68 1.79

*p < .10

Note: Figures in cells are unstandardized coefficients with standard errors in brackets.
### Table 6. Effective responsiveness in the UK, 1977-2004

Dependent variable: Changes in public expenditure (%)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Defense Model 1</th>
<th>Defense Model 2</th>
<th>Law and order Model 1</th>
<th>Law and order Model 2</th>
<th>Housing Model 1</th>
<th>Housing Model 2</th>
<th>Health Model 1</th>
<th>Health Model 2</th>
<th>Education Model 1</th>
<th>Education Model 2</th>
<th>Social services Model 1</th>
<th>Social services Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public policy preferences (p_{-1})</td>
<td>2.135* (.758)</td>
<td>18.099* (7.039)</td>
<td>.347 (5.78)</td>
<td>1.703 (3.942)</td>
<td>.900 (4.346)</td>
<td>3.771 (5.733)</td>
<td>1.828* (6.281)</td>
<td>2.688* (6.826)</td>
<td>.815 (7.13)</td>
<td>.645 (6.98)</td>
<td>.146 (9.39)</td>
<td>.219 (8.23)</td>
</tr>
<tr>
<td>Unemployment (t)</td>
<td>- .051* (.025)</td>
<td>- .050* (.036)</td>
<td>.128 (.102)</td>
<td>.111 (.120)</td>
<td>-.034 (.043)</td>
<td>-.041 (.042)</td>
<td>.068 (.065)</td>
<td>.030 (.067)</td>
<td>.094 (.149)</td>
<td>.174 (.150)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>War involvement (t)</td>
<td>-.427* (.238)</td>
<td>-.275 (.227)</td>
<td>-- --</td>
<td>-- --</td>
<td>-.051* (.025)</td>
<td>-.050* (.036)</td>
<td>.128 (.102)</td>
<td>.111 (.120)</td>
<td>-.034 (.043)</td>
<td>-.041 (.042)</td>
<td>.068 (.065)</td>
<td>.030 (.067)</td>
</tr>
<tr>
<td>Ideology of government (t)</td>
<td>.348 (2.215)</td>
<td>.182* (.092)</td>
<td>.186* (.088)</td>
<td>.548 (.627)</td>
<td>-.444 (1.622)</td>
<td>-.168 (1.227)</td>
<td>-.174 (1.227)</td>
<td>-.484* (.228)</td>
<td>-.302* (.120)</td>
<td>.698 (.751)</td>
<td>-.002 (.028)</td>
<td></td>
</tr>
<tr>
<td>Seats (t)</td>
<td>-- 4.435* (2.535)</td>
<td>-- .398 (1.256)</td>
<td>4.401 (6.339)</td>
<td>-- 1.608 (1.696)</td>
<td>-- 4.305* (2.255)</td>
<td>-- .10.079 (2.693)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public preferences (p_{-1}), Seats (t)</td>
<td>-- -29.325* (12.888)</td>
<td>-- -2.378 (6.779)</td>
<td>-.562 (9.370)</td>
<td>-.2.747* (1.381)</td>
<td>-- -.642 (1.246)</td>
<td>-- -.6.030 (2.675)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.960 (1.411)</td>
<td>-2.846* (1.537)</td>
<td>.263 (.149)</td>
<td>.070 (.742)</td>
<td>-.1.100 (1.872)</td>
<td>-.3.502 (4.192)</td>
<td>.099 (3.301)</td>
<td>-.568 (1.483)</td>
<td>-.478 (1.407)</td>
<td>-.2.650 (1.148)</td>
<td>-.816 (3.669)</td>
<td>5.228 (3.669)</td>
</tr>
</tbody>
</table>

| N | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| R squared | .34 | .49 | .17 | .13 | .34 | .45 | .12 | .26 | .14 | .27 |          |          |
| Adjusted R squared | .22 | .36 | .07 | .06 | 0 | 0 | .25 | .32 | .02 | .07 | .02 | .09 |
| Durbin-Watson | 2.05 | 2.23 | 1.78 | 1.76 | 2.39 | 2.28 | 2.06 | 2.32 | 1.78 | 1.77 | 1.88 | 1.94 |

*p<.10

Note: Figures in cells are unstandardized coefficients with standard errors in brackets.
Table 7. Effective responsiveness in the Denmark, 1970-2004

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Defense</th>
<th>Law and order</th>
<th>Housing</th>
<th>Health</th>
<th>Education</th>
<th>Social services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Public policy preferences p−1</td>
<td>-.743</td>
<td>-.361</td>
<td>.203*</td>
<td>7.313*</td>
<td>.353</td>
<td>2.586</td>
</tr>
<tr>
<td></td>
<td>(.467)</td>
<td>(.607)</td>
<td>(.099)</td>
<td>(3.287)</td>
<td>(.451)</td>
<td>(4.458)</td>
</tr>
<tr>
<td>Unemployment t</td>
<td>-.007</td>
<td>.003</td>
<td>-.051*</td>
<td>-.011</td>
<td>-.034</td>
<td>-.055*</td>
</tr>
<tr>
<td></td>
<td>(.005)</td>
<td>(.007)</td>
<td>(.029)</td>
<td>(.031)</td>
<td>(.025)</td>
<td>(.31)</td>
</tr>
<tr>
<td>War involvement t</td>
<td>.099</td>
<td>.074</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(.106)</td>
<td>(.501)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ideology of government t</td>
<td>.239*</td>
<td>.258*</td>
<td>.015</td>
<td>.019</td>
<td>-.143</td>
<td>-.054</td>
</tr>
<tr>
<td></td>
<td>(.083)</td>
<td>(.087)</td>
<td>(.026)</td>
<td>(.027)</td>
<td>(.113)</td>
<td>(.120)</td>
</tr>
<tr>
<td>Seats t</td>
<td>.216</td>
<td>.1092*</td>
<td>--</td>
<td>--</td>
<td>-.603</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(.493)</td>
<td>(.456)</td>
<td>--</td>
<td>--</td>
<td>(2.312)</td>
<td>--</td>
</tr>
<tr>
<td>Public preferences p−1*Seats t</td>
<td>-.1.388</td>
<td>--</td>
<td>-.8.022*</td>
<td>--</td>
<td>-.7.472</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>(.971)</td>
<td>(.3264)</td>
<td>(5.459)</td>
<td>(5.777)</td>
<td>(2.745)</td>
<td>--</td>
</tr>
<tr>
<td>Constant</td>
<td>-.076</td>
<td>.186</td>
<td>-.087</td>
<td>-.488*</td>
<td>.225</td>
<td>.227</td>
</tr>
<tr>
<td></td>
<td>(.055)</td>
<td>(.182)</td>
<td>(.036)</td>
<td>(.180)</td>
<td>(.211)</td>
<td>(.325)</td>
</tr>
<tr>
<td>N</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>R squared</td>
<td>.27</td>
<td>.32</td>
<td>.11</td>
<td>.22</td>
<td>.14</td>
<td>.27</td>
</tr>
<tr>
<td>Adjusted R squared</td>
<td>.19</td>
<td>.18</td>
<td>.02</td>
<td>.09</td>
<td>.05</td>
<td>.14</td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.87</td>
<td>1.82</td>
<td>1.94</td>
<td>2.15</td>
<td>2.07</td>
<td>2.27</td>
</tr>
</tbody>
</table>

* p<.10

Note: Figures in cells are unstandardized coefficients with standard errors in brackets.
Table 8. Overview of hypotheses and results

<table>
<thead>
<tr>
<th>Institution</th>
<th>Mechanism</th>
<th>Expectation</th>
<th>Evidence in support of expectation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly elected president</td>
<td>High levels of clarity and attribution of responsibility</td>
<td>High rhetorical responsiveness</td>
<td>Yes</td>
</tr>
<tr>
<td>Executive party in a minority (or small majority) in the legislature</td>
<td>Executive uncertainty about re-election</td>
<td>High rhetorical responsiveness</td>
<td>Yes</td>
</tr>
<tr>
<td>Separation of powers</td>
<td>Checks and balances on the power of the executive</td>
<td>High effective responsiveness</td>
<td>Yes</td>
</tr>
<tr>
<td>Conflict of interest between executive and legislature (e.g. divided government/minority government)</td>
<td>Decision-makers forced to compromise on policy action</td>
<td>High effective responsiveness</td>
<td>Mixed</td>
</tr>
</tbody>
</table>
Figures

*Figure 1. Conditioning effect of divided government on rhetorical responsiveness*

**a)** Rhetorical responsiveness in the US: Defense

**b)** Rhetorical responsiveness in the US: Education
**Figure 2.** Conditioning effect of executive discretion on effective responsiveness

### a) USA: Social Services

- **Predicted values for change in spending on Social Services**

### b) UK: Defense

- **Predicted values for change in spending on Defense**

### c) Denmark: Law & Order

- **Predicted values for change in spending on Law & Order**