
The Policy Effects of Electoral Competitiveness in Closed-List PR

Government-funded subsidies vary between countries. However, they also vary within countries. Governments in a given country often spend more on subsidies for some economic sectors than others. Within a country, the variation in subsidies between sectors can be partly explained by economic geography. Employees in some sectors are more geographically concentrated than others and the geographic distribution of a sector's employees, together with a country's electoral system, influences government spending on subsidies for the sector. Governments in closed-list PR systems spend more on geographically diffuse sectors than on concentrated sectors, as illustrated in Chapter 6. In this way, economic geography helps to explain the variation in government-funded subsidies between sectors within countries.

While the generosity of government subsidies varies between sectors within countries, it also varies between regions. Governments frequently spend more on subsidies to some regions than others. In Norway, for example, the government spent fifteen times more money on subsidies to producers in the northern region of Troms than the western region of Rogaland. Similarly, the government of Belgium spent €2,600 per person on subsidies to one canton but spent absolutely nothing on subsidies for another canton.¹ Also, in France, the government funded subsidies for wine makers in the Cognac region worth €1,524 per hectare but declined to make these subsidies available to producers in other regions (see Chapter 5).

Subsidies vary between regions within countries even controlling for the geographic distribution of economic activity, as demonstrated by the amount spent on subsidies per employee. In 2012, for example, the Norwegian government spent 309 kroner per manufacturing sector

¹ In the year 2008.

employee in the southern region of Vestfold. The government spent eighteen times more per manufacturing sector employee that same year in the central region of Oppland where manufacturing subsidies equaled 5,523 krone per employee. As this example illustrates, subsidy spending can vary radically between different regions in a country, even after controlling for the geographic distribution of employees. This observation raises an important question: Why do governments spend more money on subsidies for some regions than others controlling for employment patterns?

I argue that some regions receive more generous subsidies than others because of governments' reelection incentives. Governments spend more money on subsidies for certain areas to maximize their reelection prospects. In order to consolidate the electoral advantage that helped them win office in the first place, parties in government provide more generous subsidies to some electoral districts, depending on the competitiveness of elections in those districts.²

Although the effects of district-level electoral competitiveness have been studied extensively in plurality countries, scant attention has been paid to the possibility that parties respond to variations in district-level electoral competitiveness in proportional systems.³ Conventional wisdom suggests that parties in PR systems have few incentives to target benefits to select districts because all votes are equally valuable.⁴ Every vote does, in fact, contribute to a party's electoral success in PR systems. And when a single national district is used to elect a country's legislators, all votes are equally valuable – regardless of their geographic location. But most PR systems have more than one electoral district and when parties compete in multiple districts, some votes will be more valuable than others. This fact

² Although electoral competitiveness influences the distribution of subsidies within a country, it is less useful for explaining the cross-national variation in subsidies. Competitiveness varies between districts within countries. Elections in some districts are more competitive than others, and as a result it is difficult to construct a theoretically relevant country-level measure of electoral competitiveness. Additionally, measures of competitiveness must capture how the concept varies across different electoral systems. For these reasons, district-level electoral competitiveness, while useful for explaining the variation in subsidies between districts within a country, is less useful for explaining the variation in subsidies between countries.

³ For example, McGillivray's empirical tests include only plurality countries, notably the US and Canada. Her tests do not extend to PR countries (McGillivray, 1997: 271, McGillivray, 2004: 81). McGillivray herself writes, "The hypotheses for proportional representation systems are not examined" (2004: 87).

⁴ However, individual legislators work to divert money to groups concentrated in their own districts in open-list PR systems in order to cultivate a personal vote (see Chapter 6 and Golden and Picci 2008).

raises the possibility that parties may target benefits to select districts for electoral gain – even in PR systems.

In this chapter, I investigate the distribution of subsidies between electoral districts in an archetypal PR country: Norway. Like many PR countries, Norway lacks the institutional attributes usually associated with policy targeting or pork-barrel politics. Norway has a political system believed to be highly resistant to particularistic policies (Tavits 2009) – namely a parliamentary system, with strong parties and party-centered elections. Given this, Norway presents a “least likely” case for geographic targeting. In fact, few scholars expect to see policy targeting in a political system like Norway’s (Shugart 1999, Denmark 2000, Crisp et al. 2004, Morgenstern and Swindle 2005). Most scholars focus instead on national level policies when studying the electoral strategies of incumbent governments in PR systems (Alesina, Roubini, and Cohen, 1997).

I examine the possibility that political parties in proportional systems use local goods, such as targeted subsidies, to win reelection. To do so, I use novel subsidy data to calculate government spending on manufacturing subsidies per manufacturing-sector employee in each of Norway’s nineteen electoral districts. I find that subsidy spending per employee is higher in districts where the largest government party won a greater share of the votes in the previous election, all else equal. This result suggests that parties competing in closed-list PR systems, like Norway, target economic benefits to “safe” districts.

Recall that in Chapter 6, I reported evidence that governments in Norway spend more money on geographically diffuse sectors than on concentrated sectors. How can governments spend more money on diffuse sectors and target subsidies selectively at the same time? The two strategies are not mutually exclusive. In closed-list PR systems, parties’ first-best strategy is to fund subsidies for sectors whose distribution of employees closely matches the geographic distribution of the party’s supporters. Parties that manage to become the largest party in government in PR systems will tend to have geographically diffuse support. Parties with supporters in only a few geographically concentrated locations are unlikely to become the largest government party in a multiparty proportional system. As a result, the distribution of employees in diffuse sectors is more likely to match the geographic distribution of the party’s supporters than concentrated sectors. The party’s first best strategy is to target sectors with geographically diffuse employment. If, however, a sector’s employees are imperfectly distributed relative to a party’s supporters, the party’s second best option is to target subsidies to safe districts. Diffuse sectors provide

parties with the widest range of possible options for geographic-targeting. A sector that employs people across the entire country allows parties to selectively target benefits to any district via more (or less) generous subsidies. Government parties in closed-list PR systems will therefore spend relatively more money on diffuse sectors, as compared to concentrated sectors, and subsidy spending per person will tend to be higher in “safe” districts, as I demonstrate using novel quantitative data on government-funded subsidies.

I supplement the quantitative results with qualitative evidence obtained from interviews with government ministers and bureaucrats responsible for subsidy programs in Norway. These interviews confirm the importance of electoral politics and economic geography for governments’ spending decisions. The interviews also illustrate the mechanisms that government parties use to target subsidies to politically important areas. Both the quantitative and qualitative evidence from this single-country case study confirm the importance of electoral incentives for economic policy making in democratic countries.

EXPLAINING WITHIN-COUNTRY VARIATION

Within a given country, producers in some electoral districts receive more generous economic support from the government than others. In Norway, for example, government spending on subsidies is greater in some electoral districts than others. The variation in subsidies between Norway’s electoral districts is illustrated in Figure 7.1, which reports average government spending on manufacturing subsidies per manufacturing sector employee from 2005 to 2012 for Norway’s 19 electoral districts. Figure 7.1 illustrates the key question motivating this chapter: why do subsidy amounts vary per person between electoral districts within a given country?

I hypothesize that the competitiveness of elections influences the generosity of government subsidies. The competitiveness of elections often varies between districts in democratic countries with multiple electoral districts.⁵ Some districts may be relatively “safe” for a given

⁵ Competitiveness is often defined by a legislator’s margin of victory (Fiorina 1973). In a single-member district, the margin of victory is easy to calculate; it simply equals the number of votes between the first and second place finishers. In multimember districts, calculating any individual legislator’s “margin of victory” is far more difficult. Other scholars define competitiveness for different units of analysis. For example, Kayser and Lindstädt (2015) define competitiveness as the expected probability that the plurality party in parliament loses its seat plurality in the next election (p. 243). See Strøm (1992) for a theoretical definition of competitiveness.

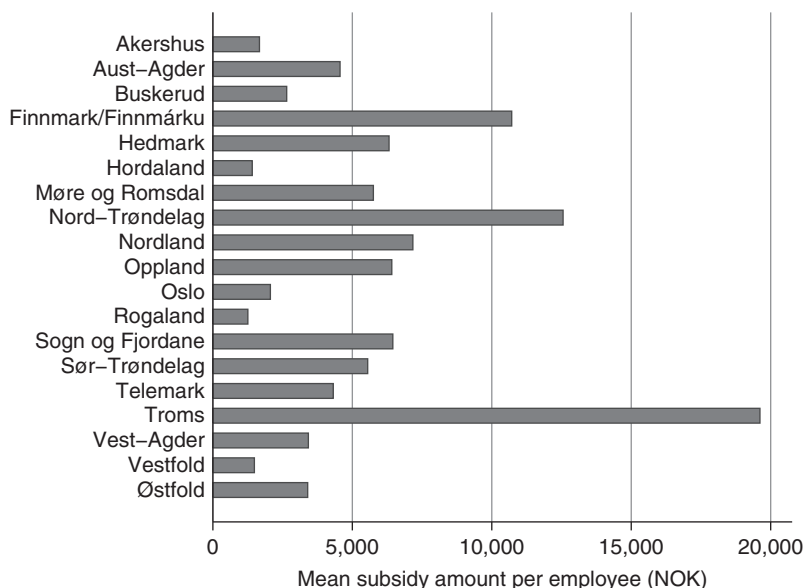


Figure 7.1 Average subsidy amount per manufacturing employee, 2005–2012

Source: Author's calculations from data provided by Innovation Norway. All amounts reported in Norwegian krone (NOK).

party – that is, a particular party may tend to win a large share of the district's votes. In contrast, other districts may be more competitive for a given party – that is, a party may run neck-and-neck with another party in a given district. Parties generally know how competitive they are in a given district. In PR systems, parties know this by simply observing the number of legislative seats they win in each district because the allocation of legislative seats is proportional to parties' district vote share. In some proportional systems, parties also have access to the protocols for the last election that describe the precise calculations for how votes are translated into seats and report parties' vote shares by district. This is the case in Norway, for example.⁶

Variation in district-level electoral competitiveness may influence the geographic distribution of subsidies within a country.⁷ A large body of scholarship argues that district-level competitiveness shapes the geographic distribution of economic rents. Such arguments have been developed almost exclusively in the context of plurality electoral systems

⁶ See www.stortinget.no/globalassets/pdf/innstilling/stortinget/2013-2014/inns-2013-14-001.pdf.

⁷ However, it is not clear what, if any, implication this observation may have for the cross-national variation in subsidy spending.

with single-member districts. A debate exists over precisely how district-level electoral competitiveness matters for policy targeting in plurality systems. One side of this debate posits that rents targeted to competitive districts bring about greater electoral rewards than rents targeted to “safe” districts.⁸ In competitive districts, politicians work to earn every available vote because each further vote is electorally valuable in a tight race. To this end, incumbents will seek to influence the geographic allocation of government assistance in competitive districts. Directing benefits to their own districts can increase their chances of winning office by securing additional votes. In contrast, politicians who command a large margin in “safe” districts feel less need to chase after each additional vote because additional votes do not increase their chances of winning office. Instead, they simply add to an already large margin. As a result, incumbents in safe districts have fewer incentives to work to secure economic benefits for their constituents. In France, for example, legislators who won by larger margins were less likely to lobby for subsidies for their wine-making constituents (see Chapter 5). Given this pattern, subsidies and other economic incentives may go disproportionality to competitive districts in plurality countries. But what role, if any, does competitiveness play in countries with proportional electoral rules?

Most countries around the world today use some form of proportional system, yet the effects of electoral competitiveness in PR systems remain largely unknown. Two factors account for the lack of attention to electoral competitiveness in PR systems. First, the difficulty of identifying “competitive” districts in multimember, multiparty PR systems makes empirical research on the topic challenging. Second, theoretical models typically assume – either explicitly or implicitly – that only one nationwide electoral district exists in PR systems (e.g. Persson and Tabellini 2003, McGillivray 2004). Grossman and Helpman (2005), for example, model a proportional system with a single nationwide legislative constituency. If there is only one, nationwide electoral district, then by definition no within country variation exists in electoral competitiveness. Yet, few real world PR systems have just one nationwide district. Most PR countries have multiple, geographically defined electoral districts that encompass subsegments of the country. In PR countries with multiple districts, most legislative seats are awarded to parties based on their share of a district’s votes – rather than their share of the national vote. The district-level allocation of seats raises the possibility that some districts are relatively more competitive for certain parties than others. District-level electoral

⁸ In contrast, Cox and McCubbins (1986) argue that parties reward loyal voters.

competitiveness may be an important, yet previously overlooked, feature of PR systems with multiple electoral districts. I examine this possibility by investigating the impact of district-level electoral competitiveness on particularistic economic policies in an archetypal PR country: Norway.

WHY NORWAY?

Norway provides a valuable case study for several reasons.⁹ First, Norway uses proportional electoral rules to elect members of parliament. To date, nearly all research on electoral competitiveness has been conducted in plurality countries, most notably the United States. As a result, little is known about how electoral competitiveness shapes politics or policy in PR countries. Norway provides a useful case with which to explore the effects of competitiveness in PR systems.

Second, Norway is a “least likely” case for particularistic economic policies because it lacks the institutional attributes usually associated with pork-barrel politics. Norway has a parliamentary system, with strong parties and party-centered elections (Tavits 2009). Few scholars expect policy targeting in this context (Shugart 1999, Denmark 2000, Crisp et al. 2004, Morgenstern and Swindle 2005).

Third, Norway has a long history with subsidies. State subsidies date back to at least the mid-19th century, when *Kongeriget Norges Hypotekbank* was established in 1852 as a mortgage bank to provide assistance to industry (Innovation Norway 2014b). The bank granted businesses cheap loans in exchange for mortgages on property. The objective was to modernize agriculture and develop new industries. State support for business continues today. In recent years, Norway spent more on subsidies as a percentage of GDP than any other country in the European Free Trade Association (EFTA).¹⁰

⁹ Alt et al. (1999) examine lobbying by firms for subsidies in Norway. However, they do not examine the distribution of subsidies between electoral districts. In fact, they focus exclusively on the demand side of the story. They measure, for example, the number of times a business organization meets with members of parliament. They point out that, “a complete model . . . should also include the(se) incentives of the government-Parliament to respond [to firm lobbying]” (p. 115). They concede that they “have not completely modelled the institutional supply side of policy” (p. 115). They state explicitly that they do “not know whether it helps a firm to be from a [particular] district” (p. 115). My research fills in the supply side of the story and investigates whether firms from more electorally competitive districts fare better or worse than firms from less competitive districts, all else equal.

¹⁰ Farmers and fishers have long been assisted by the Norwegian government. This tradition of state support is increasingly being extended to technology and environmental sectors (Innovation Norway 2014b).

Finally, Norway is one of the few countries where data on government subsidies are available at the level of disaggregation needed to assess the geographic distribution of subsidies between electoral districts. Most governments are unwilling to provide detailed information on the amount of subsidies they award and to whom (Buts et al. 2012). In contrast, the Norwegian government generously provided me access to detailed subsidy data, which include the subsidy amount as well as the sector and geographic location of the recipients. These data allow for a novel investigation of the geographic distribution of state subsidies within a given country.

ELECTIONS IN NORWAY

Although national electoral institutions are constant within a country at any given point of time, they set the stage for the dynamics that play out during election campaigns and shape both the electoral incentives of political parties and their optimal (re)election strategy. For these reasons, I briefly describe Norway's electoral institutions before exploring parties' incentives to target economic benefits.

Norway has multiple electoral districts. Norway's nineteen districts correspond with the administrative provinces (*fylker*) and include the municipal authority of Oslo, which is a *fylker* in its own right. District magnitude ranges from four seats in *Aust-Agder* and *Sogn og Fjordane* to nineteen seats in Oslo. The number of seats in each district is a function of the number of citizens in a district and its geographical size (Aardal 2011).

The Norwegian Parliament, known as the *Storting*, contains 169 members that are directly elected by universal adult suffrage for a fixed term of four years. Legislators are elected via a two-tier system. One hundred fifty seats are distributed at the provincial (i.e. district) level. In other words, most legislative seats are awarded to parties by district in proportion to their share of district votes. The remaining nineteen seats are distributed as "compensatory seats" based on parties' share of the national vote. There is no formal threshold in each district, but in order to be eligible for a compensatory seat a party needs to win at least four percent of the nationwide vote.

Compensatory seats are intended to achieve a greater degree of proportionality in the overall distribution of legislative seats (Sørensen 2003). If a political party fared worse in the provincial distribution of seats than it would if the entire country had been organized as one electoral district, and as long as it had more than four percent of the national vote, it is eligible for a compensatory seat (Aardal 2011). Both provincial seats and compensatory seats are apportioned using the



Figure 7.2 Electoral disproportionality over time in Norway
Source: Gallagher's Index (1991).

modified Sainte-Laguë method.¹¹ The Sainte-Laguë method reduces the bonus for large parties and therefore produces more proportional outcomes than other electoral formulas, such as d'Hondt (Aardal, 2011: 6).

Despite the introduction of the Sainte Laguë method in 1952 and compensatory seats in 1989, parties' national vote shares do not correspond perfectly with seat shares. In other words, some disproportionality exists in the Norwegian electoral system, as illustrated in Figure 7.2, which reports Gallagher's disproportionality index for each of Norway's legislative elections since World War II. Gallagher's index measures the difference between the percentage of *national* votes received by a party, and the percentage of seats a party receives in the resulting legislature. Deviations from proportionality decreased significantly after World War II, and particularly since 1989 when compensatory seats were introduced (Sørensen 2003, Aardal 2011).

Disproportionality emerges because most of Norway's legislative seats are awarded to parties by district in proportion to their share of district

¹¹ In November 1952, the electoral system was changed from the d'Hondt to the Sainte Laguë method for calculating the distribution of seats. In the subsequent 1953 election, the Labor Party lost six seats as a consequence of the shift from d'Hondt to Sainte Laguë (Aardal 2011).

votes (Matthews and Valen 1999, Sørensen 2003, Aardal 2011).¹² In other words, disproportionality is a result of having multiple sub-national districts in a PR systems. In 2009, for example, the Labour Party would have won sixty seats if the country was organized as one, nationwide electoral district (Aardal 2011). But based on the district-level distribution of seats, the party won sixty-four (Aardal 2011).¹³ While the Labour Party was better off thanks to Norway's multiple districts, some parties were made worse off. The Senior Citizen Party, for example, would have won a seat in the legislature if the entire country had been one electoral district in 2009. Yet, it received no provincial seats and was not eligible for a compensatory seat because it did not reach the national threshold of 4 percent. In sum, parties' national vote share does not correspond perfectly with their legislative seat share because most legislative seats are allocated according to parties' *district* vote shares rather than their national vote shares.

One other important characteristic of Norway's electoral system is the *de facto* closed party lists. In Norway, voters generally cast a ballot for a party list rather than individual candidates. The names on a party's list correspond with the candidates representing that particular party. These candidates are chosen by the nomination conventions of each party (Sørensen 2003). In theory, voters may modify the order of candidates on the list. Voters can change the rank order of the candidates on the party list and even cross out candidates if they so choose (Aardal, 2011: 8). However, the levels of coordination required to overturn the parties' rankings are so extreme that they deter most attempts to do so. At least half the voters have to make exactly the same alterations of the list for it to have any effect (Aardal, 2011: 8). For all practical purposes, Norway's system is effectively a closed-list system (Aardal, 2011: 8).

INCENTIVES TO TARGET

Given Norway's electoral institutions, what incentives, if any, do parties have to geographically target subsidies? Conventional wisdom suggests there will be little geographic targeting of economic benefits in a country like Norway. However, this widely held belief emerges from models of proportional representation that ignore geography (e.g. Grossman and Helpman 2005). In reality, the district-level allocation of seats that occurs

¹² And because some of Norway's districts have a relatively small number of seats (Aardal 2011, Carey and Hix 2011).

¹³ Although the Labour Party kept all these seats, it was not eligible for any of the compensatory seats.

in most PR countries influences parties' election strategies and subsequently their policy priorities. Parties competing in proportional systems with multiple districts must be mindful not only of their national appeal but also of their support in each district. Focusing exclusively on maximizing the party's national vote share could cost the party a "provisional seat" (i.e. a seat allocated at the district level). This is particularly likely if the party's supporters are unevenly spread across the country's electoral districts. At the same time, however, ignoring a party's national vote share may make a party ineligible for a compensatory seat. A Norwegian political party made precisely this mistake in the 1989 election. The party, People's Action Future for Finnmark (*Folkeaksjonen Framtid for Finnmark*), focused exclusively on improving economic conditions in Finnmark, a district whose local economy had been badly hurt by poor fishing output, via state aid. The party won 21.5 percent of the vote in Finnmark and consequently received a "provincial" seat in parliament. However, the party was not eligible for a compensatory seat because it failed to clear the national threshold of 4 percent. The party won just 0.3 percent of the national vote in the 1989 election, which is unsurprising given the party's exclusive focus on regional issues.

In PR systems with multiple electoral districts, like Norway, the best electoral strategy is to win those votes that maximize the party's legislative seats. To achieve this goal, parties may seek to target benefits to select districts. Targeting will be especially useful for winning legislative seats if a party's supporters are unevenly distributed across electoral districts. If partisans are concentrated in some districts but not others, parties in PR systems will do well by targeting benefits to districts in which there are a large number of party supporters (Cox and McCubbins 1986, Levitt and Snyder 1997, Balla et al. 2002, Costa-i-Font, Rodriguez-Oreggia, and Lunapla 2003, Calvo and Murillo 2004, McGillivray 2004, Golden and Picci 2008). Cultivating areas of core support, where it is less expensive to attract the marginal supporter, is an efficient way to win additional legislative seats when seats are allocated to parties by districts in proportion to parties' district vote share.

Targeting assistance to party strongholds also helps to keep party supporters loyal. If a party withdrew aid from a party stronghold, it may lose voters to other parties and new parties might emerge to represent the disaffected voters (Golden and Picci 2008). The Labour Party's failure to provide sufficient economic support to the Norwegian district of Finnmark resulted in the emergence of a new party, the aforementioned People's Action Future for Finnmark (*Folkeaksjonen Framtid for Finnmark*). This new party emerged to demand increased

government assistance to improve the economic conditions in Finnmark where unemployment had increased sharply due to shrinking fish resources in the district's coastal waters.¹⁴ Although full employment was one of the fundamental goals of the Norwegian Labour Party since the 1930s (Aardal, 1990: 153), the party did not provide economic assistance to the region at levels believed to be sufficient by many voters. Labour's inability to target sufficient economic assistance to Finnmark was likely due to the coalition dynamics at the time. Labour failed to receive a majority mandate from voters in the 1985 election and governed as a minority government with the support of the right-wing Progressive Party. As a result, this period was one of the "most turbulent in the *Storting* since World War II" (Aardal, 1990: 152). Although Finnmark was traditionally a Labour stronghold, many voters felt that the Labour Party had not done enough to help the region. As a result, the new political party won one of the district's seats previously held by Labour in the 1989 election. Strikingly, it was the first post-war election in which Labour won fewer than two seats in Finnmark (Svåsand, Strøm, and Rasch, 1997: 96).

As the Finnmark example makes clear, targeting benefits to safe districts can help parties hold core voters and prevent the emergence of new parties (Golden and Picci 2008). In contrast, targeting assistance to districts with stiffer electoral competition entails greater risk and potentially fewer rewards, particularly in PR systems where multiple parties compete in multimember districts. In such systems, it is difficult to know precisely where the marginal seats are located (Sørensen, 2003: 171). Because political parties tend to be risk adverse, they focus their efforts on "safer" electoral strategies, such as targeting economic benefits to party strongholds (Cox and McCubbins 1986).

Parties can identify their core areas of support – even in multiparty PR systems with multiple districts. Their core areas of support are simply those districts where they win the largest share of the district's seats. The Conservative Party (*Høyre*), for example, won seven of Akershus' seventeen seats in the 2013 election. They did so by winning slightly more than 40 percent of the district's votes. Seeing this result, the Conservative Party knew that Akershus was a party stronghold. Targeting benefits to "safe" districts like Akershus entails fewer risks for the Conservative Party than trying to identify marginal seats in other districts. Because parties

¹⁴ The party was formed by a man named Anders Aune who was the district's top public servant (*Fylkesmann*). For this reason, the party is sometimes referred to as the Aune list. It is also known as People's Action Future for Finnmark (*Folkeaksjonen Framtid for Finnmark*)

tend to be risk adverse, those competing in multidistrict PR systems will work to target benefits to “safer” districts (i.e. party strongholds) (Cox and McCubbins 1986), all else equal.

In closed-list systems, like Norway, parties can successfully target benefits to safe districts because they have firm control over individual party members. In open-list systems, targeting is more difficult because parties are less able to discipline their own members of parliament. Undisciplined legislators seek to target benefits to their core constituents who are typically localized in bailiwicks (Ames 1995). In Italy, for example, where open lists were used from 1953 to 1994, governing parties could not discipline their own members of parliament sufficiently to target the parties’ areas of core electoral strength (Golden and Picci 2008). Instead, powerful individual legislators were able to secure resources for their constituents at the expense of the governing parties (Golden and Picci 2008). In contrast, closed-party lists engender sufficient discipline to allow parties to adeptly target benefits to their electoral strongholds.¹⁵ Given this, I hypothesize that subsidies will flow disproportionality to safe districts in closed-list PR systems, like Norway. More precisely, I anticipate that subsidies will flow disproportionality to districts where the largest government party won by a greater margin over the next closest party in the previous election. I focus on the largest government party because it is best placed to target aid to its supporters in a multiparty coalition, particularly when it holds the relevant ministry.

POLICY TARGETING IN PRACTICE

Government parties have the ability to target economic benefits, such as subsidies, to select districts. In Norway, for example, government parties can target subsidies in at least two ways. First, the national government decides how much money to spend on subsidies for each sector of the economy. If sector employment is unevenly distributed within a country, the largest government party can target select districts via sector-specific

¹⁵ Norwegian legislators are frequently lobbied by local interests and business organizations (Alt et al. 1999). Sixty-eight percent of legislators were contacted by business organizations on a weekly basis, and about the same amount had contacts with trade unions and professional groups (54 percent). Fifty-four percent of firms reported contacting a Member of Parliament at least once in the past year (Alt et al. 1999). Norwegian legislators report that lobbying activities have increased during recent years, and that lobbying increasingly influences spending decisions and government policy (Sørensen 2003).

subsidy budget allocations. Second, the government indirectly controls the allocation of subsidies to firms in a sector via the bureaucracy.

Sector Targeting

In Norway, the national government directly controls the funding of sector-specific subsidies. The government decides how much money to spend on subsidies for each sector of the economy. The amount of money allocated to a sector is renegotiated every year within the governments' budget process.¹⁶ "In practice, last year's allocations often work as a starting point when allocations for the coming year are to be negotiated."¹⁷

Both political and economic considerations shape the government's funding decisions. In deciding how much money to allocate to a sector, there is "room for political priorities, for example if something unexpected happens and an industry crisis occurs."¹⁸ Ultimately, the amount of money allocated to subsidies is determined by "political and strategic deliberations."¹⁹

Negotiations with sector-specific interest groups influence the government's funding decisions. For example, the main farmers' organizations (*Norges Bondelag* and *Norsk Bonde- og Småbrukarlag*) negotiate with the government every year over the agriculture-sector subsidy budget. Both the amount of money and the main guidelines for the expenditures are negotiated. In this way, interest groups enjoy a direct means of influence over governmental subsidy decisions.

Following negotiations with sector-specific interest groups, each ministry prepares its subsidy budget proposal. For example, the Ministry of Agriculture and Food prepares the budget for subsidies to the agriculture sector. The Ministry for Industry and Trade prepares the budget for subsidies to the manufacturing sector. The proposed budget is based on input from the various units of the ministry, including input from the underlying businesses and other relevant organizations, such as the aforementioned farmers' organizations and Innovation Norway, the main bureaucracy responsible for allocating subsidies. The individual

¹⁶ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

¹⁷ Bjørn Kåre Molvik, Deputy Director General of the subsidy section of the Ministry of Trade, Industry and Fisheries, email communication, August 17, 2015.

¹⁸ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

¹⁹ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

ministries' proposals are then put forward to the Ministry of Finance who prepares the final budget. The final subsidy budget is presented to Parliament by the Ministry of Finance for approval.

Although Parliament must approve the final budget, individual legislators and opposition parties have little direct influence over subsidies. Parliament "typically does not change the amount of money that has been agreed by the government and interest groups."²⁰ Instead, the government's allocation decisions are normally approved with no amendments or modifications. Given this, government parties enjoy relative autonomy over the allocation of money to economic sectors.

The government does not include money for specific firms or companies in the annual budget.²¹ Instead, decisions regarding firm-level subsidies are made by civil servants. In this way, bureaucrats are the last link in the parliamentary chain of delegation (Strøm 2000). The final link in the chain of delegation is tightly controlled; the government exerts rigorous oversight of these bureaucrats and their subsidy decisions, as described in the following section.

Firm Targeting

Formally, bureaucrats decide which firms to subsidize within a sector using the monies allocated to the sector by the government.²² In other words, bureaucrats have autonomy over firm-level subsidy allocation decisions. However, they are accountable to cabinet-level ministers (Rodrik 2004). Close monitoring (and coordination) of subsidy activities by a cabinet-level politician – that is, a "principal" who has internalized the optimal reelection strategy for her party – is necessary for subsidies to be an effective vote-winning policy tool.

Government ministers purposefully attempt to influence bureaucratic behavior (McCubbins, Noll, and Weingast 1987). To control bureaucratic decisions over subsidies, the government uses several mechanisms including budgets, letters of assignment, and biannual meetings. These mechanisms of control exist because of rational choices by politicians who care about the outcomes from bureaucratic behavior (Huber, Shipan, and Pfahler 2001). Bureaucratic behavior regarding subsidies is especially

²⁰ Siri Lothe, Senior advisor, Department of Agriculture, Ministry of Agriculture and Food, email communication on July 2, 2015.

²¹ In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes on June 23, 2014.

²² In practice, the distinction between sector subsidies and firm subsidies may be less clear if, for example, a single firm dominates a sector.

important to politicians because subsidies can help political parties win votes and subsequently seats (Buts et al. 2012).

In Norway, one of the principal bureaucracies charged with the allocation of subsidies is Innovation Norway (*Innovasjon Norge*).²³ Historically, Innovation Norway's mandate was limited to nonagriculture sectors but in recent years, it has become responsible for the agriculture sector as well.²⁴ Innovation Norway is, in theory, responsible for allocating subsidies to firms within a given sector. However, the government uses various mechanisms to indirectly control the allocation of firm-level subsidies, including, for example, the national budget.²⁵

Budgets have long been recognized as a mechanism by which ministers and legislators can influence civil servants (Niskanen 1971, Banks 1989, Dunleavy 1991, Huber 2000). In Norway, the government uses the national budget to control the allocation of subsidies by specifying the total amount of money available for subsidies to specific sectors of the economy, such as manufacturing. Upon approval of the budget by Parliament, the government says to Innovation Norway, "here is the total budget for manufacturing. This money can go only to firms in the manufacturing sector."²⁶ The government gives each sector a "budget code."²⁷ Innovation Norway then charges all sector-specific subsidy programs to the appropriate budget code.²⁸

Bureaucrats cannot spend more on subsidies for a given sector than is stipulated in the government's budget. Neither can bureaucrats reallocate funds from one sector to another. Bureaucrats may want to spend more money on manufacturing subsidies and less money on agriculture subsidies, for example.²⁹ The Norwegian agriculture sector is geographically diffuse

²³ The other bureaucracy charged with subsidy allocation is the Research Council of Norway.

²⁴ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014. See also Innovation Norway (2014b).

²⁵ Previous studies of bureaucracies have suggested several possible strategies for control, including the use of the budget processes (e.g. Bendor, Taylor, and Van Gaalen 1987, Banks 1989,) and ongoing oversight (e.g. Aberbach 1990). However, most research focuses on statutory control, whereby legislators use legislation to influence agency decision (e.g. Huber, Shipan, and Pfahler 2001).

²⁶ In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes on 23 June, 2014.

²⁷ In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes on 23 June, 2014.

²⁸ In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes on 23 June, 2014.

²⁹ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

and politically powerful³⁰ and as a result, it wins generous government subsidies in Norway's closed-list PR system. Although unelected bureaucrats may view lavish agriculture subsidies as being economically inefficient, they cannot unpick this political outcome. Bureaucrats are constrained by the governments budgeting procedures; they cannot reallocate funds from agricultural subsidies to manufacturing subsidies because the government allocates subsidy funding by sector.

Bureaucrats would prefer to receive money from the government with "no strings attached."³¹ A single subsidy budget without sector-specific allocations would give bureaucrats more autonomy to decide how to allocate subsidies.³² With an "untied budget" from the government, bureaucrats could allocate money to sectors as they see fit. Yet, the government chooses not to give bureaucrats this level of autonomy. Politicians "don't want to lose control of subsidies" because they are a useful electoral tool.³³ Instead of giving Innovation Norway a big pot of money with no strings attached,³⁴ the government instead says, "these moneys are for agriculture" and asks Innovation Norway to allocate the designed funds to agriculture producers.³⁵

Several mechanisms give the government indirect control over which producers receive subsidies within a given sector. High-level, semiannual meetings provide ministers with an opportunity to influence bureaucrats' decisions.³⁶ Twice a year, staff from Innovation Norway meet with Cabinet Ministers and their senior staff to discuss the allocation of subsidies. As the State Secretary to the Ministry for Local Government and Modernisation said, "the meetings provide a platform to discuss the annual reports, the finances and to develop a shared vision for the year to come."³⁷ These twice-yearly meetings provide the government with an opportunity to exert control over the bureaucracy and their decisions.

³⁰ See Chapter 6.

³¹ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

³² In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

³³ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

³⁴ In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes on June 23, 2014.

³⁵ In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes on June 23, 2014.

³⁶ Legislators are not involved in these processes. (Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015).

³⁷ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

Annual letters of assignment also provide the government with a mechanism of control over bureaucratic actions. Bureaucrats charged with dispersing subsidies receive annual letters of assignment from the relevant ministry. Innovation Norway, for example, receives yearly assignment letters from the Ministry of Trade, Industry and Fisheries, the Ministry of Local Government and Modernisation, the Ministry of Agriculture and Food, and the Ministry of Foreign Affairs. Based on the national budget, the letters of assignment set out spending limits that stipulate the amount available for new loans and subsidies for a given sector of the economy (Innovation Norway 2014b). The letters also stipulate strategic and operational guidelines related to subsidies.³⁸

The more detailed these letters are, the stronger the constraints they impose on bureaucratic behavior (Huber, 2000: 400, Huber and Shipan 2002). Detailed letters may include, for example, precise instructions regarding the allocation of subsidies to firms within a given sector. A detailed letter may also specify the government's explicit expectations and requirements of the bureaucrats' activities and decisions.³⁹ In contrast, a letter that stipulates only the annual budget for a sector leaves more room for bureaucratic discretion.

Government ministers appear to understand the constraints imposed by detailed letters of assignment.⁴⁰ The State Secretary to the Minister of Local Government and Modernisation identified "the number of details in these letters" as a key mechanism by which the Ministry sought to limit Innovation Norway's discretion in subsidy allocation decisions.⁴¹ Some ministries, including the Ministry of Trade, Industry and Fisheries, admit to using the letters of assignment to stipulate precisely what areas should be prioritized.⁴² In short, annual letters of assignment provide a means for ministerial control over civil servants.

Government parties seek to control the allocation of subsidies because subsidies win votes. Given that subsidies are a vote-winning policy tool, why would governments ever delegate subsidy decisions to unelected bureaucrats in the first place? Surely, governments would want to

³⁸ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

³⁹ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

⁴⁰ Similarly, legislation with a vague – as opposed to a specific policy mandate – allows bureaucrats relatively more autonomy (Epstein and O'Halloran 1994, Huber and Shipan 2000, Huber, Shipan, and Pfahler 2001).

⁴¹ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

⁴² Bjørn Kåre Molvik, Deputy Director General of the subsidy section of the Ministry of Trade, Industry and Fisheries, email communication, August 17, 2015.

control the allocation of subsidies themselves to maximize their electoral rewards? But by controlling the allocation of firm-level subsidies only indirectly, the government insulates themselves from rent seeking. For example, firms sometimes approach ministers directly to request a subsidy.⁴³ But ministers defer such requests to Innovation Norway.⁴⁴ In this way, the bureaucracy shields ministers from rent-seeking. This institutional design may be a purposeful effort to minimize rent-seeking (Rodrik 2004).⁴⁵ Indeed, ministers report that they appreciate being able to pass on subsidy requests to Innovation Norway.⁴⁶ Doing so gives them “political cover” if the government is unable or unwilling to satisfy the request. By delegating subsidy decisions to unelected bureaucrats, governments have the best of both worlds: they can exert control over the allocations of subsidies for electoral gain and at the same time they can “scapegoat” bureaucrats for unpopular decisions (Remmer 1986, Vreeland 2003). This type of delegation provides maximum electoral benefits.

EMPIRICAL TESTS

I argue that the distribution of subsidies over all electoral districts within a country will exhibit a political bias. More precisely, I hypothesize that subsidy spending per manufacturing sector employee will be relatively higher in districts where the largest government party won by a greater margin in the previous election. To test this proposition, I regress government spending on manufacturing-sector subsidies per employee in each of Norway’s electoral districts on a measure of electoral competitiveness.

Measuring Electoral Competitiveness

The most commonly employed measure of electoral competitiveness, whether at the district level (e.g. Mayhew 1974, Aidt, Golden, and Tiwari, 2011) or cross-nationally (e.g. Anderson and Beramendi 2012) is the difference in vote share between the top two parties.⁴⁷ This measure is often called the vote margin. Within-country vote margins calculated at

⁴³ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁴⁴ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁴⁵ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁴⁶ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁴⁷ See Strøm (1992) for a theoretical definition of competitiveness.

the district level are informative measures of electoral competitiveness, even in multiparty PR systems (Kayser and Lindstädt 2015).

In a multiparty government coalition, the largest party is best placed to strategically allocate subsidies for electoral gain, particularly when it controls the relevant ministry. Therefore, I calculate the largest government party's vote margin in Norway's nineteen electoral districts for two regularly scheduled, national legislative elections in 2005 and 2009. I calculate the difference between the largest government party's vote share and the next closest party in each electoral district.

In parliamentary systems like Norway, the cabinet rather than the legislature constitutes the government. The cabinet consists of a portfolio of departments or ministries, such as the Ministry of Finance. Because no party won an absolute majority of legislative seats in the 2005 election, the cabinet included three parties: the Labour Party (DNA), the Centre Party (*Senterpartiet*), and the Socialist Left Party (*Sosialistisk Venstreparti*). The 2005 cabinet was the first time the Socialist Left Party sat in government. This minimum winning cabinet was known as the "Red-Green coalition." The Labour Party, which held the largest share of parliamentary seats (36 percent) after the 2005 election, also held the largest share of cabinet seats. The Labour Party held ten cabinet seats; the Socialist Left Party had five cabinet seats and the Centre Party had four.⁴⁸

As the largest party in government, the Labour Party secured both the prime ministership and the Ministry of Trade and Industry, which oversees manufacturing-sector subsidies. In a multiparty coalition, each party is generally able to implement its own priorities in the areas under its ministries' jurisdiction (Laver and Shepsle 1994). By holding the Ministry for Trade and Industry, the Labour Party was uniquely well-placed to direct manufacturing subsidies to districts where they did especially well in the 2005 election.

The three-party Red-Green coalition won reelection in 2009. The Labour Party retained both the prime ministership and the Ministry of Trade and Industry. Effectively, the Red-Green government continued in office with little change after the 2009 election. Despite being the largest party in the Red-Green coalition in 2005 and 2009, Labour's vote margin varied between electoral districts. In 2005, for example, Labour's largest vote margin was in the district of Hedmark where it won 45.89 percent of the votes cast – 28.88 percentage points more than the next largest party. Given this convincing win, Hedmark can be characterized as a "safe"

⁴⁸ The opposition consisted of four parties: the Progress Party, the Conservative Party, the Christian Democratic Party, and the Liberal Party.

district for Labour. Labour did not fare equally well in all districts. In Vest-Agder, for example, Labour faced tough competition from the Progress party. In 2005, the Progress party won 23.95 percent of the vote in Vest-Agder while the Labour Party won 23.93 percent. In this highly competitive district, just 0.02 percentage points separated the two parties' vote share.

The variable, *Vote Margin*, equals the difference between the largest government party's vote share and the next closest party in the most recent previous election. For example, the variable *Vote Margin* equals -0.02 for the district Vest-Agder because Labour, the largest government party, was 0.02 percentage points behind the next closest party (Progress) in this district in the 2005 election.

THE EMPIRICAL MODEL

I regress government spending on manufacturing-sector subsidies per employee in each of Norway's nineteen electoral districts on *Vote Margin*. By calculating subsidies per employee, I effectively control for economic geography. Because of the uneven geographic distribution of economic activities, each electoral district contains different numbers of manufacturing employees. The geographic distribution of manufacturing-sector employees is what I refer to as "economic geography." Economic geography, together with electoral institutions, helps to explain the variation in subsidies between countries and within countries between sectors (see Chapter 6).

To control for economic geography, I calculate the amount of money spent on sector-specific subsidies per sector employee in each district. This measure accounts for the uneven distribution of manufacturing employees between electoral districts. It provides a measure of subsidy spending that is comparable between districts. In this way, I can isolate the potential effects of district-level electoral competitiveness.

I regress government spending on manufacturing-sector subsidies per employee in each of Norway's electoral districts on *Vote Margin*, holding several factors constant. First, I control for districts' unemployment rate because districts with relatively higher rates of unemployment may receive more generous subsidies from the government. Governments may seek to encourage employers to hire new workers using subsidies and districts with higher unemployment rates may therefore receive more government assistance. The district Rogaland, for example, received the lowest subsidy amount per employee – just 1,065 Norwegian krone (NOK) on average over the period from 2005 to 2012. The district's low unemployment rate may explain why it received so little government

assistance. I therefore include the unemployment rate as a control variable in all estimated models.⁴⁹

I also control for the population density of each district. The Norwegian government has a long history of working “to spread business across the country by subsidizing producers in rural areas.”⁵⁰ As the State Secretary to the Minister of Local Government and Modernisation said, “The main objective (of subsidies) is to achieve value creation and economic growth in all regions of Norway.”⁵¹ The government will, for example, fund a building in a rural area that costs more than it is worth because it is in an isolated area with no secondary market/capital value.⁵² Because of this strategy, rural districts with lower population density may receive relatively more subsidies, all else equal. Population density therefore serves as an important control variable.⁵³

Labour’s district-level vote margins do not correspond closely with population density. Among the more densely populated southern districts, Labour wins by varied amounts. For example, Labour won by large margins in some southern districts, such as Hedmark and Oppland, but obtained much smaller margins in others. Similarly, Labour’s vote margins vary among the less densely populated northern districts. Labour won by large margins in Finnmark but faced much stiffer competition in Troms – despite the fact that both districts are sparsely populated. In sum, the cross-district variation in support for the Labour Party does not correspond closely with population density or the country’s north-south divide.⁵⁴

⁴⁹ The unemployment variable equals the number of unemployed persons in a district as a percentage of the district’s population. Unemployment captures the economic performance of a district. Alternative measures of a district’s economic performance might include GDP, GDP per capita and/or poverty rates. Unfortunately, these data are unavailable for much of the sample period. For example, GDP by district is available only from 2011 and household poverty measures are only available from 2013. When both measures are available, GDP and unemployment are highly negatively correlated (-0.94). The correlation between GDP and subsidies is negative but modest (-0.4). Oslo is the richest county and yet it falls within the second quartile in terms of subsidies. In fact, Oslo receives nearly the same about of subsidies per person as the second poorest county: Aust-Agder.

⁵⁰ In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁵¹ Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, email communication, July 8, 2015.

⁵² In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁵³ This logic is similar to the logic underlying the measure of “relative” geographic concentration used in previous chapters, which captures the degree of a sector’s employment concentration relative to the geographic distribution of total employment.

⁵⁴ Similarly, in Sweden, district-level population density does not correlate with parties’ vote share (Rodden, unpublished manuscript). However, Figure 7.1 suggests

Voter turnout may also influence the distribution of subsidies. Government parties may target areas that provide the best return in terms of votes (Martin 2003). As a result, electoral districts with higher turnout may receive relatively more subsidies, all else equal. I therefore control for each districts' turnout rate in the previous national election.

The size of a district's legislative delegation may also be important in securing resources for the district (Ansolabehere, Gerber, and Snyder 2002). Therefore, I also control for district magnitude. In Norway, district magnitude ranges from 4 to 19. Since 2005, the number of legislators per district is a function of the district's area and population (Aardal 2011).

I estimate ordinary least-squares regressions with robust standard errors and year-fixed effects. The inclusion of year-fixed effects ensures that any national-level shocks, such as year-to-year fluctuations in oil prices or economic crises, are absorbed by the year-fixed effects. In 2009, for example, the government significantly increased the total subsidy budget as part of a nationwide economic crisis package.⁵⁵ Year-fixed effects control for omitted variables that vary over time but are constant across districts. Year fixed effects also ensure that the focus on is the cross-district variation in subsidies, which is precisely the variation in which I am interested. However, including year-fixed effects sets up a conservative test of the hypothesis.⁵⁶ The unit of analysis is district-year and my sample includes all of Norway's electoral districts during the period from 2006 to 2012.

that subsidies in Norway tend to be more generous in districts in the north of the country, as compared to the south. The districts with the two highest subsidy amounts per employee, Troms and Finnmark, are both in the far north of the country. The entire district of Troms is north of the Arctic Circle, and Finnmark is located at the very top of Norway adjacent to Russia and Finland. In contrast, Rogaland and Vestfold are located in the south. Rogaland is the center of the Norwegian petroleum industry and as a result it is a relatively prosperous district. Vestfold is on the western side of the Oslo fjord and serves as a commuter belt for the capital city. Vestfold is also home to shipping and related industries as well as food-processing companies. Given this pattern, population density is an important control variable because it serves as a proxy for Northern districts, which are less populous than Southern districts.

⁵⁵ Sigrid Gåseidnes, Innovation Norway staff, email Communication, June 24, 2015

⁵⁶ All reported results are also robust to the inclusion of a lagged dependent variable. The amount of money allocated to sector-specific subsidies is renegotiated each year within the governments' budget process. However, "last year's [subsidy] allocations often work as a starting point when allocations for the coming year are to be negotiated" (Bjørn Kåre Molvik, Deputy Director General of the subsidy section of the Ministry of Trade, Industry and Fisheries, email communication, August 17, 2015).

RESULTS

Electoral competition influences the distribution of subsidies across districts. Safe districts win relatively more subsidies than swing districts in this closed-list PR system.⁵⁷ Manufacturing subsidies per employee are relatively more generous in districts where the largest government party won by a greater margin in the previous election. This result suggests that government parties try to consolidate the partisan advantage that helped them win office in the first place by targeting subsidies to loyal partisans in less competitive districts.

The positive relationship between vote margin and subsidies is illustrated by Figure 7.3, which plots the prediction for *Subsidy Amount* from a linear regression of the two-year lag of logged *Subsidy Amount* on *Vote Share*, along with a confidence interval. The actual observations are then overlaid and labeled with the name of the electoral district.

Districts where the Labour Party won a larger vote share in 2005 received more generous subsidies per employee in 2007.⁵⁸ For example, Finnmark, where the Labour Party received 22.6 percentage points more of the vote share than the next largest party, received the second highest subsidy amount per employee. In contrast, Vestfold received the lowest subsidy amount and the Labour Party's vote margin was less than one percentage point (0.93). The pattern illustrated by Figure 7.3 suggests that the Labour Party rewarded partisan strongholds (i.e. safe districts) with more generous subsidies.

Table 7.1 reports the results from the fully specified models. The estimated coefficient on *Vote Margin* is positive and statistically significant in all estimated models. It is also substantively large.⁵⁹

⁵⁷ Of course, it is possible that a record of subsidies creates safe seats. Party lists that successfully bring subsidies to the district may win more votes and thus engender safer districts. It is difficult to tease out which comes first: subsidies or votes. However, in my empirical tests, I treat votes as primary and regress vote share on subsidies. Votes in the previous election correlate with subsidies in subsequent years. It is also worth noting that senior legislators are not “parachuted” into safe district in Norway, as they are in other countries, such as France. In Norway, candidate selection procedures are highly decentralized (Matthews and Valen, 1999: Chapter 4). Local party officials select the candidate for the party's district list (Matthews and Valen, 1999: Chapter 4). Parachuting in a nonlocal candidate is unlikely to be a successful electoral strategy (Kaare Strøm, personal communication, May 4, 2016). In fact, voters would probability punish such attempts (Kaare Strøm, personal communication, May 4, 2016).

⁵⁸ I use 2007 spending data for this illustrative example to ensure that the new government coalition has sufficient time to influence subsidy spending. Using the 2006 spending data produces a similar graph.

⁵⁹ In Table 1, subsidies per employee are logged and as a result the coefficients are difficult to interpret directly.

Table 7.1 *Explaining the variation in manufacturing subsidies per employee between electoral districts*

	(1)	(2)	(3)	(4)	(5)	(6)
L.Vote Margin	0.047*** (0.008)	0.048*** (0.007)	0.048*** (0.007)	0.041*** (0.007)	0.026*** (0.008)	0.026*** (0.007)
L.Population Density			-0.001*** (0.000)	-0.001*** (0.000)	0.0001 (0.000)	0.0001 (0.000)
L.Unemployed(%)				76.56*** (26.14)	-37.56 (31.85)	-32.10 (32.33)
L.Turnout(%)					-0.260*** (0.049)	-0.227*** (0.062)
L.District magnitude						-0.029 (0.025)
Constant	7.449*** (0.139)	7.268*** (0.246)	7.321*** (0.251)	6.037*** (0.531)	28.160*** (4.258)	25.713*** (5.101)
Year fixed effects	No	Yes	Yes	Yes	Yes	Yes
Observations	133	133	133	133	133	133
R-squared	0.174	0.352	0.370	0.403	0.529	0.533

Notes: Robust standard errors in parentheses; *** p < 0.01, ** p < 0.05, * p < 0.1. Data cover Norway's nineteen electoral districts from 2006 to 2012.

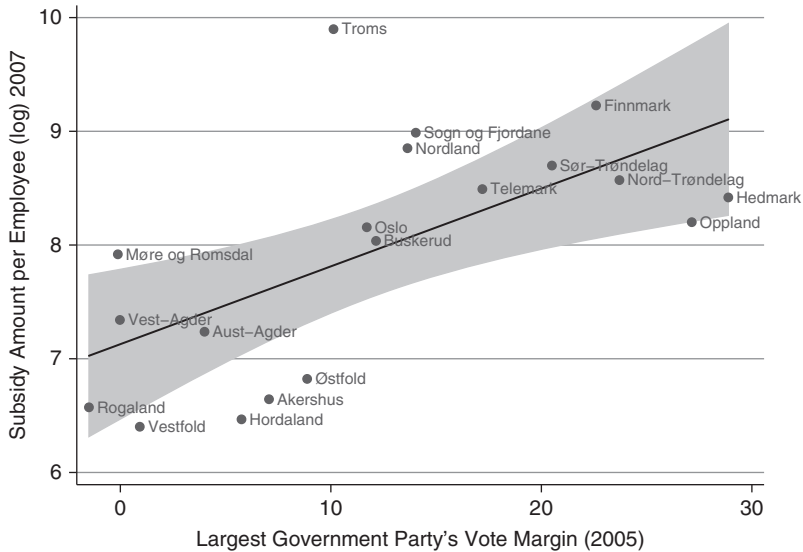


Figure 7.3 Largest government party's vote margin and subsidies per employee, by district
Source: Author's calculation using subsidy data provided by Innovation Norway and election returns from Statistics Norway.

Increasing *Vote Margin* from 4 points (i.e. Labour's vote margin in Aust-Agder) to 29 points (i.e. Labour's vote margin in Hedmark) increases subsidies by NOK 3,450 (\$415) per manufacturing sector employee in the most conservative model.⁶⁰ In sum, subsidies flow disproportionality to "safe" districts in this closed-list PR systems, all else equal.⁶¹

CONTROL VARIABLES

More densely populated districts receive fewer subsidies per employee, all else equal. In other words, subsidies flow disproportionally to rural districts with low population density. This result is consistent with the government's aspiration to spread business more evenly across the

⁶⁰ Including both year fixed effects and a lagged dependent variable reduces the magnitude of the coefficient on *Vote Share*. The one-year lag of subsidy spending is highly significant and indicates that subsidy spending, like most types of government spending, is sticky and changes slowly over time. However, the coefficient on *Vote Margin* remains positive, statistically significant and substantively large in models that include a lagged dependent variable.

⁶¹ This result is consistent with Naoi's (2009) finding that subsidies decline in the face of higher political competition.

country.⁶² However, the negative coefficient on *Population Density* loses statistical significance in models that include *Turnout*. It is important to note that both variables have population as their denominator and are positively correlated with one another ($r = 0.3$). However, *Vote Margin* remains robust to the inclusion of *Turnout*.

Turnout is negatively correlated with manufacturing subsidies. Districts with higher turnout rates receive fewer subsidies per manufacturing employee. However, it is important to note that voter turnout is generally quite high in Norway. The sample average is 76 percent with a standard deviation of two. The lowest rate of turnout is still more than 70 percent (i.e. 70.4 percent in Finnmark in 2005). Given the high rate of turnout for all districts, parties may eschew attempts to “turnout” additional voters and focus instead on rewarding party loyalists in safe districts.⁶³

In two out of three models, *Unemployment* does not robustly predict subsidy spending.⁶⁴ This null result may be due to multicollinearity. In models without *Turnout*, *Unemployment* is positive signed, as expected. Districts with higher unemployment receive more generous subsidies per person than districts with less unemployed persons. Yet, once *Turnout* is included the coefficient on *Unemployment* becomes insignificant.⁶⁵

District Magnitude is not a robust predictor of subsidies. Districts with more representatives in parliament receive no more generous subsidies than districts with fewer representatives. *Vote Margin* remains a robust predictor of subsidies even after controlling for district magnitude. District magnitude is negatively correlated with vote margin ($r = -0.27$). In other words, Labour wins less of the vote share in districts with more seats. Given this, one concern might be that district magnitude influences subsidy spending rather than vote share per se. However, vote margin is

⁶² In person interview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014.

⁶³ Alternatively, the negative coefficient on *Turnout* may be an artefact of multicollinearity between the explanatory variables. For example, unemployment and turnout are negatively correlated at -0.35 . This correlation may explain why the introduction of *Turnout* changes the estimated coefficient on *Unemployment*. Regardless, the estimated coefficient on *Vote Margin* remains positive and statistically significant for all estimated models.

⁶⁴ Perhaps welfare spending flows disproportionality to districts with higher unemployment rates thereby “squeezing out” subsidies.

⁶⁵ In these models, electoral tactics appear to dominate economic concerns. Subsidies are allocated primarily according to the political characteristics of a constituency (i.e. competitiveness) rather than economic need. Mehriiz and Marceau (2013) come to a similar conclusion regarding grant allocation decisions in Quebec, Canada.

robust to the inclusion of district magnitude and district magnitude never reaches conventional levels of statistical significance. These results suggest that it is the vote margin of the largest government party that matters for subsidy allocation rather than district magnitude. Presumably district magnitude does not matter for subsidy spending in Norway because it has no influence on politicians' election strategies in closed-list PR systems, as demonstrated in Chapter 6. Politicians have few incentive to cultivate a personal vote in closed-list PR systems, like Norway, and increases in district magnitude do nothing to change this. No matter how many seats are to be filled in a district, politicians in closed-list systems seek to appease party leaders rather than cultivate a personal vote.

CONCLUSION

In this chapter, I investigate the variation in government spending per employee on manufacturing subsidies between electoral districts in a closed-list PR country. Two novel results emerge. First, government parties competing in a country with closed party lists, proportional electoral rules, and multiple electoral districts, engage in electorally motivated policy targeting. This finding is unexpected; few would anticipate policy targeting in a country with electoral institutions like Norway's. Yet, the distribution of subsidy spending across electoral districts in Norway reveals evidence of electorally motivated policy targeting. Second, in this closed-list PR system, government parties target benefits disproportionality to electoral districts where they have relatively more supporters. Per employee, manufacturing subsidies are relatively more generous in districts where the largest party in government won by a greater margin in the last election, all else equal. In other words, government parties in closed-list PR systems target benefits to "safe" districts – that is, electoral districts with relatively large numbers of party loyalists.

Both findings run counter to conventional wisdom regarding policy targeting, which is derived largely from studies of plurality countries and the United States in particular (Golden and Min 2013). Research on this topic in plurality countries is dominated by a debate over whether parties target benefits to competitive (i.e. "swing") districts or safe districts. The evidence generally suggests that benefits flow disproportionality to swing districts or "competitive constituencies" in plurality systems (Golden and Min 2013). However, as I show here, the same is not true in closed-list PR systems.

In one of the first empirical studies of policy targeting in a closed-list PR country, I find evidence that the largest party in government

disproportionality targets subsidies to the party's safe districts – that is, those district where they won a larger share of the vote in the last election. In Norway, an increase in the largest government party's vote margin of 25 percentage points correlates with an increase in subsidies to the district equal to NOK 3,450 (\$415) per employee. Chapter 5 reported evidence of similar policy targeting in Austria, which, like Norway, has *de facto* closed party lists. Government parties in Austria supported a subsidy that disproportionality benefited areas where they had strong voter support, as discussed in Chapter 5.⁶⁶ The results from both Austria and Norway suggest that government parties in closed-list PR systems target particularistic economic benefits to safe districts, all else equal.

Policy targeting occurs even in the absence of personal vote seeking. Even in countries where politicians have little incentive to cultivate their own personal bases of support, such as Norway and Austria, policy targeting happens. This novel finding suggests that personal vote seeking is not a necessary condition for policy targeting. Instead, policy targeting can occur even in the absence of personal vote seeking. In Norway, for example, policy targeting happens when it helps parties maximize the number of legislative seats they control. In other words, personal vote seeking is not the only reason for geographically targeted economic policies.

⁶⁶ Intriguingly, the Austrian example suggests that district-level electoral competitiveness may have different effects on different parties in PR systems. Government parties may target benefits to safe districts, while opposition parties – unable to influence government spending – may focus their efforts on winning additional votes in competitive districts via other means. See Chapter 5 for further details.