SENDING THE PORK HOME: BIRTH TOWN BIAS IN TRANSFERS TO ITALIAN MUNICIPALITIES

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Abstract

We ask whether the birthplaces of Italian members of Parliament are favoured in the allocation of central government transfers. Using a panel of municipalities for the years between 1994 and 2006, we find that municipal governments of legislators' birth towns receive larger transfers per capita. Exploiting the fact that some birth towns are outside of the district of election, we conclude that this result cannot be driven by re-election incentives. On the contrary, we show that these incentives discourage legislators from diverting resources to their birthplace. We present evidence that those transfers are a way for a politician to prepare the ground for a post-congressional career in the municipal administration.

JEL Codes: H720, H770, D720.
Keywords: Pork-barrel, distributive policies, political economy.

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1 Introduction

In parliamentary systems elected representatives often have power to affect resource allocations to favour their preferred areas or projects, a practice known as *pork-barrel politics*. In particular, in single-member district (SMD) systems, it is not uncommon to find legislators' favoring their district of election. The importance of this behaviour is difficult to quantify in this context because it potentially involves all members of Parliament and, consequently, all districts. Furthermore, it is unclear whether favouring a particular area is a source of concern since it is typically the district that the legislator has been elected to represent that benefits from these extra resources.[1]

Empirical analyses of pork-barrel politics typically use expenditure or investment data at the electoral district level and rely on either (i) differences in some measure of influence of representatives such as seniority or number of electoral preferences (Golden and Picci, 2008), (ii) over representation of certain districts relative to their population (see Atlas et al. 1995 or Knight 2008 for the US case), (iii) comparing representatives who have reached their term limit with those who are instead seeking re-election (Aidt and Shvets, 2012).

In contrast, in this paper we use changes in the distribution of legislators' birthplaces and expenditure data disaggregated at the municipal level to study whether Italian members of Parliament send additional funds to their birth towns over other towns in their district of election.[2] Using expenditure data that is more geographically disaggregated than electoral districts provides us with a rich source of variation to identify pork-barrel politics. More importantly, it allows us to understand whether this behaviour seeks to favour voters or to pursue other personal benefits for the politician which are not aligned with those of her constituency. To this end, we exploit the fact that the birthplace of roughly half of Italian members of Parliament lies outside their electoral district. Given that the allocation of state funds favours these out-of-district birthplaces, where parliamentarians have no voters, the paper concludes that reelection concerns are not behind the observed birth town bias. Instead, we provide evidence that this behaviour is driven by post-congressional career concerns.[3]

The institutional setting in Italy, discussed in section 2, is ideal for studying pork-barrel politics at the municipal level. Public transfers in Italy account for as much as one quarter of the financial needs of municipal administrations, and their distribution is a matter of discussion and negotiation. Even if objective criteria for allocation are established by law, elected representatives have incentives to divert resources towards specific targets for electoral, partisan or other reasons. The way in which these incentives translate into

[1] Weingast, Shepsle and Johnsen (1981), however, notice that when benefits are linked to a geographical area but costs are spread across the nation via taxation, district representatives may choose an inefficiently high level of spending because they do not internalize the costs on other constituencies.

[2] Throughout the paper we use the words town and municipality interchangeably.

[3] Diermeier, Keane and Merlo (2005) notice that politicians should be considered and modeled as any other economic agent, who makes career decisions by choosing among different possibilities in the present and in the future.

geographical distributions of funds depends, among other things, on electoral rules (Lizzeri and Persico, 2001). After the 1994 reform, Italy moved to a single-member district system, which stayed in place for the subsequent three elections.[4] It is well known that members of Parliament in majoritarian systems are typically re-elected within the same district, thus electoral incentives are geographically localized.[5] We use this observation to isolate reelection incentives from others driving the allocation of pork.

Italian municipalities, in our sample period, are grouped into 232 districts for the Senate and 475 for the House, each electing only one representative. If the winner of one of these elections is born in a municipality that belongs to her district of election, we classify this municipality as having an *internal* connection. If, instead, the winner is born in a municipality that does not belong to this district, this municipality has an *external* connection. This classification is useful because a politician generating an external connection with Parliament has no direct reelection interest in increasing the transfers to her birthplace, since her electoral base is elsewhere. The same conclusion does not hold in the case of internal connections. To be able to exploit within-district variation in transfers, we collect data on central government transfers to municipalities for the years 1994 to 2006. The fact that some towns are the birthplace of a legislator and some are not generates variation in the strength of the link with the Parliament that can be used for estimation. In addition, parliamentary turnover generates longitudinal variation in the connection status of some towns, which allows us to include municipality fixed effects. Identification of the effect of having a connection in Parliament then comes by comparing the same town when it is connected and when it is not, thus removing all unobservable municipality-level factors that do not vary with time.

In section 4 we show that municipalities with an external connection receive higher yearly transfers per capita, while no increase is found for internal connections. Internal politicians are more likely to have local level experience - as, for instance, town mayors or council members - while externals have more parliamentary and government experience, and are generally national party members. Moreover, by definition their birthplace is surrounded by other municipalities in the politician's district. As a consequence, internal politicians may have weaker incentives to favour their town over others, since they are subject to stricter voters' control and are already well established local figures. On the other hand, these issues play less of a role for externals, whose birth town is outside their district of election. We propose an explanation for the fact that externally connected towns receive more transfers based on the post-congressional career concerns of Italian politicians. A career in Parliament is not the only goal of a politician and this is especially true in Italy, where turnover often exceeds 50 percent. While being a member of one of the Chambers is the highest achievement for most, it is generally not the last. After exiting

[4]More precisely, the system, promptly baptised "Minotaur" for its dual nature, prescribed that three quarters of the seats were allocated via single member districts and one quarter proportionally.

[5]Using data for Italy, Gagliarducci, Nannicini and Naticchioni (2011) exploit the Italian dual-tier electoral system to show that majoritarian representatives present more bills related to their district of origin than their proportionally elected colleagues.

Parliament, many former representatives continue participating in public matters at a local level as, for example, town mayor or as regional council members. Politicians who plan to pursue a local level career may use transfers to manifest their intention to go back. We argue that this mechanism is especially relevant for external politicians who, being less known locally, have stronger incentives to show interest in the birth town. On the other hand, internals have less to win and more to lose. They have less to win because they usually have substantially more experience at the local level and do not need to obtain more notoriety; and they have more to lose because voters from neighbouring towns might punish favouring the birth town over others in the district.

We run a series of placebos and robustness checks in section 5 to assess the validity of our results. We construct dummies analogous to the ones used for our main specification but which capture connections that should, in principle, have no effect on municipal transfers. Specifically, we first use a dummy for being birth town of the first runner-up in one of the district elections. We then do the same for members of the regional (as opposed to national) Parliament and confirm that, as expected, none of those connections yields extra transfers. We also check that our estimates are robust to changing the accounting definition of our dependent variable or running the model in logs. We interpret these results as evidence that our findings are not driven by confounding factors correlated with the connection status of municipalities. In section 6 we provide some concluding remarks.

Related Literature

This paper is directly related to the literature on distributive policies and in particular to allocation decisions made by legislators. In principle, it is unclear whether one should at all worry about district targeting, since the beneficiaries are the voters who elected the representative in the first place. Weingast, Shepsle and Johnsen (1981), however, show that in a model in which resources are destined to districts but tax collection is at the national level, legislators may choose a of level spending which, for the country as a whole, is inefficiently high.[6] This happens because legislators fail to internalize the costs that the other constituencies have to bear. From the electoral point of view it may be convenient for a party to target either core support areas (Cox and McCubbins 1986) or swing districts (Dixit and Londregan 1995). McGillivray (2004) reconcile these competing theories by taking into account the type of electoral system. In a majoritarian system where seats are allocated by single-member districts, securing contested districts is fundamental to obtain the majority in Parliament. In proportional systems, where each vote counts the same, parties may instead want to target their strongholds to avoid the emergence of competitors.

Identifying empirically pork-barrel transfers to geographical areas presents some challenges. Given that district boundaries are generally drawn so that each district represents the same number of people, there is no natural variation in the strength of the connection between districts and the body that decides how funds are allocated. For this reason, in

[6] Battaglini and Coate (2007) point out that, in a dynamic model, this is true only under certain conditions.

the literature, different approaches have been proposed to overcome the problem. Aidt and Shvets (2012), for instance, exploit variation in term-limit status of US members of seven state Parliaments to see whether elections have a beneficial effect in limiting pork-barrel spending. By comparing legislators when term-limited with when not, they show that pork-barrel spending is larger when reelection incentives are present. Another possibility is explored by Atlas et al. (1995), who use the fact that US states are sometimes over and sometimes under-represented in Parliament. They find that over-represented states are able to secure more federal expenditures, suggesting that politicians play an active role in allocation decisions. Using province-level data for Italy, Golden and Picci (2008) instead use variation in politicians' clout and find that provinces receive greater investments when their districts elect powerful politicians.

Our paper differs from the cited examples in two respects. First, we use within-district rather than between-district variation to study pork-barrel politics. By assuming that politicians have a stronger tie with their town of birth than with others, we have a connection measure of the politicians with the territory that varies across towns and time. Using the fact that the electoral system present in Italy in the sample period favours geographically localized spending, we are able to separate members of the Parliament who have reelection incentives from those who do not. Our work also contributes to the literature on determinants of politicians' decisions. Most of the literature typically concentrate on reelection concerns (in the tradition of Downs 1957) or policy preferences (Wittman, 1983) as the main drivers of politicians' decisions. Recently, however, Diermeier, Keane and Merlo (2005) emphasize that serving in Parliament is best seen as a step in a long-term political career. Because politicians are also rational economic agents, they make career decisions by comparing alternative choices.[7] Members of Parliament typically come from the national party ranks, local politics or the private sector, and similarly may return to their previous occupation after serving or to continue working elsewhere. The choices they make are therefore inherently forward-looking, as serving in congress and actions as a legislator may affect future career prospects. In this respect, our results can be framed as reduced-form evidence on the importance of post-congressional career motives in representatives' decisions while in office. In particular, politicians seem to take into account the possibility of not being re-elected and prepare the ground for successive career at the local level.

2 The Italian institutional setting

Italy is divided, as of 2010, into 8,109 municipalities (*comuni*). Municipal governments receive transfers from the national and regional government bodies in order to cover part of their running costs and investment projects. The rest of their income is under the direct control of the municipality, and comes from tax collection, building permits, provision of public services, fees, etc. The mayor is the head of the *Giunta*, the executive body, and is

[7] Samuels (2002) makes a similar point and argues that politicians have "progressive ambition" which goes beyond immediate reelection, and present evidence for the Brazilian case.

also part of the town council, which has legislative powers. Municipalities are grouped into 110 provinces and these form the the 20 Italian regions. Regions are the most important sub-national administrative units. Five regions are granted special powers due to their peculiar nature: Valle d'Aosta, Trentino-Alto Adige, Friuli-Venezia Giulia (which are all bordering foreign countries and are home to language minorities) and the two islands, Sardegna and Sicilia.

The Italian National Parliament is composed of 945 elected legislators and is one of the largest in the world. The lower house, (*Camera dei Deputati*) has 630 representatives, while the Senate (*Senato*) is smaller with just 315. A complete legislature lasts five years although it is not uncommon that a government crisis results in new elections being held beforehand. Indeed, in the 1994-2006 period which comprises our sample there was an incomplete legislature (legislature XII) and two complete ones (legislatures XIII and XIV). For the purposes of this paper, there were a few important laws affecting electoral rules and regulating municipal financing enacted in the years between 1992 and 2006: the two electoral reforms approved in 1993 and 2005 that determine our sample period, the 1992 law regulating the way public transfers are allocated across municipalities and the 2001 constitutional reform which accelerated the process of decentralization.

The electoral laws

In 1993, a major reform changed the Italian electoral regime and the open-list proportional system that was in place since 1948 was replaced with a mix of proportional and majoritarian. Three-quarters of the seats (475 for the *Camera* and 232 for the *Senato*) were elected via single member districts, each choosing one legislator. The remaining quarter was assigned on a proportional basis. This setup was used to determine the composition of the two chambers of the Italian Parliament for the elections of 1994, 1996 and 2001. In 2005 a reform modified the system again and Italy moved to closed list proportional under which the last elections of 2006, 2008, and 2012 took place. For reasons that will become clear later, our sample is limited to the period 1994-2006 in which the majoritarian (single member district) system was in place. Cotta and Verzichelli (2007) argue that the shift to a single-member district electoral regime made the personal profiles of individual Italian politicians more important; a common feature of SMD systems.

Main laws regulating transfers to municipalities and regions

Italian Municipalities are funded through three channels: state or region transfers, tax revenues and non-tax revenues (revenues from public services, fees, building permits, participation in societies etc.).

A comprehensive law regulating funding to regions and municipalities was approved in 1992.[8] It provided a new framework for the system of state transfers based on objective criteria and on fairness considerations. Although the specifics varied over the years,

[8] *Decreto Legislativo n.504* passed on the 30^{th} of December.

these basic rules remained substantially unchanged throughout our sample period. State transfers to cover ordinary running costs are in part determined by law on the basis of municipality's population, surface and density, age composition, previous expenses and the presence or not of a military base. Another part is meant to cover expenses for "public works of major socio-economic interest" and to foster convergence of under-endowed municipalities to the national average and is arguably more discretionary.

While the mentioned legal criteria specifies the guidelines for determining the amount of transfers, the amount of the effective allocations is determined in the budget law, approved by the Parliament in the last days of December each year. This law details how and where the public spending goes, and occupies both the parliamentary and the public debate during the whole time between discussion and approval. The budgetary process has been repeatedly questioned both from the press and from the political world itself. Two former Prime Ministers eloquently spoke about the prevalence of manipulation in the allocation of funds:[9]

The Parliament becomes the most squalid suq [a bazaar] at the moment of assigning funds in the budget law. – Massimo D'Alema (2006)

[The habit] of scraping together large breadcrumbs is an illness that can't be extirpated. – Giovanni Spadolini, talking about politicians' behaviour.

The transfers law included in the budget distinguishes between "current" transfers, that are intended to cover basic running costs and "capital" transfers, destined to finance investments. Current transfers can be further decomposed into i) ordinary transfers, to cover basic expenses such as personnel, public transportation, maintenance of roads and buildings, etc. ii) transfers established by special laws and finally iii) a "convergence" fund, to bridge differences in endowments between municipalities.[10] Capital transfers are divided into i) ordinary capital transfers, ii) special capital transfers and iii) past mortgages payments.[11] We here and henceforth refer to transfers or $trans_{it}$ for municipality i and period t, as the per capita amount of all state transfers to that municipality in a given year excluding those meant to cover past mortgage payments. The rationale for removing past mortgages payments is that those quantities were established under the previous legislative regime, in place before 1992. After 1992, remaining due payments kept flowing to municipalities, but such quantities were not manipulable anymore, nor new mortgages could be signed.

In 2001, a Constitutional reform took place and municipalities, provinces and regions were given more financial and political autonomy. For the scope of this paper, the most important change was that municipalities and regions started to receive a fraction of the

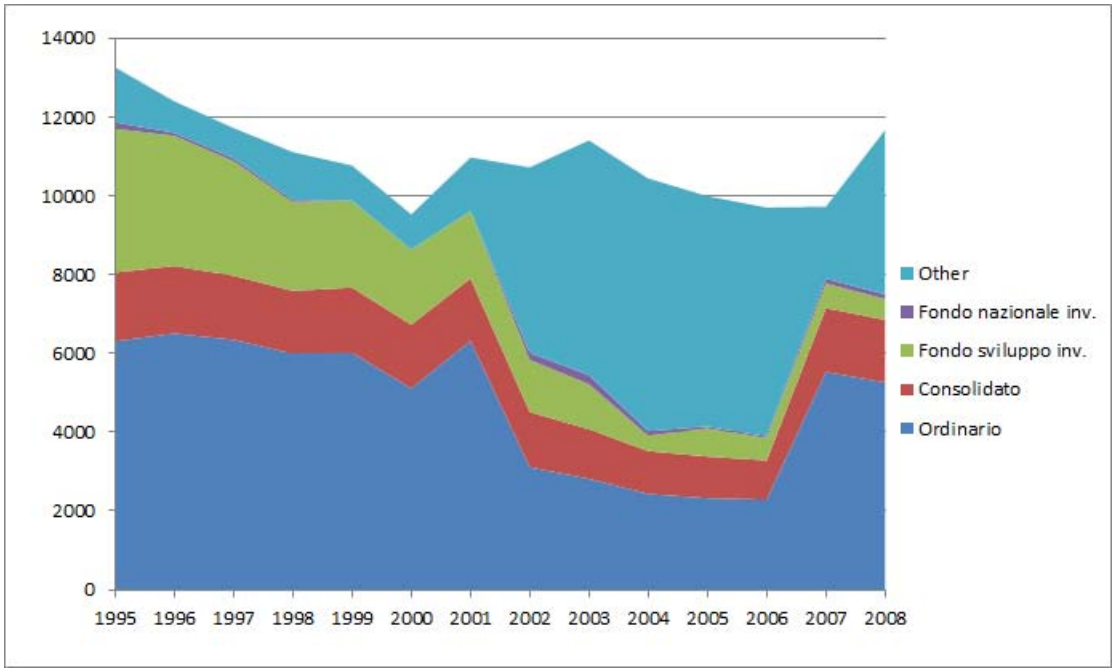
[9] Quotes extracted from the article "*Legge Stabilità, castelli, basiliche, maestri di sci: l'ultimo assalto alla diligenza*" published in *Il Messaggero Digital* by Mario Ajello (`http://tinyurl.com/bs46635`).

[10] These are called, in the laws, "fondo ordinario", "fondo consolidato" and "fondo perequativo" respectively.

[11] These are the "contributo nazionale ordinario investimenti", "contributo fondo speciale investimenti" and "contributo sviluppo investimenti" respectively.

FIGURE I

EVOLUTION OF STATE TRANSFERS IN ITALY BY CATEGORY



tax income collected there by the central government. These additional transfers were offset by a similar reduction in the ordinary transfers, as one can appreciate in figure IIa. However, given that in our empirical analysis we use *total* transfers as dependent variable, this change in the composition should be irrelevant. Incidentally we notice that, although one of 2001 reform's objective was to improve regions and municipalities' economic independence from the state, the total amount of transfers from the central government did not decrease substantially: in 2008, 7 years after the decentralizing reform, the central government transfers continued to represent a large fraction of municipal revenues (Ambrosanio, Bordignon and Cerniglia 2008).

3 Data

In our empirical analysis we want to know if legislators' birthplaces are favoured by Parliament in the allocation of funds. Therefore we construct our dataset by combining information on i) state transfers to municipalities, ii) elected representatives and iii) geographical and political controls obtained from different sources.

Transfers to municipalities

The transfer of resources to municipalities is competence of the Italian Ministry of Internal Affairs, and disaggregated data are available, for each of the 8,109 municipalities and for the period of interest, at the Ministry's website.[12] Valle d'Aosta, Trentino-Alto Adige,

[12] Details on data sources are provided in the Appendix

Friuli-Venezia Giulia are special autonomous regions and their municipalities are in general not directly funded by the Ministry. For this reason, we exclude them from our analysis. This leaves us with a dataset of 15 ordinary regions plus Sardegna and Sicilia, containing a total of 7,476 *comuni*, for each year from 1994 to 2006.

The total amount of resources to be transferred to the *comuni* in any given year is determined by the end of the preceding year in the budget law. A large part of those funds are effectively transferred to the municipality at the scheduled time and the remaining is generally settled within two additional years. Looking at the distribution of transfers across municipalities reveals substantial heterogeneity, even in per capita terms. In figure IIa we plot on a map the total state transfers in per capita terms for the 1996 legislature for each municipality. Municipalities in mountainous and southern areas appear to receive more money per capita, while in the north and especially in the river Po valley transfers are lower. Determinants of this heterogeneity are in large part population density and economic development differences, and some areas also benefit from higher benefits to cover costs for national interest infrastructures. The light areas in the north-west and in the north-east are Valle d'Aosta, Trentino and Friuli-Venezia Giulia which received almost no direct transfers from the State.

Data on representatives

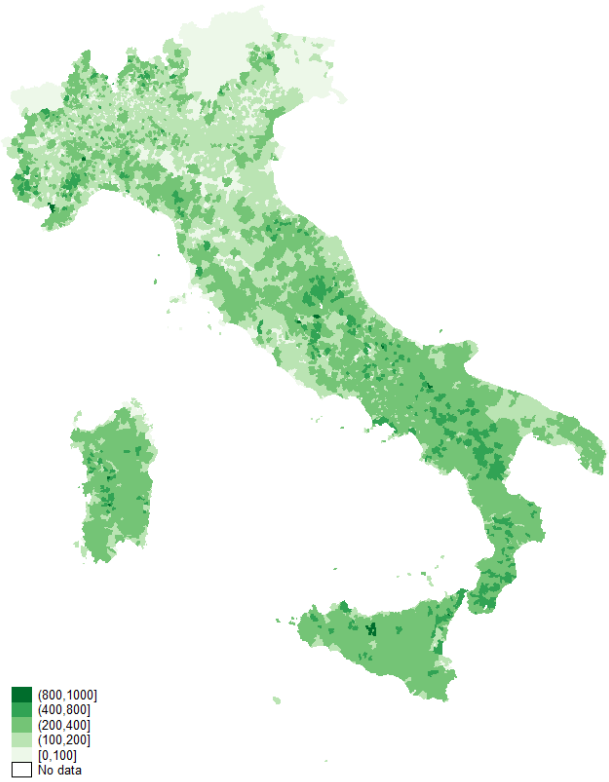
We also gathered information about all members of the national Parliament for the 1994-2006 period. Data for the lower house is obtained from the archive of the *Camera* while for senators we turn to the *Senato* historical website. Information on birthplace, date of birth and party is then complemented with personal characteristics of politicians from Gagliarducci, Nannicini and Naticchioni (2010). Data on candidates from each of the electoral districts in Italy and their electoral outcomes are obtained from election data provided by the Ministry of Internal Affairs. The Ministry of Internal Affairs also provides information on anyone who has been elected for public office at the sub-national level since 1985, including date and place of birth, party membership, education and other basic personal characteristics. From this source we obtain data on elected representatives for the regional Parliaments of each of the 17 administrative regions in our sample and for town mayors for the 1985-2012 period.

In figure IIb we show the geographic distribution of national legislators' birthplaces. One can notice that a large number is from the capital, Rome, and, not surprisingly, from other large cities like Turin, Milan, Genoa, Naples, etc. Still, there are several smaller municipalities which are also connected to Parliament.

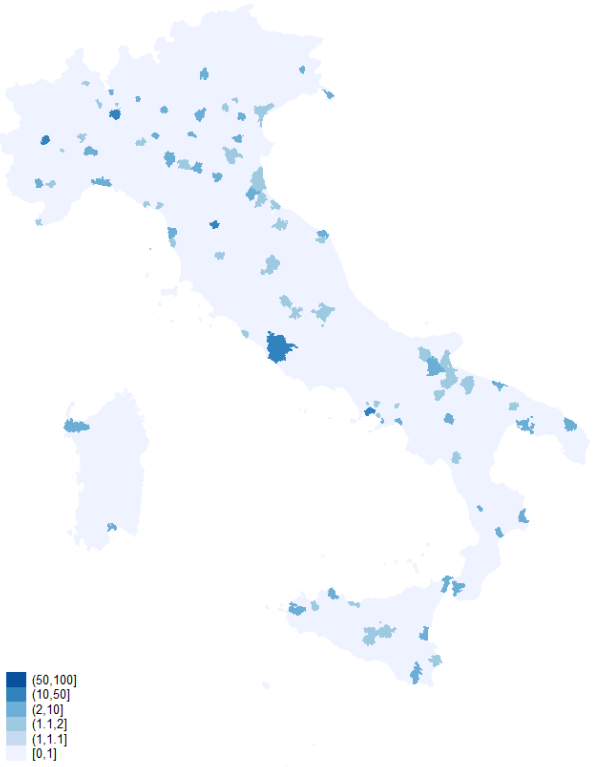
Political and geographical controls

Geographical, demographic and economic characteristics of municipalities are important determinants of the amount of transfers the state decides to allocate (some of them are explicitly indicated in the law, as we saw before). In our analysis we control for these factors using available information. Yearly data on population is obtained from the Italian

FIGURE II



(A) TOTAL STATE TRANSFERS BY MUNICIPALITY, LEGISLATURE XIII



(B) REPRESENTATIVES BY MUNICIPALITY OF ORIGIN, LEGISLATURE XIII.

Source: Data from the Ministry of Internal Affairs.

Statistical Office (ISTAT). Surface of the municipality, together with geographical data on maximum and minimum altitude as well as geographic coordinates are available from the Italian Agency for Energy (ENEA). We also use data on the presence of military bases for each *comune*. In order to control for the political leanings specific to each municipality we use data on voting behaviour in national elections at the municipal level from the elections registry.

Descriptive Statistics

Table I presents a series of characteristics of Italian municipalities, grouped by legislature (each column corresponds to the average across the respective period). After excluding the three special regions, the number of municipalities in our sample is 7,476. The average surface of municipalities is 37.1 km^2 and density is about 291 inhabitants per km^2. Municipalities are smaller in the north, with an average population of about 5,400, and larger in the center-south with average populations close to 9,000 inhabitants. Total transfers per capita are higher in the south (285 euros per year in the 1994-1995 period) and in the center (224, against the 182 in the North) arguably a consequence of fiscal equalization mechanisms present in the law. Being the birthplace of a legislator is more common for southern and central municipalities (about 8 percent of the southern municipalities are birth towns of at least one member of the national Parliament). Among municipalities having a local elected as a national legislator, the average number of representatives per town ranges from about 1.5 in the south to 1.6-2 in the north.

TABLE I

DESCRIPTIVES - MUNICIPALITIES

			Election		
			1994	**1996**	**2001**
Population	mean [std. dev.]	North	5,375	5,399	5,482
			[32,379]	[30,688]	[29,763]
		Center	9,100	9,144	9,175
			[33,384]	[32,930]	[32,253]
		South	8,929	8,952	8,979
			[33,164]	[31,808]	[31,808]
Surface (km2)				37.1	
				[51.5]	
Density (inh/km2)	mean [std. dev.]			291.1	
				[647.3]	
Total transfers per capita	mean [std. dev.]	North	182	163	229
			[205]	[99]	[125]
		Center	224	214	248
			[121]	[125]	[138]
		South	285	279	280
			[104]	[108]	[122]
% of munic. with one repr.	mean	North	3.2	3.6	3.4
		Center	6.1	6	6.3
		South	8.6	7.7	7.8
Avg. number of repr.	mean	North	2	1.6	1.6
		Center	1.7	1.8	1.7
		South	1.4	1.5	1.6
N of Municipalities				7476	
N of Province Capitals				110	
N of Munic. with at least one rep.			408	405	405

Note: the number of municipalities and of province capitals refers to 2005.

Total transfers per capita are in 2005 euros.

TABLE II

DESCRIPTIVES - PARLIAMENT MEMBERS

	Exterior	Interior	Prop.	Int-ext
Personal characteristics				
Male (%)	90.4	92.6	80.5	-2.2
				[1.5]
Married (%)	75.2	80.5	71.9	-5.3**
				[2.0]
Age (years)	50.8	49.8	50.4	1.1**
				[0.5]
Lower secundary educ. (%)	0.8	1.6	2.2	-0.8
				[0.6]
Upper secundary educ. (%)	25.3	27.2	23.7	-1.9
				[2.3]
Degree (%)	61.1	60.1	61.7	1.1
				[2.3]
MA/PhD (%)	9.7	9.1	8.8	0.7
				[1.5]
Income	120.0	114.2	113.5	5.8
				[9.6]
Currently appointed in national party (%)	31.5	28.3	33.6	3.2
				[2.2]
Self-reported past political career				
Years in Parliament	3.2	2.5	3.2	0.7***
				[0.2]
Terms in Parliament	1	0.8	1	0.2**
				[0.1]
Member of Parliament (prev. term)	45.2	44.1	43.8	1.1
				[2.1]
Member of govt. (past)	7.4	5.3	10.9	2.1*
				[1.2]
Region council member (past)	12.2	13.3	13.4	-1.1
				[1.7]
Province council member (past)	10.3	13.8	9.4	-3.5**
				[1.7]
Mayor (past)	8.9	18.1	10.5	-9.2***
				[1.8]
National party member (past)	26.2	17.4	24.2	8.7***
				[2.1]
Local party member (past)	24.5	29.3	26.6	-4.7**
				[2.3]
Pre-Congressional Career (%)				
Any town	32.0	46.4	32.9	-14.4***
				[2.5]
Birth Town	8.9	36.7	21.0	-27.8***
				[2.1]
Birth Province	3.8	9.1	3.7	-6.4***
Post-Congressional Career (%)				
Any town	22.7	28.2	21.1	-5.4**
				[2.2]
Birth Town	5.0	18.1	9.1	-13.1***
				[1.6]
Birth Province	3.2	8.0	4.2	-4.7***
Observations (NT)	1125	993	704	[1.2]

Notes: Total income is gross declared average income, in thousand euros. Self reported data come from Gagliarducci et al. (2010)'s dataset. Pre and post-congressional career data are only for 1985 to 2010 and are also obtained by authors' calculations from administrative records. t-statistics in brackets.

In Table II we split members of the Parliament into those elected in the proportional quota and those elected in single member districts. The latter are further divided into externals and internal politicians. Recall an internal is a politician elected in a constituency that includes her birthplace, while an external is elected in a constituency that does not include her birthplace. We illustrate this difference with an example: in 1994 Roberto Ronchi was elected as a member of the *Camera*. Ronchi was born in Milano and elected in one of the Milanese districts. As a result, we classify him as an internal politician. Conversely, in the same election Alessandro Meluzzi, born in Naples, was elected as a representative for Torino. Hence, we classify Mr. Meluzzi as an external politician.

Although there are no significant differences across categories in some personal characteristics (for instance, average education levels and incomes are very close), we observe that females are mostly elected in the proportional quota. Also, external politicians have slightly higher income and are more likely to be national party members. The second panel of the table reports self-declared data on past political career (data from Gagliarducci, Nannicini and Naticchioni 2010). Interestingly, externals have more experience in Parliament and in the government, while internals are much more likely to have held a position at the local level, either as a region or province council member or as a town mayor. Self-reported information on political careers pins down one important difference between internals and externals: the former are more likely to be politicians with a long standing experience at the local level, either as elected officials or as members of the party structure. On the other hand, externals are more likely to be national level figures: besides being 8.7 percent more likely to have been national party member in the past, they also have more legislative and government experience.

In the third panel we use our data from the Ministry's administrative records for the period 1985-2012 to distinguish between experience in administering any town, the town of birth or the province of origin. Results confirm that internals have more pre-Parliament experience at the local level and also show that they are more likely to have post-Parliament experience - although the difference with externals is reduced. We will come back to these comparisons in section 4.3.[13]

4 Empirical analysis

In this section we test whether members of Parliament target their birthplaces with public transfers and investigate the reason why they do so. To this aim, we begin by comparing connected with unconnected towns. A municipality is *connected* in a given year if it is the birth town of at least one member of the national Parliament (MP). We show in figure III the differences in the mean transfers per capita received by connected and unconnected towns for each of the legislatures in our 1994-2006 sample. The pattern is clear, connected

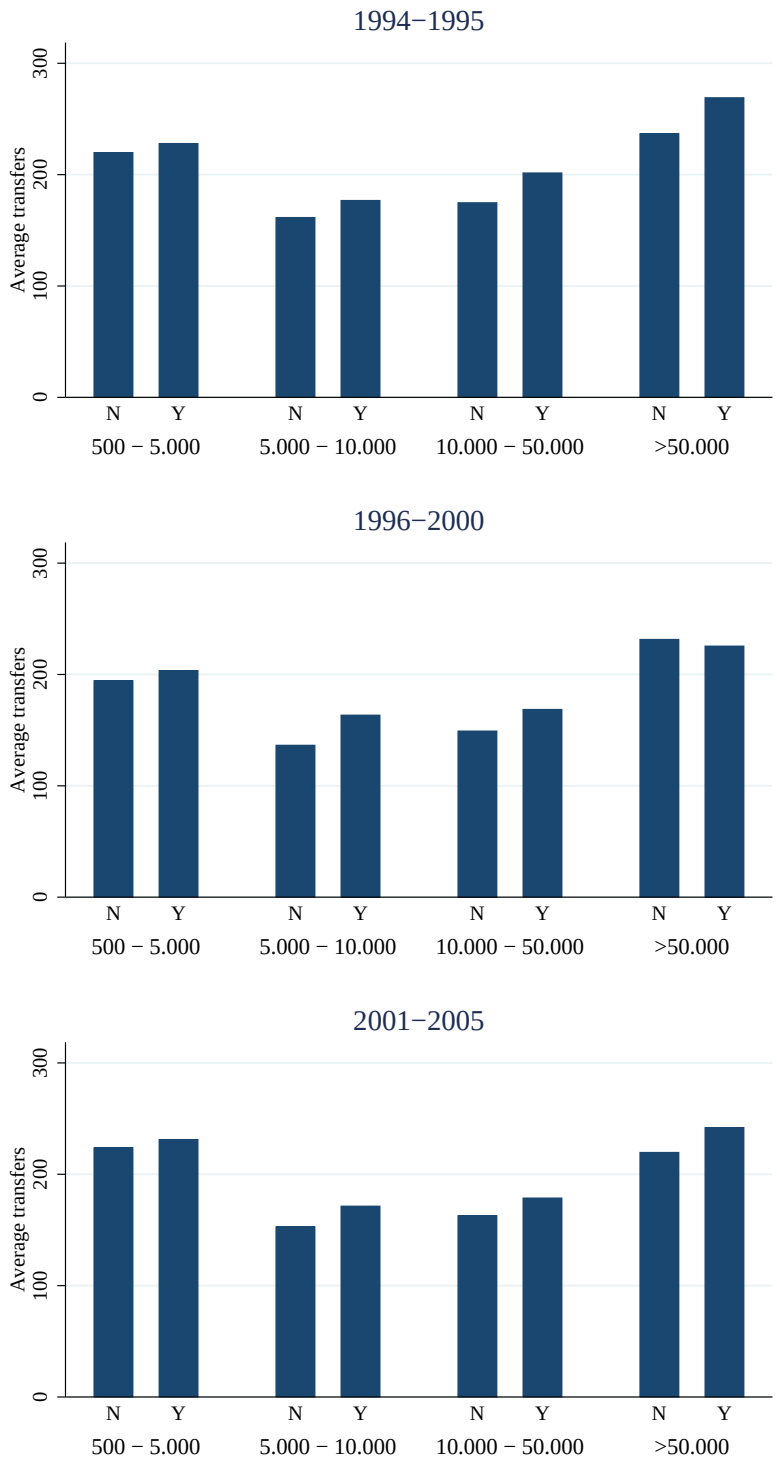
[13]For the period 1996-2012 we also have access to data on candidates in town and province elections. Given that our sample starts in 1994, then, no information on candidates is available for the pre-congressional career. In calculating the figures in the last panel of table II, instead, we considered as "post-congressional experience" both being candidate and being elected.

towns receive higher transfers per capita in all legislatures and all population groups.

To explore what drives these extra transfers we split connections into three categories: internal, external and proportional. A town has an internal connection if it is the birthplace of an internal legislator and a similar definition applies in the other two cases. For a municipality i and a year t, we then define the three dummies $ext.\ connect_{it}$, $int.\ connect_{it}$ and $prop.\ connect_{it}$ which take value one if the town has, respectively, an external, an internal a proportional connection. The rationale for separating connections in three groups comes from differences in incentives. By isolating politicians who were elected *outside* the constituency where they were born, we aim to identify non-electoral interests. The use of birthplace as a connection between a legislator and a specific town is motivated by the idea that legislators retain links with their towns of birth throughout their lives and may know local politicians (Marangoni and Tronconi, 2011). Moreover, given that birthplaces are public information, the politician can arguably use this to claim credit for the increase in transfers. Recall our dependent variable is municipal transfers per capita received by a municipality in a year after excluding past mortgage payments $trans_{it}$.

Figure III

Average Transfers per capita by population for all elections



Notes: In each of the three panels, the bins are the average transfers p.c. received by municipalities which are (column Y) or are not birth towns of a member of the Parliament (column N). From left to right we report results for different population bands. We exclude towns with populations under 500 from this graph because they rarely have a connection. Figures are in 2005 euros.

4.1 Econometric specification

In our baseline specification we consider a regression of transfers per capita $trans_{it}$ on the first lag of the three connection dummies taking value one if municipality i has a connection with Parliament in year t as defined before:

$$trans_{it} = \beta_1 ext.\ connect_{it-1} + \beta_2 int.\ connect_{it-1} + \beta_3 prop.\ connect_{it-1} + \delta' x_{it} + u_{it}, \quad (1)$$

where β_1 measures the extra yearly transfers per capita that a municipality receives on average for being the birth town of an external representative in the Parliament while β_2 and β_3 capture the effect for internal and proportional representatives, respectively. We use the lag instead of the contemporaneous value because transfers for t are are approved with the budget law at the end of the previous year. As usual, x_{it} is a vector of controls, δ is a conformable vector of parameters and u_{it} is a random disturbance term.

The choice of controls is partly given by the criteria for allocation of transfers to municipalities contained in the 1992 law we described in section 2. In particular, we include a third degree polynomial in lagged population, a set of lagged population group dummies, lagged population density, surface in hundreds of square hectometres, a dummy taking value one if the municipality has a military base and a dummy taking value one if the municipality is a province capital. We also include two political controls: one is a dummy indicating if the government coalition won in town i in the previous election, and the other is the share that the governing coalition obtained in such election. These variables are meant to control for the possibility that towns which strongly support the winning coalition at the national elections are later favoured at the time of distributing transfers.

In most of the specifications we assume that the disturbance term is of the form $u_{it} = \alpha_i + v_{it}$, where α_i captures time-invariant heterogeneity across municipalities and is possibly correlated with the regressors. In these cases we take advantage of the longitudinal dimension of our dataset and estimate the model using fixed effects. Under these conditions identification of the βs coefficients comes from variation in the connection dummies across time induced by parliamentary turnover in each election. Naturally, in the fixed effects specification, all time invariant variables are subsumed into α_i and, hence, excluded from the estimation.

Using fixed effects we control for determinants of transfers which are potentially correlated with having a connection but are unobservable. Some municipalities may have strong local party structures which increase both their political clout and their chances of being the birthplace of a member of Parliament. Likewise, a municipality may be a cultural hub, receiving more funds for cultural matters and at the same time having increased civil society participation. Reverse causality could also be an issue. Municipal governments which have historically received more transfers could become influential within the party and increase the probability of including a local in national party lists. All of these issues would be resolved by the fixed effect specification under the assumption that the relevant confounding factor is fixed over a twelve year period.

Depending on the specification, year, region or year-region dummies are also added in order to capture fixed or time-varying regional effects (e.g. differences between southern and northern regions or changes in political orientation) as well as differences in business or political cycles.

Before moving to the results, we briefly review the possibility of pursuing a Regression Discontinuity Design (RDD) approach to identification of the effect of interest. In our case, RDD amounts to comparing transfers to birth towns of parliamentarians who won the district by a small margin with transfers to birth towns of close losers. The difference in transfers could then be interpreted as the causal effect of having a connection in Parliament, because the connection status of municipalities is "as good as if it was randomly assigned". Since our units of observation are municipalities and not politicians, however, this grouping of politicians does not translate one-to-one in grouping of municipalities, which can be birthplaces of winners and losers at the same time. In the treatment effect terminology, such municipalities belong both to the treated and the not treated. One solution would be to discard those observations and compare birth towns of only one winner with birth towns of only one loser, but this drastically reduces the number of observations.[14] Large and medium sized towns are, in fact, birthplaces not only of a large fraction of parliamentarians but also of runner-ups. To get an idea of the numbers, if we take Rome, Milan and Naples, they were, in 2001, the birthplaces of no less than 10.6 percent of district winners and of 12.9 percent of runner-ups. The issue of small sample size is particularly relevant in our case since, for each term, the number of parliamentarians elected in single-member districts is only 707.

4.2 Baseline Results

In columns 1 to 4 of table III we present estimation results with different sets of time and geographical dummies. Standard errors are clustered at the municipality level in all specifications. Column 1 reports OLS estimates for equation 1 with year-region effects. We observe that externally connected towns are associated with 9.5 extra euros per capita per year, while the effect of an internal and proportional connections is indistinguishable from zero.

Results for the within group estimator are presented in column 2-4, with different sets of time and region dummies. Time dummies included in column 3 are meant to capture aggregate trends in transfers which could arise, for example, as a consequence of the 2001 constitutional reform. Region-time dummies, included in column 4, may deal with different regional patterns. Given that Italian parties tend to have stronghold regions (e.g.: The central regions have overwhelmingly voted left for decades) the inclusion of these interactions may capture the evolution of these regional trends. Moreover, it may also deal with heterogeneous business cycles between north and south.

One potential issue with using the fixed effect estimator in this context is that the

[14] Gagliarducci, Nannicini and Naticchioni (2011) use our same data for an RDD experiment, but their analysis is at the politician level so they do not incur in our problem.

connection dummies exhibit scarce longitudinal variation in the majority of municipalities. This is a consequence of two combined factors. In the first place, in the 1996 and 2001 elections around half of all legislators were reelected, so the connection status of their municipality of birth was unchanged. Secondly, many medium and large cities such as Rome, Milan or Naples show no time variation in their connection status as they are always connected. The converse happens with the vast majority of small towns, which never are.

Despite these problems, results in all columns of table III indicate a positive and statistically significant effect of $ext.\ connect_{it-1}$ on transfers.[15] While the estimated coefficient of having an external connection is statistically significant across specifications, its magnitude falls from 9.5 (column 1) to about 4.1 once we include municipality fixed effects (column 4). This suggests that indeed unobserved town-level characteristics may induce an upward bias in the coefficients of interest if ignored. We concentrate on results in the last column, which includes year-region interactions and municipality fixed effects.

According to these results, having a connection in Parliament increases yearly per capita transfers to a municipality by roughly 4.1 euros on average. This amounts to about 1.8% of the overall sample mean and 2.1% of the sample median in 2005, corresponding to a one million euros increase in transfers over a full legislature for a small sized province capital.[16] Interestingly, we find that that neither having an internal nor a proportional politician in Parliament affects transfers to municipalities: the coefficient for the internal connection is close to zero while the one for proportional is about 2.9 but imprecisely estimated (this may be due to the fact that only one quarter of the Parliament is elected in the proportional quota). We will come back to these results later.[17]

The other estimated coefficients reveal that being a province capital has no significant effect on transfers, while higher density and surface area are associated with larger allocations. The coefficients on the dummy for having voted for the government coalition in the previous elections and the winning share of the government coalition are meant to capture the intensive and extensive margin of being politically aligned with the Parliament majority. Although estimates fluctuate across specifications, overall the average combined effect is positive, as expected. This is interpreted as an informal validation of our estimating equation.

The baseline result that externals are associated with additional transfers is robust across specifications and will be further challenged with a series of robustness checks in section 5. We feel confident in interpreting the result as the effect of members of the Parliament controlling the purse strings during the budget law approval process and not a

[15] A few cities were so large that were divided into several constituencies, so that defining an external connection in such cases is potentially ambiguous. We address this issue by collapsing multiple constituencies into one, corresponding to the city boundaries. As a robustness check, we also run all estimations again by dropping all multi-constituency cities, and results are unaffected.

[16] These calculations are for a 50,000 inhabitants city, such as Siena or Mantua.

[17] For completeness, we also run the same regressions using, instead a dummy for external, a variable that counts the number of connections and a specification with dummies for having 1, 2-3 and 4 or more connections. Results are presented in tables X and XI in the Appendix.

TABLE III

BASELINE SPECIFICATION

	(1) Transfers p.c.	(2) Transfers p.c.	(3) Transfers p.c.	(4) Transfers p.c.
Ext. connect t-1	9.538***	6.118***	5.147**	4.116**
	(3.463)	(2.150)	(2.235)	(1.993)
Int. connect t-1	2.594	-1.142	-0.609	0.120
	(2.983)	(2.425)	(2.618)	(2.312)
Prop. connect t-1	5.147	4.069	4.004	2.897
	(3.795)	(2.934)	(3.067)	(2.804)
Town voted for win.	3.067*	2.458*	-0.301	-2.841**
	(1.673)	(1.317)	(1.276)	(1.264)
Share of win. coal.	-6.139	47.13***	24.86***	10.79**
	(5.005)	(4.000)	(4.251)	(4.562)
Pop. density t-1	0.633***	1.353**	0.779	-0.0677
	(0.154)	(0.637)	(0.574)	(0.597)
Surface area in km2	1.942***			
	(0.238)			
Province capital	8.669			
	(9.836)			
Year Effects	Y	N	Y	Y
Region Effects	Y	N	N	N
Year*Region Effects	N	N	N	Y
Municipality F.E.	N	Y	Y	Y
R^2	0.499	0.773	0.795	0.812
Obs.	89164	89164	89164	89164

Standard errors in parentheses

S.E. clustered at the municipality level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

consequence of other confounding factors.

4.3 Internal and external politicians: different incentives

This section analyses the different incentives faced by internal and external politicians and the way electoral motives may affect whether or not legislators push for more transfers towards their birthplace in the budgetary process. We first analyse how these type of transfers vary over the electoral cycle and conclude that they are lowest when elections are approaching. Secondly, we compare the degree of localness of internal and external politicians as measured by the number of geographically targeted sponsored bills. We conclude that internals target bills to their district of election more actively than externals, in line with their profiles as local politicians. In addition, we observe that externals balance targeted bills between their district of election and their district of birth. Finally, we note that municipalities on districts represented by external politicians receive less transfers per capita on average suggesting that these legislators are less concerned about favouring their district of election.

From these analyses we conclude that i) electoral incentives cannot explain our results and probably act against birth town bias ii) external politicians are less concerned about favouring their district of election as their support lies in the national party structure.

Electoral Cycle

In our sample almost half of members of Parliament are re-elected each election, more than two-thirds of them in the same district. About 80 percent of re-elected externals remain externals, while only a small fraction becomes internal or proportional; similar figures hold for re-elected internals. In a country where winning the next election is more than a mere possibility, politicians have strong motives for pleasing the electorate and keep their support.

In the span of a legislature, these motives are especially pressing towards the end because elections approach and voters' attention rises.[18] By interacting our two connection variables with a dummy for first year of term and another for last year of term we can test for the existence of a spending cycle to birthplaces.

The *first year* dummy takes value one in 1994, 1996 and 2001, while the *last year* is one only in 2000 and 2005.[19] We estimate the fixed effect model with year-region dummies including first and last year interactions with our connection variables and report results in Table IV. We keep the *int* and *ext* connection variables in all specifications, and include different interactions in each column.

[18] This would be a case of an *opportunistic cycle*, that arises when electoral pressure forces politicians to manipulate public policy in order to increase chances of reelection. For evidence on this, see, e.g. Akhmedov and Zhuravskaya 2004.

[19] Given that the 1994 term ended unexpectedly, we do not consider 1995 a the last year of the legislature (its dummy is set to zero). Including it would however leave results qualitatively unchanged. Similarly, repeating the exercise using the first two and last two of the legislature (instead of just one) leads to very similar results.

TABLE IV

FIRST AND LAST YEAR EFFECT

	(1) Transfers p.c.	(2) Transfers p.c.	(3) Transfers p.c.
Int.*first year t-1	6.112***		4.887**
	(2.204)		(2.143)
Ext.*first year t-1	5.231**		3.934
	(2.645)		(2.572)
Ext. connect t-1	2.730	5.198**	3.985**
	(1.725)	(2.090)	(1.761)
Int. connect t-1	-1.610	1.131	-0.455
	(2.060)	(2.370)	(2.065)
Int*last year t-1		-7.241***	-5.790***
		(1.339)	(1.033)
Ext*last year t-1		-7.179***	-6.042***
		(1.461)	(1.057)
Year*Region Effects	Y	Y	Y
Municipality F.E.	Y	Y	Y
R^2	0.812	0.812	0.812
Obs.	89164	89164	89164

Standard errors in parentheses

S.E. clustered at the municipality level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Results in column 1 show that both internal and external connections are associated with positive spending to municipalities in the first year, while the effect for the remaining years, captured by the *ext. connect* and *int. connect* dummies, is positive only for externals. When we include only the interactions for last year of the term, we see that spending is remarkably reduced in the last years compared to the rest of the legislature. Notice that the negative sign is to be interpreted relative to the reference group which, in column 2, is all years but the last. In the last column we include all the interactions, and the coefficients maintain the signs although they slightly decline in absolute value.

There are two conclusions that can be drawn from this exercise. We observe that for both internals and externals pork spending to the birth town is drastically reduced in the year before elections: politicians seem to increase transfers only in the years in which reelection is not an immediate concern. Secondly, we see that the baseline result that internals do not send pork home follows from averaging across the whole term. Rather that not being interested at all in favouring the home town, it appears that electoral incentives act against doing so.

Different Profiles

We continue to study the difference in behaviour between internals and externals by comparing them in terms of observable characteristics. In the second and third panels of table II we see that internals are more likely to have a local level background while externals are often national figures, having longer experience in national politics and in Parliament.

The choice of candidates in Italy is done by parties, and no primary elections are held. Vignati (2004) explains that generally proposals are made by the local level party administration and are subject to approval by the national party authorities.[20] When an external candidate is chosen, it might be either because the national party is interested in winning a particularly hard district or, more commonly, because they need to find a place for a party member who is deemed important.[21] Externals are therefore less likely than internals to have strong links to the constituency of election because their support within the party structure lies usually at the national level.

To obtain evidence on this, we proceed to merge part of our data on Parliament members with the dataset used in Marangoni and Tronconi (2011) corresponding to the *Camera* for legislatures XIII and XIV. This dataset contains useful variables that measure MPs' level of "localness". In particular, we use the variables that count the number of bills that each politician presents as first signer which are directed to i) her region of birth and ii) her constituency of election. Notice that our data does not allow to distinguish whether bills were targeted to a specific birthplace or to other municipalities within their constituency.

[20] There are differences between parties: left-wing party *Democratici di Sinistra* leaves local committees freedom of choice, while *AN* and *Lega Nord*'s national bureau has to formally approve candidatures. Finally, *Forza Italia*'s statute allows the national party to directly pick candidates.

[21] The phenomenon of the *paracadutati*, literally "parachuted", has been and is still widely debated by the press and academia, to the point that a proposal to set a three-year residence obligation before being able to be a district candidate has been discussed, see `http://www.linkiesta.it/riforma-elettorale-proporzionale`.

We report some summary statistics in table V.

TABLE V
LOCALNESS OF POLITICIANS

	Internals	Externals	Proport.	Ext - int
# bills to region of birth	1.3	0.6	0.8	-0.67 ***
	[2.0]	[1.3]	[1.9]	[0.1]
# bills to constituency of election	1.3	0.9	0.7	-0.45 ***
	[2.0]	[1.5]	[1.8]	[0.1]
total bills	9.9	9.8	9.1	-0.1
	[13.5]	[12.4]	[15.3]	[0.9]
Obs.	379	420	239	

Notes: data on bills obtained by Marangoni and Tronconi (2011). Only 1996 and 2001 legislatures. Obs. do not sum to 1250 because of missing values.

The average total number of bills signed per term is the same for all categories (almost 10), but there are differences. Internals sign more bills directed to their constituency than externals (1.3 against 0.9), but neglect the rest of the region of birth. For internals, the region of birth contains the constituency of election by definition, while for externals this is not necessarily the case. Externals seem to split effort between caring about who voted for them (the constituency) and their region of birth.

Constituency Level Analysis

If externals indeed have competing interests in pleasing their district of election and their birthplace, we should observe this by looking directly at the allocation of transfers at the constituency level: if the amount of resources available for redistribution is limited and if our hypothesis is correct, constituencies that elected an internal have to receive, on average, larger transfers than the ones represented by an external.

We aggregate municipal transfers at the constituency level for the *Camera* and run a regression of transfers per capita on an indicator which equals one if the constituency is represented by an external MP. After dropping multi-constituency cities (like Milan, Palermo, Rome etc.) and special regions, we are left with 368 (out of a maximum of 475) observations for each of the 12 years of the sample. We add as controls a cubic in population, density, surface and different sets of time/region-time dummies. Given that some constituencies may be birthplaces of politicians elected in the proportional quota and that this could add to their political clout we also include *prop. connect*$_{it-1}$ as a control. Since each constituency can be represented by either an internal or an external politician, the coefficient of *ext.connect* can be interpreted as the conditional effect of having elected an external on transfers.

We see in table VI that municipalities in districts represented by externals indeed receive less transfers for an estimated coefficient of -23 to -11 euros per capita per year (for the OLS specifications, columns 1-3), supporting the hypothesis that externals are

TABLE VI

CONSTITUENCY-LEVEL ANALYSIS

	(1) Transfers p.c.	(2) Transfers p.c.	(3) Transfers p.c.	(4) Transfers p.c.
Ext. connect t-1	-23.05***	-11.60***	-10.79***	-1.963
	(4.509)	(3.060)	(3.108)	(2.559)
Prop. connect t-1	13.74***	8.763***	8.153***	2.232
	(4.196)	(3.015)	(2.975)	(2.854)
Year Effects	Y	Y	Y	Y
Region Effects	N	Y	Y	N
Year*Region Effects	N	N	Y	N
Constituency F.E.	N	N	N	Y
R^2	0.243	0.549	0.643	0.768
Obs.	4272	4272	4272	4272

Standard errors in parentheses

S.E. clustered at the constituency level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

substituting constituency transfers with birth town aid. Given the very small time series variation (few constituencies switch from an internal to an external in the sample) when we include constituency fixed effects the estimated coefficient keeps the negative sign but loses significance and greatly decreases in magnitude to -1.96.

These last two exercises suggest that reelection concerns are stronger for internals, who put more effort in signalling their interest to the constituency of election. Internals usually do not have the possibility of being candidates in another district (it happens only in 6.2 percent of the cases) and have to work locally to secure reelection. On the other hand, externals are backed by the national party (or are party leaders themselves) and they can be re-elected somewhere else should the necessity arise.

4.4 Post-Congressional Careers

In the previous section we argued that immediate incentives for reelection in Parliament cannot explain our results. This section presents an alternative explanation based on the post-congressional careers of Italian legislators and discusses several alternatives.

According to Merlo et al. (2008), up to 44.2 percent of all legislators in post-war Italy continued in politics after exiting Parliament[22]. More than one third of them are elected at the local level (town, province or region), one tenth at the national level while roughly

[22]This figure masks significant heterogeneity by pre-parliamentary occupation. The fraction of legislators staying in politics after their congressional career varies between 28 percent (legal services) and 74 percent (politics) depending on previous occupation.

a half joins the party ranks. In a Parliament in which, on average, half of the members is not re-elected, a career at the local level is an important opportunity.

Our hypothesis is that legislators use transfers to their birth town as a way to improve their prospects of a political career there. This can occur either through an increase in their chances of being elected in a municipal election or through an increase of the value of winning itself. In the first case, transfers could be a way for the politician to buy influence or popularity; in the second case, larger transfers today may generate larger budgets in the years to come. The fact that we do not observe any effect of internal connections on transfers can then be interpreted as a consequence of either the effect of stronger reelection incentives - which go against favouring the birthplace - or of the fact that these politicians are already well established local figures (see section 4.3).

This career concerns hypothesis cannot be directly tested since variables such as popularity at the local level or value of office are hard to measure. Yet, there is at least one verifiable implication: parliamentarians who later take a position as public officers in their birth town should be the ones who more actively affect transfers while in office. We collect data on all municipality-level administrators (mayors and members of the *Giunta*) and members of town councils for the period 1994-2012 and match them with our legislators' data using full name, date and town of of birth.[23] We also obtain data on mayoral candidates in all municipal elections held in the period.

In order to test whether the effect estimated in section 4.2 is driven by externals who later return to their birth towns we divide external connection in two groups: one, which include externals who we know later went back as local politicians in the birth town, and another, with externals who did not. Similarly, we also split the internal connection dummy in two and include the resulting four variables in the following estimating equation:

$$trans_{it} = \beta_1 ext.\ post_{it-1} + \beta_2 ext.\ nopost_{it-1} + \beta_3 int.\ post_{it-1} + \beta_4 int.\ nopost_{it-1} + \delta' x_{it} + u_{it},$$

While this specification is arguably the best we can do given the available data, a few caveats need to be mentioned before moving to the results. The experience variables are obtained using *ex post* data on realized transitions of legislators to local governments.[24] However, the decision to transfer funds to their birth town is taken previously, when the legislator does not know when she will be leaving Parliament and whether she will effectively be willing or able to pursue a career at the local level. Therefore, our local experience dummies can only be seen as a proxy for the intention of the politician to go back to her birthplace and estimates of β_1 and β_3 may be downward biased.

Another drawback of this approach is that only about 13-18 towns (depending on the year) out of 7,476 have $ext.\ post_{it-1} = 1$, while 45-73 have $int.\ post_{it-1} = 1$. As a consequence, we quickly run into a problem of precision of the estimates, especially in the

[23] Although in principle it is possible that there are people with coinciding name, date and town of birth in our dataset, we are confident that mismatches using this algorithm are rare.

[24] We also considered being a mayoral candidate, for the years in which the data were available, as having post-congressional experience.

specification in which a rich set of dummies is included. Moreover, the small number of observations which identify these parameters may make them sensitive to outliers.[25]

Estimation results are presented in table VII. Results are consistent with the career concerns hypothesis: the coefficient β_1 is positive and larger than β_2 in all specifications and is significant across the first three columns. Despite the large difference in point estimates these are imprecisely estimated and as a result we cannot reject the null of equal coefficients at conventional levels. As a consequence, we can only interpret our results as suggestive evidence in favour of our post-congressional career hypothesis.

TABLE VII
POST-CONGRESSIONAL CAREERS

	(1)	(2)	(3)	(4)
	Trans. p.c.	Trans. p.c.	Trans. p.c.	Trans. p.c.
Ext. t-1 * posterior exp.	33.20**	12.56**	12.71**	3.791
	(15.28)	(5.027)	(5.672)	(4.697)
Ext. t-1 * No posterior exp.	8.352**	5.191**	4.149*	3.766*
	(3.551)	(2.137)	(2.204)	(1.937)
Int. t-1 * posterior exp.	-4.312	3.606	5.701	5.432
	(7.249)	(6.524)	(6.832)	(6.438)
Int. t-1 * No posterior exp.	4.255	-2.807	-2.675	-1.521
	(3.111)	(2.652)	(2.836)	(2.451)
Year Effects	Y	N	Y	Y
Region Effects	Y	N	N	N
Year*Region Effects	N	N	N	Y
Municipality F.E.	N	Y	Y	Y
R^2	0.499	0.773	0.795	0.812
Obs.	89164	89164	89164	89164

Standard errors in parentheses

S.E. clustered at the municipality level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The fact that β_2, the coefficient for externals who do not go back, is positive and significant, might however suggest that mechanisms other than post-congressional career motives are also at work. A theoretically appealing hypothesis could see politicians as information channels between towns and the Parliament in an optimal allocation framework. Suppose that the Parliament seeks to assign funds efficiently and elected legislators know the needs of their birthplaces. These municipalities would then face an informational advantage over

[25] As a robustness check we estimated all specifications using the logarithm of transfers per capita as the dependent variable. Logarithms are less sensitive to outliers and results are qualitatively analogous to those reported.

others which are not connected and it may be desirable to assign more funds to connected towns as there is less risk of misallocation. While this explanation is internally consistent, it does not match well with our results. On the first place, there seems to be little reason why information (and hence, funds) would circulate through externals and not internals, which are possibly even better connected with their birth towns. Secondly, the electoral cycle results presented in table IV are hard to reconcile with information stories which, if anything, would predict no cycle or an electoral cycle where transfers increase at the end as information from the current legislature accumulates.

An alternative explanation could be related to corruption practices be it in the assignment process (e.g. expropriation by legislators or municipal authorities) or in subsequent municipal budget decisions (e.g. graft). To test whether this may be the case we make use of the province level corruption indices from Golden and Picci (2005) and interact them with our connection dummies. If the corruption hypothesis were correct we would expect to find that the effect of connections operates through more corrupt provinces. We do not find evidence in this respect, since the coefficients on the relevant interactions are small and not significant. Alternatively, we divide Italy in North, Center and South and run our baseline specification for each macro-region separately. No clear pattern emerges, in particular, the effect is not stronger in the south - sometimes regarded as more corrupt - than in the other regions.[26]

Finally, it is also possible that legislators favour their birth town simply because they have a preference for doing so, either because they like to see it improved or because they wish to please relatives and friends. This argument has the disadvantage of being untestable since politicians' preferences and desires are unobservable. Nonetheless, we cannot rule out that it plays a role in explaining part of our results.

5 Placebos and robustness checks

In this section we run variations of our baseline model in order to address some concerns regarding the endogeneity of the connection variables and the robustness of our results.

While the town fixed effects deal with time invariant unobservables, it is still possible that time-varying shocks which affect both transfers and the political influence of a municipality bias our Table III estimates. The idea of the placebos that we propose below is to use variables that may be affected by a municipality's political salience but which are not directly related to the budgetary process.

First, we use our dataset of legislative elections outcomes to determine the runner ups in all uninominal district votes. In a single member district, in each election there is always a winner, who takes a seat in Parliament, and some losers. We construct a dummy variable $false\ ext.\ connect_{it}$ analogously to $ext.\ connect_{it}$ but taking value one when town i has at least one runner-up instead of a winner. Suppose a municipality is hit by a shock to its political visibility which simultaneously increases the amount of transfers received and

[26] Estimation results have been omitted from the paper but are available upon request.

its probability of presenting a candidate to legislative elections. While this co-movement would bias our baseline estimates, it would also induce a positive correlation between $false\ ext.\ connect_{it-1}$ and transfers insofar as the runner up dummy is also affected by the political visibility shock. Following this argument, we replace $ext.\ connect_{it}$ and $int.\ connect_{it}$ with $false\ ext.\ connect_{it-1}$ and $false\ int.\ connect_{it-1}$ and estimate the model again. The negative and statistically insignificant coefficient estimates for both of these dummies in column 1 of table VIII reassuringly suggest that our results are not driven by the time varying political weight of different municipalities.

A similar intuition drives our second placebo. We use a dummy $reg.\ connect_{it-1}$ taking value one if municipality i is the birth town of a politician elected in a regional (as opposed to national) Parliament. As with the previous placebo, a significant coefficient here would point to some confounding factor driving both transfers and towns' connections as there is no plausible way through which *regional* legislators may affect *national* transfers directly. In column 2 of table VIII we show that having a regional connection, as expected, has no impact on central government transfers.

In the years prior to 1992 each municipality was allowed to take on mortgage debt which the central government assumed as its own. The instalments of this debt were paid through yearly transfers for the corresponding amount to the municipality.[27] After the system ceased to exist transfers went on for the following years to cover outstanding mortgages (see figure I). In our third placebo we use these transfers as our dependent variable. In column 3 of table VIII we show that our connection variables have no effect on this type of transfers.

Our final placebo changes the dependent variable to ordinary transfers ("*fondo ordinario*"). These are part of our total transfers variable but are destined to finance current expenditures and are arguably harder to manipulate. Column 4 of Table VIII confirms this hypothesis by showing that our connection variables have indeed a small and insignificant effect on ordinary transfers. Note that the R^2 of the regression is substantially higher than before, meaning that the control variables suggested by the transfers law criteria (e.g. population, density etc.) do a much better job in explaining the variation in ordinary transfers than do for total transfers. The relatively large coefficient in $ext.\ connect_{it}$ may still hint to some manipulation, perhaps related to the changes in accounting concepts after the 2001 decentralization reform which led to a shift from funds from *fondo ordinario* to other transfers (see figure I).

We now proceed to test the robustness of our section 4.2 results by considering three variations of the original model. In the first place we estimate the model using the logarithm of transfers per capita as our dependent variable. The log specification is more robust to outliers and changes the interpretation of the time effects from fixed amount to proportional changes. Our second robustness check includes the runner-up and regional connection variables $false\ ext\ connect_{it-1}$, $false\ int\ connect_{it-1}$ and $reg\ connect_{it-1}$ as controls in our baseline specification.

[27] Recall that we excluded those transfers from our main dependent variable definition, see section 2.

TABLE VIII
PLACEBOS

	(1) Transfers p.c.	(2) Transfers p.c.	(3) Mortg. transf. p.c.	(4) Fondo ord. p.c.
False ext. connect t-1	-1.689			
	(2.012)			
False int. connect t-1	-0.343			
	(1.518)			
Reg. connect t-1		0.559		
		(1.261)		
Ext. connect t-1			-0.689	1.746
			(0.817)	(1.459)
Int. connect t-1			-0.00357	0.0529
			(0.682)	(1.404)
Prop. connect t-1			-0.641	1.956
			(0.820)	(1.815)
Town voted for win.	-2.847**	-2.852**	0.594	-1.317**
	(1.264)	(1.264)	(0.535)	(0.558)
Share of win. coal.	10.73**	10.75**	-0.959	11.25***
	(4.568)	(4.563)	(1.816)	(1.832)
Pop. density t-1	-0.0485	-0.0414	-0.569**	0.758*
	(0.608)	(0.607)	(0.222)	(0.391)
Year*Region Effects	Y	Y	Y	Y
Municipality F.E.	Y	Y	Y	Y
R^2	0.812	0.812	0.853	0.945
Obs.	89164	89164	83852	89152

Standard errors in parentheses

S.E. clustered at the municipality level.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Finally, we estimate a model in which connections are divided into regular connections (as defined above) and connections operating through a member of a "key" commission in the Parliament. With this specification we want to check whether more influential and/or better positioned politicians are in a better position to manipulate transfers. Data on commission affiliation for each legislator were obtained from Gagliarducci, Nannicini and Naticchioni (2010). In the period considered there were 15 active commissions composed of about 15-27 members in the *Senato* and 35-90 in the *Camera*. The overwhelming majority of Italian legislators participated in at least one commission in any given legislature. These commissions have considerable influence in shaping the legislative agenda in their subject area. Given that we are interested in identifying those legislators with particular impact in local level finance we restrict our attention to public budget, public finance, public works, agriculture, and transports, which will form our "key commissions" group[28].

The results for these three robustness checks, each run with or without region-time interactions, are presented in table IX. In the first two columns we see that the log specification yields very similar results to those presented before, with external connections increasing transfers per capita by roughly 1.8-2.5 percent. In columns 3-4 we can see that estimates for our connection variables are essentially unaffected by the inclusion of the runner-up and regional connection dummies as controls. Lastly, column 3 indicates that a large part of the estimated effect of legislators on transfers operates through members of key commissions, as expected. This result, although predictable, indicates that it is indeed legislators' actions and not municipal-level unobservables that are behind or main results.

[28]It is not entirely clear how to select the commissions that deal with matters related to transfers and local government from the ones that discuss other technical or legislative issues. While the choice will always involve a certain degree of arbitrariness, we believe that we are on the safe side excluding the constitutional affairs, environment, foreign affairs, industry, justice, employment, European Union, health, defence and culture commissions. Casual inspection of the activity of those commissions reveals that they do not discuss anything related to budget or the budget law.

TABLE IX

ROBUSTNESS CHECKS

	(1) Log transfers p.c.	(2) Log transfers p.c.	(3) Transfers p.c.	(4) Transfers p.c.	(5) Transfers p.c.	(6) Transfers p.c.
False ext. connect t-1			-3.506	-1.325		
			(2.172)	(1.940)		
False int. connect t-1			0.300	-0.284		
			(1.823)	(1.519)		
Reg. connect t-1			0.605	0.655		
			(1.473)	(1.264)		
Ext. connect t-1	2.517**	1.812*	4.797**	3.998**	1.730	0.697
	(1.221)	(1.014)	(2.177)	(1.925)	(2.275)	(1.762)
Int. connect t-1	-0.563	-0.311	-0.603	0.107	-5.668*	-4.379
	(1.241)	(0.967)	(2.620)	(2.320)	(3.317)	(2.867)
Prop. connect t-1	1.918	1.297	3.835	2.834	7.893*	5.738
	(1.592)	(1.325)	(3.025)	(2.757)	(4.028)	(3.726)
Ext. connect * comm.					10.19*	10.17**
					(5.269)	(4.821)
Ent. connect * comm.					10.85**	9.699**
					(4.747)	(4.256)
Prop. connect * comm.					-13.88**	-10.30**
					(5.886)	(4.986)
Year Effects	Y	Y	Y	Y	Y	Y
Year*Region Effects	N	Y	N	Y	N	Y
Municipality F.E.	Y	Y	Y	Y	Y	Y
R^2	0.878	0.906	0.795	0.812	0.112	0.185
Obs.	89164	89164	89164	89164	89164	89164

Standard errors in parentheses

S.E. clustered at the municipality level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations except for column 4

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

6 Conclusions

In this paper we use government transfers data at the municipal level to show that the birth towns of Italian members of Parliament are favoured in budgetary allocations. By using the town of birth as the link between geographies and political institutions, we exploit a different source of variation from those used in previous analyses of pork-barrel politics. In our case, this has two important implications. First, our results cannot be justified in terms of the politicians' role as district representatives. Second, by focusing on the influence of birthplace, we are able to disentangle electoral motives from other possible drivers of birth town bias. While we are not the first to look at the role of birthplace as a driver of regional disparities (see for example Hodler and Raschky 2014), our study measures fiscal transfers directly and is better suited to study the underlying reasons for the observed bias.

In order to study how electoral incentives shape allocation decisions, we divide politicians elected in the majoritarian systems into those having their birthplace within their district of election (internals) and those having their birthplace elsewhere (externals). We observe that municipalities connected to Parliament through an external receive roughly 2 percent larger yearly per capita transfers. Given that the birth town bias operates only through externals and that these have no electoral incentives to favour their birthplace, we conclude that other incentives must be at play. We argue that post-congressional career considerations by incumbent legislators explain at least part of our results. Through increased transfers today, politicians may be able to increase the likelihood of taking up a job at the local level after exiting Parliament. Using data on politicians' career profiles, we find evidence in this direction. Our results are in line with the recent work by Diermeier, Keane and Merlo (2005) and Keane and Merlo (2010) who stress that politicians, as forward looking agents, make their choices thinking on their career prospects and not only on the outcome of next election. In particular, we provide reduced form evidence of the role of post-congressional careers considerations.

Finally, our results show that reelection incentives attenuate rather than enhance birth town bias. This conclusion follows from using a different definition of pork than the canonical one in the literature, and therefore sheds some light on another important determinant of distributive policies.

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Appendix

Additional Tables

This Appendix contains two tables. Both of them reproduce the baseline specification but change the measures of connections. Table X substitutes the connection dummies with counters indicating the number of connections through internal, external and proportional politicians. This would be a parametric (linear) way of capturing a sense of how intensity of the connection affects transfers, while estimates are imprecise it does appear to be some scope for increased transfers through the intensive margin. Table XI splits the external connections into three groups, those which operate through one legislator, through 2 or 3, or through 4 or more. This is a different way of capturing intensity of connection and results go in the same direction as those in table X.

Data Sources

The dataset is composed of three main parts: i) state transfers data, ii) data on members of the Parliament and iii) political and geographical controls. Yearly state transfers to municipalities are obtained from the Italian Ministry of Internal Affairs (*Ministero dell'Interno*, `http://finanzalocale.interno.it/`). Data are freely accessible but not easily downloadable, so we used a Python script to obtain them. Data from 1994 to 1996 are not available directly so we recover them by summing all the payments received by municipalities in each of those years using the *Pagamenti* page.[29] Quantities are transformed in 2005 euros and divided by population to obtain the main dependent variable, per-capita transfers.

Data on the Parliament composition and some characteristics of MPs are taken from the official websites `http://storia.camera.it/` and `http://www.senato.it/legislature/297885/sitostorico.htm`. We supplement this dataset with information from (Gagliarducci, Nannicini and Naticchioni, 2010) and with the names and birthplaces of runner-ups to district elections with data from the public administrators archive `http://amministratori.interno.it/`. The archive has a good amount of details on whoever held a political position at any level in Italy since 1985.

Political and geographical controls are taken from several sources: for population data we resort to the national statistical office (ISTAT) which provides Census data each 10 years and yearly data for 1992 to today. Missing data points for population are linearly interpolated. Surface data are from the Italian Agency for Energy (ENEA). Finally, to construct a control for the political leaning of each municipality for each year, we download election results for each municipality from the Ministry's website.

[29] Available at `http://finanzalocale.interno.it/apps/floc.php/in/cod/7`.

TABLE X

BASELINE WITH COUNTER

	(1) Transfers p.c.	(2) Transfers p.c.	(3) Transfers p.c.	(4) Transfers p.c.
Ext. Connection Counter t-1	9.059***	4.446**	3.484	3.648*
	(2.947)	(2.151)	(2.274)	(2.122)
Int. Connection Counter t-1	3.142	0.762	1.731	1.586
	(3.013)	(3.006)	(3.193)	(2.992)
Prop. connect counter t-1	3.854	3.398	3.232	2.551
	(3.470)	(2.610)	(2.765)	(2.536)
Town voted for win.	3.056*	2.441*	-0.315	-2.854**
	(1.673)	(1.317)	(1.276)	(1.264)
Share of win. coal.	-6.123	47.13***	24.86***	10.78**
	(5.004)	(4.000)	(4.252)	(4.563)
Pop. density t-1	0.632***	1.363**	0.789	-0.0657
	(0.154)	(0.634)	(0.574)	(0.599)
Surface area in km2	1.944***			
	(0.238)			
Province capital	8.051			
	(9.765)			
Year Effects	Y	N	Y	Y
Region Effects	Y	N	N	N
Year*Region Effects	N	N	N	Y
Municipality F.E.	N	Y	Y	Y
R^2	0.499	0.773	0.795	0.812
Obs.	89164	89164	89164	89164

Standard errors in parentheses

S.E. clustered at the municipality level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

TABLE XI

BASELINE WITH DUMMIES

	(1) Transfers p.c.	(2) Transfers p.c.	(3) Transfers p.c.	(4) Transfers p.c.
Ext. connect1 t-1	8.434**	6.085***	5.185**	3.779**
	(3.499)	(2.037)	(2.098)	(1.804)
Ext. connect2_3 t-1	25.58**	7.008	4.414	11.92
	(12.59)	(9.076)	(9.869)	(9.869)
Ext. connect4 t-1	30.46	16.42	14.30	10.13
	(31.89)	(23.57)	(15.26)	(9.587)
Int. connect t-1	2.626	-1.151	-0.601	0.0369
	(2.986)	(2.402)	(2.595)	(2.270)
Prop. connect t-1	5.056	4.130	4.054	2.954
	(3.783)	(2.961)	(3.102)	(2.821)
Town voted for win.	3.062*	2.452*	-0.305	-2.848**
	(1.673)	(1.317)	(1.276)	(1.264)
Share of win. coal.	-6.120	47.14***	24.87***	10.80**
	(5.005)	(4.000)	(4.251)	(4.562)
Pop. density t-1	0.632***	1.353**	0.780	-0.0749
	(0.154)	(0.637)	(0.575)	(0.601)
Surface area in km2	1.947***			
	(0.238)			
Province capital	8.251			
	(9.794)			
Year Effects	Y	N	Y	Y
Region Effects	Y	N	N	N
Year*Region Effects	N	N	N	Y
Municipality F.E.	N	Y	Y	Y
R^2	0.499	0.773	0.795	0.812
Obs.	89164	89164	89164	89164

Standard errors in parentheses

S.E. clustered at the municipality level.

Dep. variable is transfers per capita excluding payment for previous mortgage obligations

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$