

# **THE POLITICS OF DISTRIBUTION**

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## **Abstract**

This dissertation presents a theoretical framework about which voters parties distribute to and with which policies. To develop this full framework of distributive policies, the dissertation proceeds in two stages. First, it analyses which voters parties have more incentives to target distributive policies. Second, it also develops the conditions under which political parties can focus exclusively on these voters or need to combine this strategy with appeals to a broader electorate.

The first part of the argument analyses which voters parties have at the centre of their distributive strategies, or, in the words of Cox and McCubbins (1986) to whom parties will give an available extra dollar for distribution. The argument is that core voters provide more efficient conditions for distribution, contradicting Stokes' (2005) claim that a dollar spent on core voters is a wasted dollar. The explanation is twofold. First, core supporters might not vote for another party, but they can get demobilised. Once we include the effects on turnout, core voters are more *responsive*. Their party identification makes them especially attentive and reactive to economic benefits provided by their party. Secondly, incumbents cannot individually select who receives a distributive policy, and not all voters are equally reachable with distributive policies. When a party provides a policy, it cannot control if some of those resources go to voters the party is not interested in. Core supporters are more homogenous groups with more definable traits, whereas swing voters are a residual category composed by heterogeneous voters with no shared interests. This makes it easier for incumbents to shape distributive benefits that target core voters more exclusively.

These mechanisms define the general distribution hypothesis: parties will focus on core voters, by targeting their distributive strategies to them. The second part of the dissertation develops the conditions under which politicians stick to this distributive strategy or, instead, would provide more universalistic spending to a more undefined set of recipients. The conventional argument explaining this choice relies on the electoral system, arguing that proportional systems give more incentives to provide universalistic policies than majoritarian systems. This dissertation challenges this argument and provides two other contextual conditions that define when parties have a stronger interest in their core supporters or in a more general electorate.

First, the geographic distribution of core supporters across districts is a crucial piece of information to know the best distributive strategy. When parties' core supporters are geographically concentrated, they cannot simply rely on them, as the party will always fall short of districts to win the election. Therefore, parties will have greater incentives to expand their electorate by buying off other voters. This should reduce the predicted differences between electoral systems in the provision of universalistic programmes.

Secondly, the policy positions of candidates are a result of strategic considerations that respond to other candidates' positions. Thus, I argue that parties adapt their distributive strategies to the number of competing parties, independently of the electoral system. In a two-party scenario, parties need broader coalitions of electoral support. In equilibrium, any vote can change the electoral outcome. As more parties compete, the breadth of parties' electorates is reduced and parties will find narrow distributive policies more profitable.

In summary, the main contribution of this dissertation one is to provide a new framework to study distributive politics. This framework makes innovations both on the

characterisation of swing and core electoral groups, and the rationale of parties' distributive strategies, contributing to advance previous theoretical and empirical research.

To my parents, Dulce and Luis,  
and my brother, Pablo

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# CHAPTER 1: TWO PUZZLES IN DISTRIBUTIVE POLITICS

## 1.1. A Bridge to Nowhere

Don Young is one of the most senior Members of the American House of Representatives. He has represented Alaska's At-Large Congressional District since 1973. However, the way in which he originally accessed office was quite peculiar. In November 1972, he lost the congressional election by a 12.5 % margin. This fact in itself is nothing unusual, without the additional knowledge that the winning candidate was a dead person. On the 16<sup>th</sup> of October 1972, 22 days before the election, Democrat Representative Nick Begich -at that time the incumbent - had taken a plane from Anchorage to Juneau for a fundraising event. The plane never arrived. The Coast Guard, Navy, and Air Force were mobilised in an immediate search operation, but their efforts to find the wreckage of the plane and the bodies of Begich and the crew were fruitless. Although the Democratic candidate had disappeared and was considered dead, the election still went ahead on November 7. Begich won a 'post-mortem victory', and Young failed in his attempt to reach the House of Representatives.

Don Young was offered a second opportunity. In December 1972, Begich was officially declared dead and, consequently, a special election in March 1973 was held to replace him. Don Young, the man that could not beat a dead candidate, ran again. This time, however, he managed to win against the Democrat candidate, Emil Notti, in the closest election Alaska's At-large Congressional district has ever had. In an election characterized by a very low turnout, Young won with a 51.4% share, and by less than a 2,000 difference, in the vote.

Despite this weak initial victory and the fact that he reached the House with very low popular support, Representative Young has shown himself to be a very successful incumbent. Since he took office in 1973, Young has habitually managed to hold onto power by quite wide margins (in the last 2010 election, Young held his seat with 69% of the votes).

What has been the secret of Young's success after such a faltering start? In a 2006 *Rolling Stone* piece, Tim Dickinson probably hit the nail on the head by branding Young 'Mr. Pork'. In his list of the 10 Worst Congressmen<sup>1</sup>, Dickinson portrayed Young as a politician whose main political motivation was to obtain pork for Alaska.

Don Young is indeed a recognised pork-seeker. One year before Dickinson's article, the *New Republic* had also defined him as "*well-known for his sharp elbows and generous appetite for legislative pork*"<sup>2</sup>. There are many stories about Young and his ability to 'bring home the bacon'. In his years of incumbency, Young has served on several committees and has left his imprint on many projects. However his probably most

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<sup>1</sup> "*The Ten Worst Members of the Worst Congress Ever*". The article can be found in: <http://www.rollingstone.com/politics/news/the-ten-worst-members-of-the-worst-congress-ever-20120112#ixzz1kgtP3A96>. Don Young was listed as the 3<sup>rd</sup> worst Congressman.

<sup>2</sup> Clay Risen, "Driven to Distraction", *The New Republic*, 3rd March 2005.

successful work, and the one to which he devoted most efforts, took place in the early 2000s. Between 2001 and 2007, Young was the Chairman of the House Transportation and Infrastructure Committee. This position allowed him to take strong legislative action within the terms of the Transportation Equity Act (TEA), in order to secure millions of dollars in earmarked funds for Alaska. Although it is the third least populated state, this act turned Alaska into the fourth-biggest recipient of transportation funds<sup>3</sup>. Young was so proud of the Act that he named it TEA-LU, after his wife's name Lu, and stated that he had it '*stuffed like a turkey*'<sup>4</sup>.

Among the many funded projects by the act<sup>5</sup>, the jewel of the crown was the \$223 million dollar bridge between Gravina Island (population: 50) and the city of Ketchikan (population around 7,000). The media soon named it the '*Bridge to Nowhere*'. Young's alleged reason to build this 'bridge to nowhere' was that Gravina island hosts Ketchikan's airport, arguing that it was necessary to connect it directly with the continent. However, a very regular 5 minutes ferry shuttle –used by 1,000 people per day- already connected Gravina and Ketchikan. Despite this low demand, Young was trying to replace this service with a bridge of the dimensions of San Francisco's Golden Gate<sup>6</sup>, which, in the estimations of California's Division of Traffic Operations<sup>7</sup>, carries over 43,000,000 cars every year. The bridge project generated immediate controversy, both from environmentalists and, particularly, by critics of fiscal waste. *Taxpayers for Common Sense*, a nonpartisan federal budget watchdog organisation, labelled the

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<sup>3</sup> According to *Taxpayers for Common Sense*, Alaska was in total awarded \$941 million for 119 special projects.

<sup>4</sup> Rebecca Clarren "A Bridge to Nowhere" *Salon*, 10th August, 2005.

<sup>5</sup> For instance, the construction of a shorter route between Anchorage and Wasillia, popularly known as "*Don Young's way*", also deserves attention as a genuine pork project.

<sup>6</sup> As reported by Nick Jans in "Alaska thanks you", USA Today, 17th May, 2005, ([http://www.usatoday.com/news/opinion/editorials/2005-05-17-alaska-edit\\_x.htm](http://www.usatoday.com/news/opinion/editorials/2005-05-17-alaska-edit_x.htm)).

<sup>7</sup> *Annual Report on Traffic in the Highway System*, Division of Traffic Operations.

project as the most wasteful in America's history. This organisation estimated the cost per user at ten times the cost of Boston's Big Dig<sup>8</sup>, the most expensive highway project in the US to date, which is frequently mentioned as an example of disastrous infrastructure planning.

Don Young, however, very firmly stuck to his decision. Ketchikan and Gravina both belong to Alaska's District 1, one of the areas where he usually receives his highest electoral supports. In that district, Young obtained a 75.61% vote share in the 2000 elections, and an 80.07% vote share in 2002. These figures were clearly above, from instance, his results in District 3 -which contains the state capital Juneau-, where Young obtained a 49.26% in 2000, and a 55.29% vote share in 2002. Thus, the most relevant project contained in the Transportation Equity Act, was in fact a bridge construction in one of the main Young's electoral stronghold.

Apart from securing funds through his Committee for this project in his stronghold, he campaigned strongly for it and was able to bring in the support of other Alaskan political leaders, such as Senator Ted Stevens, and at that time a young candidate for Governor called Sarah Palin. However, the bridge became a national symbol of useless pork barrel. The Republican Party also stood against the bridge. Republicans were making a strong stand in favour of fiscal austerity, and tried to kill Young's projects off in November 2005, by removing the federal earmark. The party was trying pass \$50 billion in spending cuts, which affected Medicaid, food stamps, and other social

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<sup>8</sup> Tax Payers for Common Sense, Press Release, February 9, 2005.

programmes, a fact that made it very difficult at the same time to back Gravina's bridge project<sup>9</sup>.

Young, however, did not give up. Once the earmark was removed, he was still able to channel the funds to Alaska's Department of Transportation in the form of an intergovernmental grant. Alaska received the same amount of money, but being empowered to build the bridge itself. This allowed the project to start in 2006.

Once Palin became Governor of the state and Alaska's' government could make free use of the funds, the State government officially cancelled the project in 2007 by citing the high costs involved. But again this was not the end of pork barrel spending in Gravina. The Government of Alaska set aside \$25 million in federal funds as part of the original bridge project, and built the *Gravina Island Highway*<sup>10</sup>. This highway was a projected road extension within the island of 50 inhabitants, which, once constructed, was leading to a non-existent bridge. Pressure in favour of the bridge continued in the House of Representatives and, in 2011 the bridge project received a new boost, with the passing of *H.R. 662: Surface Transportation Extension Act*. This act revived the project and provided fresh funding for its construction. The bridge project therefore seems to be finally moving ahead and Don Young will possibly be able to bring home his bridge.

Don Young and the *Bridge to Nowhere* illustrate one of the corner stones in the study of politics, and the main argument of this dissertation: that politicians have an interest in using public money, frequently inefficiently, to further their own political goals. This idea has received a wealth of academic attention and is now well-established in Political Science. However, there is no consensus on exactly how and when politicians have a

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<sup>9</sup> "Two 'Bridges to Nowhere' Tumble Down in Congress", by Carl Hulse, *The New York Times*, 17th November 2005.

<sup>10</sup> "Alaska Seeks Alternative to Bridge Plan", *The New York Times*, 23rd September 2007.

strong interest in distributive politics. Why was Young interested in a bridge between Gravina and Ketchikan (where he already received many votes), and not elsewhere in his district where he could potentially attract more new voters? Why did Young back such a costly infrastructure project instead of other projects that, at the same cost, would have provided benefits to many more voters all across the state? The following thesis seeks to respond to these key issues.

## 1.2. The Question

If parties use public spending with political motivations, *who are the voters they seek to favour?*

A widely accepted starting point is that: 1) parties want to win elections; 2) distributive politics matter for winning votes; and 3) not all voters are the same. Therefore parties will, primarily, try to distribute to those voters that maximise their chances of winning the next election. If opposition voters are the most difficult to buy off, parties have essentially to choose between two available strategies (Fenno, 1978):

- 1) To target their support groups, or core constituency, (namely those who have consistently supported the party in the past and to whom the party looks for support in the future)<sup>11</sup>.
- 2) To target swing groups, those who have been neither consistently supportive nor consistently hostile.

Based on this dichotomy, the study of distributive politics has mainly revolved around the development and implications of two founding models. On the one hand, Cox and

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<sup>11</sup> Other denominations widely used for this group and that I will also employ through this dissertation include *partisan voters*, or, Fenno's *re-election constituency*.

McCubbins (1986) point out that core supporters will get the lion's share of benefits because they provide the highest and most reliable response to spending. Their higher return rate converts them into a valuable and secure electoral asset that incumbents use to win re-election. In opposition to this view, Lindbeck and Weibull (1987) argue that parties will target their distributive policies to swing voters. Their argument is twofold. On the one hand, core voters receive utility if their party is in office, so they already have a predisposition to vote for it without receiving any benefits. Consequently, and given the diminishing marginal returns of utility, distributive policies produce small increases in their incentives to vote. Their partisan bias mitigates any electoral response to spending (Lindbeck and Weibull, 1987; Dixit and Londregan, 1996). On the other hand, swing voters have low ideological and party attachments. This makes them particularly responsive to distributive benefits, as their vote decision is purely determined by their economic wellbeing.

Based on these models, an extensive literature has developed its theoretical implications and has tested them empirically. The results, however, are still inconclusive. Many authors have supported Cox and McCubbins' (1986) 'core voter thesis'. In the US, leading studies like Bickers and Stein (2000) or Levitt and Snyder (1995) have suggested that American parties target partisan voters. Mebane and Wawro (2002) and Berry et al. (2010) have demonstrated that more spending reaches the districts and counties where both the President and the House majority received most electoral support. Balla et al. (2003) found that academic earmarks were largely targeted towards core districts of the majority party in Congress. Carsey and Rundquist (1999) provide a similar result regarding Defence spending. Analogous findings with different approaches to the US case can be found in Albouy (2009), Bertelli and Grose (2009), or Evans (2004).

The core distribution finding has also been validated in many different cross-national contexts with regards to many types of spending, particularly intergovernmental grants (Wibbels, 2006). Among many examples, scholars have found evidence of core-oriented distribution in Mexico by analysing public investment (Costa-i-Font, 2003), community programmes (Hiskey, 2003) and poverty programmes (Díaz-Cayeros et al., 2000; Díaz-Cayeros, 2008). Schady (2000) provided empirical evidence that, in Peru, those regions where Fujimori obtained more votes also received more funds from poverty alleviation programmes. The evidence extends to countries as diverse as Argentina (De Luca et al., 2002; Calvo and Murillo, 2004), Australia (Leigh, 2008), Kenya (Barkan and Chege, 1989), Ghana (Miguel and Zaidi, 2003), Canada (Milligan and Smart, 2005; Joanis, 2011), India (Dasgupta et al., 2001; Khemani, 2003), Spain (Solé-Ollé and Sorribas-Navarro, 2008), and the Scandinavian countries (Tavits, 2009).

These core voter distribution results have, however, been widely contested, and other authors have provided evidence supporting the opposite perspective. Wright's (1974) seminal analyses showed that funds from the New Deal programmes flowed to swing states where the electoral value of an extra vote was greater. Since the publication of Wright's research, the list of academic studies supporting the swing hypothesis is, again, very long and comprehensive. In the US, the seminal studies of Bickers and Stein suggested that American parties target swing districts (Stein and Bickers, 1994; Bickers and Stein, 1996). Frisch (1998), Levitt and Poterba (1999), Herron and Theodos (2004), Lee (2003), Shor (2006), and Lazarus (2009) also provide evidence that American swing districts and battleground states receive more distributive benefits. In other countries, the swing hypothesis is confirmed by Dahlberg and Johansson (2002) and Johansson (2003) in Sweden; Denmark (2000) in Australia; Case (2001) in Albania; Hirano (2007) in Japan; Kwon (2005) in South Korea; Arulampalam et al. (2009) in

India; Crampton (2004) in Canada; Veiga and Pinho (2007) in Portugal; and De la Calle and Orriols (2010) in Spain. These are a few examples, among many others.

In sum, there is theoretical and empirical disagreement about whether swing or core voters are targeted. These inconclusive results have sometimes been explained through the interaction with other variables. There might be other contextual factors explaining whether incumbents lean towards core or swing voters: such as the existence of interest groups (Idema, 2010); the level of decentralisation (León-Alfonso, 2007); or the electoral system (Persson and Tabellini, 2003).

I argue that this mixed evidence reflects two gaps in the literature that I will try to fill. First, with regards to the empirical approach, I argue that the attempts to answer this question have very often confused the terms. Both the Lindbeck and Weibull (1987) and the Cox and McCubbins' (1986) models are theories on distributive policies directly targeted to voters. These theories are constructed at the individual level, modelling voters' electoral reactions and assuming that parties can target voters in a direct way. It is, then, assumed that parties can decide which specific voters receive a specific benefit. They also assume that: parties compete in only one district, voters are directly responsive, and that no other level of government is intermediating the distributive transfer. Hence, their approach theorises - with all contextual conditions controlled for - which group of voters a politician is most interested in.

Despite this individual level approach, almost all the empirical evidence from this abundant literature is drawn from the district/regional level. Thus, they do not provide adequate tests of the Cox-McCubbins, and Lindbeck-Weibull models in two ways. First, they do not provide a sufficient level of disaggregation of '*who gets what*'. They focus on a *between-district* rather than a *within-district* analysis. This mismatch has rarely

been noticed or highlighted -Cox (2010) is an exception- but it has important implications. Testing distributive models simply by seeing whether incumbents skew benefits to core or swing districts (or regions, in the case of intergovernmental grants), assumes that swing districts are predominantly composed of swing voters. However, in theory this situation is as likely as one in which a swing district has a 50% split of core voters from two parties. Secondly, this conventional empirical approach does not permit the possibility that parties, once they have decided to distribute to a district, will still try to discriminate within it and target the electorally ‘most productive’ voters in it. Thus, the majority of the empirical studies adopt a framework that does not allow us to observe the whole picture of distributive strategies.

A second flaw in the literature on distributive policies is that it has ignored the alternative spending policies that parties can use to win elections. Parties, apart from distributive policies, can also activate universalistic spending programmes<sup>12</sup>. The literature focuses on the question of whom receives narrow distributive policies, but not why a party engages in some types of spending strategies and not others. I argue that we cannot fully understand distributive policies if we are unable to explain when a politician will resort to other spending instruments. This question, in fact, is intimately related to the question of which voters parties are interested in. Distributive policies will be a useful instrument when parties want to appeal to very particular voters. However, when parties want to appeal to a nonspecific electorate, they will find it more efficient to use more comprehensive and encompassing policies that provide more generalised

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<sup>12</sup> Although sometimes the term *distributive policies* is used to refer to any policy that entails a distribution of resources -including social and welfare programmes- here I will use it to refer to policies that target a specific group, (in contrast to programmes which provide general benefits to a broad electorate). Other terms employed are: “*distributive benefits*” or “*narrow distribution*”, which is taken from Persson and Tabellini’s (2000, 2003). These policies are opposed to broad redistribution or, as they will be referred here, *universalistic spending*.

benefits. The political logic that drives the provision of narrow distributive policies fails to give an explanation of how and when parties adopt these other policies. Thus, we need a broader explanation that takes into account the relation between both types of distribution.

The traditional view is that the universalistic spending programmes respond to a national demand, while distributive policies follow tactical and strategic motivations. Stokes (2009), in her conceptual scheme, argues that the former falls into the category of non-programmatic redistribution, and the latter into a programmatic one. For her, the difference is that non-programmatic policies respond to a tactical logic, while programmatic policies are those whose objectives are a matter of public debate, and whose applicability responds to official criteria.

This dichotomy has decisively affected the evolution of the literatures on distributive politics and on universalistic social and welfare policies, and led to them developing in divergent directions. However, this perspective ignores the tactical side of universalistic policies, and the fact that incumbent parties face a trade-off. Universalistic and distributive policies are both strategic instruments that governments can use to win votes. My argument is that this use will be conditioned by broadness of the winning constituency in the context in which politicians develop their strategies. Distributive policies exploit the specific and defining traits of an electoral group, such as swing or core voters, while universalistic programmes exploit transversal interests of the whole electorate.

Taking into account these two deficiencies in the literature (lack of sufficient disaggregation in the empirical research, and lack of theoretical connection with

alternative spending policies) this thesis will develop and test a model of distribution. The analysis will shed light on two puzzles in the distributive policies' literature.

### **1.3. First Puzzle: Why Core Voter Distribution?**

As Cox and McCubbins (1986) state, "*conventional wisdom suggests that candidates for office will struggle to please swing voters, perhaps even to the point of ignoring their core supporters*". However, the anecdote about Don Young at the beginning of this chapter illustrates one persistent finding in much of the literature: parties target distributive policies to their core voters.

This raises a question that remains unsolved in Political Science. Why should a politician ever have incentives to target distributive policies to her supporters? The literature assumes that these voters are already more likely to vote for their favoured party, and, as Stokes (2005) states, cannot credibly threaten to punish it if they do not receive distributive benefits from it. The theoretical literature tends to build on this argument to put forward a simple claim. If core supporters -no matter how we define them- already have a natural predisposition to vote for a party, then an office-seeking party should find it more profitable to target those voters who are either indifferent or on the verge of changing their vote. This is the reasoning built into Lindbeck and Weibull's (1987) model, which has influenced the lion's share of the theoretical literature in distributive politics. Parties would perceive that any dollar used on their core supporters is a wasted dollar (Stokes, 2005), and, therefore, distributive policies should be used with a vote-buying motivation.

This persistent argument in the theoretical literature clashes with many empirical accounts that have found evidence of core voter distribution. However, the mismatch

between theory and practice in the literature has not been explained. One common and straightforward argument is that parties are, at least partially, policy-seeking actors (Wittman, 1973; Chappel and Keech, 1986). Policy-seeking parties pursue the implementation of specific policies that that seek to satisfy their supporters. They might combine these policies with a policy agenda directed to win office, but winning office would only be valued instrumentally, as only incumbents can influence policy decisions (Strom, 1990; Muller and Strom, 1999). Once in office, parties should have many incentives to use their power to supply policies to their voters with a pure constituency service motivation.

This explanation, however, is not completely satisfactory. It can perhaps explain some level of policy provision to core supporters in all countries, but it cannot explain, for instance, why similar parties sometimes switch over time from core voter distribution to rely more on other distributive strategies. In addition, this solution is an implicit recognition that distribution to core voters is a waste of resources from an office seeking perspective. Under this perspective, parties would always try to target policies only to their core voters because that gives them a higher direct utility. They simply do not do this as often as they would like, because they need to be strategic enough to win office. Thus, adopting a (full or partial) policy-seeking framework completely undermines the strategic side of targeting policies to core voters, and cancels out any possibility of reconciling core voter distribution with office-seeking behaviour.

Another possible explanation for this puzzle is the argument put forward by Cox and McCubbins (1986) themselves. They claim that parties are risk-averse actors, who prefer to put the distributive resources in the hands of their core supporters. These are “*well-known quantities*” and the party has “*precise and accurate ideas of how they will react*”. This argument is again not fully satisfactory. Risk-aversion surely is an

important parameter that shapes politicians' distributive strategies (as it will be in the model provided in this dissertation). However, risk-aversion cannot imply blindness in politicians' strategies. It can be argued that, if parties had to choose between two groups with a similar mean expected return, but with different certainty, they would opt for targeting the one that was most secure. But if core voters were not responsive to distribution, as the conventional argument states, then no matter how risk-averse politicians are, parties would target other voters. Thus, this argument cannot hold unless we provide an additional justification of why core voters, apart from being more reliable, are responsive to distributive policies at all (even if they are less responsive than swing voters). Building on Cox and McCubbins (1986) model, we still need specific micro mechanisms that explain why, from an office-seeking perspective, core voters respond to benefits.

Stokes et al. (2011) and Camp (2011) provide another interesting answer to the core voter distribution puzzle. These authors analyse the politics of distribution in clientelistic settings and show that in these countries party machines deliver particularistic goods to their core supporters. They argue that this happens because party brokers mediate in the distribution of goods. While party candidates would be more interested in targeting swing voters, party brokers have an interest both in making the party win the election, and in controlling a network of voters. As any broker, individually, cannot substantially affect their party's victory through their marginal contributions, they have incentives to use the clientelistic goods for their own network (Camp, 2011). On the other hand, parties cannot relinquish the party brokers. These actors enforce the responsiveness of voters to targeted goods. Thus, parties end up in a suboptimal equilibrium. The preferences of party brokers prevail, and more goods are targeted to core voters. This is an appealing explanation as to why core voter

distribution happens in clientelistic settings. Office-seeking behaviour requires the intermediation of party brokers, so parties accept that some resources are ‘wasted’ on core supporters. However, this argument requires a third enforcer actor -the party broker- with its own preferences. Thus, it travels badly to developed and industrialised countries, where party machines do not directly exchange goods for votes.

In summary, we still lack a clear theory that introduces direct office-seeking motivations in party’s incentives to distribute to core voters in industrialised countries. Recent attempts, again applied to clientelistic settings, have opened up a promising path by accounting for the impact of distributive policies on the probability of turnout of core supporters (Nichter, 2008; Dunning and Stokes, 2008). According to these accounts, core supporters might be unlikely to switch their vote to another party compared to other citizens, but they are as likely to demobilise and stay at home on the day of the election. Thus, distribution to core voters would respond to a turnout-buying motivation, instead of a vote-buying one. The explanation that will be provided in this dissertation to address this theoretical puzzle goes in this direction, but will develop a more integrated and complete framework by unpacking the mechanisms that explain why core voters are responsive at all to economic benefits, and reconciling parties’ office-seeking behaviour with core voter distribution.

#### **1.4. Second Puzzle: Why Give up Distributive Policies?**

The second puzzle arises from the observation of patterns of distribution across countries. Parties often promote universalistic spending, instead of providing narrow distributive policies targeted to specific electoral groups. This leads us to the following

question: Why would a party give up targeting distributive policies to its preferred group and provide broad policies to an uncertain set of recipients?

Distributive policies cover a very wide range of possibilities that allow transferring resources, explicitly or implicitly, to narrow sets of voters. These policies can take the form of government subsidies, grants, tariff policies, public programmes, and investments that benefit specific firms, industries or citizens. Governments can also make discretionary choices regarding government offices, agencies, public schools, hospitals, universities, or military bases, which have significant impacts on local economies and create localised jobs (Huber and Ting, 2010). Incumbents can also increase particular spending items that favour specific groups of voters, such as raising public sector salaries, increasing particularistic benefits, or increasing the spending on policies that affect specific collectives of workers (education, for instance).

Intergovernmental grants represent another classic example of distributive policies, which have also been demonstrated to follow political criteria (Dahlberg and Johansson, 2002; Case, 2001; León-Alfonso, 2007). By transferring more resources to specific regional or local governments, incumbents indirectly provide more spending to voters located in an area, and help specific subnational governments to win elections.

Distributive policies can also have the shape of direct spending, such as public infrastructures. The literature has accounted for political motivations in infrastructures as diverse as water projects (Del Rossi, 1995), rivers and harbours (Maass, 1951; Ferejohn, 1974), environmental projects (Dahlberg and Johansson, 2002), cities and urban renewal (Plott, 1968), and subway extensions (De la Calle and Orriols, 2010).

Finally, apart from policies that explicitly target a set of voters, the literature has also shown how parties can provide distributive benefits by manipulating objective, codified

programmes, and by biasing resources to the groups that they are interested in. In this case, the target is not explicit in the policy decision, but in its application. For instance, Chen (2008) studies the distribution of aid funds in the aftermath of the 2004 hurricanes in Florida. He shows how, although aid applications and aid concessions were established according to apparently objective procedures, the Bush administration was able to disproportionately assign aid funds to core republican areas. This particular type of distributive policy through the manipulation of funds' allocation is recurrent in the design of intergovernmental transfers and personal subsidies.

All these distributive policies offer several important advantages for a politician. The first, and most obvious, is that these policies allow a greater control over who is the recipient. Parties are not interested in all voters. Some voters will be more likely than others to electorally reward the policies of a party. Likewise, some voters might be more decisive to win office. Thus, parties have incentives to select those voters who are going to be more productive. Distributive policies, by specifying particular criteria that apply to selected subsets of voters (as with subsidies) or by directly allocating geographically targeted policies (as with pork barrel), more accurately target the voters the politician is willing to favour. Conversely, parties do not have control over who is a recipient of a universalistic social programme. These programmes cover general, diffused, and non-exclusive policies. These policies establish entitlement conditions, which can potentially apply to almost all voters (Moene and Wallerstein, 2001). By providing universalistic policies, parties appeal to less specific interests, and are less accurate in directly transferring resources to a subset of voters.

Distributive policies also yield more certain and stronger electoral rewards with a less costly policy. The party is much more aware of who is receiving the policy. This allows politicians to more precisely anticipate the payoffs. In addition, distributive policies

entail more exclusive benefits. The average impact on a recipient's well-being can be greater than in the case of universalistic programmes. Distributive policies allow parties to generate a concentrated group of winners, while diluting the cost of the policy in the common pool of taxes. This should trigger stronger rewards and milder punishments.

Visibility is also something that is valuable to politicians. Part of politicians' efforts to win re-election relies on claiming credit with constituents and clientele groups for those policies that were implemented in their interest (Fiorina, 1977). In this regard, distributive policies provide more tangible benefits (Ferejohn, 1974), and more visible ones. In addition, as Weaver (1986) argues, policies with highly concentrated benefits, and low or relatively diffuse costs, are particularly useful for politicians to claim credit with constituents. These better conditions for visibility were underscored in the classic studies on pork barrel (Mayhew, 1974; Ferejohn, 1974; Weingast et al., 1981).

Finally, distributive policies also allow a more direct link to be established between the provider (the politician), and the recipient (the voter). Finan and Schechter (2010), based on a psychological literature, argue that receiving direct benefits from a politician engenders feelings of obligation and reciprocity that should increase the probability of voting for her. The voter will be likely to see the distributive policy (and the politician will work for that) as a "*gift to the constituency*" (Alt and Chrystal, 1983:196). Conversely, receiving some material benefits that stem from the codified eligibility criteria of a universalistic programme (Stokes, 2009) is less likely to trigger these reciprocity feelings, as the link between the provider and the beneficiary is less direct.

In summary, distributive policies provide certain, and exclusive benefits to the group a party chooses to favour, and offer a number of advantages that should imply a natural

tendency of politicians to use them. Why then would a party give up using them as their main spending strategy?

Several theories have sought to explain this. The leading traditional argument has been that universalistic social policies are a result of the capital-labour cleavage. In those countries where the power resources of labour are weak, social policies are less likely to expand. Conversely, when trade unions and labour movements are strong, governments provide a more comprehensive range of social policies (Esping-Andersen, 1990; Korpi, 1978; Korpi, 1983). A similar story has been developed with regards to leftist governments, arguing that left wing parties have an ideological preference for developing social policies (Hewitt, 1977; Hicks and Swank, 1992; Huber and Stephens, 2001).

This argument is not entirely convincing. It is not completely straightforward why the power resources of the left should necessarily lead to comprehensive social programmes. Universalistic social policies can potentially affect a large and unrestricted body of recipients, which in many cases are individuals who do not belong to the labour force. The power resources of the left could have promoted other policies that provide more direct, and exclusive benefits to workers. In fact, there is evidence that strong social-democratic parties and their labour movements have in many countries opted for selective benefits for their constituents and clientelistic policies<sup>13</sup>. Thus, there should be no clear-cut relation between the strength of the left and the provision of universalistic policies. It is likely that this relation is mediated by certain necessary institutional or electoral competition conditions.

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<sup>13</sup> See a comprehensive discussion and a variety of historical examples on this in Fernández-Albertos and Lapuente (2012).

A similar critique can be put forward against a recent and popular answer that relies on electoral systems (Persson and Tabellini, 2000, 2003; Lizzeri and Persico, 2001; Milesi-Ferretti et al., 2002). The main claim is that in proportional systems parties compete across the whole country, and therefore try to reach all voters with universalistic national policies that spread the benefits broadly. Conversely, in majoritarian electoral systems parties are interested in winning the marginal districts and will target distributive policies to voters in them.

These are very compelling arguments that have gained popularity in recent years. However, the reality seems to be more complex. First, it is still hard to understand why parties would give up using distributive policies simply because they have to compete in a single national district or in a proportional system. Regardless of parties' aim to maximise votes at national level, discretionary and targeted expenditure can still be a useful and politicised instrument. If all voters are not equally responsive or productive, parties still have incentives to select, among all potential recipients, those who would clearly reward the policy, and exclude those who are unlikely to change their vote because of it. Consequently, parties still have incentives to use the targetable nature of distributive policies to satisfy specific groups of voters.

Likewise, these arguments overlook any incentive to distribute to core voters in majoritarian systems. From this perspective, distribution would be targeted to swing districts. This claim takes for granted the victory in core strongholds and assumes that core supporters will definitely vote for their party. However, there is evidence, as I argued above, that parties have incentives to target core supporters, suggesting that parties, to some extent, still need to take care of their core districts

In summary, the two most common explanations of why parties provide universalistic policies rather than distributive policies seem to leave much variation unexplained. Thus, we still lack a more complete framework explaining why parties have incentives to give up distribution to the most productive voters and instead turn to universalistic policies with uncertain recipients. Electoral systems or parties in government might only be a part of the story, but other strong strategic considerations must be included in the explanation. The argument in this dissertation intends to fill this gap, and provide a full answer to the puzzles outlined here.

## **1.5. The Argument**

This dissertation sheds light on the previous two puzzles. It provides a theoretical framework about which voters parties distribute to and with which policies. That is, it intends to answer to the classical question of ‘*who gets what*’ (Lasswell, 1936). To develop this full framework of distributive policies, I argue that we need to understand, first, which voters parties have incentives to distribute to. Second, the framework needs to account for the conditions under which political parties can focus exclusively on these voters or need to combine this strategy with appeals to a broader electorate. This will determine the types of distributive policies they will rely on.

The first part of the argument has to do with which voters parties have at the centre of their distributive strategies, or, in the words of Cox and McCubbins (1986) to whom parties will give an available extra dollar. My argument is that politicians have a limited amount of resources for distribution, so they will focus on voters to whom distribution is electorally most efficient. I define electoral efficiency as the number of votes per unit of spending that a distributive policy returns. There are two specific conditions to

understand the efficiency of a distributive strategy: the *responsiveness* of the recipients and their *targetability*.

I argue that these two conditions apply better to core voters, contradicting Stokes' (2005) argument that a dollar spent on core voters is a wasted dollar. Regarding the *responsiveness* condition, all voters do not respond similarly to the same policy. Therefore, parties have to assess how much (and with which certainty) distributive benefits have an impact on the final vote of an individual. Core supporters might not vote for another party, but they can get demobilised. Once we include the effects on turnout, my argument is that core voters are more *responsive*. First, because their party identification makes them especially aware and reactive to economic benefits provided by their party. Secondly, because by reinforcing their loyalty, these voters guarantee future party support.

In addition, politicians will anticipate the costs of winning a vote. Incumbents cannot individually select who receives a distributive policy, and not all voters are equally reachable with distributive policies. When a party provides a policy, it cannot control if some of those resources go to voters the party is not interested in. Therefore, a party will formulate those distributive policies that reach the largest number of voters that it is interested in with the highest level of exclusivity; in other words, parties prioritise the most *targetable* groups. I argue that, while core supporters are more homogenous groups with more definable traits, swing voters are a residual category composed by heterogeneous voters with no shared interests. This makes it easier for incumbents to shape distributive benefits that target core voters.

These mechanisms define the general distribution hypothesis: parties will focus on core voters, by developing distributive strategies targeted to them. They satisfy the short-

term goals of parties, providing electoral benefits in the coming election, but also the long-term goals of parties, by cultivating stable electoral platforms.

This general claim tells us to which voters, keeping all contextual conditions constant, parties will target distributive policies to. However, under certain competition conditions core voters might be insufficient. Winning their vote is a necessary, but not always a sufficient, condition for re-election. Hence, instead of concentrating on a single group with exclusivity, parties would need to develop distributive strategies that include both core supporters and other voters. To achieve this, parties will rely less on distributive policies (such as subsidies, grants, pork barrel...) and comparatively more on universalistic spending. These policies allow parties to appeal to a larger electorate, exploiting common and transversal interests, and have the virtue of bringing together both core and swing voters.

The conventional argument explaining this choice relies on the electoral system, arguing that proportional systems give more incentives to provide universalistic policies than majoritarian systems. I challenge this argument and provide two other contextual conditions that define when parties have a stronger interest in their core supporters or in a more general electorate: the distribution of core voters across districts, and electoral fractionalisation.

First, the geographic distribution of core supporters across districts is a crucial piece of information to know the best distributive strategy. If a party has core voters in all districts, mobilising this constituency increases the chance of winning in many districts. Therefore, the most efficient strategy is to concentrate all the efforts on core supporters (as they are the most productive voters) by targeting distributive policies towards them.

The scenario is different when parties' core supporters are geographically concentrated. In this case, parties cannot simply rely on them, as the party will always fall short of districts to win the election. Therefore, parties will have greater incentives to expand their electorate by buying off other voters. Therefore, parties rely on universalistic policies that appeal to a general broad electorate by satisfying transversal interests.

The second relevant feature of electoral competition refers to electoral fractionalisation, measured as the number of competing parties. The policy positions of candidates are a result of strategic considerations that respond to other candidates' positions. Thus, based on Cox (1990) and Myerson (1993), I argue that parties adapt their distributive strategies to the number of competing parties. In a two-party scenario, parties need broader coalitions of electoral support. In equilibrium, any vote can change the electoral outcome. As more parties compete, the breadth of parties' electorates is reduced and parties will find distributive policies more profitable. In addition, core voter distribution becomes more important when an ideologically proximate party can 'take over' part of its own electoral base. Thus, distributive policies become more useful in scenarios where there are more parties competing effectively.

These two conditions allow us to understand the type of distribution that parties will provide, supplementing the conventional argument that proportional systems are more likely to produce higher levels of universalistic policy provision.

## **1.6. Research Strategy**

This thesis provides a theoretical framework to study distributive politics, which can be applied to understand the strategies followed by politicians in any country, but also to

interpret differences in spending strategies between countries. Therefore, the thesis makes an effort to test its main propositions from a comparative approach.

This dissertation makes two main claims: that parties target distributive policies to their core voters; and that parties in specific electoral contexts have strong incentives to depart from distributive policies, and rely more on universalistic spending. Both arguments are tested in chapters 4 and 5 in cross-country tests. The first is tested for 28 countries over the period 1996-2011, and the second for 23 OECD countries over the period 1980-2002. These generalizable empirical results support the wide scope of the theoretical claims of the thesis.

The analysis of chapter 4 is complemented with a within-country comparative test. The study of distributive policies requires very specific data, which are not available in a cross-country comparative format. Therefore, the thesis also provides an in-depth analysis of the American case, studying the political logic of distribution in cross-district and cross-county analyses.

The United States, as I explain further in chapter 4, is a highly suitable country for this analysis. American politicians rely more on distributive programs, making it a particularly salient case. The United States (US) is also a single member district electoral system, where the incentives to distribute to certain districts, beyond the individual characteristics of voters, should be strong. Therefore, it is a restrictive scenario in which to test the central hypothesis of this dissertation.

Finally, the availability of data in the US is also a relevant issue as it makes up for the lack of cross-country comparative data. The high geographic precision of the Federal Assistance Awards Database (FAAD) is useful in disentangling the incentives to target certain districts, from the incentives to target the most productive voters.

Finally, the individual level hypotheses of this dissertation are tested for the American case using survey data drawn from the American National Elections Studies (ANES). The ANES have three advantages. First, they provide a consistent set of questions across a large time span. Some of its surveys go back to the first post World War II elections. This allows us to trace back the evolution of core and swing voters in time. Secondly, a detailed study of core and swing voters requires precise operationalization. Comparative survey data, however, do not allow us to construct measures of core and swing voters based on more than one dimension. Finally, using the ANES surveys is consistent with the decision to undertake an in-depth study of distributive politics in the United States.

The empirical methodology followed throughout the dissertation is quantitative. Some of the findings have been illustrated with descriptive and qualitative illustrations, but the results of the thesis stem from quantitative statistical analyses. This methodological approach has the advantage of providing more generalizable results because it employs large sample data. Explanations about the quality of the data and the rationale behind all modelling decisions are given throughout the dissertation. Additionally, to avoid making the results contingent on the model or specification chosen, all key analyses in the dissertation are run using diverse statistical techniques, model specifications and robustness checks. This contributes to increased confidence in the conclusions.

## **1.7. Plan of the Thesis**

The argument presented above will be developed both theoretically and empirically in the following chapters:

**Chapter 2** presents the theoretical benchmark of this thesis, shedding light on the two puzzles in distributive policies. This chapter provides the microfoundations of why a party would be interested in targeting distributive policies to its core voters and develops the concepts of *targetability* and *responsiveness*. The chapter also develops the electoral competition conditions –in addition to the conventional electoral system argument- by which parties in government have more incentives to give up distributive policies and focus on universalistic spending programmes.

**Chapter 3** empirically tests the individual level microfoundations of the argument. By analysing survey data of voters in the United States for the period 1978-2004, I examine the two distributive conditions of voters: *targetability*, and *responsiveness*.

First, I analyse the social, demographic, and professional characteristics, and the policy preferences of swing and core voters. I show that core supporters comprise a homogenous group, with similar social traits, similar spending preferences, and similar perceptions of the political action needed in the country. Conversely, swing voters are a heterogeneous group, with no defining preferences, traits, and common preferences. This undermines the capacity of parties to target them.

Secondly, I analyse the electoral response of core supporters and swing voters, by accounting for the change in probability of turnout and voting for the incumbents in response to economic benefits. Swing voters are found to be more reactive to these policies in terms of switching their party support. If the government benefits them, they are more likely than core supporters to change their vote in favour of the incumbent party. Core voters, however, are more reactive in terms of turnout. When they feel benefitted by the government, they are more likely to turn out to the voting booth than swing voters, for which economic policies have no significant mobilising effect.

Considering both effects together, the chapter shows that the electoral response of core voters is stronger than for swing voters. This generates incentives to use targeted benefits to mobilise core supporters.

Once these microfoundations are established, **chapter 4** tests the main proposition of this dissertation: core voters are at the centre of parties' distributive policies. To win re-election, parties prefer strategies that keep their electorate mobilised.

To study this hypothesis, I conduct a twofold analysis. First, I analyse the use of public sector compensations as distributive instruments. Using data for 28 countries for the period 1996-2011, I show that parties with more civil servants within their constituency are more likely to increase compensations to government employees.

In second place, I provide an in-depth analysis of distributive policies in the United States. Specifically, using American expenditure and electoral data at the county level, I study the allocation of federal grants and direct payments of the US members of the House of Representatives between 2001 and 2009. The literature normally tests which districts get more federal expenditure and why. This chapter is a further contribution to this debate as it analyses more disaggregated data with a sample of more than 22,000 observations. This allows testing more precisely hypotheses on distributive politics and account not only for which districts get more targeted expenditure, but also *which counties within those districts* are favoured.

In the first part of the chapter I run the standard analysis in the literature and show that swing districts get on average more distributive policies than other districts. However, I argue that this cannot be confused with distribution to swing voters. In the second part, I disaggregate the data and run county-level analyses. This analysis can be summarised by stating two main findings. First, in line with the expectations raised in the theoretical

chapter, those counties that gave greater support to the incumbent in the previous election obtain a higher level of targeted grants and direct payments. This implies that, in general terms, politicians' spending strategies are directed to their core voters. This supports the general distributive hypothesis of this dissertation.

Secondly, core counties in swing districts obtain relatively more grants than core counties of other districts. This implies that the incentives for core voter distribution are not constant. In fact, when the stakes are higher, parties are even more interested in mobilising their most likely voters, instead of trying to 'expand' their electorate.

These findings represent an important contribution to the literatures on the core/swing debate and electoral systems. They show that the electoral system might generate incentives on *where* a party should spend (swing districts). However, this does not imply that parties spend on swing voters. On the contrary, as long as possible parties will discriminate among voters in the district and will rely on core voters (within that district).

In **chapter 5**, I explore the macro-level and comparative implications of the main argument, by exploring the electoral competition conditions under which parties have more incentives to depart from narrow distributive policies and use universalistic policies.

Using data from 23 OECD countries, I analyse social spending measures, as a proxy for national universalistic policies, and measures of government consumption and non-social expenditure, as proxies for distributive policies. Several indexes of the regionalisation of the electorate -which measure whether parties' electorates are concentrated in certain districts- and electoral fractionalisation are regressed on these spending variables. I show that the conventional argument that majoritarian electoral

systems provide lower levels of universalistic policies must be qualified. The analyses show that the interaction between majoritarian electoral systems and electoral regionalisation indexes has a positive, consistent and robust effect on the provision of social expenditure and social transfers, and a negative impact on distributive policy measures. Secondly, the analyses also show that electoral fractionalisation (which is more common in proportional electoral systems) has a strong negative effect on social expenditure and a positive one on distributive policies. These findings are robust to several specifications of both the dependent and independent variables.

Thus, the chapter contributes to the current debate by complementing conventional electoral system arguments, and developing further electoral competition conditions under which we can expect that certain countries will have bigger and more encompassing welfare states, or will concentrate their distributive strategies on more narrow constituencies.

Finally, **chapter 6** provides a summary of the results. It also analyses the contributions of this dissertation, the implications of its results and the paths for future research. The argument developed here brings core voters back into the study of distributive politics. The literature has tended to argue that rational office-seekers will devote all their efforts to buying off swing voters. This dissertation reconciles the importance of core voters with the office-seeking behaviour of parties. The argument proposed by the advocates of Lindbeck and Weibull's model is that while core supporters only vote for a party, swing voters are more subject to change their vote. As Dunning and Stokes (2008) argue, "*the basic intuition behind these claims is that a dollar spent on a voter who is ideologically proximate and hence would vote for the machine anyway, even without an inducement, is a dollar wasted*". Benefits would then simply be a device for persuasion (Cox, 2010), by which parties seek to convert voters through economic incentives.

Instead, I show that parties have stronger incentives to use economic benefits to mobilise a latent constituency of core voters that provide no risk of voting for any other party, but that the party machine “*has to be able to bring them to the polls*” (Dunning and Stokes, 2008). This implies that parties have incentives to be representative of their constituencies and will promote their distributive interest. These results break with the common view of parties as opportunist actors using public funds to buy off new voters. In fact, this dissertation demonstrates that parties will only depart from the objective of distributing to their constituency, when they develop an interest in a broader electorate, for which they will provide universalistic policies of general interest, such as social policies.

# CHAPTER 2: THE POLITICS OF DISTRIBUTION

## 2.1. Introduction

Which voters do parties target with their distributive policies? Which spending strategies do parties use to win elections? In the previous chapter, I illustrated how the literature has addressed both questions separately. This has produced conflicting evidence that has resulted in two empirical puzzles. My argument is that we can only fully understand why some governments use particular distributive platforms, by first identifying the voters that parties have an interest in distributing to, and second, by disentangling the circumstances under which parties have incentives to focus on them, or to appeal to a broader electorate.

The model I provide answers these two questions, by addressing two flaws from previous models. First, it provides the specific microfoundations of why an office-seeking party should distribute to core, instead of swing, voters. Secondly, it introduces the importance of electoral competition to explain when parties have a greater interest to rely more on narrow distributive transfers or universalistic spending policies.

## 2.2. A Full Model of Distribution

### 2.2.1. *The Foundations of Parties' Strategies*

The standpoint adopted here is that parties are essentially office-seeking actors. This implies that parties' strategies will be aimed at maximising their probability to be in office. However, office-seeking behaviour is often characterised as being simply focused on the next election, and parties' goals are defined as maximising the probabilities of being re-elected. Here it is argued that parties also evaluate incumbency from an inter-temporal perspective.

The short-term concerns of parties are quite straightforward. Parties are electoral machines and therefore they want to win the upcoming election<sup>14</sup>. This conventional approach, however, is somehow reductionist. Political Economy models of distribution tend to ignore the future. As Strom (1990) notes, models of party behaviour are generally *static*. From this perspective, elections are depicted as a one shot game and parties' decisions are necessarily short sighted. Yet, although parties are primarily interested in winning the next election, their goals cannot simply be reduced to maximising their next election chances. Parties will also be interested in developing a strategy that prepares them for future contests. This is consistent with Moe's (1990) argument that that 'political uncertainty' is a key factor in policy-making.

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<sup>14</sup> This office-seeking perspective does not exclude that parties might also be concerned with policy-seeking goals. However, as said in chapter 1, any policy-seeking behaviour needs to be complemented with an office seeking strategy as otherwise no influence on policies can be gained (see, for instance, Budge and Laver (1986) or Muller and Strom (1999)). Therefore, I intend to develop a theoretical framework in which the predictions on distribution are explained in office-seeking terms, keeping policy motivations constant.

This approach to parties as non-myopic actors is not completely new. The party organisation literature has consistently emphasised that parties are living organisations whose aims go beyond a single election (Schlesinger, 1985). However, this is an unusual approach in the distributive and political economy literatures, where parties' lives seem to begin and die between elections (Laver and Budge, 1992)<sup>15</sup>. Characterising parties as non-myopic implies that they are actors endowed with intelligent foresight to anticipate future events and the impact of specific distributive policies on them (Laver and Shepsle, 1990).

There are powerful reasons to include far-sightedness in parties' behaviour. Although candidates are obviously the most interested in winning the coming election, Mattozzi and Merlo (2008) argue that politicians who remain in office for longer periods receive additional payoffs (which can be interpreted as ego-rents from being confirmed in office by the voters, or other non-pecuniary rewards associated with seniority in the political sector). Unless candidates totally discount future office, they will try to win the elections in a way that also favours re-election after it.

The party elites and organisation will also bargain to maintain the continuity of the party in the long run. An internal organisation is an essential feature of every political party and all party leaders need to provide themselves with one (Schlesinger, 1991). Consequently, party leaders will have to combine their goals with that of the organisation. In this vein, Maravall (2003) argues that parties' organisation will be proactive in reducing the scope for short-term opportunism by their leaders. Although

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<sup>15</sup> Hicks (2011) is an exception. He argues that parties make policy choices based on their expectations about the likelihood that future governments will reform them. His research shows that parties' spending strategies differ depending on the perceived probability that the opposition party will take over and undo its policies.

these organisational constraints are normally depicted as policy-oriented pressures, they can also be developed from an office seeking perspective. Beyond the short-term results, party members are interested in maintaining the reputation of the party since the brand will be valuable in attracting votes in future elections (Wittman, 1995). From a different approach, the so-called models of *overlapping generations* (such as Alesina and Spear (1988) also introduce long-term motivations in party organisations. These models emphasise the roles of young elites within the party. As they will become the future party leaders, they exercise control over the platform, so that their future electoral chances are not harmed.

Finally, this farsightedness will not only come from future party leaders. In each election, particularly in parliamentary democracies, it is not only the electoral fate of the candidate that is decided. Individual legislators, no matter if they belong to a closed party list, also run to keep a seat that we can assume they will try to hold for as many years as possible. While the candidate might be more short-sighted, other party leaders (like the members of the legislature) can have, in the words of Maestas (2003), *static* and *progressive* ambitions<sup>16</sup> that need of party's reliability towards core voters. A classic literature on the American Congress shows that legislators have a longer time horizon than presidential candidates (Edwards, 1978; Mezey, 1989; Thurber, 1991; Wolanin, 1976). Similar considerations can be applied to parliamentary democracies, where the party's legislative leaders can exert their intraparty bargaining power to make the party adopt a more long-term view.

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<sup>16</sup> *Static ambitions* are defined as those directed to keep office, while *progressive ambitions* are those directed to win to higher office in the future.

In summary, almost everything in a party's life is linked to a longer temporal framework. Therefore, I characterise parties' goals as a combination of short- and long-term motivations.

### **2.2.2. The Choice: Voters and Policies**

How do parties fulfil the previous goals? To put it simply, parties can choose between concentrating their efforts on specific groups with highly exclusive benefits, or seeking to please a larger set of voters with fewer benefits. This implicitly determines the choice for a particular type of distribution. Parties have to choose between distributive policies, which have a concentrated, but smaller set of winners, or policies, such as programmatic universalistic spending, that produce many dispersed winners. Both decisions are electorally motivated; they only differ in the means: the degree of exclusiveness of the policy and the breadth of the particular electorate.

From this perspective, a full model of distribution must have two stages. First, it has to account for the voters to whom parties target their distributive policies. Secondly, it must account for the conditions under which parties can focus on these preferred voters, or whether they need to appeal to a broader electorate.

Regarding the first question, the analysis requires us to establish the specific voters that parties have the most incentives to target *distributive policies*, or, in Cox and McCubbins' (1986) words: "*who would receive a transfer if an incumbent had only one dollar to distribute*". These authors argue that this is the fundamental question in the field of distributive politics. Once the electoral groups that are most preferred by parties are determined, the second step of the model is to analyse if parties can focus on that group exclusively, or whether they also need to appeal to a broader electorate. This

defines which types of spending strategies parties will predominantly follow. Parties can employ distributive policies that allow them to target a defined group of voters. Alternatively, parties might have to combine this with appealing to a larger electorate. Among the competition conditions that influence this strategy, I will study two that have been overlooked in the literature: the distribution of voters across districts and the electoral fractionalisation.

### **2.3. Who Gets Distributive Policies?**

As Fenno (1978) argues, when parties provide narrow distributive policies, they have essentially to choose between core and swing voters. Core supporters can be defined as those voters who have a stable affective attachment to a party and have a high propensity to vote for it. Swing voters are those that have no attachment to any party and are close to indifference between parties, being more prone to switch their vote.

How do politicians choose between them? This question has filled thousands of pages of academic literature. Here, I provide two specific microfoundations to understand an incumbent's behaviour. My argument is that, as politicians have a limited amount of resources available for distribution, they will focus on the group of voters to whom distribution is electorally most efficient. I define electoral efficiency as the number of votes per unit of spending that a targeted distributive policy returns. Two are the defining elements of efficiency:

1. The electoral reaction of a policy recipient. This is what I call the *responsiveness condition*.

2. The distinctiveness of voters' traits that allows parties to target them and exclude other voters. This is what I call the *targetability condition*.

First, parties assess the potential electoral benefits of a policy. These are relevant because not all voters respond similarly to a similar policy. Some voters might never vote for a party regardless of how much they receive from it (or will only do it after very costly distribution), while other voters vote for the party regardless of being recipients of distributive benefits. Thus, parties have to evaluate the impact that a distributive policy is going to have on the vote decision of the recipients.

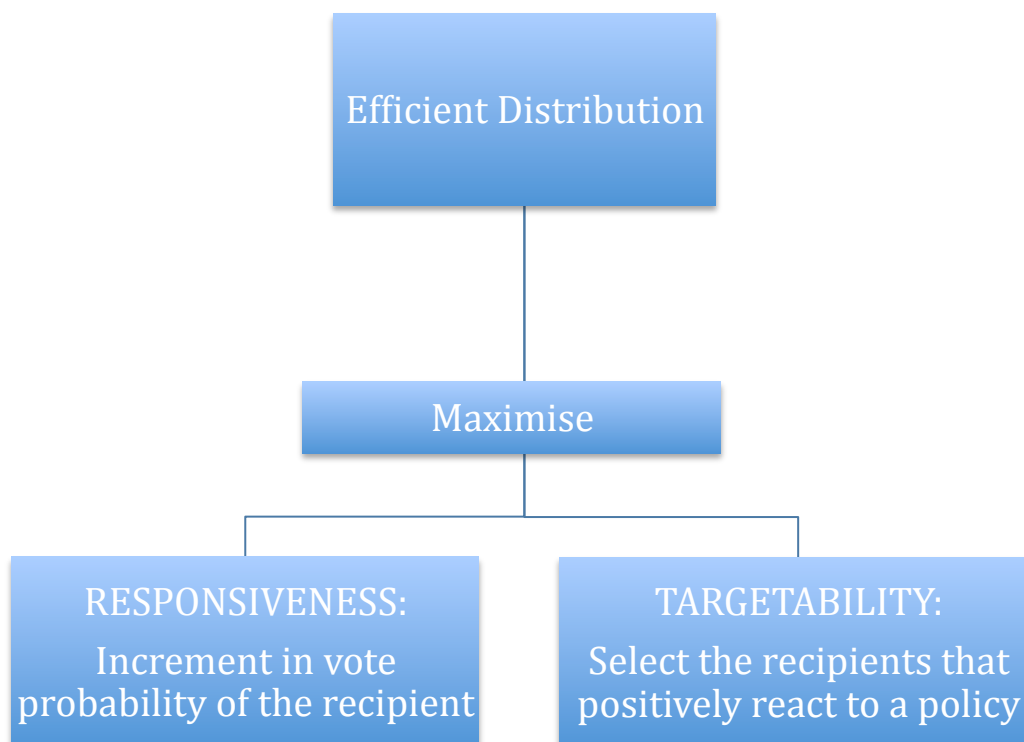
Secondly, politicians will anticipate the costs of winning a vote. Incumbents cannot individually select who is or not a recipient of a policy. They have to formulate application criteria that implicitly select recipients. The problem is that not all groups of voters are equally distinguishable, and therefore, reachable with distributive policies. Inevitably the mix of voters means that on the way to distribution some resources are lost on voters the party is not interested in. Therefore, a party will provide spending that reaches the largest number of voters that it is interested in with the highest level of exclusivity.

This implies that politician will prioritise the voters to which distribution is most efficient, by minimising the risk of having an effect on the vote decision of an individual, or not reaching her with the policy (Figure 2.1). This concern with efficiency is normally overlooked in the literature. Only the literature on clientelism tackles the issue of how parties are concerned with distributive efficiency and what they do to improve it. Clientelism, however, is a particular scenario for efficient distribution. First, parties can target benefits all the way down to the individual level (Díaz-Cayeros and Magaloni, 2003); that is, they can *perfectly target* voters. Second, the party machine can

often monitor whether the voter votes accordingly (Stokes, 2009); that is, it can ensure *responsiveness*. Neither of these options is possible in industrialised democracies. We can assume that parties in these countries cannot distribute to specific individuals and exchange benefits for a vote. Hence, parties have to evaluate indirectly which voters will actually benefit from a distributive policy and their electoral response, to assess the efficiency of distribution.

The general argument found in the literature is that swing voters are the most profitable, because they provide high electoral benefits and parties can easily distribute to them. I will contest these two assumptions. My claim is that swing voters do not provide as strong electoral responses to benefits than core voters and are costlier to target. This makes distribution to them less efficient, and therefore, less attractive.

**Figure 2.1. Efficient Distribution**



### **2.3.1. Responsiveness**

The first feature of distribution that politicians take into account to decide their distributive strategies is the responsiveness of recipients, that is, the impact of benefits on their vote.

Cox and McCubbins (1986) argue that the voters with the highest responsiveness to spending are the ones who receive most benefits. The crucial question to answer then is who these voters are. Cox and McCubbins suggest that partisan voters have a higher return rate<sup>17</sup>, and, more importantly, they have a reliable propensity to vote for a particular party. However, they do not put forward clear mechanisms as to why this should happen.

This approach is at odds with swing voter theorists. These scholars argue that, instead of a higher predisposition, core voters seek to ‘satisfy their utility’ by having their party in office. Consequently, benefits have a small impact on their voting incentives as these voters already have a sufficient motivation to vote for it. Partisanship mitigates any electoral reaction to distributive policies (Lindbeck and Weibull, 1987; Dixit and Londregan, 1996). Conversely, swing voters, which do not have ideological or party attachments, are very responsive to economic benefits. Their vote decision is not influenced by partisan considerations. Therefore, these voters will be more responsive to an extra unit of spending, because their utility is contingent on their economic

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<sup>17</sup> In fact, Cox and McCubbins are not completely clear about this. Although at the beginning of their article they suggest that core partisans will have a higher response rate, they conclude by simply stating that there is no *a priori* reason to rank swing groups uniformly ahead of support groups (Cox and McCubbins, 1986: 378). Their final main argument, as I developed in chapter 1, is that parties overinvest in core voters because they are risk-averse. As parties maximise a concave function of votes, they will seek to target those groups with a more reliable response rate.

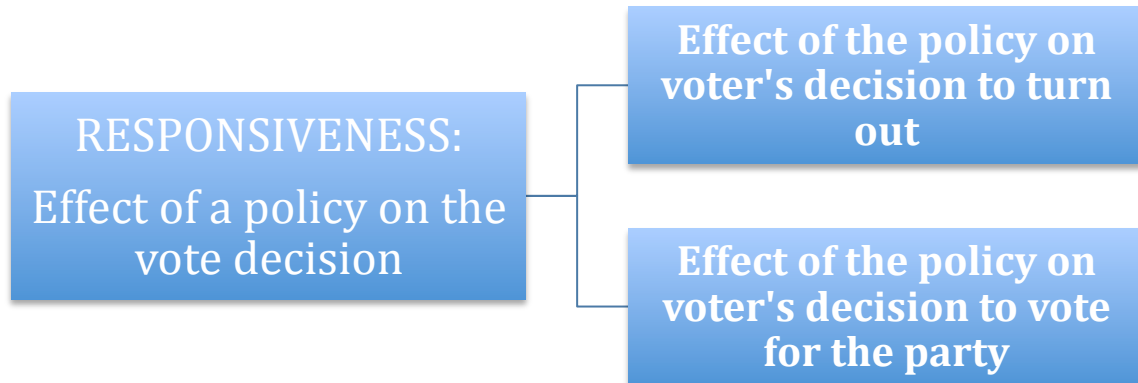
wellbeing. Apart from other possible criticisms, the swing-voter approach has, in my view, two drawbacks, that I will challenge.

In the first place, this approach ignores that the voting decision consists in two stages: First, the voter can turn out or not. Second, once turning out, the voter has to decide also which party to vote for. Hence, an office-seeking party should evaluate the impact of a policy on both stages to assess the total responsiveness. If the voter is, first, going to turn out and, second, surely vote for a party, distributing to her is a loss of resources. Conversely, if the policy can have an influence on any of the two stages, the party might have incentives to target the voters. In this regard, swing voter models tend to ignore the first stage of the vote decision, keeping the mobilisation effect of benefits out of the picture. Authors like Lindbeck and Weibull (1987) or Stokes (2005) depict core voters as secure voters, whose turnout is guaranteed.

The second criticism has to do with the effect of benefits on voting. When providing benefits, the incumbent has to evaluate which is the impact that the distributive policy has on the final vote. There will be voters that might react to benefits, but only after being flooded with them. Parties will seek for those that provide a higher increase in the response per unit of spending. In this regard, the swing-voter approach characterises core voters as impervious to benefits.

These two claims are contested in the following sections. I will argue that, evaluating the impact of policies on the two voting stages (Figure 2.2), the net effect is stronger in core voters.

**Figure 2.2. Responsiveness**



### **2.3.1.1. Core voters and mobilisation**

As Ansolabehere and Snyder (2006) state, the Lindbeck-Weibull and Dixit Londregan models take turnout for granted, and implicitly assume that government spending does not affect voters' mobilisation. These theoretical models consider distributive benefits as simply a device for persuasion (Cox 2010), by which parties seek to convert voters through economic incentives, and would be meaningless for those already persuaded.

However, if, as some research has already suggested, we contest the assumption that core supporters always vote (Martin, 2003; Holbrook and McClurg, 2005), benefits can play an important role on their vote decision by mobilising them (Ansolabehere and Snyder 2006, Nichter 2008). From this perspective, both core and swing voters would be responsive in different ways. While swing voters can be persuaded by benefits, core voters can be mobilised by them. This is what Dunning and Stokes (2008) call the mobilisation vs. persuasion dilemma in distributive politics.

In this vein, I argue that parties cannot take core voters' support for granted, as they can demobilise and not turn out. This is in line with a theoretical literature that has stated

that voting is costly and irrational, as the probability of having an impact on the final electoral results is very small (Riker and Ordeshook, 1968). Being an ideologically committed voter should not necessarily guarantee that the voter turns out. She faces similar collective action dilemmas than economically motivated voters. In a different manner, the argument is also in line with the Political Sociology literature that states that partisan voters are characterised by having a conditional greater likelihood to vote for a party, but do not provide a blank cheque to their parties. Lazarsfeld et al. (1948) already argued that partisans' predispositions need to be activated to be turned into a final electoral support. Core voters have a greater likelihood to vote for their party as long as their policy demands are satisfied (Díaz-Cayeros et al., 2008). If not, they might not show up to the polls. There is research that shows how the traditional constituency of the left has shifted their vote when leftist parties have not provided the policies that they demanded (see, for instance, Lindvall and Rueda (2011)). In this regard, Nichter (2008) and Gans-Morse et al. (2009) introduce the concept of turnout-buying strategies. Core voters have in common with the rest of voters that they might not turn out. The difference lies in that, in case they vote, they have a higher predisposition to do it for a specific party.

Thus, if parties target core voters, they would not provide benefits to 'buy' a new vote, but to ensure that they actually show up at the voting booth. This can be seen as the main incentive that parties have to target their most sensitive voters.

### **2.3.1.2 Core voters and the electoral reaction to distributive policies**

Once argued that the electoral response to a policy must include both the decision of turnout and the vote decision, the relevant question is which voters - core or swing - provide a stronger total electoral reaction to distributive benefits.

Political economy and voting behaviour models tend to assume that swing voters are more responsive, while partisans are more predisposed to vote for a party, and are impervious to benefits. However, these two features of voting (predisposition and electoral return) should not necessarily be contradictory. My argument is that they are complementary. Similar policies do not yield the same electoral success for all parties. Voters will respond differently to policies depending on the party that provides them. They will have a more positive reaction to those adopted by a party they like. Therefore, more than being a natural higher predisposition to vote for a party, core voters' party identification boosts their reaction to benefits. Conversely, a swing voter does not have a partisan identity that makes her more reactive to distributive benefits.

The Michigan School defined party identification as a stable feature of the individual consisting of a psychological attachment to a party acquired in her socialisation process (Campbell et al., 1960, Stokes, 1962; Converse, 1976). This identification is generally described as a higher natural likelihood to vote for a specific party throughout her life course. This is what Converse (1966) calls the *normal vote*, defined as the naturally expected vote of an individual, keeping all short-term factors constant. This has led many authors to assume that parties cannot use distributive policies to increase the likelihood of turnout of their core supporters. Instead, they would have more room for manoeuvre with swing voters. These individuals do not have partisan predispositions, and their electoral choice would be fully determined by economic stimuli, being their

expected returns higher than core voters'. Thus, the key assumption underlying this argument (which is present in all the literature around Lindbeck and Weibull's model) is that party identification neutralises the effect of spending on voting.

My argument goes in the opposite direction. I claim that both partisan biases and the electoral response to spending are interrelated. More specifically, the electoral response to benefits is itself a feature of the partisan bias. Core voters, defined as those who have a bias in favour of a party, are the most responsive to any benefits they receive from it (and their response would be characterised by increases in turnout). Instead of cushioning the effect of benefits, partisanship amplifies it.

There are many reasons to expect that partisan biases would have an important role in explaining the short-term responses to distributive policies. As Marsh (2006) argues, partisanship not only defines an individual's relationship to politics, but also provides an informational filter that helps the individual to deal with the constant stream of information about politics.

The literature has also used this framework to study the economic voting and has shown that voters do not react in the same way to similar economic outcomes. Partisanship acts as a lens through which reality is filtered, mediating both its interpretation and its political rationalisation. Economic perceptions of how well a government has done are then highly influenced by individual partisan biases. Retrospective voters perceive differently the same economic outcomes depending on their partisanship -see for instance, Evans and Andersen (2006) or Marsh and Tilley (2010)-. More importantly, partisan biases are not limited to the perception of reality. Voters cannot invent economic successes, or artificially blame incumbents for economic downturns that do not happen; but partisanship can influence the yardstick used to judge governments.

Voters are more likely to exonerate a party they are identified with for bad economic outcomes (by justifying these outcomes on external conditions), while they attribute any successes to them (Rudolph, 2003a). Selective responsibility attribution also applies to the issues that voters take into consideration when deciding on their vote. For instance, given a similar natural disaster, partisan voters are more likely to consider that it was inevitable and reward the incumbent on the basis of post disaster relief actions, while voters with no partisan attachment are more likely to attribute responsibility to the party for not foreseeing and planning for it (Malhotra and Kuo, 2008).

Biases in the attribution of responsibility are not the only way partisan voters exonerate or reward their party. Maravall and Przeworski (2001) show that partisanship also matters for the voting mechanism voters put in place to evaluate their government. Core voters choose the grounds that help them to reward their incumbent. If the incumbent performs badly, voters will make inter-temporal assessments and will vote on prospective terms. Conversely, they will place more importance on retrospective evaluations when the economic outcomes have been good, turning their vote into a reward of past governmental actions. In a recent article, Malhotra and Margalit (2010) show that people's attitudes on policies are determined by those long-standing predispositions. They show that partisan biases are a powerful predictor of support for the incumbent's policies in response to the financial crisis.

The mechanism I propose here is similar to those listed. If party identification mediates responsibility attribution for general economic outcomes, it is reasonable to expect that it will also mediate the electoral reward for personal economic benefits. The short-term reaction to benefits is filtered through and shaped by long-term predispositions for parties. This way, we escape from the purely rationalistic view of voters as simply being economically oriented, but also from the deterministic view of the social class and party

identification literatures that undermines any capacity of parties to influence voters' decisions.

Thus, I predict that core voters will have a stronger reaction to benefits provided by their party. Partisanship serves as a heuristic that allow individuals to select and weight all issues when making an electoral decision. Core voters are also normally better informed about the party's policies (Carpini and Keeter, 1993) and will place on them more weight in their voting decision. Second, this group identification and party loyalty will override other considerations when individuals allocate rewards to their party (Brewer, 1979; Towson et al, 1981; Ancok and Chertkoff, 1983)<sup>18</sup>. Partisan biases make voters focus on those issues that imply a positive response to the party incumbency.

Conversely, swing voters will have a weaker electoral response to benefits. They do not have partisan cues that make them weigh more positively the benefits provided by a party, and will consider also other issues to make up their minds. They might offer positive feedback in pure economic voting terms. However, they do not have partisan cues that selectively focus the electoral decision on benefits. Hence, winning a swing voter is more costly. More resources are needed to ensure her vote.

Finally, core voters of other parties do not reward benefits. As Pettigrew (1979) argues, individuals look for external reasons to minimise the positive behaviour of disliked out-groups. Hence, voters will rely on fairness, or other justifications to rationalise benefits, or they will even attribute the responsibility of those policies to external actions of their own party to avoid rewarding a disliked party.

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<sup>18</sup> A large ethnic literature has shown the strength of the out- and in-group evaluations. See, for instance Kramer and Brewer (1984) for a detailed review on this.

In summary, parties know that their core supporters are more likely to attribute to them improvements in their wellbeing. Yet, they also know that voters are not blind. Partisanship implies placing more weight and reacting more to the positive stimuli that voters receive. However, if they receive no stimulus- such as distributive benefits-, they will not increase their electoral response.

This argument is surprisingly absent in the literature on distributive policies. While there is more evidence of the effect of partisanship on the perception of general economic outcomes, there is almost no research that specifically accounts for its effect on the electoral response to distributive policies. It could explain, however, the reasons for the mixed evidence on the electoral effects of public spending. For instance, Larcinese et al (2009) do not find clear evidence of voters reacting to public spending and argue that parties cannot successfully improve their electoral results through distributive policies. Other authors have argued for the same 'nil effect' (Eslava, 2006; Brendner and Drazen 2008). Peltzman (1992) and Drazen and Eslava (2010) even argue that spending can have a negative effect for the incumbent. I argue that the results are inconclusive because the effect of spending on voting cannot be studied aggregately. It is necessary to disaggregate the effect of spending by types of voters.

Only recently has this argument been explored. Chen (2008) is an excellent precedent. He analysed, at the aggregate level, the electoral response to Federal Emergency Management Agency (FEMA) benefits in Florida after the 2004 hurricane season. He found that poor voters are more sensitive to aid relief benefits and electorally reward them more; a finding that provides support to the standard assumptions of economic voting and distributive models (Dixit and Londregan, 1996; Calvo and Murillo, 2004; Persson and Tabellini, 2000; Stokes, 2005). However, he also finds that partisanship was the most important catalyst of the electoral reaction to benefits. Among core voters,

those that received benefits had a greater likelihood to turn out and vote, confirming that parties cannot take their votes for granted and that benefits were a useful tool for mobilising them. Furthermore, looking at the outcomes at the precinct level, Chen also shows that aid benefits had a bigger impact on electoral results in core (in this case, Republican) precincts, a moderate one in swing precincts, and no effect at all in Democrat precincts. While partisanship operates to exacerbate the electoral reaction to benefits among partisans, it reduces the reaction among opposing constituencies. The main conclusion of his research is that core voters are cheaper to buy off. In his estimations, a dollar spent on Republican areas returns three times more votes than a dollar spent on swing areas.

In a similar vein, Calvo and Murillo (2004) show that, in Argentina, low-income voters who belong to Partido Justicialista's constituency rewarded the patronage provision of public jobs by governors of this party, but not by UCR governors. At the individual level, the same authors (Calvo and Murillo, 2009) provide evidence that the distribution of non-programmatic goods by party machines in Argentina and Chile only had a positive electoral effect on citizens who were already in the party's network. Finally, Orriols' (2010) individual-level analyses of the effect of Reagan's distributive benefits also point in this direction. He shows that the electoral response to benefits in the early eighties was different between Republicans, Democrats and Independents. He suggests that governments cannot simply use economic benefits to 'buy' votes, because their influence on voting is mediated by partisanship. These articles aside, the empirical literature has not tackled the differential electoral response to economic benefits across voters.

In summary, the claim I make allows connecting and establishing a feedback between the fixed and long term, emotional attachments of partisanship and the response to

benefits. Partisans do not vote under all circumstances. They also respond to economic motivations, and targeting benefits to them increases their mobilisation to vote.

Hence, I pose here the first hypothesis:

*H1: Core voters' electoral response to benefits is higher than the response of swing and opposition voters.*

### **2.3.2. Targetability**

Targetability is the second characteristic of voters that parties observe to decide to whom to distribute. Parties are not interested in all voters. Ideally, they would only distribute benefits to those who can either be mobilised or persuaded. However, in the real world, incumbents provide spending, without selecting specific individuals that receive the benefits of a policy<sup>19</sup>. In industrialised democracies, even for geographic grants, the selection process has to be done in programmatic and open ways. This implies an adverse selection problem. Parties provide spending but they are not able to monitor who exactly is the recipient and if she returns a vote. Thus, when deciding to which set of voters to distribute and which policies to formulate, parties look at the targetability of voters.

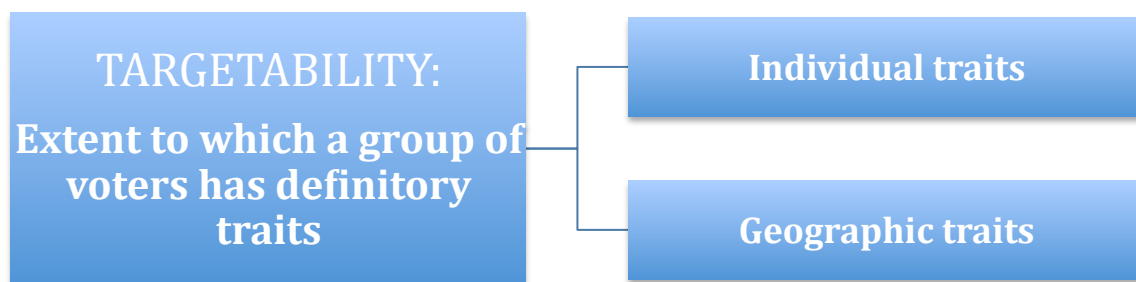
Targetability is defined as the extent to which a set of voters has distinctive traits from the rest of the electorate. This allows parties to implicitly target them and exclude the remaining citizens. The more homogenous their traits distinguishing them from other voters, the more targetable they are.

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<sup>19</sup> Unless the incumbent engages in corruption, exchanging a public good for a vote. I assume this to be exogenous to the model.

There are two ways voters in which parties can target voters (Figure 2.3). One is by taking advantage of their individual traits. Politicians can define a set of social, economic or demographic conditions to which a policy applies. As these characteristics are not evenly distributed across the population, these policies implicitly target a specific set of recipients. The second targetability trait is the geographical location. By allocating public resources in an area, politicians narrow down a set of potential beneficiaries, implicitly excluding voters from other areas.

**Figure 2.3. Targetability**



Let me give an example. If a party's constituency has an important share of farmers, the party knows that agricultural subsidies reach its core voters with a very high level of exclusivity. On the other hand, a competitor party might have some farmers among its supporters, but the lion's share of that policy will go to voters who support the incumbent party. A similar logic applies to geographically targeted benefits. If an incumbent provides a local public good in a particular jurisdiction, again it cannot monitor that only her voters will benefit from it. She cannot track posterior voting performance on a case-by-case basis. However, the party does have accurate information on voting patterns in the jurisdiction. Parties can infer the likelihood of

reward from the district's voting patterns and accordingly decide whether a geographic target pays off. Hence, voter's geographical location is the other trait that parties can use to target voters. The immediate question is then which voters, core or swing, provide better targetability conditions. Here it is hypothesised that core voters are more targetable, both through social and geographical means.

In social terms, it is expected that the core voters of a party share a similar profile. Being a core voter of a party has generally to do with certain individual characteristics that are widely shared among the constituency. Moreover, these characteristics are frequently associated with the demand for certain policies.

The social consistency of parties has to do with the nature of their origins. Lipset and Rokkan's (1967) classical argument is that the collision between individual traits (such as national identity, religiosity, property or economic status) and the policy demands that stem from them, give way to the emergence of cleavages that drive the political conflict in a society. Parties build on these cleavages to represent groups in the society, becoming, in words of Lipset and Rokkan, *agents of conflict*. The stability of party systems in advanced industrial democracies derives primarily from the stability of parties' bases and the cleavages they represent.

Notwithstanding this, parties' evolution and access to office normally entail transcending their traditional bases of support. Elections move parties from a logic of pure constituency representation to a logic of party competition (Kitschelt, 1989). This induces parties to integrate in their electoral coalition voters with other social profiles (Przeworski and Sprague, 1986; Esping-Andersen, 1992), so that, to a certain extent, government parties have mixed constituencies, and do not rely on a single social group to win office. However, even when this is true, they will do it in a way that still allows

them to find a common ground. Parties will try to propose policies that cut across their electoral bases by exploiting shared interests. Lipset and Rokkan also underscored this, when they characterised parties as also being *instruments of integration*. Esping-Andersen (1985) described the Scandinavian Socialists as a coalition mainly between blue-collar workers and agrarians. In this regard, Baldwin (1990) describes how blue-collar workers gave up their demands for certain redistributive policies to find a common interest with *risk classes*, like the Agrarians. The initial Swedish Social Democratic constituency can therefore be defined according to risk exposure traits rather than on a work- or income-basis (which only defined blue-collar workers). By focusing on risk traits, the enlargement of the core constituency was achieved and some social homogeneity was maintained.

Economic and social change may also transform the cleavage structure in a society, making traditional cleavages decline, while new political conflicts emerge. Parties, however, also adapt to this transformation by finding new lines of representation and realigning their core-constituency. Rueda (2005, 2006) has described the strains that mixed core constituencies with contradictory social features and policy demands generate for Social Democratic parties. This is unsustainable in the long-run, and parties need to find a new realignment that keeps some level of homogeneity and common interests.

In addition to social homogeneity, core voters also tend to share a geographic location. It is more the norm than the exception that parties display strong geographic patterns of support. Parties frequently have regional strongholds that constitute the base of their electoral platform. This is the case even for the large national parties. Furthermore, the patterns of geographic support can arise independently of the usual suspects, such as decentralisation or the electoral system. In a majoritarian country, like the UK, the

Labour Party obtains a significant share of its vote support from the industrial counties of northern England. In the United States, the Democrats have lately been more successful in the coastal States, while the Republicans win the remainder. The Italian left gets more votes in the central part of the country. We can compare these trends with proportional representation countries, and see that the story is not very different. In countries operating proportional representation, where, in theory, electoral competition should take place in the whole country and all votes count the same - the reality is that parties still frequently have highly territorialised supports. In summary, parties can frequently target their core voters with geographic distributive policies, such as pork barrel, that implicitly exclude a majority of other party voters.

While core voters will frequently be targetable, both by social or geographical means, swing voters are less targetable. Their heterogeneous nature and their less pronounced geographic patterns make the target more difficult. This is relevant as conventional models might be overestimating the saliency of swing voters by overlooking these characteristics. The usual approach in the literature is that swing voters are a well-defined and cohesive group, which is ideologically unattached and, therefore, very responsive to economic benefits (Persson and Tabellini, 2000). Moreover, the literature on distributive policies treats them as perfectly targetable. When parties supply benefits, it is generally assumed that parties can equally deliver to core and swing voters, and that they only face a trade-off between them.

It is surprising how much we speak about swing voters in Political Science, and how little in fact we know about them. My claim is that we actually know so little because of their residual nature. The swing voter concept groups a heterogeneous set of voters that have in common an unpredictable vote. Mayer (2008) defines swing voters as those voters that *“could go either way: a voter who is not so solidly committed to one*

*candidate or the other as to make all efforts at persuasion futile*". These definitions are coherent with the traditional distributive politics models. In those models, swing voters are defined as voters that can only satisfy their concave utility function with economic benefits, because they receive no partisan payoff from having any party in government.

Notwithstanding this, these voters are in reality a 'black box' of very different individuals, with quite different motivations and profiles. For instance, in a two-party setting, swing voters include those voters that praise both parties and are positively indifferent, but also those voters that are antagonistic to both of them (Mayer 2008). Furthermore, the level of information that these voters have is not clear. Mayer argues that they will be individuals with low information, because the highly informed will have a non-persuadable vote. Conversely, Dalton (2001) argues that the expansion of high education and the capacity to get information promotes the increase of swing and independent voters. Likewise, Klingerhöfer (2010) also argues that, as they do not have ideological or partisan shortcuts, swing voters have more incentives to be informed.

This has consequences in distributive terms. Under some circumstances, parties could perhaps have an interest in distributing policies exclusively to swing voters. The problem lies in their low targetability. Swing voters form a socially heterogeneous group, that, in addition, might comprise a significant number of voters at national level, but do not display pronounced geographic patterns. As Mayer argues (2007) "*all of the attention that campaigns lavish on swing voters, and any attempt to argue that they are theoretically important, presumes that swing voters are, in at least some significant ways, different from the rest of the electorate*". If this is not the case, incumbents will find it difficult to exploit any social or geographical trait to shape a distributive policy that mainly targets them. Distribution to swing voters would be very inefficient, as it is arduous to maximise the number of swing recipients per unit of spending.

This heterogeneous nature of swing voters arises in the social characteristics that make them potentially targetable. Swing voters do not have specific demographic characteristics, and do not belong to any homogenous social or economic group. Thus, it is much more difficult to design selective policy devices to win their vote. Mayer (2007) shows, for the American case, that swing voters compose a very heterogeneous mix. The only group that is slightly overrepresented among American swing voters are the Catholic voters. Torcal (2011) shows that, in Spain, swing voters, beyond their ideological moderation cannot be defined on other grounds. Among them there are, in very similar proportions, capital owners and blue working class workers, men and women, religious and non-religious voters. Hence, the policies that can increase their well-being are very diverse and parties cannot easily find a single distributive policy that delivers benefits to them altogether.

Moreover, past electoral results are not a very accurate predictor of swing voters' targetability. Mayer (2008) shows that swing voters vary significantly across different elections, and that their social traits change crucially from one election to the next. If an election happens to be characterised by a particular type of swing voters, parties cannot use this information in the future. Parties cannot rely on retrospective relevant traits to target swing voters.

Their geographic traits are also less salient than core voters'. The empirical literature has underscored the incentives to target local transfers and pork barrel to swing voters, particularly in majoritarian systems, where election outcomes are decided in just a few districts. However, this literature confuses swing districts with swing voters (Cox, 2010). Almost all of the empirical research has studied the 'swing' hypothesis by exploring whether parties target swing districts, but there still might be a significant number of swing voters in core districts, and an apparent swing district can comprise

core voters of parties in close competition, with almost no swing voters. In fact, some research departs from the usual district-level measures and builds aggregate indicators using individual data. They show that we cannot infer with accuracy the characteristics of voters in a district just by looking at the aggregate result. In addition, and using diverse definitions of swing voters, this research shows weak patterns of swing voters' geographic concentration. Dahlberg and Johansson (2002) and Johansson (2003), through a factor analysis of survey data, calculate the density of indifferent voters in Swedish municipalities. Their results showed that, on average, Swedish municipalities had around 3% of swing voters, and differences across municipalities are also low. Undeniably, these voters can be important for the final electoral outcome. However, in terms of targetability, parties will have great difficulties to reach them.

Jarocinska (2008) analyses swing voters in Spain by calculating the differences between predicted vote probabilities of survey respondents. In her most encompassing definition, she defines swing voters as those whose difference between the predicted probability of voting for PSOE and another party is less than 20%. Even with this permissive measure, the average of swing voters in each district is only around 10%. More importantly for geographic targetability purposes, differences across districts are again quite low. Larcinese et al. (2009) operationalize swing voters in American states using the share of independent voters in surveys. Their indexes, again, show no significant geographic patterns. Hence, while parties usually have their votes concentrated in regional strongholds, it is very unlikely that a whole region or district will be characterised as predominantly inhabited by swing voters. Swing voters, in any of its possible definitions, tend to be more evenly distributed across the territory.

In sum, swing voters will be costlier to target, both with social or geographic policies. This intuitive idea is already developed in Dixit and Londregan's model (1996). Apart

from their predictability, these authors argued that core voters are valuable because distributive efforts are made through a *leaky bucket*. Parties formulate policies that, on the way to voters, lose part of their size, because either do not entirely reach the voters, or do not perfectly suit the necessities of the recipients, generating a milder electoral response. In this regard, Dixit and Londregan (1996) argued that there is the possibility that each party “*has some core support groups it understands better, and it can deliver benefits to them with greater efficacy*”. This is a very reasonable assumption for local electoral machine politics in clientelistic environments<sup>20</sup>. Dixit and Londregan convincingly show how local leaders in New York used privately delivered goods to mobilise core voters for the election. I claim that Dixit and Londregan’s assumption of greater efficiency can also be applicable to non-clientelistic contexts, but with a different logic. In these contexts, parties cannot target individuals, and therefore, some policy resources are always wasted on voters they are not interested in. The more heterogeneous a group is, the more leaky the distributive bucket is. Given that core voters are more homogenous and share more social or geographic traits, the policy delivery is more efficient.

As a result, I pose the second hypothesis:

*H2: Swing voters are less targetable than core voters*

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<sup>20</sup> See for instance, Stokes (2005), Stokes and Dunning (2008), Brusco et al. (2004). Each of these authors put forward distributive models, where parties in clientelistic contexts can deliver goods to certain voters with greater efficiency.

### **2.3.3. Central Hypothesis on Distributive Politics**

Summing up, and given the responsiveness and targetability conditions, the main argument of this dissertation is that the baseline of politicians' distributive strategies will be aimed at winning the core voters. Parties are office-seeking actors that develop a minimal winning strategy with short- and long-term motivations. Core voters offer the best combination of short-term efficiency and the long-term interest of ensuring a stable electoral platform of support.

I have argued that, in the short term, core voters are a valuable electoral resource that provides a reliable and secure response to policies. A political leader could be interested in enlarging its majority in the legislature, but using distributive benefits with this aim poses some problems. First, as described, it is a less efficient strategy. The benefit of persuading a swing voter might be higher, but the cost of achieving this too. Conversely, a politician needs fewer resources to mobilise core voters. Second, the reaction from swing voters is less predictable. Targeting swing voters risks the prospects of re-election. As core voters are not fully guaranteed, the potential benefit of swing voters is uncertain and the implementation of the swing voter distribution takes place at the cost of losing votes one already has. Therefore, incumbents' policies will be more focused on keeping the electoral *status quo*. A formal literature has already made this argument (Austen-Smith, 1984). The risk of losing their electoral platform of support is higher than the potential advantage of winning new seats in parliament (Stokes, 1999).

The second advantage of core voters lies in their long-term value. Distributive strategies will not only be designed to win the coming election, but will also try to fulfil the goal of maximising the chances of being re-elected in the future or returning to office in the

case that they lose the election. Thus, when designing their strategies, parties also look beyond the votes they can win or lose with short-term strategies and also take into account the post-electoral outcomes. The changes of party support in one election have consequences on parties' expectations of future support. They will consider whether new votes are likely to be kept or whether they can lose some voters today that they might not get back in the future. Particularly with regards to core supporters, if parties lose the loyalty of these voters, they waste a very important electoral asset.

In this regard, keeping a satisfied core constituency pays off, as they ensure the continuity of the party. As Díaz-Cayeros et al (2008) state, all parties need to win elections and to have a stable platform to do it. Otherwise, they "*will be condemned to unstable electoral coalitions that need to be constructed every time elections are held, confronting high risks of opportunism.*" A stable platform is particularly useful for the 'bad times', when the party could be in the opposition and will not be able to use distributive resources strategically.

A core voter's propensity to vote for her party is not constant over time. Partisanship is not completely stable and fixed in the long-term (Clarke and McCutcheon, 2009). This is what Díaz-Cayeros et al (2008) call '*conditional party loyalty*'. Thus, parties have incentives to feed voters' attachments. This is also consistent with Fiorina's (1981) contention of party identification as a running tally of accumulated retrospective evaluations. If core voters feel that their loyalty is not being rewarded, they will reconsider their vote in the future. Losing these voters might not be crucial for the coming election, but parties weaken their electoral base of support for subsequent ones.

An alternative claim could be that in a long-term strategy, targeting swing voters might be a way to create new constituencies. Indeed, a continuous and persistent target of

material benefits on certain voters might, in the long run, increase the identification with the party<sup>21</sup>. However the long-term goals have to be compatible with those in the short term. And, as theorised above, the short-term benefits of attracting swing voters are uncertain and the total losses of this strategy might be high. Any attempt by parties to convert swing voters is fruitless if in the short term its core electoral support base does not turnout to vote (Cox, 2010; Idema, 2009).

In conclusion, core voters provide more efficient distribution conditions given the party goals. As a consequence, I derive the central hypothesis on parties' distributive strategies. Parties will concentrate on what Fenno (1978) calls the *reelection constituency*: the core supporters.

*H3: Politicians' baseline strategy will be to target distributive policies to core voters.*

It is important to note, as I will develop in chapter 4, that this hypothesis is formulated at the voter's level, absent of any institutional consideration. The argument provided here is that politicians, keeping all contextual variables constant, will have more incentives to target distributive policies. This does not exclude that, sometimes, this general distributive behaviour can be mediated and influenced by the context where parties decide their distributive strategies.

In this regard, the electoral system is an important variable shaping incumbents' incentives. However, the intermediation of other variables does not invalidate the central hypothesis. As Persson and Tabellini (2000) argue, in majoritarian electoral systems, such as a single member district country, a small share of voters can change

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<sup>21</sup> For instance, for the American case there is research highlighting the effect of New Deal benefits on party identification realignments. See Lubell (1956), Campbell et al. (1960) or Pomper (1967).

the outcome of the whole election. The final election results are highly dependant of small changes in swing districts. Then, it is reasonable to expect that politicians will be concerned about where to allocate their distributive policies and will have incentives to concentrate their distributive efforts in swing districts.

This claim instead of a challenge to the central hypothesis provided here, is a complementary argument. As well as politicians anticipate in which districts a vote has a higher marginal value on the final result, they can also anticipate which voters are the most productive and responsive to distributive benefits within that district. Thus, if parties are in need to place more weight in swing districts, they will do it by seeking, as long as it is possible, the most productive voters. Therefore, they will target core supporters, with a special focus on swing districts' ones. Parties paying a special attention to swing districts are perfectly compatible with a core voter distribution strategy.

## **2.4. The Trade-Off Between Narrow Distributive Policies and Universalistic Programmes**

If, as argued so far, core voters are the most productive voters in the short- and long-term, and distributive politics entail exclusive benefits, parties should have greater incentives to rely on distributive policies targeted to their core constituency. A targeted distributive policy provides more certain results. It entails an exclusive and more direct benefit to a smaller set of voters, so parties know who receives it and how they electorally respond. It is then a perfectly rational strategy for office-seekers not to pursue a vote maximising strategy (Riker, 1962). In fact office-seeking and vote-seeking might conflict with each other. Trying to win as many votes as possible would

imply, in distributive terms, that parties should distribute to as many voters as possible. This is not in the interest of politicians, who find that distributive policies are more electorally valuable if they produce concentrated winners and dispersed losers (Weingast et al. 1981).

However, the evidence is that industrialised democracies vary radically in their policy platforms. Some democracies provide higher levels of social and welfare policies, while other countries choose to distribute through targeted benefits. Moreover, these patterns change over time and while some countries have augmented their welfare provision, others have cut it. In a similar vein, some have been stable while others have frequently switched between policies. What explains these patterns? When do parties have incentives to depart from narrow distribution to a group of voters and focus on universalistic policies? Why should parties depart from supplying benefits to their most productive voters to provide general benefits to unspecified recipients?

A complete model of distribution must be able to explain this conundrum, and define when parties' incentives to formulate distributive politics are weaker. Parties have various policy choices available when designing their distributive strategies. To put it simply, parties can choose between narrow distributive policies or universalistic programmes (Franzese and Nooruddin, 2004; Persson and Tabellini, 2000). The former imply exclusive distribution, and parties will use them if they are interested in a specific electoral group. The latter provide non-exclusive distribution, and parties will use them when they are interested in appealing to a broader electorate. Policies fall into a continuum that ranges between these two 'ideal' extremes. There are three main criteria that differentiate both policy types:

### 1. Encompassingness:

While distributive policies reach a narrow group of voters, universalistic programmes benefit a broad electorate. This feature has to do with the exclusiveness of the situation that makes an individual a recipient of a policy. Distributive policies apply to very exclusive and specific individual circumstances or location, while universalistic programmes respond to common and universal contingencies that make the set of potential recipients much larger. As Diaz Cayeros and Magaloni (2004) state, universalism does not imply that everyone in a society is a recipient of a policy. Instead, it implies that the conditions under which one may receive a policy is a common one, and can potentially apply to everyone. An example is health expenditure. Although not everyone in a society might be in need of requiring medical treatment, no one, in principle, is exempt from requiring it at some point. Another example is pensions. Although not everyone in a society is old, eventually the majority of voters fulfil the age criteria and become recipients.

This implies that the majority of voters might benefit from universalistic programs. Specific voters might be more likely recipients, but, as Moene and Wallerstein (2001) argue: “*welfare policies provide insurance to all and enhance efficiency to the extent that the public sector protects against risks that are difficult or impossible to cover through private insurance markets.*” Thus, if voters are just minimally risk-averse they would demand a certain level of welfare policies, regardless of their income. This implies that universalistic programmes have the virtue of bringing together different types of voters, by exploiting their common interests.

Conversely, distributive policies are non-encompassing. They respond to very specific interests and the voters that receive them have some exclusive traits that implicitly omit

a large sector of the electorate. This exclusiveness not only happens at the moment of reception, but also on the likelihood of receiving it. This can mark a difference between distributive and universalistic policies that have a redistributive motivation. A universalistic program, such as unemployment benefit, covers a common contingency that many citizens may one day suffer. Conversely, means-tested programmes fall more into the distributive policies side, as they normally set an income threshold that only a more defined group of voters might be below.

Another consequence derived from the encompassingness of distributive instruments is the concentration of benefits. Encompassing policies provide more diffuse benefits, as they affect a larger set of recipients, while distributive policies, by defining a narrower group of beneficiaries, can provide both more intense and greater benefits.

## 2. Selection:

Policies also vary in the accuracy with which politicians can target voters. On the one hand, distributive policies are not only less encompassing, but also allow parties to target specific groups of voters. One extreme is represented by discretionary distributive policies, with which parties explicitly select the recipients. Examples of this are the earmarked appropriations in US legislation. The American Office of Management and Budget defines them as the legislative procurements that allocate funds to be spent on specific projects, “*circumventing otherwise applicable merit-based or competitive allocation processes*”, and specifying the location or recipient<sup>22</sup>. As Stokes (2009) argues, by employing these means legislators can quietly craft legislation to explicitly and directly favour specific constituents with discretionary policies.

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<sup>22</sup> <http://earmarks.omb.gov/earmarks-public/>

Discretion can also arise in the application of the codified criteria. As was argued in chapter 1, the literature has also shown how parties can provide distributive benefits by manipulating objective, codified programs, and biasing resources to the groups in which they are interested. In this case, the selection is not made explicit in the policy decision, but in its application.

Policies do not need to be explicitly discretionary to select recipients. The majority of distributive policies do respond to programmatic criteria or competitive allocation processes. However, by defining very precise and closed sets of conditions to receive a policy, or very individualised and tailored reception criteria, distributive policies can target specific voters or areas. Thus, although incumbents cannot directly discriminate among beneficiaries, they can design distributive policies that apply to particular interests, or voters, in a particular location. This is what Stokes (2009) calls the *bias* of distributive policies, which implicitly defines a set of recipients. Finally, selection also has to do with certainty about the reception conditions. Distributive policies apply to very specific characteristics of voters that tend to be constant (such as the location or income group), so parties can *a priori* predict who is going to receive them.

Conversely, the nature of universalistic programs is less selective. Clearly, as long as the policy is applied following particular criteria, there is some level of selection. However, the reception criteria are sufficiently broad to mean that parties cannot individualise the receptors. These are programmes cannot be finely targeted towards specific constituencies (Persson and Tabellini, 2003; Lizzeri and Persico, 2001). In this regard, Díaz-Cayeros and Magaloni (2004) argue that when the access to a policy is through broad entitlements, incumbents are not able to choose which particular citizen receives it. This is because universalistic policies cover a wide range of voter types, and voters with different profiles might benefit from them. Unemployment benefits, again,

provide an example of this. Although these benefits are targeted to those that do not have a job, this reception condition is broadly spread across the population, and this means that politicians are not accurately selecting a specific set of voters.

### 3. Stickiness:

A final feature that differentiates types of distribution is the ‘stickiness’ or variation over time of a policy. While distributive policies are highly volatile and can easily be implemented or withdrawn, universalistic programmes are sticky, stable, and much more institutionalised.

This idea can be traced back to Pierson (1996), who stated that welfare state expenditure is less likely to retrench, as it is difficult to roll back. This is predominantly because of the high amount of fixed costs involved. First, the investment required to provide these programs is larger, because they often require public buildings and greater bureaucracy. Second, as Hicks, (2009) argues, the paradigmatic universalistic programs, such as: *“health care, education, care for the elderly, pre-school, and any number of other welfare services that are provided by the state, all embody large amounts of labour”*. In addition, these are labour sectors, which are highly unionised (Freeman, 1986). This suggests that governments face high costs, once the programmes are in place, if they try to reduce them.

This stickiness also has consequences for credit-taking strategies. As long as universalistic programmes are stable over time and governments have less room for manoeuvre in crafting them, it is more difficult for politicians to claim the credit for their benefits. Conversely distributive policies more often take the form of cash transfers, which present more variable and changeable patterns, and in which the

government's hand is more visible. This permits incumbents to claim credit more efficiently.

In addition, governments have more capacity to design distributive policies over time, responding, to the specific interests they want to favour, at any particular moment. Some distributive programs are, by their nature, temporal. Intergovernmental grants have to be decided and agreed for specific periods of time (for instance, annually). Likewise, public works entail the use of funds that only apply for the period of construction. These kinds of policies might compromise funds, but, by definition, they cease after a period of time. This allows politicians to continuously reshape programmes to pursue their goals.

In summary, politicians have a wide range of policy options available to design their spending strategies. All these options can be placed on a continuum that runs from distributive policies to universalistic programs with regards to three criteria: *encompassingness*, *selection*, and *stickiness*. Distributive policies will tend to be non-encompassing, selective, and highly variable over time. Conversely, universalistic programmes will be encompassing, non-selective and sticky over time.

As I argued in chapter 1, politicians have strong incentives to rely more on distributive policies in their spending strategies. These policies have the virtue of providing an exclusive benefit at the expense of the rest of the electorate. They are more visible, they allow politicians to select the most productive voters, they provide more concentrated benefits and they offer better credit-taking conditions. Therefore, they supply a more predictable reward. Additionally, distributive policies are useful in building long-term constituencies.

This should imply powerful incentives to prioritise distributive policies. In this dissertation I provide a novel explanation as to why, and when, politicians decide to overlook this instrument and resort to more universalistic programmes.

#### ***2.4.1. The Electoral System Explanation***

I argue that some electoral competition conditions make parties relatively less prone to invest in their core supporters and appeal to a broader electorate. In this regard, one of the recent and most popular explanations for this variation between types of distribution relates to the incentives provided by the electoral institutions. An electoral system operates in a twofold way. First, it divides a country into districts. Second it establishes a rule by which parties access office. Both issues will have an impact on which voters matter for politicians and which spending strategies are optimal to win their vote.

The conventional argument is that proportional electoral systems encourage distribution based on universalistic policies, while in majoritarian electoral systems spending takes the form of narrow and targeted distributive transfers (Persson and Tabellini, 2000, 2003; Lizzeri and Persico, 2001; Milesi-Ferretti et al., 2002; Grossman and Helpman, 2005).

These authors argue that in proportional systems, parties maximise their vote share across the whole country. The greater the number of votes they obtain, the more representation they receive. Conversely, in majoritarian systems parties maximise their representation by winning in the largest number of districts. This leads scholars to state that, while in proportional systems parties appeal to broader electorates to maximise their vote share, in majoritarian systems, electoral competition will predominantly take place in the pivotal districts (those where elections are being decided). They would

allocate resources to them, and ignore districts that are going to be lost or won anyway. Parties will, consequently, concentrate on smaller sets of voters by providing more narrow transfers and distributive policies (Persson and Tabellini, 2003).

Another argument relies on the form of the electoral competition. While in proportional systems voters always vote for a party list, in majoritarian electoral systems, districts are smaller and voters tend to vote for a candidate, instead of a party. Milesi-Ferretti et al. (2002) and Stratman and Baur (2002) use this difference to argue that parties in proportional systems represent broad electoral groups, while, in majoritarian ones, politicians have incentives to form geographically narrow (and socially heterogeneous) coalitions of support in their constituencies. This makes politicians rely on universalistic programmes in the former, and on narrow distributive policies, in the form of pork barrel, in the latter.

Grossman and Helpman (2005) also highlight the differences regarding party unity. These authors argue that in majoritarian systems, party unity tends to be lower. Candidates rely more on personalistic platforms of support (and less on the party's brand) to keep office. Therefore, they will tend to promote narrow transfers to their districts instead of universalistic distributive programmes.

These articles have proven influential and have given insights into the relation between the electoral system and policy outcomes. However, their empirical results are not totally conclusive. As Rickard (2011) states, simple electoral system explanations leave much variance unexplained. Countries with similar electoral systems often supply very different levels of social policies. These conventional arguments on the effect of the electoral system are incomplete because they do not capture the whole picture of electoral competition incentives. My argument is that other features of electoral

competition related to the electoral system can modify the expected differences between majoritarian and proportional electoral systems across countries.

First, the approach to majoritarian electoral systems assumes that parties focus on pivotal districts. However, I have argued that parties' distributive strategies must always include core voters. Thus, if parties have a special interest in winning in certain districts, but also have to mobilise their core supporters, the distribution of voters across districts will be relevant to define their final spending strategies. As Callander (2005) argues, relaxing the assumption that the distribution of electoral groups is similar across districts has serious implications for parties' strategies.

In second place, the policy positions of a party are a result of strategic considerations that respond to other candidates' positions. The electoral system arguments do not take into account the side effects that they might have on distributive politics through the number of competing parties. In this regard, we know that in equilibrium larger districts converge into multi party competition, while countries with lower district magnitudes tend to have a lower number of parties (Duverger, 1954). However, the number of competing parties might have independent and opposite effects on distributive policies to the effects attributed to the electoral system (Rickard, 2011). In addition, the actual number of competing parties can explain differences within similar electoral systems. Despite the trend towards more competing parties under proportional representation, we find a lot of variance regarding the fractionalisation of electoral competition.

#### ***2.4.2. The Geographic Distribution of Core Voters***

As said, the literature on electoral systems assumes that, majoritarian (as compared to proportional) systems encourage the formulation of narrow and targeted transfers and

pork barrel, particularly in swing districts, and ignoring core voters<sup>23</sup>. However, I have argued that parties have great incentives to rely on their core supporters to win elections with distributive policies. Their voters' distribution across districts will determine the extent to which that is possible. Depending on this, my argument is that majoritarian electoral systems *do not* necessarily provide lower levels of social policies.

The underlying assumption in comparative political economy and in the study of distributive policies is that state-wide parties<sup>24</sup> are national parties that enjoy uniform distributions of territorial support. Once we look at the patterns in industrialised societies, we observe that this in fact a varying phenomenon overlooked in the literature. This variation is not limited to small or regionalist parties. The level of the nationalisation of the electorate (meaning the extent to which parties are successful in winning votes across the territory) of those parties that aspire to hold national incumbency varies hugely between countries. Furthermore, these patterns can arise independently of the usual suspects, such as the electoral system.

In a majoritarian country, like the UK, the Labour Party obtains a significant share of its vote from the industrial counties of northern England. In France the conservative UMP has its strongholds in the North- and Mideast, while the Socialist Party wins the lion's share of its representation in the South- and Midwest. In the United States, commentators have recently noted that Democrats have in the last few elections been more successful in the coastal States, while the Republicans tend to win the rest of them (Frank, 2004; Gelman et al., 2008).

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<sup>23</sup> In this thesis I define majoritarian systems as those with low district magnitude and a high number of districts, while PR systems are those with high district magnitude and only one (or a few) district(s).

<sup>24</sup> The term state-wide parties is widely used in the territorial politics literature. Brancati (2006) defines them as those parties that compete and win votes in every region of a country and tend to focus their agendas on national issues.

Examples of this tendency can also be found in more proportional systems, in varying degrees. The Italian left obtains many more votes in the central part of the Italian Peninsula. The Spanish Partido Popular – Spain’s leading conservative party- has strongholds in rural Spain and Madrid and Valencia and has considerable problems to win votes in Catalonia or the Basque Country, while the PSOE relies fundamentally on its strongholds in Andalusia and Catalonia. In Germany, where the SPD obtains even shares of the vote across Länders, the CDU/CSU has enjoyed levels of support of over 45% in the Southern Länder, while in the Eastern region it is hardly able to surpass 25% vote share. The extreme case is Belgium, where national parties have disappeared and become regionalist parties themselves. Many other examples can be provided. ‘National parties’ are often less state-wide than the public normally assume. Even in single district proportional systems we can find variation in the levels of vote territorialisation (Latner and McGann, 2005). The Netherlands is a country in which the vote distribution of the main parties does not show territorial biases, while in Israel parties have strong territorial support.

These patterns arise not only independently of the electoral system, but also of other factors such as country size, ethnic fragmentation or previous distributive policies<sup>25</sup>. Thus, the distribution of the electorate across districts varies greatly between countries and parties. Although there has been a great deal of effort made to explain why national electorates emerge<sup>26</sup>, the distributive consequences of it remain unexplored.

I argue that the level of regionalisation of the electorate should help to explain the differences in the use of distributive policies. The literature claims that proportional

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<sup>25</sup> This opens up the possibility that the argument presented here on the effect of regionalisation on distributive policies is endogenous. I explore this in the empirical analysis in chapter 5.

<sup>26</sup> See, for instance, Caramani (2005).

systems will provide more universalistic policies than majoritarian systems. However, this argument does not take into account how the incentives to provide certain type of policies respond to geographic patterns of core voters in majoritarian electoral systems.

In a perfectly proportional electoral system, with one single national district, the distribution of core supporters should be irrelevant. Parties can decide their distributive strategies without being concerned about the geographic distribution of voters. However, as elections takes place in more multi-district setting, parties' strategies have to take into account the extent to which the distribution of their voters across districts allows them to win<sup>27</sup>.

A party can be the most voted in a country, but two very different and antagonistic scenarios can underlie to this. It could be that the party is competitive in all parts of the country, and so it is the winning party in many districts; but it might also be that the party obtains 100% of the votes in a few districts, and none in the remainder. Each scenario may produce a very different outcome. In the first scenario, the party will be quite likely to win the election by simply relying on its core voters. In the second scenario, the party will always be short of districts to win the election if it only relies on its core supporters. Therefore, I expect that voters' geographic distribution will condition the strategies followed by parties in majoritarian systems.

When a party is competitive in all districts, parties have strong incentives to concentrate their efforts on mobilising their core supporters to win the election. A dollar in narrow distributive policies generally provides higher returns if invested in a party's core voters. Thus, if a party is sufficiently represented in all districts, it will have greater

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<sup>27</sup> However, many proportional electoral systems continue to have a districts' division, so it is possible that the effect of the distribution of electorate will not fade away completely.

incentives to provide targeted policies that mobilise its voters. This satisfies the long-term party goals, while at the same time is the most efficient way to win elections in the short-term.

A different scenario arises when a party has the majority of its core supporters concentrated in certain districts. If a party has a regionalised electorate, the party cannot achieve good results simply by targeting them. A party that simply mobilises its core supporters will result in it winning in its core strongholds, but not being competitive in the remaining districts. Thus, parties have incentives to design policies that cover a broader electorate. Instead of simultaneously seeking to target narrow transfers to core voters and swing districts, it is much more efficient for a party to use a single policy to target all of them. In this scenario, parties will employ universalistic social policies. These policies do not very accurately target their core voters, and so will be less useful in mobilising them. However, given that they are overrepresented in certain districts, the party will be willing to give up some of these voters to win new voters in the remainder of districts. Parties need to address their initially unfavourable competition conditions (an asymmetric distribution of voters), by providing broader countervailing spending. I expect that the more concentrated core supporters are, the more parties will broaden their policy programmes with universalistic programmes.

In summary, my claim is that differences between electoral systems are mediated by the distribution of core supporters across districts. While in a majoritarian electoral system parties have in principle fewer incentives to provide universalistic policies than in proportional electoral systems, these incentives revert as the electorate becomes concentrated in specific districts. In this scenario, parties need to broaden their electorate and go beyond their strongholds with more national policies.

This argument is a step forward because it complements (and also responds to) the literature on electoral systems and social policy. This literature associates each distributive instrument with a specific electoral system. My argument breaks with this dichotomous division of strategies and introduces the importance of the geographic distribution of core voters.

This claim is partially related to Jusko's research (2008). She explores the effects of geographic concentration of low-income voters on social expenditure and shows that the conventional arguments based on electoral systems miss a big part of the picture. Jusko's argument is that the geographic distribution of low-income voters and legislative seats across electoral districts shape legislators' and parties' incentives to be responsive to low-income citizens. More specifically, in majoritarian systems, the concentration of low-income voters provides them with more political power as the 'pivotal voter' in those districts demands more social expenditure. This will lead to more total social spending. However, her argument departs from mine in two ways. First, Jusko continues to overlook the existent incentives required to keep core voters mobilised. Second, she does not consider the usefulness of social policies as a compromise between different types of voters (Moene and Wallerstein, 2001).

Conversely, my claim is twofold. On the one hand, parties have strong incentives to rely on their core supporters. Their territorial distribution determines the extent to which they can do so with exclusivity to win elections. On the other hand, universalistic policies have the virtue of bringing core and swing voters together. No specific electoral group is benefitted, but all voters can potentially be the beneficiaries. This converts these policies into useful distributive instruments when parties want to exploit transversal interests and appeal to broader electorates that still include their own core supporters.

Bringing both arguments together, when parties have supporters in all districts, parties' core supporters are key to winning a high number of seats. Parties' goals will then be better met with narrow distributive policies that more exclusively target their supporters and have a high impact on their mobilisation in a handful of districts. On the other hand, when parties have concentrated electorates, mobilising their core electorate is insufficient to win an election. Parties' core supporters allow them to win just a few districts. Thus, national and universalistic policies become more productive. They do not produce such a strong mobilising effect on core supporters, but appeal to a broader electorate.

This argument allows me to pose the fourth hypothesis of the dissertation:

*H4: The more majoritarian the electoral system, the stronger the positive impact of voters' geographic concentration on universalistic spending.*

### **2.4.3. Electoral Fractionalisation**

A second relevant feature of electoral competition is the number of competing parties. As I argued, this cannot be perfectly assimilated into the electoral system. Although proportional systems have, on average, more competing parties, there is a big variation across electoral systems (both between countries and within countries over time). While the United States is a classic bipartisan single member district system, the UK consistently challenges the duvergerian equilibrium with a competitive third party in many districts. Likewise, in the period 1960-2008, a proportional system like Austria had an average of 2.83 effective parties (on the vote share level), while Finland had 5.77. Thus, it is necessary to explore the implications of electoral fractionalisation, independently of the electoral institutions in place, particularly if, as I predict, it has

independent and opposite effects to those that are commonly attributed to the electoral system.

The majority of papers, both theoretically and empirically, relating the number of competing parties and distribution revolve around multiparty governments (Von Hagen and Harden, 1995; Austen Smith, 2000; Bawn and Thies, 2003). Multi-party systems lead to more coalition governments. One of the outcomes attributed to multi-party governments (among many others<sup>28</sup>) is an increase in the government size due to the common pool problem. This problem arises when politicians from different parties, with different interests, have to agree on the provision of public policies financed by general taxes. Single party governments internalise the negative externalities generated by overspending. However, as Von Hagen (2006) puts it, in a multiparty government: *“individual politicians perceive that an increase in spending on targeted policies will provide their constituencies with more public services at only a fraction of the total cost”*. In a coalition, parties can diffuse responsibility for bad outcomes, but can claim the credit for good outcomes to their constituents (Urquizu-Sancho, 2008). Poterba and von Hagen (1999) or Persson et al. (2007) provide empirical evidence on the positive impact of coalition governments on spending.

Notwithstanding the validity of these arguments, they develop an *indirect* link between the number of competing parties and spending strategies. The predicted relation is result of intra-government bargaining, and is not truly an effect of competition on electoral policies. Parties, under this approach, do not distribute more because they have to

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<sup>28</sup> Such as more deficits (Roubini and Sachs (1989); Alesina et al. (1992); De Haan and Sturm (1993); De Haan and Sturm (1997)), instability (Taylor and Herman, 1971), or corruption (Tavits, 2007).

compete with more parties. They do so simply because it is less costly for them in this setting.

My argument is that there is a *direct* relation (through electoral competition) between the number of competing parties and the distributive strategies pursued by political parties. Apart from the electoral rule, the policy positions of parties are a result of strategic considerations that respond to other candidates' positions. In this regard, Myerson (1993), based on Cox (1990), develops the notion of the *Cox threshold*, defined as the: "*largest minority group that may be ignored by all candidates in the election*". This threshold defines the number of votes a party needs to win office. If there are two effective parties competing, a winning party must surpass the 50% threshold. However, if three effective parties compete, a politician could potentially be the winner if she had a vote share that is marginally over 33%. This argument brings in the importance of the difference between office- and vote-maximising behaviour. Votes are only valued instrumentally (Strom, 1990), so it can be perfectly rational for a party to give up broadening its electorate in order to ensure a less risky (but sufficient for office) number of voters.

I bring this framework to the politics of distribution, and argue that the number of competing parties will influence whether parties choose to concentrate their distributive strategies on their core voters or to provide universalistic policies to a broader electorate. When the number of competing parties is low, parties will develop, in the terms of Cox (1990), centripetal distributive strategies. In distributive terms, centripetal policies are those that bring together as many voters as possible. This implies that parties should provide encompassing policies that cover the usual contingencies (such as the unemployed, the elderly, the sick, ... ).

Downs (1957) already stated that, in a two-party setting, parties have greater incentives to converge towards the median voter and appeal to a broader electorate. In this setting, the Cox threshold is lower, and the mass of swing voters is larger. No voter can be squeezed between the other two parties and therefore everyone is potentially subject to change their vote to the other party. Thus, parties are not willing to exclude any swing voter from their distributive strategies, because they would be sure to lose the election. Parties will develop universalistic and encompassing spending strategies. Although these policies do not strongly impact specific citizens, they exploit common interests to diverse types of voters. All voters can be potential beneficiaries, particularly the median voter.

However, as the number of competing parties increases, parties will respond by following centrifugal strategies. Following Myerson (1993) an increase in the Cox threshold makes parties more willing to exclude a group of voters from their policy proposals and simply focus on closer sets of voters. There are two key reasons for this situation. First, the number of potentially indifferent swing voters decreases. As Cox (1990) states, no party can get votes from voters from whom it is separated by an opponent. To avoid being squeezed between parties, some parties will have incentives to move towards voters located at the extremes of the distribution. In distributive terms this implies that all parties move away from transversal interests, and instead concentrate on those that are specific and narrow. In these circumstances, the electorally most efficient strategy for a party, as was argued above, will be targeting distributive policies to its core supporters.

Secondly, coordination also plays a role (Cox, 2010). As I argued above, parties cannot take their core voters for granted. Following Hirschman's (1970) framework, a core constituent has three available options at election time. First, she could remain *loyal* and

continue voting for her party. Secondly, she could take the *exit* option, by not turning out to vote when she feels that her party no longer responds to her interests, or has not performed well. This is, as I argued above, the main way in which core voters punish the policies and performance of their party. Finally, a core voter could express her *voice*, and vote for another party. This, in principle, is the least likely option. Core voters are characterised by having an emotional attachment to a party that goes beyond the simple act of voting. Therefore, they are reluctant to vote for another party. However, their ‘switching costs’ are also related to the availability of alternative choices and the substitutability of the own party. When few parties compete, core voters will be less willing to change their vote for another party. If parties that are ideologically close enter a competition, the costs of a switch decrease for core supporters, and increases the likelihood of *voice*<sup>29</sup>.

Parties, in this latter case, have more incentives to employ distributive policies to attract their (likely) voters to their brand when they feel that their voters are likely to be ‘captured’ by a third party. As Cox (2010) argues: “*if there is some chance that one of the duopolists might face competition on its home turf, then transfers to the core groups have another value, as they presumably help to depress the probability of internecine competition*”. Anderson and Beramendi (2012) show that when dominant left parties face competition on the left, they have greater incentives to mobilise their natural constituency of low-income voters. In brief, taking this argument to distributive policies, targeting core voters should become more important when an ideologically proximate party can ‘take over’ part of the own electoral base.

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<sup>29</sup> Some authors provide evidence on this, showing that unsatisfied core voters in multiparty settings switch their vote to parties on the same side of the ideological continuum. See, among others, Lindvall and Rueda (2011) for the Swedish case, or García Viñuela et al. (2012) for the Spanish elections.

These dynamics have been illustrated in the spatial models and personal vote literature. There is an influential body of research that shows that there are incentives to cultivate narrow constituencies<sup>30</sup> when there are more candidates or parties (particularly those competing on the same side of the ideological continuum). However, the empirical evidence of electoral fractionalisation -keeping the electoral system constant- on the level of distributive politics is scant and inconsistent. Kittel and Obinger (2003) find an effect of party fractionalisation on social expenditure, particularly in periods of retrenchment. Ghosh (2010) shows that the increases in party competition are also associated with increases in developmental spending in Indian states. However, other authors contradict these findings. The main empirical article supporting the hypothesis of this dissertation is Park and Jensen's (2007), who argue for a direct link between increases in electoral competition and narrow transfers. These authors argue that competition between various parties encourages divergent policy positions among competitors, and empirically confirm this positive effect. Estévez et al. (2002) find that in Mexico, when there are many competing parties at local level, the incumbent uses spending programmes to distribute exclusive goods to her core supporters. However, as competition becomes bipartisan, incumbents provide relatively more non-exclusive public goods, because they: "*need to make higher-risk investments in order to attract non-core swing voters*". These papers advance the empirical work provided in this dissertation.

In conclusion, the second electoral hypothesis is that increased inter-party competition forces parties to concentrate their distributive strategies on smaller segments of the

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<sup>30</sup> Some very relevant papers are Ames (1995), Carey and Shugart (1995), or Hirano (2006).

electorate. Given the distributive condition developed above, this smaller set of voters will be composed of core supporters.

*H5: The greater the electoral fractionalisation, the more parties will provide distributive politics and less universalistic spending.*

## **2.5. Summary of Hypotheses**

To recap, I go over the hypotheses that will be tested in this dissertation. I have argued that a full model of distribution has to account for 1) which are the most productive voters for distributive policies, and 2) under which conditions parties concentrate relatively more on this group of voters or on a broader electorate.

Regarding the first question, I have argued that parties' interest on voters has to do with the efficiency of distribution. This efficiency is characterised by two features: *responsiveness*, defined as the impact of a unit of spending on the vote function (including turnout) of an individual, and *targetability*, which is the ability to reach a exclusive set of voters with distributive policies. This leads to the first two hypotheses:

*H1: Core voters' electoral response to benefits is higher than the response of swing and opposition voters in the short- and long-term.*

*H2: Core voters are more targetable voters.*

Given these two features of voters, parties will have a general interest to target distributive policies to core voters. Hence, I pose the following general hypothesis of the dissertation:

*H3: Politicians' baseline strategy will be to target distributive policies to core voters.*

This general distributive behaviour, however, will be less or more intense depending on the electoral competition conditions. Parties sometimes need to give up their core voters to appeal to a broader electorate using universalistic policies. Specifically, I hypothesise two conditions of electoral competition:

*H4: The more majoritarian the electoral system, the stronger the positive impact of voters' geographic concentration on universalistic spending.*

*H5: The greater the electoral fractionalisation, the more parties will provide distributive politics and less universalistic spending.*

# CHAPTER 3: TARGETABILITY AND RESPONSIVENES

## 3.1. Introduction

The first claim of this dissertation is that swing and core voters provide different conditions for governments' distributive policies. Core and swing voters are two of the most recurrent topics in the Political Science literature. However, there have been few empirical attempts to shed light on their relevance in distributive politics. On the one hand, political-economy models have been grounded on a series of assumptions regarding the behaviour of each group of voters, without testing whether they hold in reality or not. On the other hand, Political Sociology has focused on the general electoral behaviour of these voters, but has paid relatively little attention to its implications for governments' distributive strategies.

This chapter attempts to bridge both fields of research by analysing specific features of core and swing voters that are of relevance for distributive politics. In simple terms, there are two characteristics of voters that a party needs to be aware of when deciding how to use distributive benefits. In first place, politicians need to know the extent to which they can 'reach' that group of voters, that is, their *targetability*. This implies a

decision about whether governments can consider these voters to be a coherent group and, if so, whether the group is demanding similar policies. Next, a politician needs to assess whether favouring this group will have any impact on their voting decisions, which defines their *responsiveness*. If a politician distributes to a group of voters that will vote for her either way, or that will never do so, then from an office-seeking perspective this is a wasted investment.

This chapter will analyse these two points by testing the individual level hypotheses of chapter 2 (Hypotheses 1 and 2). By establishing precisely who the core and the swing voters are, and how they react to economic policies, I determine the foundations of government's distributive policies.

The analyses in this chapter draw on American data from the American National Elections Studies (ANES). The ANES provide several advantages. First, these surveys contain a very detailed catalogue of questions, with very rich socioeconomic and professional data. This is useful for the purpose of this chapter, where I intend to analyse in detail who the core and swing voters are and which is their electoral behaviour. In addition, the ANES Cumulative Data File covers a long period of time. This gives us a wider scope of the patterns of core and swing voters over time, and a larger sample for the empirical analyses.

The ANES also permit to operationalize more precisely core and swing voters. As I will develop in the next section, the usual measures of core and swing voters used in the literature are too broad. The conventional operationalization of core and swing voters includes individuals, which do not fit completely in the definition. The ANES, by asking on different dimensions of partisan attitudes and electoral behaviour is useful to discriminate among voters and be more accurate on analysing the features and electoral

performance of the different electoral groups. This kind of precision is not possible in surveys with comparative data.

Finally, I argue that using American data does not prevent from drawing general conclusions. Although the concept and operationalization of core voters was initially developed for the US, it soon spread to other countries (Butler and Stokes, 1969; Converse, 1969; Dalton et al., 1984; Converse and Pierce, 1986; Lohmann et al., 1997), where similar features of affectivity and stability have been validated (Green et al., 2002, Berglund et al. 2005). Thus, this chapter focuses on the American case, but intends to provide valid results for other countries and comparative analysis.

### **3.2. Operationalizing Core and Swing Voters**

In studying core and swing voters, the first challenge lays in their operationalization. Core supporters can be defined as those voters who have a stable affective attachment to a party. The classical works from the Michigan School were the first to define them this way, emphasising that this attachment, acquired in the socialisation process, implied a stable political behaviour (Belknap and Campbell, 1952; Campbell et al., 1960; Lazarsfeld, et al., 1948; Berelson, et al., 1954; Stokes, 1962; Converse, 1976).

Stemming from this approach, the standard empirical procedure of analyses at the individual level has been to operationalize partisan voters as those who self-identify as close to a party (the *self-identifiers*). In the American case, this operationalization is based on the standard party identification question in the ANES (American National Election Studies) surveys: “*Generally speaking, do you consider yourself a Democrat, Republican, an independent, or what?*”; this is a simple, generally available, and very

intuitive measure of partisanship that has been used in a wealth of research<sup>31</sup>. Furthermore, this question has also been used to operationalize swing voters. From this perspective, swing voters are operationalized as the independents, assuming that their lack of partisan or ideological attachments allows them to vote either way.

However there are drawbacks in considering core voters as simply self-identified partisans, and swing voters as the independents. These categories are too broad and therefore do not completely capture the profile of either group. Although partisanship requires, as a necessary condition, a passive affective link, it is not limited to this. Partisanship should also involve an attachment that entails consistent perceptions and behaviour. In this line, Brader and Tucker (2001) argued that we can only say that a voter's party attachments are meaningful when we observe a consistent relationship between party identification, behaviour, and other political assessments. Once we look at the ANES surveys, we see that these types of inconsistencies are in fact displayed by self-identifiers.

First, identifiers do not always show a strong commitment to their party. There might be voters who identify themselves as being close to a party, but who are in fact demotivated, alienated, disappointed or de-attached from what they traditionally have considered to be their party. Each of the ANES pre-electoral surveys asks how favourably or unfavourably (on a 0-100 scale) the respondent views the Democratic and the Republican Party. These are the denominated '*feeling thermometers*'. Table 3.1 shows the party scores for self-identified Republicans and Democrats. Obviously, Republicans give higher ratings on average to the Republican Party, and Democrats do

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<sup>31</sup>. See, among many others, Hurley (1990), Verba et al., (1995), Grofman et al. (1999), Hoolbrok and McClurg (2005), Donovan et al. (2009), Orriols (2010).

so for the Democratic Party. However, these ratings are not necessarily concentrated in the highest ranks. More than 40% of the Republicans and over 35% of the Democrats rate their party between 50 and 70. More importantly, around 15% of the Democrats, and almost 20% of the Republican identifiers rate their party below 50 (on a 100 scale). These are quite unfavourable predispositions, far from fulfilling Brader and Tucker's (2001) requirements, and indicating that partisanship is being exaggerated by self-identification measures. This suggests that, for many individuals, the survey question of partisanship has more to do with sympathies than with commitment. Voters tend to declare that they feel close to the political party for which they have usually voted. However, this identification is frequently a feeling that has more to do with ideological closeness, than with affective attachment. A voter will tend to consider herself a Democrat if this is ideologically the closest party, but will not necessarily be affectively attached to it and will not behave as a Democrat core supporter.

**Table 3.1. Core Supporters' Feeling Thermometers**

Feeling Thermometer	Republican Party		Democratic Party	
	% Republicans	Cumulative % Republicans	% Democrats	Cumulative % Democrats
0-10	1.54	1.54	0.67	0.67
10-20	1.12	2.66	0.63	1.3
20-30	1.65	4.31	1.1	2.4
30-40	2.8	7.11	2.46	4.86
40-50	9.75	16.86	7.55	12.41
50-60	17.52	34.38	13.76	26.17
60-70	23.03	57.41	22	48.17
70-80	5.11	62.52	4.81	52.98
80-90	24.74	87.26	25.02	78
90-100	12.75	100	22	100

Source: ANES Cumulative File, 1952-2008

The second drawback of simply relying on self-identification measures is that they also might be inconsistent with the expected behaviour. The evidence provided in Table 3.2 points in this direction. This table displays differences in party scores for Democrat and

Republican identifiers. Two things are worth noting. First, among those self-identified as close to one of the American parties, the differences in ratings are highly variable. Secondly, and more surprisingly, around 20% of self-identified Republicans and Democrats give a similar rating to both parties, or even a higher rating to the party that they are *not* identified with.

**Table 3.2. Core Supporters' Differences in Feeling Thermometers**

Difference: Own Party – Other Party	Republicans (%)	Democrats (%)
<0	9.71	6.87
0	12.42	11.86
0-10	9.1	8.96
10-20	15.16	14.09
20-30	14.02	13.34
30-40	10.63	9.99
40-50	8.75	10.55
50-60	7.71	6.96
60-70	5.81	5.87
70-80	0.61	0.83
80-90	2.94	4.14
90-100	3.13	6.54

Source: ANES Cumulative File, 1952-2008

Thus, analysing these two tables, we might agree that, although those who identify themselves with a party will predominantly be core supporters, among them there will be many voters who are already deattached sympathizers, and exhibit inconsistent and unpredictable electoral behaviour. Hence, to integrate these three requirements of partisanship (identification, commitment and consistency) I operationalize core supporters as those voters who: 1) self identify as being close to a party; 2) rate the party higher in their 'feeling thermometer' than any other party; and 3) their feeling thermometer towards their party scores 50 or over.

Turning to swing voters, the empirical challenge is even stronger. Although swing voters are key in the discipline, they have been less theorised. There have been two

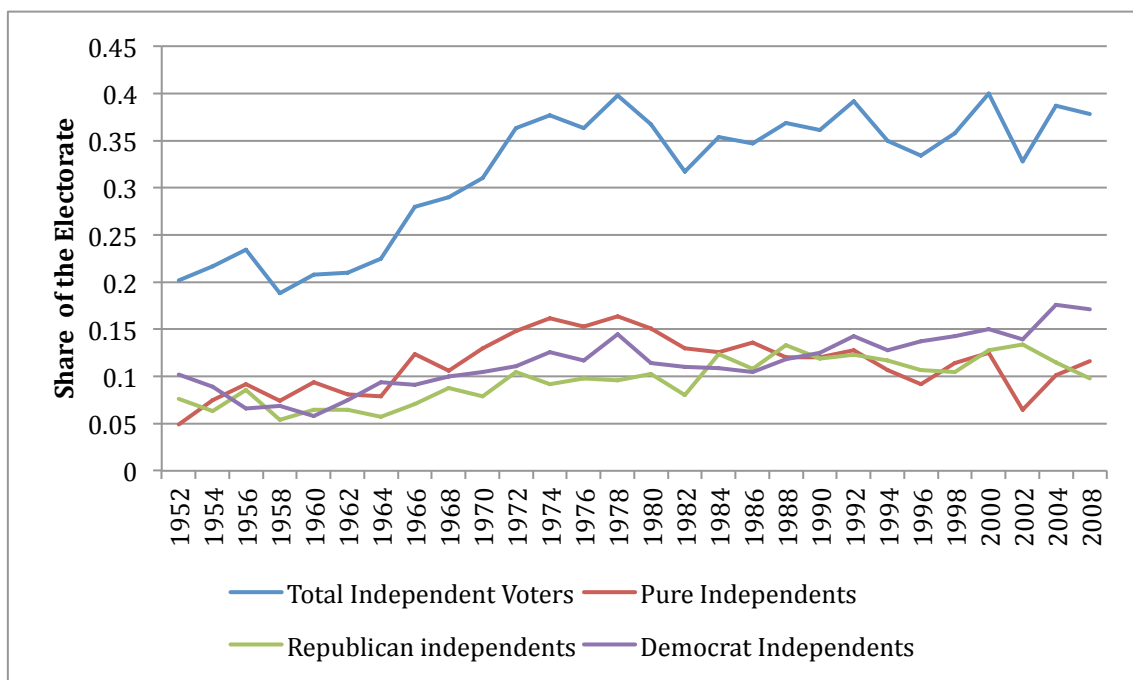
predominant approaches. The first, illustrated above, highlights swing voters' lack of partisan attachments (see, for instance, Hurley (1990), Binning et al. (1999), or Dix and Santore (2003)). The second emphasises the swing nature of these voters, and focuses on their indifference towards two parties. This approach is followed by Riker (1982), Lindbeck and Weibull (1987), Dixit and Londregan (1996), or Mayer (2007, 2008), among others.

Regarding the first approach, the standard procedure is to identify swing voters with the independents. This is, for instance, the approach adopted by Binning et al. (1999), who define swing voters as those who have no partisan attachments, assimilating lack of partisanship with having the vote up for grabs. The data, however, do not completely validate this approach. The main problem of using independents as a proxy for swing voters is that there are many disguised partisans within that category (Weisberg, 1980; Keith et al., 1992); that is, voters who declare themselves to be independents, but who in reality have attachments to one party (Dennis, 1992). Figure 3.1 illustrates this point. The blue line displays the global share of voters who self-identify as independents. This proportion has grown from around 20% in the 1950s, to around 40% of the electorate in the last American elections. The average level for the whole period is a 31.8% of the electorate.

However, it can be misleading in quantifying the real level of independence in the electorate. Once having declared their initial party identification, independents are further asked in the ANES surveys whether they still have any leaning to any of the parties. We can then disaggregate the independents in three sub-categories: *Pure Independents*, *Republican Independents*, and *Democrat Independents*. Once we distinguish among independents, it turns out that only one third of them are 'pure independents' and declare no closeness to any party. The remaining two thirds lean

towards one party. Although their primary identification is independent, they nonetheless feel close to one of the two main American parties. Keith et al. (1992) denominate these voters as “*closet Republicans and Democrats*”, and argue that their behaviour is more likely to resemble a partisan, rather than an independent. These voters always form around two thirds of all independents<sup>32</sup>.

**Figure 3.1: Independents in the Electorate**



Source: ANES Cumulative File, 1952-2008

Another piece of evidence is shown in Table 3.3. It displays the feeling thermometer of independents between 1978 and 2008<sup>33</sup>. It can be seen that, in addition to declaring a leaning, some of the independents have in fact strong feelings either against, or in favour of the Democratic or the Republican Party. Although (as expected) they tend to

<sup>32</sup> Specifically, the average share of Republican and Democrat Independents in the whole electorate over the period of analysis is 9.6% and 11.5% respectively. The amount of pure independents gets reduced to an average of only 11.3% of the electorate.

<sup>33</sup> The feeling thermometers were only introduced in the ANES in 1978.

have moderate opinions for both parties and the majority cluster them between 40 and 60, some provide extreme scores, either in favour or against the parties. In addition, the right-hand part of the table shows the distribution of differences between parties' ratings. 56% of independents rate both parties very similarly, with a difference of not more than ten points on a 100 scale. However, there are still significant numbers of independent voters who rate one party much higher than the other. More than 30% of Independents rate one party more than twenty points above the other.

**Table 3.3: Independent's Feeling Thermometers**

Feeling Thermo.	Democratic Party (% of Independents)	Republican Party (% of Independents)	Thermo. Democratic Party- Thermo. Republican Party	% of Independents
0-10	2.92	4.12	0-10	56.29
10-20	2.13	3.32	10-20	16.15
20-30	4.89	5.58	20-30	11.06
30-40	9.49	10.59	30-40	5.62
40-50	30.59	31.56	40-50	3.99
50-60	20.54	19.2	50-60	3.14
60-70	16.55	14.33	60-70	1.71
70-80	2.06	1.82	70-80	0.17
80-90	7.9	7.52	80-90	0.96
90-100	2.92	1.96	90-100	0.92

Source: ANES Cumulative File, 1978-2008

This provides evidence of the misguided assimilation of independents into the 'swing voters' group. The independents' category clearly contains many swingers. However, there will still be some with strong leanings towards a party that drive their electoral behaviour: individuals who socially identify with the category of political independents, but who have a social identity that combines an independent self-identification, and a partisan behaviour (Greene, 1999).

A second approach, followed by authors such as Dix and Santore (2003), Riker (1982), or Lindbeck and Weibull (1987), emphasises the behavioural side to classify a voter as swing, instead of focusing on party identification. Swing voters, from this perspective,

can be defined as those who are neither consistently supportive, nor hostile to any particular party (Fenno, 1978). That is, voters who can potentially switch their vote from one party to the other (Queralt, 2008). Thus, while core supporters are committed to one party, swing voters are those who, *a priori*, can potentially vote for any party. This conceptualization is in accordance with Dixit and Londregan's (1996) definition of swing voters as those who are indifferent between the two main parties. In their model, this indifference implies that any marginal increase in utility provided by one party will make a voter change her vote.

In this regard, Mayer (2007, 2008) uses the feeling thermometers to operationalize swing voters as those whose score differences between the two main parties are below 15. This may be an arbitrary cut-off point, but it seeks to capture the voters close to indifference between the two parties, and, therefore, with a very similar probability of voting for either of them<sup>34</sup>. The reality is, however, that this is again an imperfect measure of swing voters. For instance, although these voters provide similar scores to both parties, 45% of them identify with one party in particular. Likewise, 75% of the voters in this category ended up voting for the same party as in the previous election (close to 83% of the sample's mean). This suggests that this operationalization also fails to include those voters who really feel indifferent towards the parties. Many voters give similar ratings to both parties, as a way to legitimate democracy, but feel affectively identified with one party, which they end up voting for repeatedly.

Therefore, both approaches (swing voters as independents and swing voters as indifferent) are incomplete. While swing voters will tend to provide similar scores on

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<sup>34</sup> This is similar to Idema's (2009) approach, based on Wilson (2008). Idema operationalizes swing voters as those individuals who declare a high probability to vote for more than one party.

each party's thermometer, some of them are in reality committed to one party. Likewise, swing voters will be more likely to identify themselves as political independents, but not everyone who does it can be categorised as swing voter. Thus, each approach only captures one side of the concept of swing voter. Accordingly, I have chosen to integrate both of them in a mixed approach. I consider swing voters for the American case to be those voters who: 1) declare no allegiance to any party; and 2) whose differences, in terms of the thermometer, are below or equal to 15 in the ANES surveys. That is, those voters who have no partisan attachments that can condition their behaviour, and are close to the 'indifference point' between the two parties<sup>35</sup>.

Figure 3.2 shows the share of swing voters and incumbent's core voters in the electorate under this operationalization, which will be used all through this chapter. As said, these measures can only be constructed with the ANES data from 1978 on. It can be seen that each group contains similar amounts of voters, normally being both parties' core supporters a higher number than swing voters. All groups are of a relevant magnitude so they may seem attractive for an office-seeking politician.

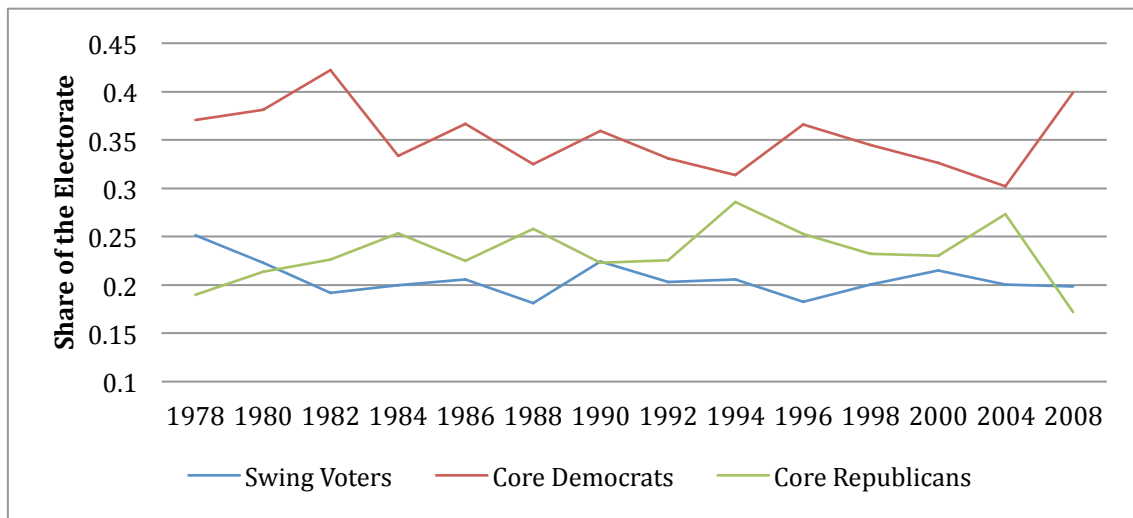
To account for the validity of this operationalization, a confirmatory cluster analysis has been undertaken. This a method used by Billingsley and Ferber (1981), or Smith and Saunders (1990), among others. Cluster analysis is a search technique for locating groups of individuals who have similar scores on a series of variables (Aldenderfer and Blashfield 1984). That is, it is a procedure that allows us to create groups with individuals, which are similar within the group and different between the groups. By modelling the underlying latent groups within the whole sample, the resulting clusters

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<sup>35</sup> I have used 15 as a cut-off point to be consistent with Mayer's (2007, 2008) operationalization. Other cut-off points have been used (such as 10, or 20), and the results of this chapter hold.

contain similarly minded individuals whose views on the political attitudes domain are connected by their underlying partisanship<sup>36</sup>. The correlation between the resulting clusters and my partisanship categories is over 75%, which makes us confident that the operationalization is capturing the main partisanship dimension<sup>37</sup>.

**Figure 3.2: Swingers and Partisans in the Electorate**



Source: ANES Cumulative File, 1978-2008

### 3.3. The Persuasion vs. Turnout dilemma

Once we have a defined concept of partisan and swing voters, we can explore the foundations of their electoral behaviour. Theoretically, parties can use distributive policies with two goals. On the one hand, they can use policies to persuade and convince voters to vote for them (Cox, 2010). On the other hand, parties can use

<sup>36</sup> I proceeded as follows. With a k-means cluster procedure, I used all the most important variables that define being a core or swing voter (party self-identification, the party thermometers, the candidate thermometers, and the reported ideological distance between the respondent and the party) to create five clusters of partisanship. The two extreme clusters contain the voters that score high on the partisan variables, namely the Republican and the Democrat clusters. The remaining three medium clusters contain voters with mild leanings for any of the two parties, the disaffected, and the voters with no strong partisanship. With these individuals, and using those variables available in the ANES surveys that can define a swing voter (being self-identified as independent, the difference between both party thermometers, the difference between both candidate thermometers, declaring that there are no differences between what the Democratic and Republican parties stand for and declaring that the respondent has still not decided her vote before the election), I create a new cluster of swing voters.

<sup>37</sup> In addition, the econometric analyses of this chapter have been rerun using clusters, and yield very similar results.

policies to mobilise voters (Dunning and Stokes, 2008; Nichter, 2008). A significant share of voters stays at home on Election Day. Thus, politicians can also use transfers to bring voters to the polls either by triggering their feeling of duty, reciprocity, or by raising the stakes of the election.

Persuasion and mobilisation are the two available strategies for political parties. However, it is reasonable to expect that these theoretical strategies do not apply similarly to all voters. Some voters might be more willing to change their vote than others, and some voters might be more receptive to mobilisation efforts than others. Thus, in this section, I explore descriptively the behaviour of the groups of partisan and swing voters defined above. This will provide us with information on the potential electoral effect of each political strategy with each group of voters.

Getting first to partisans, these are, as explained above, those who have an *ex ante* attachment to a party, given no other short-term stimuli. This standard view of partisans expects that they “*begin campaigns with natural affinities for one candidate and an automatic disdain for the other*” (Hoolbrook and McClurg, 2005). This would imply that parties count on those votes. Parties’ electorates would contain a high number of partisans whose votes are guaranteed.

Table 3.4 shows the percentage of partisan voters who vote for their party, following the previous section’s operationalization. The first column shows the mean of the sample of actual voters (those who turned out). It indicates that, among the partisans who casted a vote, almost all of them voted for their party (and not for any other). The percentages tend to be very high (85% on average, and over 90% in more than half of the elections), which confirms that partisan voters rarely consider voting for another party and stay loyal to theirs.

**Table 3.4: Core Supporter's Voting Patterns**

Year	Democrats voting Democrat		Republicans voting Republican	
	After turnout	Before turnout	After turnout	Before turnout
1980	0.793	0.579	0.912	0.711
1984	0.900	0.670	0.923	0.723
1988	0.888	0.641	0.905	0.691
1992	0.826	0.649	0.778	0.632
1996	0.874	0.662	0.904	0.782
2000	0.908	0.720	0.914	0.748
2004	0.933	0.757	0.944	0.800
2008	0.955	0.763	0.905	0.758

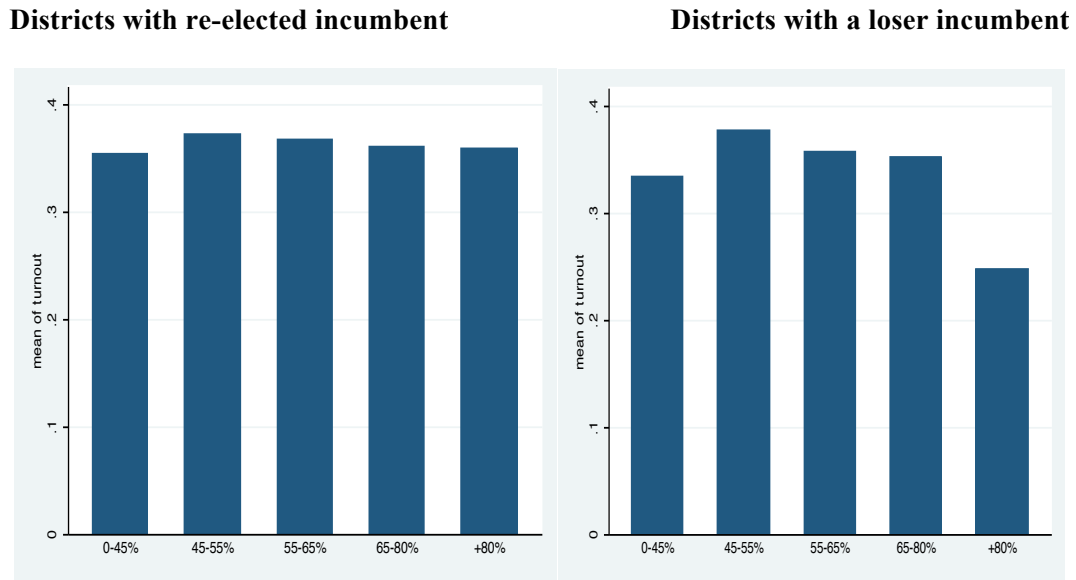
Source: ANES Cumulative File, 1980-2008

Observing these vote choices of partisans is the standard approach in the literature. However, it undermines the importance of turnout. The second column of Table 3.4 shows the percentage of partisan voters who vote for their party, drawing on the whole sample of core supporters (including abstainers). It shows that, once we take turnout into account, and calculate percentages on the whole sample, the votes of the partisans do not seem to be so guaranteed. Only around 70% of Republican and Democratic partisans on average voted for their party. This is not because they voted for any other, but because a percentage of them did not turn out. Given that partisans form the lion's share of a party's electorate, this should imply great incentives for mobilisation strategies, as predicted by Nichter (2008).

This intuition is confirmed at a higher level of aggregation. Figure 3.3 shows the mean turnout in American counties, classified by the level of support for the incumbent in the previous election. In districts where the incumbent was re-elected, turnout is very similar across counties. Conversely, districts where the incumbent lost the current election are characterised by a demobilisation of voters in core counties. Those counties where the incumbent had obtained over 80% of the votes in the previous election, experienced a decrease in turnout, on average, of almost 10%. Hence, the incumbents

who lose their seat tend to experience a decrease in turnout in their electoral strongholds. This can indicate a failure in their mobilisation strategies that frequently lead to an electoral defeat.

**Figure 3.3. Mean Turnout by Counties within Districts**



Source: Leip (2011)

This descriptive evidence suggests that partisans are not guaranteed voters, and that they can be crucial for the final electoral outcome. Although politicians know that it is highly unlikely that their core supporters will switch to another party, they are also aware that they might not turn out to vote. Thus, there seems to be room for mobilisation and turnout buying strategies regarding core supporters.

What about swing voters? The framework provided in the theoretical chapter points to swing voter's persuasion strategies as the flip side of buying partisans' turnout. A close examination of voting patterns confirms this partially. Table 3.5 shows the mean of swing voters that voted for each party (including and not including abstainers). Two patterns are observed. First, as expected, swing voters can go either way. In each election, they vote in high shares for both parties. It can then be noted that they do not

always vote more for the winning party. They tend to split in very similar proportions between the two main parties. The fact that swing voters are potential voters of both parties could imply that parties can follow persuasion strategies, which seem less necessary for partisan voters. However, as swing voters rarely massively support one party, and split in very even proportions, it could also indicate that there might not be clear instruments to persuade them, or that they are not ultra-sophisticated voters who respond to similar stimuli when casting their vote. This could potentially undermine the relevance of persuasion strategies.

**Table 3.5. Swing Voters Electoral Behaviour**

Year	After Turnout		Before Turnout	
	Vote Democrat	Vote Republican	Vote Democrat	Vote Republican
1980	0.341	0.511	0.229	0.343
1984	0.496	0.504	0.322	0.327
1988	0.509	0.491	0.319	0.307
1992	0.388	0.325	0.275	0.23
1996	0.494	0.363	0.334	0.245
2000	0.514	0.486	0.341	0.323
2004	0.524	0.465	0.334	0.296
2008	0.633	0.367	0.4	0.232

Source: ANES Cumulative File, 1980-2008

Secondly, once we consider turnout, swing voters are not the highly mobilised voters that the literature assumes. Swing voters demobilise in each election in similar rates to partisans. This would suggest that parties might also find incentives to try to mobilise them. If this was the case, the dilemma between mobilisation and persuasion (Cox 2010, Dunning and Stokes, 2008) would not be completely equivalent to a dilemma between core and swing voters.

Thus, the evidence suggests that parties in principle face a trade-off between partisan mobilisation and swing voter's persuasion (and also mobilisation). The relevant question now is which will be the dominant strategy. I argue that this has more to do

with the conditions of voters and not so much with district considerations, as an extensive literature suggests (Persson and Tabellini, 2003). It is generally argued that the interest in swing voters increases in majoritarian systems. Under this electoral system, the election is decided in swing districts. So, even if parties have more difficulties in persuading or mobilising swing voters, it will pay to target them in swing districts, because the votes there are crucial. I argue that this is a flawed argument as it contains an ecological fallacy. A swing district is one in which a small change in the share of votes has a greater probability of switching the district winner. This tells us nothing about the nature of its voters. It can easily be that a swing district is composed of an even split of both parties' core supporters, or just by swing voters.

Given that institutional considerations are secondary, how do parties solve the dilemma between swing and partisan voters? Which strategy is the most successful? The choice depends on the extent to which distribution to each group is efficient from an electoral point of view. As I argued in the theoretical chapter, when designing their distributive strategies, parties are not interested in all voters. In the first place, politicians should focus on those voters where a more direct and relevant link with specific policies can be established. Any attempt to distribute to a group will fail if the lion's share of that policy does not reach them, or if the policy is not demanded by a majority of its members. Being able to find policies that effectively favour one group of voters is crucial. This is what I have referred to as the '*targetability condition*'. Likewise, parties should not focus on those voters who either always vote for them, or who will never do so. Thus, parties evaluate the capacity of the distributive benefits they use to influence the behaviour of an electoral group, by either persuading or mobilising them. This is what I called the '*responsiveness condition*'.

The evaluation of these two conditions for core and swing voters will give us an insight into which distributive strategy is more efficient. In other words, these two conditions tell us the electoral returns of an increase in 1\$ of benefits invested in each type of voters.

### **3.4. Targetability**

Targetability is defined as the distinctiveness and cohesiveness of a group of voters, which makes them definable on specific attributes, relative to the rest of the electorate. Politicians cannot individually exchange benefits for votes (unless they involve themselves in corruption or clientelism). They provide distribution without perfectly determining who benefits from the policy and who does not, facing a potential problem of adverse selection. Some of the beneficiaries will never vote for the party, but nonetheless still receive the benefits. Others will always do it, regardless of what they receive. To minimise these risks, politicians need to assess the net electoral gain of each monetary unit of benefits by calculating how efficiently they can deliver to an electoral group. Under this logic, those groups that can be exclusively targeted by policies would gain electoral relevance, compared to those groups of voters who do not have a defined set of traits or demands and to which parties find more difficulties in providing exclusive distributive policies. In other words, targetable voters will be more attractive than those who are less targetable. Parties can target them exclusively by moulding policies according to their distinctive traits.

There are two potential sources of targetability. First, the more distinct a group is, the more targetable they will be. A group of voters who share distinctively similar traits and who have a cohesive set of interests can be more effectively targeted by the policies of

politicians. The second source of targetability is the cohesiveness of the demands. It might be that a group of voters does not share individual traits that characterise them as a group. However, as long as they demand similar policies, even if they are not personally beneficiaries, incumbents can expect to find policies that will yield a positive electoral response from them.

Analysing the distinctiveness and cohesiveness of the electoral groups is a relevant issue, particularly in the case of swing voters. The formal literature tends to put forward the argument that, given their presumed electoral value, parties have great incentives to provide benefits to swing voters. The underlying assumption is that parties can define policies that are directly targeted to them. This assumption, however, remains basically untested. Thus, as Mayer (2008) argues, *“before we develop more elaborate theories about how swing voters decide which candidate to support, we need to establish some basic propositions about who they are”*.

If swing voters comprise a targetable group, their electoral importance would be justified. Sharing traits and interests is also relevant as it enables distributive efficiency. The first requirement for a party to favour a specific group of voters is to find policies that effectively impact those voters. If swing voters have common traits, parties will have policy instruments to implicitly favour the whole group and discriminate against those voters who they are not interested in. However, if the swing group gathers individuals with no shared traits, then distributive policies aimed at winning the swing votes might face two problems. First, it might be that certain distributive policies favour some of the swing voters, while at the same time harms some others with contradictory interests. Second, it could simply be that a policy favours a small amount of swing voters while diverting many resources to other voters on which policies have no effect. Thus, if swing voters are, in the words of Mayer (2007), *“a randomly selected subset of*

*all voters*”, then they will have no capacity to influence politicians’ distributive strategies. They would comprise a residual category of heterogeneous individuals with a theoretical attractiveness, which, in reality, cannot be exercised<sup>38</sup>.

The hypothesis in chapter 2 stated that partisans will be more targetable than swing voters, because they compose a more cohesive and distinctive group. To account for this, I will open the ‘black box’ of swing voters and explore who they are, where they are located, and which are their policy preferences compared to partisans. This will allow us to understand whether swing voters, compared to core supporters, have leverage in demanding distributive policies, or whether they are a residual category which parties might have an interest in winning, but who will not be able to condition parties’ distributive strategies.

### **3.4.1. Who Are the Core and Swing Voters?**

As said, politicians have to decide whether they target core or swing voters with specific policies. In this, sharing socioeconomic traits provides an electoral group with a certain level of cohesiveness that allows politicians to brand policies with a specific target. The ANES provides very rich demographic and socioeconomic data that help us to test the homogeneity of electoral groups. To study this, I will run several econometric models predicting if an individual is a core or swing voter based on a series of traits. In this analysis, I include all social, demographic, economic or ideological variables that can be built with the ANES data for the period 1978-2008.

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<sup>38</sup> In addition, this would undermine its capacity of collective action. Olson (1965), in his classic theory, stated that sharing interests is the first condition to enable it. If swing voters share interests, it is more likely that they will make themselves visible and exert pressure to extract rents from office-seeking politicians. Conversely, if swing voters have no distinctive traits or attitudes, then the swing voter category might have importance from a conceptual point of view, but will be of less practical relevance. The capacity of swing voters to make themselves salient will be undermined by the lack of cohesion of their demands.

Beginning with the demographic variables: *retired* captures whether or not the individual is retired or permanently disabled. This variable can define a set of preferences for particular distributive policies. Voters in this category will favour disability benefits. Old people are also greatly supportive of old-age pensions and benefits for the sick and the elderly (Ponza et al., 1988; Blekseaune and Quadagno, 2003). Ponza et al. (1988) also show that the elderly are less supportive of policies that do not yield any direct benefits to them. The only exception is those programmes that involve transfers to low-income families with children. However, this distributive policy can still be understood in terms of group self-interest, as grandparents are a family substitutive of child care policies.

*Young*, operationalized as those individuals who are under 25 years old, defines the opposed set of preferences. Research shows that young people tend to be more supportive of education spending (Lewis, 1980) and of child-care policies (Pettersen, 2001). From a more general perspective, young people are normally expected to provide greater support for protective policies, as they are an economically vulnerable group (Hasenfeld and Rafferty, 1989). The discount of the future, conversely, makes them less supportive of benefits for the elderly.

I also include in the analysis whether the individual is *married with kids in the household*. Orriols (2009) demonstrates that individuals with children demand greater spending on education. A further demographic variable that has consequences on policy preferences is gender (operationalized here as *female*). Women tend to be more supportive of social protection than men (Svallfors, 1997; Edlund, 1999; Blekseaune and Quadagno, 2003). Two explanations have been provided for this consistent fact. One possible argument is that women have different socialisation experiences (Waerness and Ringen, 1986) that make them more sympathetic to protective policies.

Some authors however, explain this in terms of self-interest, arguing that women support specific distributive programmes, because they are an economically vulnerable group who are more dependent on the state's provision of social protection (Hernes, 1987; Sainsbury, 1994). In addition, Edlund (1999), argues that women in Scandinavian countries are "*more likely to be recipients of benefits as widows or single parents and more likely to be employed by the welfare state*". This should imply that parties could target women through family benefits, and public employment, in order to win their vote.

Racial traits also have a translation into policy preferences. *Black* and *Hispanic* capture whether the voter belongs to any of the main racial minorities in the United States. In general terms, as economically vulnerable groups, they support the expansion of distributive programmes (Hasenfeld and Rafferty, 1989). More specifically, there are some individual traits that correlate with race. An average black person in US receives lower income, has higher unemployment rates, achieves lower education levels and has a greater likelihood of living in a lone parent family (Conley, 2009). Thus, in the American context, race is a straightforward shortcut to predict the distributive necessities of an individual.

I also include economic variables. The main one is *unemployed*, which captures whether the respondent is not working or is temporally laid-off. Regarding labour market policies, Rueda (2005, 2007) has shown that the unemployed have a preference for economic protection, as well as active labour market policies that enable their reintroduction into the labour market. These preferences should be contradictory with the ones defined by *union members*. Unionised economic sectors are characterised by higher wages and safety (Esping-Andersen, 1999). Labour market segmentation favours

these types of insiders (Saint Paul, 1996), who will demand employment protection (Rueda, 2005) and sector-oriented distributive policies.

As more generic economic variables, *poor* takes value 1 if the individual's household is within the first quintile of the reported income scale in the survey, while *rich* captures whether the individual's household belongs to the fifth quintile of the scale. The former would define the individual broadly as a potential beneficiary of means-tested policies, while the latter defines the voter as a net taxpayer, and therefore, positively affected by spending cuts and tax reduction policies.

Education levels can also be linked to specific policies that parties can use to favour voters. *High education* has value one, when the respondent has achieved a graduate or postgraduate degree, and zero otherwise. Hasenfeld and Rafferty (1989) report a preference of the highly educated for less government intervention, but, at the same time, support tertiary education policies. Although those who are highly educated do not benefit directly from it anymore, children of highly educated parents tend to reach higher educative stages (Shavit and Blossfeld, 1993; Larcinese 2008). Idema (2009) shows that this translates into a stronger demand for high education spending by those who have already received higher education. Conversely, *low education*, operationalized as not having finished Grade 12, should correlate with a general demand for primary and secondary education investments, instead of tertiary.

The ANES allow us to include many professional variables that have connections with policy measures. *Blue collar* includes machine operators, assemblers, transportation and

material moving workers, handlers and equipment cleaners, among others<sup>39</sup>. These individuals are mainly located in industrial sectors that demand protection, and industry subsidies. Conversely, *executives* (which includes executives, administrative workers and managers) is the occupational category with the highest mean income and is expected to respond to policy preferences that are in accordance with upscale groups.

Respondents that have *professional specialty occupations* or *sales occupations* are expected to be particularly affected by very specific economic sectors and can be targeted with subsidies, regulation, and protective policies. *Primary sector* includes individuals who have farming, forestry and fishing occupations. It is expected that this latter group will have an interest in agricultural subsidies and protectionist policies, while members of the *army and protection* sector would benefit from increases in the military budget. Finally, *homemakers* should demand more from family benefits, and labour activation policies.

I also include two ideological variables, *liberal*, and *conservative*, who have value one when the individual report an ideological leaning (independently of its intensity). These variables do not establish a link between specific individual traits and policies. Although there might be some correlation with the social traits, being a beneficiary of specific policies is not a necessary requirement to support them ideologically. In fact, Inglehart and Klingemann (1976), Sears et al. (1980) and Kinder and Sears (1981), among others, have demonstrated that ideology is not a predictor of social class and social traits. However, it establishes a link between an individual and the demand for specific spending policies. Ideology as defined by Converse (1964: 207) is a belief

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<sup>39</sup> The variable comprises the categories 11, 12, and 13 of the *vcf0154b* variable in the ANES Cumulative Data File.

system characterised by “*a configuration of ideas and attitudes in which the elements are bound together by some form of constraint or functional interdependence*”. That is, ideology provides a consistent framework, by which individuals assess the necessity of different policies, particularly with regards to redistributive policies, and the role of the state in the economy (Orriols, 2009). In this line, research has shown a strong and robust connection between ideological leanings and attitudes toward the welfare state (Sears et al., 1980; McClosky and Zaller, 1984; Hasenfeld and Rafferty, 1989).

In addition, the ideological stance of a group of voters is particularly important, not only because it defines their support for specific policies, but also because it defines the yardstick used in evaluating a government. Powell and Whitten (1993), and Whitten and Palmer (1999) show that left-wing constituents assess leftist governments by their performance on unemployment; while right wing parties are held accountable for their management of inflation. Thus, incumbents who wish to favour a particular group will be interested in identifying the specific economic outcomes upon which they will be made accountable.

With each of the aforementioned variables I run three logit regressions, with robust standard errors, where the dependent variables take value one if the individual belongs to an electoral group (Democrat, Republican, or Swing), and zero otherwise<sup>40</sup>. The models report to which extent we can predict the partisanship of an individual given her personal traits. The positive coefficients mean that a trait is defining of the electoral group. Table 3.6 displays the regression results.

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<sup>40</sup> The period of analysis includes all the electoral surveys in presidential election years between 1980 and 2004. Before that year, some variables are not available.

The first result worth highlighting is that Democrats and Republicans have specific traits that distinguish them from the rest of the electorate. The resulting profiles are in fact highly consistent with the expectations in the literature. Democrats incorporate three types of voters. On the one hand, *retired* voters are more likely to be Democrats. This provides incentives to the Democratic Party to be especially attentive to elderly benefits. The second characteristic group of Democrats are the *unionised* and the *blue-collar* workers. This means that Democratic leaders would be expected to promote labour market policies, and subsidies, that implicitly favour a specific part of their constituency. Finally, socially vulnerable groups are also more likely to fall into the Democrat cluster. The parameters of racial minorities (*Black* or *Asian-American*), and *women* show positive and highly significant coefficients. This indicates that policies like housing benefits, or positive discrimination and activation policies will have more impact on the Democrat party's constituency. In addition, they will demand for means-tested distribution, education policies, and also labour market activation policies -which, in Rueda's (2005, 2007) framework, could create a conflict with their second constituency group, the insiders. Finally, as expected, Democrats tend to be more *liberal*, which implies that they are more receptive to the provision of certain distributive programmes.

The Republican constituency is less defined on a socio-demographic basis, and more on economic and professional terms. The only two demographic traits that significantly help us to predict if an individual will be a Republican supporter is whether she lives in a household composed of a *married couple and kids* or is a *homemaker*. This can give incentives to a party to provide family-friendly policies, such as child-care, or school vouchers (particularly because they are over the mean household's income). This group

could potentially share interests (and partially overlap) with the *highly educated* voters, another defining variable of Republican partisans.

**Table 3.6. Electoral Groups' traits: Logit Regressions**

VARIABLES	(1) Democratic Core Voter	(2) Republican Core Voter	(3) Swing Voter
Young (<25years)	-0.455*** (0.0660)	0.0422 (0.0727)	0.388*** (0.0627)
Retired	0.445*** (0.0700)	-0.0241 (0.0821)	-0.434*** (0.0863)
High Educated	-0.0467 (0.0568)	0.239*** (0.0626)	-0.214*** (0.0610)
Low Educated	0.0269 (0.123)	-0.401** (0.181)	-0.313** (0.139)
Unemployed	-0.102 (0.0852)	-0.189* (0.114)	0.201 (0.123)
Black	1.394*** (0.0708)	-2.368*** (0.181)	-0.575*** (0.0859)
Hispanic	0.793*** (0.0925)	-1.025*** (0.135)	-0.111 (0.100)
Union Member in Household	0.411*** (0.0608)	-0.388*** (0.0743)	-0.0603 (0.0672)
Female	0.327*** (0.0502)	-0.0354 (0.0559)	-0.197*** (0.0543)
Poor (1st quintile income)	0.0586 (0.0795)	-0.435*** (0.108)	0.0289 (0.0866)
Rich (5th quintile income)	-0.538*** (0.125)	0.384*** (0.114)	-0.120 (0.132)
Blue Collar	0.103* (0.0629)	-0.343*** (0.0984)	0.134* (0.0773)
Executive	-0.0853 (0.0807)	0.178** (0.0827)	-0.0384 (0.0877)
Professional	-0.00213 (0.0754)	0.0693 (0.0806)	-0.123 (0.0869)
Primary Sector	-0.274 (0.179)	0.526*** (0.169)	-0.399** (0.176)
Sales	-0.0751 (0.0863)	0.167* (0.0891)	-0.0378 (0.0901)
Army & Protection Services	0.0649 (0.181)	0.313* (0.191)	-0.121 (0.210)
Homemaker	-0.0568 (0.217)	0.404* (0.211)	-0.0768 (0.237)
Married & kids household	-0.00977 (0.0557)	0.0164* (0.0099)	0.0509 (0.0579)
Liberal	1.029*** (0.0652)	-1.210*** (0.111)	-0.670*** (0.0805)
Conservative	-0.810*** (0.0615)	1.164*** (0.0563)	-0.508*** (0.0636)
Observations	9432	9432	9120
R2	0.1285	0.1885	0.0338

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1, robust standard errors in parentheses. Constant not shown.

The remaining traits that delineate the Republican constituency refer to professional groups. Republicans are more likely to be *executives* (which include also those that occupy a managerial position), or have a *sales occupation*, which would define a strong interest of the Republican Party to use economic policies, and regulation to target their voters. *Primary Sector* workers, who also generally belong to the Republican constituency, are easily targeted with subsidies and grants. Another professional group that stand out as predominantly Republican is the *Army*, which means that they will have clear benefits from increases in military spending. Finally, as expected, being ideologically *conservative* is a highly predictive factor of partisanship. This is a residual trait, which gives us indications of the kind of distributive policies that Republican partisans will support most strongly.

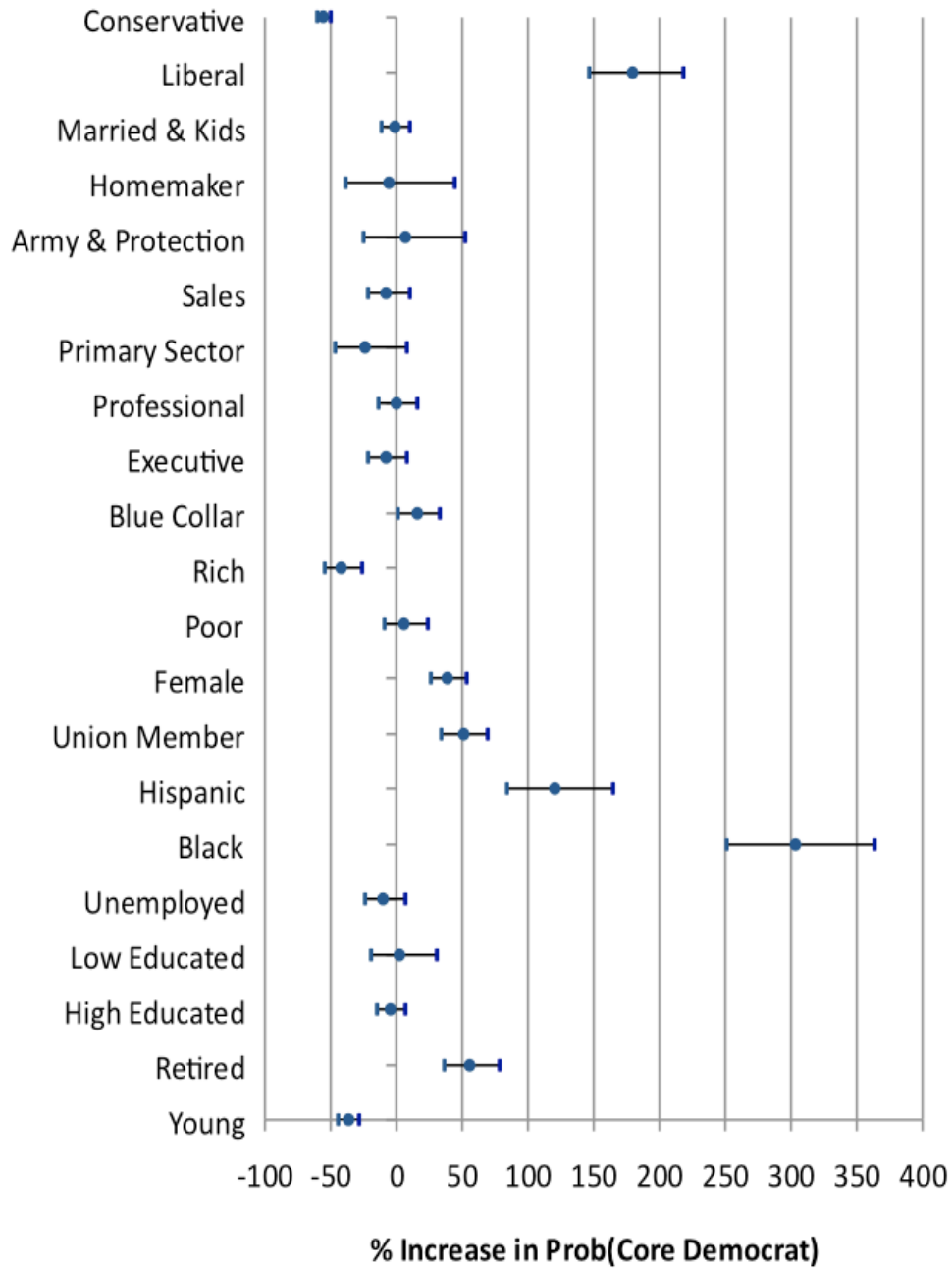
Conversely to the models on core Republican and Democrats, the swing voters' model does not yield conclusive results. Swing voters do not display salient and clear traits. While the other two models have quite a few positive coefficients (and also some negative), in the swing voters' model the majority of the variables are insignificant, or have a significant negative sign. This means that we can only define swing voters by what they are not, but not by what they are<sup>41</sup>. It is difficult to find, within the collective of swing voters, a definitional socioeconomic, demographic, professional, or ideological trait that can be linked with a distributive policy. The only positive and significant variable is *young*, denoting that swing voters are more likely to be under 25 years old. This could potentially define a set of interests that parties could exploit to target swing voters. However, apart from this age factor, swing voters are a heterogeneous set. While

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<sup>41</sup> Some of these negative signs also implicitly define a group. For instance, a negative sign of *female* implies that swing voters are more likely to be men. However, I have argued that the coded variables can be better linked with a distributive policy. Being a woman is more defining in terms of potential distributive policies than being a man.

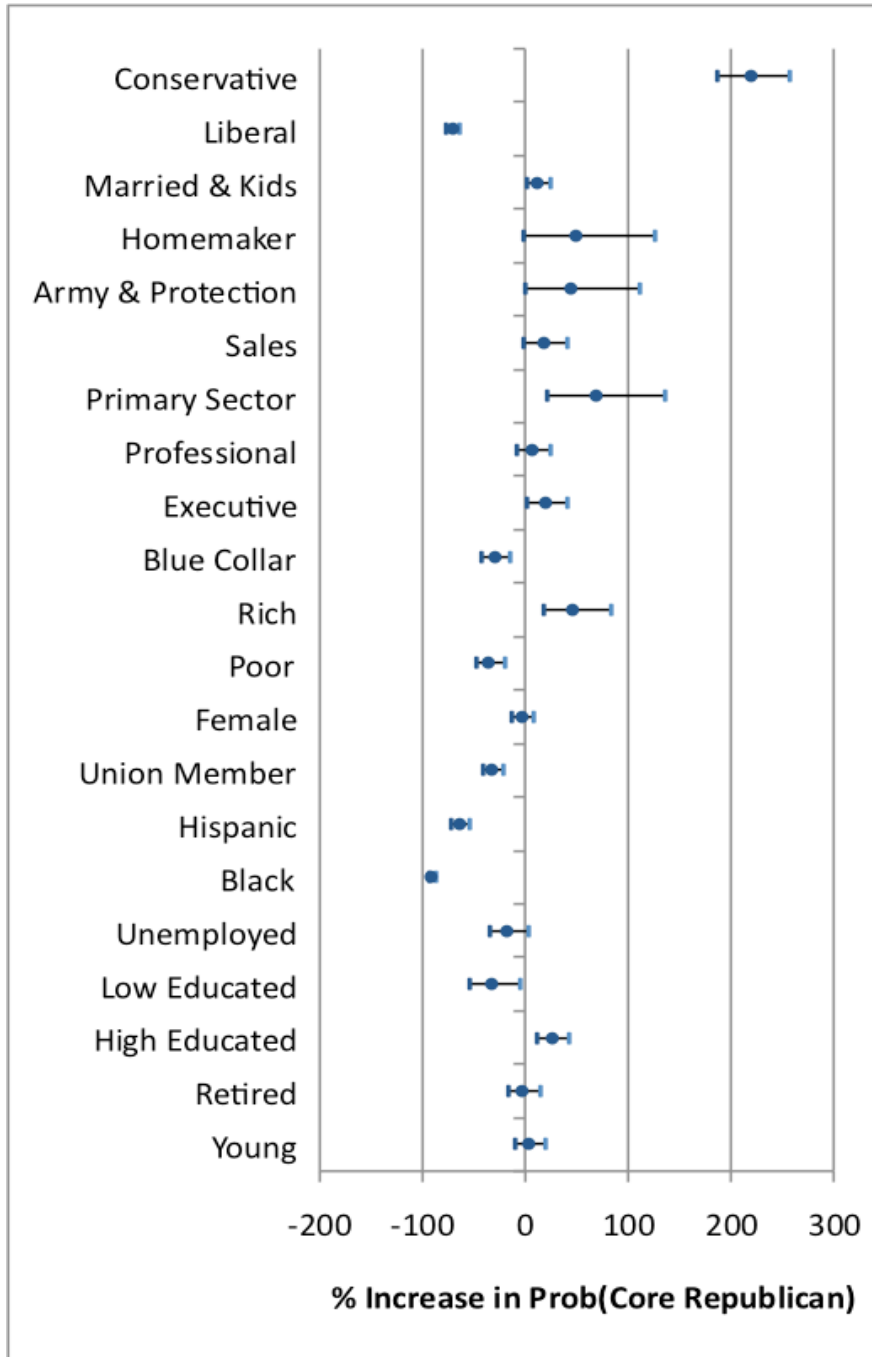
Democrats and Republicans are cohesive groups in a variety of ways, swing voters are a residual category with no defining traits.

**Figure 3.4: Core Democrats' Traits**



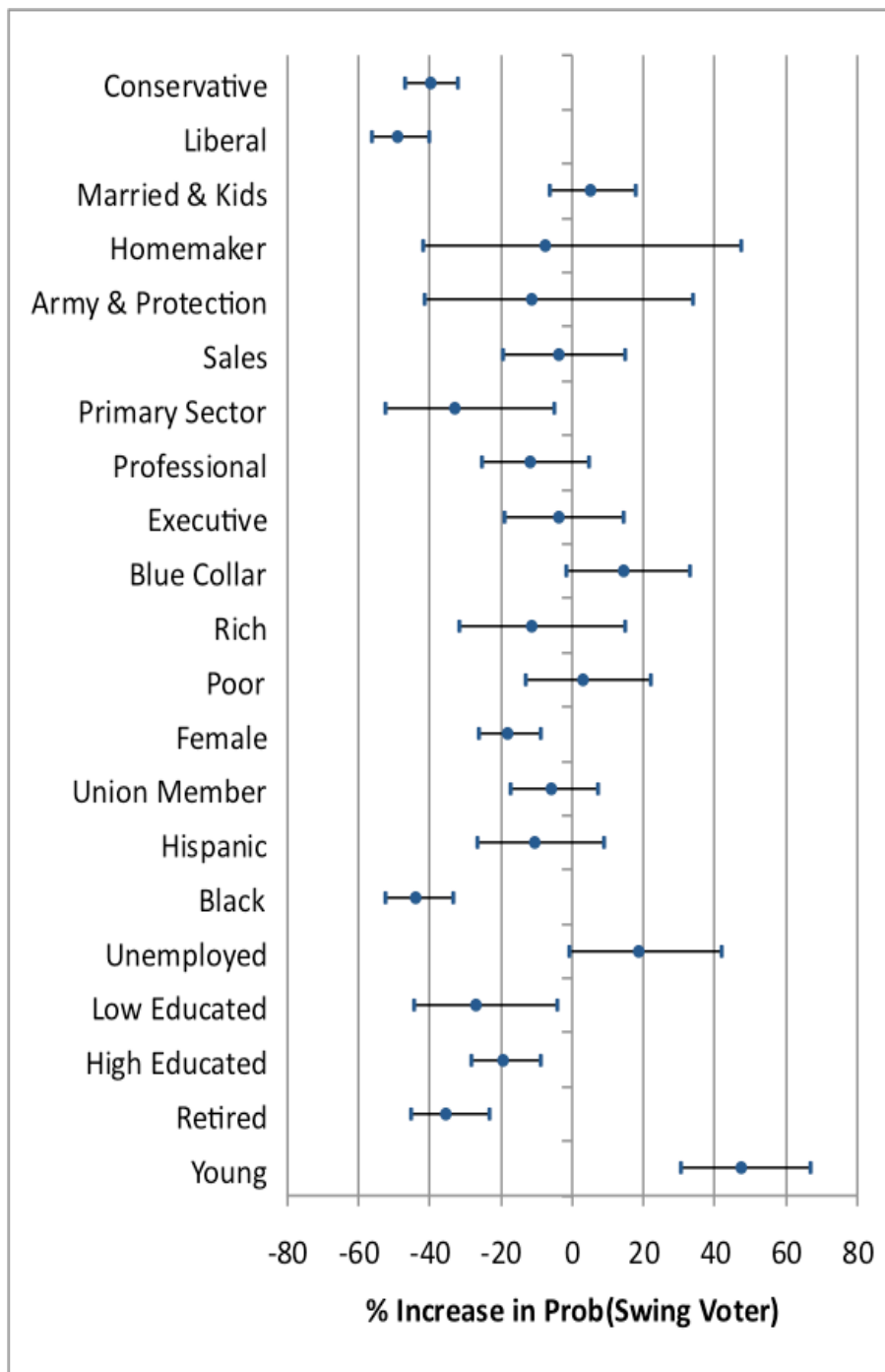
Source: Model 1 in Table 3.6 (95% Confidence Intervals)

Figure 3.5: Core Republicans' Traits



Source: Model 2 in Table 3.6 (95% Confidence Intervals)

**Figure 3.6: Swing Voters' Traits**



Source: Model 3 in Table 3.6 (95% Confidence Intervals)

Figures 3.4 to 3.6 display the odds ratios of each model. They show the increase in the probability of being a Core Democrat, Republican, or Swing Voter, given each individual trait. The figures show us not only whether a trait increases significantly the

probability of belonging to each electoral group, but also the magnitude of the increase. It can be seen that the majority of the traits are not very informative with regards to swing voters (Table 3.6). They have wide confidence intervals and tend not to be negative or different from zero. For Democrats, the most powerful predictors are, apart from being liberal, *retired*, *union member*, or belonging to the *racial minorities*. For Republicans, apart from being conservative, being wealthy, a homemaker, or working in the Army and primary sector are the most defining traits.

A second consideration that should be taken into account when analysing the models has to do with the explicative leverage. The swing voters' model is almost non-explicative. The R-squared does not reach 3.5%. This marks a big difference with the explained variance of the equivalent estimations for partisan groups. The Democrats model explains almost 13% of the variance regression. To predict Republican partisanship, the model explains almost 19% of the variance (which is a quite relevant level for a model with individual data).

This implies that apart from having more common traits that we can rely on to predict who is going to be a Republican or Democrat core supporter, we are also much more precise in that prediction. This is important, as risk-averse political parties will have an interest in maximising the efficiency of distribution and the likelihood that a policy reaches the voters they are interested in. If the configuration of an electoral group is uncertain, parties will be aware that there is a risk of adverse selection when providing distributive policies with an office-seeking motivation.

In conclusion, socioeconomic demographic, professional, and ideological traits are strong and specific predictors of the core supporters of the Democratic and Republican Parties. Conversely, these traits are less useful and more uncertain predictors of

American swing voters. This converts partisan supporters into more targetable voters. Parties can be more confident that a policy that exploits certain traits will reach their core supporters, making them more attractive propositions for distribution. Conversely, even if an incumbent is interested in winning swing voters, she will have greater difficulties finding a policy that targets a significant amount of them with certainty.

### **3.4.2. Where Are the Core and Swing Voters Located?**

Apart from their socioeconomic characteristics, when voters are geographically concentrated, location is another relevant trait that parties can exploit to reach them with narrow geographic transfers. Bueno de Mesquita et al., (2003) argue that there is a link between the breadth of a party's constituency and the incentives to provide specific policy types. Thus, if a constituency is defined by geographical traits, parties' distributive strategies would accommodate them by providing local transfers. Furthermore, shared location is a very attractive feature of voters as it means that: 1) there is greater certainty that a policy reaches a selected subset of voters, and 2) voters with quite different social profiles can be brought together with a geographic distributive policy.

To account for the geographic distribution of core and swing voters, I run several analyses, both at the individual and aggregate level. First, using the Republican, Democrat and Swing dummies of the 1978 to 2004 ANES surveys, I calculate the share of each group of voters in each state<sup>42</sup> and its standard deviation across states. Higher standard deviations will imply that a group displays greater concentrations of voters in certain states, while it will be less represented in others. Conversely, low standard

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<sup>42</sup> I only use those states for which I have at least 20 respondents, to avoid the distortions of underrepresented states. However, results do not change if all states are included.

deviations imply that a group of voters is, independently of its total size, similarly distributed in all states. Table 3.7 shows the standard deviation for each group. It can be seen that Democrats are usually more geographically concentrated than Republicans. This is consistent with the common knowledge that Democrats cluster in the Coastal areas, while Republicans are more homogenously distributed across the whole of America.

**Table 3.7. Standard Deviation Across States of Electoral Groups**

	Republicans	Democrats	Swing Voters
1978	0.088	0.134	0.096
1980	0.116	0.122	0.087
1982	0.119	0.130	0.076
1984	0.080	0.092	0.071
1986	0.091	0.087	0.069
1988	0.105	0.101	0.052
1990	0.135	0.099	0.066
1992	0.099	0.100	0.062
1994	0.085	0.075	0.071
1996	0.078	0.075	0.044
1998	0.083	0.090	0.062
2000	0.065	0.074	0.059
2004	0.036	0.030	0.046
Average	0.091	0.093	0.066

**Source:** States' shares of each electoral group are calculated with ANES Cumulative File respondents.

These frequently highlighted differences are less relevant when compared to swing voters. Democrats and Republicans exhibit systematic higher standard deviations. This shows that, while there might be states that can be characterised by voters with a Republican or a Democrat profile, a state's electorate is less probable to be characterised as composed of swing voters. Swing voters are, for all the years except 2004, the most dispersed and least geographically concentrated among the three groups. Comparing the averages of all the years, a t-test rejects the hypothesis that the standard deviation of Republicans is smaller than the standard deviation of Democrats. However,

the test always yields that swing voters are, in average, less concentrated than Republicans and Democrats.

The ANES surveys do not allow us to track individuals beyond the state-level. Given that this might be too aggregate, a second test is done using registration data. This allows us to more closely trace geographic patterns of electoral groups. Table 3.8 displays the standard deviations of registration at the district level and the county level. Here we have to assume again that registered independent voters are a proxy of the level of swing voters (although this is an imperfect proxy, as I argued above). The table confirms the expectation that partisans exhibit stronger geographic patterns. In all years we have data for, the number of individuals registered as Democrats or Republicans displays higher standard deviations. The geographic asymmetry across districts is again higher for the former. However, both are always more concentrated than independents.

**Table 3.8. Dispersion across and within districts for electoral groups**

	Standard Deviation of Registration Across Districts			Mean Standard Deviation of County Registration Within Districts		
	Independents	Democrats	Republicans	Independents	Democrats	Republicans
2001	0.09056	0.14507	0.11952	0.06742	0.12059	0.11330
2003	0.09604	0.13768	0.11819	0.06938	0.11418	0.11106
2005	0.09556	0.13481	0.11887	0.06869	0.11383	0.11142
2006	0.09415	0.13323	0.11691	0.06979	0.11439	0.11240
2007	0.08854	0.12577	0.11545	0.06315	0.10961	0.11006
2008	0.08851	0.12573	0.11542	0.06319	0.10962	0.11006
2009	0.08896	0.12655	0.11600	0.06246	0.10942	0.10993

Source: Leip (2011)

This stronger geographic pattern between-districts arises also within-districts. Using counties as the unit of analysis, I calculate, for each district, the standard deviation of registration for the three groups. The mean of these standard deviations give us an account of the global within-district concentration patterns. Comparing them we can see, again, that partisans display more concentrated configurations. They tend to

congregate in specific counties, which are characterised as being the core counties of an incumbent, while, in an average district, the distribution of independents diverges less across counties.

In summary, regardless of using states, districts or counties as the unit of analysis, swing voters display less intense geographic patterns, while partisan voters concentrate more in geographic strongholds.

Still, it could be argued that more than the general pattern of concentration, parties are interested in whether swing voters cluster in swing districts. However, I have already argued that we should not draw conclusions on the types of voters by looking to the type of state or district. Table 3.9 confirms this. It shows, for each year I have data on, the share of swing voters, and core Democrats and Republicans in the whole electorate. This figure is compared with the share of these electoral groups in battleground states<sup>43</sup>, where it is supposed that parties should have strong incentives to focus on. It can be seen that the differences are meaningless. Battleground states are not characterised by containing more swing voters. Parties always have more core supporters to mobilise than swing voters to persuade. In addition, there does not seem to be more swing voters than in the rest of the country's average. Even with just 14 observations, a t-test cannot reject at a 90% confidence level the null hypothesis that battleground states are different to the national average in its composition of the three electoral groups. Thus, battleground states are not significantly different to the average of the country, and, more importantly, are not characterised by having more swing voters than core ones.

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<sup>43</sup> I have coded as battleground all those states where the margin of victory in the previous presidential election was less than 5%. For the 1984 election, I used the 10% threshold to have more leverage. With Regan's landslide victory, there were only three states where the margin was below 5%.

**Table 3.9. Electoral Groups: National and Battleground States' Average**

Year	Swing Voters		Core Democrats		Core Republicans	
	National Average	Battleground States	National Average	Battleground States	National Average	Battleground States
1978	0.2513	0.2750	0.3707	0.3447	0.1901	0.1983
1980	0.2230	0.2186	0.3810	0.3901	0.2138	0.2047
1982	0.1918	0.1670	0.4224	0.5034	0.2264	0.1625
1984	0.1994	0.1688	0.3336	0.4023	0.2534	0.2208
1986	0.2059	0.1991	0.3667	0.3886	0.2247	0.1730
1988	0.1809	0.1926	0.3250	0.3392	0.2578	0.2341
1990	0.2242	0.1987	0.3596	0.3765	0.2232	0.2732
1992	0.2028	0.1857	0.3308	0.3318	0.2258	0.2418
1994	0.2056	0.1985	0.3136	0.3174	0.2858	0.2868
1996	0.1826	0.1773	0.3658	0.3712	0.2526	0.2372
1998	0.2006	0.1898	0.3450	0.3373	0.2319	0.2801
2000	0.2147	0.2222	0.3265	0.3086	0.2302	0.2395
2004	0.2005	0.1913	0.3020	0.2919	0.2731	0.3054
2008	0.1986	0.1964	0.3990	0.4289	0.1718	0.1443
Average	0.2059	0.1986	0.3530	0.3666	0.2329	0.2287

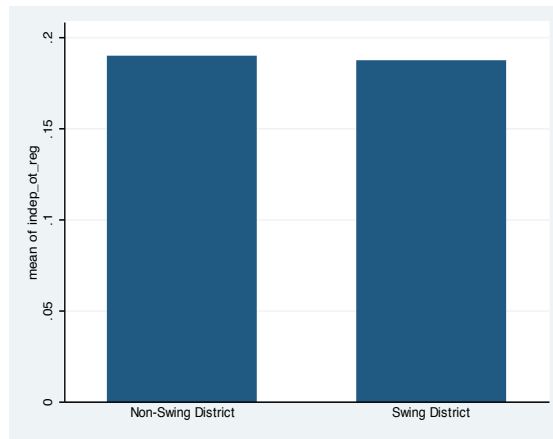
Source: Own Elaboration. ANES Cumulative Data File (1978-2008)

Further evidence at a more disaggregated level is shown in Figures 3.7 and 3.8. They compare the amount of registered independents (as the best proxy for swing voters) and incumbent party's registered voters in non- and swing districts<sup>44</sup>. The data are taken from Leip (2011) and cover the period 2001-2009. Swing districts are coded as districts where the margin of victory was under 15% of the votes. The figures show that the differences in registration are meaningless. Swing districts do not seem to have more independents or fewer core supporters. This is suggestive evidence that swing and non-swing districts do not differ so much on the number of potential partisan or swing voters.

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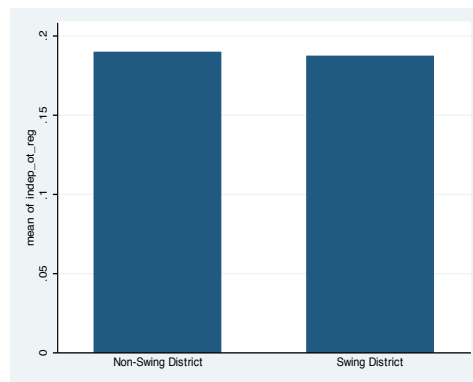
<sup>44</sup> We can interpret the evidence on battleground states as the meaningful one for presidential elections, and this evidence on swing districts as meaningful for elections to the House of Representatives.

**Figure 3.7. Mean of Registered Independents and Third Party Voters (2001-2009)**



**Source: Leip (2011)**

**Figure 3.8. Mean of Incumbent Party's Registered Voters (2001-2009)**



**Source: Leip (2011)**

All this evidence can be summarised in two points. First, swing voters are geographically less targetable than core voters. Politicians will face more difficulties to use pork barrel, intergovernmental transfers, local transfers and any other geographically defined distributive policy to target swing voters. Conversely, these policies are potentially more useful to provide benefits to core supporters. Secondly, parties do not have to choose between pleasing swing voters in swing districts, and partisan voters in core districts. Instead, they can decide first to which districts they are going to distribute, and then to which voters within those districts.

### **3.4.3. The Political Preferences and Perceptions of Core and Swing Voters**

I have demonstrated above that swing voters do not have clear distinctive personal or geographic traits. Nonetheless, they could be targetable if they have cohesive preferences for spending policies. Oriols (2009) has shown that some voters might reward spending policies that they agree with on ideological terms, even if they are not direct recipients. He argues that voters have different interests and these differences may easily condition the importance of policies in citizens' electoral behaviour. When voters find a policy issue that is particularly salient to them, they will be cognitively more attentive to it and more knowledgeable about the incumbent's performance on that dimension (Krosnick, 1990). This would imply that politicians have incentives to provide policies demanded by voters that, although not necessarily being direct beneficiaries, reward them electorally. Oriols argues that, if this happens, this will be a very favourable context for a politician. She could provide a policy with multiplicative electoral rewards, as this kind of spending has the "*potential benefit of mobilising a wider constituency that not only includes the self-interested electorate but also the ideological one*". In other words, both the direct beneficiaries, and those who are ideologically in favour of the policy will reward it electorally.

To test the cohesiveness of the spending demands, I use the ANES question: "*Should federal spending on [ITEM] be decreased, kept about the same or increased?*" on seven spending categories: *poor people, public schools, financial aid for college students, foreign aid, welfare programmes, food stamps, and Social Security*. These seven categories give us an account of the social spending demands of each group of voters. As the question is asked on the preference for decreasing, keeping the same, or increasing, I, run three categories ordered-logit models.

In addition, I also run two further Ordinary Least Squares (OLS) regressions on two continuous spending categories. In the first, the dependent variable is the respondent's self-placement on a seven-point scale between "*the Government should greatly decrease defence spending*" and "*the Government should greatly increase defence spending*". The second continuous dependent variable is based on a seven points range between "*Government should provide fewer services: reduce spending a lot*", and "*Government should provide many more services: increase spending a lot*".

For each spending question, I run three separate models with each of the electoral group -Swing, Democrat and Republican- included as dummies, as the main independent variable. All the socioeconomic variables of section 3.4.1 are included as controls, Table 3.10 shows the coefficients and significance of the three electoral groups in each of the twenty-seven models<sup>45</sup>. Republicans are characterised by significantly advocating a reduction in all types of spending, except military expenditure. On the other hand, Democrats favour increasing spending on all items significantly more than the rest of voters (except for military spending). Conversely, swing voters have no strong and distinctive preferences. They do not significantly resemble any of the partisans in seven out of nine policies. They only, by a small magnitude, share with Democrat partisans a demand for decreases in military spending and increases in public schools spending. Apart from that, they do not show determined policy demands in any direction. The coefficients are, in addition to being of small magnitude, far from the conventional significance levels. Hence, we should not expect any strong or specific electoral response by swing voters for increasing or reducing specific spending policies.

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<sup>45</sup> To save space, the control variables are not shown but they present conventional signs and significance.

**Table 3.10. Demand of Spending by Electoral Group**

Model	Item	Republican	Democrat	Swing
Ord. Logit (3 cats.)	Poor people	-0.793***	0.629***	0.092
Ord. Logit (3 cats.)	Public Schools	-0.516***	0.523***	0.016*
Ord. Logit (3 cats.)	Financial Aid for College Students	-0.497***	0.459***	-0.053
Ord. Logit (3 cats.)	Foreign Aid	-0.137***	0.252***	-0.039
Ord. Logit (3 cats.)	Welfare Programmes	-0.719***	0.638***	0.003
Ord. Logit (3 cats.)	Food Stamps	-0.624***	0.504***	-0.014
Ord. Logit (3 cats.)	Social Security	-0.559***	0.460***	0.021
OLS (7 cats.)	Military Spending	0.598***	-0.457***	-0.118**
OLS (7 cats.)	Government Services	-0.736***	0.616***	0.017

The coefficients are drawn from electoral group dummies. Control variables not shown;  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1, robust standard errors

Apart from the aforementioned demand for increasing (or reducing) spending policies, swing voters do not share similar perceptions of the national problems or the areas where more political action is needed. I have run logit models using the different categories of the question: “*What do you think are the most important problems facing this country?*” as a dependent variable (and including all the socioeconomic traits as control variables). Table 3.11 shows that Democrats share with each other similar concerns and perceive similar problems. They tend to perceive that *Social Welfare* and *Foreign Affairs* are problematic, while they are less prone to think that the *Public Order*, the *Government Functioning* or *Economics* in general represent a problem. Conversely, Republicans think that *Public Order* and *Economics* are a national problem, while they significantly play down *Natural Resources* and *Social Welfare* as problematic issues. Swing voters, however, are only characterised by significantly perceiving that the *Government Functioning* is a problem. Apart from that, no single issue is more (or less) problematic for them compared to the remainder of the citizens.

**Table 3.11. Perception of Main National Problem by Electoral Group**

<b>National Problems</b>	<b>Republican</b>	<b>Democrat</b>	<b>Swing</b>
Agricultural Issues	-0.016	0.003	-0.137
Economics	0.139***	-0.131***	-0.009
For. Aff. / Nat. Defense	-0.072	0.152***	0.010
Gov Functioning	0.056	-0.572***	0.248**
Labor Issues	-0.135	-0.426	0.499
Natural Resources	-0.312**	0.010	0.199
Public Order	0.334***	-0.358***	-0.052
Racial Problems	-0.244	0.395**	-0.394
Social Welfare	-0.316***	0.314***	0.009

Coefficients of each electoral group dummy in logit regressions with robust standard errors;  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

All the previous analyses conclude that the main American parties' core supporters are cohesive groups, with consistent sets of interests, and policy demands. Conversely, swing voters are a residual category. The first hypothesis is, thus, confirmed. The only thing that swing voters share is not having an attachment to any party, and being indifferent in the current election. Beyond that, they have heterogeneous social profiles, they do not follow geographic patterns and do not have cohesive demands for similar policies. This is predicted to undermine their electoral importance. Their lack of cohesion weakens their collective action potential and dilutes the capacity of politicians to shape distributive policies that target them.

### **3.5. The Responsiveness of Core and Swing Voters**

In the previous section I have shown that swing voters are less targetable than partisans, because they share fewer geographic and personal traits. Thus, the first condition for distribution is favourable for core supporters. However, it could still be that it is electorally profitable to spend on swing voters if they were more responsive to distributive policies. This is basically what the theoretical literature on distributive policies assumes. Swing voters, being free of partisan attachments, are predicted to be

most responsive to economic benefits and place more weight on the economic dimension to vote.

I challenge this common assumption in the literature with two criticisms. The first criticism underscores the role of partisanship in mediating the perception of economic outcomes and benefits. Voters receive many stimuli before casting a vote, and they do not need necessarily agree on the weight they give to each of them (Orriols, 2009). Partisanship serves as heuristic to weigh up all the issues that a voter can consider to decide a vote. This heuristic influences how individuals update their political evaluations (Highton and Kam, 2011), the selection of the voting issues (Clarke, 1992), the perceptions of political performance (Bartels, 2002), or the attribution of responsibilities (Rudolph, 2003a, 2003b; León, 2011). In this regard, partisanship makes voters establish a stronger link between any improvement in their well-being and their party's political action in different ways. First, they are more likely to focus on the outcomes they can give a party credit for. Thus, economic policies that positively affect a partisan voter will be a very important factor in her voting decision. Secondly, a partisan voter will overwhelmingly believe that the incumbent's policies produced improvement in her welfare (Peffley, 1985). Finally, partisanship augments the electoral reaction to these policies. When partisans attribute to their party their economic improvement, it translates into more positive performance evaluations (Abramowitz et al., 1988; Feldman and Zuckerman, 1982).

Thus, I argue that partisanship will be a crucial variable in mediating a positive electoral response to economic benefits. Conversely, swing voters lack this partisan heuristic to make their vote decision. This makes them less predictable in their response, even in the cases when they are benefitted by an incumbent policy.

The second criticism has to do with the definition of the voting function. To measure electoral responsiveness, the literature tends to simply focus on the vote decision. That is, whether a voter decides to vote for party A instead of party B. This approach takes turnout for granted. However, I provided above suggestive evidence that turnout is a crucial feature of the voting decision, particularly for core supporters. It is unlikely that partisans vote for another party in a given election. However, they may not show up to the voting booth. I also exposed that in districts where the incumbent lost, there was normally a decrease in turnout in the core areas. Therefore, examining economic voting by simply looking to party choice is flawed. Instead, it is necessary to address the effect of economic benefits on the voting decision in two stages: first, its impact on turnout, and, second, its impact on the actual vote choice.

In this section, I take these two criticisms into account to evaluate the electoral reaction of core and swing voters to governments' economic policies. This evaluation takes place at the two stages of voting. This allow us to assess the benefits of 1\$ spent on mobilization versus 1\$ spent on persuasion for core and swing voters.

To test their different reactions, ideally we would have a variable measuring whether an individual, objectively, has increased or decreased their reception of benefits from the government. Unfortunately, the presidential year ANES surveys do not provide direct information on the increases or decreases in specific benefits<sup>46</sup>. However, in the 1988,

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<sup>46</sup> The 1982 ANES survey contains questions on whether a member of the Respondent's family has lost benefits in the previous year. However, this survey was undertaken in a mid-term year, and therefore does not contain questions on presidential election voting. In the 1992 survey, the respondents are asked whether during the previous year they have received food-stamps, veteran aid, Medicare, and Medicaid benefits, among other programmes. However, this question does not ask about increases or decreases in the reception. Thus, it does capture whether the policy is perceived as a benefit. In addition, the question was posed during a period of welfare retrenchment. Receiving benefits in retrenchment times should actually have a negative effect on voting for the incumbent, because the cost of withdrawing benefits should be larger than the reward for receiving benefits.

and 2000 surveys, we find a question that asks the extent to which the individual has benefitted from the government's policies. The 1988 question is: "*Have you personally been helped or have you been hurt by the Reagan Administration's economic program?*" The 2000 question is: "*Have you personally been helped or have you been hurt economically by the Clinton Administration, or hasn't it affected you one way or the other?*" The responses are ranged on a 3-point scale (1=hurt; 2= made no difference; 3=helped). These questions, operationalized in the variable *helped*, are the closest approximation of whether the individual has directly benefitted from economic policies of the federal government. They analyse the extent to which the individual has *personally* been helped from governmental action, so they are reasonable proxies of the level of distributive and economic benefits received.

Another advantage of the variable *helped* is that it assesses, with a single variable, the impact of all kinds of benefits. The alternative would be to construct proxies of distributive benefits with survey data that are not based on individual perceptions. However, these proxies would refer to very specific policies received by very specific types of individuals. In addition, making this sort of assumptions increases the risk of omitted variables' biases driving the relation between benefits and vote. Instead, *helped* is a more global measure that can be also used for very diverse types of voters, including high-income individuals that in many cases benefit from distributive policies.

It can be argued that this variable is partially endogenous. As it is a subjective measure, those more likely to vote for the incumbent will be more likely to declare that they have been personally helped by her administration. However this is not a fundamental challenge, for three reasons.

First, the question is posed during a pre-electoral survey, and we are assessing its impact on a post-electoral question. This mitigates the risk that the variable *helped* is a post-vote rationalisation. Secondly, the correlation between having a natural predisposition to vote for the incumbent's party, and feeling benefitted by the government, might be particularly salient in the case of core voters. To avoid this bias, the analyses are run in two different subsamples for core and swing voters. Thus, in each sample, we are comparing individuals of the same type, which should be subject to similar levels of endogeneity. Finally, acknowledging some endogeneity, the variable is still suitable for the main purpose of the analysis. I am interested in evaluating the benefits in the different stages of voting: *turnout* and *vote choice*. In principle, both decisions should be similarly correlated with the variable *helped*, and exposed to a similar endogenous bias. Thus, if the variable shows a stronger effect on any of the stages, we are being able to assess the mechanism by which benefits influence the vote.

Apart from the endogeneity issue, the fact that the variable is only available in two surveys also poses the question of whether they are sufficiently representative. Fiorina (1981) warns about the risks associated with using a limited number of surveys. However, these two elections present similar contexts in very different settings. In both elections, the incumbent party was running with a new candidate who was the former Vice-president, and was arriving at the presidential election with big victory chances, after eight years of popular presidencies that were considered to be successful (particularly by the party bases). Both candidates overwhelmingly won their party primaries, and did not face competition within their ideological wing in the Presidential

Election<sup>47</sup>. These similarities control for any possible omitted bias in favour of the incumbent in any of the two elections. Apart from this, the very divergent features of these two elections make them very representative of different contexts. The predominant feature is that the incumbent supporters we are dealing with are different in each election. In 1988, the Republican partisans are codified as the incumbent's supporters, while in 2000 they are the Democrats. This avoids any bias in the results caused by potentially different 'responsiveness mechanisms' in each group of partisans. In addition, the incumbents were not only different, but the economic contexts were distinguishable. The 1988 elections took place in a period of slow economic growth, while the 2000 elections occurred in a period of economic expansion. In terms of results, the 1988 the elections ended up being a clear victory, where George H. W. Bush carried forty states, while the 2000 election was one of the tightest contests in American history. In addition, the incumbent party won the 1988 election, while in 2000 the incumbent party lost. This gives us confidence that the analyses control many potential biases, so they have strong potential for generalisation.

The main dependent variable is *vote for the incumbent*. This is a dichotomic variable that takes a value of one, if the individual votes for the incumbent, and zero otherwise (non-voters and other-party-voters). This variable measures the basic behaviour that the incumbent party is interested in observing (an actual vote), by taking into account all potential voters, including abstainers.

This behaviour can be further decomposed into two variables that allow us to track the effect of benefits in the different stages of the vote decision. *Turnout* is operationalized

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<sup>47</sup> In 1988, the third most voted candidate was Ron Paul with a 0.47% vote share. In 2000, although the votes that finally went to Ralph Nader were decisive, these only represented 2.74% of the total; far from, for instance, the 18.91% that Ross Perot achieved eight years earlier.

as one when the individual reports having voted in the presidential election, and zero if not. This is a necessary, but not sufficient, condition to vote for the incumbent. Secondly, *vote choice*, has value one when the individual has voted for the incumbent, and zero when she has voted for any other party. This variable is coded as missing for those who have not turned out. This allows us to test the effect of *helped* on the actual vote choice, taking turnout as given (that is, once the voter has effectively been mobilised).

The first set of analyses comprises logit regressions with robust standard errors on the three dependent variables. The model is first regressed on *vote for the incumbent*, testing whether the effect of *helped* is positive and significant on the final probability to vote for the incumbent. In the two subsequent models, the analysis is broken down to the two stages of voting. This allows us to observe the effect of *helped* (which was aggregated in the previous model) over the two stages of the voting process: first *on turnout*, and, then, on *vote choice*. These three models are run in the subsamples of incumbent's partisans and swing voters to see the differential effect in the electoral behaviour of each group in response to economic benefit.

A possible objection to this procedure is that the vote decision is composed of two interdependent decisions that we cannot separate into two independent regressions. The decision on whom to vote for (the *vote choice* model) is related to the decision on whether to vote or not (the *turnout* model). Hence, if we run a logit model simply on *vote choice*, we are not considering the effect that the variables would have had for individuals who are not in the sample, simply because they did not turn out. This implies a potential selection bias problem, theorised by Heckman (1979). Thus, I also estimate jointly the two stages of the voting decision (*turnout* and *vote choice*) in a second set of analyses. This corrects for the selection bias in the *vote choice* sample

with a so-called heckman probit model. This estimation allows the covariates to have a direct effect on each dependent variable and an indirect effect on vote choice by increasing the probability of turnout (Lemke and Reed, 2001). In the model's terms, the decision on *vote choice* is constrained by the decision on turnout, being both jointly estimated. This takes into account the fact that certain observations of the total sample are censored and do not enter the second sub-sample (voters).

As controls, I have incorporated some socioeconomic variables that can affect both/either *vote choice* and *turnout*. *Female* is included, given that women vote more frequently for the incumbent (De La Calle et al., 2010), and participate less (Gallego, 2007). Similarly, I introduced the *age* and the *age squared*, to control for whether young people participate less, and/or are more critical with the incumbent, (acknowledging the possibility that the effect is non-linear)<sup>48</sup>.

A basic control for *vote choice* is the *individual economic improvement* in the last year<sup>49</sup> (with five categories that range from 1=much worse to 5=much better). This is a measure of individual economic voting, that controls for general improvements in individual well-being that are not necessarily due to the political action of the federal government. This allows us to separate the effects of the Presidential Administration's economic policies from the general 'well-being' improvements due to other reasons. A second relevant control is a dummy with value one if the respondent *approves strongly* the incumbent's presidency. This variable has two goals. It allows us to distinguish,

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<sup>48</sup> As the analyses are run on a subsample of voters, other socioeconomic controls are not necessary. Moreover, the dependent variable is *vote for the Republican Party in 1988*, and *vote for the Democratic Party in 2000*. This makes many of the usual control variables redundant. Those can have a positive effect on voting Democrat would have a negative effect on voting Republican. Being the dependent variable defined as voting for the incumbent party, their effects should cancel out.

<sup>49</sup> The exact wording of the question is: "*Would you say that you and your family are better off or worse off financially than you were a year ago?*"

within each electoral group, those voters who have a higher propensity to vote for the incumbent. Second, it also serves as sociotropic assessment. Sociotropic voting can be used as a rationalisation of partisanship (Weatherford, 1983)<sup>50</sup>. In fact, Evans and Andersen (2006) show that the relation between partisanship and sociotropic evaluations is much stronger than between partisanship and egotropic assessments. Thus, this variable should pick up the effect of different intensities of partisanship not captured with the sample division, and that may mould the effect of *helped*. Finally, to control for any remaining differences in partisans and swing voters between surveys, I include the dummy *year 1988* for those year's observations.

There are other controls that are not expected to have an influence on *vote choice*, but should have an effect on the probability of *turnout*. *Differences* controls for whether the voter feels that the Democratic and the Republican parties stand for different things. It is expected that those who do not find meaningful differences between the main two parties, would have less incentives to turn out. The variable *close* takes the value of one if the respondent predicted in the pre-electoral survey that the presidential election result will be close. This variable should capture additional electoral incentives to turn out. Even though the *ex-ante* likelihood of changing the election outcome is still negligible in close elections, research has shown that the perceived tightness of the result matters for mobilisation (Fiorina, 1976). *Education* is a classic control for analyses on turnout, as it has been widely reported that highly educated citizens vote more (Verba et al., 1995; Miller and Shanks, 1996; Gallego, 2007). The ANES question on educational attainment has ten categories and it is introduced as a continuous variable.

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<sup>50</sup> However, Kinder and Kiewiet (1981) did not find any evidence of this.

As said, I first run a logit model with robust standard errors on *vote for the incumbent*, which is further decomposed in *turnout* and *vote choice*. Table 3.12 shows the results for the core supporters of the incumbent party, and Table 3.13 the estimations for swing voters. Secondly, Table 3.14 contains the two-stage-heckman-probit estimations with robust standard errors, in which I allow *vote choice* to be influenced indirectly by the *turnout* equation. The table displays the results of this analysis for both subsamples. Reassuringly, both types of models yield similar results, with similar levels of confidence and coefficient magnitudes.

**Table 3.12. Voting Models for Incumbent's Core Supporters**

VARIABLES	<i>Observed Behaviour</i>	<i>Decomposition into Two Stages</i>	
	(1) <i>Vote for the incumbent</i> (1= Vote incumbent; 0= Vote other party, no turnout)	(2) <i>Vote Choice</i> (1= Vote incumbent; 0= Vote other party)	(3) <i>Turnout</i> (1= Turnout; 0= No turnout)
<i>helped</i>	<b>0.667***</b> (0.183)	<b>0.972***</b> (0.307)	<b>0.401**</b> (0.1855)
<i>female</i>	-0.189 (0.217)	-0.597 (0.394)	-0.0323 (0.239)
<i>age</i>	0.0787** (0.0341)	0.0872 (0.0591)	0.0623* (0.0373)
<i>age squared</i>	-0.000459 (0.000338)	-0.000785 (0.000563)	-0.000214 (0.000381)
<i>approve president</i>	-0.110 (0.115)	-0.227 (0.213)	0.528** (0.233)
<i>pers. econ. improvement</i>	0.868*** (0.206)	1.464*** (0.380)	-0.0636 (0.125)
<i>differences</i>	0.555** (0.235)	0.706* (0.387)	0.329 (0.254)
<i>year 1988</i>	0.435* (0.240)	-0.398 (0.402)	0.690*** (0.264)
<i>close election</i>	0.276 (0.254)		0.335 (0.287)
<i>education</i>	0.395*** (0.0779)		0.567*** (0.0925)
<i>constant</i>	-4.729*** (1.195)	0.00320 (1.917)	-4.709*** (1.249)
R2	0.164	0.171	0.167
Observations	648	577	655

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The main result is that *helped* has a positive significant effect on the total probability of *vote for the incumbent* both for core and swing voters (column 1 of Tables 3.12 and 3.13). This implies that parties can potentially use distributive benefits strategically with both electoral groups. Increases in the economic benefits to both core and swing voters significantly increase the likelihood that they vote for the party that provides them.

**Table 3.13. Voting Models for Swing Voters**

VARIABLES	<i>Observed Behaviour</i>	<i>Decomposition into Two Stages</i>	
	<i>Vote for the incumbent</i> (1= Vote incumbent; 0= Vote other party, no turnout)	<i>Vote Choice</i> (1= Vote incumbent; 0= Vote other party)	<i>Turnout</i> (1= Turnout; 0= No turnout)
<i>Helped</i>	<b>0.395*</b> (0.209)	<b>0.557**</b> (0.218)	<b>0.122</b> (0.206)
<i>Female</i>	0.582** (0.268)	0.668** (0.283)	-0.0252 (0.241)
<i>Age</i>	0.0766* (0.0461)	0.0169 (0.0527)	0.109** (0.0474)
<i>age squared</i>	-0.000419 (0.000447)	-2.56e-05 (0.000522)	-0.000643 (0.000505)
<i>approve president</i>	0.367*** (0.128)	0.943*** (0.301)	0.487 (0.311)
<i>pers. econ. improvement</i>	0.902*** (0.275)	0.399*** (0.146)	-0.0325 (0.128)
<i>Differences</i>	0.143 (0.259)	-0.145 (0.288)	0.624*** (0.242)
<i>year 1988</i>	1.245*** (0.347)	0.887*** (0.304)	0.559* (0.297)
<i>close election</i>	0.318 (0.330)		0.770** (0.330)
<i>Education</i>	0.304*** (0.0792)		0.802*** (0.112)
<i>Constant</i>	-9.459*** (1.732)	-5.356*** (1.586)	-7.501*** (1.445)
R2	0.147	0.119	0.276
Observations	409	257	414

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 3.14. Jointly-Estimated Voting Models: Heckman-Probit Estimations**

VARIABLES	Incumbent's Core Supporters		Swing Voters	
	(1) <i>Vote Choice</i>	(2) <i>Turnout</i>	(3) <i>Vote Choice</i>	(4) <i>Turnout</i>
<i>Helped</i>	<b>0.462***</b> (0.173)	<b>0.244**</b> (0.111)	<b>0.329**</b> (0.142)	<b>0.0853</b> (0.122)
<i>Female</i>	-0.325* (0.196)	0.000393 (0.132)	0.422** (0.183)	-0.0194 (0.143)
<i>Age</i>	0.0437 (0.0311)	0.0368* (0.0203)	-0.00113 (0.0364)	0.0651** (0.0259)
<i>age squared</i>	-0.000403 (0.000289)	-0.000145 (0.000203)	0.000106 (0.000353)	-0.000398 (0.000273)
<i>approve president</i>	0.712*** (0.194)	0.307** (0.132)	0.553*** (0.191)	0.274 (0.176)
<i>pers. econ. improvement</i>	-0.120 (0.104)	-0.0432 (0.0704)	0.286*** (0.0971)	-0.0185 (0.0740)
<i>differences</i>	0.358 (0.232)	0.223 (0.144)	-0.164 (0.193)	0.395*** (0.144)
<i>year 1988</i>	-0.104 (0.207)	0.383** (0.149)	0.734*** (0.205)	0.299* (0.171)
<i>Close election</i>		0.204 (0.158)		0.460** (0.191)
<i>Education</i>		0.300*** (0.0495)		0.457*** (0.0589)
<i>Constant</i>	0.271 (1.113)	-2.648*** (0.724)	-3.377*** (1.119)	-4.396*** (0.826)
Observations	662	662	416	416

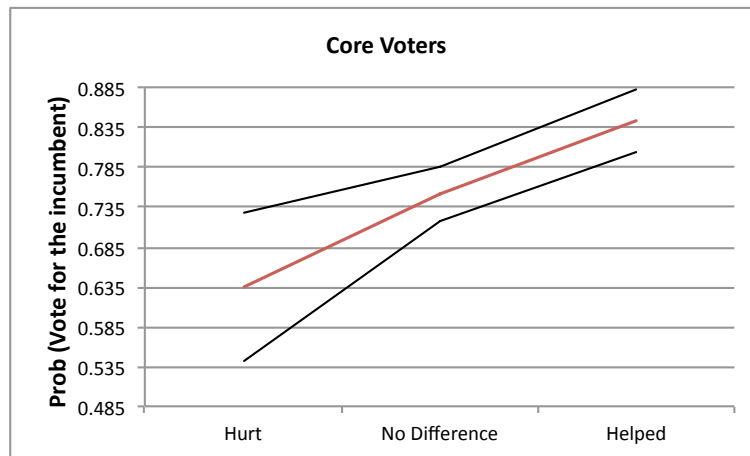
Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Figures 3.9 and 3.10 plot the predicted probabilities for different values of *helped*<sup>51</sup>. Although the slope is positive both for core and swing voters, two differences attract attention. First, the confidence intervals of the predictions are much narrower for core voters than swing voters. This is suggestive evidence validating Cox and McCubbins' (1986) claim that core voters provide a reliable response to their party. This means that risk-averse politicians who want to maximise the efficiency of their distributive policies have incentives to focus on them rather than swing voters. Core voters provide less uncertain electoral responses. Their partisan bias establishes a link between incumbent's policies and their increase in welfare.

<sup>51</sup> These probabilities are calculated from model 1 of Tables 3.12 and 3.13. The predicted probabilities from the heckman-probit models are virtually similar.

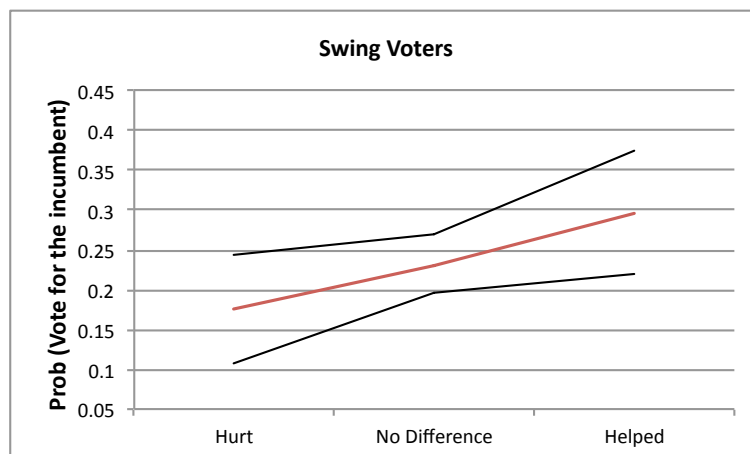
The second point to make is that apart from the certainty, the expected total effect of *helped* on *vote for the incumbent* is clearly larger for core voters. A transition from being hurt by the economic policies of the federal government to feeling helped increases the probability of a *vote for the incumbent* from 0.636 to 0.844. This, apart from being significant, is a very strong effect, as the probability increases by 0.208. This is larger than the 0.121 push on swing voters, for whom the same transition in *helped* increases the final probability to vote for the incumbent from 0.175 to 0.296.

**Figure 3.9. Core Voters' Predicted Probabilities to Vote for the Incumbent**



Simulation Column 1, Table 3.12 (95% Confidence Interval)

**Figure 3.10. Swing Voters' Predicted Probabilities to Vote for the Incumbent**



Simulation Column 1, Table 3.13 (95% Confidence Interval)

Thus, core voter distribution is electorally more productive and is a coherent strategy with an office-seeking behaviour. A unit of public spending invested in core voters yields a greater electoral marginal reward than when it is invested in swing voters. If parties want to win the vote of swing voters, they might need to rely on other strategies. In fact, the previous tables show that, for instance, the coefficient of presidential approval is stronger and significant to explain the swing voters' vote. This might indicate that swing voters vote more in accordance to general performance evaluations. However, if parties want to use economic benefits to win elections, core voters provide a stronger response.

This could be surprising as core supporters are committed to a party and, unlike swing voters (who do not have any affective attachments with any party), they face emotional costs to switch their vote to another party. However, these predicted probabilities are calculated on the final observed behaviour (casting a vote for the incumbent or not). To understand why the net effect is stronger, columns 2 and 3 of Tables 3.12 and 3.13 decompose the effect of *helped on vote for the incumbent* into the two voting stages.

Once we divide the vote decision into two steps, we can appreciate the different mechanisms that mediate the electoral response of core and swing voters to incumbents' economic policies. Regarding *vote choice*, *helped* is positive and highly significant for both types of voters. This implies that incumbents can use economic policies to persuade both types of voters. However, once we calculate predicted probabilities, we corroborate the fact that the magnitude of the effect is greater for swing voters. That is, swing voters are more likely than core supporters to change their vote from party A to party B if the latter targets benefits to them. The persuasion effect is, as expected, stronger for swing voters.

On the other hand, while *helped* has a positive and significant effect to mobilise core voters, it has no significant impact on swing voter mobilisation. This implies that parties can use economic benefits to increase the likelihood of core voters' electoral turnout, but these benefits do not have turnout buying effects on swing voters.

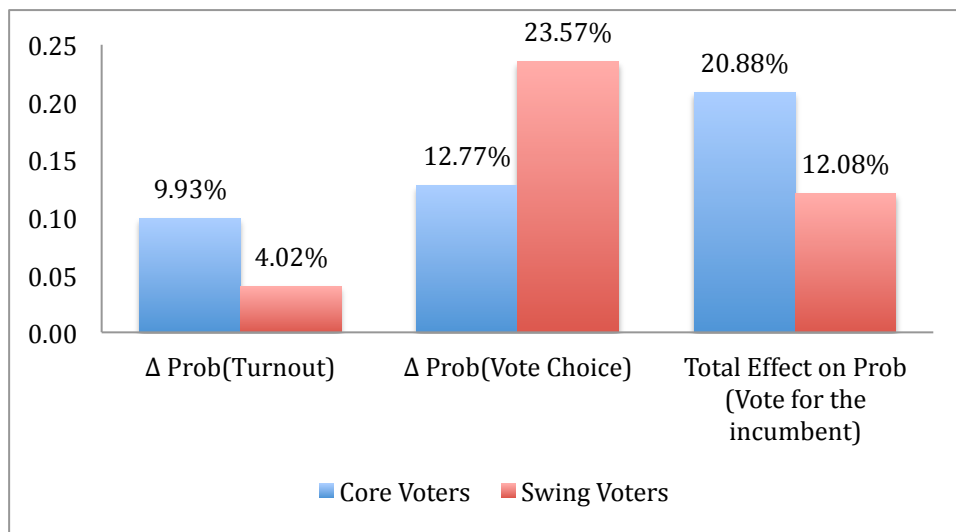
Figure 3.11 illustrates the decomposition of the total effect on *vote for the incumbent*. It shows the total impact on *vote for the incumbent* of a transition from being *hurt* by the economic policies of the federal government to being *helped*. This increase in the final probability of voting for the incumbent is decomposed in, first, the effect of *helped* on *turnout*, and, once having turned out, the increases in *vote choice*. Figure 3.11 shows that for core voters, the two effects are meaningful. First, the changes in the variable *helped* generates an almost 10% increase in probability of turning out. This is more than twice as much the effect for swing voters, who only increase their probability of turnout in a 4% (and it is not significant). Second, we see that the effect on *vote choice* for core voters is a 12.77%, which is a relevant variation. In the case of swing voters, the effect is larger, increasing in a 23.57% the probability of voting for the incumbent, taking turnout as given.

The interesting result is that, adding both effects up, the net effect on the final vote is higher for core voters than for swing voters. Increases in turnout have a multiplicative effect with core supporters. They are already very predisposed to vote for their party (and I showed above that they do so in rates over 90%), so their mobilisation yields very high electoral benefits. An increase, for instance, of 5% in the probability of turnout of core supporters translates into basically the same increase in votes of that group. Conversely, swing voters do not significantly increase their likelihood of turning out to vote due to benefits. Still, even if swing voters could be mobilised with distributive

policies, a similar increase in turnout would yield lower returns, as their likelihood of voting for the incumbent is lower.

This implies that politicians can use their economic policies to win elections, but these policies yield different outcomes depending on the type of voters. Stokes (2005) argues that parties can use economic policies to persuade swing voters. This is reflected in the results, which show that, although core voters can be persuaded with benefits, the effect is larger for swing voters. However, the results show also a much greater effect on core voter mobilisation, which does not exist for swing voters. Altogether, distributive policies to core supporters provides higher electoral returns.

**Figure 3.11. Decomposition of Increase in Probability to Vote for the Incumbent**



Linking these results with previous evidence, we can draw conclusions on the kind of strategies parties will follow and their electoral impact. Table 3.9 showed that in battleground states there are more core voters than swing voters. Thus, these results imply that, to win in swing states, parties should have particularly strong incentives to use economic benefits targeted to their core voters in that state, instead of the swing voters. As I have just shown, these policies yield greater and more certain electoral

rewards when they benefit core voters. In addition, in states where votes are more valuable, parties can mobilise a larger share of voters by favouring their core voters.

These results challenge two common assumptions. The first is that swing voters are not the ultrasensitive voters depicted in the literature. Although we do find an effect of economic benefits on swing voters' vote, this is not dramatic. Moreover, it is only partial. Swing voters only respond to economic policies by changing their vote, but not by turning out to vote more. However, the descriptive evidence in Section 3.3 showed that there is room for swing voter mobilisation. Thus, this has to be explained by other mechanisms. Governments can only use their economic and distributive policies to - once a swing voter is going to show up to the voting booth - persuade her to choose the incumbent's party ballot.

The second conclusion is that, contrary to Stokes' (2005) claim, a dollar spent on core voters is *not* a wasted dollar. Many of the arguments made in favour of core voter distribution state that politicians distribute to their supporters because of a group-serving bias. In this view politicians represent social groups and therefore devote part of their time in power in office to favour them. The results presented here show that, conversely, the incentives to distribute to core supporters are self-interested. Parties have incentives to distribute to their supporters because this is an office-maximising strategy.

### 3.6. Conclusions

This chapter has analysed the foundations of distribution at the individual level. It has been argued that, to maximise efficiency in their distributive policies, parties have to evaluate the targetability and responsiveness of the electoral groups. I have explored these two conditions for swing voters and incumbent's core supporters. There are two main results.

First, swing voters are less targetable than core supporters. Swing voters neither have cohesive preferences, nor present distinguishable traits as a group nor salient patterns of geographic distribution. This finding has relevant implications. It could be that under certain conditions parties would have an interest in representing swing voters, and trying to favour them with distributive strategies. The problem that arises is that they might not find suitable policies to do it. The formal models on distribution assume that politicians can perfectly discriminate among voters and choose to whom to distribute. However, swing voters are a heterogeneous category that comprises many different types of voters with potentially contradictory interests. This makes it more difficult for parties to find a policy that exclusively targets swing voters.

These worse targetability conditions add up to the second condition of distribution: namely that swing voters are less electorally responsive to economic benefits in contrast with the core voter. Swing voters do react to economic policies by increasing the likelihood of switching their vote. However, once we take the effects of turnout into account, the net effects are stronger for core voters. Core voters are already predisposed to one party, so benefits are less relevant to persuade them. However, they can be (de)mobilised. If they feel personally benefitted by the policies of their party's President, they respond strongly by reaffirming their vote. Conversely, if they feel hurt

by the economic policies, they may not punish with a vote-switch, but they might decrease their probability of showing up on Election Day. This turnout effect is important in understanding the incentives of governments, as it has a multiplicative effect. Unlike swing voters, whose vote is less predictable, a candidate can reasonably expect that their supporters will vote for her, if she is able to get them to the polls. Thus, the mobilisation of a core supporter is a safer and profitable bet.

In conclusion, core supporters provide better conditions for distribution, because they are both more targetable and more responsive. These are the foundations to explain the distributive strategies of politicians that are analysed in the following chapter.

# CHAPTER 4: WHO GETS DISTRIBUTIVE POLICIES?

## 4.1. Introduction

The previous chapter has shown that core supporters provide better conditions for distribution. This chapter tests the partisan side of the argument. If core voters provide better distributive conditions, do parties respond by targeting them more distributive policies? The question about to whom parties target their distributive policies has received much attention in the theoretical and empirical research. As exposed above, a large body of research stemming from Cox and McCubbins's (1986) model has argued that politicians will be interested in targeting distributive policies to their core supporters, while the literature based on Lindbeck and Weibull's (1987) has argued that parties will concentrate their distributive policies on swing voters.

The empirical evidence testing these models is inconclusive. My claim is that the inconclusiveness of the empirical results has also to do with a misspecification of the unit of analysis. Much of the empirical research has studied the 'swing' hypothesis by exploring just whether parties target swing districts. This literature has underscored the incentives to skew local transfers to the districts where election outcomes are decided. However, this literature confuses swing districts with swing voters. This has important implications. The incentives to target one particular district are caused by the electoral system, while the incentives to target certain voters are caused by the individual

distributive conditions enounced in the previous chapter. In addition, districts are sufficiently big so they allow parties to target the most productive voters in it. Hence, to account for the distributive strategies, we have to distinguish the district level from the study of which groups of voters- core or swing supporters- are the actual recipients of benefits. In this chapter, I overcome these insufficiencies with a twofold analysis. First, I will provide a cross-country analysis of the use of public sector compensations as a distributive instrument. Then, I will test the theoretical framework of the dissertation making a comprehensive analysis of distributive policies in the United States.

## **4.2. Districts, Voters, and Distributive Policies**

The study of distributive politics has mainly revolved around the development and implications of two founding models: Cox and McCubbins' (1986), and Lindbeck and Weibull's (1987). Both models are theories based on direct voter distribution. They model voters' electoral reactions and assume that parties can perfectly target voters as if benefits were private goods, and that parties compete in just one district. This allows them to theorise – keeping all contextual conditions constant- which voters a politician is most interested in. In Cox and McCubbins' (1986) words, the question gets reduced to *“who would receive a transfer if an incumbent had only one dollar to distribute.”*

However, as I developed in the chapter 1, the majority of the empirical studies do not account for benefits that go directly to voters, despite the individual level approach of the models. The majority of cross national research refers to intergovernmental grants or other kinds of transfers that reach quite aggregated areas of a country, such as the state, the region or the district. Thus, they are no adequate tests of the Cox-McCubbins, and Lindbeck-Weibull models as they do not completely capture *‘who gets what’*. This

mismatch, underscored by Cox (2010), has important implications. Testing distributive models by accounting for which districts get more benefits, assumes that swing and core districts are predominantly composed of the same type of voters. Chapter 3 showed that this is not necessarily the case. This assumption does not allow us to observe the whole strategic logic of distributive policies. In fact, it falls into an ecological fallacy by accounting for *which districts* attract more transfers, and inferring *which voters* benefit from them.

Therefore, a full test of distributive politics' models requires analysing specifically *which groups* of voters are targeted, and separating this question from the strategy of *which districts* receive more benefits. This differentiation is very relevant if, in addition, we think that there might be two overlapping strategies operating distinctively at the district and at the voters' level. Parties might have an interest in certain voters, while some institutions, like the electoral system might give at the same incentives to spend in certain areas.

There is scarce empirical research directly testing which voters get distributive goods, but it generally confirms this central hypothesis. Stokes (2005) examines the allocation of benefits directly to individual voters. She depicts core voters as unconditional voters, and therefore predicts that benefits will flow to swing voters. Dunning and Stokes (2008), in a similar vein, test the allocation of clientelistic benefits from party machines. Although they predict that what they call "*weakly opposed voters*" should get more, the truth is that both articles find no evidence of a pure swing voter strategy and, furthermore, their findings seem to imply that parties try to target 'weak partisans'. That is, demobilised core voters who are not guaranteed to turn out on voting day. This finding is confirmed in Stokes et al. (2011).

While Dunning and Stokes focus on the mobilisation effects, Calvo and Murillo (2009) provide a different logic of core supporters' distribution. They study the provision of individual benefits in Argentina and show that parties distribute to core voters when they have powerful machine networks that allow them to efficiently distribute to them. This would imply that core supporters get more not only because parties need to mobilise them, but also, as Dixit and Londregan (1996) suggested, because politicians find it easier direct distributive policies to them. Core supporters tend to have more cohesive interests that make them more targetable.

These studies point to the two individual level microfoundations tested in the previous chapter, but they focus on clientelistic settings, where parties can enforce an exchange of private goods for votes. Adopting a similar approach to the case study of this chapter, Ansolabehere and Snyder (2006) and Berry (2010) provide empirical evidence that the best strategy of state-level politicians and the presidential administration is to disproportionately transfer more resources to narrow core support areas. Ansolabehere and Snyder's (2006) results also show that an increase in transfers had an effect on turnout, confirming the importance of distributive benefits as turnout buying devices (Nichter, 2008).

Building on this research, the argument of this chapter is that distributive benefits are targeted to core voters. I provide a twofold empirical test. First, I provide an introductory cross-national analysis of 28 countries, studying the increases in the volume of compensation to government's employees. By accounting for the extent to which incumbents' core constituencies are formed of public sector workers, I analyse whether governments use compensations to their employees as a core voter distribution strategy.

In a second analysis, I provide an in-depth evaluation of distributive strategies of legislators of the US House of Representatives. This allows us to overcome the misspecifications mentioned above and separate the effects of the electoral system from the incentives provided by the individual characteristics of voters. I examine federal grants and direct cash payments at the district- and county-level between 2001 and 2009, exploring whether political representatives target core or swing districts and core or swing counties within those districts. Thus, this chapter takes the standard approach in the literature a step further by focusing on more disaggregated data and drawing on a sample of more than 22,000 observations. With this approach, I can test more precisely hypotheses on distributive politics, accounting not only for *which districts* get more targeted expenditure, but also *which voters within those districts* are favoured. This will give a clearer picture of the political logic driving distributive policies.

### **4.3. Public Sector Compensations as Distributive Benefits: a Cross-Country Analysis**

#### ***4.3.1. A Comparative Test of Distributive Benefits***

This section provides the first comparative analysis of the main claim of this dissertation: that parties target their spending strategies at their core voters. In order to achieve this, I focus on a particular policy - the salaries of government employees - and explore the differences across countries on whether parties use them as a distributive instrument that is biased towards core voters.

As said, there have been few attempts at directly testing the core/swing theories from a cross-country perspective. Most studies rely on aggregate measures at the district/region level. There are good reasons for this. To test the political use of distributive benefits

comparatively, we need two types of information and data. In first place, we need a comparable measure, across countries, of how much benefit a certain and defined electoral group receive. These kinds of distributive policy measures are rarely available in a comparative format (Franzese and Nooruddin, 2004). Distributive programmes refer to policies targeted to selective and non-encompassing groups, and are normally diluted in the main spending figures that are normally available for comparative research. This is why the literature relies on the level of transfers to broad areas (such as districts), and makes inferences on the types of voters targeted. However, I have shown in previous sections that this is an erroneous approach.

In second place, it is even more complicated to obtain accurate and comparative measures of the characteristics of parties' core constituencies. Although we can use indirect and secondary evidence to have an idea of the characteristics of the main political parties' core constituencies, a comparative variable measuring this accurately across countries is normally unavailable.

In this first empirical test, I overcome these two challenges by using 'increases in public workers' compensation' as a proxy for distributive efforts. This allows me to make a comparative analysis of 28 countries and test whether parties use public workers' benefits as a core voter distributive instrument.

I have argued that distributive policies need to be non-encompassing, selective, and variable over time. The use of public sector compensation fulfils these criteria. They are *non-encompassing*, as they only affect a specific and narrow group of workers. It is also a *selective* policy, as parties know, with accuracy and *a priori*, the voters who will benefit from it, and those who are excluded. Finally, by focusing on the annual changes, public workers' compensation is also a *temporally flexible* policy subject to partisan

manipulation. While the total amount of compensation to governments' employees is sticky over time, parties are able to target voters with the annual update of salaries and other compensations. Governments cannot, from one day to the other, dramatically reduce the size of their administration. As I said above, governments face great electoral costs if they reduce some of the services that are already being provided. These costs have to do with, for example, the industrial actions by unions and electoral punishments for the reduction of government services, which are particularly visible to voters. Therefore, focusing on the total sum of salaries or the number of public employees would not be a useful distributive policy measure. However, governments do have room for manoeuvre with regards to increases in employees' compensations. Governments can increase salaries over the level of inflation as a distributive benefit to its workers. On the other hand, if governments need to reduce spending, they can either freeze or increase civil servants' pay below the level of inflation. It is expected that, depending on its electoral implications, parties will use more or less intensely the public sector pay as a distributive instrument.

In addition to its fit into the distributive policies concept, public sector wages are also a particularly useful measure for comparative analysis. First, it is a measure of the remunerations that a specific group of voters receives, overcoming the problem of finding a comparable measure that directly accounts for benefits at voter level (and not to big areas). Secondly, it is a comparable measure, as all countries have a body of workers providing its services.

There is a wealth of research that considers public sector employment as a distributive tool. This literature mainly focuses on patronage and the exchange of public sector jobs for votes (see, for instance, Baldwin, 2005, among many others). However, the creation of public sector jobs is a distributive instrument predominantly available in developing

countries, where the civil service is not professionalised and access to it is not based on meritocratic criteria. In developed countries, parties need to use indirect means to target voters. In this regard, public sector workers share an exclusive trait that allows parties to selectively distribute to them.

The consideration of public sector salaries as a distributive instrument is not new. There is much evidence that public sector workers are overpaid compared to comparable workers in the private sector (Smith, 1976; 1977; Quinn, 1979; Bellante and Long, 1981). There is less evidence, however, exploring the differential use of public sector salaries by political parties. Treisman (2003) argues that Menem, in Argentina, and Cardoso, in Brazil, used public sector salaries as a distributive instrument. Other authors try to disentangle a similar relation (Moore, 1997; Ujhelyi and Calvo, 2011). I deepen these analyses by tracing a relation between salaries to public workers and their partisanship, and test whether governments are particularly interested in raising them when public workers are part of its constituency.

### **4.3.2. Data and Method**

#### **4.3.2.1. Dependent variable**

The dependent variable requires the operationalization of the use of wages and benefits to public workers as a distributive instrument. To calculate this, I use the World Development Indicators' (World Bank, 2011) *compensation of employees*' variable. The compensation of employees includes all payments made by the government "*in cash, as well as in kind (such as food and housing), to employees in return for services rendered, and government contributions to social insurance schemes such as social security and pensions that provide benefits to employees*". The variable is measured as a percentage of total government expenditure. Thus, it controls for the total amount of services

provided by the government, and measures the relative weight that governments place on the compensation of public sector workers in their budget. As I am interested in the political use that governments make of these remunerations, I run econometric models that capture the annual variation in the total volume of compensations.

#### **4.3.3.2. Main independent variable**

To test whether governments target core voters with public wages, we need a measure of the presence of civil servants within the government's constituency. Measuring this with a high level of accuracy is a difficult task. We need to rely on indirect proxies that build on comparable survey data. In this regard, the Comparative Study of Electoral Systems (CSES) surveys are a good instrument for this. This dataset contains a set of common post-election survey questions from more than 30 countries, and is therefore particularly useful for this analysis. When respondents are asked about their main occupation, they are also questioned about their specific type of employment (public, private, mixed, or self employed). All respondents that answer that their employment is public I categorize as 'public workers'.

In the CSES surveys, respondents are also asked to name the party they feel closest to, if there one, and the party to which they have voted. Relying on these questions, I construct two measures of public workers within parties' constituencies. First, I calculate the share of public workers among the respondents that feel closest to the party that holds the incumbency<sup>52</sup>. Secondly, I calculate the share of public workers among

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<sup>52</sup> Although in the previous chapter, I mentioned some of the problems of simply using the identification question, the surveys do not contain further questions that allow building more specific and accurate measures of partisanship. Still, the identification question is a valid proxy for a preliminary comparative analysis.

those responding that they voted for the incumbent in the previous election. These two measures give us an account of the extent to which the incumbent's core constituency is formed by civil servants.

For presidential countries and France, I use the President's party to calculate the share of public workers within the incumbent's core constituency. When various parties form part of a coalition government, I use the prime minister's party. There is evidence showing that, when the government is a coalition, the responsibility attribution for the government action and the electoral accountability is mainly concentrated on the prime minister's party (Urquizu-Sancho, 2009). Thus, it is expected that the party holding the incumbency will predominantly be made responsible for distributive benefits.

To avoid misspecifications in the models and the relation between constituencies and compensations, I have only included those observations when a party holds the incumbency for more than half a year. If, for instance, a new party took over the incumbency after July 1st, the government is included in the data set from the second year on.

#### **4.3.3.3 Control Variables**

As control variables, I include a set of economic variables that can explain the variation in public sector's wages. Periods of higher *inflation* (measured with the GDP deflator) are assumed to correlate with reductions in the relative size of public sector wages in the government's budget. On the other hand, if there is *growth in GDP*, then that should be reflected in an increase in public sector pay. The *Ln GDP per capita* captures whether richer countries are more or less likely to pay more to their civil servants.

There is a trade-off between the size of the administration and the remuneration of its workers. When a government decides to enlarge the public sector, it will be less likely to increase the salaries of the workers who are already a part of it. Thus, the larger the *size of the government* (measured as a percentage of GDP), the lower the relative volume of employees' compensations. Likewise, countries that rely heavily on *trade* - measured as the sum of exports and imports as a GDP percentage- may have incentives to increase public sector wages as an insurance instrument (Rodrik, 2000). Finally, the level of *debt interest payments* (as a percentage of total government expenditure) and a higher *unemployment* level should constrain the financial capacity of governments to increase public sector wages. All these variables are taken from the *World Development Indicators* (World Bank, 2011). I also include a dummy of *left governments*, which has value 1 when the prime minister's party is leftist. This variable captures whether left parties are more responsive to the salary demands of civil servants and their unions.

#### **4.3.3.4. Econometric Specification**

The previous variables yield an unbalanced panel for 28 countries, with an average time span of 5.64 years for each country (ranging from the two observations for Austria to the eleven observations for Germany, Spain, and Korea)<sup>53</sup>. The analyses with

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<sup>53</sup> More specifically, the sample used in these analyses is: Australia (2005-2009), Austria (1997, 2009), Belgium (2003-2007), Brazil (2003-2006), Bulgaria (2001-2005), Canada (1997-2000, 2004-2006), Croatia (2008-2010), Czech Republic (1997, 2003-2010), Denmark (1998-2003), Finland (2003-2008), France (2007-2009), Germany (1999-2009), Hungary (1999-2006), Iceland (1999-2010), Ireland (2002-2009), Israel (2003-2009), Italy (2006-2008), Korea (2000-2010), Netherlands (1998-2005), New Zealand (2003-2005), Norway (2001-2009), Peru (2006-2009), Poland (2002-2009), Portugal (2002-2009), Romania (2005-2008), Slovenia (1997-2000, 2005-2008), Spain (1997-2007), United Kingdom (1997-2001, 2005-2009), United States (2005-2008).

*Government Employees within Voters* as a main independent variable<sup>54</sup> draw on 26 countries, as there is no data for Iceland and Romania.

It is important to note that the dependent variable is measured as a first difference. This has implications for the econometric models and their specifications. First, I use an Arellano-Bond model. As the model is subject to dynamic data biases, this specification requires taking first differences in the dependent and independent variables and includes a lagged dependent variable, which is used as an instrument. Thus, the model accounts for within-country variation, which is consistent with the previous discussion on the dependent variable. Arellano-Bond estimations are particularly useful for panel data covering short time periods (Arellano and Bond, 1991). In second place, I use a time-series-cross sectional error correction model, where the dependent variable is explicitly modelled as first-difference, and all independent variables are included both in their first difference and lagged values: the former accounting for the short-term effects, and the latter for the long-term effects of the variables.

### **4.3.3. Results**

Table 4.1 displays the results of the Arellano-Bond models, and Table 4.2 the results of the error correction models. The results are reassuringly similar. The level of inflation and the total size of government have a negative effect on the compensation of government employees. Table 4.2 shows that these effects are mainly short-term impacts. Annual increases in inflation have a negative impact on annual increases in

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<sup>54</sup> The sample with this variable is: Australia (2005-2009), Austria (1997, 2009), Belgium (2003-2007), Brazil (2003-2006), Bulgaria (2001-2005), Canada (1997-2000, 2004-2006), Croatia (2008-2010), Czech Republic (1997, 2003-2010), Denmark (1998-2003), Finland (2003-2008), France (2007-2009), Germany (1999-2009), Hungary (1999-2006), Ireland (2002-2009), Israel (2003-2009), Korea (2000-2010), Mexico (2000), Netherlands (1998-2005), New Zealand (2003-2005), Norway (2001-2009), Peru (2006-2009), Poland (2006-2009), Portugal (2002-2009), Slovenia (1997-2000, 2005-2008), Spain (1997-2007), United Kingdom (1997-2001, 2005-2009), United States (2005-2008).

public sector salaries. A similar negative short-term effect is caused by the size of the government. Those countries that expand their government, presumably to provide new services, decrease the relative importance of employees' remunerations in their total budget. Table 4.2 also shows that there is an additional negative short-term impact of trade exposure on the volume of compensations to government's employees, which was not captured in the Arellano-Bond models. This should indicate that increases in openness reduce, not only the total level of public spending- as the globalisation hypothesis expects (Tanzi, 2002)-, but also the relative importance of public sector workers within the total government budget.

**Table 4.1: Compensation to Employees: Arellano-Bond Estimations**

<i>VARIABLES</i>	(1) Compensation to Employees (%Gov Exp)	(2) Compensation to Employees (%Gov Exp)
<i>LDV</i>	0.510*** (0.0842)	0.569*** (0.0842)
<i>Inflation</i>	-0.148*** (0.0517)	-0.175*** (0.0547)
<i>GDP growth</i>	-0.0534 (0.0530)	-0.0522 (0.0615)
<i>Ln GDP</i>	2.840 (2.023)	2.842 (2.431)
<i>Unemployment</i>	0.0136 (0.0910)	0.0441 (0.107)
<i>Size of Government (%GDP)</i>	-0.375*** (0.0595)	-0.364*** (0.0719)
<i>Trade</i>	-0.0251 (0.0184)	-0.0230 (0.0201)
<i>Left Government</i>	-0.597 (0.414)	-0.710 (0.442)
<i>Interest Payments</i>	-0.0137 (0.0921)	0.0457 (0.0984)
<b><i>Gov Employees within Core Constituency</i></b>	<b>5.668*** (1.834)</b>	
<b><i>Gov Employees within Voters</i></b>		<b>5.241* (2.925)</b>
<i>Observations</i>	158	145
<i>Number of countries</i>	28	26

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Tabla 4.2: Compensation to Employees: Error Correction Models**

VARIABLES	(1) First Diff. Compensation to Employees (%Gov Exp)	(2) First Diff. Compensation to Employees (%Gov Exp)
<i>Lagged Level of Dependent Variable</i>	-0.0101 (0.0267)	-0.0243 (0.0278)
<i>First Diff. Inflation</i>	-0.102* (0.0524)	-0.121** (0.0588)
<i>Lagged Inflation</i>	-0.0393 (0.0479)	-0.0763 (0.0592)
<i>First Diff. GDP growth</i>	1.868 (1.761)	2.132 (2.040)
<i>Lagged GDP growth</i>	1.889 (1.762)	2.154 (2.038)
<i>First Diff. Ln GDP</i>	-195.9 (179.1)	-221.9 (206.4)
<i>Lagged Ln GDP</i>	0.0413 (0.129)	0.0360 (0.153)
<i>First Diff. Unemployment</i>	-0.0547 (0.158)	-0.0434 (0.171)
<i>Lagged Unemployment</i>	-0.0360 (0.0359)	-0.0448 (0.0467)
<i>First Diff. Size of Government (%GDP)</i>	-0.422*** (0.0654)	-0.414*** (0.0733)
<i>Lagged Size of Government (%GDP)</i>	-0.0285 (0.0201)	-0.0231 (0.0214)
<i>First Diff. Trade</i>	-0.0333* (0.0182)	-0.0341* (0.0190)
<i>Lagged Trade</i>	0.00721 (0.00533)	0.00720 (0.00558)
<i>First Diff. Left Government</i>	-0.377 (0.451)	-0.353 (0.503)
<i>Lagged Left Government</i>	-0.161 (0.273)	-0.187 (0.303)
<i>First Diff. Interest Payments</i>	-0.161 (0.102)	-0.148 (0.107)
<i>Lagged Interest Payments</i>	-0.0245 (0.0291)	-0.0199 (0.0327)
<i>First Diff. Gov Employees within Core Constituency</i>	<b>5.157***</b> <b>(1.818)</b>	
<i>Lagged Gov Employees within Core Constituency</i>	<b>2.413**</b> <b>(1.002)</b>	
<i>First Diff. Gov Employees within Voters</i>		<b>5.172*</b> <b>(3.022)</b>
<i>Lagged Gov Employees within Voters</i>		<b>2.255</b> <b>(1.382)</b>
Observations	162	148
Number of countries	28	26

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

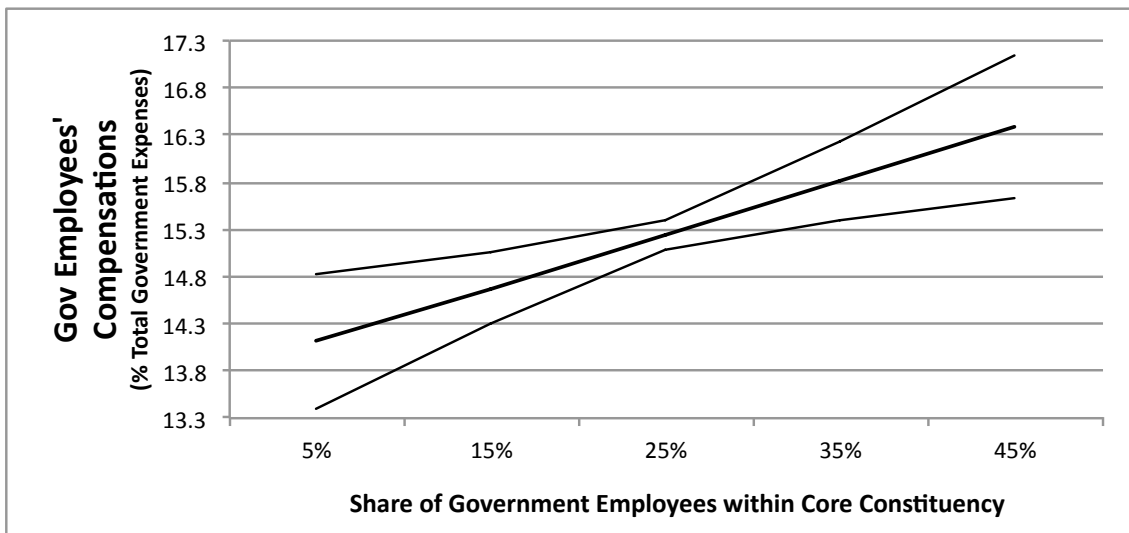
The variables of interest confirm the central hypothesis. Both variables that measure the level of public employees in the government's constituency yield very significant results, given the small sample size. The main variable, *Government Employees within Core Constituency*, has a strong impact on the dependent variable at very significant levels ( $p < 0.01$ ).

The second variable *Government Employees within Voters* also shows a high magnitude, reaching the conventional levels of significance for small size sample ( $p < 0.1$ ). Again, Table 4.2 allows us to separate the effect between short-term and long-term of the composition of the core constituency. It can be seen that there is a twofold effect when the main independent variable (*Government Employees within Core Constituency*) is employed. In the short term, an increase in the public employment composition of the government's core constituency has a positive impact on the compensation of public sector workers. However, there are also long-term effects. Presumably due to the high levels of unionisation of civil servants, an increase in their visibility, bargaining power or, simply, their attractiveness to the party in government, has a positive impact in their salaries in the long-run.

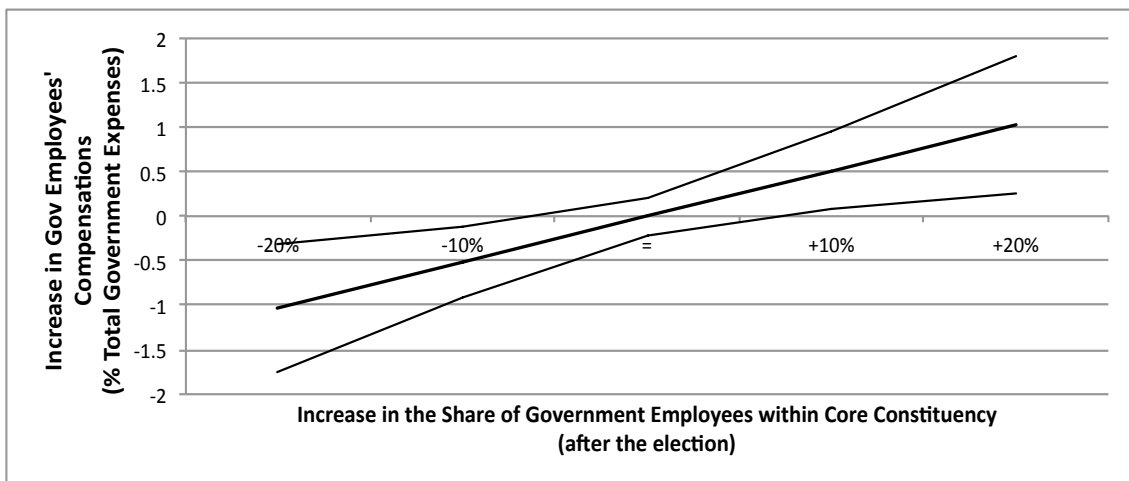
Apart from the coefficients displayed in the tables, we can simulate the impact on the compensation to employees of the variation in the public sector composition of the government's constituency. Figure 4.1 displays the predicted level of compensation- at a 95% confidence level- for several values of the main independent variable (column one of Table 4.1). We can see that having a core constituency with many civil servants is a relevant predictor of the total level of compensation, with high confidence levels. A switch from a core constituency that is only composed of 10% civil servants -like the German CDU/CSU in Merkel's first government- to 40% of civil servants -like the Swedish Socialist Party in the 2000s- implies an average increase of 2% of total

government expenditure in compensation to public sector workers. In Figure 4.2, the short-term effect of an increase in the share of civil servants within the core constituency is simulated at a 95% confidence level (column 1 of Table 4.2). This can be interpreted as the impact on the total amount of compensation of an incumbent change. If, after the election, the new incumbent has a total of 20% more civil servants within its core constituency, it is expected that the compensation to employees increase a 1% of the total government expenditure. Conversely, a new incumbent with 20% fewer civil servants should decrease the compensations by a similar 1%.

**Figure 4.1: Effect on Compensations of Government Employees within Core Constituency**



**Figure 4.2: Effect on Compensations of Increase in Government Employees within Core Constituency**



These results provide the first support -from a cross-country comparative perspective- to the main hypothesis of the dissertation. The results show that the share of government employees within the core constituency is a relevant variable that explains the incentives of governments to increase or decrease the share of expenditure devoted to their compensation. Even with the data restrictions and the imperfection of the measures used, the analysis unequivocally confirms the central hypothesis: parties target distributive benefits to their core voters.

Some caveats, however, are in order. As said, the measure of distributive benefits is not ideal. Although the econometric specification is focused on annual increases, which are much more subject to government manipulation, it is true that the compensation levels of government employees are not totally flexible, and parties do not have completely free hands to use them as distributive instruments. This is particularly relevant because, as I mentioned above, this sector tends to be unionised, which would by default push compensation upwards. This is also suggested with the significance of the long-term effect of the core constituency variables. It seems that when the core constituency of a party is particularly characterised by public sector workers, they do not only obtain increases in their wages in the short-term, but they are able to extract long-term benefits. This would suggest that there is some level of inertia in public sector compensations. To rule out any omitted variable bias, all the analyses presented here have been re-run incorporating measures of unionisation, government intervention in the wage settings, and wage coordination - taken from Visser (2009) - and are robust to these inclusions. Although some of the variables lose some level of significance, they are always kept at conventional levels, and with similar magnitude of the effects. Thus, although public sector compensation is not a perfect distributive instrument, there seems to still be a core voter logic driving them, beyond institutional explanations.

Secondly, the measures used in this analysis are a good proxy to provide preliminary evidence, but they are not ideal. They advance conventional research (which focuses on district distribution), as public sector compensations account for direct distribution to voters. However, this is still a quite aggregate measure, which does not allow us to distinguish between specific types of civil servants. In a similar vein, the measures of public employment used are based on the aggregation of survey data.

Finally, the cross-country analysis does not allow us to study the intermediation of other institutional variables. Do core voters always receive more distributive benefits, or can institutions, such as the electoral system, change these incentives? And, even more importantly, do governments have incentives to distribute to all core voters similarly, or are there core voters that are more attractive to some parties than others?

Thus, these analyses have offered a first insight into the hypothesis. However, they also confront the problems associated with cross-country comparative analysis with imperfect data and a very aggregated focus. This is why in the following sections I carry out an in-depth analysis of distributive policies in the United States. This will allow me to provide a complete picture of the political logic that drives distributive policies.

#### **4.4. Distributive Policies in American Districts and Counties**

The previous section has shown that when parties have a core constituency characterised by civil servants, they have incentives to use compensations to target them distributive policies. The rest of the chapter tests the general core voter distribution

hypothesis for the American case in the period 2001-2009<sup>55</sup>, using grants and cash payments as measures of distributive policies.

As a first step, I explore *which American districts* get more targeted benefits. A wealth of theoretical research to state that in majoritarian ones competition concentrates in the pivotal districts (Persson and Tabellini, 2003; Milesi Ferretti et al., 2002; Lizzeri and Persico, 2001). The implication is that in multi-district environments, distributive politics will be skewed to those jurisdictions where elections are being decided; those where votes at the margin are more valuable.

The analysis of this strategy, however, should not derive any conclusion on the groups of voters targeted. Therefore, in further sections, I will compare the results at the district-level with a more disaggregated analysis, accounting for who gets more benefits *within the district*. Risk-averse politicians will have greater incentives to concentrate on those most reliable voters, particularly in swing districts (Díaz-Cayeros, 2008). My argument is that core voters are a valuable electoral resource that provides a secure response to policies. To test this, I will use the county-level as proxy of the types of voters targeted and will account for which counties, within a district, get more pork.

There is a strong case to study distributive policies in US districts. On the one hand, this is a system where distributive policies are crucial in the political process. Distributive policies and exchanges of support are a decisive element that allows legislators to build voting blocks in both Chambers (Lee, 2000, 2003; Evans, 2004). The American system is also characterised by flexible spending programmes, given the importance of agenda setting, bureaucratic procedures and fund appropriations, as well as the participation of

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<sup>55</sup> The availability of within-district electoral data constrains the analysis to this period.

a multiplicity of actors in the process (Arnold, 1979; Kiewiet and McCubbins, 1991). In addition, committees have in many cases the opportunity to earmark funds, by which individual legislators are able to target specific benefits to their constituencies. Thus, United States is characterised by the existence of, in the terms of Levitt and Snyder (1995), more *high-variation programmes*<sup>56</sup>, which was one of the defining traits of distributive policies. In countries with bigger Welfare states, the redistributive policy programmes tend to be more institutionalised and stable over time. However, in the US the distributive programmes involve more variability in spending allocation over time and across districts and respond to a more powerful and visible political logic. Thus, the American setting is particularly useful for the study of the dependent variable of this chapter.

On the other hand, the American case is a restrictive scenario to test if distributive benefits follow a swing-district logic. In principle, if distributive benefits flow to swing districts, it should be because parties are interested in maximising their victory in them. However, this should be less likely to happen in the US, as its party system is generally characterised as weak (Mayhew, 1974; Diermeyer and Feddersen, 1998; Mayhew, 2001; Chhibber and Kollman, 2004), where parties should theoretically be less relevant to explain policy outcomes. As Levitt and Snyder (1995) argue, congressional politics are highly personalised affairs in which candidates rely little on party resources and try to claim personal credit for policies. In this sense, a very large literature in American Politics has shown that the capacity of incumbents to extract pork is highly determined by district level and incumbent level variables, and not so much by parties' interests. For instance, the importance of the representative's seniority in districts' benefits has

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<sup>56</sup> These authors define high-variation programmes as those whose coefficient of variation between districts is greater than or equal to 3/4.

been widely documented (Arnold, 1979; Roberts, 1990; Hibbing, 1997; McGillivray, 2004). Committee membership is also relevant as some committees handle more resources than others and their members have the opportunity to impact both legislation and rules on resources' distribution earlier in the process (Ferejohn, 1974; Ritt, 1976; Ray, 1981; Box-Steffensmeier et al., 1997; McGillivray, 2004). The only party level variable frequently pointed out to be relevant is Democratic membership. The logic, however, has not to do with partisan coordination. Democratic representatives tend to correlate with more economic benefits, as the Democrat agenda involves more spending, particularly on welfare and public works; while the tax-cutting Republican agenda is less compatible with this (Owens and Wade, 1984; Stein and Bickers, 1994)<sup>57</sup>. Hence, given the low relevance of the party structure and organisation and the relative higher relevance of the individual legislators, the American setting is a more demanding case to find a policy bias in favour of swing districts. If we still find it, we should expect this to be more evident in other contexts with more institutionalised political parties.

The American case is also particularly useful for the complementary within-district analyses of Section 4.5, which is conducted at the county-level. The study of distributive politics in the US has centred on district level incentives and how programmes are bargained in the legislature (Bertelli and Grose, 2009). However, the already mentioned majoritarian system and the strong level of personalisation should imply that the House agrees policies and programmes that throw resources to specific districts, but legislators will have freer hands and the motivation to shape in them the way that is most convenient to them, according to their within-district incentives. The

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<sup>57</sup> A similar argument is Sellers' (1997), who argues that fiscally consistent incumbents are rewarded more than inconsistent ones. Thus, Democrat incumbents benefit comparatively more for the augmentation of spending programmes, while Republicans are rewarded more if they spend less.

lack of strong organisational constraints allow representatives to flexibly allocate spending on those areas of their district where spending is electorally most profitable.

Finally, the United States is a very convenient case to analyse distributive policies at various levels, as it provides very rich data. The US Census Bureau compiles all yearly federal expenditure outlays on a program-by-program basis for all federal domestic assistance programmes in the Federal Assistance Awards Database (FAAD). These data contain a very high level of geographic precision and are very useful to explain the political logic in the allocation of federal spending to states, districts, or counties.

## **4.5. Swing or Core Districts?**

### ***4.5.1. Dependent Variables***

In this first part of the analysis, I am interested in testing which districts get more benefits. My main dependent variable is the level of district *federal grants*, taken from the FAAD. Grants are a standard measure of pork barrel, conventionally used in the literature (see, for instance, Rundquist and Ferejohn, 1975; Arnold, 1979; Rich 1989; Stein and Bickers, 1994; Bickers and Stein, 1996; Alvarez and Saving, 1997).

Grants also fulfil the three criteria presented in chapter 2 that characterise distributive policies. First of all, grants involve non-encompassing distribution. Each federal program defines reception conditions and competition criteria that apply to a narrow segment of the electorate with specific characteristics. Grants are also a typical example of targeted and selective benefits. Representatives can control the provision of grants more than any other spending instrument, both by type of recipient and by geographic allocation. By defining the conditions to receive a grant, parties can very accurately

target types of voters that will receive the benefits. Alternatively, by defining conditions that apply to a specific local economy or need, politicians can allocate resources with great geographic precision. Finally, grants are also a temporally variable spending item. Grant programmes are continuously discussed and amended in the House and Senate Committees. In many cases, they are included as earmarks attached to legislation. This implies that politicians are not restricted by previous grant programmes and have more flexibility to shape them over time according to their interests.

To check the robustness of the results, I run the same analyses using an alternative dependent variable: the per capita spending on high-variation *direct payments*. This variable includes those personal direct payments that the Federal Assistance Awards Database (FAAD) and the Consolidated Federal Funds Report (CFFR) classifies as ‘*other direct payments*’. These are benefits, such as food stamps, Medicaid, welfare programmes, and any other direct personal payment, excluding those included in the *retirement and disability* category (retirement and disability programmes, federal employee retirement and disability benefits, social security payments, and Veteran Administration programmes)<sup>58</sup>.

This direct payments measure also fulfils the distributive policies criteria. Unlike the *retirement and disability* category, which refers to broad and encompassing entitlements, the cash transfers included in the *direct payments* category respond to more narrow interests. This should not be confused with the social and redistributive goals. Much of the cash transfers might be categorised as responding to social and redistributive interests, but they do it in a non-encompassing way. They cover specific and non-comprehensive needs that apply to smaller segments of the electorate.

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<sup>58</sup> See <http://www.census.gov/govs/cffr/> for a more detailed account of the programmes considered.

Secondly, as the needs that they cover are more exclusive, politicians can have a more precise knowledge of how well these policies target voters in their districts. This gives them the possibility to define reception conditions that allow them to select the recipients with great accuracy. Finally, while the *retirement and disability* category includes what Levitt and Snyder (1995) denominate ‘low-variation programs’, the *direct payments* variable falls into the high-variation category. Levitt and Snyder argue that these programmes show much less temporal dependence compared to those of broad entitlement. Thus, the direct payments category covers cash transfers programs with greater annual variation, which are especially susceptible to political manipulation (Berry et al., 2010).

Hence, both dependent variables, *grants* and *direct payments*, are the most representative spending categories that US legislators can use to allocate benefits to the voters of their interest.

#### **4.5.2 Independent Variables**

The main hypothesis to be tested is whether *grants* and *direct payments* flow predominantly to swing districts, as the literature has predicted. To correctly gauge this political logic, I use four different measures of district’s swingness. First, I include the usual margin of victory in each district. This is the most standard measure in the literature. I actually use the *(1-margin of victory)* to have a positive measure, which runs from 0 to 1 and increases its value as the district is more swing. Secondly, I use the incumbent’s vote share. This offers a rough - but direct - measure of how powerful the party and how safe the district is. Again, to have a positive value for swing districts, I operationalize it as *(1-vote share)*. Thirdly, *swing dummy* has value 1 when the margin of victory in the previous election was 15% or less. This might look to be quite a wide

margin to consider a district as ‘swing’ from a comparative perspective, but not in the US case, where many districts are won by very wide margins. As American districts present few vulnerable incumbents (Ferejohn, 1977; Fiorina, 1977), a broad characterisation of swing districts is recommended<sup>59</sup>. Finally, I create another continuous measure of a district’s swingness:  $1-\sqrt{\text{Margin of Victory}}$ . This variable is similar to the first one, but gives greater weight to smaller margins of victory, as the importance of the district for a party decreases marginally with wider margins. The summarising statistics of the dependent variables and these variables of interest are presented in Table 4.3.

**Table 4.3. Descriptive statistics (District Level Analysis; 2001-2009)**

VARIABLES	Mean (St. Dev.)
Grants per Capita	1337.56 (740.20)
Direct Payments per Capita	1419.23 (552.56)
1- margin of victory	0.639 (0.25)
$1-\sqrt{\text{Margin of Victory}}$	0.442 (0.201)
1- incumbent share	0.665 (0.12)
Swing Dummy	0.258 (0.438)

As control variables, I include several political and geographic determinants of expenditure. Among the geographical controls, *land area* (in square miles) is a proxy for the district’s need of infrastructure grants. A similar logic applies to include the

<sup>59</sup> The following results using this dummy are robust to other cut-off points such as 0.1 or 0.2.

district's *water area* (in square miles)<sup>60</sup>. I also control for whether the district contains the *state capital* (as capitals receive more federal funds than average), whether the incumbent is a *Democrat* or the district is an *affiliated* one (when the district's representative belongs to the majority in the House). These last two variables are also interacted, to capture if the effect of having a Democrat incumbent varies when the Democrats hold the House majority. An *electoral year* dummy accounts for the common claim in the literature that incumbents have greater incentives to increase expenditure in election years (e.g. Alesina et al., 1993, 1997; Alesina and Sachs, 1988).

As socioeconomic controls, the district's *median income* captures how wealthy the district is<sup>61</sup>, the percentage of *farm owners*<sup>62</sup> controls that these districts tend to receive, in average, more grants, and the district's *population density*<sup>63</sup> indicates the potential scale economies within the district. Distribution to highly populated areas can provide more beneficiaries per unit of spending.

#### **4.5.3 Method**

The analyses cover the period 2001-2009. Two alternative methods are used to account for the effect of the four main swing district variables on the two dependent variables. First, I use a dynamic model to account for the over time variation. I use Arellano-Bond estimations, as they are particularly useful for panel data with a large N and small t (Arellano and Bond, 1991). The sample used here satisfies these conditions as it has

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<sup>60</sup> *Land and Water Area* are taken from the ICPSR 20660 database.

<sup>61</sup> Taken from the U.S. Census Bureau, Small Area Estimates Branch.

<sup>62</sup> Taken from the Regional Economic Accounts of the Bureau of Economic Analysis.

<sup>63</sup> Own calculations.

around 300 units (districts) and nine data points (2001-2009)<sup>64</sup>. Secondly, I employ the commonly used ordinary least squares estimations. I control for the fact that some spending programmes cover several years with a lagged dependent variable (LDV) model (Beck and Katz, 2004; Keele and Kelly, 2006).

Fixed-district effects are included in the specifications of all the econometric models to control for other potential variables that could explain the different capacity to extract pork by US legislators, which are not already included in the models<sup>65</sup>. Finally, to control for any remaining time effects and different propensities to attract targeted benefits over time, I also incorporate term dummies in all models (not shown in the tables).

#### **4.5.4. Results**

Before getting into the econometric models of Tables 4.4 to 4.7, Figures 4.3 and 4.4 show some descriptive evidence. They provide the mean values of the dependent variable separating districts by incumbent's margin of victory. The figures show some bias towards swing districts, particularly regarding *grants* allocations. It can be seen that districts with short margins of victory receive large amounts of distribution. However, two things must be noted. In the case of *direct payments*, it seems that there are also incentives to provide benefits to very loyal districts. In addition, it can be seen that differences between types of districts are not very high. This evidence provided in the

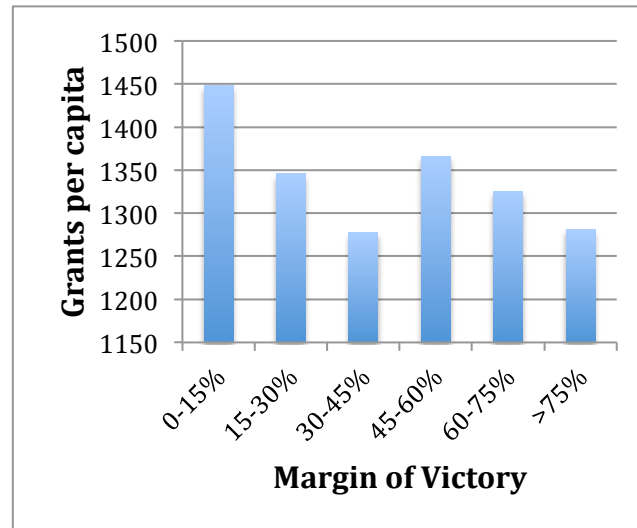
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<sup>64</sup> The 2001 observations are dropped as all analyses include a lagged dependent variable. As it is explained below, some counties do not entirely belong to one district and have to be excluded from the county-level analyses. Therefore, for consistency reasons, I only use the data of those 300 districts that contain full counties and that will be the same included in following analyses. Results on the full sample of districts yield basically the same results.

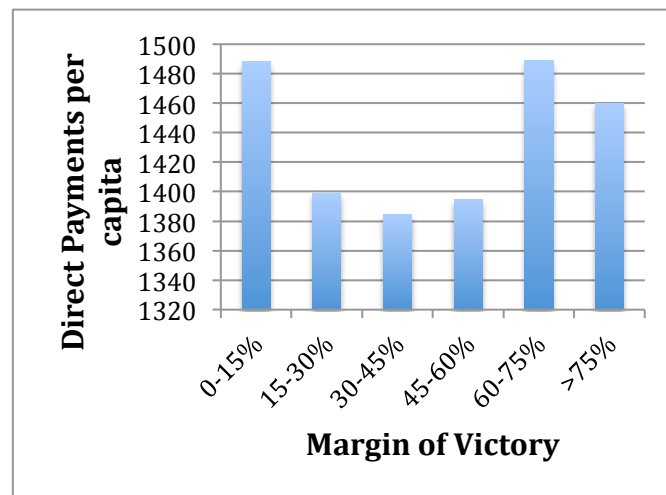
<sup>65</sup> Hausman tests revealed that it was not possible to assume random effects for all models, although the coefficients of the substantively interesting variables were similar in both fixed and random effect's specifications.

figures does not include the described controls, but they suggest that between-district variation might be not as relevant from a political perspective, as it is normally underscored in the literature.

**Figure 4.3. Mean District Grants and *Margin of Victory***



**Figure 4.4. Mean District Direct Payments and Margin of Victory**



The results of the econometric models are presented in Tables 4.4 and 4.5 for the regressions with the *grants per capita* dependent variable, and Tables 4.6 and 4.7 for the *direct payments* analyses. Controlling for a number of electoral and socioeconomic predictors, the results are similar across all specifications: American parties spend more in swing districts. These results support the standard findings of the literature. They

show that, even in a weak party system like the US, political parties over-invest in swing districts compared to safe districts. The swing district variables always have the predicted sign, and in fourteen out of the sixteen models they are significant.

**Table 4.4. Grants Distribution to Districts: Arellano Bond Estimations.**

VARIABLES	(1) Grants pc district	(2) Grants pc district	(3) Grants pc district	(4) Grants pc district
<i>LDV</i>	-0.0778* (0.0406)	-0.0816** (0.0406)	-0.0850** (0.0404)	-0.0800** (0.0406)
<i>Democrat</i>	0.267** (0.107)	0.264** (0.109)	0.291*** (0.107)	0.272** (0.107)
<i>Affiliated</i>	0.216*** (0.0699)	0.222*** (0.0706)	0.237*** (0.0699)	0.219*** (0.0701)
<i>Democrat*Affiliated</i>	-0.702*** (0.105)	-0.702*** (0.105)	-0.701*** (0.104)	-0.700*** (0.105)
<i>State Capital</i>	1.085*** (0.365)	1.059*** (0.365)	1.034*** (0.363)	1.076*** (0.365)
<i>Median Income</i>	-0.0205*** (0.00692)	-0.0202*** (0.00693)	-0.0197*** (0.00690)	-0.0201*** (0.00693)
<i>Farm Property</i>	-39.97*** (2.808)	-39.84*** (2.811)	-39.28*** (2.775)	-39.90*** (2.810)
<i>Population Density</i>	1.360 (3.762)	1.278 (3.765)	1.251 (3.756)	1.298 (3.764)
<i>Land (sq. miles)</i>	1.09e-05 (1.24e-05)	1.05e-05 (1.24e-05)	1.07e-05 (1.23e-05)	1.09e-05 (1.24e-05)
<i>Water (sq. miles)</i>	2.41e-06 (0.000118)	3.43e-06 (0.000118)	6.32e-06 (0.000117)	5.18e-06 (0.000118)
<i>Electoral Year</i>	0.0523* (0.0307)	0.0516* (0.0307)	0.0507* (0.0305)	0.0513* (0.0307)
<i>1-Margin of Victory</i>	<b>0.245**</b> <b>(0.102)</b>			
<i>1-√Margin of Victory</i>		<b>0.222*</b> <b>(0.133)</b>		
<i>Swing Dummy</i>			<b>0.0462</b> <b>(0.0578)</b>	
<i>1-Incumbent Vote Share</i>				<b>0.442**</b> <b>(0.216)</b>
Observations	1767	1767	1781	1767

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 4.5. Grants Distribution to Districts: Pooled OLS Regressions with Fixed Effects**

VARIABLES	(1)	(2)	(3)	(4)
	Grants pc district	Grants pc district	Grants pc district	Grants pc district
<i>LDV</i>	0.355*** (0.0525)	0.355*** (0.0521)	0.354*** (0.0521)	0.355*** (0.0524)
<i>Democrat</i>	0.220** (0.0878)	0.210** (0.0897)	0.219*** (0.0830)	0.223** (0.0865)
<i>Affiliated</i>	0.129 (0.0847)	0.130 (0.0819)	0.141* (0.0743)	0.130 (0.0839)
<i>Democrat*Affiliated</i>	-0.522*** (0.140)	-0.522*** (0.139)	-0.522*** (0.135)	-0.521*** (0.140)
<i>State Capital</i>	1.708* (0.913)	1.697* (0.909)	1.677* (0.908)	1.703* (0.909)
<i>Median Income</i>	-0.0169* (0.00868)	-0.0168* (0.00870)	-0.0166* (0.00866)	-0.0167* (0.00873)
<i>Farm Property</i>	-28.48** (11.92)	-28.48** (11.96)	-28.15** (11.78)	-28.47** (11.91)
<i>Population Density</i>	5.895* (3.460)	5.888* (3.464)	5.732 (3.480)	5.873* (3.458)
<i>Land (sq. miles)</i>	8.38e-06 (8.78e-06)	8.14e-06 (8.74e-06)	8.06e-06 (8.65e-06)	8.47e-06 (8.75e-06)
<i>Water (sq. miles)</i>	7.68e-05 (5.21e-05)	7.65e-05 (5.22e-05)	7.69e-05 (5.31e-05)	7.79e-05 (5.19e-05)
<i>Electoral Year</i>	0.0411 (0.0288)	0.0407 (0.0287)	0.0399 (0.0285)	0.0404 (0.0287)
<i>1-Margin of Victory</i>	<b>0.201*</b> (0.117)			
<i>1-√Margin of Victory</i>		<b>0.228*</b> (0.120)		
<i>Swing Dummy</i>			<b>0.0860**</b> (0.0351)	
<i>1-Incumbent Vote Share</i>				<b>0.401*</b> (0.232)
Observations	2061	2061	2075	2061
R-squared	0.739	0.739	0.739	0.739

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 4.6. Direct Payments Distribution to Districts: Arellano-Bond Analyses**

VARIABLES	(1) Direct Payments pc District	(2) Direct Payments pc District	(3) Direct Payments pc District	(4) Direct Payments pc District
<i>LDV</i>	0.00594 (0.0405)	0.00537 (0.0405)	0.00471 (0.0402)	0.00728 (0.0405)
<i>Democrat</i>	0.335*** (0.0942)	0.317*** (0.0955)	0.335*** (0.0950)	0.335*** (0.0943)
<i>Affiliated</i>	0.400*** (0.0594)	0.393*** (0.0598)	0.398*** (0.0598)	0.398*** (0.0596)
<i>Democrat*Affiliated</i>	-0.696*** (0.0939)	-0.691*** (0.0940)	-0.716*** (0.0938)	-0.691*** (0.0941)
<i>State Capital</i>	-0.295 (0.321)	-0.305 (0.321)	-0.334 (0.322)	-0.296 (0.321)
<i>Median Income</i>	0.0103* (0.00594)	0.0105* (0.00594)	0.0108* (0.00597)	0.0106* (0.00595)
<i>Farm Property</i>	-14.27*** (2.377)	-14.34*** (2.378)	-13.96*** (2.365)	-14.26*** (2.379)
<i>Population Density</i>	-3.891 (3.291)	-3.993 (3.290)	-4.119 (3.311)	-3.946 (3.293)
<i>Land (sq. miles)</i>	1.36e-05 (1.08e-05)	1.32e-05 (1.08e-05)	1.33e-05 (1.08e-05)	1.36e-05 (1.08e-05)
<i>Water (sq. miles)</i>	-2.49e-05 (0.000103)	-2.55e-05 (0.000103)	-2.12e-05 (0.000103)	-2.28e-05 (0.000103)
<i>Electoral Year</i>	0.0269 (0.0266)	0.0264 (0.0266)	0.0240 (0.0266)	0.0260 (0.0266)
<i>1-Margin of Victory</i>	<b>0.191**</b> <b>(0.0879)</b>			
<i>1-√Margin of Victory</i>		<b>0.270**</b> <b>(0.115)</b>		
<i>Swing Dummy</i>			<b>0.0962*</b> <b>(0.0506)</b>	
<i>1-Incumbent Vote Share</i>				<b>0.400**</b> <b>(0.187)</b>
Observations	1767	1767	1781	1767
chi2	380.5	381.6	383.8	379.9

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 4.7. Direct Payments Distribution to Districts: Pooled OLS Regressions with Fixed Effects**

VARIABLES	(1) Direct Payments pc District	(2) Direct Payments pc District	(3) Direct Payments pc District	(4) Direct Payments pc District
<i>LDV</i>	-0.00655 (0.0681)	-0.00749 (0.0696)	-0.00826 (0.0661)	-0.00609 (0.0680)
<i>Democrat</i>	0.485*** (0.0805)	0.467*** (0.0762)	0.485*** (0.0786)	0.488*** (0.0811)
<i>Affiliated</i>	0.431*** (0.0861)	0.424*** (0.0806)	0.439*** (0.0834)	0.432*** (0.0863)
<i>Democrat*Affiliated</i>	-0.888*** (0.143)	-0.883*** (0.140)	-0.908*** (0.142)	-0.886*** (0.143)
<i>State Capital</i>	-0.322** (0.142)	-0.329** (0.146)	-0.349** (0.138)	-0.326** (0.142)
<i>Median Income</i>	-0.00246 (0.00558)	-0.00238 (0.00552)	-0.00263 (0.00555)	-0.00230 (0.00559)
<i>Farm Property</i>	-10.25** (4.427)	-10.38** (4.446)	-10.18** (4.435)	-10.23** (4.417)
<i>Population Density</i>	-2.009 (1.655)	-2.040 (1.648)	-2.167 (1.603)	-2.027 (1.656)
<i>Land (sq. miles)</i>	1.66e-05 (1.12e-05)	1.66e-05 (1.13e-05)	1.66e-05 (1.11e-05)	1.67e-05 (1.12e-05)
<i>Water (sq. miles)</i>	-2.30e-05 (3.34e-05)	-2.22e-05 (3.32e-05)	-2.14e-05 (3.33e-05)	-2.22e-05 (3.29e-05)
<i>Electoral Year</i>	0.0257 (0.0208)	0.0254 (0.0208)	0.0237 (0.0207)	0.0251 (0.0208)
<i>1-Margin of Victory</i>	<b>0.166** (0.0825)</b>			
<i>1-√Margin of Victory</i>		<b>0.249* (0.148)</b>		
<i>Swing Dummy</i>			<b>0.0813* (0.0483)</b>	
<i>1-Incumbent Vote Share</i>				<b>0.324* (0.168)</b>
Observations	2061	2061	2075	2061
R-squared	0.532	0.533	0.530	0.532

Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

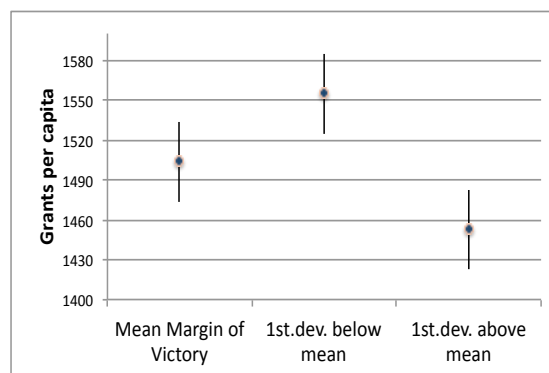
In Figure 4.5, I present some simulations of the results of Table 4.5<sup>66</sup>, setting the rest of independent variables at their mean values. As we can see, the expected *grants* per capita in a district with the mean margin of victory is slightly above 1,500\$. In competed districts (one standard deviation lower), the expected levels of grants are

<sup>66</sup> Using the Stata *margins* command.

1,560\$ per capita. Conversely, in a core district, where the incumbent wins by a wide margin of victory (such as one standard deviation over the mean: a 61% of vote share difference), the expected grants allocation is 1,452\$. Very similar results are presented for *direct payments* per capita in Figure 4.6.

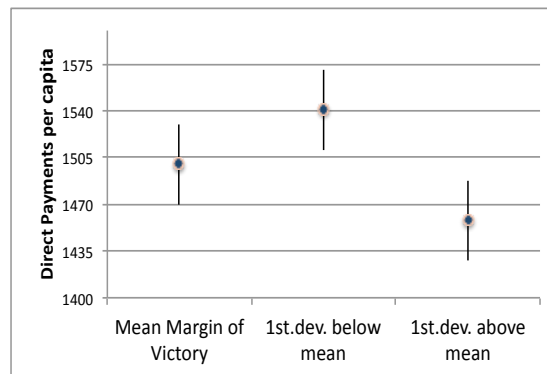
These simulations show that American parties target distributive policies to those districts that resulted highly competitive in the previous election. Swing districts are crucial to keep or win the House majority, so parties have incentives to mobilise their distributive efforts on them in the next electoral term. Nonetheless, these results also show that the magnitude of the effects is low. Swing districts get more grants, but not overwhelmingly. The difference between a perfectly even district (in which the two most voted parties get the same vote share) and a core one (61%) is slightly more than the 10% of a standard deviation in grants. In addition, the levels of significance sometimes do not reach the 95%. This invites us to think that there are other political logics driving the allocation of grants and direct payments beyond the classical cross-district analysis and the swing/core district dilemma.

**Figure 4.5. Predicted Grants by District's Margin of Victory**



**Predicted Values. Model 1 Table 4.5 (95% Confidence Interval)**

**Figure 4.6. Predicted Direct Payments by District's *Margin of Victory***



**Predicted Values. Model 1 Table 4.7 (95% Confidence Interval)**

The conclusion of this section is straightforward. Under a majoritarian system, in which elections are decided at the district level, parties target swing districts. This, in principle, can be explained by the interest of parties in maximising their chance of winning in the most competitive districts. There is an alternative possible interpretation. It could still be that the swing district distribution is not driven by a party-level logic, but by individual-level motivations of politicians. Some authors have claimed that unsafe districts get more grants, because their incumbents are highly motivated to extract more pork from the House (Stein and Bickers, 1995; Bickers and Stein, 1996; Levitt and Snyder, 1997). They argue that it is the result of more effort being made by these representatives, rather than by parties coordinating their strategy in the House. Whatever the interpretation, these results show that under a particular electoral system specification, there are bigger incentives to spend in certain districts.

This finding, however, does not tell us which particular voters politicians are interested in. There is no evidence on the *types* of voters targeted in the previous analyses. As I stated above, the literature tends to equalise swing districts to swing voters, so the argument usually made is that parties concentrate their efforts on swing districts to buy off the undecided and tip the balance of the election to one side. Both premises can be

misleading. On the one hand, swing districts' voters are not necessarily more swing. On the other hand, a politician can target a swing district in a variety of ways. If the politician wants to maximise its chances of winning there, she will try to mobilise the most productive voters within it. This is tested in the following section.

## **4.6. Swing or Core Counties?**

The previous section has shown that Democrats and Republicans in the House target swing districts. Is this evidence in favour of the swing voter theory? As it was said above, even if an electoral system sets up a trade off between districts, this does not necessarily imply that politicians face a trade-off between voters. The electoral system might tell *where* it is more profitable to spend, but incumbents might still be able to seek the most responsive voters within an electoral unit. As long as a politician can discriminate among voters, she will seek to spend on those who she considers the most 'profitable'. This is tested in this chapter.

### **4.6.1. Dependent Variables**

To explore this argument, I use more disaggregated expenditure. Specifically, I use the same two different specifications of targeted benefits of the previous section, but now at the county level. Firstly, I employ the standard *grants per capita* in a given year. Secondly, all the analyses are also run using high-variation programmes' *direct payments per capita*<sup>67</sup>.

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<sup>67</sup> These spending data present several extreme outliers at the county level. These extreme values are just a few data points that alter the normality in the distribution of both dependent variables. I follow Osborne and Overbay's (2004) suggestion and drop the observations that are three standard deviations over the mean. At the county level, this choice excludes 24 observations in the direct payments analyses, and 37

By analysing which counties get more expenditure, we will have a clearer idea of which voters, within a district, politicians try to mobilise. Counties provide considerable within-district variation, as there is an average of more than seven counties per district and sixty-one counties per state. Although the data I am using are not at the individual level, they provide a more precise account of which voters within the district politicians are interested in. Furthermore, it is true that with these data we might not observe whether it is precisely a core voter who actually receives a grant; but neither will politicians be able to do this. In developed countries an incumbent cannot exchange benefits for a vote. The incumbent provides spending; though it is impossible to control exactly whether the beneficiary is a voter or not. Hence, the best she can do is to target expenditure to narrow areas where there is a higher share of the voters that she is interested in. As Martin (2003) argues in the most relevant paper at the county level so far, “*county information reasonably reflects the kind of information members of Congress would possess. A member of Congress can be expected to know about variations (...) at the county level, though they would be less likely to know this information at the precinct level and thus are less likely to use such information in decision-making. Counties are also logical units of government that provide natural boundaries for members of Congress in understanding the landscape of their districts.*”

In addition, Martin also argues that many of the federal programmes are able to make

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observations in the grants ones (out of over 22,000). Descriptive analyses show no clear pattern in those observations, beyond their extraordinary extreme value. They do not purport any relevant information for the objective of this chapter. More specifically, the value of the political variables, such as vote for the incumbent, is almost the same to the rest of the sample. T-tests do not show significant differences. Hence, it seems that their extreme values are not result of the process I will analyse here, and simply respond to exogenous exceptional conditions. In these cases, Osborne and Overbay (2004) or Barnett and Lewis (1994) argue that it is preferable to remove them. The analyses presented here take out these observations. Still, all the analyses of this paper have been rerun including these outliers. The results are basically similar. Some parameters do increase their magnitude, as we are violating the linear effect assumption, and others reduce slightly their significance. However, including the outliers does not change the general result, and do not seem to respond to any political logic.

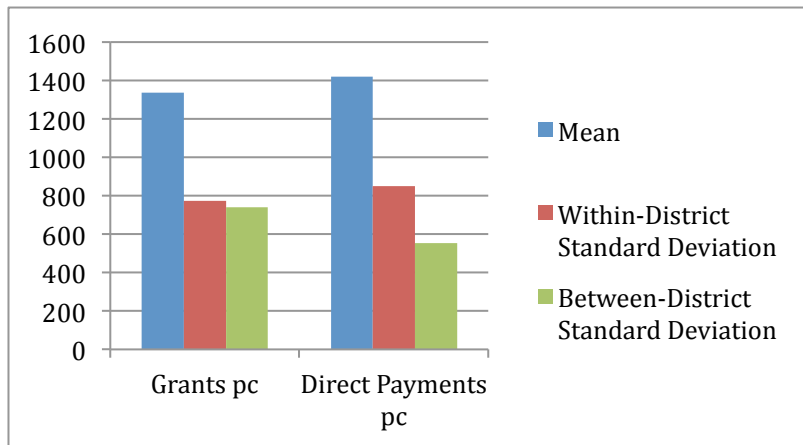
geographic targets, but they are unlikely to be precise enough beyond the county level to a smaller area like the census tract or precinct. Consequently, counties are the optimal unit of analysis that allow us to: 1) study within-district variation and 2) get the closest to benefits to voters, by having the same level of information as Members of Congress.

Descriptive evidence shows us that there is indeed a big variation in spending within districts. An average district receives 1,337.56\$ in grants per capita, and 1,419.23\$ in direct payments. However, this is not a very precise account of the benefits that voters in an average district get. Figure 4.7 shows the descriptive statistics of between- and within-district spending in grants and direct payments per capita. The average within district standard deviation<sup>68</sup> of grants per capita is 773.14\$, while the between district variation is 740.20\$. In the case of direct payments, the within-district standard deviation is 850.70\$, while the between-district one is 552.57\$. This shows that there are very relevant differences within districts in the amount of benefits received, and indicates that there is room for manoeuvre by legislators to distribute benefits within their electorate, selecting some voters and discriminating others. Moreover, for both dependent variables, the average within-district variation is in fact higher than the variation between districts. Hence, to explain how much benefits voters will get, it is more predictive to know the county where a voter lives, than the district. This illustrates that empirical analyses focused on between-district variation have missed a big part of the story.

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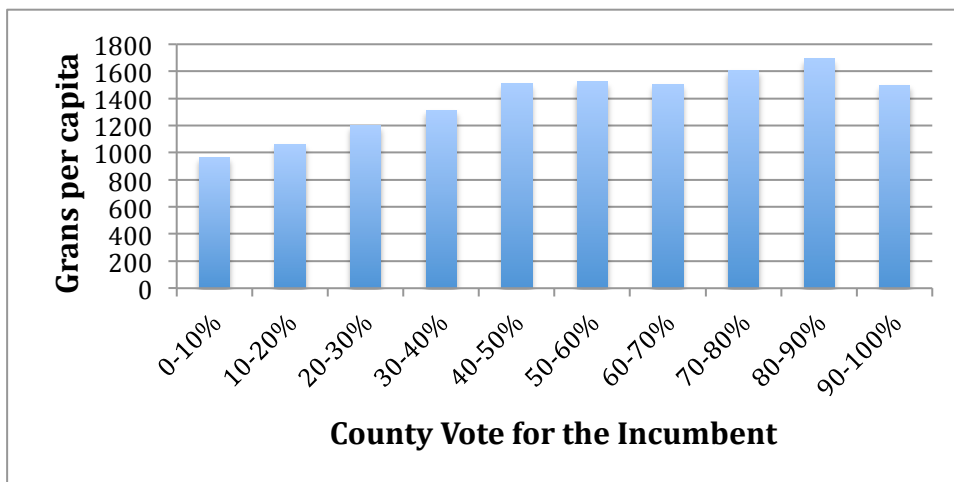
<sup>68</sup> This standard variation is calculated for districts with four or more counties. This is consistent with the sub-sample of districts I use for in the empirical analyses, as I will explain below.

**Figure 4.7. Variation in Benefits across and within Districts**

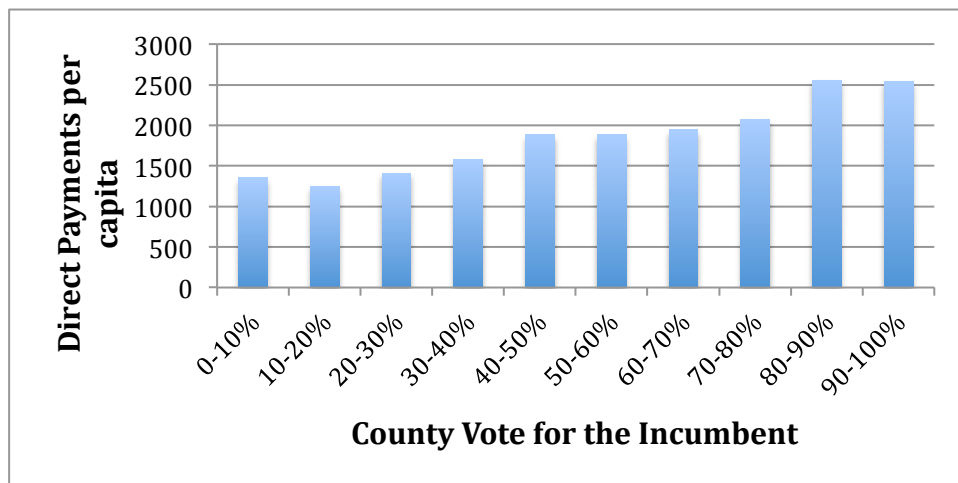


A final piece of preliminary evidence is shown in Figures 4.8 and 4.9. They provide the mean grants and direct payments per capita by incumbents' county vote share. The figures show a clear relation between incumbent vote at the county level and benefits. Counties where the incumbent received very high vote supports receive more grants and direct payments. Moreover, this relation is much stronger than the one with regards to swing districts detected in Figures 4.3 and 4.4 at the district level. It suggests not only that variation within districts is larger than between districts, but also that the political logic explaining variation in benefits at the county level looks stronger.

**Figure 4.8. Average County Grants per capita by County's Incumbent's Share**



**Figure 4.9. Average County Direct Payments per capita by County's Incumbent's Share**



#### **4.6.2. Independent Variables**

The descriptive evidence suggests that core counties, as a proxy of core voters, will get more benefits. To test this argument, I use four alternative measures of core counties. The conventional approach is to use electoral data. By analysing the results of the previous House of Representatives elections, we can build measures of how relevant the voters in a county are for the final victory of a candidate. To supplement this approach, I also use county-level data on voter's registration in which voters declare their allegiance for a party. Table 4.8 contains the summarising statistics of the dependent variables and all the main independent variables. Being  $V_c$  the incumbent's vote share in a county, the measures are:

Vote for the incumbent: This is the usual variable used in the literature. It measures the vote share that the incumbent received in each county<sup>69</sup>.

$$\text{County Vote: } V_c$$

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<sup>69</sup> This variable does not account for the relative support levels within the district. As I employ hierarchical models, the level-two random effects already control the relative levels. Therefore, this is still a useful variable. In addition, it is a comparable measure with other research.

County/District: The previous variable does not capture the within-district position of the county, and puts counties of different districts with the same vote share at a similar level. However, we are interested in observing if incumbents prioritise their core areas with respect to the rest of counties within their district. An incumbent with a 50% or 80% vote share in the *district* ( $V_D$ ) will perceive differently a 65% vote share in a *county*. Therefore, by calculating the ratio between the incumbent's vote share in a county and her total vote share in the district, the ratio captures the 'relative coreness'. Those counties where electoral support was higher than the district's average will have values above 1. Those that gave relatively less support to the incumbent will have values below 1. Hence, this measure is independent of total levels of support and puts high and low voted incumbents at the same level. For instance, in a district where the incumbent had an 80% vote share, counties with 75% of support would rank low in this measure.

$$\text{County/District: } \frac{V_c}{V_D}$$

County/Max County: This is another measure of the relative success of the incumbent. In this case, the measure is normalised over the best performance in the district ( $\text{Max } V_c$ ), instead of the average performance. The variable is the ratio between the incumbent's vote share in a county and the vote share in her most successful county.

$$\text{County /Max County: } \frac{V_c}{\text{Max } V_c}$$

Incumbent Registration: This variable measures the percentage of voters who register themselves as members of the district incumbent's party. In many American states, when voters register to be entitled to vote, they have to declare their political affiliation with a party or as independents. This affiliation is not equivalent to full membership of

a party, but it gives the right to vote in parties' primaries. This registration data is the closest to a county level survey we can have, in which voters declare which party they are identified with. Its main drawback is that Leip's (2011) database does not contain registration data for all states. The observations of 22 states<sup>70</sup> are dropped, so the analyses with these variables are run with a reduced sample. Still, this is a very useful robustness variable. Instead of using indirect estimations of core counties from electoral results, this variable uses self-reported individual data on the identification of voters in each county.

*Incumbent Registration: Reg Inc<sub>c</sub>*

Using these core county variables, the core voter hypothesis is tested against the competing swing voter hypothesis. To test whether incumbents target swing voters, I use the following measures:

*Absolute Margin*: This variable measures the absolute value of difference in votes in the county between the incumbent ( $V_c$ ) and the main opposition party ( $V_{Opp}$ ). The vote difference is subtracted to one, to have highest measures the closes the victory margin. This measure because puts at the same level, both a 5% victory by the incumbent and a 5% victory by the main opposition party.

$$I\text{-absolute margin: } 1 - |V_c - V_{Opp_c}|$$

*Opposition Ratio*: This variable measures the ratio between the county vote share of the main opposition party and the county vote share of the district's incumbent. The

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<sup>70</sup> The missing states are: Alabama, Arkansas, Georgia, Hawaii, Idaho, Illinois, Indiana, Michigan, Minnesota, Mississippi, Missouri, Montana, North Dakota, Ohio, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, and Washington.

variable is capturing the size of a county's electorate that the opposition party should win to be the most voted in the county.

$$\textit{opposition ratio: } \frac{V_{Opp_c}}{V_c}$$

Volatility: Mayer (2008) defines swing voters as those voters that can vote either way. Therefore, and based on Díaz-Cayeros (2008), I calculate the absolute difference in vote share for the current incumbent's party between the previous two elections. With this measure, we can test whether politicians target the voters that have shown themselves as undecided or easily persuadable. This approach requires drawing on the two previous electoral terms, so it restricts the period of analysis to 2004-2009.

$$\textit{volatility: } \textit{abs}(V_{c,t-1} - V_{c,t-2})$$

Third Parties Share: I also include a variable capturing the total vote share of third parties in the county. In counties where there are fewer voters strongly identified with a specific party it is more likely that third parties receive larger vote shares:

$$\textit{third parties share: } V_{c,3rd}$$

Swing Registration: Finally, I include a variable based on county registration data. I measure swing voters as the share of voters in the county affiliated as independents or to third parties. Based on Fenno (1978) and his three groups framework, I add both independent and third parties' registration to capture the amount of potential new voters that do not belong to the main opposition party<sup>71</sup>.

$$\textit{Swing registration: } \textit{Reg Indep}_c + \textit{Reg Others}_c$$

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<sup>71</sup> The analyses have been run again using only the share of registered independents (and excluding the states where this is not a registration option). The results do not change.

**Table 4.8. Descriptive statistics (County Level Analysis; 2001-2009)**

VARIABLES	Mean (standard deviation)
Grants per Capita	1672.406 (1749.941)
Direct Payments per Capita	2313.367 (26531.79)
County /District	1.011 (0.147)
County/Max County	0.797 (0.196)
Vote for the Incumbent	0.642 (0.174)
Incumbent Registration	0.449 (0.173)
Absolute Margin	0.979 (0.529)
Opposition ratio	0.997 (17.266)
Volatility	0.733 (0.150)
Third Parties Share	0.029 (0.064)
Swing Registration	0.189 (0.121)

Table 4.9 illustrates some of these measures and their usefulness to explain patterns in distributive policies. I use Oklahoma's 2<sup>nd</sup> Congressional District, which is one of the American districts that contain a highest number of counties (24). The table shows some of the core and swing county measures and the level of distributive benefits per capita in 2005. In November 2004, Democrat Dan Boren achieved a 65.89% vote share, a clear victory over the Republican Walyand Smalley, who polled a 34.11% vote share. However, Boren's vote share was not uniform across the district. In general, he performed better in southern and western counties like Coal, Pushmataha, or Johnston, where he obtained over a 75% vote share. These are also counties where the Democrat registration is over 80%. Conversely, Boren performed notably worse in counties at the north of the district like Delaware (58.4% vote share), Nowata (58.9% vote share) or Mayes (61.9 vote share %). In these counties, the Democrat registration is 60% or less.

**Table 4.9: Oklahoma's 2<sup>nd</sup> Congressional District**

County	Core County Measures			Swing County Measures		Distributive Policies	
	Vote for Incumbent	County/District Ratio	Democratic Registration	1-absolute margin	Independent Registration	Grants pc	Direct Paym. pc
Adair	0.671	1.018	0.627	0.658	0.063	2931.59	1438.19
Atoka	0.664	1.008	0.791	0.672	0.063	2112.29	1572.05
Brian	0.680	1.033	0.702	0.639	0.115	2613.64	1930.43
Cherokee	0.698	1.059	0.656	0.604	0.114	2998.87	1396.07
Choctaw	0.725	1.100	0.818	0.550	0.079	4938.36	2376.10
Coal	0.766	1.163	0.853	0.468	0.046	3528.07	2014.30
Craig	0.641	0.973	0.695	0.717	0.073	1729.98	1912.74
Delaware	0.584	0.886	0.575	0.832	0.095	1436.93	1323.32
Haskell	0.736	1.116	0.872	0.529	0.032	2806.94	1950.10
Hughes	0.749	1.136	0.803	0.503	0.059	2306.11	2279.49
Johnston	0.751	1.140	0.805	0.497	0.068	2828.36	1835.16
Latimer	0.705	1.071	0.858	0.589	0.045	1571.23	1949.75
Le Flore	0.644	0.977	0.750	0.712	0.083	1859.91	1710.62
McCurtain	0.648	0.984	0.838	0.703	0.051	3577.07	2148.98
McIntosh	0.712	1.080	0.797	0.577	0.053	1758.75	2001.01
Mayes	0.619	0.940	0.604	0.761	0.083	1037.88	1319.90
Muskogee	0.676	1.026	0.673	0.648	0.106	1895.98	2117.35
Nowata	0.589	0.894	0.575	0.822	0.088	1389.76	1485.23
Okfuskee	0.752	1.141	0.767	0.496	0.069	2521.05	2014.64
Okmulgee	0.693	1.051	0.683	0.615	0.088	2158.23	2009.20
Ottawa	0.663	1.007	0.656	0.673	0.108	1839.54	2255.15
Pittsburgh	0.716	1.087	0.751	0.568	0.081	1545.64	1619.51
Pushmataha	0.758	1.150	0.871	0.484	0.049	2904.77	2291.62
Sequoyah	0.650	0.987	0.749	0.699	0.065	2618.56	1379.21

Source: Own calculations from CFR and Leip (2011).

There seems to be congruence between the different core and swing measures. All those counties that have a 10% vote share over the incumbent's average (more than 1.1 in the ratio *County/District* measure) have over 80% of Democrat registration (with the exception of Okfuskee County). Likewise, all those counties that rate over 0.7 in the *absolute margin* variable, are also counties where the percentage of registered independents and third parties is over 8% (with the only exception of McCurtain county). More importantly, the swing measures tend not to be related with the incumbent's vote share. As I explained above, an apparently tight electoral result can be due to a higher share of core voters of the two parties or due to a high share of swing

voters. Thus, it is important that swing measures capture the latter, and are not driven by the presence of core voters. In this regard, using the measures displayed in the table, it seems that the swing measures are independent of the incumbent's vote share (which can be a proxy of its core voters in the county). We can find counties that rate high in the swing measures in which the incumbent vote share was at its average, such as Brian County or Cherokee County, but there are also counties where the incumbent performed badly and also have high values of the swing measures, such as Nowata County, or Mayes County. Thus, the swing county measures are not simply capturing the incumbent's electoral results, and, altogether, we can be confident that they are picking up the level of swing voters in a county.

Finally, if we look to the relation with distributive benefits, there seems to be a relation as the one predicted. The average county received 2371\$ in grants per capita and 1847\$ in direct payments. The three most core counties mentioned above obtained significantly higher levels of both types of spending. Coal County received 3528\$ in grants per capita, and 2014\$ in direct payments, Pushmataha received 2904\$ in grants per capita, and 2291\$ in direct payments, and Johnston received 2828 in grants per capita, and, 1835\$ in direct payments. These are all remarkably higher levels of distributive benefits than the average (the only moderate figure is the direct payments targeted to Johnston County).

On the other hand, those counties with higher values of the absolute margin variable got low sums of distributive benefits. Delaware received 1436\$ in grants per capita, and 1323\$ in direct payments, Nowata was targeted 1389\$ in grants per capita and 1485\$ in direct payments, and Mayes, 1037\$ in grants per capita and 1319\$ in direct payments. Thus, while core counties seem to receive in average a high level of distributive

benefits, swing counties receive moderate or low levels. In the next sections, I will test if this result holds econometrically.

### **4.6.3. Method**

I test the hypothesis in the period 2001-2009 for the two dependent variables. As I said above, the novelty of this chapter is the richness and precision of the data. For each year I have around 2,500 county observations<sup>72</sup>. This yields around 22,500 observations in the whole analysis<sup>73</sup>. I am interested in which counties within a district are prioritised in the distribution of pork. Therefore, I use multilevel hierarchical models, with district-level random intercepts that account for unobserved heterogeneity, and counties clustered within their districts (the level 2).

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<sup>72</sup> The United States has, depending on the year, around 3,140 counties, but my sample is reduced in two ways. I replicate Martin's (2003) procedure to tackle two drawbacks of using counties as units of analysis. First, I drop from the analysis those counties that do not entirely belong to one single district, as I cannot entirely attribute the grants to one representative. The Consolidated Federal Funds Reports tell us how much resources reach each county, but they do not specify how much reaches each part of the county that belongs to different districts. In some robustness analyses, I have considered that each part of the county receives a share of *grants* and *direct payments* proportional to its population. The results remained unchanged and are available upon request. Secondly, to correctly capture the incumbent's choice between counties, I analyse only those districts where there are 4 or more counties. It makes more sense to study districts with several counties for two reasons. First, I am trying to identify which counties incumbents prioritize. That is, I am exploring within district variations. Hence, it is necessary to have some counties with different levels of grants per capita to have variation in the dependent variable. Moreover, I also need variation in the independent variables. If I took districts with one county, there would be no core counties. These decisions leave me with around 2,500 counties per year, depending on the missing values of the independent variables. Still, the analyses are robust to other cut-off points in the sample, either more flexible ones (districts with at least two counties), or more stringent ones (districts with more than five or six counties). If something, restricting the analysis to districts with high number of counties would over-represent Southern and Eastern States, where counties tend to be smaller. There is no reason, however, to believe that the political logic driving benefits in these districts is different to the rest of the nation. Moreover, Martin's (2003) analyses on the influence of county turnout comparing the reduced sample and the full sample show similar and consistent results, so we can expect that this functional reduction does not yield any significant bias. The advantages of using this slightly reduced sample of counties are, therefore, much stronger than the potential disadvantages.

<sup>73</sup> Preliminary analyses show that, unlike the *direct payments*, the *grants* variable has a much more temporal dependent structure. *Grants* normally comprise spending programmes that develop over years, while *direct payments* are more variable in the short-term. This temporal dependency advises including a lagged dependent variable for the grants analyses. Therefore, the analyses on *grants* lose the 2001 observations. As I discuss in next chapter, this would be a problem if the analyses included fixed effects due to the Nickell bias (Nickell, 1981). However, as I am using level-2 random effects, the analysis does not include county fixed-effects, ruling out this potential risk.

I include four sets of controls: socioeconomic, political, geographic and economic. The socioeconomic controls are taken from the US Census Bureau. I include the county's *median income*, to control for the level of well-being within the district (Bickers and Stein, 1996). The total county *population* measures how attractive a county is for the incumbent in terms of votes, but also how targetable the voters in the county are. Highly populated counties mean that there are many potential votes to be won. Conversely, low populated counties tend to have more homogeneous interests that are more easily targetable through distributive politics. The *unemployment* and *poverty* rates, estimated by the US Census Bureau, capture whether politicians have more incentives to target distributive policies to areas where there are more economic needs. Conversely, as the poor vote less, politicians might have fewer incentives to target them distributive policies. The county's *density of population* denotes the existence of agglomeration and scale economies within the county. In densely populated areas, a similar policy might impact a higher number of voters.

I argued in the theoretical chapter that politicians have more incentives to deliver narrow transfers where there are many competing parties (Cox, 1990). Although this argument is made at the national level, I include the *effective number of parties* (calculated at the county level results of the House of Representatives elections) to control for electoral competition incentives to target more distributive policies to more competed counties. The geographic controls are the *land* and *water area* of the county (measured in square miles). Following the same rationale of the district level analyses, I also include a dummy indicating whether the county contains a state *capital*.

I incorporate some supplementary economic variables that capture some conditions that make a county more or less likely to receive transfers. All these variables belong to the 2004 ERS (Economic Research Service) database of the United States Department of

Agriculture (USDA). *Farm* and *mine* are indicators of whether the county is farm- or mine-dependent. *Retire* has value 1 if the county is, according to the USDA, a retirement destination. This type of counties will be characterised by a predominance of a services economy. *Low employment* is an indicator for counties characterised by low employment levels. I also include an *Urban-Rural* variable. This variable has nine categories that draw a continuum between counties in metropolitan areas of more than one million inhabitants to rural counties of less than 2,500 urban population, not adjacent to any metropolitan area<sup>74</sup>. All the ERS variables are time invariant, but given the high ‘stickiness’ of economic conditions, they can be used for the whole period of analysis.

At the district-level, I include a dummy for the district’s representative (a Democrat (1) or a Republican (0)) and a dummy with value 1 when the district’s representative belongs to the House majority (*affiliated*). The interaction between both captures whether any of the two parties makes a more intense political use of transfers.

Finally, all models include a dummy for *electoral year*, term dummies and district random intercepts (not shown in the tables).

#### **4.6.4. Results**

The empirical evidence of Tables 4.10 to 4.13 strongly supports the hypothesis that politicians discriminate among voters in each district, and target their expenditure to

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<sup>74</sup> Specifically, the nine categories are: 1) Counties in metro areas of 1 million population or more 2) Counties in metro areas of 250,000 to 1 million population 3) Counties in metro areas of fewer than 250,000 population 4) Urban population of 20,000 or more, adjacent to a metro area; 5) Urban population of 20,000 or more, not adjacent to a metro area; 6) Urban population of 2,500 to 19,999, adjacent to a metro area; 7) Urban population of 2,500 to 19,999, not adjacent to a metro area; 8) Completely rural or less than 2,500 urban population, adjacent to a metro area; 9) Completely rural or less than 2,500 urban population, not adjacent to a metro area.

areas with more core voters. Conversely, there seems to be no evidence in favour of swing voters' distribution.

Tables 4.10 and 4.11 contain the core county variables. All of them are positive and significant with both specifications of the dependent variable. This is very robust evidence that politicians allocate more monies in core areas of their districts, and consequently, that they are interested in core voters. The interpretation is that politicians prioritise mobilising their electorate to win re-election rather than persuading new voters. However, as incumbents cannot exchange directly a public good for a vote, and given that all representatives have some level of variation in their electoral support within their district, they seek to allocate the discretionary public spending in those areas where they already obtain more votes. This is the closest a politician can get to her potential voters.

The magnitude of the effects is large, and greater than in the district level analyses. In Figures 4.10 and 4.11, I simulate –with a 95% confidence interval- the results of Tables 4.10 and 4.11 using the variable *County/District* as main independent variable, and setting the rest of variables to their mean value. It can be seen that an average county receives 1,732\$ per capita in grants and 2,190\$ per capita in direct payments. These figures increase to over 1,826\$ in grants and almost 2,320\$ in direct payments in those counties where the incumbent obtained two standard deviations (around a 35% of the vote share) over the mean. Conversely, those counties where the incumbent obtained two standard deviations below the mean, receive only an average of 1,638\$ per capita in grants and 2,060\$ in direct payments. This is strong evidence of a political logic in benefits' distribution within a district.

On the other hand, there is no evidence of swing voter's distribution in Tables 4.12 and 4.13. The analyses have included several variables that measure county's swingness in a variety of ways that respond to diverse conceptions of what swing voters can mean for a politician. Only the variable *volatility* in the *direct payments* specification (model 4 in Table 4.13) is positive and significant. The remainder nine specifications of county's swing voters fall under conventional levels of significance or even show a negative and significant effect. This is the case for the *registration* variable, which shows a big and strong negative relation with both *grants* and *direct payments* per capita. The *third parties share* proxy also takes a negative and significant sign in the direct payments' model. Thus, counties with higher amounts of independent and third party voters seem to be excluded from distribution. This goes against the swing voter theory and in favour of Cox and McCubbins' (1986) theoretical framework. Politicians avoid targeting independent voters, because their lack of 'partisanship' does not provide a positive and certain electoral response to benefits. Parties will therefore prefer transferring resources to their core areas where the uncertainty in the electoral response is lower.

**Table 4.10. Grants per capita to core counties:**

**Multi-level analyses with District Random Intercepts**

VARIABLES	(1) Grants	(2) Grants	(3) Grants	(4) Grants
<i>LDV</i>	0.611*** (0.00800)	0.611*** (0.00794)	0.612*** (0.00814)	0.709*** (0.0109)
<i>State Capital</i>	3,386*** (118.0)	3,384*** (117.4)	3,378*** (119.6)	3,208*** (142.4)
<i>Land Area</i>	0.0147 (0.00975)	0.0154 (0.00968)	0.0149 (0.00988)	0.0268*** (0.00935)
<i>Water Area</i>	0.0606 (0.0490)	0.0648 (0.0478)	0.0610 (0.0496)	0.168 (0.122)
<i>Density</i>	0.112** (0.0439)	0.112** (0.0438)	0.114** (0.0451)	0.481** (0.192)
<i>Poverty</i>	2,497*** (322.5)	2,494*** (320.4)	2,470*** (331.0)	1,898*** (420.5)
<i>Democrat</i>	669.1*** (57.55)	668.0*** (57.02)	664.7*** (58.80)	555.1*** (74.41)
<i>Affiliated</i>	589.2*** (53.58)	596.2*** (53.07)	585.0*** (54.88)	443.1*** (71.06)
<i>Democrat*Affiliated</i>	-1,288*** (102.6)	-1,285*** (101.7)	-1,273*** (105.2)	-1,048*** (138.2)
<i>Unemployment Rate</i>	1,205** (589.7)	1,109* (585.1)	1,172* (604.2)	1,915** (803.8)
<i>Median Income</i>	-5.949*** (2.165)	-6.082*** (2.148)	-5.724** (2.227)	-5.675** (2.825)
<i>Population</i>	-5.549*** (1.830)	-5.633*** (1.819)	-5.606*** (1.862)	-12.99*** (3.516)
<i>Rural-Urban</i>	22.64*** (5.063)	23.42*** (4.996)	23.82*** (5.197)	26.94*** (7.205)
<i>Farm</i>	60.55** (29.57)	64.21** (29.33)	62.68** (30.28)	28.47 (37.34)
<i>Mine</i>	-60.90 (44.81)	-58.40 (44.41)	-46.12 (46.45)	-61.33 (55.99)
<i>Low Employment</i>	73.41** (32.99)	74.63** (32.79)	73.20** (34.03)	4.129 (46.16)
<i>Retire</i>	-149.3*** (29.00)	-148.4*** (28.57)	-154.4*** (29.72)	-96.78** (44.62)
<i>Electoral Year</i>	132.4*** (20.17)	130.7*** (19.89)	127.0*** (20.76)	96.39*** (27.64)
<i>Eff. N. Parties</i>	-34.24 (84.45)	-62.34 (95.46)	-80.03 (121.7)	-271.9** (119.5)
<b>County/District</b>	<b>268.8***</b> <b>(64.38)</b>			
<b>County /Max County</b>		<b>227.9***</b> <b>(87.29)</b>		
<b>Vote Incumbent County</b>			<b>175.28**</b> <b>(82.59)</b>	
<b>Incumb. Registration</b>				<b>242.2***</b> <b>(83.04)</b>
Observations	19529	19809	18963	7823
chi2	14027	14173	13516	10890

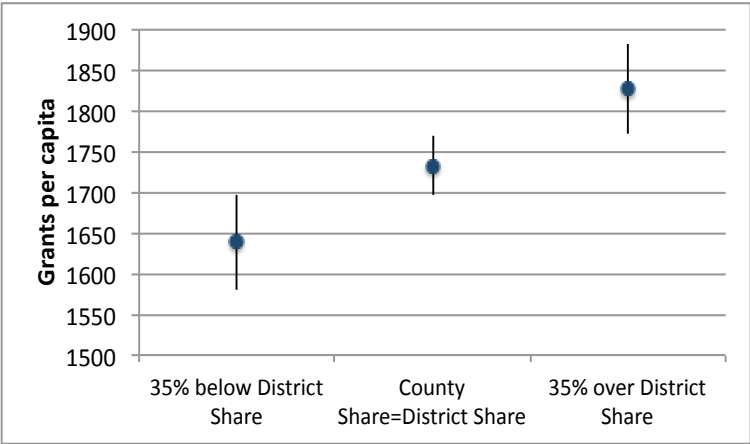
District Random Intercepts not shown. Standard errors in parentheses,\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 4.11. Direct Payments per capita to core counties:**

<b>Multi-level analyses with District Random Intercepts</b>				
VARIABLES	(1)	(2)	(3)	(4)
	Direct Payments	Direct Payments	Direct Payments	Direct Payments
<i>State Capital</i>	-61.66 (120.4)	-62.89 (107.6)	-63.21 (104.2)	218.9 (141.2)
<i>Land Area</i>	-0.0764*** (0.0133)	-0.0757*** (0.0199)	-0.0754*** (0.0191)	-0.0720*** (0.0109)
<i>Water Area</i>	0.0369 (0.0281)	0.111 (0.0768)	0.0392 (0.0293)	0.592*** (0.149)
<i>Density</i>	0.246*** (0.0310)	0.249*** (0.0354)	0.246*** (0.0342)	0.389*** (0.151)
<i>Poverty</i>	-3,845*** (706.1)	-3,914*** (603.9)	-4,025*** (649.5)	-6,249*** (1,077)
<i>Democrat</i>	2,122*** (214.4)	2,144*** (178.1)	2,161*** (188.2)	2,600*** (339.9)
<i>Affiliated</i>	2,407*** (293.6)	2,408*** (250.9)	2,441*** (239.6)	3,445*** (493.3)
<i>Democrat*Affiliated</i>	-4,541*** (488.2)	-4,570*** (417.0)	-4,594*** (408.3)	-6,106*** (814.5)
<i>Unemployment Rate</i>	-9,404*** (2,028)	-9,584*** (1,678)	-9,745*** (1,692)	-15,380*** (3,343)
<i>Median Income</i>	-54.71*** (5.637)	-55.32*** (4.357)	-56.56*** (4.739)	-62.17*** (7.736)
<i>Population</i>	-7.572*** (2.062)	-7.696*** (2.115)	-7.243*** (2.450)	-4.304 (3.478)
<i>Rural-Urban</i>	108.4*** (6.793)	111.5*** (6.441)	108.3*** (6.603)	150.6*** (10.29)
<i>Farm</i>	1,651*** (83.55)	1,652*** (68.24)	1,671*** (92.74)	1,950*** (170.7)
<i>Mine</i>	-53.27 (44.87)	-61.61 (52.30)	-65.63* (38.34)	10.73 (56.04)
<i>Low Employment</i>	120.4* (65.56)	119.2* (64.50)	129.5** (52.33)	165.3* (85.20)
<i>Retire</i>	-378.8*** (31.23)	-361.3*** (32.63)	-376.8*** (26.12)	-291.0*** (39.76)
<i>Electoral Year</i>	294.0*** (25.37)	288.7*** (24.94)	298.9*** (25.35)	450.1*** (47.66)
<i>Eff. N. Parties</i>	340.6*** (106.1)	321.9** (133.2)	347.5** (172.2)	674.5*** (175.5)
<b>County/District</b>	<b>373.3*** (122.1)</b>			
<b>County /Max County</b>		<b>266.9* (147.6)</b>		
<b>Vote Incumbent County</b>			<b>207.8** (100.12)</b>	
<b>Incumb. Registration</b>				<b>341.6* (181.0)</b>
Observations	22023	22303	21396	8759
chi2	6391	10677	6397	4020

District Random Intercepts not shown. Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Figure 4.10. Predicted Grants at the County-Level by *County/District ratio***



**Predicted Values. Model 1 Table 4.10 (95% Confidence Interval)**

**Figure 4.11. Predicted Direct Payments at the County-Level by *County/District ratio***



**Predicted Values. Model 1 Table 4.11 (95% Confidence Interval)**

**Table 4.12. Grants per capita to swing counties:**

**Multi-level analyses with District Random Intercepts**

VARIABLES	(1) Grants	(2) Grants	(3) Grants	(4) Grants	(5) Grants
<i>LDV</i>	0.611*** (0.00800)	0.612*** (0.00808)	0.708*** (0.0109)	0.577*** (0.0111)	0.611*** (0.00794)
<i>State Capital</i>	3,377*** (118.1)	3,373*** (118.8)	3,202*** (142.4)	4,208*** (173.5)	3,381*** (117.4)
<i>Land Area</i>	0.0153 (0.00977)	0.0152 (0.00978)	0.0294*** (0.00928)	0.0208 (0.0135)	0.0153 (0.00969)
<i>Water Area</i>	0.0633 (0.0490)	0.0693 (0.0483)	0.167 (0.122)	0.101 (0.0694)	0.0694 (0.0478)
<i>Density</i>	0.108** (0.0440)	0.112** (0.0448)	0.469** (0.192)	0.0698 (0.0625)	0.111** (0.0438)
<i>Poverty</i>	2,456*** (322.8)	2,458*** (328.3)	1,783*** (420.5)	2,670*** (430.9)	2,461*** (320.2)
<i>Democrat</i>	666.0*** (57.64)	658.5*** (58.09)	583.0*** (74.15)	687.2*** (63.65)	656.2*** (57.16)
<i>Affiliated</i>	596.1*** (53.60)	588.0*** (54.32)	455.0*** (70.81)	586.5*** (56.44)	594.4*** (53.14)
<i>Democrat*Affiliated</i>	-1,290*** (102.7)	-1,276*** (104.1)	-1,057*** (138.1)	-1,292*** (104.5)	-1,283*** (101.8)
<i>Unemployment Rate</i>	1,172** (590.5)	1,123* (598.1)	1,789** (800.0)	1,129 (803.6)	1,149** (585.1)
<i>Median Income</i>	-5.915*** (2.166)	-5.813*** (2.208)	-5.314* (2.842)	-5.575* (2.975)	-6.014*** (2.149)
<i>Population</i>	-5.555*** (1.832)	-5.471*** (1.848)	-12.28*** (3.535)	-6.282** (2.738)	-5.485*** (1.818)
<i>Rural-Urban</i>	23.75*** (5.060)	24.07*** (5.127)	28.70*** (7.200)	30.55*** (7.416)	23.71*** (4.996)
<i>Farm</i>	66.49** (29.56)	62.83** (30.04)	24.05 (37.67)	83.60* (43.77)	64.58** (29.34)
<i>Mine</i>	-60.64 (44.84)	-48.50 (46.03)	-76.23 (56.43)	-62.58 (66.13)	-61.11 (44.41)
<i>Low Employment</i>	73.77** (33.02)	74.08** (33.80)	10.47 (45.98)	65.81 (48.67)	74.44** (32.80)
<i>Retire</i>	-154.0*** (29.00)	-152.5*** (29.23)	-102.1** (44.61)	-162.8*** (42.00)	-151.0*** (28.56)
<i>Electoral Year</i>	133.0*** (20.18)	125.8*** (20.46)	95.93*** (27.65)	227.5*** (28.99)	131.1*** (19.89)
<i>Eff. N. Parties</i>	49.30 (143.5)	89.16 (97.63)	-204.0* (114.8)	39.60 (130.8)	75.71 (80.62)
<b><i>Absolute Margin</i></b>	<b>-5.679</b> <b>(37.25)</b>				
<b><i>Opposition Ratio</i></b>		<b>-0.904</b> <b>(2.938)</b>			
<b><i>Swing Registration</i></b>			<b>-291.0*</b> <b>(159.5)</b>		
<b><i>Volatility</i></b>				<b>-20.09</b> <b>(97.16)</b>	
<b><i>Third Parties Share</i></b>					<b>-190.9</b> <b>(164.6)</b>
Observations	19529	19236	7823	12134	19809
chi2	13988	13687	10913	7077	14162

District Random Intercepts not shown. Standard errors in parentheses,\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 4.13. Direct Payments per capita to swing counties:**

**Multi-level analyses with District Random Intercepts**

VARIABLES	(1) Direct Payments	(2) Direct Payments	(3) Direct Payments	(4) Direct Payments	(5) Direct Payments
<i>State Capital</i>	-68.72 (94.57)	-68.72 (94.57)	134.7 (140.6)	-26.40 (167.8)	-62.91 (101.0)
<i>Land Area</i>	-0.0754*** (0.0174)	-0.0754*** (0.0174)	-0.0658*** (0.0133)	-0.0839*** (0.0287)	-0.0754*** (0.0191)
<i>Water Area</i>	0.117* (0.0650)	0.117* (0.0650)	0.723*** (0.188)	0.216* (0.113)	0.115 (0.0923)
<i>Density</i>	0.247*** (0.0304)	0.247*** (0.0304)	0.402** (0.164)	0.243*** (0.0477)	0.250*** (0.0359)
<i>Poverty</i>	-4,109*** (584.5)	-4,109*** (584.5)	-6,426*** (1,291)	-4,659*** (920.4)	-3,932*** (578.3)
<i>Democrat</i>	2,173*** (111.6)	2,173*** (111.6)	2,659*** (388.2)	1,921*** (237.2)	2,113*** (193.7)
<i>Affiliated</i>	2,435*** (167.6)	2,435*** (167.6)	3,455*** (557.1)	2,204*** (304.7)	2,399*** (257.6)
<i>Democrat*Affiliated</i>	-4,633*** (268.3)	-4,633*** (268.3)	-6,132*** (926.1)	-4,162*** (503.5)	-4,550*** (426.0)
<i>Unemployment Rate</i>	-9,866*** (1,262)	-9,866*** (1,262)	-15,591*** (3,628)	-13,016*** (2,613)	-9,551*** (1,700)
<i>Median Income</i>	-57.13*** (3.664)	-57.13*** (3.664)	-57.73*** (10.14)	-62.04*** (7.175)	-55.23*** (4.437)
<i>Population</i>	-7.130*** (2.213)	-7.130*** (2.213)	-1.866 (3.866)	-8.845*** (3.399)	-7.658*** (1.997)
<i>Rural-Urban</i>	110.8*** (7.140)	110.8*** (7.140)	150.9*** (10.87)	135.5*** (12.31)	111.4*** (6.033)
<i>Farm</i>	1,667*** (88.78)	1,667*** (88.78)	1,878*** (166.5)	1,795*** (142.1)	1,650*** (86.59)
<i>Mine</i>	-77.85* (46.47)	-77.85* (46.47)	-46.23 (53.96)	-109.3 (71.17)	-65.24 (56.75)
<i>Low Employment</i>	128.0** (50.91)	128.0** (50.91)	153.5* (87.28)	213.5** (102.2)	119.5** (50.14)
<i>Retire</i>	-357.4*** (32.73)	-357.4*** (32.73)	-290.9*** (44.48)	-415.6*** (46.03)	-363.9*** (30.39)
<i>Electoral Year</i>	293.7*** (30.37)	293.7*** (30.37)	445.4*** (55.81)	394.9*** (54.48)	289.0*** (29.67)
<i>Eff. N. Parties</i>	580.0*** (110.0)	580.0*** (110.0)	608.6*** (170.2)	621.3*** (173.3)	506.5*** (87.03)
<b><i>Absolute Margin</i></b>	<b>0.0981 (1.085)</b>				
<b><i>Opposition Ratio</i></b>		<b>0.0981 (1.085)</b>			
<b><i>Swing Registration</i></b>			<b>-2,243** (944.1)</b>		
<b><i>Increment</i></b>					
<b><i>Volatility</i></b>				<b>505.6*** (166.8)</b>	
<b><i>Third Parties Share</i></b>					<b>-870.1*** (163.5)</b>
Observations	22023	21668	8759	12135	22303
chi2	4096	8934	3064	2357	6052

District Random Intercepts and term dummies not shown. Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### **4.6.5. Are All Politicians Equally Interested in Core Counties?**

I have shown so far that incumbents target benefits to areas, within their district, where there are more core voters. However, at a more aggregate level, I showed in Section 4.5 that swing districts get more grants. Are these results connected? I suggested above that risk-averse politicians have incentives to target core voters. They are a reliable electoral asset, that politicians need to mobilise to ensure re-election. Hence, the necessity of ensuring them should be even stronger in uncertain settings, where a mobilised constituency is a necessary condition for the final electoral victory.

To test this connection, I run the same models of previous section, incorporating now a cross level interaction between the level-2 swing district variables and the core counties' measures. This way I test whether incumbents from swing districts are more, less or as interested in core counties than other representatives. That is, whether core counties are equally attractive to a swing district's incumbent or whether politicians' incentives change across districts.

In Table 4.14<sup>75</sup>, I interact the four electoral core county variables with one of most representative measure of swing districts: (*1- margin of victory*). To prove the robustness of the results, in Table 4.15, I repeat the analyses interacting now one of the main core county variables (*County/Max County*) with the other three swing district variables: *1-(Incumbent Share)*, ( $1-\sqrt{\text{Margin of Victory}}$ ), and the *swing dummy*.

The results provide evidence of a cross-level effect. In Table 4.14, seven out of the eight interactions are significant with the expected sign. Likewise, seven out of eight interactions are significant in Table 4.15. With a variety of measures at the district- and

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<sup>75</sup> In these analyses I do not show the control variables as they yield very similar magnitudes and significance as in previous analyses.

county-level, these results indicate that incumbents in unsafe districts have greater incentives to distribute to their core voters. The uncertainty of the electoral result and their risk-aversion gives them extra incentives to target their most reliable voters.

Following Brambor et al.'s (2006) guidelines, I present the interactions graphically. I plot the interactive effects with two different measures of core counties for the two dependent variables. Figure 4.12 plots the interaction of model 1 in Table 4.14, and Figure 4.13 shows the interaction of model 2 in Table 4.15. It is shown that in safe districts (left-hand side of the graphs), core counties have no effect attracting both *grants* and *direct payments*. As the competitiveness and swingness of the district increases, incumbents have more incentives to discriminate among their electorate and target the most certain voters. On the right hand side of the graph, where swing districts lie, being a core county has a very strong effect in attracting both *grants* and *direct payments*. In this vein, and calculating these predicted values, in a perfectly competitive district (where both parties tied) a unit increase in the coreness of a county (measured with the *County/District* vote share ratio), represents an increase of 400\$ in *grants* per capita (Figure 4.12). If we use the simulation of Figure 4.13, the effect of core counties implies an increase of almost 700 \$ in *direct payments* in tied districts.

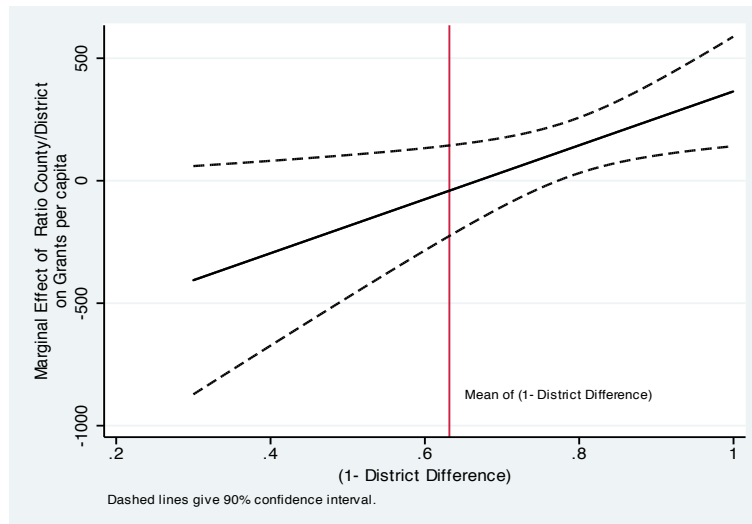
These figures show that, in fact, the general finding of distribution to core counties is driven by swing districts' incumbents. In very safe districts, the marginal effect of core counties is not significantly different from zero. Safe incumbents might be more comprehensive in their distributive strategies, while unsafe incumbents have to be very cautious in choosing their beneficiaries.

**Table 4.14. Distribution to Core Counties across Districts (I): Multi-level analyses**

VARIABLES		(1) Grants	(2) Direct Payments	(3) Grants	(4) Direct Payments	(5) Grants	(6) Direct Payments
<i>Swing District</i>	<i>1- Margin District</i>	-775.9** (319.0)	83.11 (510.3)	-517.2 (342.3)	-1,926*** (450.1)	13.52 (111.2)	380.4*** (146.0)
<i>Core County (i)</i>	<i>County/District</i>	-668.6** (291.8)	-155.0 (433.2)				
<i>Interaction (i)</i>	<i>County/District * (1- Margin District)</i>	1,057*** (344.8)	410.3 (551.0)				
<i>Core County (ii)</i>	<i>County /Max County</i>			-608.8* (357.7)	-2,367*** (462.9)		
<i>Interaction (ii)</i>	<i>County /Max County * (1- Margin District)</i>			949.4** (416.5)	3,055*** (603.5)		
<i>Core County (iii)</i>	<i>Vote Incumbent County</i>					-408.9** (160.0)	-275.8 (207.0)
<i>Interaction (iii)</i>	<i>Vote Incumbent* (1- Margin District)</i>					558.7*** (179.5)	449.3* (249.0)
	Observations	19529	22023	19529	22023	18963	21396
	chi2	14034	9686	14002	8219	13555	7500

Controls and District Random Intercepts not shown. Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Figure 4.12. Marginal Effect of District's Margin of Victory on Grants to Counties**

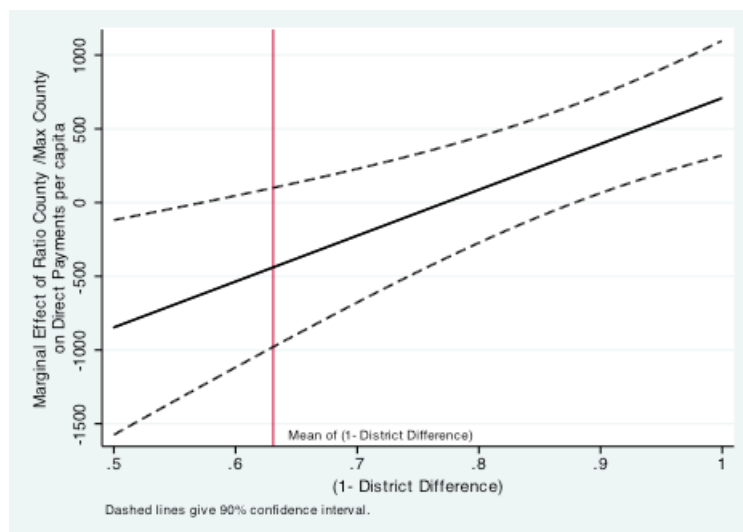


**Table 4.15. Distribution to Core Counties across Districts (II): Multi-level analyses**

VARIABLES		(1)	(2)	(3)	(4)	(5)	(6)
		Grants	Direct Payments	Grants	Direct Payments	Grants	Direct Payments
<i>Core County</i>	<i>County /Max County</i>	1,644*** (496.8)	3,751*** (975.8)	-503.1* (289.1)	-1,641*** (583.8)	111.2 (120.1)	-12.727 (255.3)
<i>Swing District Variable (i)</i>	<i>(1- Incumbent Vote Share)</i>	1,468** (688.5)	3,955*** (1,341)				
<i>Interaction(i)</i>	<i>County /Max County * (1- Incumbent Vote Share)</i>	2,578*** (859.7)	6,282*** (1,681)				
<i>Swing District Variable (ii)</i>	<i>1- <math>\sqrt{\text{Margin of Victory}}</math></i>			-691.9* (357.9)	-2,005*** (726.5)		
<i>Interaction(ii)</i>	<i>County /Max County * 1- <math>\sqrt{\text{Margin of Victory}}</math></i>			1,185*** (453.2)	3,125*** (920.4)		
<i>Swing District Variable (iii)</i>	<i>Swing Dummy</i>					-154.3 (129.4)	-431.3 (274.9)
<i>Interaction(iii)</i>	<i>County /Max County * Swing Dummy</i>					245.80 158.4	554.3* (337.3)
	Observations	19529	22023	19529	22023	19529	22023
	chi2	14025	2605	13998	2601	13998	2601

Controls and District Random Intercepts not shown. Robust standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Figure 4.13. Marginal Effect of District's Margin of Victory on Direct Payments to Counties**



These results do not only invalidate the assumption in the literature that parties target swing districts in order to buy off swing voters. In fact, they show the opposite result. It is precisely in swing districts where politicians have more incentives to mobilise their reliable core voters by targeting grants and direct payments to the counties where they had higher relative levels of support in the previous election.

This seems to imply that politicians are risk averse, and that the uncertainty of the final electoral outcome makes them less prone to expand their electoral base to new voters. In turn, they focus all their efforts on ensuring that their voters do not fail in their support. Hence, the usual association between swing districts and swing voters is misleading. Although there might be swing voters in these districts, politicians discriminate between voters and seek to identify those that are likely to be most responsive. They do this by particularly targeting voters in core counties, which is their safest strategy.

#### **4.7. Robustness Analyses**

The main result of the previous section was that politicians distribute benefits to core counties within their district, particularly in swing districts. However, this conclusion stems from regression analyses, which, in the words of Ho et al. (2007), are *model dependent*. The causal relation is potentially exposed to a bias if the conditions that make a county receive more grants are also correlated with the conditions that make a county more prone to be core. This is a plausible suspicion. Therefore, in this section I try to deal with the non-random assignment issue in two ways. First, I will try to exogenously select the cases that (almost) randomly assign counties to the treatment of being *core* and see if, among those quasi random observations, there are differences in the level of distributive politics between core counties and the rest. In the second place,

I will use those counties that clearly vote for a candidate to calculate propensity scores of being a core county. With a matching procedure I will use the comparable cases to estimate the effects of being a core county on attracting distributive benefits.

#### **4.7.1. Differences-in-Differences**

A first analysis to reinforce previous findings is to directly select those counties whose condition of being a core county after an election is close to be random. We can define being core as the *treatment* of this analysis. A differences-in-differences estimation tests whether the differences in outcomes after and before elections in counties affected by the treatment are significantly different to the outcomes for untreated counties (Bertrand et al., 2004). This would tackle some of the possible causality and identification problems that could be raised. However, to do this successfully, we have to be very cautious in selecting those counties where the intervention (being or not being core) is basically random, ruling out any bias in the intervention.

Simplifying, we can define the condition of being an incumbent's *core* county by two features: 1) the *county* overwhelmingly votes for a party or candidate; 2) the candidate results to be the winner in the *district*. It is reasonable to assume that the first condition is dependent on county conditions. There will be certain variables, such as relative income, poverty, the previous level of benefits and many others that could make a county more likely to vote for the Democratic or Republican Party. However, the conditions that make the second requisite happen are less correlated with the county's variables. A *county* might vote for a candidate, but if this candidate is not successful in the whole *district*, these votes do not turn the *county* into a *core* one. In fact, if a *county* votes for a candidate who does not win in the *district*, those votes convert it into an '*opposition county*'. Therefore, the conditions that make it core cannot completely be

attributed to the county. If we are able to isolate those unobservable conditions at the county level that correlate voting for a party, and exploit those conditions at the district level that randomly convert it into a *core* one, the conclusions will be stronger.

To carry this out, I select *counties* in very competitive *districts*, where the final condition of being core or not will depend on only a few votes and, therefore, is close to being random. More importantly, the conditions that make those votes happen or not (that is, the conditions that make the county prone to receive the treatment) will be correlated with district level variables, where the importance of a single county is diluted.

Let us pose an extreme example. Research has shown that turnout can be influenced by non-political conditions, such as rain or snowfall (Gomez et al., 2007). Let us assume a highly competitive *district* where the Democrats win by just one vote. This vote difference could be caused by lower turnout in a Republican *county* due to rain. In this case, the rest of counties that overwhelmingly vote for the Republican candidate, do not become core simply because it rained in one of them. Thus, the condition of being core/non-core in all counties has to do with the contextual conditions in just one of them. And these conditions will be less correlated (or even totally uncorrelated in the case of rain) with those typical characteristics that tend to make a Republican county a *core* one.

We can further illustrate this with two examples from the dataset in Table 4.16. Glascock County is an overwhelmingly Republican county, like many others in Georgia. However, it belongs to Georgia's 12th, a Democrat District. In the 2006 election, the fact that Glascock county ends up being a core or non-core county was almost random. The 2006 election in Georgia's 12<sup>th</sup> Congressional District was decided

by a 0.61% vote share difference. Democrats kept the district just by 864 votes. This miniscule margin is small enough to consider that the district could easily have leaned to the Republican side. Moreover, the 864 votes are very likely not to be related to specific county level conditions. Counties like Glascock, which remain with their status (core or non-core) by very small margins in the district election, will be the ‘*control*’ group of my analysis. I expect that in the control group there will not be big differences in the reception of distributive benefits between terms.

**Table 4.16. An Example of the Control and the Treated Groups**

Group	Party	County	District	Switch
CONTROL		<b>Glascock County (2006)</b>	<b>Georgia 12th</b>	
	Democrat	23.42%	50.30%	<b>NO</b>
	Republican	76.57%	49.69%	
TREATED		<b>Charlottesville City (2008)</b>	<b>Virginia 5th</b>	
	Democrat	77.62%	50.24%	
	Republican	22.38%	49.76%	<b>YES</b>

The ‘*treated*’ counties are those that quasi-randomly change their status from being core to non-core or vice-versa. These are *counties* that overwhelmingly vote for a candidate, which, for almost random conditions, overtakes the *district* or loses it. Table 4.16 illustrates this. Charlottesville City is a county of Virginia’s 5<sup>th</sup> District. This is a very Democrat county within a Republican district. Thus, Charlottesville City, despite voting clearly for a party (Democrat), was not an incumbent’s core county. However, the 2008 election was decided by 727 out of 316,893 votes. By a mere 0.48% difference, the *district* switches to a Democrat representative. Hence, this very short margin should actually imply a big difference for Charlottesville City. By a margin that (we assume) randomly tips the balance to one side, this *county* changes suddenly its status from being an *opposed* county to a *core* one.

My hypothesis is while the 2006 election randomly assigns to Glascock County the condition it already had in the previous term, the annual variation in grants before and after the election should be very similar. Conversely, Charlottesville City should experience a high variation in their grants and direct payments allocation after the elections with respect to the level they were receiving before the election.

In this analysis, I select those like the ones exemplified above, whose condition depends on a quasi-random event (their party winning in the whole district for a small margin). I am aware that this is not completely random, but we can assume that it is unrelated to each county's specific conditions.

I operationalize this in the following way. I select potential *core counties* using two different criteria to obtain more robust results. In a first analysis, I use those counties where the vote share of a candidate was 10% over district's average in two consecutive elections. These are counties that consistently show a preference for a party, so they will be core counties if the party's candidate wins. In a second subsample I select those counties that vote for a party over 60% of the vote share in two consecutive elections. These two subsamples code, with two different criteria, the potential core counties.

Regarding the second condition, which is the one we can exploit in the search for randomness in the treatment, I select those *districts*, where the final margin of victory was less than 5% of the votes. This margin, by US standards, is a very short one, as turnout and volatility at the district level are very variable. The mean district's margin of victory in the sample is 37% of the vote share. A 5% difference is small enough to consider that the result could have easily tipped to the opposite side.

Once I have selected samples of potential counties that belong to districts with quasi-random incumbent parties, I run a differences-in-differences (DiD) analysis. This

analysis explores the variation in *grants* and *direct payments* allocations after and before the elections and compares the differences between types of counties. The variable *post-electoral year* has value 0 for election years and 1 for the year after elections. This variable allows us to test whether the difference in the dependent variable outcomes between the pre-treatment and the post-treatment years are significantly different. *Treatment* has value 0, when the county does not change its core/non-core status after elections, and value 1 when the district switches the incumbent (and, therefore, the county's status). The *interaction* between both dummies tests if the difference in the dependent variables between the pre- and post-treatment is different in counties that switch their coreness condition to those that do not switch. That is, the interaction measures the differences-in-differences.

These variables are regressed on two dependent variables: the absolute *variation in county grants per capita*, and the absolute *variation in direct payments per capita*. The expectation is that those counties that, due to the switch in the district's incumbency, 'randomly' change their status (from core to non-core or vice versa) will experience a larger absolute variation in the allocations of grants and direct payments than counties that keep their status.

In the analyses, I include all the county-level controls of the previous section (the district variables are controlled with the sample selection, so they are unnecessary). Regarding the method, a hierarchical estimation is used to nest the selected counties within each district. Following Bertrand et al.'s (2004) recommendation, I bootstrap the data in order to avoid the possible autocorrelation problems generated in the DiD analysis.

**Table 4.17: Differences-in-Differences. Multilevel Analyses**

VARIABLES	MODEL 1		MODEL 2	
	Counties 10% over district's mean		Counties over 60% vote share	
	(1)	(2)	(3)	(4)
	Variation in Grants pc	Variation in Direct Payments pc	Variation in Grants pc	Variation in Direct Payments pc
<i>Lagged Level of Dep. Variable</i>	-6.34e-05*** (2.06e-05)	3.28e-05*** (4.37e-06)	-6.50e-05** (2.68e-05)	2.80e-05*** (4.40e-06)
<i>Democrat</i>	-0.846 (0.753)	0.370* (0.197)	1.162 (1.241)	-0.115 (0.221)
<i>Affiliated</i>	0.189 (0.177)	0.0396 (0.0626)	0.241 (0.268)	-0.0438 (0.0598)
<i>Democrat*Affiliated</i>	0.179 (0.163)	0.187*** (0.0625)	0.274 (0.222)	0.0161 (0.0521)
<i>Poverty</i>	-0.431 (0.298)	-0.259** (0.116)	-0.566 (0.405)	-0.00881 (0.0933)
<i>Unemployment Rate</i>	-2.639* (1.414)	0.692* (0.385)	-3.614* (1.913)	0.337 (0.356)
<i>Median Income</i>	-0.00335 (0.00515)	0.00293** (0.00137)	0.00293 (0.00807)	0.000455 (0.00152)
<i>Population</i>	-0.00132 (0.00297)	-0.000645 (0.000812)	-0.0380* (0.0201)	-0.00155 (0.00370)
<i>Rural-Urban</i>	0.0253** (0.0125)	-0.000551 (0.00338)	0.0260 (0.0220)	0.000408 (0.00411)
<i>Farm</i>	0.221*** (0.0742)	-0.00492 (0.0202)	0.228** (0.101)	0.0209 (0.0194)
<i>Mine</i>	0.160* (0.0892)	-0.00216 (0.0230)	0.112 (0.110)	-0.0168 (0.0198)
<i>Low Employment</i>	0.114 (0.0806)	-0.0150 (0.0217)	0.0687 (0.107)	0.00792 (0.0200)
<i>Retire</i>	-0.00269 (0.0762)	0.00350 (0.0201)	0.0307 (0.100)	-0.0358* (0.0187)
<i>Eff. N. Parties</i>	0.639* (0.356)	0.237** (0.0961)	0.582 (0.534)	0.111 (0.0967)
<i>Post-electoral Year</i>	-0.170** (0.0788)	-0.0721*** (0.0233)	-0.372*** (0.109)	-0.0366* (0.0215)
<i>Treatment</i>	-0.134 (0.0879)	-0.0652* (0.0335)	-0.233* (0.124)	-0.0374 (0.0288)
<i>Post-electoral Year * Treatment</i>	0.247** (0.112)	0.117*** (0.0321)	0.524*** (0.186)	0.108*** (0.0383)
Observations	550	535	291	285

Standard errors in parentheses. District Random Intercepts and constant not shown, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4.17 displays the results. The interaction is positive and significant for both dependent variables and for both criteria of county selection. This interaction term has a clear interpretation. It indicates that those counties that change their coreness status (due to quasi-random and county-uncorrelated events) vary significantly more their reception of *grants* and *direct payments*, than those counties that keep their coreness status after the election. A new incumbent party implies a reconfiguration of the electoral map of

the district. Those counties that were consistently voting for the opposition party suddenly result to be core counties. This makes a difference that can be quantified, according to Model 2, in a 524\$ increase in the reception grants and 108\$ in direct payments.

As the dependent variable is operationalized as the absolute variation in both distributive policies, the econometric model is capturing both increases and decreases in the dependent variable. Therefore, the results of Table 4.17 in fact imply that incumbents, when they reach office, have immediate incentives both to allocate distributive benefits to their core support areas, but also to withdraw benefits from the opposition party's core areas. Those counties that change their coreness status both by turning into a core or non-core county vary the level of benefits received significantly more than those counties that remain core or non-core.

#### ***4.7.2. Non-Parametric Propensity Score Analyses***

In the previous differences-in-differences analyses I have exogenously selected those counties where the core condition can be assumed to be random. This allowed me to control the county-level conditions that may bias the likelihood of receiving benefits. In this section, instead of looking for randomness, I estimate propensity scores of being a core country to restrict the identification conditions. The advantage of this method is that it does not require establishing a further multivariate analysis between benefits and core counties. Matching equivalent observations already controls for contextual conditions, so a bivariate relation can be established (Ho et al., 2007). The drawback is the potential loss of generality. However, here it does not pose a problem, as these are robustness analyses that add to the previous findings.

I select in my sample the *counties* that vote for a party two standard deviations over the *district's* share of that party. This way I select those counties that overwhelmingly voted for a party –either the Republican or the Democratic-. These criteria yield over 6,000 observations that are potential core counties. They will finally be if their party wins.

A propensity score analysis allows us to randomise the district's incumbency. The treatment variable here is *affiliated county*. This variable has value 1, when the *county* voted for a candidate, who is also the *district's* representative. It takes the value 0 when the *county* votes for a candidate that did not win in the *district*. While in the previous difference-in-differences I was selecting districts with quasi-random incumbents, in this analysis being a Republican or Democratic County will be in many cases highly correlated with district conditions. With a matching procedure, we can predict, given those conditions, how likely it is that a particular county votes for the same party that wins in its whole district. Then we can compare counties that received the treatment with counties with similar likelihoods to receive it, but that finally did not.

To estimate the propensity scores for the *affiliated county* variable, I use all the independent variables at the county level of the previous regressions<sup>76</sup>. I employ two standard matching methods<sup>77</sup>: 1) one-to-one nearest neighbour (*neighb*), and 2) local linear regressions (*llr*). The two methods are run with bootstrapped standard errors with 50 replications. As the underlying conditions that convert a county into a Republican core are different to the ones that convert it into a Democratic core, I estimate the propensity scores separately for each party.

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<sup>76</sup> These variables are: *state capital, poverty, unemployment rate, median income, population, rural-urban, farm, mine, low employment, retire* and *effective number of parties*.

<sup>77</sup> For more details on the methodology and properties of these estimations, see Fröhlich (2004).

Figure 4.14 shows the balance in the matching procedure for Republican counties<sup>78</sup>. We obtain a very balanced sample with an important leverage for comparison. There is a big overlap between treated and untreated observations at medium values of the propensity score. Thus, we can match a high number of Republican core counties with similar non-core counties that had the same *a priori* likelihood of being core, and compare the differences in the level of distributive benefits. A similar balance yields from the propensity score graph for Democratic counties. This will give us very reliable estimations of the importance of being a core county.

With these propensity scores, now we can calculate the Average Treatment Effect (ATE) of the being core. The ATEs are the average difference in *grants* or *direct payments* between a core and non-core county that have the same propensity score to be core. Thus, the ATEs compare treated counties with equivalent untreated counties. This allows providing robust conclusions on the effect of the treatment.

Table 4.18 shows the ATEs estimations both for Republican and Democratic core counties. All estimations yield the expected sign and seven out of eight have very significant levels of confidence. Some straightforward comparative statics give us an account of the importance of being a core county. Using the *neighb* estimations, a Republican core county receives an extra 523.50\$ in *grants* per capita and 274.09\$ in *direct payments* compared to an equivalent county in a Democrat district. The final conclusion is clear: politicians distribute benefits to core counties.

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<sup>78</sup> The Figure is the matching balance of core and non-core Republican counties with a one to one nearest neighbour estimation. The balance is very similar with a local linear regression estimation or drawing on the sample of core and non-core Democrat counties.

These results also yield a new insight into the dynamics of distribution. It can be seen that both parties use the two distributive instruments, grants and direct payments, to target their core counties. The core county average treatment effect is almost always highly significant, indicating that they always receive relatively more of the two types of spending. However, once the analysis is split by parties, partisan differences arise. The Republican Party relies relatively more on grants to benefit their core voters. Using the *llr* estimation, a Republican core county receives 528 extra dollars in grants, but only 219\$ in direct payments. Conversely, a Democratic core county receives 239 extra dollars in grants, but 432\$ in direct payments. This indicates that the Republican Party uses grants relatively more as a distributive instrument, while the Democratic Party uses more the direct cash payments.

This finding makes sense and is consistent with the theoretical framework of chapter 2 and the empirical findings of chapter 3. Parties adapt their distributive strategies to the targetability conditions of voters. Depending on the defining traits of their constituencies, parties would mould distributive policies to target them more efficiently. Chapter 3 showed that the Republican core voters are mainly defined by professional traits, and, among them, the primary sector stands out. This makes them particularly targetable through grants. On the other hand, an important part of the Democratic Party's core constituency is composed by the elderly, and by the poor, low-qualified, an unemployed. These groups are more targetable by cash transfers and direct-payment redistributive programmes.

Figure 4.14. Propensity Score Balance

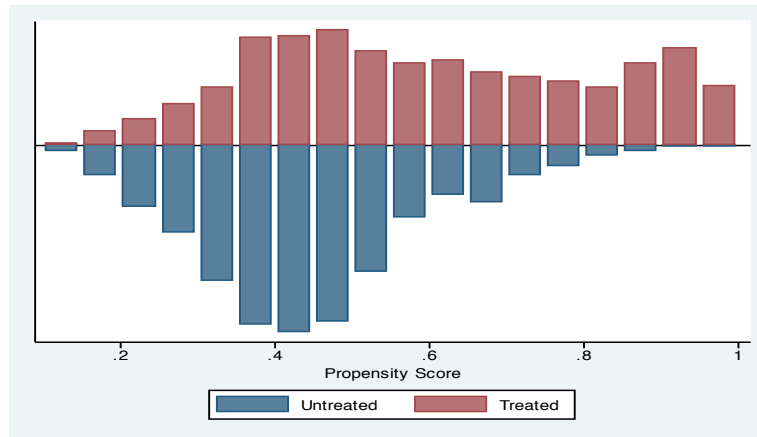


Table 4.18. Matching Estimates

	Grants per capita		Direct Payments per capita	
	neighb.	Llr	neighb.	Llr
<i>Republican Core</i>				
$\delta_{ATE}$	523.50*** (57.76)	528.77*** (40.89)	274.09*** (58.25)	219.09*** (34.87)
N	6177	6177	6178	6178
<i>Democratic Core</i>				
$\delta_{ATE}$	229.14 (112.14)	239.25*** (94.54)	471.10*** (80.39)	432.05*** (67.55)
N	7328	7328	7328	7328

Bootstrapped standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 4.8. Discussion

In this chapter I have argued that incumbents' distributive policies are directed to core voters. I have first tested this hypothesis studying the compensations to public sector workers across 28 countries. I have shown that governments increase relatively more the remunerations to civil servants, when they form an important share of their core constituency.

I have complemented this with an in-depth examination of the distributive strategies of the US Members of the House of Representatives. This analysis allows gauging the

importance of core voters in politicians' strategies, by departing from between-district analyses and combining them with a within-district perspective.

The results can be summarised in three. First, replicating the standard analysis in the literature, it is shown that swing districts obtain on average more pork barrel than the remaining districts. As votes are more valuable, politicians have more incentives to concentrate their distributive efforts in them.

Secondly, once we disaggregate the data, we observe that politicians target core counties within districts. I have shown that those counties that highly supported the incumbent in the previous election obtained a higher percentage of grants and direct payments within the district. Using several measures of core counties and several robustness checks the consistency of the findings is reinforced. Conversely, there is no evidence in favour of distribution to swing counties, supporting the general claim that politicians try to discriminate among voters and target their core supporters. This is because they provide more efficient conditions and safe electoral responses than swing voters.

Finally, consistent with the theoretical expectations, the two strategies are interrelated. Core counties in unsafe districts (that is swing districts) get relatively more grants than core counties of other districts. This implies that, when parties need to win in a swing district, they will not do it by distributing to swing voters. Instead, they will be even more interested in mobilising their most likely supporters by targeting more grants to their core support areas. In conclusion, it is core counties within swing districts that receive relatively more distributive benefits.

These results make various significant contributions to both the core/swing debate and the electoral systems literature. In the latter field, the evidence of this chapter suggests

that a majoritarian electoral system generates incentives on *where* a party should spend (swing districts). Politicians anticipate the marginal value of a vote on the final result and supply more benefits to areas where these voters are. However, this does not imply that incumbents spend on swing voters. On the contrary, as long as it is possible, politicians will discriminate within a district and will rely on core voters to win re-election.

The chapter also opens several paths for future research. A key one will be to explore more accurately, with individual data, the type of voters targeted by parties. It could be argued that the results of this paper contain another ecological fallacy. It is true that, by analysing counties, we are not able to directly account for which specific individuals benefit from a policy. However, I argued above that this does not pose a fundamental problem. By exploring distribution to counties, the empirical analysis already gets very close to voters. In addition, in industrialised democracies politicians cannot exchange directly with citizens a vote for an economic benefit. Thus, as Martin (2003) argues, the kind of information a politician herself will have when designing her distributive policies is at the county level, and a county target is the most precise politicians can be in distributing resources. In any case, by uncovering a political logic in the allocation of grants and payments across counties, we have already shown the necessity to break up the study of distribution to districts from distribution to voters. Even when, given the available data, I was unable to track down benefits to the individual level, analysing distribution to counties is still a valuable step further as it accounts for within-district variation. More research linking voters and distributive policies will contribute to understand better politicians' incentives.

# **CHAPTER 5: ELECTORAL COMPETITION AND PUBLIC SPENDING STRATEGIES**

## **5.1. Introduction**

This dissertation has demonstrated that core supporters are key electoral assets, and parties target distributive policies at them. Once this is established, a new question arises. Apart from distributive policies targeted to a specific electoral group, parties have other policy instruments available, such as universalistic programmes. These policies spread benefits across the whole electorate, and benefit a larger share of voters. However they do not allow concentrating benefits on a particular group of recipients. If parties are interested in distributing to voters whose electoral response is certain, why would they provide general non-exclusive benefits to an undefined set of voters?

This question is particularly important in the light of the fact that some countries provide more universalistic policies than others. This opens the door to political explanations, beyond those that are simply based on societal need. Among the electoral competition explanations, the electoral system is frequently indicated to be the main catalyser of parties' incentives. However, in this chapter I argue that this is only one of the contextual conditions that determine the policy incentives in a party system. Here I point to two other electoral competition conditions: the distribution of parties' voters across districts, and the electoral fractionalisation. These two factors will allow me to

depart from popular electoral system approaches and provide new insights into welfare state policy trends in developed democracies.

## **5.2. Insufficient Explanations**

A long-established and very fruitful body of literature has sought to explain why some countries provide higher levels of universalistic policies than others. Regime type is an obvious suspect. It has been argued that democracies force politicians to be responsive to a broader popular base, leading to more comprehensive social policies (Przeworski et al., 2000; Lake and Baum, 2001; Avelino et al. 2005). Nonetheless, the ‘democracy argument’ cannot offer a complete explanation, as there still remains great variation across democracies. Some democracies, like the US, have low levels of social policy provision, while others, like Sweden, are characterised by high levels.

In this regard, a broad range of theoretical approaches has sought to explain variation within democracies. A popular approach is to focus on the link between policies and the working class. From this perspective, social spending is a key issue in the capital-labour cleavage. Countries with stronger labour movements and trade unions will provide a more comprehensive range of welfare policies (Esping-Andersen, 1990; Korpi, 1978; Korpi, 1983).

Other authors have analysed the political agency side of this mechanism. The argument is that left wing parties have an ideological preference for developing social policies, and the size of their governments tends to be larger. A considerable amount of research has focused on this relation. Hewitt (1977) and Hicks and Swank (1992) find a relevant partisan effect on the provision of welfare policies in industrialised countries. Huber et al. (1993) and Huber and Stephens (2001) argue that left-wing governments are the

strongest predictor of long-term levels of welfare policies. Korpi and Palme (2003) argue that partisanship is also relevant to explain the extent of welfare state retrenchment. Similar results to these have been supported by an abundant literature (Bradley et al., 2003; Allan and Scruggs, 2004; Brady et al., 2005, and many others).

A separate literature has examined the demand for social insurance. This insurance-driven rationale explains the higher levels of universalistic policies in small open economies. Small European countries, whose economies had to rely on the trade sector, have been found to be more vulnerable to external shocks. Social policies were therefore necessary to cushion the impact of the markets' volatility (Katzenstein, 1986). These kinds of arguments have also been used to explain a structural trend for greater social policy provision as globalisation increases (Rodrik, 1998; Garrett, 2001).

Other authors have viewed social policies as being intimately connected to the industrial structure of the country. Those economies that relied on specific-skill industries needed to develop universalistic social programmes that gave incentives to workers to invest in vocational training and industry-specific formation. Countries with general skill industries developed more flexible production schemes and did not need to use social spending as a coordination mechanism between labour and capital (Hall and Soskice, 2001; Estevez-Abe et al., 2001).

All these approaches have addressed general national conditions (either partisan, social or institutional) that incentivise social policies, either with distributive or social insurance motivations. Academics have provided explanations based on structural factors that reject the strategic side of policy choices. However, a recently emerging political economy literature has focused on the electoral competition dimension and how social and distributive policies fit into it. This literature departs from the traditional

trade off between providing or not providing universalistic policies. Instead, it characterises all spending policies as useful devices to win elections. Parties then face a trade-off between types of policies. Depending on the electoral incentives, they will provide relatively more distributive or social spending.

From this perspective, the literature has argued that the electoral system is the crucial determinant of the electoral competition conditions that shape this decision. The argument is that in proportional electoral systems, politicians have more incentives to provide national social policies, while in majoritarian ones parties employ more distributive policies targeted to very specific districts. Two arguments support this claim: 1) the relation between the electoral system and the broadness of parties' constituencies, and 2) the relation between the electoral system and the geographic scope of electoral competition.

Regarding the breadth of parties' constituencies, Persson and Tabellini (2000, 2003) argue that parties can choose between pleasing a large number of voters (by supplying public policies that benefit the whole electorate), or they can concentrate on a segment (by targeting specific groups). That is, they have a choice between universalistic and narrow redistribution. Universalistic distribution is identified with national social and welfare policies (that is, public goods and programmes that are universalistic in their setup and are demanded by a large number of voters). On the other hand, as it was analysed in the previous chapter, politicians might choose to benefit a narrow and explicitly defined set of recipients at the expense of the remainder of the electorate. These policies often respond to incumbents' discretionary decisions and consist of distributive programmes, in which earmarked redistribution flows to targeted and non-encompassing groups of voters.

According to these authors, the decision between pleasing a large or a narrow group of voters is shaped by the electoral system (Persson and Tabellini, 2000, 2003; Lizzeri and Persico, 2001; Milesi-Ferretti et al., 2002; Grossman and Helpman, 2005). The general claim is that, in proportional systems, competition for votes occurs all across the country, so parties use universalistic social programmes to build national level constituencies (Persson and Tabellini, 2000, 2003). In majoritarian systems, electoral competition takes place in pivotal districts. Parties take certain districts as won or lost *ex ante* and basically target distributive policies to swing districts.

Similarly, in Lizzeri and Persico's (2001) model incumbents use public resources either to provide a universalistic public good or to divide them into narrow transfers aimed at coalitions of voters. Assuming there are two parties competing, they argue that in a majoritarian electoral system with multiple districts, a party only needs 25% of the votes to win elections (50% of the votes in 50% of the districts). Hence, a party can win an election by maximising transfers to a quarter of the electorate. In a single district system, however, a party needs 50% of the votes to ensure that it wins. Thus, it will require broader support. Local transfers are not useful instruments in this case. Parties will maximise the vote by providing a single universalistic public policy that impacts on a greater amount of voters.

In sum, by looking at various dimensions of electoral systems, these authors conclude that proportional systems will lead to higher levels of social spending, while majoritarian systems encourage local public goods, pork barrel and narrow transfers. However, the reality seems to be more complex. Once we analyse the data, the explanations do not seem so straightforward. Recent research has highlighted this. As Rickard (2009) states, Sweden and France allocated virtually the same share of narrow distributive spending to the manufacturing sector throughout the 1990s, despite having

very different electoral institutions. In a similar vein, Franzese and Nooruddin (2004) show that the correlation between the number of districts, as a proxy of majoritarian rule, and government's social expenditure is almost zero. Hence, the electoral system explanation of distributive policies seems to be far from conclusive and insufficient to explain the choices made by governments. These theories are useful in explaining very general patterns within a country. However, a more in-depth analysis shows flaws in these explanations. The variation found within similar systems shows that there is still significant space for other strategic behaviour. By defining a general set of incentives, standard explanations of distribution have ignored the fact that the specific strategies that a government will follow have much to do with the context they face, and not simply the framework of the electoral rule.

I will argue in the next section that there are two factors of electoral competition undermining the predictions of the conventional arguments on electoral systems: the regionalisation of the electorate and the electoral fractionalisation.

### **5.3. The Argument and Hypotheses**

In general terms, governments have two types of policies available that they strategically employ to win office. On the one hand, they can provide universalistic spending. These policies exploit common and transversal interests, have a diffused demand and provide benefits indiscriminately. Voters, with different profiles, have an interest (with varying intensities) in these policies, as everyone is a potential recipient. Thus, these policies generate a broad, but diffused, body of beneficiaries. On the other hand, parties can provide narrow distributive policies. These policies allow parties to select the recipients by satisfying more narrow interests. They are targeted at a limited

number of voters who, on average, can benefit more strongly than they would do from social policies.

My argument is that the use of each policy type will be conditioned by the context in which politicians develop their strategies. According to the theoretical framework I have presented, parties will have strong incentives to target distributive policies to core supporters as their main electoral strategy. However, sometimes parties cannot win an election by simply relying on narrow groups of voters. In these situations, parties need to expand their electoral base, and vote-maximising behaviour becomes their best office-seeking strategy. Parties will then resort to delivering more universalistic policies (although they have less control over who is the recipient), because these policies generate more beneficiaries with more varied profiles. Thus, depending on how electoral competition is structured, parties will have incentives to place more weight on distributive policies, or universalistic spending.

The canonical argument is that proportional electoral systems are more prone to universalistic policies than majoritarian electoral systems. My claim is that this is not always the case. The reason is that the incentives for a more or less encompassing policy scope are also strongly determined by the distribution of votes across districts and the fractionalisation of electoral competition.

The first relevant feature of electoral competition is the geographic distribution of voters and, in particular, the *regionalisation/nationalisation of parties' electorates*<sup>79</sup>.

Parties sometimes have their core constituency well represented across districts. In this

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<sup>79</sup> Here it is assumed that the regionalisation of the electorate is exogenous to parties' distributive strategies. I discuss the issue of endogeneity in section 5.7 and provide some robustness checks, accounting for simultaneous causality.

case, the party has better chances to win elections by simply targeting this group. Core voters provide better conditions for distribution than the remainder of the electorate. Thus, parties will provide distributive policies that impact on them with greater exclusiveness (and more benefits) than with universalistic programmes. Accordingly, and taking into account the results of the previous chapter, parties will pay an even more special attention to distributive policies that are targeted to core voters in swing districts. This is consistent with Persson and Tabellini's and Lizzeri and Persico's predictions that parties will target smaller sets of voters in majoritarian electoral systems.

The incentives, however, change when parties have their core supporters concentrated in certain districts. In this case, it is fruitless to seek to win the election by mobilising them. The party would convincingly win in a few electoral districts, but would be far away from maximising their seat share. At the same time, I have shown that parties have strong incentives not to exclude their core supporters from their distributive strategies. Thus, they do not have incentives to concentrate exclusively on swing districts and exclude core voters from their distributive strategies. Thus, under these circumstances, parties have strong incentives to rely more on universalistic and national policies. By providing these encompassing policies, parties exploit transversal interests that affect all types of voters. These policies are a compromise between distributing to core supporters -which in this context does not ensure a short-term victory-, and bringing in voters from other areas, particularly from swing districts. This allows them to use distributive strategies to go beyond their regional strongholds and impact voters in all districts. Therefore, I predict that under these regionalisation conditions, differences between electoral systems in the level of universalistic policies should decrease.

The second relevant feature that complements the electoral system arguments is the *fractionalisation of electoral competition*. A body of established theoretical literature has sought to identify the electoral conditions that make parties follow centripetal or centrifugal strategies (Cox, 1990; Myerson, 1993). Centripetal incentives are those that promote policies that pursue a general, and diffused, interest; while centrifugal incentives will be those that encourage parties to cultivate minorities and narrow electoral groups with intense and cohesive preferences. Taking this framework to the politics of distribution, my argument is that when parties have an interest in centripetal strategies, they will seek universalistic policy platforms that cover situations and risks common to many and diverse voters. Conversely, multiparty electoral competition, independently of the electoral rule, will enhance the satisfaction of narrow distributive interests of selective groups of voters.

The rationale is that, in bipartisan settings, every single voter that switches her vote can theoretically be determinant for the final electoral outcome. This pushes parties not to exclude any voter from their spending strategies and form broad constituencies, by providing wide-ranging policies that can impact upon the whole electorate. As more parties compete effectively, they will need less broad electorates, and they will develop incentives to concentrate their distributive efforts on their constituency. The reasons are twofold. First, in equilibrium, the more parties there are, the fewer votes are necessary for a party to be the most voted. Parties will then find it more profitable to concentrate very exclusive benefits on those narrow groups that are more responsive (and I have already shown that these conditions are better met in the core constituency). In second place, in multiparty settings parties find that their own constituency is more endangered. Parties can never take their core supporters for granted. However, electoral abstention is less costly for parties than a vote switch. When there is only one other viable party, the

exit threat is less credible and voters are trapped. For parties it is less costly to let this type of voters down, because the greatest punishment they can receive is electoral abstention. When more parties compete, the leverage changes. Voters have more (and ideologically closer) alternatives and can find more motivations to vote for another party. Thus, parties face more incentives to satisfy them and avoid losing their core constituency in multiparty contexts.

The effect of electoral fractionalisation should not be confused with the effects of the electoral system. Both variables correlate<sup>80</sup>. However, the rationale by which they have an impact on distributive policies is completely different. While the predicted effect of the electoral system has to do with the incentives generated by the district division and the geographic scope of electoral competition, the effect of electoral fractionalisation has to do with the strategic considerations responding to the position of the rest of parties along the ideological space. Therefore, they can have an independent impact on distributive strategies that must be assessed separately.

All these arguments allow me to pose the following two hypotheses enounced in the theoretical chapter:

*H4: The more majoritarian the electoral system, the stronger the positive impact of voters' geographic concentration on universalistic spending.*

*H5: The greater the electoral fractionalisation, the more parties will provide distributive politics and less universalistic spending.*

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<sup>80</sup> In the sample of this chapter's econometric models, the correlation between Lijphart's *effective threshold* and the *effective number of parties* measured in the vote share is -0.26. The correlation with the seat share measure is -0.42.

## **5.4. Data and Methodology**

### **5.4.1. Main Independent Variables**

This chapter develops the empirical test of the two arguments. The first relates to the effect of electoral regionalisation on the incentives to provide universalistic policies. The second hypothesis refers to the impact of electoral fractionalisation on the trade-off between social and distributive policies. These analyses require me to operationalize three main independent variables.

#### **5.4.1.1 Electoral regionalisation**

In this analysis I employ Moenius and Kasuya's (2008: 126) conceptualisation, and define the regionalisation/nationalisation of the electorate as: "*the extent to which parties compete with equal strength across various geographic units within a nation*". A highly nationalised electorate results in parties obtaining a more even vote share across districts, while regionalised electorates lead to parties obtaining greater variation in electoral support across districts.

As Lago and Montero (2010) argue, there are two broad categories of nationalisation measures: those based on the homogeneity of parties' electoral support across districts, and those that measure the territorial coverage of parties. I am particularly interested in the territorial vote support of parties. Therefore, I depart from measures that focus on parties' entry decisions at the district level (like Urwin's (1982), Caramani (2004) or Lago and Montero's (2010)), and draw upon those that capture territorial voting patterns in a country. Drawing on electoral data from the Constituency-Level Elections Archive

(CLEA) gathered by Kollman et al. (2010)<sup>81</sup>, I build three indexes that measure in different ways the homogeneity of voting behaviour across constituencies<sup>82</sup>. This dataset is particularly useful for this purpose. It provides electoral results at the district level<sup>83</sup>. This allows us to track the geographic patterns of parties' electoral supports.

The first measure is the *Adjusted Lee index (ALI)*, which is used by Caramani (2004, 2005), based on Lee (1988). I will use this index as my main independent variable. It measures the dispersion of each party's subnational votes shares from their national average, adjusting for the sizes of the party and the number of districts/territorial units. Let us consider that we have to aggregate J parties that obtain a  $V_N$  vote share at the national level, and a  $V_s$  vote share in each of the  $n_s$  subnational units. The Adjusted Lee Index would be:

$$(1) \quad ALI = \frac{\sqrt{n_s} * \sum_{s=1}^n |V_s - V_N|}{2(n_s - 1) * \sum_{s=1}^n V_s}$$

The second measure is Boschler's (2010) *Electoral Gini* index<sup>84</sup>. The Electoral Gini index measures the level of asymmetry in a party's vote distribution across constituencies. I calculate each party's  $G_i$  using Deaton's (1997) approximation for discrete data. The different Ginis are aggregated weighting each party by their vote share at national level ( $V_n$ ).

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<sup>81</sup> This database includes all parties that poll at least 5% of the vote within at least one territorial unit.

<sup>82</sup> Lago and Montero (2010) discuss the potential problems associated with nationalisation measures based on the territorial homogeneity of parties' support. The main drawback is that the level of data disaggregation varies across countries (Boschler, 2010). In the data used here, Finland has 15 constituencies in some years of the sample, while the UK has up to 640 constituencies. Caramani (2004) also claims that this is a potential source of bias, as the regionalisation indexes are more volatile the fewer territorial units we observe. However, he also shows that these biases, if existent, are small and should not invalidate the general analyses. For the sake of robustness, all the analyses in this chapter have been run including a control for the number of territorial units and removing countries with fewer constituencies. The results remain virtually the same.

<sup>83</sup> In proportional countries with just few big districts, the data draw on small administrative regions or territorial units.

<sup>84</sup> I use his simplest version, in which the only weights are each party's size.

$$(2) \quad Gini = \sum_{i=1}^n (G_i)(V_N)$$

The final measure I use is *Moenius and Kasuya's index* (Moenius, and Kasuya, 2008).

This index results from:

$$(3) \quad Moenius \text{ and } Kasuya = I_w^{0.5} * D^{0.5};$$

$$\text{where (4)} \quad I_w = \left( \frac{EffPart_N - \sum_{s=1}^n EffPart_s \frac{V_s}{V_N}}{\sum_{s=1}^n EffPart_s \frac{V_s}{V_N}} \right) * 100$$

$$\text{and (5)} \quad D = CV(I_s)^{0.5} * K(I_s)^{0.5}$$

This index characterises the electorate's regionalisation on two dimensions,  $I_w$  and  $D$ . The first dimension ( $I_w$ ) accounts for how inflated the effective number of parties at the national level is compared to the average subnational effective number of parties. This gives us an account of how different electoral competition in each district is from the national aggregate. The inflation measure, provided first in Moenius and Kasuya (2004), has been a widely used measure (among others, by Lago-Peñas and Lago-Peñas (2009) or Leiras (2006)). A high level of inflation means that district level competition departs more strongly from the national aggregate, and, consequently, electoral competition is considered as more regionalised.

The *Moenius and Kasuya index* used here weights this first measure,  $I_w$ , with a second dimension ( $D$ ) that captures the contribution of each district to the national-level party system inflation. That is,  $D$  measures whether all subnational jurisdictions are equally regionalised. Being  $I_s$  a measure of how much the party system in a district  $j$  differs from the national-level party system,  $D$  aggregates the differences between districts and the national level with the combination of two indicators:  $CV(I_s)$ , the coefficient of variation of  $I_s$ , and  $K(I_s)$ , the kurtosis of its distribution. These two components are

invariant to party system size and 1) the mean deviation of local inflation rates from the average inflation rate and 2) how narrow the distribution of inflation rates is across districts<sup>85</sup>.

In Table 5.1, I display the mean of the three indexes for all countries in the sample from the mid-fifties to the mid 2000s<sup>86</sup>. Not surprisingly, Switzerland and Belgium have the most regionalised electorates. In Switzerland, apart from the effect of small parties only competing in certain districts, the SVP has usually been very strong in the German cantons, while the SPS and the FDP get better results in the rest of the country. Belgium is the second most regionalised country. However, if the indexes were calculated from the eighties on, Belgium would clearly be the most regionalised electorate. This country has reached a context where there are no state-wide parties. Flemish parties only compete in Flanders, while Valonia's parties exclusively compete in their districts. Conversely, Austria and Sweden tend to be the most nationalised electorates. In these two countries, the main parties tend to obtain similar shares at the district and national level, as the electorate behave similarly across the territory.

Although the three indexes display similar patterns, the *Moenius and Kasuya index* provides a slightly different regionalisation ranking. Finland for instance is, with this operationalization, the most regionalised electorate. This is not surprising. While the *Electoral Gini* and the *Adjusted Lee index* draw on the differences in the distribution of each party's voters across districts, the *Moenius and Kasuya index* draws on the direct comparison between the effective number of parties in each district and the aggregate

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<sup>85</sup> For details on how to calculate the dispersion (D), see Moenius and Kasuya (2008).

<sup>86</sup> To have the three measures ranging from 0 to 100, the Adjusted Lee Index and the Gini Index are multiplied by 100.

number of parties. Thus, this index captures more the differences in competitiveness across districts, rather than the distribution of voters across the territory.

**Table 5.1. Electoral regionalisation: Mean Indexes by Country (1955-2002)<sup>87</sup>**

Electoral Gini		Adjusted Lee Index		Moenius and Kasuya Index	
Switzerland	49.58	Switzerland	39.42	Finland	14.70
Belgium	44.37	Belgium	38.13	Switzerland	14.10
France	39.71	France	31.49	France	8.53
Japan	31.16	Japan	25.67	Belgium	8.37
Australia	30.11	Australia	24.35	Canada	6.78
Canada	30.92	Canada	23.89	UK	6.49
Finland	29.68	UK	22.66	Australia	6.15
UK	28.75	Finland	22.42	Italy	6.04
Italy	25.64	Italy	20.56	Japan	5.42
Spain	24.08	Spain	19.78	Netherlands	5.35
Portugal	19.93	Luxembourg	16.31	Spain	5.14
Netherlands	19.78	Portugal	15.12	Portugal	4.24
Luxembourg	19.65	Iceland	14.58	Iceland	4.21
Iceland	19.12	Netherlands	14.52	Norway	3.91
Norway	18.8	Ireland	13.97	Ireland	3.71
Ireland	18.47	Norway	13.78	Germany	3.58
Denmark	14.77	Denmark	10.77	Denmark	3.28
Germany	14.6	Germany	10.7	Greece	3.24
Greece	14.28	Austria	10.21	Sweden	3.21
Austria	14.02	Greece	10.18	Austria	3.01
Sweden	13.27	Sweden	9.68	Luxembourg	2.99

Source: Kollman et al. (2010)

<sup>87</sup> The period covered in this table for each country is: Australia (1955-1988), Austria (1956-1999), Belgium (1958-1999), Canada (1957-2008), Denmark (1957-2002), Finland (1958-1999), France (1973-2006), Germany (1960-2002), Iceland (1956-1999), Ireland (1957-2001), Italy (1958-2000), Japan (1955-1997), Luxembourg (1959-1998), Netherlands (1956-2002), Norway (1957-2001), Portugal (1975-1999), Spain (1979-2000), Sweden (1956-2002), Switzerland (1955-1999), United Kingdom (1955-2001).

#### 5.4.1.2. Electoral System

I argue that, as the electoral system is more majoritarian, the electoral regionalisation has a stronger positive impact on universalistic spending. Therefore, I interact the previous regionalisation variables with a measure of the electoral system.

An electoral system is a set of norms that translates votes into seats. It basically comprises an electoral formula, a division into districts and an allocation of seats to each district. Research has repeatedly shown that the really important features that define the proportionality of the electoral system are the number of districts and their average magnitude (Rae, 1971; Taagepera, and Laakso, 1980; Taagepera, and Shugart, 1989; Lijphart, 1990), rather than the electoral formula. Therefore, as a measure of mechanical disproportionality in the electoral system, I use *Lijphart's effective threshold*. This variable is proposed by Lijphart (1994) and measures the percentage of votes that, on average, a party needs to win a single seat in a district. It ranges from 37.5 in single member district systems to 0 in a single national district proportional system. To have the national aggregate figure, I calculate the *effective threshold* as<sup>88</sup>:

$$\text{Effective Threshold} = \frac{0.75}{(\text{Median District Magnitude} + 1)} \times 100$$

To draw conclusions on the interactive effect of the electorate's regionalisation and the electoral rule, both variables have to be independent from each other. Apart from the descriptive evidence provided in Chapter 2, this is also supported by the fact that, in my sample, electoral regionalisation is not significantly different in proportional systems from single member district countries. In addition, the correlation between the median

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<sup>88</sup> The median district magnitude in each country of the sample draws on the author's own calculations.

district magnitude and the Adjusted Lee Index is -0.038. Hence, the claim that both issues should be treated independently seems to hold.

#### **5.4.1.3. Electoral Fractionalisation**

The second hypothesis refers to incentives provided by electoral fractionalisation. To capture this, I employ Laakso and Taagepera's (1979) measure of the effective number of parties:

$$Effective\ Number\ of\ Parties = \frac{1}{\sum_{i=1}^n v_i^2}$$

where  $n$  is the number of parties that reaches at least a 2% vote share. I use two versions of this variable. In the first one,  $v_i$  is the share of votes for party  $i$ , and in the second one  $v_i$  is the seat share of party  $i$ . This allows me to observe whether parties react more to actual electoral fractionalisation or only to fractionalisation among parties that obtain representation. Both measures are taken from Armingeon et al. (2009).

#### **5.4.2. Dependent Variables**

The argument of this chapter is that under certain electoral competition conditions, incumbent parties depart from narrow targeted distributive policies and base their strategies on universalistic and welfare policies. To test this, I employ several measures of both types of policies.

Regarding universalistic policies, I use two specifications conventionally used in the literature: the level of *social expenditure* and the level of *social security transfers* (both measured as a percentage of GDP, and taken from the OECD Social Expenditure and Welfare Statistics (2007)). The rationale for the use of these two policies is twofold.

First, they are the most representative measures of the aggregate level of universalistic spending programmes, providing non-exclusive benefits, and affecting voters with very different profiles. The lion's share of the *social security transfers* refers to unemployment, sickness and disability benefits, and retirement pensions. These are universalistic and encompassing programmes, which apply to common and widespread needs and situations. The *social expenditure* measure includes, apart from these transfers, broad social programmes like health and education, which are paradigmatic universalistic spending policies with a broad and very diverse set of beneficiaries. Second, these two spending measures tend to remain almost completely in the hands of central governments, particularly in the case of *social security transfers*. This avoids possible omitted variable biases. If these variables show any kind of variation, it is not because regional governments are co-deciding and imposing their preferences.

Consistent with the theory put forward in Chapter 2, the flip side of the argument is also tested. I claim that when parties do not have incentives to provide universalistic spending, they will be more interested in providing targeted distribution. They will do so by increasing expenditure on policies that allow them to flexibly target resources to voters or places that they are interested in.

The empirical test of this second part of the hypothesis presents some problems. As Franzese and Nooruddin (2004) point out, it is almost impossible to find an accurate measure of distributive policies that can be used for comparable cross-country analysis. Distributive policies, which by definition are policies responding to particularistic interests and targeted to a small group of voters, are difficult to capture with a national measure in which the effect of expenditure on a particular type of voters might be diluted in the aggregate national figure. In addition, different countries, -due to domestic conditions- or different parties -due to the different characteristics of their

constituencies- might rely on different types of distributive policies. This makes it more difficult to use a single measure for cross-country comparative analysis. For instance, chapter 4 showed, public sector salaries are distributive instruments used only by parties with constituencies characterised by public sector workers. Hence, constructing an aggregate measure of the general level of distributive policies that can be used for many countries at the same time is a problematic task. Still, we can rely on proxies. Some authors, like Rickard (2009), opt for using indirect measures based on legislation or international agreements that indicate the level of protection of certain special interests in a country. However, these measures do not translate to an easily quantifiable measure in spending terms, and are basically capturing distributive policies in certain economic sectors, such as trade, but cannot capture the whole range. Other authors try to use indirect measures based on aggregate spending figures that cover a significant share of distributive and particularistic policies. I follow this second option and, for this general empirical test, I have tried to provide two reliable proxies. However, I am cautious when interpreting these results and do not intend to draw conclusive arguments from them.

The first measure is inspired on Franzese and Nooruddin (2004) and Gimpelson and Treisman (2002). I use the relative level of *government consumption* as a proxy of distributive policies. The measure includes all government annual expenditures for purchases of goods and services<sup>89</sup>. In the scarce comparative research on distributive transfers, this is a measure that has been used by various authors (for instance, Bradbury and Crain (2001)). The rationale is that governments that want to distribute to certain groups increase the consumption of certain goods, and contract more services in the

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<sup>89</sup> The measure is taken from the World Development Indicators of the World Bank (2011).

areas where they want to concentrate resources. *Government consumption* is highly variable over time, and subject to government discretion over which goods and services to consume (which implicitly means very different groups of beneficiaries). In addition, government consumption mainly entails benefits to the providers of the goods and services, implying a non-encompassing type of spending. These features entail that this is a valid proxy for distribution. However, this measure also correlates with social expenditure, as the provision of many social policies, such as health services, also involve a high level of government consumption. To dampen the effect of this, I use the government consumption relative to the expenditure in the three most fixed social programmes (unemployment benefits, old age pensions, and health expenditure).

The second measure of distributive politics is the level of *non-social expenditure*, as a percentage of total governmental outlays. This second measure is based on Persson and Tabellini (2003). These authors argue that governments pursuing the satisfaction of special and narrow interests will tend to increase their size. However, the total size of the government might again be a misleading figure because it also correlates with the level of social policy provision. Therefore, I only employ the size of non-social expenditures<sup>90</sup>. This is not directly measuring the level of distributive policies, but is capturing the relative size of the non-universalistic spending in the government's budget. One advantage of using a similar measure to Persson and Tabellini is that it allows me to compare their results to mine, when the interactive effect of the electoral system with the electorate's regionalisation is taken into account.

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<sup>90</sup> The variable is calculated from the OECD Social Expenditure and Welfare Statistics (2007).

### 5.4.3. Control Variables

I include a set of economic, political, and demographic controls to test the hypotheses. First, as the social spending dependent variables are measured as a percentage of the GDP, it is necessary to include those variables that control for the ‘natural’ demand for social policies. Therefore, all models control for the *unemployment* rate and the *elderly* share (i.e. the percentage of the population over 65)<sup>91</sup>. These variables capture the need for social policy provision in a society, and, somehow, control for the average level of social policies, given a similar degree of social need<sup>92</sup>.

I also include GDP, both in its growth and level values. *GDP growth* is a standard economic control to account for the effects of growth on the policy decisions of governments. We can obtain either a positive or a negative sign depending on whether we expect pro-cyclical or anti-cyclical government behaviour. We expect a negative effect if governments are responsive to increases in social policy demands when countries are stagnated. On the other hand, there will be a positive relation if countries use the revenues generated with their growth to augment social policies. The *Ln GDP* level controls whether or not there are Wagner law’s effects, by which richer countries increase their government size.

A further economic control for trade *openness* is included, measuring the total trade (sum of imports and exports) as a percentage of the GDP (Armingeon et al., 2009). The literature provides conflicting expectations of the effect of trade openness on social

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<sup>91</sup> Both variables are taken from Armingeon et al. (2009). The unemployment rate is taken in its standardised version.

<sup>92</sup> The underlying assumption is that all the unemployed receive unemployment benefits and all the elderly receive old age benefits. Although this could not hold in every single case, it is a very close measure of the natural demand of social policies in a country.

policies. The compensation hypothesis predicts that trade dependence is associated with greater levels of government intervention in the economy. This responds to a ‘risk-avoidance’ logic. The more internationalised an economy is, the more the domestic economy is exposed to international cycles, and will be more vulnerable to exogenous risks. As a response to this increased risk, governments enlarge the public economy as an insurance device (Katzenstein, 1985; Rodrik, 1998). On the other hand, the opposite argument is also possible. Globalisation reduces social expenditure because tax and trade competition constrains the spending power of governments (Tanzi, 2002).

I also include a variable of financial capacity. The *lagged deficit* controls the debt restrictions that governments face when making their current budget decisions. Altig and Davis (1989) show how the financial situation constrains the distributive calculations of governments.

I include a measure of *left government*. Many authors have argued that left governments provide more social policies (see, for instance, Blais et al., 1993; Huber and Stephens, 2001; Bradley et al., 2003; Allan and Scruggs, 2004). I measure the partisanship of the government with Armingeon’s (2009) measure of the percentage of cabinet posts that belong to social democratic or left parties. This variable is also weighted by days of the year that each member of the cabinet holds the post.

*Voter turnout* in the previous election is also incorporated in the analyses. Assuming that lower income citizens are less prone to vote, voter turnout is a proxy for their political mobilisation. If we expect that parties are responsive to the median voter and not the median citizen, when people with fewer resources vote, parties will have more incentives to provide redistributive social policies (Kenworthy and Pontusson, 2005;

Nelson, 1999; Pontusson and Rueda, 2010). Mahler (2008) also finds a positive effect of turnout on social transfers.

Finally, I also include two dummies for *coalition* and *minority* governments. This controls for the indirect effect of electoral fractionalisation on spending via coalition or minority governments, which tend to be characterised as fiscally irresponsible (Roubini and Sachs, 1989; de Haan and Sturm, 1994; Poterba and von Hagen, 1999; von Hagen, 2006; Persson et al., 2007).

#### **5.4.4. Empirical Strategy**

I test the hypotheses with data on 23 OECD countries<sup>93</sup>. The panel covers for most countries the period 1980-2002. Expanding the temporal analysis is constrained by data availability. The *social expenditure* and the *distributive policies* variables do not go back beyond 1980<sup>94</sup>. The *social security transfers* data reaches the early seventies<sup>95</sup>. On the other hand, the CLEA tends not to provide data at constituency level from 2002 on<sup>96</sup>, while the electoral fractionalisation data, taken from Armingeon (2009), cover until 2007. Thus, each model has a different sample, depending on these constraints. In

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<sup>93</sup> The countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The first hypothesis is only tested on 21 countries. The CLEA dataset does not allow us to calculate regionalisation indexes in the United States. New Zealand drops out of the analyses, because the electoral data at district level only cover until 1983.

<sup>94</sup> The sample of the models on these variables is: Australia (1980-1988), Austria (1980-1999), Belgium (1980-1999), Canada (1980-2005), Denmark (1982-2002), Finland (1980-1999), France (1980-2005), Germany (1990-2001), Greece (1998-2000) Iceland (1992-1999), Ireland (1982-2001), Italy (1980-2000), Japan (1980-1997), Luxembourg (1991-1998), Netherlands (1980-2002), Norway (1985-2001), Portugal (1982-1999), Spain (1981-2000), Sweden (1980-2002), Switzerland (1991-1999), United Kingdom (1980-2001). Depending on the missing values, this sample gets reduced.

<sup>95</sup> Specifically, the sample for this dependent variable is: Australia (1972-1988), Austria (1971-1999), Belgium (1972-1999), Canada (1971-2007), Denmark (1974-2002), Finland (1978-1999), France (1979-2006), Germany (1971-2001), Greece (1977-2000) Iceland (1982-1999), Ireland (1981-2001), Italy (1971-2000), Japan (1972-1997), Luxembourg (1991-1998), Netherlands (1972-2000), Norway (1984-2001), Portugal (1982-1999), Spain (1981-2000), Sweden (1974-2000), Switzerland (1991-1999), United Kingdom (1973-2001).

<sup>96</sup> In some cases, the CLEA only provides data for shorter periods, such as Australia (only until 1989). Conversely, for Canada the data reach until 2008.

general, each regression uses an average of 18.5 country-year observations, but this number rises to 23.5 in the models on social security transfers.

The analyses are time-series-cross-sectional estimations. I depart from the common practice in comparative analyses of including a lagged dependent variable. Achen (2001) shows that, when the lagged dependent variable has no substantive and causal impact, its inclusion picks up the effect of the remainder of the independent variables that show a temporal trend, overestimating the effect of the lagged dependent variable and collapsing the remainder of variables to small and implausible effects.

Plumper et al. (2005), in addition, argue that the lagged dependent variable assumes that the dynamics of all independent variables are identical. This may be a strong assumption. The model contains time invariant variables, such as the electoral system, whose temporal effects on social expenditure are of a very different nature to constantly changing variables such as the unemployment level. Finally, Nickel (1981) and Kittel and Winner (2005) highlight that the combination of a lagged dependent variable and fixed effects produce biased estimators, as the lagged dependent variables highly correlate with the unit effects.

Therefore, I estimate the models with fixed effects and no lagged dependent variable<sup>97</sup>, as Achen (2001) suggests. Fixed-country effects are included to control for how country-specific and not time-varying institutional and economic features (those not already included in the models) might affect governments' policy choices. Therefore, these models capture how governments' distributive policies respond to within-country

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<sup>97</sup> The problem of non-stationarity in this model is addressed following Gujarati (2003) and Soroka and Wlezien (2005)'s indications. To test the sensitivity of the model to stationarity, the analyses are performed introducing the year of observations as a "*countervariable*". This *countervariable* has a perfectly linear rising trend, and allows us to observe the model's results "*net of the trends in the variables*" (Jensen, 2011). The model's results remain unchanged.

variation in the two electoral competition conditions. However, these models also present some potential problems. They can be problematic when the main independent variable shows a sluggish trend (Clark and Linzer, 2012). This was noted by Wooldridge (2002), who argued that fixed effects cannot estimate time-invariant or rarely changing explanatory variables adequately, as these variables are highly or perfectly correlated with the unit-level effect. This is a potential problem in my analysis, particularly with regards to the first hypothesis, where the interaction between regionalisation and the rarely changing electoral system is one of the main independent variables. Secondly, more substantively, Plumper et al. (2005) argue that fixed effects are not adequate if there is a theoretical expectation that the absolute level, and not only the year variation, of the main independent variable has a long-term effect on the dependent variable. This is the case if, as the literature states, the electoral system has a long-term impact on distribution. Therefore, I follow Plumper et al.'s suggestions and also test the first hypothesis by running a feasible generalised squares model with a first order autoregressive term in each panel.

## 5.5. Results

The first hypothesis is tested in Tables 5.2 to 5.5, and the second in Tables 5.6 and 5.7. Some comments on the control variables are necessary. In general, they perform well, in the expected direction and with high levels of significance (particularly in the fixed effects models). Among the social need variables, *unemployment* is significant across all models. Higher unemployment rates force governments to provide more universalistic programmes and relatively fewer distributive policies. Likewise, *elderly* tends also to show similarly relevant and significant effects in the social spending and distributive policies' models. *Openness* is not robust across models. It has a significant coefficient

in the fixed-effects models, but not in the FGLS ones. In general, the results do not support the compensation hypothesis. Instead, *openness* tends to take a significant negative sign in the social spending models, validating the globalisation hypothesis. Those countries that are more exposed to global shocks reduce their level of social welfare. In addition, Tables 5.4 and 5.5 show a positive effect of *openness* on distributive policies. Altogether, this seems to imply that governments respond to global markets exposure by compensating specific groups of voters with targeted distribution, instead of providing social insurance.

The provision of social policy also seems to be restricted by the financial conditions of the country. The *lagged deficit* significantly reduces the provision of *social expenditure* and *social security transfers*. However, no effect of the lagged deficit is detected with regards to narrow distributive spending. As these policies imply targeted distribution to specific social groups, governments are less restricted by the global finance capacity of the state.

The economic variables are also relevant to explain the policy choices. The logarithm of *GDP per capita* increases the provision social spending -in its two specifications- giving support to Wagner's law. Likewise, richer states resort less to distributive spending as a means for electoral survival. Annual *GDP growth*, on the other hand, decreases the provision of social policy variables, as the automatic stabilisers (which increase social spending) do not come into play. In the distributive policies' models, annual *GDP growth* has a less important effect. It is significant and positive only in the fixed-effects models of the non-social expenditure specification of the dependent variable.

**Table 5.2. Electoral Regionalisation and Social Expenditure**

VARIABLES	(1) Social Expenditure (FE)	(2) Social Expenditure (FGLS, PSAR1)	(3) Social Expenditure (FE)	(4) Social Expenditure (FGLS, PSAR1)	(5) Social Expenditure (FE)	(6) Social Expenditure (FGLS, PSAR1)
<i>Unemployment</i>	0.542*** (0.0332)	0.510*** (0.0400)	0.543*** (0.0331)	0.507*** (0.0399)	0.541*** (0.0331)	0.492*** (0.0396)
<i>Elderly</i>	0.578*** (0.109)	1.078*** (0.101)	0.569*** (0.109)	1.092*** (0.0993)	0.615*** (0.108)	0.951*** (0.105)
<i>Lagged Deficit</i>	-0.149*** (0.0297)	-0.0420 (0.0270)	-0.146*** (0.0295)	-0.0454* (0.0271)	-0.143*** (0.0291)	-0.0444 (0.0272)
<i>Ln GDP pc</i>	6.987*** (1.025)	6.227*** (0.496)	7.000*** (1.025)	6.132*** (0.502)	6.690*** (0.998)	6.461*** (0.562)
<i>GDP Growth</i>	-0.198*** (0.0366)	-0.171*** (0.0252)	-0.198*** (0.0365)	-0.173*** (0.0253)	-0.203*** (0.0367)	-0.159*** (0.0246)
<i>Left Government</i>	-0.00121 (0.00236)	0.00233 (0.00237)	-0.00138 (0.00235)	0.00258 (0.00237)	-0.000564 (0.00235)	0.00313 (0.00233)
<i>Openness</i>	-0.0354*** (0.00967)	-0.00208 (0.00643)	-0.0350*** (0.00971)	-0.000470 (0.00627)	-0.0363*** (0.00963)	-0.0127* (0.00690)
<i>Turnout</i>	-0.0133 (0.0245)	0.00201 (0.0130)	-0.0165 (0.0245)	0.00568 (0.0130)	-0.0208 (0.0240)	-0.0229 (0.0154)
<i>Minority Gov.</i>	0.212 (0.275)	0.322 (0.231)	0.226 (0.272)	0.350 (0.230)	0.173 (0.271)	0.444* (0.227)
<i>Coalition Gov.</i>	-0.0398 (0.289)	0.363* (0.205)	-0.0456 (0.288)	0.379* (0.204)	0.0195 (0.289)	0.292 (0.201)
<i>Effective Threshold</i>	-0.157** (0.0628)	-0.211*** (0.0355)	-0.149** (0.0637)	-0.241*** (0.0388)	-0.104* (0.0565)	-0.201*** (0.0368)
<i>Adjusted Lee Index</i>	-0.180*** (0.0513)	-0.0921*** (0.0240)				
<i>Adj Lee Ind * Eff Thr</i>	0.00575*** (0.00193)	0.00510*** (0.00105)				
<i>Electoral Gini Index</i>			-0.159*** (0.0424)	-0.0789*** (0.0203)		
<i>Elect Gini Ind * Eff Thr</i>			0.00474*** (0.00164)	0.00491*** (0.000963)		
<i>Moenius Kasuya Index</i>					-0.522*** (0.149)	-0.293*** (0.0855)
<i>Moen Kasuya Ind *Eff Thr</i>					0.0145** (0.00628)	0.0169*** (0.00406)
<i>Observations</i>	385	385	385	385	385	385
<i>R-squared</i>	0.677	-	0.679	-	0.678	-
<i>Number of countries</i>	21	21	21	21	21	21

Standard errors in parentheses, \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 5.3. Electoral Regionalisation and Social Security Transfers**

VARIABLES	(1) Social Security Transfers (FE)	(2) Social Security Transfers (FGLS, PSAR1)	(3) Social Security Transfers (FE)	(4) Social Security Transfers (FGLS, PSAR1)	(5) Social Security Transfers (FE)	(6) Social Security Transfers (FGLS, PSAR1)
<i>Unemployment</i>	0.590*** (0.0342)	0.404*** (0.0354)	0.592*** (0.0340)	0.402*** (0.0355)	0.599*** (0.0341)	0.404*** (0.0359)
<i>Elderly</i>	-0.147 (0.121)	0.568*** (0.101)	-0.155 (0.121)	0.607*** (0.0996)	-0.137 (0.120)	0.476*** (0.109)
<i>Lagged Deficit</i>	-0.158*** (0.0343)	-0.0437* (0.0239)	-0.156*** (0.0341)	-0.0477** (0.0240)	-0.146*** (0.0337)	-0.0367 (0.0238)
<i>Ln GDP pc</i>	3.310*** (1.039)	0.299 (0.715)	3.349*** (1.039)	-0.0108 (0.703)	3.217*** (1.037)	1.263* (0.747)
<i>GDP Growth</i>	-0.138*** (0.0391)	-0.0715*** (0.0176)	-0.137*** (0.0390)	-0.0710*** (0.0177)	-0.136*** (0.0393)	-0.0702*** (0.0173)
<i>Left Government</i>	0.000215 (0.00263)	-0.000955 (0.00192)	0.000232 (0.00263)	-0.00121 (0.00193)	9.31e-05 (0.00263)	-0.000977 (0.00191)
<i>Openness</i>	-0.0396*** (0.0108)	0.00226 (0.00660)	-0.0408*** (0.0109)	0.00548 (0.00639)	-0.0410*** (0.0110)	-0.00554 (0.00637)
<i>Turnout</i>	0.0569** (0.0277)	0.0154 (0.0149)	0.0565** (0.0276)	0.0144 (0.0143)	0.0499* (0.0275)	-0.0126 (0.0164)
<i>Minority Gov.</i>	0.0496 (0.297)	0.0325 (0.173)	0.1000 (0.296)	0.0390 (0.174)	0.112 (0.298)	0.0546 (0.170)
<i>Coalition Gov.</i>	0.453 (0.307)	-0.0625 (0.166)	0.464 (0.307)	-0.0681 (0.166)	0.430 (0.309)	-0.0745 (0.163)
<i>Effective Threshold</i>	-0.206*** (0.0680)	-0.168*** (0.0308)	-0.217*** (0.0701)	-0.185*** (0.0351)	-0.155** (0.0667)	-0.175*** (0.0340)
<i>Adjusted Lee Index</i>	-0.128*** (0.0487)	-0.0756*** (0.0233)				
<i>Adj Lee Ind * Eff Thr</i>	0.00693*** (0.00194)	0.00401*** (0.000952)				
<i>Electoral Gini Index</i>			-0.113*** (0.0413)	-0.0657*** (0.0202)		
<i>Elect Gini Ind * Eff Thr</i>			0.00624*** (0.00169)	0.00374*** (0.000890)		
<i>Moenius Kasuya Index</i>					-0.439*** (0.161)	-0.373*** (0.0947)
<i>Moen Kasuya Ind *Eff Thr</i>					0.0224*** (0.00717)	0.0161*** (0.00385)
<i>Observations</i>	495	495	495	495	495	495
<i>R-squared</i>	0.520	-	0.521	-	0.516	-
<i>Number of countries</i>	21	21	21	21	21	21

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5.4. Electoral Regionalisation and Non-Social Expenditure**

VARIABLES	(1) Non-Social Expenditure (FE)	(2) Non-Social Expenditure (FGLS, PSAR1)	(3) Non-Social Expenditure (FE)	(4) Non-Social Expenditure (FGLS, PSAR1)	(5) Non-Social Expenditure (FE)	(6) Non-Social Expenditure (FGLS, PSAR1)
<i>Unemployment</i>	-0.194*** (0.0507)	-0.207*** (0.0628)	-0.195*** (0.0507)	-0.215*** (0.0626)	-0.193*** (0.0505)	-0.242*** (0.0624)
<i>Elderly</i>	-0.305* (0.166)	-1.133*** (0.154)	-0.297* (0.167)	-1.113*** (0.156)	-0.354** (0.165)	-1.089*** (0.160)
<i>Lagged Deficit</i>	-0.0516 (0.0454)	0.0406 (0.0488)	-0.0525 (0.0452)	0.0438 (0.0487)	-0.0561 (0.0445)	0.0484 (0.0485)
<i>Ln GDP pc</i>	-16.00*** (1.566)	-8.460*** (1.235)	-15.97*** (1.571)	-8.593*** (1.239)	-15.59*** (1.525)	-8.909*** (1.244)
<i>GDP Growth</i>	0.144** (0.0559)	0.0369 (0.0452)	0.142** (0.0560)	0.0362 (0.0448)	0.150*** (0.0561)	0.0349 (0.0437)
<i>Left Government</i>	-0.00807** (0.00360)	-0.0104** (0.00416)	-0.00799** (0.00361)	-0.0104** (0.00415)	-0.00975*** (0.00359)	-0.0105** (0.00408)
<i>Openness</i>	0.0327** (0.0148)	0.00389 (0.00824)	0.0328** (0.0149)	0.00523 (0.00838)	0.0370** (0.0147)	0.00227 (0.00876)
<i>Turnout</i>	0.0257 (0.0374)	0.0798*** (0.0270)	0.0305 (0.0376)	0.0749*** (0.0272)	0.0351 (0.0366)	0.0698** (0.0280)
<i>Minority Gov.</i>	-1.431*** (0.420)	0.752* (0.391)	-1.434*** (0.417)	0.669* (0.390)	-1.368*** (0.414)	0.476 (0.388)
<i>Coalition Gov.</i>	0.0341 (0.441)	0.140 (0.368)	0.0450 (0.441)	0.137 (0.364)	-0.0672 (0.442)	0.239 (0.357)
<i>Effective Threshold</i>	0.313*** (0.0959)	0.234*** (0.0514)	0.301*** (0.0977)	0.265*** (0.0595)	0.298*** (0.0863)	0.231*** (0.0588)
<i>Adjusted Lee Index</i>	0.343*** (0.0783)	-0.00460 (0.0330)				
<i>Adj Lee Ind * Eff Thr</i>	-0.0113*** (0.00295)	-0.00453*** (0.00156)				
<i>Electoral Gini Index</i>			0.281*** (0.0651)	-0.00363 (0.0306)		
<i>Elect Gini Ind * Eff Thr</i>			-0.00906*** (0.00251)	-0.00466*** (0.00151)		
<i>Moenius Kasuya Index</i>					1.038*** (0.228)	-0.0207 (0.142)
<i>Moen Kasuya Ind *Eff Thr</i>					-0.0372*** (0.00959)	-0.0189*** (0.00673)
<i>Observations</i>	385	385	385	385	385	385
<i>R-squared</i>	0.634	-	0.633	-	0.635	-
<i>Number of countries</i>	21	21	21	21	21	21

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5.5. Electoral Regionalisation and Government Consumption**

VARIABLES	(1) Government Consumption (FE)	(2) Government Consumption (FGLS, PSAR 1)	(3) Government Consumption (FE)	(4) Government Consumption (FGLS, PSAR1)	(5) Government Consumption (FE)	(6) Government Consumption (FGLS, PSAR1)
<i>Unemployment</i>	-2.069*** (0.244)	-2.474*** (0.286)	-2.070*** (0.243)	-2.497*** (0.285)	-2.077*** (0.239)	-2.495*** (0.285)
<i>Elderly</i>	-5.088*** (0.799)	-7.323*** (0.723)	-5.059*** (0.800)	-7.322*** (0.731)	-4.979*** (0.780)	-6.986*** (0.743)
<i>Lagged Deficit</i>	-0.0454 (0.219)	0.0165 (0.199)	-0.0498 (0.217)	-0.00188 (0.197)	-0.0414 (0.211)	-0.0409 (0.202)
<i>Ln GDP pc</i>	-33.38*** (7.484)	2.038 (5.333)	-33.45*** (7.493)	2.183 (5.317)	-35.72*** (7.200)	6.110 (5.357)
<i>GDP Growth</i>	0.333 (0.263)	0.134 (0.186)	0.333 (0.263)	0.138 (0.184)	0.371 (0.259)	0.0813 (0.186)
<i>Left Government</i>	-0.0229 (0.0169)	-0.0205 (0.0165)	-0.0222 (0.0169)	-0.0209 (0.0164)	-0.0301* (0.0166)	-0.0241 (0.0167)
<i>Openness</i>	0.264*** (0.0695)	0.0741 (0.0456)	0.264*** (0.0699)	0.0631 (0.0455)	0.303*** (0.0679)	0.0511 (0.0491)
<i>Turnout</i>	0.236 (0.176)	0.784*** (0.100)	0.246 (0.176)	0.744*** (0.101)	0.197 (0.169)	0.751*** (0.104)
<i>Minority Gov.</i>	-2.038 (1.999)	-1.229 (1.785)	-2.087 (1.984)	-1.398 (1.766)	-2.105 (1.934)	-1.319 (1.783)
<i>Coalition Gov.</i>	3.420 (2.098)	1.333 (1.512)	3.442 (2.096)	1.351 (1.498)	2.874 (2.064)	1.418 (1.510)
<i>Effective Threshold</i>	0.898** (0.453)	1.019*** (0.254)	0.898* (0.460)	1.112*** (0.290)	1.738*** (0.398)	1.477*** (0.270)
<i>Adjusted Lee Index</i>	0.751** (0.372)	-0.442** (0.185)				
<i>Adj Lee Ind * Eff Thr</i>	-0.0235* (0.0140)	-0.0101 (0.00794)				
<i>Electoral Gini Index</i>			0.680** (0.310)	-0.361** (0.165)		
<i>Elect Gini Ind * Eff Thr</i>			-0.0202* (0.0119)	-0.0113 (0.00745)		
<i>Moenius Kasuya Index</i>					4.418*** (1.057)	0.378 (0.769)
<i>Moen Kasuya Ind *Eff Thr</i>					-0.181*** (0.0443)	-0.111*** (0.0315)
<i>Observations</i>	381	381	381	381	381	381
<i>R-squared</i>	0.564	-	0.565	-	0.581	-
<i>Number of countries</i>	21	21	21	21	21	21

Standard errors in parentheses, \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

Regarding the political variables, no partisan effects on social spending are detected.

*Left governments* do not increase it, across either of the two specifications of this variable. This is consistent with recent research (see, for instance, Brooks and Manza

(2006)) and goes against the conventional claim, stated in chapter 1, by which it is expected that left parties pursue more social policies. However, in alternative models (not shown) the variable seemed to have an effect in non-consensual democracies, validating Schmidt's (1996) finding that the partisan effects of governments are not similar across institutional settings<sup>98</sup>.

In the models on distributive policies, I find a negative effect of *left government* in Table 5.4. However, the effect is very inconsistent. In the test of the second hypothesis (Table 5.7), its significance fades away and it switches the direction of the effect on the non-social expenditure model. It seems, then, that we cannot make conclusive claims on the partisan explanations of spending. The direct impact of the ideology of the government on spending policies is unclear, and its effect will be contingent on other contextual variables, both institutional and economic. This is noted in Rueda and Pontusson et al. (2002), Rueda (2008), Beramendi and Cusack (2009), and Kwon and Pontusson (2010), among others.

*Voter turnout* has a milder effect than expected. It only has a consistent positive effect on *distributive policies*, but also in some models on *social security transfers*. Thus, lower income voters' mobilisation increases both the provision of one of the broad social spending measures, but also the incentives to target certain particularistic goods to them<sup>99</sup>. This finding provides some evidence that is consistent with Dixit and Londregan's model. They argue that politicians have greater incentives to provide distribution to low-income voters, because an increase in their income generates higher

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<sup>98</sup> These results are available upon request.

<sup>99</sup> In alternative models, turnout interacts with partisanship, and those models often show a positive effect of turnout on social spending, when the government is left wing. Hence, the non-effect of government's partisanship might be driven by the impact of turnout on right wing governments' policies. These results are in line with Pontusson and Rueda's (2010), and are available upon request.

marginal increases in utility. Thus, when *voter turnout* is high, it implies that low-income voters are mobilised, and that parties have greater incentives to target distributive benefits to them.

Finally, regarding the type of cabinet, only *minority government* tend to have a negative and significant effect on non-social expenditure. In the rest of the models, contrary to the expectations, there seems not to be any indirect impact of electoral fractionalisation on spending strategies once we account directly for the variables of interest of this chapter.

### **5.5.1. Results on Electoral Regionalisation**

Three key results emerge from the study of the effect of electoral systems and the regionalisation of the electorate on the provision of social policies (see Tables 5.2 and 5.3).

A first result is that, as the conventional argument states, majoritarian electoral systems provide, on average, less universalistic policies than proportional systems. The electoral system variables are frequently highly significant. This implies that proportional electoral systems generally produce more comprehensive policies that cover broader electorates. However, this result is conditional on values of regionalisation equal to zero. Thus, this result partially validates the predictions of the standard models on electoral systems on social policy provision. The higher provision of social policies in proportional electoral systems is conditional on the electorate being nationalised.

Once we introduce considerations related to electoral regionalisation, this result is moderated. This is the second main conclusion from these tables. The effect of the electorate's regionalisation reduces the differences between electoral systems. The

interaction between the electoral system and regionalisation of the electorate is significant across all models, both in Tables 5.2 and 5.3. This implies that majoritarian electoral systems increase their average provision of social spending, as a response to the electorate being more concentrated in certain districts. This provides strong support to the first hypothesis of this chapter. Measuring the electorate's regionalisation with three different indexes, the resulting six interactions are significant with the expected sign. In majoritarian electoral systems there is a clear positive effect of the electorate's regionalisation on the provision of national social policies. This interactive effect arises when regressed both on total *social expenditure*, and on *social security transfers*<sup>100</sup>.

As tables cannot illustrate the significance and magnitude of the effects for the whole range of values of the interaction, I provide simulated graphical results of the effect of electoral regionalisation conditional on the electoral system. Figure 5.1 displays the impact of electoral regionalisation (measured with the *Adjusted Lee Index*) on *social expenditure* simulating a single member district country (effective threshold=37.5)<sup>101</sup>. The mean value in the sample of the Lee Index is 19.9. It can be seen that, at a low level of regionalisation such as 15, equivalent to United Kingdom in the early 1960s, the government provides, on average, a level of social expenditure slightly above 17.5% of GDP. At an extreme value of 50 of the Lee Index -equivalent to Belgium in the nineties- the predicted level of social expenditure reaches 21% of GDP<sup>102</sup>. This is a quite substantial increase. The predicted level of social expenditure in a perfectly proportional system (effective threshold=0) with mean regionalisation is slightly below 23% of GDP.

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<sup>100</sup> Similar analyses have also been run regressing these models on health expenditures and pensions. Both types of models tend to show the expected sign, but the significance is more inconsistent. These results are available upon request.

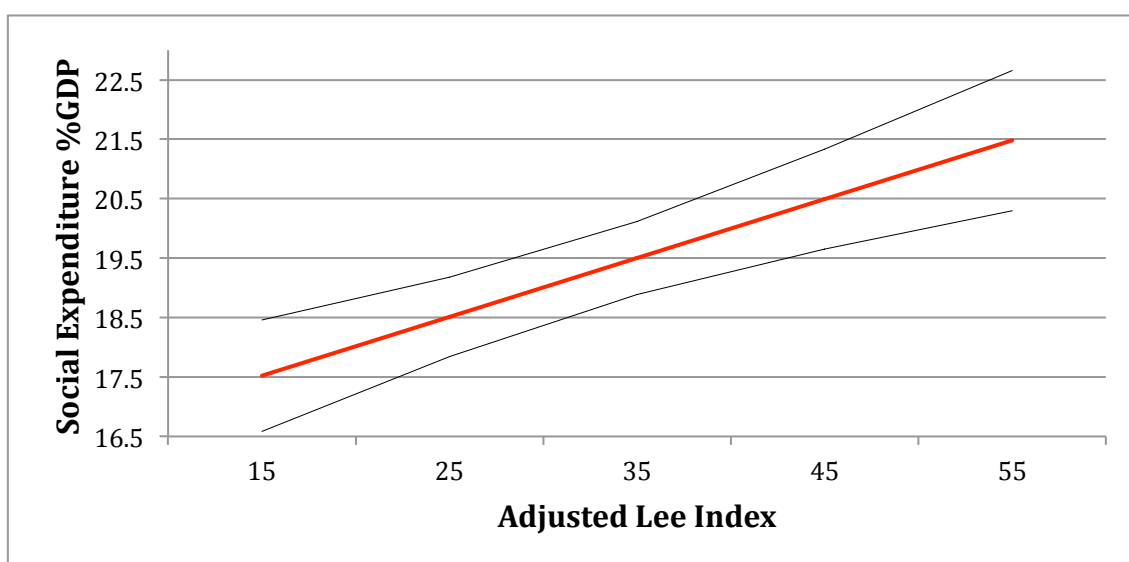
<sup>101</sup> Interaction 2 of Table 5.2.

<sup>102</sup> These calculations are computed with the Stata *margins* command, setting all the rest of independent variables to their mean.

This means that the regionalisation of the electorate can greatly reduce differences in the level of social expenditure generated by the electoral system.

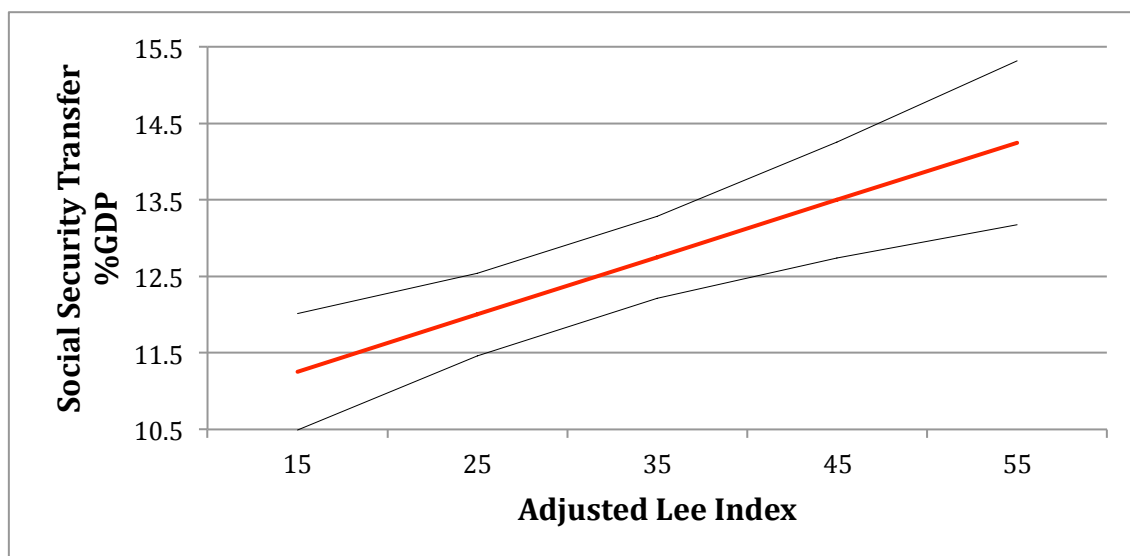
Figure 5.2 displays the same interaction in the *social security transfers* regression (interaction 2 of Table 5.3). The effect of electoral regionalisation on this dependent variable is even greater. At a low level of regionalisation (15), a single member district system provides 11.25% of GDP in social security transfers. Again, this level increases, as the electorate becomes more regionalised. At an extreme value of regionalisation (such as 50) social security transfers almost reach 14% of GDP. Given that the predicted level of social security transfers in a perfectly proportional system with no entry threshold (effective threshold=0) and a mean level of regionalisation is 14.9% of GDP, this result implies that the regionalisation of the electorate can nullify almost all the differences in social security transfers between a perfectly majoritarian system and a perfectly proportional one.

**Figure 5.1. Effect of electoral regionalisation on social expenditure in a single member district country**



Source: Simulation of Interaction 2 in Table 5.2. 90% Confidence Interval

**Figure 5.2. Effect of electoral regionalisation on social security expenditure in a single member district country**



Source: Simulation of Interaction 2 in Table 5.3. 90% Confidence Interval

We can conclude that, when the electorate is highly regionalised, and parties' core supporters are concentrated in just a few districts, an SMD system provides as strong incentives to deliver social policies as a proportional system.

One further result is worth highlighting. The principal effect of the regionalisation variables is always significant with high magnitudes. The significance of the principal effect implies that, for values of the interaction equal to zero, the regionalisation of the electorate has a negative effect on the level of social policies. That means that, while the regionalisation of the electorate has a positive impact on the provision of social policies in majoritarian systems, in a proportional system the effect is negative.

This result was not theorised in chapter 2, but it may still be consistent with the theoretical framework. As I have argued above, parties adapt their distributive strategies to the context in which they compete. In principle, in a proportional system parties should not care about the geographic distribution of their core supporters. Parties can try to target their supporters in a variety of ways, and they do not need to be concerned with

how their voters are distributed across districts. Districts are supposed to be sufficiently large so that there are no marginal districts where few votes can be decisive for the global electoral result. However, I have also argued that the main factor that explains the provision of distributive policies is the efficiency of distribution. There are two defining features of efficiency: responsiveness and targetability. It is reasonable to expect that, although parties can always find distributive policies to target their core supporters regardless of their geographic distribution, their targetability conditions improve when they are concentrated in certain areas of the country. In this case parties can exploit both their individual and geographical traits, thereby increasing the efficiency of distribution. This gives parties more incentives to target their core constituency than if they are dispersed, when parties can identify fewer traits for distribution.

Thus, even with a proportional electoral system in place, where votes in all regions count the same, parties are not always equally able to win votes in all regions, and will find it particularly profitable to spend in the regions where they are competitive. This suggests that if parties have very territorialised constituencies and they do not need to maximise the districts where they win (because a proportional system has a low number of districts), they can devote more effort to mobilising their core constituents and they will particularly do it with distributive policies with strong regional implications, such as regional pork barrel. This result is related to Picci and Golden (2007), who show how, in a proportional system, politicians can still respond to very local incentives.

This additional finding is also relevant for the hypothesis under analysis. When the electorate is concentrated in certain districts, not only incumbents in majoritarian electoral systems will have stronger incentives to provide universalistic policies, but

also incumbents in proportional systems have weaker incentives to do it. As a result, the expected differences in social policy provision between electoral systems will be even smaller than those predicted.

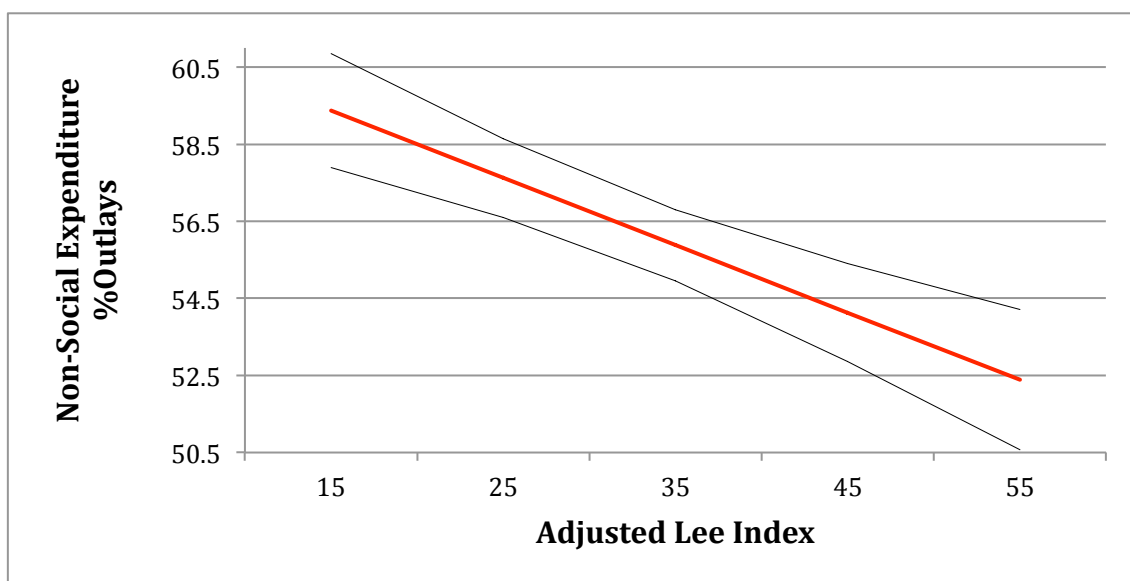
Now that the effect of regionalisation on social policies between electoral systems has been accounted for, the flip side of the argument is also tested. Tables 5.4 and 5.5 find empirical support and validate this complementary claim. The interactions display the opposite sign than previous models, and tend to have high levels of confidence with the two specifications of the dependent variables (*government consumption* and *non-social expenditure*). Only one interaction in the government consumption model falls short of significance. The remainder perform very well. These results show that in majoritarian systems the regionalisation of the electorate not only has a positive effect on the incentives to provide universalistic national policies, but also that the incentives to provide targeted distributive policies decrease.

Figure 5.3 graphically displays the predicted effect in a perfectly majoritarian country using the level of non-social expenditure as a dependent variable, and the *Adjusted Lee Index*, as the regionalisation measure (Interaction 2 of Table 5.4). The figure shows the reverse effect to previous figures. As the electorate becomes more regionalised, incumbent parties have weaker incentives to provide distributive politics and place more weight on universalistic spending. The effect from a transition from a level of regionalisation of 15 to a regionalisation of 50 (equivalent to a switch from British or Danish regionalisation levels to Belgian ones) can account for a decrease of non-social expenditure of 6% of the total outlays.

In summary, I have shown that the differences in social policy provision between electoral systems are conditioned by the electorate's regionalisation. In principle,

proportional systems provide more social policies. However, in more majoritarian electoral systems, the incentives to provide social policies increase when electorates are regionalised. Thus, I find strong empirical validation for hypothesis 1. These results are very consistent, as they arise with different specifications of the variables, and always show relevant magnitudes.

**Figure 5.3. Effect of electoral regionalisation on non-social expenditure in a single member district country**



Source: Simulation of Interaction 2 in Table 5.4. 90% Confidence Interval

### **5.5.2. Results on Electoral Fractionalisation**

Turning to the test of the second hypothesis, I have argued that electoral fractionalisation is another feature of electoral competition that mediates the incentives to depart from narrow distributive strategies and concentrate on universalistic policies. This effect of electoral fractionalisation should be independent of the electoral system, and, therefore, moderate the differences between majoritarian and proportional ones. The latter tend to host more effective competing parties. Hence, although the

proportional electoral rule might have a direct and positive effect on promoting social policies, it has an indirect negative effect through electoral fractionalisation.

The hypothesis is also validated by the empirical results. Table 5.6 displays the effect of electoral fractionalisation on two measures of social policies and Table 5.7 runs the same models using the two proxies of distributive policies as the dependent variable. The *effective number of parties*, both measured on the *vote* and *seat share*, has a positive and highly significant effect ( $p < 0.01$ ) on social policies (Table 5.6). Likewise, three of the four coefficients are also significantly predictive in the distributive policies' models (Table 5.7).

**Table 5.6. Effective Number of Parties and Universalistic Spending: Fixed Effects Estimations**

VARIABLES	(1) Social Expenditure	(2) Social Expenditure	(3) Social Security Transfers	(4) Social Security Transfers
<i>Unemployment</i>	0.507*** (0.0308)	0.506*** (0.0303)	0.568*** (0.0282)	0.567*** (0.0278)
<i>Elderly</i>	0.598*** (0.0764)	0.567*** (0.0760)	0.0233 (0.0708)	-0.00264 (0.0706)
<i>Lagged deficit</i>	-0.108*** (0.0278)	-0.0975*** (0.0275)	-0.0743** (0.0293)	-0.0668** (0.0291)
<i>Ln GDP pc</i>	7.810*** (0.765)	7.803*** (0.748)	2.754*** (0.681)	2.810*** (0.672)
<i>GDP growth</i>	-0.204*** (0.0343)	-0.212*** (0.0339)	-0.139*** (0.0348)	-0.145*** (0.0345)
<i>Left Government</i>	-0.00480** (0.00209)	-0.00428** (0.00206)	-0.00107 (0.00219)	-0.000487 (0.00218)
<i>Openness</i>	-0.0307*** (0.00728)	-0.0298*** (0.00717)	-0.0361*** (0.00705)	-0.0357*** (0.00699)
<i>Turnout</i>	-0.00980 (0.0191)	-0.00226 (0.0188)	0.0315 (0.0195)	0.0384** (0.0193)
<i>Minority Gov.</i>	-0.0900 (0.250)	0.152 (0.251)	-0.0911 (0.251)	0.0938 (0.252)
<i>Coalition Gov.</i>	0.174 (0.251)	0.216 (0.248)	0.182 (0.254)	0.244 (0.253)
<i>Effective Threshold</i>	-0.0142 (0.0161)	-0.00912 (0.0159)	0.0220 (0.0175)	0.0277 (0.0174)
<i>Eff Num Parties (Vote Share)</i>	-0.512*** (0.121)		-0.491*** (0.111)	
<i>Eff Num Parties (Seats)</i>		-0.748*** (0.134)		-0.712*** (0.127)
Observations	533	533	696	696
R-squared	0.642	0.651	0.480	0.489
Number of countries	23	23	23	23

Constant not shown. Standard errors in parentheses, \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table 5.7. Effective Number of Parties and Distributive Policies: Fixed Effects Estimations**

VARIABLES	(1) Non-Social Expenditure	(2) Non-Social Expenditure	(3) Government Consumption	(4) Government Consumption
<i>Unemployment</i>	-0.202*** (0.0568)	-0.201*** (0.0562)	-2.250*** (0.238)	-2.285*** (0.235)
<i>Elderly</i>	-0.681*** (0.141)	-0.643*** (0.141)	-3.740*** (0.593)	-3.498*** (0.593)
<i>Lagged deficit</i>	-0.0342 (0.0513)	-0.0470 (0.0511)	-0.324 (0.216)	-0.424** (0.215)
<i>Ln GDP pc</i>	-18.49*** (1.411)	-18.51*** (1.390)	-56.58*** (5.965)	-58.00*** (5.866)
<i>GDP growth</i>	0.158** (0.0632)	0.168*** (0.0630)	0.534** (0.262)	0.595** (0.261)
<i>Left Government</i>	0.00471 (0.00385)	0.00411 (0.00383)	-0.000566 (0.0160)	-0.00293 (0.0159)
<i>Minority Gov.</i>	0.0225* (0.0134)	0.0215 (0.0133)	0.373*** (0.0556)	0.373*** (0.0550)
<i>Coalition Gov.</i>	-0.000289 (0.0353)	-0.00867 (0.0349)	0.0775 (0.146)	0.0595 (0.144)
<i>Openness</i>	-0.958** (0.462)	-1.238*** (0.466)	1.163 (1.938)	0.113 (1.948)
<i>Turnout</i>	-1.476*** (0.462)	-1.530*** (0.460)	0.981 (1.935)	0.569 (1.920)
<i>Effective Threshold</i>	0.00484 (0.0298)	-0.00184 (0.0296)	0.341*** (0.123)	0.284** (0.122)
<i>Eff Num Parties (Vote Share)</i>	0.571** (0.223)		1.245 (0.924)	
<i>Eff Num Parties (Seats)</i>		0.866*** (0.249)		3.266*** (1.029)
Observations	533	533	529	529
R-squared	0.655	0.659	0.520	0.528
Number of countries	23	23	23	23

Constant not shown. Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

More importantly, the coefficients' significance remains, even after controlling for the effect of the electoral system's *effective threshold*. Thus, the models are capturing an independent effect of the number of competing parties regardless of the electoral system. This complements existing explanations, explaining differences across countries with similar electoral institutions and within-country variation.

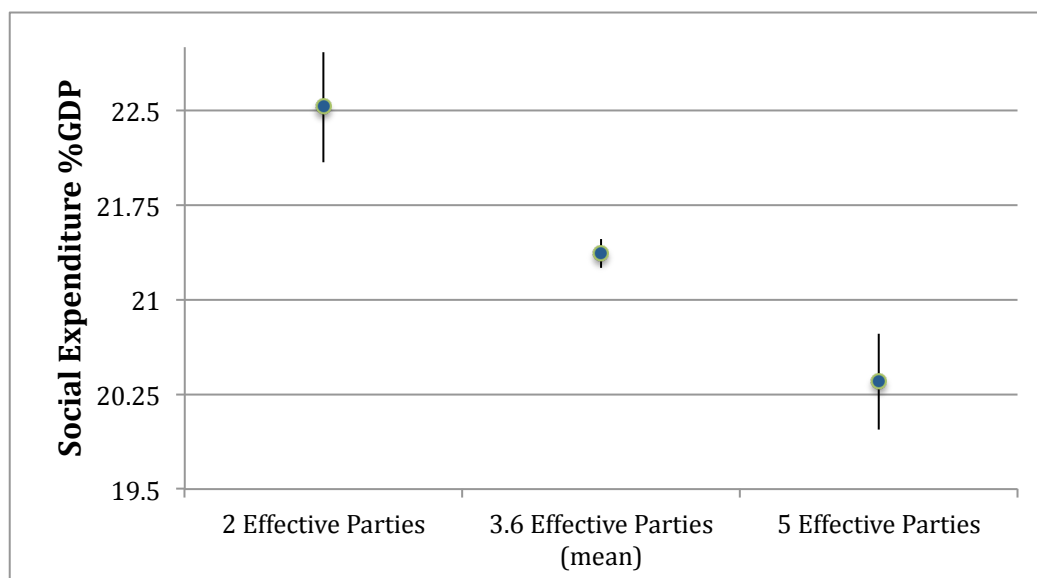
It can also be seen that the effective number of parties measured in the seats share performs better than the vote share measure, which in one specification falls slightly below significance. This means that parties' strategies are more reactive to the electoral

fractionalisation of parties that achieve representation than to the general fractionalisation of the electorate.

To assess the magnitude of the effects, I simulate some results. Figure 5.4 shows the predicted levels of *social expenditure* for different parliamentary fractionalisation scenarios. A legislature like the French between 1997-2001 with 3.6 effective parties (equivalent to the mean fractionalisation in the sample) would provide an average of 21.36% of GDP in *social expenditure*. This figure increases to 22.52% in a perfectly bipartisan setting (like the United States House of Representatives between 1993 and 1997), while it decreases to 20.35% in a fractionalised legislature with five effective parties (equivalent to Switzerland in the 1975-1978 term).

These effects are already of a relevant magnitude. However, as the number of effective parties in the lower chamber only changes when elections take place, we can expect that its effect extends between the whole electoral term. Table 5.8 shows that, over a four-year legislative term, the impact is very strong. Let us take a country like Sweden, with a mean of 3.77 effective parties in the years of the sample. If Sweden's Parliament would increase to five effective parties after an election, we would expect that it would decrease its social expenditure a 3.5 % of GDP. This implies that Sweden would decrease from its current 30% mean provision of *social expenditure* to levels of around 26.5%, equivalent to Austria's. This would be quite a substantial change.

**Figure 5.4: Effect of the effective number of parties (seat share) on social expenditure**



Source: Simulation of model 2 in Table 5.6. 90% Confidence Interval

**Table 5.8: Social Expenditure and Effective Number of Parties: Simulations**

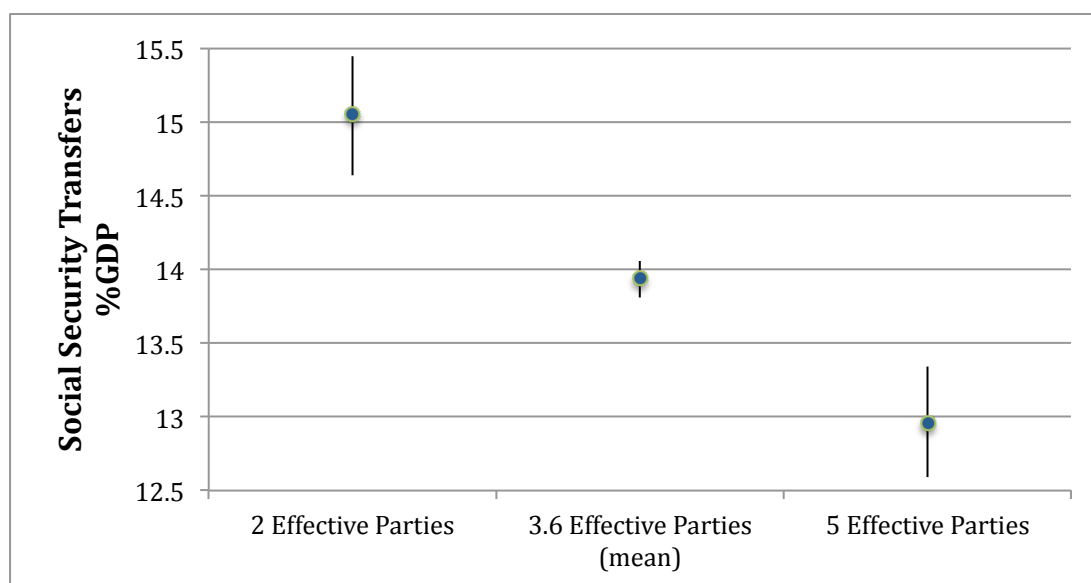
Effective Number of parties (seats)	Predicted Social Expenditure (% GDP)	95% Confidence Interval	Term effects (4 years) of a switch from 3.78 effective parties (Sweden's average)
2	22.53	(22.09 , 22.96)	5.19
3.6 (mean)	21.37	(21.25 , 21.48)	0.55
5	20.35	(19.97 , 20.73)	-3.5

Similar results are displayed in Figure 5.5 and Table 5.9, which display the predictions on the impact of electoral fractionalisation on *social security transfers*. Figure 5.5 shows that a government like France in the late nineties (with a mean fractionalised legislature) provides 13.9% of GDP in social security transfers. This figure increases by 1.11% of GDP, to 15.05%, in a two parties legislature. The level of social transfers is reduced to 12.96% in a fractionalised parliament with 5 effective parties.

Taking into account a whole four-year term, the impact of a change on the number of effective parties on policy outcomes is very considerable. In this case, I use Austria as benchmark for the simulation. This country had 2.76 effective parties in its legislature in the years of the sample. If its number of parties would increase to 3.6 (the mean value in

the whole sample), it would decrease its level of social transfers by 2.32 % of GDP. This would put Austria at the levels of Italy in *social security transfers* in four years. These predictions confirm the second electoral competition hypothesis. There is strong support for the negative effect of electoral fractionalisation on universalistic spending.

**Figure 5.5: Effect of the effective number of parties (seat share) on social security transfers**



Source: Simulation of model 4 in Table 5.6. 90% Confidence Interval

**Table 5.9. Social Security Transfers and Effective Number of Parties: Simulations**

Effective Number of parties (seats)	Predicted Social Security Transfers (% GDP)	95% Confidence Interval	Term effects (4 years) of a switch from 2.76 effective parties (Austria's average)
2	15.06	(14.64 , 15.45)	2.13
3.6 (mean)	13.94	(13.81 , 14.06)	-2.32
5	12.96	(12.59 , 13.34)	-6.24

### 5.5.3. Discussion of the Results

The interpretation of the results on both hypotheses qualify the theoretical predictions of Persson and Tabellini (2000, 2003), Lizzeri and Persico (2001), Milesi-Ferretti et al. (2002), or Stratman and Baur (2002), among others. I have shown that, when the electorate is very regionalised, incumbents in majoritarian electoral systems may even

provide more social policies than in proportional systems. Likewise, multiparty competition -which is more likely in proportional systems- incentivises the delivery of distributive policies, rather than universalistic programmes.

This outcome must lead to a rethink of the aforementioned arguments. The results provided here suggest that the mechanisms, by which these authors claim that social policy provision increases, only arise under certain conditions. In their theoretical explanations, it is assumed that parties in majoritarian electoral systems always concentrate their distributive efforts on a specific set of voters, particularly in swing districts. The results provided here suggest a different mechanism. First, it is true that majoritarian electoral systems might incentivise politicians to focus on swing districts, but they would do so by prioritising distributive policies targeted to their core supporters within those districts. Secondly, the incentives to distribute to narrow groups of voters are also conditional on the distribution of voters across districts. Thus, the rationale of maximising the benefits delivered to a defined set of voters will only apply when parties have a sufficient number of core voters in many districts, particularly in the swing ones. In this case, parties can rely on their core supporters to win the election. However, when they have their core electorate concentrated in a few districts, parties will need to expand their electorate by providing universalistic policies. This qualification implies that Persson and Tabellini's predictions on majoritarian systems are only valid when parties have dispersed electorates. The concentration of the electorate changes parties' incentives and their distributive strategies.

Likewise, these authors ignore the side effects of electoral systems. The electoral competition framework established by proportional electoral systems might give stronger incentives to provide universalistic policies. However, this argument does not take into account the indirect effects via electoral fractionalisation. Proportional systems

tend to host, on average, more multiparty systems than majoritarian countries. I have shown that the number of competing parties is a strong determinant of distributive policies. Therefore, we can expect that the differences in the provision of social policies and universalistic distributive programmes are not necessarily higher in proportional electoral systems than in majoritarian ones. Although the electoral rule fosters more social spending, the number of competing parties provides, at the same time, distributive incentives in the opposite direction.

## **5.6. Robustness Check (I): Simultaneity**

I have argued that, under specific electoral competition conditions, incumbents will have incentives to depart from distributive policies and will provide universalistic social policies. This argument is set up as a trade-off. However, the previous methodological approach did not test the argument jointly. The previous section separately ran a set of analyses on national social policies, and then a second set of analyses on distributive transfers.

In this section, I provide some extra analyses that seek to consider both parts of the argument together. To estimate the effect of an independent variable on both dependent variables simultaneously, I estimate a system of equations by running seemingly unrelated models (Zellner, 1962). These are maximum likelihood models that allow us to estimate two separate regressions that share explanatory variables, and model the underlying errors as jointly normally distributed. With this method, I can trace the effect of the electoral regionalisation and electoral fractionalisation variables both on social and distributive policies, controlling for the fact that it is a joint process. For the sake of

parsimony, these models include all the control variables of previous models, and country dummies. Again, all models are robust to the inclusion of year dummies.

The hypothesis on the effect of the electorate's regionalisation is tested in Tables 5.10 and 5.11. Table 5.10 provides the estimations of the two social spending measures (*social expenditure* and *social security transfers*) with the first measure of distributive policies (*non-social expenditure*). Table 5.11 displays the estimations with the second distributive policy (*government consumption*)<sup>103</sup>. The interaction between the electoral system and the electorate's regionalisation is strongly predictive of the types of spending. In majoritarian electoral systems, the regionalisation of the electorate increases the provision of social expenditure, while at the same time the incentives to formulate distributive policies decrease. The interaction has the expected sign and conventional levels of significance in all models. The simulated predictions yield slightly higher coefficients for the interaction in the social spending models. This implies that, when the joint process is taken into account, the incentives in majoritarian electoral systems to provide universalistic spending are even stronger. Thus, differences between electoral systems should be even smaller than predicted in the previous section. In addition, the share of the variance explained (R squared) by the models has strongly increased. This indicates that we are picking up much more explanatory power by testing the two parts of the theoretical argument jointly.

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<sup>103</sup> For economy of space, I only provide the models with the *effective threshold* as a measure of the electoral system, and the *Adjusted Lee Index* as a measure of the electoral regionalisation. The combinations with the other variables provide very similar results and are available upon request.

**Table 5.10. Seemingly Unrelated Regressions: Electoral Regionalisation and the Trade-Off between Social Spending and Non-Social Expenditures**

VARIABLES	MODEL 1		MODEL 2	
	Social Expenditure	Non-Social Expenditure	Social Security Transfers	Non-Social Expenditure
<i>Unemployment</i>	0.542*** (0.0317)	-0.194*** (0.0484)	0.591*** (0.0438)	-0.194*** (0.0484)
<i>Elderly</i>	0.578*** (0.104)	-0.305* (0.159)	-0.232 (0.144)	-0.305* (0.159)
<i>Lagged Deficit</i>	-0.149*** (0.0284)	-0.0516 (0.0433)	-0.118*** (0.0392)	-0.0516 (0.0433)
<i>Ln GDP pc</i>	6.987*** (0.979)	-16.00*** (1.495)	2.554* (1.353)	-16.00*** (1.495)
<i>GDP growth</i>	-0.198*** (0.0350)	0.144*** (0.0534)	-0.121** (0.0483)	0.144*** (0.0534)
<i>Left Government</i>	-0.00121 (0.00225)	-0.00807** (0.00344)	0.000975 (0.00311)	-0.00807** (0.00344)
<i>Openness</i>	-0.0354*** (0.00923)	0.0327** (0.0141)	-0.0412*** (0.0128)	0.0327** (0.0141)
<i>Turnout</i>	-0.0133 (0.0234)	0.0257 (0.0358)	0.0479 (0.0324)	0.0257 (0.0358)
<i>Minority Gov.</i>	0.212 (0.262)	-1.431*** (0.401)	-0.209 (0.363)	-1.431*** (0.401)
<i>Coalition Gov.</i>	-0.0398 (0.276)	0.0341 (0.421)	0.174 (0.381)	0.0341 (0.421)
<i>Effective Threshold</i>	-0.157*** (0.0600)	0.313*** (0.0916)	-0.203** (0.0829)	0.313*** (0.0916)
<i>Adj Lee Index</i>	-0.180*** (0.0490)	0.343*** (0.0748)	-0.148** (0.0677)	0.343*** (0.0748)
<i>Effect Thresh *Adj lee Index</i>	0.00575*** (0.00185)	-0.0113*** (0.00282)	0.00751*** (0.00255)	-0.0113*** (0.00282)
Observations	385	385	385	385
Number of countries	21	21	21	21
R squared	0.951	0.935	0.838	0.935

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5.11. Seemingly Unrelated Regressions: Electoral Regionalisation and the Trade-Off between Social Spending and Government Consumption**

VARIABLES	MODEL 1		MODEL 2	
	Social Expenditure	Government Consumption	Social Security Transfer	Government Consumption
<i>Unemployment</i>	0.547*** (0.0327)	-2.069*** (0.233)	0.597*** (0.0452)	-2.069*** (0.233)
<i>Elderly</i>	0.571*** (0.107)	-5.088*** (0.762)	-0.250* (0.148)	-5.088*** (0.762)
<i>Lagged Deficit</i>	-0.145*** (0.0293)	-0.0454 (0.209)	-0.113*** (0.0405)	-0.0454 (0.209)
<i>Ln GDP pc</i>	7.036*** (1.002)	-33.38*** (7.142)	2.682* (1.386)	-33.38*** (7.142)
<i>GDP growth</i>	-0.199*** (0.0352)	0.333 (0.251)	-0.121** (0.0487)	0.333 (0.251)
<i>Left Government</i>	-0.00113 (0.00227)	-0.0229 (0.0162)	0.00110 (0.00314)	-0.0229 (0.0162)
<i>Openness</i>	-0.0349*** (0.00930)	0.264*** (0.0663)	-0.0404*** (0.0129)	0.264*** (0.0663)
<i>Turnout</i>	-0.0136 (0.0235)	0.236 (0.168)	0.0489 (0.0325)	0.236 (0.168)
<i>Minority Gov.</i>	0.159 (0.268)	-2.038 (1.907)	-0.217 (0.370)	-2.038 (1.907)
<i>Coalition Gov.</i>	-0.0293 (0.281)	3.420* (2.003)	0.217 (0.389)	3.420* (2.003)
<i>Effective Threshold</i>	-0.154** (0.0607)	0.898** (0.432)	-0.198** (0.0839)	0.898** (0.432)
<i>Adj Lee Index</i>	-0.176*** (0.0498)	0.751** (0.355)	-0.142** (0.0689)	0.751** (0.355)
<i>Effect Thresh *Adj lee Index</i>	0.00563*** (0.00187)	-0.0235* (0.0134)	0.00730*** (0.00259)	-0.0235* (0.0134)
Observations	381	381	381	381
Number of countries	21	21	21	21
R squared	0.951	0.930	0.838	0.930

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Tables 5.12 and 5.13 test the second hypothesis on electoral fractionalisation, using the *effective number of parties (seat share)* as the main independent variable. Again, the first set of models test the trade-off between the universalistic programmes (*social expenditure and social security transfers*) and *non-social expenditure*, and the second table uses *government consumption* as a measure of distributive policies.

These seemingly unrelated regressions give strong support for the hypothesis. The *effective number of parties* is always highly significant, having a negative effect on the social policy variables and a positive effect on both distributive policies proxies. Again, compared with the analyses of the previous section, the significance and magnitude of the predicted effects change slightly, as an indication that the relevant independent variables are having a joint effect on both types of policy instruments. The magnitudes are still of importance, validating the previous results. Both hypotheses are, thus, confirmed.

**Table 5.12. Seemingly Unrelated Regressions: Effective Number of Parties and the Trade-Off between Social Spending and Non-Social Expenditure**

VARIABLES	MODEL 1		MODEL 2	
	Social Expenditure	Non-Social Expenditure	Social Security Transfers	Non-Social Expenditure
<i>Unemployment</i>	0.506*** (0.0292)	-0.201*** (0.0543)	0.562*** (0.0352)	-0.201*** (0.0543)
<i>Elderly</i>	0.567*** (0.0734)	-0.643*** (0.136)	-0.0872 (0.0884)	-0.643*** (0.136)
<i>Lagged Deficit</i>	-0.0975*** (0.0266)	-0.0470 (0.0494)	-0.0269 (0.0320)	-0.0470 (0.0494)
<i>Ln GDP pc</i>	7.803*** (0.723)	-18.51*** (1.343)	1.912** (0.870)	-18.51*** (1.343)
<i>GDP growth</i>	-0.212*** (0.0328)	0.168*** (0.0609)	-0.136*** (0.0395)	0.168*** (0.0609)
<i>Left Government</i>	-0.00428** (0.00199)	0.00411 (0.00370)	0.000123 (0.00240)	0.00411 (0.00370)
<i>Openness</i>	-0.0298*** (0.00693)	0.0215* (0.0129)	-0.0285*** (0.00834)	0.0215* (0.0129)
<i>Turnout</i>	-0.00226 (0.0182)	-0.00867 (0.0338)	0.0273 (0.0219)	-0.00867 (0.0338)
<i>Minority Gov.</i>	0.152 (0.242)	-1.238*** (0.450)	-0.251 (0.292)	-1.238*** (0.450)
<i>Coalition Gov.</i>	0.216 (0.239)	-1.530*** (0.445)	0.172 (0.288)	-1.530*** (0.445)
<i>Effective Threshold</i>	-0.00912 (0.0154)	-0.00184 (0.0286)	0.0583*** (0.0185)	-0.00184 (0.0286)
<i>Eff Numb Parties (Seat share)</i>	-0.748*** (0.130)	0.866*** (0.241)	-0.922*** (0.156)	0.866*** (0.241)
Observations	533	533	533	533
Number of countries	23	23	23	23
R squared	0.935	0.892	0.844	0.892

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5.13. Seemingly Unrelated Regressions: Effective Number of Parties and the Trade-Off between Social Spending and Government Consumption**

VARIABLES	MODEL 1		MODEL 2	
	Social Expenditure	Government Consumption	Social Security Transfers	Government Consumption
<i>Unemployment</i>	0.517*** (0.0296)	-2.285*** (0.227)	0.570*** (0.0357)	-2.285*** (0.227)
<i>Elderly</i>	0.537*** (0.0747)	-3.498*** (0.573)	-0.112 (0.0902)	-3.498*** (0.573)
<i>Lagged Deficit</i>	-0.0853*** (0.0271)	-0.424** (0.208)	-0.0175 (0.0327)	-0.424** (0.208)
<i>Ln GDP pc</i>	8.111*** (0.739)	-58.00*** (5.669)	2.155** (0.892)	-58.00*** (5.669)
<i>GDP growth</i>	-0.211*** (0.0329)	0.595** (0.252)	-0.134*** (0.0396)	0.595** (0.252)
<i>Left Government</i>	-0.00413** (0.00200)	-0.00293 (0.0153)	0.000272 (0.00241)	-0.00293 (0.0153)
<i>Openness</i>	-0.0293*** (0.00693)	0.373*** (0.0532)	-0.0280*** (0.00837)	0.373*** (0.0532)
<i>Turnout</i>	-0.00151 (0.0182)	0.0595 (0.139)	0.0284 (0.0219)	0.0595 (0.139)
<i>Minority Gov.</i>	0.0898 (0.246)	0.113 (1.883)	-0.283 (0.296)	0.113 (1.883)
<i>Coalition Gov.</i>	0.244 (0.242)	0.569 (1.855)	0.209 (0.292)	0.569 (1.855)
<i>Effective Threshold</i>	-0.00783 (0.0154)	0.284** (0.118)	0.0594*** (0.0186)	0.284** (0.118)
<i>Eff Numb Parties (Seat share)</i>	-0.755*** (0.130)	3.266*** (0.994)	-0.928*** (0.156)	3.266*** (0.994)
Observations	529	529	529	529
Number of countries	23	23	23	23
R squared	0.935	0.905	0.844	0.905

Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 5.7. Robustness Check (II): Endogeneity

The second robustness check seeks to rule out any endogeneity bias in the test of the first hypothesis. There is the potential risk that the electorate's regionalisation is itself a result of previous distributive policies. As I explained above, certain types of distributive policies, particularly those that have traditionally been labelled under the category of *pork barrel*, can have strong geographic impacts. Therefore, one could

argue that the territorial shape of an electorate responds partially to the geographic scope of parties' distributive policies in previous years.

This should not be a problem either at a theoretical or empirical level. From a theoretical point of view, the nature of the process described here is not endogenous. I have argued that parties respond to the regionalisation of the electorate by providing universalistic social policies. These policies exploit transversal interests of the whole electorate and are generally considered to be national policies. Thus, the outcome of these policies in the long-term should be a more nationalised electorate, breaking with the previous regionalisation patterns. This logic of the argument rules out an endogenous vicious circle, by which current regionalisation is a result of previous spending policies with strong regional impacts.

From an empirical point of view, this potential risk should not be a big problem either. On the one hand, endogeneity would be a concern if parties integrated into their decision making the consequences of future electorate nationalisation. However, it is reasonable to assume that this is a minor concern for parties when designing their spending strategies. Even if past strategies have had an impact on the current regional distribution of support, this does not make the decisions on today's spending strategies trivial.

More importantly, although distributive policies may have an effect on the electorate's regionalisation, this is influenced by many other variables, and a party cannot therefore make accurate predictions on the consequences of its policies of the future electorate's geographic distribution. The literature has described multiple factors that make parties more or less able to win votes throughout the territory, independent of the individual profile of voters. These factors can be divided into two main groups. On the one hand,

compositional arguments highlight the influence of social interaction on an individual. These interactions are shaped by the social composition of the region where an individual lives. Thus, an individual's political behaviour and preferences will be linked to the social networks and conversations in the environments in which she is inserted (Huckfeldt and Sprague, 1995; Dalton et al., 1998; Zuckerman, 2007; Ferejohn and Kuklinski, 1990; Straits, 1991). On the other hand, contextual arguments emphasise the exposure of individuals to experiences in their regions, beyond the interactions between individuals (Kenny, 1992). These arguments explain individual political choices by situating individuals in a social-geographical context (Agnew, 1996). By this logic, individuals have different perceptions about parties and their policies depending on their regional context and vote accordingly (Johnston and Pattie, 2006). The patterns across regions will be independent of the previous distributive policies.

Any of these arguments highlight the fact that electoral regionalisation patterns respond to a variety of causes that are far from being simply determined by parties' distributive policies. In any case, it is reasonable to argue that the two processes – provision of spending policies, and electorate's regionalisation- can be, to some extent, mutually influenced. The main argument defended here is that the distribution of voters across districts has an effect on the type of distributive strategies pursued by parties. However, this argument is not offset if, at the same time, the distributive policies delivered have consequences for the future distribution of the electorate. The fact that there is a mutually reinforcing process acknowledges that almost any social science phenomenon is coevolving (Lewis and Steinmo, 2010). As long as the second part of the causal chain does not dominate the whole process, the argument provided here is still valid.

By acknowledging that the causal process is coevolving, we can use a structural equation model to test the first hypothesis again. This methodology allows us to observe

each part of the causality chain and to test whether the argument still holds. Taking into account the effect of previous and current universalistic spending, we can test the effect of the electoral regionalisation on current public expenditure decisions. Specifically, I run three stage least squares regressions<sup>104</sup>. This method estimates a system of equations where endogenous explanatory variables are dependent variables from other equations. The dependent variables are explicitly taken to be endogenous to the system and are treated as correlated with the disturbances in the system's equations. If the seemingly unrelated regressions of previous section allowed us to test the effect of an independent variable on two dependent variables simultaneously, this method allows us to study the simultaneous effect of two variables that are endogenous to each other.

I estimate several systems of two simultaneous equations. In each system, the first equation tests the hypothesis of this chapter (regionalised electorates increase the incentives to social spending in majoritarian countries)<sup>105</sup>. In the second equation, I control the reverse causality, with the regionalisation index being the dependent variable. I include as independent variables the social spending variables and two lags of each<sup>106</sup>, to account for the effect of current and previous year spending on regionalisation. I also include two categorical dummies for *federal countries*<sup>107</sup>, as we expect that in federal countries, more regionalised voting patterns emerge. Finally, the model contains the *effective threshold*, to control if certain electoral systems increase the electorate's regionalisation, and country dummies.

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<sup>104</sup> This method is proposed by Zellner and Theil (1962).

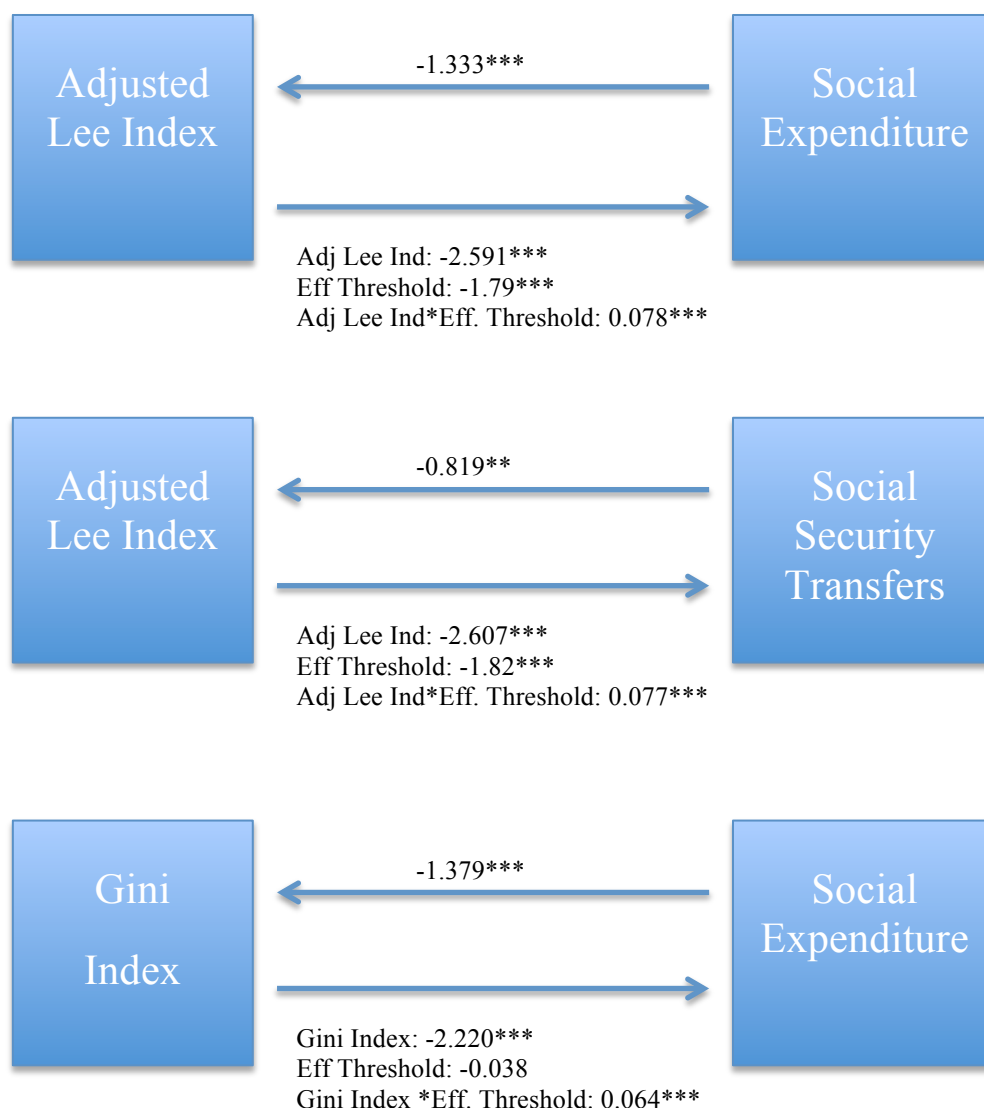
<sup>105</sup> I use the same fixed-effects specification of the models above (Tables 5.2 to 5.5), with similar control variables.

<sup>106</sup> The results are robust to the inclusion of more lags.

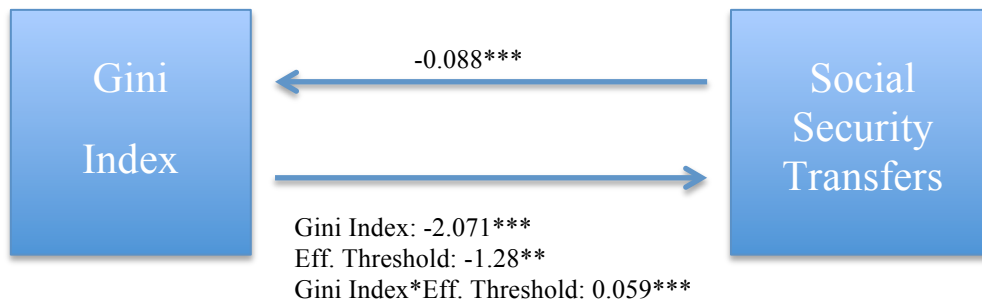
<sup>107</sup> This variable is taken from Armingeon et al. (2009) and it is operationalized as 0 (not federal); 1 (weak federalism); 2 (strong federalism).

I replicate all the models of Tables 5.2 to 5.5, introducing the second equation into the system. The results are consistently robust and still confirm the hypothesis. The control variables perform as expected and the interactive effect of regionalisation and the electoral system holds. Figure 5.6 displays the coefficients for the relation between the two social spending variables and the two main regionalisation indexes<sup>108</sup>.

**Figure 5.6: Three Stage Least Square Regressions: Coefficients**



<sup>108</sup> The combinations with the other electoral system and regionalisation variables yield similar results.



The figure shows that the process is indeed coevolving and mutually reinforced. Social spending has a negative effect on the regionalisation of the electorate. Those countries that provide more social spending tend to produce more nationalised electorates. However, this does not invalidate the opposite causality. We can see that, systematically, the interaction between the effective threshold and the regionalisation variables have a positive impact on the amount of social spending provided by governments. Regionalised electorates generate incentives for universalistic spending in majoritarian countries.

## 5.8. Conclusions

In this chapter I have tested two arguments on why parties will give up distributing to their core constituency to deliver universalistic policies to more undefined recipients. This allows me to offer a new explanation on social policies that complements current theories on the size of a welfare state, and also the commonly attributed differences between electoral systems.

Two key results emerged. First, the effect of the electoral system on social spending is contingent on the regionalisation of the electorate. As Persson and Tabellini (2000,

2003) predicted, majoritarian electoral systems yield on average fewer universalistic national programmes. However, this prediction changes if parties have their voters concentrated in a few districts. Under these conditions, parties develop incentives to provide more encompassing policies that distribute to a broader electorate. This strategy allows parties to compete in many districts, while still providing policies that impact on their core voters.

The second result reveals the effect of electoral fractionalisation on the welfare state. Although a proportional electoral rule might provide more incentives to supply social policies, when many parties compete, they have stronger incentives to pursue narrow distributive strategies centred on their core constituency. Conversely, as fewer parties compete, they have to build broader electoral support coalitions by delivering social policies that do not exclusively target an electoral group.

These results showed that differences in the electoral competition context, keeping the electoral system constant, are relevant in explaining distributive strategies. The distribution of voters across districts, and the number of effective parties can explain, depending on the estimation, variations of around 4% of GDP in social expenditure. This is an important explanation adding to previous ones on why some countries provide more welfare policies than others.

These arguments have been tested using three measures of the electorate's regionalisation, and several measures of the electoral system, electoral fractionalisation, and dependent variables. Therefore, the results provided in this chapter are robust.

# CHAPTER 6: CONTRIBUTIONS AND PATHS FOR FUTURE RESEARCH

## 6.1. Summary of the Findings

This thesis has three main findings. In first place, I have shown that parties' distributive policies are best targeted towards core voters. Two points need to be borne in mind. Contrary to the common assumption in the theoretical literature, core voters are more *responsive* to economic benefits than the remainder of the electorate. This result arises when we take the effects of benefits on turnout into account. As Dunning and Stokes (2008) argue, parties face a persuasion vs. turnout dilemma when deciding how to use distributive policies. On the one hand, parties can target distributive benefits to swing voters. These benefits will mainly increase the probability that they choose their party. On the other hand, they can target distributive policies to core voters. These policies have a weaker impact on their vote decision, but will increase the likelihood that these voters turn out. The results in chapter 3 showed that the effect of distributive policies on core voter mobilisation is higher than the swing voters' persuasion. Thus, the total electoral response is stronger for core voters.

Targetability is the other distributive condition favourable to core voters. When analysing which voters are more attractive to politicians, the theoretical literature assumes that parties can perfectly target voters and choose who receives a policy.

However, in reality parties cannot directly transfer benefits to the voters they are interested in. They have to formulate specific programmatic conditions that implicitly define a set of recipients. This dissertation has shown that it is less feasible to do this with swing voters than with core supporters. Swing voters neither have cohesive preferences, nor present distinguishable traits as a group, nor salient patterns of geographic distribution. Swing voters form a heterogeneous group composed of voters who have much more diverse interests than core voters. Thus, even if we believe that under particular circumstances parties could have an interest in swing voters, they might not find the adequate policies to favour the swing group in its entirety. Parties are able to find more efficient means to target core voters.

The second finding of the dissertation is that, in coherence with these better distributive conditions, parties target more distributive policies to core voters. Analysing grants and direct payments in the American context, I show that swing districts receive on average more targeted benefits than other districts. However, I have argued that this is not evidence that parties target swing voters. In fact, I show that Members of the House of Representatives discriminate among voters in their district and target more pork barrel to their core support areas. This implies that specific institutional conditions, like the electoral system, might provide incentives to spend on certain districts. But parties, once these institutional constraints are accounted for, will still try to distribute to the most productive voters: their core supporters.

The third main finding refers to the conditions under which parties will not concentrate all their efforts on their core constituency and deliver relatively more universalistic policies to an undefined set of recipients. Recent literature has highlighted the role of the electoral system in providing incentives for universalistic policies. The results of this dissertation qualify this argument. First, they show that the effect of the electoral

system on universalistic spending is contingent upon the regionalisation of the electorate. As Persson and Tabellini (2000, 2003) predicted, parties in majoritarian electoral systems provide on average fewer universalistic policies. However, this difference is mediated by the distribution of core voters across districts. When parties have their voters concentrated in some districts, they find it more difficult to win the election simply by relying on their constituency. Therefore, parties have incentives to provide more encompassing policies. This strategy exploits the transversal interests of the whole electorate and provides the best combination between broadening electoral support, and continuing to cover the core electorate.

There is a second electoral competition condition that nuances the effect of the electoral system: the number of competing parties. When competition is fractionalised, parties have stronger incentives to pursue narrow distributive strategies centred on their core constituency. As competition is based on fewer parties, they have greater incentives to build broader electoral support coalitions by providing social policies.

All these results imply two things. First, parties have a strong interest in providing distributive policies to their core supporters. This electoral group will be at the centre of their distributive strategies. Second, parties assess to which extent this strategy is powerful enough to make them win office. In some electoral contexts they might have incentives to combine this strategy with social policy programmes that supply more diffused benefits to a broader electorate.

## **6.2. Contributions**

This dissertation makes several contributions in various areas of research. The main one is to provide a new framework to study distributive politics. This new framework makes

innovations both on the characterisation of parties' strategies and the swing and core electoral groups.

Regarding parties' strategies, this dissertation emphasises the role of efficiency as the main motivation that drives parties' distributive decisions. Efficiency of distribution is defined as the number of returned votes per unit of spending. Two conditions explain why distribution to some voters is more efficient than others: *responsiveness* and *targetability*. The theoretical literature tends to use a restrictive concept of the former. Many of the models on distributive politics only analyse the persuasion effects of distributive benefits, and ignore their capacity of mobilisation. However, I have shown that we cannot fully comprehend the electoral reaction of voters if we do not give sufficient importance to the turnout decision, which is particularly important for core voters.

In addition, the literature tends not to pay attention to targetability, ignoring the limitations that parties face with regards to distribution. The simplifying assumption in many formal models on distribution is that in advanced industrialised democracies parties provide distributive policies in a similar fashion to clientelistic settings, where parties can directly and individually deliver goods to the voters they are interested in. This is a strong assumption that is relaxed in this dissertation. Instead of portraying distribution as a simple decision of whom to benefit, I have described distribution as an adverse selection problem. Building on Dixit and Londregan's model (1996), I have argued that as incumbents cannot distribute directly to individuals, some policy resources are always wasted on voters they are not interested in. Incumbents face the challenge of finding policies that maximise the number of recipients they intend to target. This has strong implications for the way we understand the distributive strategies of parties. They will not always distribute to whom they want, but also to whom they

can. This explains why swing voters have been overemphasised in the literature. Political economy models tend to characterise swing voters as a cohesive group that parties can decide to target. In reality swing voters are a residual category comprised of very different voters, who are not easily targetable with distributive policies

In dealing with efficiency, this dissertation incorporates ‘far-sightedness’ into parties’ distributive scope. This contribution enriches conventional distributive politics models, which normally provide a short-term perspective. Within the framework presented here, parties’ distributive decisions are not simply devoted to winning the coming election. They are also oriented to build and grease a coalition that ensures electoral continuity. As I illustrated above, Díaz-Cayeros et al. (2008) argue that if parties do not target core voters, they “*will be condemned to unstable electoral coalitions that need to be constructed every time elections are held, confronting high risks of opportunism.*” Thus, parties are willing to invest in an electoral platform that provides future benefits, even at the cost of giving up some potential new voters in the present.

This argument can be developed from a game theory perspective. Distribution to core constituencies can be described as a repeated game equilibrium with incomplete information (Fudenberg and Maskin, 1986). Incumbents know that in the short-term there is the possibility to use distributive policies to buy off new voters. However, this is, in the first place, a risky strategy, as core voters provide better and more reliable short-term conditions for distribution. Furthermore, parties play a dynamic game that does not end in the next election, and they have an interest in maximising the options of winning the elections in the future in the most favourable conditions (Falcó-Gimeno and Jurado, 2011). These voters augment their importance, as they are the best guarantee of being electorally successful in the future. In addition, there is some level of uncertainty with regards to the use that parties can make of distributive policies in the years ahead.

If the party loses incumbency, distributive policies will not be an available instrument to persuade and mobilise voters. Therefore, they have incentives to take into account the long-term implications of their current distributive strategies. This inter-temporal argument is absent in the literature and can contribute to a better understanding of parties' strategies.

The second area of contribution is in the field of voters' behaviour. Distributive policies cannot be fully understood without bringing voters into the picture. By analysing the electoral behaviour and characteristics of voters, this dissertation contributes to the understanding of the micro-foundations of parties' distributive policies. Apart from stressing the importance of the turnout decision, I have highlighted the relevance of party identification in the electoral response to economic benefits. The literature has normally contended that partisanship drives electoral behaviour, and offsets any reaction to benefits. However, I have argued that the influence of partisanship does not imply an unconditional vote, but, instead, a stronger electoral reaction to economic stimuli, such as distributive benefits. Partisanship has the effect of exacerbating the reaction to the positive performance of the incumbent. This short-term effect of the long-term determinants of vote is normally ignored or misunderstood in the distributive politics literature.

By bringing both voters and parties into this framework, this dissertation makes an important contribution to the recurrent core/swing debate, both theoretically and empirically. At the theoretical level, I claim that the dominant strategy of parties is core voter distribution. This challenges an extended literature, which considers that from an electoral point of view, distribution to core voters is a waste of resources. Instead of resorting to explanations based on other party goals, this dissertation reconciles office seeking behaviour and core voter distributive strategies. Distributing to core voters pays

off, as it is the most efficient strategy to win elections. The implication of this finding is also important in understanding how and whom parties represent. Cox (2010) notes that if parties focus exclusively on persuasion, and hence target swing voters in the electorate, it is hard to see how they could be reliable agents of their core voters. The results provided here, however, conceal the two goals of maximising office and serving the interests of core voters.

At the empirical level, the dissertation sheds light on why the literature testing the core/swing hypothesis has been so inconclusive in its results. I have argued that this is partially due to a misspecification of the object of study. Most studies have drawn conclusions regarding voter distribution by analysing district distribution. However, I have argued that both concepts should not be conflated, as they might be explained by different variables. The electoral system might be relevant in indicating in which districts a party should spend; but not on which voters. A swing district is not equivalent to swing voters. Swing districts can potentially be composed of core voters of each party, and no swing voters. Therefore, the electoral system can foster distribution to certain districts; that is, it gives incentives on '*where* to spend', which is not equivalent to '*on whom* a politician should spend'. As long as she can discriminate among voters, she will seek to spend on those who are most profitable. By separating out the effects of the electoral system, this dissertation contributes to the understanding of the distributive dilemma between core and swing voters.

A final contribution, beyond the field of distributive politics, is to the Welfare State literature. This literature has established a strong link between the spending policies in place and the degree of proportionality of the system. Conversely, I have argued that the electoral system cannot offset the role of other relevant variables such as the distribution of voters across districts or the effect of the number of competing parties. The use of

distributive and social policies will be conditioned by the context in which politicians develop their strategies. This argument contributes to a literature dominated by an institutional. Much of the literature on the Welfare State conceives policy dynamics as a necessary result of structural conditions, such as the institutional setting. In this dissertation, however, it has been shown that policy trends are also strongly determined by more short-term electoral factors, such as the distribution of voters across districts or the number of competing parties. This dissertation contributes to the general debate on the future of the Welfare State by highlighting the importance of parties and electoral competition in explaining these trends.

### **6.3. Paths for Future Research**

This dissertation also opens several paths for future research. One key path will be to explore more accurately, and with individual data, the type of voters targeted by parties. The main empirical chapter of this thesis analysed within-district distributive policies and accounted for which counties within a district receive more targeted benefits. The reality is that, by analysing counties, we are still not able to directly account for which specific individuals benefit from a policy. The analysis provided in chapter 4 advances previous empirical research by getting very close to voters. However, it is not direct evidence of whether core voters receive more distributive policies. More research accounting for *who gets what* with disaggregate measures that go beyond the county level will be necessary. This will contribute to a better understanding of the motivations for core voter distribution. For instance, I have shown that distributive benefits are targeted to narrow core support areas. But the question arises: Do all core voters receive more distributive policies than other voters? Or is it only well organised core voters with the capacity of collective action that are able to pressure the incumbent and,

therefore, extract more expenditure from her? Further analyses that are able to trace a distributive policy down to the recipient will be useful in responding to these questions.

Another relevant path for future research is to explore the conditions under which swing voters can become more attractive for incumbents. The theory in chapter 2 does not predict that core voter distribution is an inevitable outcome. The dissertation has argued that, apart from the potential mobilising effect of distributive strategies towards core supporters, these voters also receive more because they are a much more targetable group. Given the heterogeneity of swing voters, the size of transfers lost on the way to them will tend to be bigger. However, this might not always be the case. It might happen that, under specific circumstances, a meaningful group of swing voters shares some traits that make them particularly targetable. If the theory put forward in this dissertation is right, parties should in this case have greater incentives to distribute to them. Swing voter distribution would become, from an electoral point of view, more cost-effective. Therefore, it would be very useful, in order to test the strength of the theoretical claims made here, to explore whether in scenarios in which swing voters form a more homogeneous group, swing voters gain relevance.

In a similar vein, chapter 3 revealed that, in principle, there is room for mobilisation strategies towards swing voters. The descriptive evidence at the beginning of the chapter showed that these voters demobilise in similar rates to core voters. However, the empirical analyses indicated that economic policies and benefits were not useful in achieving this. The likelihood of turnout of a swing voter was not significantly affected by benefitting her. Thus, it will be interesting to explore which policies or strategies have a positive effect on swing voters' turnout. It could be that swing voters' behaviour is more affected by, for instance, general economic assessments. This could imply that parties could try to appeal differently to swing and core voters. While distributive

benefits, as this dissertation has shown, is useful to win the vote of the latter, parties could combine these distributive strategies with others oriented to mobilise swing voters.

Further research that analyses different types of distributive policies will also be necessary. As I mentioned in chapter 1, distributive policies cover a wide range of political instruments that parties can shape to target voters. These policies can take the form of government subsidies, grants, tariff policies, intergovernmental grants, means-tested programmes, investments, earmarks, wage increases, public works, infrastructure construction, military spending, or public employment, among others. In this dissertation I have used the generic label of distributive policies and have operationalized them in several ways throughout the various analyses. However, it might also be that not all distributive policies are the same, and that some variables explain the choice of certain policies and not others. This intuition is reinforced by the results presented at the end of chapter 4. Although both the Democratic and Republican Party used grants and direct payments as distributive benefits targeted to core voters, the Democratic Party made more intense use of cash transfers, while the Republicans relied more on grants. This showed that there might also be partisan explanations of the distributive choices made by governments. I have argued that this might be related to the targetability conditions of voters. If parties predominantly use distributive policies as a core voter distribution instrument, it makes sense to expect that they will adapt to the specific characteristics of the core constituency. However, the standard models on distributive politics ignore the partisan side of distributive choices. More research disentangling the role that parties and their constituencies play in this looks very promising.

Another path for future research is related with the relation between targeted distributive policies and universalistic spending. This dissertation has tried to incorporate both policies into an integrated framework. The former are policies directed to a specific set of voters, while the latter exploit transversal interests that potentially apply to a broad electorate. However, it will be interesting to explore other tactical uses of social policies that resemble more distributive policies.

On the one hand, the concept of pork barrel has been persistently restricted to locality-by-locality and perfectly targetable allocations of resources. Even in recent papers that take into account geographic factors, pork barrel and distributive transfers always imply some level of earmarked distribution. Hence, by requiring an explicit geographic target to consider a policy as pork barrel, other kinds of policies have been excluded. On the other hand, the literature on social policies has tended to consider them as national policies, because they do not discriminate geographically, and access to them is through entitlement. Even acknowledging, as I have argued, that social policies apply to the whole electorate, they can have strong geographic impacts. Policies such as unemployment subsidies or pensions are presented as national policies, but the recipients (the unemployed or old people) in many cases display strong regional clusters -see, for instance, Overman and Puga (2002)<sup>109</sup> or Ezcurra and Rapun (2006)-. Thus, national policies, which in theory are not regionally targeted, have *de facto* a diverse and asymmetric impact throughout the country if their recipients are geographically concentrated. In these cases, social policies imply a regional trade-off, and it is

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<sup>109</sup> Overman and Puga (2002), using the European NUTS2 as a measure of region, show that regions that had a low unemployment rate relative to the European average in 1986 tended to maintain or reduce their unemployment rate over the next decade. However, regions that had a high unemployment rate relative to the European average in 1986 still tended to have a relatively high unemployment rate in 1996. Using Esteban et al's (2007) measure of polarisation, the polarisation of unemployment in Europe has also increased (by 37%, from 0.096 to 0.131) in this decade.

reasonable to expect that rational politicians take into account the geographic distribution of recipients to formulate their policies. Governments, in their distributive decisions can decide to pork barrel to certain regions through policies that are apparently neutral with respect to the geographic conditions of the country, but that actually are not. This research could open up a promising path to better understand the differences in social policy provision between countries with similar levels of recipients.

Finally, a suggestive and path breaking result of this dissertation that could be studied in future research refers to the role of voters' geographic distribution in shaping parties' strategies. This dissertation has argued (and found positive evidence to support the claim) that the differences between majoritarian and proportional electoral systems in terms of social policy provision are conditional on electoral geography. Majoritarian electoral systems only supply fewer social policies and universalistic programmes when parties' electorates are well represented in a majority of districts. If, on the other hand, parties' electorates are geographically concentrated, parties will have incentives to provide universalistic policies. This is an interesting result in itself that has apparently not been highlighted in any other research article. Further work will be necessary in order to understand the relation between distributive dynamics and the distribution of the electorate across districts.

Additionally, chapter 5 provided a result that was not predicted in the theoretical framework. The regionalisation of the electorate does not only explain why in majoritarian electoral systems parties have an interest in providing more universalistic programmes, but it also has an independent effect in proportional electoral systems. Under this institutional setting, with few districts and a high average magnitude, parties should in principle not be concerned about the distribution of the electorate across the

territory. However, I found a significant and strong negative effect of the electorate's regionalisation on the provision of social policies in these countries. This result brings Caramani's (2004) theoretical framework to the study of distributive policies, and deserves further exploration. It indicates that in regionalised proportional contexts, parties formulate distributive policies with strong territorial biases. As Baldi (1999) states, "*a high regionalisation of national parties and/or the presence of regionally unique parties increase the possibility of territorially divergent majorities, and provide a political channel for the representation of territorial interests within the national Parliament.*" In a similar vein, Caramani argues that through the nationalisation of the electorate, highly localised and territorialised politics are replaced with national electoral alignments. Programmes and policies become national and reduce the scope of local problems in national politics. Thus, as the electorate nationalises the most relevant issues are transferred from the local to the national level, thereby promoting national level constituencies.

Hence, this dissertation suggests that in proportional systems the use of distributive policies carries the imprint of the nationalisation/regionalisation of the electorate. When parties have core supporters in all parts of the country, and they do not have to care about their distribution across districts, they will have a stronger interest in providing comprehensive and national policy programmes. On the other hand, when they have regionalised electorates, it is much more likely that political conflict will occur over issues that separate interests across geographic boundaries. Parties will perceive that their electoral chances diverge strongly between parts of the country and that their supporters will be concentrated in certain regions. They will, as a consequence, intensify the provision of narrow local transfers, in contrast with a national scenario.

This argument connects with Bueno de Mesquita et al.'s (2003) claim that there is a link between the breadth of a party's constituency and the policy incentives. Parties that mobilise their electorate around well-defined narrow constituencies are more prone to consistently provide narrow distributive policies. Beramendi (2007) also shows that countries with high interregional inequality, are more prone to decentralise redistributive powers. Following this logic, it will be interesting to further explore how governments in proportional representation countries respond to geographic patterns of the electorate not only by decentralising redistribution, but also by providing themselves more or regionalised distributive policies. This approach opens up a new area of research that will expand and complement some of the findings provided in this dissertation.

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