Government in Crisis: Opening the “Black Box” of Intra-Cabinet Competition Over Budgetary Allocation*

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Abstract

With the onset of the current economic and financial crisis in Europe, questions about the power of core executives to control fiscal outcomes are more important than ever. Why are some governments more effective in controlling spending while others fall prey to excessive overspending by individual cabinet ministers? We approach this question by opening the “black box” of intra-cabinet decision-making. Using individual cabinet member’s contributions to budget debates in Ireland, we estimate their positions on a latent dimension that represents their relative levels of support or opposition to the cabinet leadership. We find that ministers who are close to the finance minister receive a larger budget share, but under worsening macro-economic conditions closeness to the prime minister is a better predictor for budget allocations. Our results, therefore, show that the effectiveness of delegating fiscal authority crucially depends on the economic environment.

Key Words: Intra-cabinet bargaining, budgetary politics, fiscal governance, text analysis

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1 Introduction

Austerity measures introduced in the aftermath of the financial crisis have pushed fiscal policy to the forefront of the political agenda and public debate. As the post-crisis situation has shown, governments vary in their ability to implement the necessary cuts to public spending and control fiscal policy more generally. One of the proposed mechanisms to increase control over fiscal policy is to delegate the oversight over the budgeting process to a minister for finance (Hallerberg, 2004). We know that this mechanism is particularly effective when appropriate budgetary rules are in place (Martin & Vanberg, 2013) and when finance ministers are supported by their prime ministers in the budgeting process (Hallerberg et al., 2009, 36). Intra-cabinet political dynamics, however, are often characterized by power struggles within the cabinet that may result in conflict between cabinet colleagues (e.g. Bennister & Heffernan, 2012; Mendelson, 2010; Rawnsley, 2001, 2010). How does competition between cabinet members affect fiscal policy decisions?

We address this question by opening up the “black box” of intra-cabinet politics through assessing the preferences of individual spending ministers relative to the prime minister and minister for finance. In general, there is very little empirical work on preference heterogeneity in cabinet governments. Traditionally, this has been due to the lack of objective information on cabinet decision-making. This is partly a result of the concept of collective responsibility whereby cabinet discussions and potential disagreements remain confidential in order for the cabinet to appear united in public (James, 2002, 7). Available empirical data appears only in political memoirs (e.g. Mendelson, 2010; Richards & Mathers, 2010; Bevir & Rhodes, 2006) or occasional leaks (e.g. Rawnsley, 2010, 2001). All of this makes cabinets appear empirically as a “black box” that has only recently begun to be opened up due to advances in text analysis (e.g. Giannetti & Laver, 2005).

The main contribution of our paper is to further expose this “black box” by analyzing the speeches of cabinet ministers delivered during budget debates. This allows us to identify their preferences over the allocation of government spending across departments and test the micro-mechanism of fiscal decision-making. We furthermore show that these estimated preferences are
systematically related to changes in departmental budgetary shares. Our results, therefore, provide evidence that positions expressed through speeches are systematically linked to important policy outcomes.

Our empirical test focuses on Ireland which has a well-documented history of intra-cabinet political competition, with varying intensity over time. This allows us to externally validate the results of our text analysis (Grimmer & Stewart, 2013). Since 1998 the country has also implemented the delegation mechanism of fiscal governance (Hallerberg et al., 2009, 50) along with a very robust fiscal governance and control process in comparison to other EU member states (Hallerberg et al., 2009, 74). By looking at Ireland for the period since 1999, we are also able to estimate the effect over the entire economic cycle: from boom to bust.

In contrast to previous results in the literature we find that the delegation mechanism has varying performance over the economic cycle. Under this mechanism the finance minister has significant discretion in budgetary decision-making. We show that cabinet ministers closer to the finance minister on the intra-cabinet political competition dimension receive greater increases in budget shares. This discretionary power fits with theoretical predictions of the delegation mechanism employed in fiscal governance. However, we also find that during economic crisis the prime minister can intercede on behalf of the ministers closer to him and alleviate cuts to their departments, thus curtailing the finance minister’s discretionary power and possibly hindering the performance of the delegation mechanism.

The paper proceeds as follows. The next section discusses relevant work. The following section presents our theoretical argument, incorporating the effects of intra-cabinet political competition and resource allocation. We next discuss fiscal governance and intra-cabinet political competition in the Irish context. This is followed by testing of the empirical implications of our main theoretical propositions. The final section concludes and discusses areas of further research.
2 Intra-Cabinet Politics of Budgetary Process

Studies of the executive in parliamentary systems focus on the relative power of the prime minister versus the cabinet within the wider institutional context of cabinet government (Dowding, 2013). Cabinet ministers hold distinct policy preferences (Laver & Shepsle, 1994; Blondel & Manning, 2002) and are naturally placed to replace the prime minister at the helm of power (Heffernan, 2005b; Weller, 1994; Luebbert, 1986). The power of individual ministers within the cabinet varies, with some of the “big beasts of the jungle” exercising almost prime ministerial influence over events (King & Allen, 2010; Laver & Shepsle, 2000; King, 1994). In this context, Indridason & Kam (2008) suggest that all ministers have the incentive and opportunity to engage in self-interested behavior and utilize their portfolios counter to the preferences of the prime minister. This appears to be the explanation behind the failure of Greek privatization in the early 1990s (Pagoulatos, 2001), where the cabinet performed as a “federation of departments” (King, 1994) with conflicting interests and preferences. More recently, the segmented executive (Elgie, 2011) in Greece has been linked to systemic economic governance failures (Featherstone & Papadimitriou, 2013).

The involvement of cabinet ministers in collective decision-making is one of the potential causes of intra-cabinet conflict. This may derive from the representation of distinct and conflicting interests and also from overlapping jurisdictions, particularly in the case of the finance minister (Andeweg, 2000). Most, if not all, departmental proposals have budgetary consequences which brings the spending needs of individual departments into direct confrontation with the finance minister who often has veto power over spending proposals. For example, the German finance minister can veto governmental spending decisions as long as he has the full support of the prime minister (Sturm, 1994).

From a fiscal policy perspective, preference heterogeneity in the cabinet contributes to the so-called common pool problem. Taxes drawn from the larger population fund expenditure programs targeting narrow interest groups (Von Hagen & Harden, 1995). This creates a difference in benefits between the larger group of taxpayers and the smaller group of program recipients, bringing with
it an abundance of possibilities to free ride. Representatives of interest groups receiving targeted spending have an incentive to overspend compared to socially-optimal levels. The common pool problem has been shown to result in larger government debts and excessive deficits (Hallerberg et al., 2009; Velasco, 2000; Von Hagen & Harden, 1995) and, more generally, in economically inefficient policies (Weingast et al., 1981). In parliamentary systems the number of parties in government (Bawn & Rosenbluth, 2006) and the number of spending ministers (Perotti & Kontopoulos, 2002; Schaltegger & Feld, 2009; Wehner, 2010; Woo, 2003) leads to higher spending and budget deficits. Political fragmentation within government also leads to similar fiscal outcomes (Hallerberg et al., 2009; Franzese, 2000).

Possible solutions to collective action problems have been discussed in the literature (Olson, 1965; Ostrom, 1990; Ostrom et al., 1994). One possibility is to appoint an “entrepreneur” with sufficient powers to induce and monitor coordination between all actors.1 Among the ministers in the cabinet, the minister for finance (or equivalent) usually plays the role of such a fiscal entrepreneur (Hallerberg, 2004). The delegation of powers over budgetary decision-making to the finance minister as fiscal entrepreneur results in centralization of the budgetary process. Empirical results show that centralization can reduce the effect of the overspending bias resulting from the common pool problem (de Haan et al., 2013; Hallerberg, 2004; Von Hagen & Harden, 1995; Hallerberg et al., 2009; Hahm et al., 1996; Von Hagen, 1992). More recently, Martin & Vanberg (2013) have shown that this is particularly effective when other fiscal rules are in place that reduce coalition members’ incentive and ability to increase spending.

The downside of delegating fiscal authority to a strong finance minister is that spending decisions could be biased towards the minister’s own policy preferences. It is rare in parliamentary systems that non-partisan outside experts are appointed to cabinet positions. Instead, finance ministers are usually recruited from the top ranks of their parties. They therefore naturally favor some constituencies over others, either for electoral reasons, career ambitions, or simply because of their

1 The second often-used solution is a binding contract between all spending actors. We do not focus on this solution here due to space constraints and also since it now applies only to a relatively small number of countries – six out of fifteen according to Hallerberg et al. (2009, 50).
individual political beliefs. Delegation of fiscal authority is therefore a trade-off between counter-balancing the overspending biases of individual ministers and the bias induced by a partisan finance minister (Hallerberg et al., 2009). This observation can be summarized as our first hypothesis as follows:

**Hypothesis 1:** If a delegation mechanism is in place, spending decisions will reflect the policy preferences of the finance minister.

A crucial factor in the effectiveness of delegating fiscal authority is that the finance minister is supported by the prime minister when making spending decisions. Indeed, a common assumption made in the literature on budgetary politics is that the prime minister and finance minister both weigh the collective interests of the government rather than those of specific spending departments (Von Hagen & Harden, 1995, 774). This assumption has been made in a recent applied analysis of the politics of budgetary redistribution (e.g. Lowe & Benoit, 2013).

We argue that this assumption severely misrepresents intra-cabinet politics and conflict over the redistribution of financial resources. Wildavsky & Caiden (2004) describe budgets as struggles for power, where budgetary decisions are essentially decisions about the distribution of power made through a “dance of the dollars.” This provides ample opportunity for potential conflicts of interest between the finance and prime minister. For example, Prime Minister Andreas Papandreou in Greece in the 1980s offered virtually no support to his finance minister on budget matters (Hallerberg, 2004, 64). While British Prime Minister Tony Blair provided support to Chancellor Gordon Brown over many economic matters (Hallerberg, 2004, 64), they clashed, for example, over health spending (Heffernan, 2005a). Policy conflict within the Blair-Brown duopoly is well documented in the proliferation of cabinet committees (Dunleavy, 2006) and establishment of clear “policy fiefdoms” (Hennessy, 2005). The relationships vary even within the same country over time. While Margaret Thatcher consistently backed Chancellor Howe, her successor, John Major, was more likely to side with spending ministers rather than Chancellor Lamont although he later supported Lamont’s replacement, Chancellor Clarke (Hallerberg, 2004, 73-78).
What explains the breakdown of effective delegation in some governments? We argue that changes in the macroeconomic conditions can significantly alter the prime minister’s rational evaluation of the aforementioned trade-off between the benefits and costs of delegation. During economic good times when sufficient funds are available and borrowing is under control, delegation is cheap because there is relatively little competition over the precise allocation of government resources. During economic crisis, in contrast, the costs of delegation may outweigh its benefits. When difficult decisions have to be made sacrificing spending in some areas and ring-fencing spending in others, even small differences in preferences over budgetary allocations can lead to major disagreement between the prime minister and finance minister, ultimately leading to a breakdown of the delegation mechanism. Thus, the macroeconomic environment and its effect on competition between the prime minister and finance minister structures decisions on budgetary redistribution. From this discussion we develop our next hypothesis:

**Hypothesis 2:** An increase in competition between the prime minister and finance minister during economic crisis will lead to less delegation of fiscal authority and hence to less influence of the finance minister over budgetary outcomes.

To summarize, we believe that decisions over budgetary redistribution across departments structure intra-cabinet political competition. The preferences of individual ministers contrast those of the finance minister and prime ministers. At the same time, the prime minister and finance minister may also have distinct and different preferences over budgetary spending. During the economic crisis standard fiscal governance instruments may be augmented with a more direct involvement of the PM in decisions over budgetary redistribution.

### 3 Fiscal Governance and Intra-Cabinet Politics in Ireland

Irish spending ministers enjoy a large degree of autonomy (Farrell, 1994). The only check on them comes from the Taoiseach (prime minister), other coalition party leaders and the minister for finance. Authorization from the minister for finance is required for all spending (Government
of Ireland, 2008, A4.9). In their analysis of geographically-targeted spending in Ireland, Suiter & O’Malley (2013) consider two types of expenditure: educational grants (more institutionally-constrained in geographical focus) and sports grants (more flexible). They find that ministers responsible for the funding area were able prioritize the distribution of grants to their constituencies. The Taoiseach proved important for the disbursement of grants, but only for the more institutionally-constrained educational grants. However, by far the largest effect, in absolute terms, was for the minister for finance whose constituency received the lion’s share of geographically-targeted spending from these two expenditure programs.

In its recent economic history, Ireland experienced both standard fiscal governance mechanisms. In the period from 1985 to 1997, it had a contract mechanism in place, however, this was replaced with the delegation mechanism in 1998 (Hallerberg et al., 2009, 50). The structure of the budgetary process has become more centralized over time and is currently one of the most centralized among the EU15 states (Hallerberg et al., 2009, 74). The change to the delegation mechanism in Ireland appears to be driven by the appointment of Charlie McCreevy as minister for finance. McCreevy exercised independent fiscal policy in the context of the competing interests of the Irish tripartite social partnership arrangement (Herzog & Mikhaylov, 2010, 11). In fact, he was widely considered an extremely strong and independent minister for finance who dominated the Taoiseach in economic matters.2

The literature on pork-barrel politics suggests that pork spending usually comes in the form of public investment rather than current expenditure (e.g. Drazen & Eslava, 2010; Khemani, 2004). This is done so as not to increase overall election-year deficits that are not viewed favorably by voters (e.g. Peltzman, 1992; Brender, 2003; Brender & Drazen, 2008). Capital expenditure is also more “visible” to voters, for example, in the form of new road construction or infrastructure-building (Kneebone & McKenzie, 2001), or, more generally, targeted at specific voter groups (Drazen & Eslava, 2010).

In turn, during fiscal adjustments, politicians face the choice of whether to cut current or capital

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2 Authors’ interviews with a former government minister and three former top civil servants, Dublin, July 2009.
expenditure. Alesina et al. (1998) argue that this choice revolves around short-term and long-term political perspectives. Some current expenditure cuts (e.g., spending on social welfare programs) may be more permanent and can result in positive wealth and economic expectation effects. However, such welfare cuts may be politically untenable. At the same time, cuts in capital expenditure are less costly in the short run, albeit with higher productivity-diminishing costs in the long run. Depending on politicians’ time horizons, they may prefer to introduce investment cuts (Alesina et al., 1998). In this setting, Rogoff (1990) suggests that under the conditions of informational lags, voters may actually reward governments for choosing to cut capital rather than current expenditure. Ireland implemented expenditure cuts during its first deep fiscal crisis of the 1980s: while current expenditure was largely not targeted, capital spending was severely cut (McCarthy, 2009, 6). Lessons from previous consolidation also seem to have affected the handling of the latest economic crisis (Dellepiane & Hardiman, 2012).

Drawing on the discussion above, in order to capture the effects of intra-cabinet political competition on budgetary redistribution we focus on capital, current and overall public spending. This allows us to capture potential effects over the full economic cycle.

4 Data and Method: Using Budget Debates to Measure Preferences over Redistribution

Our analysis is based on cabinet members’ contributions to the annual budget debate. The budget debate takes place in the first week of December of each year and begins with a statement by the minister for finance (often lasting 45 minutes), followed by statements of the official spokespersons from opposition parties, the prime minister, cabinet members, party leaders, and backbenchers from the government and opposition.

Budget speeches are an excellent data source to measure cabinet members’ policy preferences. First, contributions to the budget debate are rather political than technical in nature and give members of parliament the opportunity to issue their opinions on the proposed distribution of gov-
ernment resources. Second, budget debates happen annually, involve the majority of cabinet members, and are about a clearly identified topic, which makes it possible to measure changes in preferences over time. Third, given the institution of strict party discipline that is typical for parliamentary systems in Europe, voting against the party would almost always lead to expulsion from the party, which results in almost perfect voting cohesion in roll-call votes (Hansen, 2009). Speeches are, therefore, an alternative vehicle for cabinet members to express their opinions while still voting along the party line. In the following two sections, we explain in more detail how we estimate the preferences of cabinet ministers and provide an overview of our data.

### 4.1 Data overview

We collected all contributions to budget debates from a new database of parliamentary speeches in Ireland that contains all speeches since 1922, in addition to each member's parliamentary history, such as party affiliation and ministerial appointments (Herzog & Mikhaylov, 2013). Due to data availability of budgetary information, we limit our analysis to the time period 1999 to 2013.4

Table 1 provides a summary of the cabinets included in our analysis. Between 1999 and 2011, the cabinet was dominated by Fianna Fáil (FF), the largest party at that time, which appointed both the Taoiseach and minister for finance. In 2011, after a disastrous election outcome for FF and its small coalition partner, the Green party, the government was replaced by a coalition between Fine Gael (FG) and the Labour party. During most of the time period in our sample, the cabinet leadership was in the hands of Bertie Ahern (FF), who, following a payment scandal, resigned from his position in 2008 and was replaced by his finance minister, Brian Cowen. For the finance ministry, four office-holders are included in our data: Charlie McCreevy (FF, 1997–2004), Brian Cowen

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3The speeches we use in the analysis are part of the general budget debate that follows the official introduction of the Budget Bill by the finance minister. The more technical aspects of the budget are discussed in specialized committees after the general budget debate has taken place, and specific fiscal policies are introduced in the subsequent Finance Bill. We exclude these more technical discussions from our analysis.

4Information about the allocation of government budgets is only available in electronic format from 1999 onward.
The cabinet consists of 15 ministers. However, due to time constraints, not all cabinet ministers participate in every debate. Some are replaced by their junior ministers who we therefore include in our analysis. Other departments are represented by more than one cabinet member (i.e., the cabinet minister and a junior minister, or two junior ministers), while others are not represented at all. This introduces two potential biases into our analysis. First, junior ministers might express a policy position that differs from the (unobserved) position of their department head. However, this is unlikely, as both ministers should have a similar interest in increasing their department’s budget share and hence should express a similar position.\footnote{We can perform a crude test of this assumption by looking at the cases in which a department was represented by more than one speaker in a debate, which happened in 31 (22\%) cases. The average distance between speakers from the same department across all years is 0.36 (s.d. = 0.31). In comparison, the average distance between speakers from different departments in each debate is 0.92 (s.d. = 0.29). In short, speakers from the same department have, on average, relatively similar positions. This is also illustrated in Figure 2, which shows the position of each speaker by department in each year.}

Second, the fact that some departments are not represented in a debate may indicate a systematic exclusion of certain cabinet ministers, for example, those with the largest spending cuts or those most opposed to the government budget. However, the number of departments that are not represented in each year is relatively small and we have not found a significant effect between budget shares and representation in the debate in our data.\footnote{An exception is the debate in 2009 for the 2010 budget. Because parliament had already spent significant time on the bank bailout debate, it was decided to shorten the budget debate and to only include – in addition to the prime minister and minister for finance – the party leaders and finance spokespersons. All results presented below are robust to including or excluding the 2010 budget debate.}

### 4.2 Measuring intra-cabinet positions

To extract latent traits from the budget speeches, we use a quantitative text analysis method called “Wordscores” (Laver et al., 2003) as implemented in the R-package “quanteda” (Benoit & Nulty, 2014).
Wordscores is an implementation of the Naive Bayes Classifier (NBC) (Benoit & Nulty, 2013a) widely used in machine learning (see e.g., Hastie et al., 2009). The basic idea of NBC is to classify documents (e.g., emails) into known categories (e.g., “spam” vs “not spam”) based on their word frequencies. To this end, the researcher defines a training set, which is a set of documents that are known to belong to one of the categories (e.g., a collection of spam and regular emails). Based on the word frequencies in the training set, one calculates the conditional probability that an unknown document belongs to one of the categories based on the word frequencies in the document. Wordscores then calculates the latent position of each document as the arithmetic mean of the posterior probabilities (Benoit & Nulty, 2013a).

Our goal is to estimate the latent position of each ministerial speech relative to the positions of the prime minister (PM) and minister for finance (FM). We therefore use the PM and FM speeches in each year as our training set (i.e., “reference documents” in the terminology of Wordscores) to scale the positions of the remaining budget speeches. These positions are similarity measures between the ministerial speeches and the reference documents. The similarity between speeches is then an indicator for the preference alignment between cabinet members on the dimension of intra-cabinet competition between the PM and FM.

Previous work has externally validated the application of quantitative text scaling to budget speeches. Lowe & Benoit (2013) compare the application of an unsupervised Poisson-scaling method to budget speeches. Following the advice in Benoit & Nulty (2013a), we use an uninformative prior as we have no prior expectation about the class probabilities.

Preferences expressed through speeches are of course not strategy free or a reflection of a minister’s “true” beliefs. Like an analysis of roll-call data, we can only measure similarity between expressed behavior but not its underlying motivation. It is also possible that expressed preferences are endogenous, i.e., influenced by budgetary decisions in the first place. For example, ministers whose budget was cut might use their speeches to articulate dissatisfaction with the finance minister. Precisely for this reason we believe that a supervised scaling method is better suited for our analysis than an unsupervised approach like Wordfish (Slapin & Proksch, 2008). By using the speeches of the PM and FM as our reference documents, we explicitly estimate the similarity of cabinet members’ speeches relative to these two documents. This allows us to estimate positions on the dimension of competition between the PM and FM, and not just to capture cabinet member’s approval or disapproval of the finance minister’s budget decision. This issue of endogeneity would only become particularly problematic if the dimension of intra-cabinet competition perfectly corresponds to the dimension capturing sentiment towards the finance minister.
model (Slapin & Proksch, 2008) of the 2010 Irish budget debate to human coding of the same speeches. They find that with a few exceptions the computer-coded results closely resembled those of the human coders. Our method slightly differs from the one used in Lowe & Benoit (2013) because we use a supervised text-scaling model. Nevertheless, Lowe and Benoit’s analysis shows that Irish budget speeches contain meaningful political information about legislator’s preferences that can be recovered through careful quantitative text scaling.

Any application of computer-assisted text analysis requires careful pre-processing of documents. Before we estimated positions, we removed interruptions from the plenary, converted everything to lowercase, removed standard function words (‘stop words’), numbers and punctuation, applied stemming, and trimmed the documents to remove all words that appeared in only one speech within one debate. These are standard pre-processing steps commonly used in natural language processing (e.g. Manning et al., 2008). We then applied Wordscores to each budget debate separately, with the prime minister’s speech set to +1 and the finance minister’s speech to −1. Estimating each debate separately has the advantage that our analysis is not confounded by topical changes from one year to the next (Proksch & Slapin, 2009). The disadvantage is that estimated raw scores are not necessarily comparable across years. We therefore applied the transformation procedure proposed in Martin & Vanberg (2007), which rescales all positions so that the scaled positions of the reference speeches are set to the values assigned to them. This way all speeches are scaled to the [−1,+1] interval and can be compared across time.

Figure 1 summarizes our estimates of intra-cabinet positions, and Figure 2 provides an overview of our analysis.

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9Our reason for selecting the supervised scaling method “Wordscores” instead of the unsupervised scaling method “Wordfish” (Slapin & Proksch, 2008) is because our goal is to estimate latent positions on a dimension that represents similarity to the prime minister (PM) and finance minister (FM). Using an unsupervised scaling method we may be estimating positions on a latent dimension not necessarily related to the dimension of competition between PM and FM that we are interested in.

10Our results are robust to changing the trimming parameters.

11The actual values assigned to the reference documents are arbitrary and only required to set the direction and range of the underlying latent dimension.

12We note that we get very similar results to those reported in the rest of the paper when using raw scores instead of scores rescaled to the [−1,+1] interval.
of each portfolio’s estimated position in each year. The top and bottom lines in Figure 1 indicate the position of FM and PM respectively. The dots represent the positions of all other cabinet members. The first important result of this paper is that, despite strict party discipline and collective cabinet responsibility, cabinet members hold policy positions that are clearly different from each other. While the bulk of ministers tend to be clustered around the mean and median position – a typical feature of this sort of text analysis (Benoit & Laver, 2007; Martin & Vanberg, 2007) – some ministers are clearly closer to either the PM or FM. The goal of our analysis is to test whether this closeness is systematically related to changes in budget allocations.

[Figure 1 about here.]

[Figure 2 about here.]

### 4.3 Budget composition

Information about the budget composition in each year was obtained from the annual Revised Estimates for Public Services. These are technical documents published by the Department of Finance that provide a detailed breakdown of spending, separated into capital and current. Since 2003, the spending items in these documents are categorized into ministerial voting groups that correspond to individual government departments. For earlier years, estimates are available for individual budgetary votes. We used a guide note from the Ministry for Finance to map individual votes into ministerial voting groups.\(^{13}\) Based on these documents, we calculated our variable of interest – each department’s share of current and capital expenditure. Because department names change over time, we distinguish between 15 general government portfolios: Agriculture, Arts, Children, Defense, Education, Enterprise, Environment, Foreign, Gaeltacht, Health, Justice, Reform, Resources, Social, and Transport.\(^{14}\) In each year, each portfolio represents exactly one department, that is, we do not lump different departments into the same portfolio.


\(^{14}\)The Children and Reform portfolios are new government departments created in 2011.
Figure 3 shows current and capital spending for each portfolio for the time 1999 to 2013. Figure 4 shows changes in budget shares (first differences) over time, which is the dependent variable in our regression model below. In terms of current spending, the majority of the budget (between 54% and 77%) is spent on education, health, and social services. There is a sharp increase in the share on social spending from about 18% in 1999 to more than 36% in 2013. This is mostly the result of demand-driven factors and especially because of the sharp increase in the unemployment rate from about 5.5% to almost 14% over the same time period. As discussed above, intra-cabinet positions should predominantly affect capital spending. This is expenditure on, for example, roads, hospitals, and schools.

The largest part of capital expenditure (up to 11%) is spent on the environment and transport, with both portfolios having seen significant cuts to their spending shares during the financial crisis. We further see that capital spending has also declined in the education and health portfolios, while it remained fairly constant in the areas of defense, enterprise, and resources.

### 4.4 Regression models

In this section we test the two hypotheses we have developed in our theory section. To repeat our main arguments, we expect that spending decisions will reflect the preferences of the finance minister if a delegation mechanism is in place (Hypothesis 1). To test for this conjecture, we estimate the extent to which changes in budgetary spending in each department are correlated with our estimate of intra-cabinet positions. If Hypothesis 1 is correct, we should find a negative correlation between the two variables. This would indicate that ministers closer to the FM than PM receive larger budget shares.\(^{15}\)

\(^{15}\)The correlation should be negative because we have rescaled the estimated positions such that the FM position is set to -1.
We furthermore conjecture that an increase in competition between the PM and FM as a result of tighter fiscal requirements will lead to the break-down of the delegation mechanism and hence to less influence of the FM (Hypothesis 2). If this is correct, we should find a positive correlation between changes in departmental budget shares and estimated intra-cabinet positions, but only during times of fiscal tightening when resources are limited and questions about budgetary allocations become more prevalent. To test this expectation, we control for two alternative measures of the macro-economic environment together with their interactions with our preference measure. First, we control for annual changes in government debt as a percentage of GDP ($\Delta$Debt). Second, we include changes in the annual unemployment rate ($\Delta$Unemp) into the model, which, in contrast to government debt, is more visible to the general public and hence might be a better measure for political pressure on the cabinet. Both variables are calculated as the average values of the previous time period and thus capture lagged changes in debt and unemployment. The two variables are highly correlated with each other and we therefore estimate their effects in separate regression models.\(^{16}\)

The two economic variables are direct measures of macro-economic conditions. To tap more directly into the potential conflict between the PM and FM over budgetary decisions, we also estimate a model in which we include dummy variables for two of the three prime ministers, Cowen and Kenny (with Ahern as the control group), together with the interaction effect between these dummy variables and our estimated intra-cabinet positions. Each dummy variable is coded as 1 for all years in which one of the prime ministers was in office. Because this is identical to including fixed effects for different time periods, we estimate the model with PM dummies separate from the models with the economic indicators.\(^{17}\)

\(^{16}\)Government debt and unemployment rate are correlated at $r = 0.97$, and at $r = 0.76$ when expressed as annual changes.

\(^{17}\)Both debt and unemployment have continuously increased during the time period in our sample, which means we would introduce high multicollinearity into our model if we were to simultaneously control for the economic effects as well as for time fixed effects. For the same reason we do not include fixed effects for budget years in our models. Instead, we estimate standard errors clustered by budget years to account for potential correlation between budget items in each year. However, we note that our substantive conclusions are robust to estimating the models with or
Theoretical models of the delegation mechanism suggest that finance ministers might be biased towards ministers from their own party (Hallerberg et al., 2009). To test for this hypothesis, we include a dummy variable that indicates whether or not a cabinet member is from the same party as the FM. Because our data set includes both cabinet ministers and junior ministers, we also include a control variable for junior ministers in order to test for systematic differences between the two groups. Finally, we include dummy variables for each portfolio (with the agricultural portfolio excluded as the control group) to account for differences in the magnitude of change in spending, such as the increase in unemployment spending during the economic crisis.

5 Results

Table 2 summarizes the results of six regression models. Our estimated measure of intra-cabinet position-taking is included in all six models. In the first two models, we estimate the effects of the two macro-economic variables and their interactions with the estimated positions on capital and current spending. The third model includes the PM dummy variables and their interaction effects.

Looking first at the effect of intra-cabinet positions across all models, we find strong support for Hypothesis 1. Across all models with capital spending as the dependent variable, we find a significant effect (though only at the 0.1 level in the model with ∆Unemp) of positions on changes in budgetary shares. The coefficient is negative, meaning that cabinet members who express preferences closer to the PM receive a smaller share of the budget, while ministers closer to the FM increase their budget shares. In substantive terms, this corresponds to an increase of a portfolio’s budget share by about 0.5 percentage points if its minister’s position changes from the average without clustered standard errors.

As a robustness check, we replicated all models with two alternative specification: (1) taking the average policy position of all speakers from the same portfolio in each budget year, (2) only including cabinet ministers in the model (i.e., excluding junior ministers). In both cases, the results were substantively identical to those presented here.
position of the PM to the average position of the FM. While this may seem like a small effect, in absolute terms this corresponds to an increase in a department’s capital expenditure by, on average, €27.5mln.\footnote{This number is based on the average total capital expenditure over the entire time period, which is equal to €5.5bln.}

This finding implies that, on average, finance ministers in our sample were able to allocate parts of the budget according to their preferences. This indirectly provides evidence that delegation of fiscal authority in Ireland was successful because finance ministers had some leverage over budgetary outcomes. It can also be seen as evidence for Hallerberg et al.’s (2009) claim that successful delegation induces a bias because some of those budgetary outcomes may have favored finance ministers’ own constituents. Furthermore, we see that the effect we found only holds for capital but not for current spending. As discussed previously, this is in line with the literature on pork-barrel politics and fiscal governance, whereby capital expenditure is more amenable to adjustments than current expenditure due to external economic pressure and political expediency.

Turning to the effect of macro-economic conditions ($\Delta$Debt and $\Delta$Unemp) and the test of Hypothesis 2, we find a negative effect on capital spending, but a positive effect when interacted with policy positions (at the 0.1 level in the model with $\Delta$Unemp). This means the effectiveness of delegation decreases with the severity of the financial crisis. To further illustrate this result, we have calculated predicted values and confidence intervals for changes in intra-cabinet positions for different levels of $\Delta$Debt and $\Delta$Unemp that occur in our sample. As the first two panels in Figure 5 illustrate, there is a negative correlation between changes in budget shares and positions when macro-economic conditions are favorable. With an increase in $\Delta$Debt and $\Delta$Unemp (i.e., a worsening of the macro-economic situation), this relationship first flattens and then reverses, which indicates a breakdown of the delegation mechanism because budgetary allocations reflect the PM’s preferences rather than preferences of the FM as one would expect under delegation. This supports Hypothesis 2 that delegation is only effective during economic good times and not necessarily
sustainable during financial and economic crises.\textsuperscript{20}

As expected we find similar results when the macro-economic variables are replaced with dummy variables for two of the three prime ministers. While the main effect of intra-cabinet positions is negative, its interaction with the dummy variable for Cowen (in office from 2008 to 2011) and Kenny (2011 to present) is positive. Because almost all of the budget adjustments during this time period were spending cuts, our results indicate that ministers closer to the prime minister received smaller cuts to their departmental budgets than those closer to the finance minister. This result again confirms the idea of a breakdown of the delegation mechanism under Cowen and Kenny, with the two prime ministers being able to guard their preferred ministers and portfolios against the austerity measures of the finance minister.

As before, we further illustrate this result by calculating predicted effects for different values of the key variables. The bottom panel in Figure 5 plots the predicted changes in capital expenditure shares conditional on intra-cabinet positions and the prime minister in office. The figure shows that the delegation mechanism worked particularly well under Ahern (with McCreevy as finance minister). We then see a reversal of the effect when Cowen became prime minister and Lenihan took over as finance minister, and a similar effect for Prime Minister Kenny and Finance Minister Noonan.

Our interpretation of the results is that delegation to the finance minister became ineffective when Ireland entered the economic and financial crisis. Faced with the need to implement some of the harshest austerity measures in the country’s history, Cowen imposed his own preferences on the budget, protecting ministers and government portfolios closest to his own preferences rather than fully delegating the budgetary process to his finance minister Brian Lenihan. The general observation that Lenihan received relatively little support from Cowen supports this interpretation. Daniel

\textsuperscript{20}With respect to the direct effects of the two macro-economic variables, we find negative effects on capital spending, but positive effects on current expenditure. The latter is a result of demand-driven changes in spending as a result of the economic crisis, such as an increase in the payment of unemployment benefits when more people become unemployed.
McConnell, a political correspondent for the *Irish Independent* (the country’s largest newspaper), for example, writes:

“Their [Cowen and Lenihan’s] political and personal relationship was dysfunctional and went far beyond a mere personality clash. The disintegration of their relationship was personal and it had a serious impact on the workings of government. Mutual suspicion and mistrust between the two Brians proved disastrous for their party Fianna Fail, their Government and the country. Cowen, instead of seeking counsel from his most senior minister, sought solace and advice from his tight-knit coterie of ‘Dail Bar’ cronies, who harboured animosity to the Cambridge-educated finance minister [. . . ].”  

McConnell’s analysis furthermore points to the competition over leadership between the two ministers, which we have argued is a common feature of intra-cabinet conflict, and which was particularly severe in this instance:

“Lenihan quickly became frustrated and disillusioned with his leader, distanced himself from him as a result and ultimately realised that Cowen was not up to the job. It eventually came to the point where Lenihan, despite his terminal illness, was openly plotting against his leader.”

The important finding of our paper is therefore that delegation to the finance minister is highly context-dependent. This has important implications for the design of budgetary rules. Most recently, Martin & Vanberg (2013) have shown that appropriate budgetary rules, which includes centralization of budgetary decisions-making through delegation to a powerful finance minster, can mitigate the common-pool resource problem. Our result further adds to this finding by showing that effective budgetary rules also require the support of the prime minister. While generally an effective mechanism during economic “good times,” it can quickly break down if the government

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22Ibid.
is forced to implement unpopular austerity measures and its prime minister is not fully committed
to delegating power to the finance minister. Ironically, it is exactly under such conditions that cen-
tralization of fiscal authority has been propagated in previous academic research as a solution to
fiscal problems.

Finally, it is worth pointing out one other result in Table 2, whether or not a cabinet minister
is from the same party as the finance minister has no significant impact on budget allocation. In
other words, being from the same party as the finance minister is not sufficient to be favored in
the budget-allocation process, it is rather the position of the individual minister with respect to the
two main cabinet leaders. These results contribute to the relatively small literature that looks into
the politics of budgetary composition (e.g. Bräuninger, 2005; Tsebelis & Chang, 2004; Wehner,
2010). We plan to extend them in future work to a larger sample of countries over a longer time
period.

6 Conclusion

This paper provides the first empirical evidence that intra-cabinet politics has an effect on policy
outputs in parliamentary democracies. Drawing on work on fiscal governance (Martin & Van-
berg, 2013; Hallerberg et al., 2009) and intra-cabinet decision-making (Laver & Shepsle, 1994;
Dowding, 2013), we develop two hypotheses. First, under effective delegation of fiscal authority,
budgetary outcomes should reflect the preferences of the finance minister. Second, we hypothesize
that effective delegation crucially depends on the macro-economic environment. More specially,
we argue that a worsening of the economic situation can introduce competition between the prime
minister and finance minister over the allocation of the budget, which can ultimately lead to a break
down of the delegation mechanism.

To test our claims, we draw on an original data set that includes all legislative speeches by
cabinet members during 20 years of annual budget debates in Ireland. As a country that has ex-
perienced both rapid economic growth as well as one of the most dramatic economic declines in
modern history, it provides the ideal test case for our claim that the effectiveness of fiscal deliga-
tion depends on the macro-economic context. We analyze these data with a novel technique
from supervised machine-learning that allows us to estimate individual cabinet members positions
relative to the prime minister and finance minister from their speeches.

Our first key finding provides strong support for one of they key implications from the literature
on fiscal governance (Martin & Vanberg, 2013; Hallerberg et al., 2009). The delegation mechanism
performs as expected by providing the finance minister with sufficient discretion over fiscal gover-
nance. This is based on an analysis that shows that ministers closer to the finance minister receive
a larger proportion of the budget than those with preferences closer to the prime prime minister.
While we are unable to say whether such spending is optimal for the social welfare function, we
can conclude that discretionary powers of finance ministers are exercised as expected under the
delegation mechanism. As such, our paper makes an important contribution to the literature on
fiscal governance by providing the first micro-level support of effective delegation.

Our second key finding is that the discretionary power of the finance minister is not constant
over the economic cycle. When cabinets face decisions to cut expenditure across departments,
the prime minister can effectively intervene to protect those closest to him. More specifically,
we find that delegation breaks down when the economy faces high levels of government debt and
unemployment. However, it is exactly under such conditions that delegation of fiscal authority to
a strong finance minister has been propagated in previous academic research as a solution to fiscal
problems. Put differently, when delegation is needed the most, the prime minister has the least
motivation to give fiscal authority away. This is an important result for our understanding of the
effectiveness of fiscal delegation during economic crisis and opens avenues for further research to
investigate alternative mechanisms that are both effective for fiscal consolidation and aligned with
the preferences of the key players.

Finally, our results make a significant contribution to the growing literature on quantitative
text analysis. While the technique we use is based on a well-know implementation of supervised
machine-learning, we show that when applied to legislative speeches one can measure positions
that are correlated with significant and important public policy outcomes. Legislative speeches are therefore not just cheap talk, but contain relevant information about legislator’s preferences over key decisions.
References


Featherstone, K., & Papadimitriou, D. (2013). The emperor has no clothes! power and resources within the greek core executive. Governance, 26(3), 523-545.


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Figure 1: Estimated policy positions for Irish Cabinet members, 1999–2013. Positions are rescaled to the $[-1,+1]$ interval, with the endpoints representing the positions of the prime minister (+1) and finance minister (−1), respectively. The dashed line indicates the position of the median cabinet member.
Figure 2: Estimated positions by cabinet portfolio and budget year. Portfolios are ordered by the average position across all years.
Figure 3: Shares of current and capital expenditure by portfolio, 1999-2013.
Figure 4: Changes in shares of current and capital expenditure by portfolio, 1999-2013.
Figure 5: Predicted values for changes in capital expenditure shares conditional on intra-cabinet policy positions and changes in debt (top panel), changes in unemployment rate (middle panel), and changes in prime minister (PM) in office (bottom panel). Dashed lines indicate 95% confidence bands. All values are calculated from the OLS regression results in Table 2, with all other variables held at their mean values.
Table 1: Cabinet composition and data overview

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<th>Budget year</th>
<th>Prime Minister</th>
<th>Finance Minister</th>
<th>Govt. parties</th>
<th>No. obs. (^a)</th>
<th>No. portfolios (^b)</th>
<th>Avg. length (^c)</th>
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\(^a\) Number of cabinet members (ministers and junior ministers) who participated in the budget debate

\(^b\) Number of portfolios represented in each debate

\(^c\) Average length of speeches in number of words

\(^d\) The Progressive Democrats formally dissolved in 2009 and its two members of parliament continued to support the government.
Table 2: OLS regression of changes in budget shares conditional on changes in debt (% of GDP), changes in the unemployment rate (%), PM in office, and control variables.

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<td>(0.08)</td>
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<td>Kenny × position</td>
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†p<0.1, *p<0.05, **p<0.01