While government-funded subsidies vary across countries, they also vary within countries. In a given nation, governments often spend more on subsidies for some sectors than others. The variation in subsidies across sectors in a country can be explained, in part, by economic geography. Different sectors have different employment patterns; some sectors' employees are more geographically concentrated than others. The geographic distribution of a sector's employees influences government spending on subsidies for the sector. Governments spend more on geographically diffuse sectors than on concentrated sectors in closed-list PR systems, as illustrated in Chapter 6. In this way, economic geography helps to explain the variation in government-funded subsidies across sectors within countries.

While subsidies vary across sectors within countries, they also vary across regions. Governments frequently spend more on subsidies to some regions than others. In Norway, for example, the government spent 15 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 for one canton in 2008 but nothing on subsidies for another canton that same year. In France, the government funded subsidies for wine makers in the Cognac region worth €1,524 per hector but declined to make these subsidies available to producers in other regions (see Chapter 5).

Even controlling for the geographic distribution of economic activity, subsidies vary across regions in a country. In 2012, for example, the Norwegian government spent 309 krone per manufacturing sector employee in the southern region of Vestfold. The government spent eighteen times more per manufacturing employee that same year in the central region of

Oppland. In 2012, manufacturing subsidies to Oppland equalled 5,523 krone per employee. This example illustrates that subsidy spending can vary across regions within a country, even controlling for the geographic distribution of employees. An obvious question arises: why do governments spend more money on subsidies for some regions than others controlling for employment patterns?

Some regions receive more generous subsides than others because of governments' electoral incentives. In countries with more than one electoral district, governments tend to spend more money on subsidies for some electoral districts than others. As a result, subsidy spending per employee varies across a country's electoral districts. Parties in government spend more on subsidies for some electoral districts than others to consolidate the electoral advantage that helped them win office in the first place. The generosity of government-funded subsidies depends, in part, on the electoral competitiveness of a given district.[1]

District-level electoral competitiveness has been studied extensively in plurality countries. Yet, in countries with proportional electoral systems, scant attention has been paid to the possibility that government parties spend money unevenly across a country in response

---

[1] Although electoral competitiveness influences the distribution of subsidies within a country, it is less useful for explaining the cross-national variation in subsidies because electoral competitiveness is not a meaningful country-level characteristic. Competitiveness varies across 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. Measures of competitiveness must capture the difference in the concept across varied types of electoral systems. For these reasons, district-level electoral competitiveness, while useful for explaining the variation in subsidies across districts within a country, it is less useful for explaining the variation in subsidies across countries.

to variations in district-level electoral competitiveness.[2] Parties in proportional systems are believed to have few incentives to target economic benefits to select districts because all votes are thought to be equally valuable. Every vote does, in fact, contribute to a party's electoral success in proportional systems and when a single national district is used to elect all of a country's legislators, all votes are equally valuable. However, most PR systems have more than one district and when parties compete in multiple districts with multiple seats, some votes will be more valuable than others to certain parties. And all parties will find it easier to win over some voters than others given voters' partisan disposition. These facts raise the possibility that parties competing in proportional systems may target economic benefits to select districts for electoral gain.

In this chapter, I investigate the distribution of subsidies across electoral districts via an in-depth examination of subsidy spending in a single PR country: Norway. Norway is a "least likely" case for geographic targeting because it lacks the institutional attributes usually associated with policy targeting (or pork-barrel politics). Norway, like other Nordic countries, has a political system that is believed to be highly resistant to particularistic policies (Tavits 2009) – namely a parliamentary system, with strong parties and party-centered elections. Norwegian elections are held using proportional rules and de facto closed party lists. In this context, few scholars expect policy targeting (Shugart 1999, Denmark 2000, Crisp et al. 2004, Morgenstern and Swindle 2005). Most scholars focus on national level policies rather than on

---

[2] For example, McGillivray's empirical tests include only plurality countries, notably the US and Canada. Her empirical 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).

local public goods when studying the electoral strategies of incumbent governments in PR systems (Alesina, Roubini, and Cohen, 1997).

In contrast, I examine the possibility that government parties disproportionality allocate subsidies to select districts for electoral gain in closed list PR. Using novel subsidy data, I calculate government spending on manufacturing subsidies per manufacturing-sector employee for each of Norway's 19 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 in closed-list PR systems 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. Parties' first-best strategy is to fund subsidies for those sectors whose distribution of employees closely matches the geographic distribution of the party's supporters. In PR systems, parties that manage to become the largest party in government will tend to have geographically diffuse support.[3] The distribution of employees in geographically diffuse sectors is more likely to match the geographic distribution of the party's supporters. As a result, 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. Even in this case, diffuse sectors provide parties with the widest range of options for geographic-targeting. A sector that employs people across the entire country, for

---

[3] Parties with geographically concentrated supporters are unlikely to be the largest government party in a multi-party proportional system.

example, allows parties to selectively target benefits to any district via more (or less) generous subsidies, as described later in this chapter. For these reasons, parties competing in closed list PR systems with multiple electoral districts disproportionally fund subsidies for geographically diffuse sectors and target subsidies to safe districts.

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 for governments' spending decisions. The interviews also illustrate the mechanisms government parties use to target subsidies to politically important areas. Both the quantitative and qualitative evidence from this single-country study confirm the importance of electoral incentives for economic policy in democratic countries.

Explaining within country variation

Within a given country, producers in some electoral districts receive more generous economic benefits than others. In Norway, for example, government spending on subsidies per employee are, on average, 15 times greater in the northern district of Troms than in the western district of Rogaland.[4] The variation in subsidies across Norway's electoral districts is illustrated in Figure 7.1. Figure 7.1 reports average government spending on manufacturing subsidies per manufacturing sector employee from 2005-2012 for Norway's 19 electoral districts. Norway's 19 electoral districts correspond with the administrative provinces (*fylker*) and include the municipal authority of Oslo, which is a *fylker* in its own right. Figure 7.1 illustrates the key question motivating this chapter: why do subsidies vary so significantly across electoral districts within a given country?

[Insert Figure 7.1 about here]

---

[4] Author's calculations using data supplied by Innovation Norway.

I hypothesize that district-level electoral competitiveness influences the distribution of subsidies within democratic countries. In countries with multiple electoral districts, the competitiveness of elections often varies across districts.[5] Some districts may be relatively "safe" for a given party – that is a given party tends to win a large share of the district's votes. In contrast, other districts may be more competitive for a given party – that is the party typically runs neck-and-neck with a competing party in a given district. Parties know how competitive they are in a given district by the number of legislative seats they win in PR systems. In some proportional systems, like Norway, 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.[6]

Variation in district-level electoral competitiveness may influence the geographic distribution of subsidies within a country.[7] Indeed, a large body of scholarship argues that

---

[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 multi-member districts, calculating any legislator's "margin of victory" is far more difficult. Others define competitiveness for different units of analysis. For example, Kayser and Lindstadt (2015) define competitiveness or "electoral risk" as the expected probability that the plurality party in parliament loses its seats plurality in the next election (p. 243). See Strøm (1992) for a theoretical definition of competitiveness.

[6] See, for example, www.stortinget.no/globalassets/pdf/innstillinger/stortinget/2013-2014/inns-201314-001.pdf.

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

district-level competitiveness shapes distributive policies and the geographic distribution of economic rents. These arguments highlight the electoral benefits of supplying economic rents to districts with varying levels of competiveness. Such arguments have been developed almost exclusively in the context of plurality electoral systems with single-member districts.

In plurality systems, rents targeted to competitive districts may entail greater electoral benefits than rents targeted to "safe" districts.[8] Politicians running for office in competitive districts have powerful incentives to work to earn each additional vote. Each further vote is particularly valuable in a tight race. To this end, incumbents in competitive districts will seek to influence the geographic allocation of government assistance. Directing benefits to their own districts can increase their chances of winning office by securing additional votes. In contrast, politicians who command a "safe" margin feel less need to chase after each additional vote. 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 few 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, like France. But what role, if any, does competitiveness play in countries with proportional electoral rules?

Most countries around the world today use some form of proportionality yet the effects of electoral competitiveness in PR countries remain largely unknown. Two factors account for the previous lack of attention to electoral competitiveness in PR systems. First, the difficulty of identifying "competitive" districts in multi-member, multi-party PR systems makes empirical research on the topic challenging. Second, theoretical models typically assume –

---

[8] Although Cox and McCubbins (1986) argue that parties reward loyal voters.

either explicitly or implicitly – that only one nation-wide 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 just one, nation-wide legislative constituency. If there is only one, nation-wide electoral district, then by definition there is no within country variation in electoral competitiveness. Yet, few real world PR systems have just one nation-wide district. Most PR countries have multiple, geographically-defined electoral districts that encompass sub-segments of the country, like Norway. In PR countries with multiple electoral districts, legislative seats are often awarded to parties based on their share of a district's votes – rather than their national vote share. The district-level allocation of seats raises the possibility that some districts are relatively more competitive for some parties. In other words, district-level electoral competitiveness may be an important, yet previously overlooked, feature of PR systems with multiple electoral districts. I address this oversight here by investigating the impact of 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

---

[9] Alt et al. (1999) examine lobbying by firms for subsidies in Norway. However, they do not examine the distribution of subsidy across electoral districts. In fact, they focus exclusively on the demand side of the story and 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

competitiveness has been conducted in plurality countries, most notably the United States. As a result, very little is known about how electoral competitiveness shapes politics or policy in PR countries. Norway provides a useful case to explore the effects of competitiveness in a previously under-examined electoral system.

Second, Norway is a "least likely" case for particularistic economic policies because it lacks the institutional attributes usually associated with pork-barrel politics. Norway, like other Nordic countries, has a political system that is believed to be highly resistant to particularistic policies (Tavits 2009) – namely a parliamentary system, with strong parties and party-centered elections. Few expect policy targeting in this context (Shugart 1999, Denmark 2000, Crisp et al. 2004, Morgenstern and Swindle 2005). As a result, scholars have typically focused on national level policies rather than on local public goods when studying the electoral strategies of incumbent governments in systems like Norway (Alesina et al. 1997).

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 modernise agriculture and develop new industries. State support for business continues today. In recent

---

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.

years, Norway spent more on subsidies, as a percentage of GDP, than any other country in the European Free Trade Association (EFTA).[10]

Finally, Norway is one of the only countries where data on government subsidies are available at the level of disaggregation needed to assess the geographic distribution of subsidies across electoral districts. Most governments are unwilling to provide detailed information on the amount of subsidies they award and to whom (But et al. 2012). In contrast, the Norwegian government generously provided me with unique 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 PR country.

Elections in Norway

At any given point of time, national electoral institutions are constant within a country. Given this, electoral systems cannot explain the cross-district variation in subsidy spending. But national electoral institutions set the stage for the dynamics that play out during election campaigns. National electoral institutions shape the incentives of political parties and their optimal election strategy. I briefly describe Norway's electoral institutions before turning to parties' incentives to geographically-target particularistic policies, such as subsidies.

Norway is a PR country with multiple electoral districts. Norway's 19 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 4 seats in *Aust-Agder*

---

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

and *Sogn og Fjordane* to 19 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. 150 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 19 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 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

---

[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 6 seats as a consequence of the shift from d'Hondt to Sainte Laguë (Aardal 2011).

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, 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).

[Insert Figure 7.2 about here]

Disproportionality emerges because of Norway's multiple electoral districts (Matthews and Valen 1999, Sørensen 2003, Aardal 2011).[12] In 2009, for example, the Labour party would have won 60 seats if the country was organized as one electoral district (Aardal 2011). But based on the district-level distribution of seats, the party won 64 (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 a vast majority of legislative seats are allocated according to parties' district vote shares – not their national vote share.

One additional characteristic of Norway's electoral system that deserves mention is the de facto closed party lists. Voters generally cast a ballot for a party list rather than individual

---

[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.

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 are, in fact, allowed to change the rank order of the candidates on the party list as well as cross out candidates (Aardal, 2011: 8). However, the levels of coordination required to overturn the parties' rankings are so extreme that they effectively deter 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 provide geographically-targeted subsidies? Conventional wisdom suggests there will be little geographic targeting of economic benefits in a country like Norway. In PR countries with closed-party lists, disciplined national parties are believed to work to maximize their share of the national vote and this electoral strategy provides parties with few incentives to target benefits geographically. However, this widely-held believe emerges from models of proportional representation that ignore geography.

Existing models of PR systems often assume only a single-national electoral district exists. For example, Grossman and Helpman (2005) derive a comparative static suggesting that a majoritarian bias exists in trade protection using a model of PR that includes a single nationwide electoral district. Yet, few real world PR systems have just one nation-wide electoral district. Instead, most proportional systems have multiple, geographically-defined electoral districts in which several parties compete for multiple seats. In such systems, (most) legislative seats are allocated to parties by district in proportion to their share of the district's

votes. In Norway, for example, 150 of the 169 legislative seats are allocated to parties based on their share of district votes (Aardal 2011).[14]

The district-level allocation of seats that occurs 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 could cost the party a "provisional seat" (i.e. a seat allocated at the district level) if the party's supporters are unevenly spread across the country's electoral districts.[15] At the same time, ignoring a party's national vote share may make a party ineligible for a compensatory seat. For example, a party called People's Action Future for Finnmark (*Folkeaksjonen Framtid for Finnmark*) won 21.5 percent of the vote in the Norewegian district of Finnmark in 1989. As a result, the party won a "provincial" seat in parliament. However, the party was not eligible for any compensatory seats because it failed to clear the national threshold of 4 percent.[16]

---

[14] It is precisely because seats are awarded to parties at the district level that disproportionality exists between parties' national vote shares and the number of legislative seats they hold in most PR countries.

[15] Similarly, focusing exclusively on maximizing district votes may cost a party a compensatory seat. In 1989, for example, a party that focused exclusively on regional economic issues (*Folkeaksjonen Framtid for Finnmark*) won 21.5 percent of the vote in the district of Finnmark and consequently a seat in parliament (Aardal 1990). However, the party was not eligible for any compensatory seats because it failed to clear the national threshold of 4 percent.

[16] The party won just 0.3 percent of the national vote in the 1989 election. This outcome is not surprising given the party's exclusive focus on regional issues. The party's main focus

Parties' best electoral strategy in PR systems with multiple electoral districts is to win those votes that maximize the party's seats. To achieve this goal, parties may seek to target benefits to select districts. Targeting will be especially useful for winning seats if a party's supporters are unevenly distributed across 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 (i.e. safe districts) (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 seats when they are allocated by districts in proportion to parties' district vote share.

Targeting assistance to party strongholds helps parties in PR systems with multiple electoral districts to maximize the number of legislative seats they hold. Targeted aid keeps party supporters loyal. If a party withdrew aid from a party stronghold, it may lose voters to other parties. New parties might also emerge to represent disaffected voters – particularly in electoral systems characterized by low barriers to party entry (i.e. proportional systesm) (Golden and Picci 2008). For example, 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*), that subsequently "stole" one of the district's seats away from Labour in the 1989

---

was the economic conditions in Finnmark where the local economy had been badly hurt by poor fishing output.

election.[17] The new party demanded more government assistance to improve economic conditions in the district of Finnmark where unemployment increased sharply due to shrinking fish resources in the district's coastal waters. [18] The situation in Finnmark was especially difficult for the Labour party as full employment had been one of the fundamental goals of the party ever since the 1930s (Aardal, 1990: 153). Many voters in Finnmark, which was a traditional Labour stronghold,[19] felt that the Labour party had not done enough to help the region and as a result, the new party's list won 21.5 percent of the district's votes in the 1989 election and a seat in parliament.

Targeting benefits to safe districts helps parties hold core voters and prevents 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 multi-member districts. In such systems, it is difficult to know precisely where the marginal seats are located (Sørensen, 2003: 171). Parties

---

[17] Labour's ability to target economic assistant to Finnmark was likely constrained by the coalition dynamics at the time. Labour did not 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. This period was one of the "most turbulent in the Storting since World War II" (Aardal, 1990: 152).

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

[19] This was the first post-war election in which Labour won fewer than two seats in Finnmark (Svåsand, Strøm, Rasch, 1997: 96).

tend to be risk adverse and therefore focus their efforts on "safer" electoral strategies, like targeting benefits to party strongholds (Cox and McCubbins 1986).

Even in multi-party PR systems with multiple districts, parties can identify their core areas of support. Their core areas of support are those districts where they win the largest share of the district's seats. For example, the Conservative Party (*Høyre*) won 7 of Akershus' 17 seats in the 2013 election. Seeing this result, the Conservative Party knows that Akershus is a party stronghold. They won slightly more than 40 percent of the districts seats. Targeting benefits to safe districts like Akershus entails fewer risks for the Conservative Party than trying to identify marginal seats. Because parties tend to be risk adverse, those competing in multi-district 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. Targeting is more difficult in open-list PR systems where 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). Individually powerful 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.[20] Therefore, I hypothesize that subsidies will flow disproportionality to districts

---

[20] Norwegian legislators are frequently lobbied by local interests (Alt et al. 1999). Legislators also are frequently contacted by business organizations; 68 percent of legislators were

where the largest government party wins by a greater margin over the next closest party in a closed list PR country like Norway. I focus on the largest government party because it is best placed to target aid to its supporters in a multi-party coalition, particularly when it holds the relevant ministry.

Policy Targeting in Practice

Government parties have the ability to target economic assistance, such as subsidies, to select districts based on their levels of electoral support in a district. In Norway, government parties can target subsidies in 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 across a country, the largest government party can target select districts via sector-specific subsidy budget allocations. Second, the government indirectly controls the allocation of subsidies to firms within a sector via the bureaucracy.

Sector Targeting

The government directly controls the funding of sector-specific subsidies. Every year, the government decides how much money to spend on subsidies to each sector of the economy. The amount of money allocated to a sector is renegotiated every year within the Governments'

---

contacted by business organizations on a weekly basis, and about the same amount of 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). In surveys, Norwegian legislators reported that lobbying activities had increased during recent years, and lobbying increasingly influences spending decisions and government policy (Sørensen 2003).

budget process.[21] "In practice, last year's allocations often work as a starting point when allocations for the coming year are to be negotiated."[22]

Both political and economic considerations shape the government's funding decision. 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."[23] Ultimately, the amount of money allocated to subsidies is determined by "political and strategic deliberations".[24]

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 these negotiations, each ministry prepares its subsidy budget proposals. 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

---

[21] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015

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

[23] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015.

[24] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015.

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 farmers' organizations and Innovation Norway, the main bureaucracy responsible for allocating subsidies. The individual ministries' proposals are put forward to the Ministry of Finance who prepares the final budget. The government's subsidy budget is then presented to the Parliament for approval.

Although Parliament must approve the final budget, individual legislators and opposition parties have little influence over subsidies. All 169 members of the *Storting* vote on the subsidy budget. However, Parliament "typically does not change the amount of money that has been agreed by the government and interest groups".[25] The government's allocation decisions are normally approved with no amendments or modifications. As a result, 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.[26] 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). However, the government exerts control over these bureaucrats, as described in the following section.

Firm Targeting

---

[25] Siri Lothe, Senior advisor, Department of Agriculture, Ministry of Agriculture and Food. Email communication, July 2, 2015.

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

Formally, bureaucrats decide which firms to subsidize within a sector using the monies allocated to the sector by the government.[27] Bureaucrats have autonomy over firm-level subsidy allocation decisions. However, they are accountable to cabinet-level ministers (Rodrik 2004). Such accountability is essential for subsidies to be a useful electoral tool. Close monitoring (and coordination) of subsidy activities by a cabinet-level politician, a "principal" who has internalized the optimal re-election strategy for themselves and their party, is essential for subsidies to be an effective vote-winning policy tool. Government ministers purposefully attempts to influence bureaucratic behaviour (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 exist because of rational choices by politicians who care about the outcomes from bureaucratic behaviour (Huber, Shipan and Pfahler 2001). In the case of subsidies, bureaucratic behaviour is especially important to parties because subsidies are a useful policy tool with which to win votes (Buts et al. 2012).

In Norway, one of the principal bureaucracies charged with the allocation of subsidies is Innovation Norway (*Innovasjon Norge*).[28] Innovation Norway is "the most important instrument for innovation and development of Norwegian enterprises and industry."[29] It is responsible for "supporting companies in developing their competitive advantage and

---

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

[28] The other bureaucracy charged with subsidy allocation is the Research Council of Norway.

[29] www.innovasjonnorge.no/en/start-page/

enhancing innovation."[30] Innovation Norway's objective is to be the government's instrument for achieving value-creating business development throughout the country (Innovation Norway 2014b).[31] Although Innovation Norway is, in theory, responsible for allocating subsidies to firms in a given sector, the national government uses various mechanisms to control indirectly the allocation of firm-level subsidies, including the national budget.[32]

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). The Norwegian 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

---

[30] www.innovasjonnorge.no/en/start-page/ . Although historically Innovation Norway's mandate was limited to the non-agriculture sectors, in recent years Innovation Norway became responsible for agriculture subsidies as well (In person iterview with Innovation Norway staff members Pål Aslak Hungnes and Per Melchior Koch in Oslo, Norway on June 19, 2014. See also Innovation Norway 2014b).

[31] The company is organized as an enterprise established by special legislation who's Board of Directors has an independent responsibility for its activities and the results achieved (Innovation Norway 2014b).

[32] 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).

firms in the manufacturing sector.[33] The government gives each sector a "budget code".[34] Innovation Norway then charges subsidy programs to these budget codes.[35]

Bureaucrats cannot spend more on subsidies to a given sector than is stipulated in the government's budget. Additionally, bureaucrats cannot reallocate funds from one sector to another. Bureaucrats may want to spend more on manufacturing subsidies and less on agriculture subsidies, for example.[36] The Norwegian agriculture sector is geographically diffuse and politically powerful.[37] As a result, it wins generous government subsidies. Although unelected bureaucrats may view the generous agriculture subsidies as economically inefficient, they cannot unpick this political outcome. They are unable to reallocate funds from agricultural subsidies to manufacturing subsidies because of the government's budgeting procedures, which allocate subsidy funds by sector.

Bureaucrats would prefer to receive money with "no strings attached".[38] A single subsidy budget without sector-specific allocations would give bureaucrats more autonomy to

---

[33] In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes 23 June, 2014

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

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

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

[37] See Chapter 6.

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

decide how to allocate subsidies.[39] With an "untied budget" from the government, bureaucrats could allocate money across sectors. 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.[40] Instead of giving Innovation Norway a big pot of money with no strings attached,[41] the government says, "these moneys are for agriculture" and asks Innovation Norway to allocate the funds to agriculture producers.[42]

Several mechanisms give the government indirect control over which producers receive subsidies within a given sector. High-level, semi-annual meetings provide ministers with an opportunity to influence bureaucrats' decisions.[43] 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

---

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

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

[41] In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes 23 June, 2014

[42] In person interview at Innovation Norway in Oslo, Norway with Sigrid Gåseidnes 23 June, 2014

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

for the year to come".[44] These twice-yearly meetings provide the government with an opportunity to exert control over the bureaucracy and their subsidy decisions.

Annual letters of assignment provide the government with another 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.[45]

The more detailed the letter, the stronger the constraints on bureaucratic behaviour (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.[46] In contrast, a letter that stipulates only the annual budget for a sector leaves more room for bureaucratic discretion.

---

[44] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015.

[45] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015.

[46] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015

Government ministers appear to understand the constraints imposed by more detailed letters of assignment.[47] 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.[48] Some ministries, including the Ministry of Trade, Industry and Fisheries, confess to using the letters of assignment to explicitly stipulate what areas should be prioritized.[49] 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 can win votes. Given that subsidies are a vote-winning policy, why would governments delegate subsidy decisions to unelected bureaucrats in the first place? Surely, governments would want to control the allocation of subsidies themselves to maximize their electoral benefits?

By controlling the allocation of firm-level subsidies only indirectly, the government insulates themselves from rent seeking. Firms sometimes approach ministers directly to request

---

[47] 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).

[48] Jardar Jensen, State Secretary to the Minister of Local Government and Modernisation, Email communication, July 8, 2015.

[49] Bjørn Kåre Molvik Deputy Director General of the subsidy section of the Ministry of Trade, Industry and Fisheries, Email communication august 17, 2015.

a subsidy.[50] Ministers defer such requests to Innovation Norway.[51] In this way, the bureaucracy shields ministers from close interaction with businesses. This institutional design may be an effort to minimize rent-seeking (Rodrik 2004).[52] Ministers appreciate being able to pass on subsidy requests to Innovation Norway.[53] 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 "scapegoat" bureaucrats for unpopular decisions (Remmer 1986, Vreeland 2003) while taking credit for subsidies that are authorized. This type of delegation is purposefully designed for maximum electoral gain.

Empirical Tests

I argue that the distribution of subsidies across electoral districts will exhibit a political bias. More precisely, I hypothesize that subsidy spending per manufacturing sector employee will be relatively higher in electoral 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.

---

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

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

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

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

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.[54] This measure is often called the vote margin. Within-country vote margins calculated at the district level are informative measures of electoral competitiveness, even in multi-party PR systems (Kayser and Lindstadt 2015).

The largest party in a multi-party government coalition is best placed to strategically allocate subsidies for electoral gain, particularly if it controls the relevant ministries. Therefore, I calculate the largest government party's vote margin in Norway's 19 electoral districts for 2 regularly scheduled, national legislative elections held 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, what actually constitutes the government is not the legislature but the cabinet. The cabinet consists of a portfolio of departments or ministries, such as the Finance ministry. Because no party won an absolute majority of legislative seats in the 2005 election, the cabinet included three parties: the Labour Party (DNA), the Socialist Left Party (*Sosialistisk Venstreparti*)[55] and the Centre Party (*Senterpartiet*). This minimum winning cabinet was known as the "Red–Green coalition".

---

[54] See Strøm (1992) for a theoretical definition of competitiveness.

[55] The 2005 cabinet was the first time the Socialist Left Party sat in government.

The Labour Party, which held the largest share of parliamentary seats (36 percent) after the 2005 election, held the largest share of cabinet seats (10).[56] The Labour party also secured the Prime Ministership and the Ministry for Trade and Industry, which oversees manufacturing-sector subsidies. By holding the Ministry for Trade and Industry, the Labour party was uniquely well-placed to direct manufacturing subsidies to those districts where they did especially well in the 2005 election. In a multi-party coalition, each party is generally able to implement its own priorities in the areas under its ministries' jurisdiction (Laver and Shepsle 1994).

The three-party Red-Green coalition won re-election in 2009. The Labour party retained both the Prime Minister and the Ministry of Trade and Industry. Effectively, the Red-Green government continued in office with virtually no change after the 2009 election.

Despite being the largest party in the Red-Green coalition, Labour's vote margin varied across electoral districts. In 2005, 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" 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 current or most recent previous election. For example, the variable *Vote Margin* equals -0.02 for the district Vest-Agder from 2005 until

---

[56] The Socialist Left Party had five cabinet seats and the Centre Party had four. The opposition consisted of four parties: the Progress Party, the Conservative Party, the Christian Democratic Party and the Liberal Party.

2008 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 19 electoral district on *Vote Margin*. By calculating subsidies per employee, I control for economic geography. Each electoral district contains different numbers of manufacturing employees; some more, some less. The geographic distribution of manufacturing-sector employees is what I have referred to as economic geography. Economic geography, together with electoral institutions, helps to explain the variation in subsidies across countries and within countries across sectors (see Chapter 6). Here, I calculate the amount of money spending on sector-specific subsidies per sector employee in each district. This measure controls for the uneven distribution of manufacturing employees across electoral districts while providing a measure of subsidy spending that is comparable across districts. In this way, I "control" for economic geography to isolate the effects of district-level electoral competitiveness.

I regress government spending on manufacturing-sector subsidies per employee in each of Norway's electoral district on *Vote Margin*, holding several factors constant. First, I control for districts' unemployment rate because districts with relatively higher unemployment rates 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 1065 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.[57]

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".[58] 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".[59] 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.[60] Because of this strategy, rural districts with lower population density may receive

---

[57] 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 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. For the years in which 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. Oslo receives nearly the same about of subsidies per person as the second poorest county: Aust-Agder.

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

[59] Jardar Jensen, State Secretary to the Minister, Email communication, July 8, 2015

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

relatively more subsidies, all else equal. Population density therefore serves as an important control variable.

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. 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.[61]

Voter turnout may influence the distribution of subsidies. Incumbent government parties target areas that provide the best return in terms of votes (Martin 2003). Thus, electoral

---

[61] Similarly, in Sweden, district-level population density does not correlate with parties' vote share (Rodden 2016). However, Figure 7.1 suggests 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 just outside of Oslo 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.

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 four to 19. In other words, a district may be represented by as many as 19 legislators or as few as four. 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 subsidy budget as part of a nation-wide economic crisis package.[62] Year fixed effects control for omitted variables that vary over time but are constant across the 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 key explanatory variable.[63] The unit of analysis if district-year. I have data for all of Norway's 19 electoral districts and the sample covers the period from 2006-2012.

---

[62] Sigrid Gåseidnes, Innovation Norway staff, Email Communication, June 24, 2015

[63] 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

Results

Electoral competition influences the distribution of subsidies across districts. Safe districts win relatively more economic incentives than swing districts in this closed-list PR system.[64] Manufacturing subsidies per employee are relatively more generous in districts where the largest government party won by a greater margin. 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 labelled with the name of the electoral district.

Deputy Director General of the subsidy section of the Ministry of Trade, Industry and Fisheries, Email communication, August 17, 2015).

[64] 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. Of course, 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 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 non-local candidate is unlikely to be a successful electoral strategy (Kaare Strøm, personal communication, May 4, 2016). Votes would probability punish such attempts (Kaare Strøm, personal communication, May 4, 2016).

[Insert Figure 7.3 about here]

Districts where the Labour party won a larger vote share in 2005 received more generous subsidies per employee in 2007.[65] 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. The Labour party's vote margin was less than 1 percentage point (0.93) in Vestfold. The pattern illustrated by Figure 7.3 suggests that Labour 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.[66] Increasing *Vote Margin* from 4 points (Labour's vote margin in Aust-Agdar) to 29 points (Labour's vote margin in Hedmark) increases subsidies per manufacturing

---

[65] 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.

[66] In Table 1, subsidies per employee are logged so the coefficients are difficult to interpret directly.

sector employee by NOK 3,450 ($415) in the most conservative model.[67] In sum, subsidies flow disproportionality to "safe" districts in closed list PR, all else equal.[68]

[Insert Table 7.1 about here]

Control Variables

More densely populated districts receive fewer subsidies per employee, all else equal. Subsidies flow disproportionally to rural districts with low population density. This result is consistent with the government's aspiration "to spread business across the country by subsidizing producers in rural areas".[69] 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. In general, voter turnout is quite high in Norway. The sample average is 76 percent with a standard deviation of 2. The

---

[67] 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.

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

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

lowest rate of turnout is still more than 70 percent (i.e. 70.4 in Finnmark in 2005). Given the high rate of turnout across all districts, parties may eschew attempts to "turnout" additional voters and focus instead on rewarding party loyalists in safe districts.[70]

In two out of three models, *Unemployment* is not a robust predictor of subsidies. This null result may be due to multicollinearity. In models without *Turnout*, *Unemployment* is positive signed, as expected. Districts with higher unemployment receive relatively more subsidies per person than districts with less unemployed. Yet, once *Turnout* is included the coefficient on *Unemployment* becomes insignificant.[71]

District Magnitude is not a robust predictor of subsidies. Districts with more representatives in parliament receive no more generous subsidies than districts with fewer

---

[70] 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 across all estimated models.

[71] 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. Mehiriz and Marceau (2013) come to a similar conclusion regarding grant allocation decisions in Quebec, Canada. However, it is worth noting that a generous welfare state exists in Norway. Previous research demonstrates that subsidies are substituted for social welfare spending in many countries (Rickard 2012b). It is possible the inverse is also true. Norway's generous welfare spending may flow disproportionality to districts with higher unemployment rates thereby "squeezing out" subsidies.

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 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 because it has no influence on politicians' election strategies in this closed list system. Politicians have no incentive to cultivate a personal vote in closed list systems, like Norway, and increases in district magnitude do not 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 across 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 expect to see policy targeting in a country with electoral institutions like Norway's. Yet, the distribution of subsidy spending across electoral districts in Norway reveals electorally-motivated geographic 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.

Both findings run counter to conventional wisdom regarding policy targeting, which is derived largely from the study of plurality countries and the United States in particular (Golden and Min 2013). Research on this topic is dominated by a debate over whether parties target benefits to competitive "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, in proportional systems, the same is not true.

A small but growing body of research examines policy targeting in open list PR systems. Evidence from open list systems, like Italy and Brazil, shows that governing parties are unable to discipline their own members of parliament sufficiently to target benefits to either swing or safe districts (Golden and Picci 2008).[72] Instead, in open list systems, powerful individual legislators divert money to groups concentrated in their own districts or bailiwicks (see Chapter 6). Such diversion is less likely in closed list systems. Closed lists allow party leaders to sanction legislators if they go against the party's interests – by, for example, diverting money away from the party's spending priorities. Because parties can discipline their legislators sufficiently to "target" select districts, an investigation of policy targeting in closed list PR is warranted.

In this chapter, I conduct 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

---

[72] Undisciplined legislators seek to target benefits to their core constituents who are typically localized in bailiwicks (Ames 1995). Individually powerful legislators in open-list PR countries can secure resources for their own constituents at the expense of the governing parties (Golden and Picci 2008).

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

In Austria, the largest opposition party opposed the subsidy for farm gate wine merchants in an attempt to appeal to voters in Salzburg. In Salzburg, the party stood a greater chance of winning an additional legislative seat than they did in other districts. To win the additional votes needed to win an additional seat, the opposition party came out strongly against the subsidy, which would benefit few, if any, people in Salzburg. 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 wining additional votes in competitive districts via other means.

As this chapter makes clear, 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. Policy targeting can emerge even in the absence of personal vote seeking. It does so 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. Future research could usefully shed further light on the alternative sources of policy targeting.

Figure 7.1: Average subsidy amount per manufacturing employee, 2005-2012
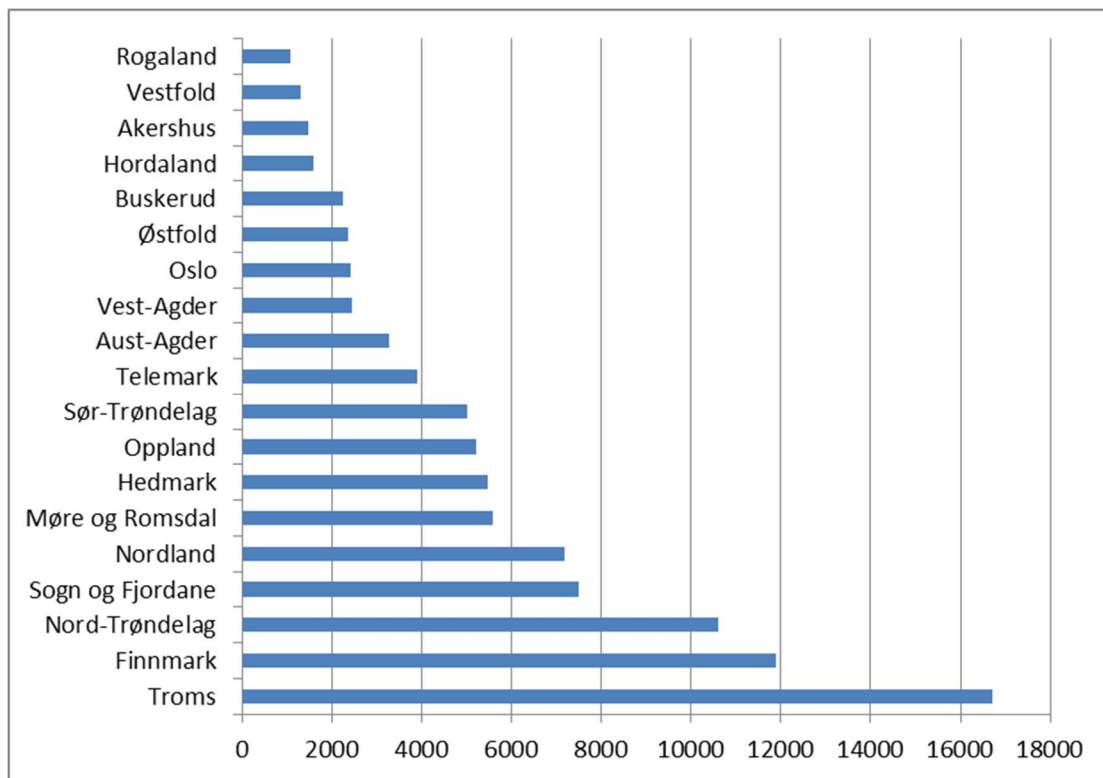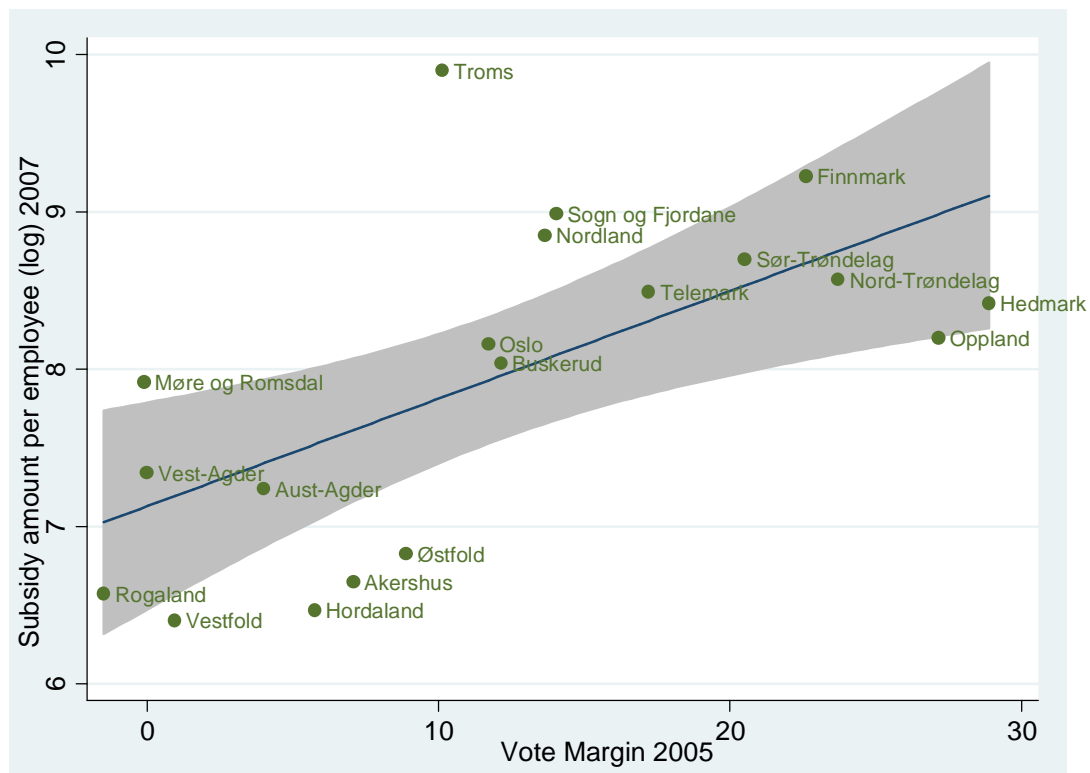

Source: Author's calculations from data provided by Innovation Norway.

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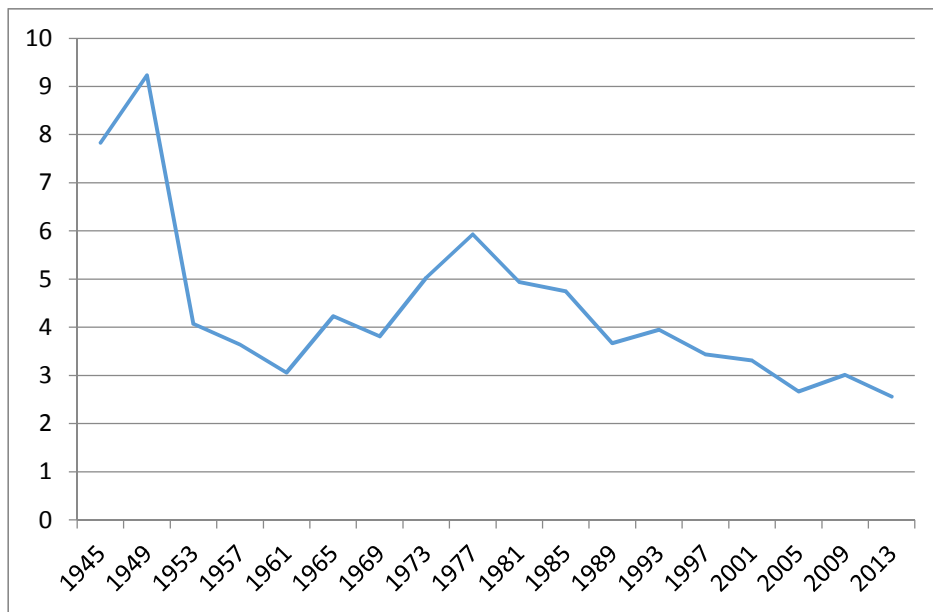
Source: Gallagher's Index (1991)

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.

Table 7.1: Explaining the variation in manufacturing subsidies per employee across electoral districts

	(1)	(2)	(3)	(4)	(5)	(6)
L.Vote Margin	0.047***	0.048***	0.048***	0.041***	0.026***	0.026***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.008)	(0.007)
L.Population Density			-0.001***	-0.001***	0.000	0.000
			(0.000)	(0.000)	(0.000)	(0.000)
L.Percent Unemployed				76.56***	-37.56	-32.10
				(26.14)	(31.85)	(32.33)
L.Turnout					-0.260***	-0.227***
					(0.049)	(0.062)
L.District magnitude						-0.029
						(0.025)
Constant	7.449***	7.268***	7.321***	6.037***	28.160***	25.713***
	(0.139)	(0.246)	(0.251)	(0.531)	(4.258)	(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 19 electoral districts from 2006 to 2012.