

Working Papers in International Studies

Centre for International Studies

Dublin City University

No. 1/2012

Yes, minister: The impact of decision-making rules on geographically targeted particularistic spending

Jane Suiter & Eoin O'Malley



No. 1/2012

Yes, minister: The impact of decision-making rules on geographically targeted particularistic spending

Jane Suiter & Eoin O'Malley

This paper tests a number of hypotheses which have been used to explain particularistic political spending. Using constituency level data we can better evaluate the competing merits of theories predicting whether parties reward their voters or target floating or swing voters to maximise the party's electoral return. We also test the hypothesis that the spending decision-making rule is most important and may determine which of the loyal or marginal voters are targeted, or indeed whether another group might be rewarded. We find that the decision rule is indeed most important, and the unusual level of discretion to ministers in Ireland will determine where these monies go. This finding adds greatly to our theoretical knowledge of geographically targeted spending and is consistent with empirical findings in other countries.

Keywords: Constituency spending, particularistic spending, pork-barrel politics, electoral systems, decision-rules, PR-STV, Ireland.

1.1 Introduction

The distribution of goods is the essence of politics, and the electoral connection with distributive spending is regarded as axiomatic. This often means that parties will target distributive spending on collective goods, though they may be seen to benefit core groups, such as the middle classes or working classes, that the parties in power are seen to represent. Some spending will be more narrowly focussed at particular groups, such as a specific industry or sector. Given the geographic nature of constituencies, we also expect, and do see that some particularistic spending is geographically targeted. But the existence, extent and beneficiaries of geographically targeted spending are the subject of some debate.

Foremost it was thought that such spending will be higher in countries with single member districts, though it might be expected to occur in countries using other candidate-based electoral systems which have incentives to legislators garnering a personal vote. Despite these theoretical expectations, evidence of geographically-targeted spending (hereafter GTS) aimed at electoral gain has been found around the world regardless of electoral system. Australia (Denemark 2000), Brazil (Ames 2001, 1995), Canada (Milligan and Smart 2005), England (John, Ward, and Dowding 2004), France (Cadot, Röller, and Stephan 2006), Germany (Stratmann and Baur 2002), India (Dasgupta, Dhillon, and Dutta 2001), Japan (Thies 1998; Horiuchi and Saito 2003) to Scandinavia (Tavits 2009; Dahlberg and Johansson 2002) among others, all

have geographically targeted spending. The absence of empirically-supported explanations of cross-country variation¹ would suggest the theoretical basis for geographically targeted spending is not fully developed.

If the electoral system is thought to cause the existence and extent of GTS, then another literature attempts to explain where GTS goes. It has been asked whether the key explanatory factor is the legislators' desire to consolidate their core vote or the party's attempt to attract swing voters. McGillivray (2004: 18) argued that the different explanations can be resolved by considering another variable, party strength. Where parties are strong, in that legislators follow the direction of party leaders, the party will target marginal districts so as to maximise the party's power in the legislature. If parties are weak, individually powerful legislators will secure benefits for their own districts at the expense of the party nationally.

This assumes that the party or legislators will be the mechanism through which GTS is distributed. However, in most parliamentary democracies governments are much more powerful than legislatures. Following theoretical work on US committees which suggest that idiosyncratic legislative rules should help determine where particularistic spending is targeted (Shepsle and Weingast 1987), we argue that decision-making structures matter. Specifically we test the hypothesis that in parliamentary democracies with weak

¹ There is limited empirical literature explaining the extent of geographically targeted spending (Milesi-Ferretti, Perotti, and Rostagno 2002 is a possible exception).

parliaments, government decision-making structures will determine the direction of GTS.

By adding the decision-rule as an independent variable, we test the rival explanations on Ireland, a country whose electoral system, political culture and party system would lead us to expect to see high levels of GTS. But Ireland's governmental institutions tend to give a good deal of autonomy to ministers. Using data on two programmes, in sports grants and school building grants, that are easily linked to constituencies, but which vary in the discretion given to ministers, we can see that GTS is potentially neither directed at core voters nor swing voters. We find that the institutional decision rules account for more variation in the direction of GTS than either marginality or party support. Furthermore the variation in the key independent variable, the decision-rule governing the allocation of spending, varies with that spending.

1.2 Theories of partisan spending

The literature on geographically-targeted partisan spending emerged from work on localism in US politics, the personal vote and the need to cultivate the district (Cain, Ferejohn, and Fiorina 1984; Mayhew 1974; Fenno 1978; Key 1949). Explanations for pork-barrelling behaviour focus on the different incentives among electoral systems to cultivate a personal vote (Carey and Shugart 1995). According to Carey and Shugart where the ballot structure

allows voters choose between a party's candidates those candidates have an incentive to cultivate a personal vote. Thus the US with open primaries and candidate-based voting will strongly incentivise personal vote cultivation. Furthermore where the legislature and executive are truly separate as in presidential systems, party cohesion will be lower. But if we can explain under what institutional conditions such spending should occur, how can we explain *where* it is targeted within a country?

Cox and McCubbins (1986) ask whether politicians direct resources to their core supporters, to the opposition or to swing voters and find that politicians will favour those voter blocs that promise higher rates of return on their policy investment. These higher rates are invariably associated with core supporters, easily identified from previous voting behaviour. A different perspective, based on persuasion and conversion rather than mobilisation of core voters, was laid out by Lindbeck and Weibull (1987), who offer a stylised theoretical account arguing for the logic of targeting swing voters they assert that the expected electoral return of any given transfer is maximised when outlays are directed at swing voters. Transfers to loyal supporters or to committed opposition voters cannot be expected to affect voting choices, as these voters' choice is generally between abstention and voting for their party.

Thus there are competing expectations. The Cox and McCubbins model predicts that core supporters will be targeted whereas Lindbeck and Weibull's

theory suggests that swing voters will be targeted. Both theories have been corroborated in different research and generally results have been mixed. Studies of distributive benefits in the US find that parties target pork projects to swing districts (Bickers and Stein 1996; Stein and Bickers 1994), while other studies find a bias toward core supporters (Ansolabehere et al. 2007; Levitt and Snyder 1995).

McGillivray (2004) potentially resolves these seemingly conflicting hypotheses by specifying under which party system each is likely to occur. The specific outcome is due to interaction of the electoral system with the party type, specified as the strength or weakness of the party or party leaders to impose direction on legislators (McGillivray 2004: 45). In strong-party systems the electoral organisation is controlled by parties, not by candidates. Elected representatives toe the party line, voting in parliament with the party when directed. Coalitions are durable and the political actor is the party in government. By contrast, in weak-party systems individual legislators are more important in policy formulation and are less beholden to their party for their political survival. Coalitions are temporary and fluid. The continual need to build temporary coalitions means GTS is added to omnibus legislation in exchange for support for the core part of the legislation. Weak parties lead to the expectation that bills receive support from both sides of the House (Weingast, Shepsle, and Johnsen 1981). McGillivray hypothesises that in weak-party, majoritarian systems, distributive funds will be targeted at safe

districts which elect the more senior legislators. She asserts that legislators in electoral systems with single-member districts, where political parties are internally cohesive, have incentives and capabilities to target local public goods to marginal or swing electoral districts. In Proportional Representation (PR) systems where votes tend to correlate with seat allocation, the concept of safe or marginal seats is not appropriate. Legislators in PR systems with cohesive political parties might target government party supporters, i.e. those districts where government parties are strong.

Figure 1: Electoral Districts likely to receive most resources under alternative electoral and party arrangements

		Governing Parties	
		Strong	Weak
Electoral System	Candidate-based	Marginal Districts	Safe Districts
	Party-based	Party strongholds	Party leader bailiwicks

Adapted from Golden & Picci (2008: 273)

McGillivray ignored the different impact on incentives produced by open list and transferable vote systems, which heighten intra-party competition (competition between co-partisans on the same ticket), increasing the need to cultivate a personal vote and potentially reducing the impact of national party oriented policy, which lifts all co-partisans. Golden and Picci (2008) found that, in Italy from 1953-1994, where an open-list PR system generated high

levels of intra-party competition and factionalism, the effects of particularistic policy were significant and measurable. Their reading of Italian policy making suggests that senior legislative figures will direct spending to their home districts. Thus they fill the fourth cell in McGillivray's quadrant expecting that party leaders' bailiwicks will be targeted.

Italian districts in Golden and Picci's time period are large, with on average 20 deputies in each and they must aggregate the characteristics of a constituency's MPs. The aggregation strategy may cause problems as it could conceal the estimated impact of a senior MP in a constituency if she is elected with 19 novices. Nor is there a detailed discussion of how such grants are awarded and so we do not get to see whether or why their hypotheses would be appropriate. Golden and Picci's results show that seniority is linked to financial transfers as they expected, but they are silent on the causal mechanism through which 'senior' legislators can direct spending to their districts.

The institutional rules that allow pork to be distributed are of utmost importance. In the US it was found that legislators in more influential committee positions are often more successful in targeting their home districts with additional funds, through their agenda setting powers (Shepsle and Weingast 1987). And generally we see fiscal transfers are linked to institutional rules (Baron and Ferejohn 1989). For instance Hallerberg and Marier (2004) found that the decision rule has an impact on budgetary

spending in Latin America. But, except in the US, the mechanisms through which GTS is delivered are ignored. We argue that these could be of more importance than the electoral system incentives. If in many countries GTS is given to parliament to deliver, this could increase the power of senior legislators. But what mechanisms allow seniority determine the destination of GTS? If committees control their delivery, and committee chairs could either have an agenda setting or gate-keeping function. In parliamentary democracies, the government is most likely to control spending, but again the rules of how this is managed will have a greater impact on the destination of GTS than the electoral system, whose main explanatory power relates to the extent rather than destination of GTS. If power within government is with party leaders, then swing districts may receive the bulk of GTS. But if ministers have a high degree of autonomy, then ministers may target their own districts or those of members of their faction. If ministerial autonomy is low and they rely on legislators for the delivery of goods, then they will be responsive to legislator demands and might see GTS go to the districts of existing MPs or where the party is strong. If ministers rely on cabinet colleagues to act, ministers may be responsive to the needs of cabinet colleagues. We can see that the expectation in all four quadrants could be very different if we vary decision-making rules. If three elements, party type, electoral system and decision-making institutions are relevant to the outcome, it is the last which may be more important than the others. So even where strong parties exist under SMD, marginal seats may be ignored if those

controlling the governing structures have no incentive to maximise party seat gains. Only by looking at the decision-making structure and the incentives of those in decision making positions in more detail can we make reasonable predictions about the destination of GTS.

1.3 The Irish case

This paper argues that both the Irish electoral and party systems provide incentives towards a personalized delivery of distributive funds. As is well known the electoral system, PR with the Single Transferable Vote (PR-STV) incentivises intra-party competition and personal vote gathering (Marsh 2007). The electoral organisation tends to be local, at the individual level, and so government TDs may rebel if their constituency is being subject to specific measures which will harm it, and when the opposition puts down motions designed to expose divisions in the government parties. Despite this we can think of the parties as strong in the sense that TDs (MPs) will almost invariably vote with their party whip (Gallagher 2010). Relying solely on the McGillivray's analysis we would expect that GTS would go to party strongholds, or those constituencies where support for the governing parties is high. As constituency magnitude is small – each has between three and five seats and the mode is four – there is a less than perfect proportionality, which means it is possible for parties to target particular seats. This means we can think of some seats as marginal. If we add the nature of decision-making,

however, we may get a different or at least a refined sense of the direction of GTS.

A localist political culture and small programmatic differences between parties make for highly personalised campaigns. Electoral competition tends to manifest itself in terms of promoting and working within one's community and acting as a broker between the constituency and the administrative system. This is enabled by the small size of constituencies. Each TD represents just over 20,000 people, but in 2007 between 7,000 and 8,000 first preference votes were usually enough to see a candidate elected (Gallagher 2008: 79). One candidate was eventually elected building on just 939 first preference votes, but this was highly unusual. In most constituencies where more than one candidate runs for a party, the party will divide the constituency geographically (Weeks 2008). During campaigns, candidates stress how much they have done for the constituency, while opponents concentrate on how particular incumbents have failed to deliver. Local service is top of many TDs' priorities. When asked how strongly they emphasize service to their local constituency, 64 per cent of 2007 candidates said that they emphasise this service strongly.² Possibly because of the almost complete absence of policy or ideological competition, parties are highly cohesive in legislative votes, so party leaders can rely on TDs to follow the party direction (Hansen 2009).

² Michael Marsh, Jane Suiter and Séin Ó Muinecháin (2008) *Candidate Study 2007* unpublished mimeo. Trinity College, Dublin.

Having the incentive to promote one's constituency does not mean one has the ability. The nature of the governmental system means that ministers are more able than most to actually deliver government spending to constituencies. Ireland is comparatively unusual in that all Irish ministers are elected members of the lower house.³ And because ministers nearly always defend their seats, ministers will compete with incumbent TDs from their own and other parties for re-election. Additionally voters' expectations of ministers may be higher than for backbench TDs for the delivery of goods.

In part because of the overlap of party leadership (in parliament and party) with leadership in the executive, the Irish executive dominates the Dáil to a greater extent than in most other European countries. But there are many formal rules which guarantee executive dominance. Irish legislators cannot create temporary coalitions for specific spending because the government retains a constitutionally-binding sole power of initiating spending or allocation of the state's revenue (Article 17.2). The government also controls Dáil time and the agenda there through the House's Standing Orders. This means that opposition parties or backbenchers are limited to proposing motions, which may have no impact except to send signals to voters. For instance an opposition party might call for the government to guarantee that a certain hospital in an area is not closed.⁴ Such motions are not binding on the

³ There is provision for two (unelected) senators to be made minister, but this is almost never used.

⁴ An example of such a motion was voted on in the Dáil on 6 October, 2010. The motion read; "That Dáil Éireann, noting with concern:
— that there are more than 46,000 adults and children on hospital waiting lists across the country, which is 5,400 patients more than last year;

government, but are designed to force opponents to vote in such a way that might be electorally embarrassing. That said, defeat for the government on such a motion, or at least one related to a major policy plank, may cause a government to feel it has lost the confidence of the Dáil and thus to a general election.

Within government, Irish ministers are sometimes considered to be given a good deal of autonomy (Farrell 1994). The rules of government decision-making as set out in the *Cabinet Handbook* (Taoiseach 2006: 19) necessitate that '[p]roposals requiring a Government decision should be the subject of a memorandum from the responsible Minister'. Only the responsible departmental minister can make proposals in her area. Other ministers whose domains may overlap or have a departmental interest should be consulted about the decision. Ministers retain power over appointments within their area of responsibility, and these are subject to few or no checks from either cabinet or the Dáil (O'Malley, Mair, and Quinlan 2011). There is sometimes a requirement to inform the Dáil of decisions made using statutory instruments or publish that information in the state gazette, *Iris Óifigiúil*.

-
- that over 272,000 bed days were lost in 2009 due to the delayed discharge of patients;
 - that 50,000 operations have been cancelled since 2007, leaving many patients waiting in pain;
 - the anguish that continues in hospital A&E departments, with an average of 300 patients on trolleys each day; and
 - that no further loss of capacity can be sustained;
- calls on the Government to:
- ensure that there are no further reductions to frontline staff or services;
 - suspend the loss of frontline health services and capacity at hospitals, for example at Clonmel, Merlin Park, Nenagh, Roscommon, Navan, Sligo, Letterkenny, Portlinculla, Wexford, Monaghan, Ennis and Louth County; and
 - immediately open the €16 million community hospital facility in Dingle, Co. Kerry.”

The major restriction on ministerial autonomy is not the Cabinet, which is a decision-affirming institution, but the Taoiseach (prime minister), the Minister for Finance and other coalition party leaders (for a discussion of the system, see O'Malley and Martin 2010). The control the Taoiseach has over the careers of ministers ensures that ministers will generally be responsive to his direction. The political realities of coalition politics also means that the opinions and needs of government party leaders, who are invariably also members of the cabinet, must also be met. The Minister for Finance must sanction all spending, and does so through the estimates procedure (Finance 2008: A4, 9-16). This takes place from July each year and is published in November, two weeks before the budget. Each minister agrees amounts for spending within their department. Gemma Hussey (1990: 12), a former Minister for Education, said that the Department of Finance rarely agreed to any spending proposal and fought the battles at cabinet level, often on a line-by-line basis. Finance has some powers to ensure that spending is within the 'sub-heads' agreed by the Oireachtas (parliament), that is, that it funds allocated to a domain are spent in the appropriate domain. The Department of Finance and its minister is also powerful in the design of legislation, over which it has a veto.

Within a 'sub-head', once a scheme or programme is established, ministers usually have discretion as to where money goes, subject to compliance with procedural requirements and departmental advice, the latter of which can be

over-ruled. The schemes used in this study are subheads of the estimates, and so ministers have discretion over spending, but will be conscious of the need to satisfy the Minister for Finance. Crucially there is variation in the type of schemes where the responsible minister has much more discretion in sports allocation grants than in education grants because education grants are subject to specific rules and because the objective need for investment in education varies greatly. Furthermore most funding decisions that would be typical of GTS in other countries are not subject to parliamentary or even cabinet approval, but are completely within the gift of the minister.

Fellow ministers and TDs can lobby a minister to achieve spending in their own constituencies. For ministers with leadership ambitions this may mean that funds will be transferred to the constituencies of supportive TDs. But even decisions which would otherwise have been made can be presented as favours to TDs who in turn present the allocation as having resulted from lobbying. Letters between TDs and ministers are frequently published and presented to voters in election literature. TDs are sometimes allowed to communicate the decision to relevant groups and constituents before the decision is formally communicated by the government department. The need to have prospective legislation approved by cabinet colleagues might mean that ministers will submit to cabinet colleagues' requests. Even allowing for these restrictions, ministers will be expected to and so have a strong incentive to deliver spending to their own constituency.

So where in presidential systems with weak parties, legislators are the primary political actors, in parliamentary systems with strong or weak parties, the decisive actor is determined by institutional rules as much as any other factor. This leads to the following three competing hypotheses for Ireland, the first of which we expect to find evidence for:

1. Responsible ministers will direct higher levels of expenditures or more benefits to their home constituencies, and those of other influential ministers, the Minister for Finance and the Taoiseach, where they have discretion. Where ministers have more discretion, relatively more money will be targeted at these constituencies;
2. Governing parties will direct higher levels of expenditures or more benefits to areas of greater electoral strength, i.e. to party strongholds.
3. Governing parties will direct higher levels of expenditures or more benefits to areas of greater volatility, i.e. to swing voters.

1.4 Data and Methods

In general, scholars of particularistic spending have tended to focus on infrastructure spending or social welfare policy, or indeed locally targeted discretionary grants such as sports grants (Denemark 2000). The 2007 Irish Candidate Study reveals the areas that candidates themselves believe they can claim credit for. When asked what sort of local benefits are TDs most likely to

claim credit for, many of the candidates mentioned more than one category and these provide guide our selection decision. Almost 33 percent mentioned schools and, in particular, school buildings, amounting to some 22 percent of all mentions. Just under that (29 percent) mentioned sports facilities and lottery grants, making up about 19 percent of total mentions. Thus, sports clubs and schools are the top two areas that legislators themselves believe it is worth claiming credit for. This accords with elected TDs' behaviour in an analysis of parliamentary questions raised in the Dáil (Martin 2011).

We use two separate detailed datasets to test these hypotheses, one on sports capital grants and the other on primary school building programme in Ireland over a sequence of six calendar years from 2002-2007. The Sports Capital Grants was set up in 1988 funded exclusively from National Lottery income. It was initially a multi-annual scheme, but since 1998 it has been allocated annually. For these monies the National Lottery Act (1986) gives the Minister for Finance discretion to decide the amount that will go to for each 'purpose', i.e. sports, arts etc., but these funds are then left to relevant departments for disbursal. Since 2005 the scheme is also funded through the normal 'Vote' allocated by the Dáil for each Department's expenditure. Though there are criteria for the disbursal of funds, these are vague, and the minister has the ultimate decision. The fund was soon subject to controversy and there was an early (failed) attempt to ensure it was not used for what one TD described it

as 'a re-election slush fund' (*Dáil Debates*, 8 November 1988: vol. 383, col. 2120).

The second spending programme ensures variation in the decision-rule. The School Building Programme, administered by the Minister for Education, is designed to facilitate the building and refurbishment of school buildings. It is administered by the Planning and Building Unit (PBU) of the Department and has responsibility for planning education accommodation provision and managing the capital funding allocated by the government each year for upgrading, replacing and expanding school and third-level college buildings and infrastructure. This includes the purchase of sites, provision of new buildings (including furnishing and equipping) and extending and refurbishing existing buildings. The overall amount is agreed with the Department of Finance each year, and the minister for education allocates the funds, but there are guidelines setting out priorities for the programme, and changing demographic needs will trump most other factors. Interviews with the protagonists involved in these programmes revealed that while this was an important programme for TDs, the ability to 'deliver' what would not have otherwise been delivered was more imagined than real. Because of this we expect that relevant ministers' impact in this area will be lower than that of the sports grants where the minister is less constrained. Both sets of grants are demand-driven rather than formula-based aid programmes. So recipients must apply for grants. We see no reason why this should bias our results.

The data used encompass two general elections (2002 and 2007), with up to three changes of minister, allowing for some variation in each dataset. The data for each scheme are at the level of the individual grant and are allocated to the relevant constituency. The data were obtained under Ireland's Freedom of Information Act (1996, amended 2003). The Sports Capital Grants dataset contains entries for some 4,444 different grants, amounting to €403 million over the period. The data contain the name of the sports club, its address, and the amount it won. The Department issued data that break down the grants by county. However, in general, constituency and county boundaries are not coterminous. Indeed, some constituencies contain two counties, while Dublin has 12 constituencies within it, electing 47 TDs. Using a constituency map and address information, we allocated each individual grant application to the constituency in which it is located. Considine et al. (2008) provide some bivariate evidence that, from 1999 to 2007, the counties of the Minister for Arts, Sport and Tourism received the highest per capita allocation of Sports Capital Grants in all 26 counties, even after changes in office holder. However, this analysis was done on the basis of county rather than constituency.

The School Building Programme dataset incorporates all capital spending on the primary and post-primary education sectors in the Republic of Ireland from 2001-2007. The original dataset contains the name of each school, its

address, the amount of each individual grant and its purpose. It also records the type of school (mixed sex or single sex, type of patron, i.e. church) as well as the number of children enrolled. Each individual school is then allocated to its constituency – these changed in years where the boundaries changed. The data as supplied by Department of Education contained multiple entries for schools for the years 2001-2003, where each grant was set out. However, in the years 2004-07, each school had merely a single entry. As a result we use a collapsed dataset with one observation for each school each year, or 9,399 observations. In the years 2002-2007 this amounts to primary grants of €976 million.

Both datasets were then collapsed to per annum constituency level amounting to some 255 observations for each programme, (three years (2002-2004) with 42 constituencies and three years (2005-2007) with 43 constituencies). So each observation represents the amount of money spent on the programme in each constituency per year. Collapsing the data in this way removes any problems with measurement at different levels as the independent and control variables are all at the constituency level.⁵

The central empirical strategy is to regress per capita spending for each policy area by each electoral district and year on measures of political factors, together with economic and demographic controls that may influence

⁵ These two datasets are thus entirely new sources for scholars and will be made available by the authors.

funding decisions. Stein and Bickers (1994) argue that the number of grants rather than the level of grant are a more appropriate dependent variable. However, given the structure of the data where any one project can be the recipient of a large number of grants, as parts of the project are allocated monies in successive years, we prefer to use the overall amount as the key variable of interest in this instance.

The variables used are set out in Table 1. Our major expectation is that the variables that capture the political actors who control the decision-making process will be significant. The decision-rule variables are dummies which capture whether the constituency was represented by the relevant minister, the finance minister, the Taoiseach or any other cabinet minister. The variables designed to test for the party core and swing voter models measure the percentage support for the main government party (Fianna Fáil)⁶; and marginality – how close Fianna Fáil as to winning or losing a seat.⁷

In addition, we control for the various socio-demographic features of the constituencies in which the investments are made. These include the number of residents in the constituency, the proportion of the population under 18, and voter turnout. Unemployment expressed in terms of the proportion of adults registered as unemployed and the proportion of adults educated to a

⁶ We excluded small coalition parties because they are captured by the cabinet minister variable. When included in the model they were not shown to be significant.

⁷ Other variables, the Fianna Fáil seat proportion and whether Fianna Fáil had lost or gained a seat in the constituency were also used, but these were not significant and were removed because of multicollinearity.

Table 1: Variables in the analysis

Variable name	Description	Unit of measurement	Expectation (direction/significance)
Ln Grant	Logged Grant allocation for each constituency by year	€Ln per constituency	n/a
<i>Core support</i>			
FF Vote	Vote for Fianna Fáil (FF - governing party)	Raw percentage	+/ ns
<i>Marginal seats</i>			
Swing	Absolute value of difference between number of seats and number of quotas. The higher the figure the more unsecure the seat/ or closer to a target seat	Interval data between 0 and 1.	+/ ns
<i>Decision-rule</i>			
Ed Min	Is this the education minister's constituency?	1/0 dummy	+/ s
Sport Min	Is this the sport minister's constituency?	1/0 dummy	+/s
Taoiseach	Is this the Taoiseach's constituency?	1/0 dummy	+/ s
Fin Min	Is this the Finance ministers	1/0 dummy	+/ s
Cab Min	Is this any other cabinet minister's constituency?	1/0 dummy	ns
<i>Control</i>			
Urban	Does the constituency contain a city?	1/0 dummy	-/ns
Turnout	Turnout at previous elections	Percentage	+/ns
Education	Percentage educated only to age 15	Percentage	-/ns
Unemploy	Numbers unemployed	Raw numbers	ns
Under18	Numbers under 18?	Raw numbers	+/s
Pop	Population of constituency	Raw numbers	-/ s

minimal level are included, as is a dummy variable denoting whether a constituency is urban or rural. All Dublin constituencies and those with large urban areas in Cork, Limerick and Galway are all coded as urban. This is to capture whether rural ministers are likely to respond different to demands for particularistic goods than urban ministers as Considine et al. (2008) implied.

1.5 Estimation and Results

We present results of two sets of models, one spending on sports as the dependent variable and the other with money spent on schools buildings as the dependent variable.⁸ The main independent variables of theoretical interest are those measuring the political influence of legislators in constituencies, these are the dummies for the Minister for Finance and Minister for Education or Sports as well as the dummy for all Cabinet Ministers as a whole. Also of interest is that which measures the strength of the governing party's vote in each constituency thus testing the core voter hypothesis. A variable which captures the swing voter hypothesis is included (see description in Table 1).

The expectation is that the signs on the variables measuring the powerful cabinet ministers will be positive (see Table 1). The hypotheses are tested cumulatively, so GTS directed at core voters, or party strongholds is tested first for its significance on its own; then the marginal voter hypothesis is

⁸ Visual inspection implied that the model suffers from non-constant variance of the residuals. Thus we report robust (Huber/White) standard errors, as these are less likely to mislead about the significance of the independent variables. We utilise the log of the grant variable as the data is skewed by outliers

tested, following by the decision-rule hypothesis. All three competing hypotheses are then tested against each other. Results appear as Columns 1, 2, 3 and 4 respectively in Tables 2 and 3.

Table: 2 Partisan spending effects on sports grants 2002-2007 (dep Variable Log of Grant)

VARIABLES	Core	Swing	Decision	All
FF Vote	0.000555 (0.00572)			-0.00149 (0.00605)
Swing		0.0453 (0.168)		-0.219 (0.172)
Sports Minister			0.885*** (0.155)	0.991*** (0.187)
Finance Minister			0.631*** (0.147)	.665*** (0.157)
Prime Minister			0.17 (0.197)	0.118 (0.210)
Cabinet Minister			-0.143 (0.0867)	-0.142 (0.0882)
Under 18 Pop (pc)	1.393 (1.469)	1.436 (1.393)	1.809 (1.511)	1.696 (1.563)
Education until 16	0.0041 (0.00752)	0.0044 (0.00799)	0.0028 (0.00855)	0.0026 (0.00851)
Population	0.0001*** (1.59e-06)	0.00011*** (1.57e-06)	0.00012*** (1.56e-06)	0.00011*** (1.55e-06)
Unemployment (pc)	4.511 (4.530)	4.531 (4.746)	6.524 (5.070)	6.292 (5.040)
Turnout	-0.0004 (0.00937)	-0.0005 (0.00918)	-0.0015 (0.00925)	-0.0017 (0.00947)
Urban Rural	0.0237** (0.115)	0.233** (0.119)	0.19* (0.114)	0.204* (0.117)
Constant	12.49***	12.48***	12.37***	12.55***
Observations	255	255	255	255
R-squared	0.289	0.289	0.352	0.357

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Examining first sports grants in Table 2, the variable measuring the percentage constituency vote for the governing party is not statistically significant. Another variable testing the core voter model proposed by Cox and McCubbins, the governing party's proportion of seats in the constituency, was also used (not reported) but was not significant. This is perhaps not surprising as Ireland has reasonably strong, unified parties, so McGilivray would expect GTS would be targeted at marginal constituencies. Of the control variables, the population is highly significant and positive, which indicates that larger constituencies attract more pork, presumably because they apply for more grants.

Model 2 tests the marginal voter hypothesis proposed by Linbeck and Weibull. The variable measuring marginality is also insignificant. This is surprising in that neither of the standard explanations appear to be important in accounting for the variation in the amount of GTS delivered to individual constituencies in particular years. Our theoretical expectations are that the decision rule is most important: Model 3 tests for this with dummy variables for the relevant ministers. The results are both positive and highly significant and the model shows constituencies of the decision-making ministers do significantly better than other constituencies. Recall that these data include changes in personnel in both departments, and controls for demographic variables. So the explanation is unlikely due to an idiosyncratic minister or that that their constituencies were most needy. The sign relating to their other

colleagues in cabinet is not significant, which is not surprising as ministers may equally want to respond to demands from backbenchers. This provides evidence against any idea of cabinet log-rolling; a pattern that persists in the full model. Thus there is strong corroborating evidence for the hypothesis that the interests of the individually powerful ministers will prevail over those of the party as a whole.

Table: 3 Partisan spending effects on education grants 2002-2007 (Dep var: Log of Grant)

VARIABLES	Core	Swing	Decision	All
FF Vote	0.000799 (0.00666)			-0.00154 (0.00683)
Swing		0.443** (0.198)		0.503** (0.199)
Education minister			0.343* (0.178)	0.361* (0.189)
Finance minister			0.706*** (0.174)	0.662*** (0.162)
Prime Minister			0.384 (0.342)	0.553 (0.352)
Cabinet minister			-0.117 (0.100)	-0.141 (0.103)
Under 18 pop.	5.748*** (1.738)	6.072*** (1.677)	5.448*** (1.800)	6.058*** (1.815)
Education until 16	-0.00176 (0.0106)	-0.000521 (0.01000)	-0.000300 (0.0110)	0.00152 (0.0109)
Population	1.21e-05*** (1.86e-06)	1.25e-05*** (1.82e-06)	1.17e-05*** (1.90e-06)	1.22e-05*** (1.86e-06)
Unemployment	5.093 (5.560)	6.004 (5.297)	5.496 (5.983)	5.625 (5.986)
Turnout	-0.0105 (0.0102)	-0.0112 (0.00991)	-0.00375 (0.0105)	-0.00445 (0.0104)
Urban/Rural	-0.0192 (0.121)	-0.0498 (0.119)	-0.0805 (0.121)	-0.116 (0.121)
Constant	12.60***	12.36***	12.29***	11.98***
Observations	255	255	255	255
R-squared	0.281	0.296	0.309	0.327

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

One of the control variables, urban, is significant in earlier models, suggesting that GTS is targeted at urban area, something which surprises us as anecdotally people suggest rural TDs are better at delivering grants, and Monroe and Rose (2002) argue that urban interests tend to be worse at translating political support into effective representation. This significance falls away in the models including dummies for the main decision-makers' constituencies. Other control variables, such as unemployment rate, under-18 population or turnout are not significant. One interesting if unsurprising aspect is that the dummies controlling for each year of the programme show that much more money is spent in elections years or the year coming up to an election, whereas significantly less is spend in mid-term years.

Table 3 reports the same models for primary schools capital spending. Here we again use the log of the grant because the original dependent variable is not normally distributed. This is because certain areas which have seen large demographic changes (particularly newer suburbs of Dublin) have had new schools built which means these constituencies had greater need for large capital grants from this programme. Again there is no evidence for the core voter model on its own or in the full model. The swing model presents a more conventional picture with areas with a larger swing in the vote for the governing party receiving more monies. Once again the evidence for the decision-rule hypothesis is strong with the key decision-making ministers' constituencies receiving additional funds, the finance minister with strong significance, but the education minister falling short at the .05 level. This

evidence is explicable in that we vary the decision-rule (the level of ministerial discretion), so we are not surprised to see the responsible ministers' ability to target their own area dropping. The finance ministers' constituencies are targets for significantly more funding. A marginal constituency is of some importance in explaining the destination of such funding. In fact here we see that the under 18 population is most important, showing that Irish ministers have to respond to needs caused by demographic changes. We can also compare the standardised beta coefficients across models; the sports minister accounts for a quarter of a standard deviation change in sports grant allocations, whereas the education minister only accounts for about eight per cent.

In terms of the raw amount of funding delivered (using unlogged grant allocations) we can see in the full sports model that the constituency of the Finance Minister can expect some €1.25 million in additional funding each year while the constituency of the Minister for Arts, Sport & Tourism can expect almost €600,000. In contrast the constituency of other cabinet ministers will generally receive over €140,000 less in sports capital funding. In primary school capital funding the constituency of the Minister for Education will receive about €1 million in additional annual funding while the constituency of the Minister for Finance will receive about €3.5 million additional funds.⁹

⁹ These figures derive from an analysis of the raw amount of funds as the dependent variable as in the sports model. We report these figures as it is difficult to interpret the log derived coefficients in the table above. Both models produced similar results with only small changes in significance levels.

1.6 Discussion

Pork-barrel politics is thought of as the product of opportunity structures and incentives in the electoral and party systems within which parties and individual politicians seek to win and maintain power. Many works tend to disregard the decision-making rules or have simplifying assumptions with regard to them. The Irish candidate-centred electoral system, strong party unity and its localist political culture make it an ideal case for testing theories of partisan particularistic spending. There are reasons to expect GTS is important and that everything else being equal this would be targeted at marginal constituencies. But Ireland also has a dominant executive (controlled by the governing parties) with ministers who are all legislators seeking re-election. There are strong competing incentives for spending, so where it ends up is of theoretical interest. The result is that, GTS is sometimes in the gift of the powerful politicians or ministers who control the decision-making structures and are not primarily used as rewards or carrots for party supporters. Because we have two types of programmes which vary in the discretion given ministers we can further test if the decision rule is important. Thus we can say, at least in this area, the interests of individual ministers trump the interests of the ruling party. Other legislators are only able to signal to voters that they had influence through the use of parliamentary questions. This of course leaves open the question of whether delivery such funds is associated with garnering more votes at subsequent elections than rival candidates from the same party who do not have the ability to distribute pork

locally. Another puzzle is why the parties do not act in a more concerted effort to maximise seat share. These are obvious next steps in further research.

Having studied the geographic distribution of resources to Irish constituencies from 2002-2007 we find that districts which elect powerful decision making cabinet ministers win additional capital investments. However, the governing party is not always successful at winning additional funds for their core voters or for the districts which elect non-decision-making ministers. Thus the decision-rules for the allocation of resources are the first factor that scholars should look at. Only when these have been taken into account can we assess the validity of studies testing whether core or swing voters are the primary target of partisan spending.

References

- Ames, Barry. 1995. Electoral Rules, Constituency Pressures, and Pork Barrel: Bases of Voting in the Brazilian Congress. *The Journal of Politics* 57 (02):324-343.
- . 2001. *The Deadlock of Democracy in Brazil: Interests, Identities and Institutions in Comparative Politics*. Ann Arbor: University of Michigan Press.
- Ansolabehere, Stephen, John Mark Hansen, Shigeo Hirano, and James M. Snyder Jr. 2007. The incumbency advantage in U.S. primary elections. *Electoral Studies* 26 (3):660-668.
- Baron, David P., and John A. Ferejohn. 1989. Bargaining in Legislatures. *American Political Science Review* 83 (4):1181-206.
- Bickers, Kenneth N., and Robert M. Stein. 1996. The Electoral Dynamics of the Federal Pork Barrel. *American Journal Of Political Science* 40 (4):1300-1326.
- Cadot, Olivier, Lars-Hendrik Röller, and Andreas Stephan. 2006. Contribution to productivity or pork barrel? The two faces of infrastructure investment. *Journal of Public Economics* 90 (6-7):1133-1153.
- Cain, Bruce E., John A. Ferejohn, and Morris P. Fiorina. 1984. The Constituency Service Basis of the Personal Vote for U.S. Representatives and British Members of Parliament. *The American Political Science Review* 78 (1):110-125.
- Carey, John M., and Matthew Soberg Shugart. 1995. Incentives to cultivate a personal vote: A rank ordering of electoral formulas. *Electoral Studies* 14 (4):417-439.
- Considine, J., F. Crowley, S. Foley, and M. O'Connor. 2008. Irish National Lottery Sports Capital Grant allocations, 1999–2007: natural experiments on political influence. *Economic Affairs* 28 (3):38-44.
- Cox, Gary W., and Mathew D. McCubbins. 1986. Electoral Politics as a Redistributive Game. *The Journal of Politics* 48 (2):370-389.
- Dahlberg, Matz, and Eva Johansson. 2002. On the Vote-Purchasing Behavior of Incumbent Governments. *American Political Science Review* 96 (01):27-40.
- Dasgupta, S, A Dhillon, and B Dutta. 2001. Electoral Goals and Centre-State Transfers: A Theoretical Model and Empirical Evidence from India. *Unpublished manuscript*.
- Denemark, David. 2000. Partisan Pork Barrel in Parliamentary Systems: Australian Constituency-Level Grants. *The Journal of Politics* 62 (03):896-915.
- Farrell, Brian. 1994. The political role of cabinet ministers in Ireland. In *Cabinet Ministers and Parliamentary Government*, edited by M. Laver and K. A. Shepsle. New York: Cambridge University Press.
- Fenno, Richard F. 1978. *Home Style: House members and their districts*. Boston: Little, Brown.
- Finance, Department of. 2008. *Public Financial Procedures: An Outline*. Dublin: The Stationary Office.
- Gallagher, Michael. 2008. The earthquake that never happened: Analysis of the results. In *How Ireland Voted 2007*, edited by M. Gallagher and M. Marsh. Basingstoke: Palgrave.
- . 2010. Parliamentaries Parties and Party Whips. In *The Houses of the Oireachtas: Parliament in Ireland*, edited by M. MacCarthaigh and M. Manning. Dublin: IPA.

- Golden, Miriam A., and Lucio Picci. 2008. Pork-Barrel Politics in Postwar Italy, 1953-94. *American Journal Of Political Science* 52 (2):268-289.
- Hallerberg, Mark, and Patrik Marier. 2004. Executive Authority, the Personal Vote, and Budget Discipline in Latin American and Caribbean Countries. *American Journal of Political Science* 48 (3):571-87.
- Hansen, Martin Ejnar. 2009. The Positions of Irish Parliamentary Parties 1937-2006. *Irish Political Studies* 24 (1):29 - 44.
- Horiuchi, Yusaku, and Jun Saito. 2003. Reapportionment and Redistribution: Consequences of Electoral Reform in Japan. *American Journal Of Political Science* 47 (4):669-682.
- Hussey, Gemma. 1990. *At the Cutting Edge: Cabinet Diaries, 1982-1987*. Dublin: Gill and Macmillan.
- John, Peter, Hugh Ward, and Keith Dowding. 2004. The Bidding Game: Competitive Funding Regimes and the Political Targeting of Urban Programme Schemes. *British Journal of Political Science* 34 (03):405-428.
- Key, V.O. 1949. *Southern politics in state and nation*. Knoxville: Alfred A. Knopf.
- Levitt, Steven D., and James M. Snyder, Jr. 1995. Political Parties and the Distribution of Federal Outlays. *American Journal Of Political Science* 39 (4):958-980.
- Lindbeck, Assar, and Jörgen W. Weibull. 1987. Balanced-Budget Redistribution as the Outcome of Political Competition. *Public Choice* 52 (3):273-297.
- Marsh, Michael. 2007. Candidates or parties? Objects of electoral choice in Ireland. *Party Politics* 13 (4):500-27.
- Martin, Shane. 2011. Using Parliamentary Questions to Measure Constituency Focus: An Application to the Irish Case. *Political Studies* 59 (Forthcoming).
- Mayhew, David R. 1974. *Congress: the electoral connection*. New Haven: Yale University Press.
- McGillivray, Fiona. 2004. *Privileging industry: The comparative politics of trade and industrial policy*. Princeton: Princeton University Press.
- Milesi-Ferretti, Gian Maria, Roberto Perotti, and Massimo Rostagno. 2002. Electoral Systems and Public Spending. *The Quarterly Journal of Economics* 117 (2):609-657.
- Milligan, Kevin, and Michael Smart. 2005. Regional Grants as Pork Barrel Politics. In *CESifo Working Paper Series No. 1453*. : Available at SSRN: <http://ssrn.com/abstract=710903>.
- Monroe, Burt L., and Amanda G. Rose. 2002. Electoral Systems and Unimagined Consequences: Partisan Effects of Districted Proportional Representation. *American Journal of Political Science* 46 (1):67-89.
- O'Malley, Eoin, Peter Mair, and Stephen Quinlan. 2012. The Changing Parameters of Party Patronage in Ireland. In *Party Government and Party Patronage: Public appointments and political control in European democracies*, edited by P. Kopecky and P. Mair. Oxford: Oxford University Press
- O'Malley, Eoin, and Shane Martin. 2010. The Government and the Taoiseach. In *Politics in the Republic of Ireland 5th ed.*, edited by J. Coakley and M. Gallagher. Abingdon: Routledge.
- Shepsle, Kenneth A. , and Barry Weingast. 1987. The Institutional Foundations of Committee Power. *American Political Science Review* 81 (1):85-104.
- Shepsle, Kenneth A., and Barry R. Weingast. 1987. The Institutional Foundations of Committee Power. *The American Political Science Review* 81 (1):85-104.

- Stein, Robert M., and Kenneth N. Bickers. 1994. Congressional Elections and the Pork Barrel. *The Journal of Politics* 56 (02):377-399.
- Stratmann, Thomas, and Martin Baur. 2002. Plurality Rule, Proportional Representation, and the German Bundestag: How Incentives to Pork-Barrel Differ across Electoral Systems. *American Journal Of Political Science* 46 (3):506-514.
- Taoiseach, Department of the. 2006. Cabinet Handbook. Dublin: The Stationary Office.
- Tavits, Margit. 2009. Geographically targeted spending: exploring the electoral strategies of incumbent governments. *European Political Science Review* 1 (01):103-123.
- Thies, Michael F. 1998. When Will Pork Leave the Farm? Institutional Bias in Japan and the United States. *Legislative Studies Quarterly* 23 (4):467-492.
- Weeks, Liam. 2008. Candidate selection: democratic centralism or managed democracy? In *How Ireland Voted 2007*, edited by M. Gallagher and M. Marsh. Basingstoke: Palgrave.
- Weingast, Barry R., Kenneth A. Shepsle, and Christopher Johnsen. 1981. The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics. *The Journal of Political Economy* 89 (4):642-664.