

PERFORMANCE OF LOCAL GOVERNMENTS AND ELECTORAL RESULTS

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1 — Introduction

Portugal, despite having a long tradition of municipal intervention in the satisfaction of public needs, experimented a long period of centralism during the Estado Novo regime. With the fall of this authoritarian regime, there was a natural urge from the population to return to the above referred municipal tradition. Thus, since 1974 till nowadays, local governments have been benefiting from an increasing share of public funds to face new responsibilities transferred from central government.

Although the importance of local governments in Portugal did not increase dramatically, we can not deny the visibility of local governments (municipalities in special) since 1974 and that the trend has been towards greater municipal intervention. The municipalities have benefited from a favourable public opinion despite the occurrence of cases of corruption. For this result contributes, among other reasons, the closeness of political representatives to local voters and the concrete problems to be solved at local level.

If we recognise that municipalities benefit from this favourable public opinion, we also agree that there is a lack of studies on the quality of management of local representatives. In this paper we try to answer the referred need by analysing the performance of Portuguese municipalities and how it is related with electoral results. The measurement of local governments performance is a rather difficult task because there is a lack of data on this subject. The data available does not cover aspects such as type of services provided, output produced, costs related with output produced, etc. We have to rely on indirect indicators of quality of management. Therefore, the results obtained in this paper are subject to further evidence using more refined indicators of performance of local governments.

This paper is organised in six sections. In a second section, we review some of the literature on the performance of local governments. In a third section, we evaluate to what degree voters approve the performance of mayors. For that purpose, we derive several indicators of mayor's approval by voters. Using electoral outcomes we compare these measures of electoral approval with equivalent measures mainly determined by ideology and overall evaluation of the mayor's party. In a fourth section, we calculate some indicators of local governments performance. In a fifth section, we analyse the relative importance of the performance indicators as explanatory variables of electoral results. To that

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purpose, we use as dependent variable the previously defined measures of electoral approval. Our main purpose is to bring evidence on the relative importance of quality of management indicators compared to other explanatory variables of election outcomes. Finally, in the last section we present some conclusions.

2— A brief review of literature on the performance of local governments

In contrast with other research areas in the field of government finance, studies analysing the performance of local governments are not abundant, although recently an increasing number of authors show interest for this subject. As a consequence of lack of data, the available studies usually provide indirect measures of local governments performance. Furthermore, to derive those measures, the authors have to rely on strong assumptions that may restrict the validity of the results obtained. We may be able to classify these studies into six major research approaches. In a first approach, studies provide measures of impact of fiscal policy at local level by analysing its effects on the location of residents. Taking as background the model developed by Tiebout (1956), where residents vote with their feet to obtain the best combination of local public goods and fiscal burden, several authors analyse the interaction between local fiscal policy and population migration (Oates, 1969, and Rothenberg, 1970). Schuler (1974) not only analyses the interaction between local governments and location of residents but also considers the feedback effect of residents relocation on local governments fiscal receipts. Cuthbertson et al. (1979, 1981a, 1981b) analyse the impact of local governments fiscal policy on urban employment and population.

In a second approach authors rely on hedonic type estimates to derive measures of allocative efficiency. Steven Deller (1990) following an early paper by Brueckner (1979) assumes that property values are maximised when public goods are provided efficiently. Therefore, the author expects that the estimates of the coefficients of local public goods will be positive if those local public goods are underprovided. Those estimates will have a negative sign if they are overprovided. If the estimated coefficients are close to zero, this will mean that the public good is efficiently provided.

A similar methodology is followed by Lori L. Taylor (1995). Nevertheless, the author admits that differences in the provision of local public goods might also have been captured by wages differences. Therefore, the estimates are obtained for a single labour market.

Mathew Khan (1995) also uses an hedonic-type model. The author predicts that, controlling for productivity, wages will be lower in cities with higher attributes. In the model the indirect utility function of residents is defined over wages, rents and local public goods. Because the vector of local public goods is not observed, the author uses a revealed preference approach. Provided that migration is costless and there is full information, wages will be lower if the vector of local public goods bundle is larger. Estimating hedonic functions for wages and rents it is possible to predict wages and rents controlling for personal characteristics and housing attributes. Then the author derives an index of city quality of life.

In a third approach, the authors try to estimate productivity measures and efficiency measures. Charles R. Hulten (1984) develops a model that allows the estimation of the rate of growth of public sector productivity without an explicit measure of sectional output. Consumers maximise utility, considering a private commodity and a public commodity that is internally produced, subject to a certain technology in the production of the public commodity and a total expenditure constraint. The public commodity is expressed as a function of an input vector. In the study it is considered that the amount of public commodity increases at a constant rate in consequence of technological progress and changes in the production environment. The inputs considered are capital services, labour, non-durable intermediate goods and purchased services. With the assumption that price of public commodity is a translog function of prices of inputs, and using Shepard's duality theorem, the author derives a linear equation that allows the estimation of productivity growth in the production of the public commodity.

Steven C. Deller (1992) evaluates the production efficiency of local governments concerning rural road services in USA. A total of five inputs are assumed to be used in the production of rural roads: labour measured by «full time employees» and «part-time employees»; capital measured by the flow of services from «motorised graders», «single-axe trucks», and «loaders». To estimate services of inputs, the author assumes that capital services are inversely related to the square root of the age of the equipment. The output is measured using an index of different types of rural roads. The production technology is assumed to be represented by a log-linear quadratic function. To evaluate production efficiency, the author estimates the production function for three groups of local governments organised by increasing mileage responsibility. The results provide evidence that local governments with lower mileage responsibility are less efficient than those with higher mileage responsibility.

Bruno De Borger and Kristiaan Kerstens (1996) estimate indices of cost efficiency using five different reference technologies. To obtain cost frontier estimates the authors use as dependent variable local government expenditures and as independent variables proxies for local governments outputs, such as number of beneficiaries of minimal subsistence grants, number of students enrolled in local primary schools, surface of public recreational facilities, total population, and the fraction of the population older than 65. The index of cost efficiency is then regressed against explanatory variables such as income, tax price, per capita grants, population density, level of education, and two dummy variables for participation of socialists and liberals in the ruling coalition.

A fourth approach evaluates the performance of local governments considering the response of citizens to the provision of local public goods. Shyam Nath e Brijesh C. Purohit (1992) argue that citizens may respond to publicly provided local goods in three distinct ways: increasing demand for public local goods; supplementing deficient public provided local goods with private supply; substituting publicly provided local goods by privately provided local goods. These authors derive a model of local fiscal choice introducing the above mentioned response of consumers. The utility function of the community is specified as a CES function with two types of goods (local public goods and private goods). The functional form used considers parameters that represent the allocation of the community's income between public goods and private goods, the financing

by own resources and other sources of funds, and the distribution between grants and borrowing. The budget constraint is the sum of three types of resources: local taxes and fees; grants, borrowing. The estimation of the substitution elasticity between public local goods and private goods, according to the authors, will allow to determine in each way how consumers do respond to publicly provided goods.

An approach frequently used to evaluate government performance is to observe poll results and election outcomes and to relate them with local government performance. Despite the fact that the majority of studies aim at explaining the behaviour of voters representatives concerning the distribution of public expenditures along their mandate, we use this approach to derive measures of local governments approval by voters. The extension of this type of models to analyse local governments behaviour has been introduced by several authors. The studies analysing central government results shows that $\frac{1}{3}$ of voters intentions depend on the performance of the economy. There remains the doubt about the importance of economic evolution on local election results and to what degree its influence depends on which party is represented at central and at local level.

In a less formalised approach, performance of local governments is evaluated deriving indicators such as proportion of investments in total local government expenditures, degree of budget implementation, and other quality of management indicators (Dupuis, 1991). This approach is very useful to complement empirical evidence produced with the estimation of formalised models. As we referred before, the estimated models rely on strong assumptions. Therefore, the evidence produced has to be seen only as indirect signs of local governments performance.

3 — Electoral approval of mayor's mandate

Our study considers the results of the elections held for the Municipal Council (Câmaras Municipais) in 1989 and in 1993 in Continental Portugal. Câmaras Municipais are the executive body of the municipalities where representatives are elected by the Hondt method (proportional to the outcome of each party). The mayor is the first member of the list of the most voted party. In Portugal, despite previous discussion for several times, only the parties can run the executive body.

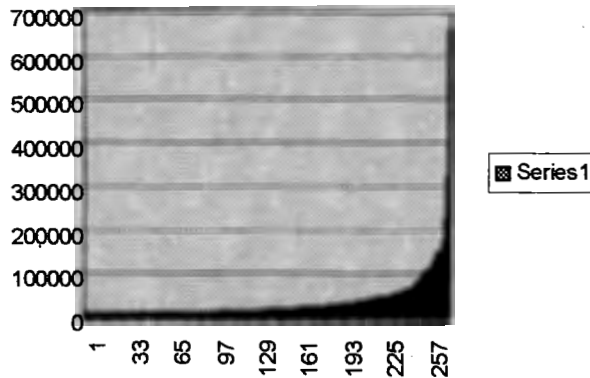
In Continental Portugal we have 275 municipalities, most of them of small size ⁽¹⁾ if we consider population in 1991: 82 municipalities had less than 10 000 residents; 149 municipalities had a number of residents between 10 000 and 50 000; 23 municipalities had a number of residents between 50 000 and 100 000. For the interval 100 000-150 000 of residents the number of municipalities is only 12, whereas this number decreases to 9 when we consider a number of residents above 150 000. To give a clear picture of the asymmetry existing between few municipalities and all the others we present in the figure 1 a graph

⁽¹⁾ Compared to other countries the area of each municipality is of medium size.

of municipal population in 1991 organised by increasing size. As we can see in this graph, the size of Lisbon (the largest municipality) and Porto (the second largest municipality) is overwhelming, showing clearly that in Portugal municipalities of intermediate size are under-represented.

FIGURE 1

Population of municipalities (municipalities organised by increasing size)



To derive measures of electoral approval, as we referred before, we use the last two elections for local governments held in 1989 and in 1993 (in the end of 1997 a new election is going to be held). We consider two election outcomes because we want to measure the approval of voters both in a static and in a dynamic perspective. In a static perspective we measure the voters approval using alternative variables. A first variable is simply the percentage of votes of the party most represented in the executive body of municipalities (PER93). In a second variable, we compare the result of the party in power during the last mandate with a close election result for the European Parliament (DIF93). We chose this election because it is not influenced by the so-called useful vote which happens for national parliament decreasing the results of small parties and increasing the results of large parties. This comparison is also useful because it allows us to determine to what degree local elections are influenced by ideology and general considerations on the agenda of each party. If theoretical expectations on the closeness of voters and representatives are correct, in the election for local governments, voters are aware of the performance of their representatives and, therefore, the difference of election results at local level and at National and European level is significant. Furthermore, we would expect that this difference would be in average larger for smaller municipalities because of closeness of voters and visibility of opportunity costs of local executives decisions is higher.

To estimate DIF93 we compare, for the most voted party in the local election of 1989, the results obtained in the local election of 1993 with the results obtained in the election for the European Parliament in 1994. These two dates are sufficiently close for the comparison to be possible. More specifically, we calculate the difference of the percentage of votes in the party in each of these elections.

As we observe in figure 2, the parties most represented in the municipal executives, in general, obtain a better result in the local election than in the European parliament election. In this figure, we organised the municipalities by increasing population size. As we can conclude from the observation of the figure 2, the amplitude of the differences does not diminish with the size of the municipality, not confirming therefore our expectations that election results in larger municipality should be more influenced by the general perception about the party in the municipal government.

FIGURE 2

Difference of percentage of votes 1993 (municipalities organised by increasing size)

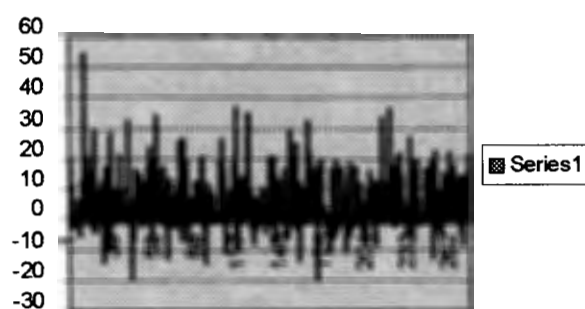


TABLE 1

Average differences of election results

Municipalities	AVEDIF 93	AVEDIF 93*
Population < 10 000	11,11	0,380
10 000 ≤ Pop. < 50 000	10,12	0,345
50 000 ≤ Pop. < 100 000	11,89	0,383
100 000 ≤ Pop. < 150 000	10,63	0,269
Population ≥ 150 000	10,68	0,344

Source: Eleições Autárquicas, Atlas Eleitoral, STAPE.

To aggregate these differences according to municipal size, we sum up the positive value of the differences and then we calculate the average value (AVEDIF93). As we can see in table 1 the average values are very similar for different classes of municipal sizes. This result is confirmed by the correlation coefficient between the positive value of the differences and population, which is close to zero (0,011). Because the positive value of the differences are positively correlated with the percentage of the party, we derived another measure which consisted of dividing the positive value of the differences by the percentage of the party in the European parliament election. Then, we calculate the average value by classes of municipal size (AVEDIF93*). As we can see in table 1, we still have a result that does not confirm our expectations. An alter-

native way of measuring the approval of mayors is to consider if they were or not reelected (REELECT). In this case we have a dummy variable taking the value one if the mayor was re-elected and zero otherwise. This variable does not capture small changes of opinion on the mayors that have a comfortable majority. It has, however, the advantage to capture cases where the party did not like the performance of the incumbent, reason why it did not support his/her candidacy. As we can see in table 2, at local level the number of re-elections is important. If we consider that in most of the cases the non re-elected mayors did not run for another mandate, the trend in favour of incumbents is even stronger. This result may have two explanations. A first one is that performance of local governments is in general very well perceived by voters which tend to keep the good performers. Another explanation deals with the advantage incumbents have in information economies (they are well known by voters) and the possibility they have to favour voters who vote for them in return. If this second explanation is true, we would expect percentage of re-elections to be smaller in larger municipalities. As we can observe in table 3, only for the very large municipalities, we have a smaller percentage of re-elections and in the last election the pattern is even reversed with a larger percentage of re-elections in the municipalities above 100 000 residents.

TABLE 2
Re-election of mayors

	1979	1982	1985	1989	1993
Number of re-elections	135	189	182	184	165
Percentage of mayors re-elected	49,1	68,7	66,2	66,9	60,0

Source: *Eleições Autárquicas, Atlas Eleitoral, STAPE.*

TABLE 3
Re-election of mayors by classes of municipalities

	Pop. < 10 000	Pop. ≥ 10 000 Pop. < 50 000	Pop. ≥ 50 000 Pop. < 100 000	Pop. ≥ 100 000 Pop. < 150 000	Pop. ≥ 150 000
Number of mayors re-elected (1979-1993).	62,9	62,9	62,8	65,0	50,0
Percentage of mayors re-elected (1993)	63	57	56,5	91,6	66

Source: *Eleições Autárquicas, Atlas Eleitoral, STAPE.*

Considering the total number of re-elections in each municipality, we calculated the average number of re-elections by classes of municipalities. As we can see in table 4, with the exception of the class 100 000-150 000, the average number of re-elections decreases with the size classes. The correlation coef-

ficient between number of re-elections and population is negative but of small magnitude ($-0,11$), which allows us to conclude that we have only mild evidence that re-election of mayors is more frequent in smaller municipalities.

TABLE 4

Re-elections of mayors by classes of municipalities

Municipalities	Average number of re-elections
Population < 10 000	3,20
10 000 ≤ Pop. < 50 000	3,14
50 000 ≤ Pop. < 100 000	2,95
100 000 ≤ Pop. < 150 000	3,41
Population ≥ 150 000	2,55

In a dynamic perspective, we also measure voters approval of the action of the party most represented in the executive body of municipalities using alternative variables. A first variable is simply the difference of the percentage of the party in the local election of 1993 and 1989 (DIF93-89). A second variable is the ratio of the percentages of votes in 1993 and 1989. Both variables capture how the voters evaluate the performance of the last mandate, compared to their expectations based on previous mandates or on the electoral program of the mayor. This second variable, compared to the former, accounts for the relative size of the variation. A third variable is the difference between DIF93 and DIF89, which gives an idea of changes in the surplus (or the deficit) of votes in local elections compared to the elections for the European parliament between 1989 and 1993 (to compare the local election of 1989 we used the results of the election for the European parliament in 1990). The overall picture of the dynamics of electoral results shows that in the last mandate (1989-1993) there are more electoral losses than gains. An interesting theoretical question is to know if the evolution of the economic situation affects or does not affect the electoral results of local governments. Does it affect the local governments in general or only the local governments belonging to the party in the central government? The correlation coefficient between DIF93-89 and a dummy variable GOV93 (taking the value one if mayor is associated with the party in central government and zero otherwise) is 0,02. Therefore, it seems that to belong or not to belong to the party in the government does not influence the gain or loss of votes in local elections. One might argue that in 1993 we are not yet in a clear situation of recession, and consequently, we obtain this result. Another argument is that the performance of central government plays a more important role for larger municipalities. To account for that, we divided the municipalities into two groups: less than 100 000 residents and more than 100 000 residents. Then we calculate the correlation coefficient between DIF93-89 and GOV93 for each group of municipalities. The results confirm our expectations. While for the smaller municipalities the correlation coefficient is almost zero (0,0039), for the larger

municipalities it is negative and significantly different from zero ($-0,4739$). The same result is obtained for the correlation between DIF93-DIF89 and GOV93. For the large municipalities the correlation coefficient takes the value $-0,3892$ while for the small and medium size municipalities it takes the value $0,098$.

4 — Indicators of local governments performance

In this section we calculate several indicators of municipal performance. As we referred before, we have to rely on indirect indicators because we do not have available direct measures of output for Portuguese municipalities.

The indicators we use were constructed considering data from municipal accounts (*contas de gerência*) which are published by the Ministry of Planning and Management of Territory. Underlying the estimation of the first indicator is the idea that a better performance of municipalities would determine the allocation of a smaller percentage of current disbursements to compensation of employees. Provided that the production process is not substantially modified, the fall of this percentage can be interpreted as a sign of an increase in the productivity of municipal services.

In order to evaluate more closely what happened in the mandate 1989-1993, we compare the above referred indicator in those two years considering municipalities organised by size classes. A first conclusion we can derive is that there is a fall in the percentage of the compensation of employees, which might be interpreted as a sign of increasing productivity. A second conclusion is that there is a convergence movement, although small municipalities tend to be slightly above the others. These values are average of averages, and consequently there is a natural convergence to the mean. So, we present, in figure 3, a graph of the percentage of compensation of employees in total current disbursements in 1993. As we can see in this graph, there is still a considerable dispersion of values across similar municipal sizes. As a matter of fact, the correlation coefficient between these two variables takes the values $0,149$ and $0,062$ respectively in 1989 and in 1993.

TABLE 5

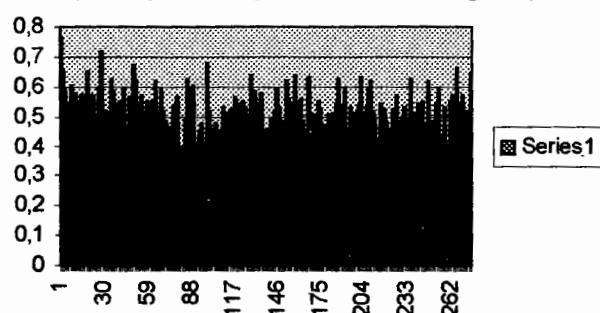
Compensation of employees as a percentage of total current expenditures (PCE)
(average value of percentages)

Municipalities	1989	1993
With:		
Population < 10 000	50,2	48,7
10 000 ≤ Pop. < 50 000	52,2	50,6
50 000 ≤ Pop. < 100 000	62,6	45,2
100 000 ≤ Pop. < 150 000	45,5	44,2
Population ≥ 150 000	50,7	44,2

Source: Contas de gerência dos municípios.

FIGURE 3

Percentage of compensation of employees in total current disbursements 1993
(municipalities organised by increasing size)



Provided that there is not a tendency for over-expenditure in other current expenditure items, it seems that municipalities obtained gains of productivity. It remains to determine to what degree the decrease in the percentage of remuneration of employees was not compensated by an increase in the acquisition of services. Because of this doubt, we constructed another indicator which is the percentage of compensation of employees plus acquisition of services in total current disbursements

Considering this indicator, the previous conclusion changes dramatically. During the last mandate, it seems there is a strong increase in the percentage of acquisition of services, which may be a consequence of the diversification of the services provided by the municipality but it may also result from inexistence of gains of productivity. Unfortunately we can not solve this doubt because we do not have available indicators of services provided by the municipalities.

TABLE 6

Compensation of employees plus acquisition of services as a percentage of total current expenditures (PCEAS) (average value of percentages)

Municipalities	1989	1993
With:		
Population < 10 000	54,9	70,6
10 000 ≤ Pop. < 50 000	56,3	71,9
50 000 ≤ Pop. < 100 000	69,1	72,3
100 000 ≤ Pop. < 150 000	51,1	74,5
Population ≥ 150 000	55,6	77,1

Source: Contas de gerência dos municípios.

As an indirect indicator of level of debt, we use the percentage of financial costs in the total current disbursements. In Portugal, municipal debt is limited to a certain level determined by the transfers from central government to municipi-

palities. Despite this restriction, the debt of the municipality may be seen as an indicator of performance. Municipalities with a debt close to the maximum are restricted in their action, and consequently their mayors may be perceived by voters as bad performers. It remains to determine to what degree voters have a perception on the amount of debt, since this is frequently a matter of discussion between the mayors and the opposition in consequence of lack of information about the municipal debt. The general increase in the percentage of financial costs comes as no surprise. The correlation coefficient between financial costs and population of municipalities is $-0,102$ in 1989 and $-0,109$ in 1993. As a matter of fact, debt occurs across all types of municipalities.

TABLE 7
Financial costs as a percentage of total current expenditures (PFC)
(average value of percentages)

Municipalities	1989	1993
With:		
Population < 10 000	4,7	7,1
10 000 ≤ Pop. < 50 000	4,1	5,3
50 000 ≤ Pop. < 100 000	6,5	9,5
100 000 ≤ Pop. < 150 000	5,6	5,9
Population ≥ 150 000	4,9	8,5

Source: Contas de gerência dos municípios.

The per-capita investment (PCAPI) is frequently used as an explanatory variable in political business cycle models. This choice results from the fact this variable is one of the most visible indicators of local government performance. We do not want to enter into the discussion if voters are rational forward looking or backward looking and suffering from amnesia, since in the paper we are not interested in testing expenditure cycles determined by re-election reasons. We use the investment in the last year of the mandates because of practical reasons. When we take a dynamic approach we also compare the per capita investment in the last year of the mandate with the last year in the previous mandate, which may be only possible if voters do not have memory loss.

One possible alternative is to use per-capita expenditure. We prefer per-capita investment because per-capita expenditure is determined by per-capita receipts which for most municipalities is practically out of their control. The capacity to orient public funds to investment is also determined by transfers from central government, but municipalities still have some degree of autonomy. As we can see, in figure 4, per-capita investment is slightly inverse related with municipal size (correlation coefficient is $-0,17$). An alternative indicator to account for investment is the percentage of investment in total expenditure. Although it is a better indicator of municipal performance, voters do not have a good perception of the relative effort the municipality is making in terms of investment. Consequently, it may not significantly influence voters approval of the

mayor. In the next section we will test the capacity of these two variables to explain percentage of votes in the party most represented in the executive body of the municipality.

FIGURE 4

Per-capita investment in thousands escudos — 1993
(municipalities organised by increasing size)

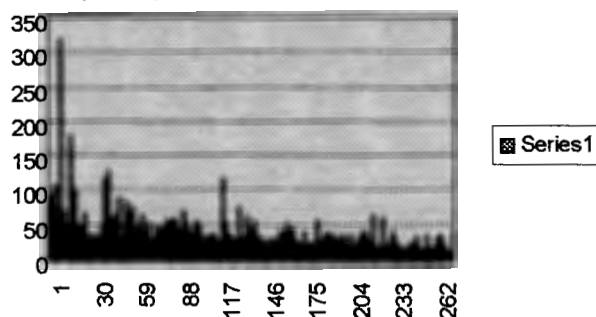


TABLE 8

Percentage of investment in total expenditures (PINV)
(average value of percentages)

Municipalities	1989	1993
With:		
Population < 10 000	46,6	45,7
10 000 ≤ Pop. < 50 000	44,2	42,2
50 000 ≤ Pop. < 100 000	38,6	35,8
100 000 ≤ Pop. < 150 000	33,1	36,4
Population ≥ 150 000	33,9	34,6

Source: Contas de gerência dos municípios.

Comparing the last year of the two mandates we conclude that in average, there was a decrease in the percentage of investments for all classes of municipalities with the exception of the very large municipalities. In relative terms, smaller municipalities tend to have larger percentage of investments (correlation coefficient between percentage of investment and population is $-0,231$ in 1989 and $-0,170$ in 1993).

5 — Performance of local governments and electoral results

In this section of the paper, our main purpose is to bring evidence on the relative importance of quality of management indicators compared to other explanatory variables of election outcomes. A set of other variables are considered. A first variable is related with ideology. To account for ideology, we use the variable PERPE94 representing the electoral result of the mayor's party in

the elections for the European parliament in 1994. When we take a dynamic perspective we use the variable PERPE94-90 which is the difference of the percentage of votes of the party in the election for the European parliament in 1994 and in 1990. This variable captures how voters evaluate the overall performance of the party.

A second variable is the dummy variable GOV93 to account for the electoral benefits or costs of the party to be responsible for central government.

A third variable is PERSON taking the value one if the incumbent is running for other party and zero otherwise. When the incumbent is running for another party, we expect the electoral results to be seriously damaged.

A fourth variable is REELEI which accounts for the number of re-elections in the municipality in the last 5 elections. We use this variable to account for voters responsiveness to candidates personal characteristics. If number of re-elections is larger that may be interpreted as a case where knowledge of the candidate is more relevant to voters than in cases where number of re-elections is lower.

A fifth variable (only introduced when taking a dynamic perspective) is the dummy variable PRD. With this variable we account for the fact that variation in the electoral results are influenced by the extinction of this party.

Another variable is MAJORITY which takes the value one if the party most represented in the executive body of the municipality has an absolute majority and zero otherwise. Some discussion has been introduced concerning the benefits of the system of proportional representation of parties in this executive body. Some authors argue that when the party of the mayor has an absolute majority, he is able to carry his program more effectively and consequently his/her performance is better. Disputing this argument, other authors argue that the mayor would be less careful with the interests at stake, and consequently his/her performance is worse. Therefore, we may have either a positive sign or a negative sign for the estimated coefficient of this variable.

To account for quality of management indicators, we use the variables defined before. When we take a dynamic perspective we consider differences between the value of the variables in 1993 and 1989. For the variable PCAPI instead of difference of values we use the ratio between the value in 1993 and 1989. Because we expect voters in very small municipalities to react differently from voters in medium and large municipalities, we allow for a different estimated coefficient for small municipalities by considering these variables multiplied by a DUMMY variable taking the value one if population is less than 50 000 and zero otherwise.

In table 9 we present the OLSQ estimation of an equation where the dependent variable is PER93. According to this estimate, the electoral results at local level are strongly influenced by ideology and the overall performance of the party most represented in the executive body of the municipality. We also find that to belong to the party responsible for central government has hurt in the local election. It seems that at local level voters take into consideration national issues.

Our results show that at local level, the personality of mayors is also crucial to explain electoral results. As we can see in table 9 the candidacy of the mayor for another party diminishes the percentages of votes in about 4,8%.

The variable REELEI (number of re-elections) may capture different effects. One possible explanation is that some municipalities are more responsive to

mayor's personality than others. If so, we should have a positive coefficient for REELEI*DUMMY1 where the dummy variable takes the value one if municipality has a population under 10 000 and zero otherwise. The estimated coefficient for this variable is, as expected, positive and significant.

The estimated coefficient of the variable MAJORITY is significant and positive. In this case, where we have as dependent variable the percentage of votes of the mayor's party, an explanation for this result is that having a majority in 1989 is positively associated with a higher percentage of votes in 1993. As we will see below, the estimated coefficient of this variable is more meaningful when we take a dynamic perspective.

Among the variables accounting for local government performance, only the variables related to investment (PINV and PAPI) have the expected sign and are statistically significant. According to our results, the investment is translated into votes in a greater proportion in the medium and large municipalities than in the small municipalities.

The signs of the estimated coefficients of the variables PCE and PCE*DUMMY were expected, but only one is significantly different from zero. It seems that in small municipalities to spend in compensation of employees is important for the local population, and, therefore, benefits the electoral results.

TABLE 9
OLSQ estimations (dependent variable: PER93)

	Estimated coefficient	T statistics	Estimated coefficient	T statistics
Constant	24,35	5,07	20,94	3,97
PERPE94	0,48	8,87	0,48	8,82
GOV93	- 4,82	- 3,89	- 4,75	- 3,85
PERSON	- 9,93	- 3,46	- 9,94	- 3,46
REELEI	0,56	2,68	0,55	2,66
MAJORITY	3,56	3,08	3,55	3,08
PCE93	- 11,73	- 1,20	- 13,62	- 1,18
PCE93*DUMMY	12,89	1,85	18,07	1,82
PFC93	12,04	0,31	2,58	0,06
PFC93*DUMMY	- 4,22	- 0,11	7,95	0,19
PINV93			33,15	2,39
PINV93*DUMMY			- 30,10	- 2,13
RCAPI93	0,38	2,55		
RCAPI93*DUMMY	- 0,39	- 2,57		
	R2 = 0,367 F stat.=13,84		R2 = 0,365 F stat.=13,75	

In table 10, we present the results when we take a dynamic perspective. Now the variables PER93-89, PERPE94-90, PCE93-89, PFC93-89 and PINV93-89 are differences between the two elections (1993 and 1989 for local governments and 1994 and 1990 for the European parliament). The R squared of the estimated equation is lower, as we should expect because we use differences between variables. Still the F statistics is high enough to conclude that the regression is statistically significant.

The results, once again, confirm the importance of ideology and general evaluation of the party in local elections outcomes. According to our results a 1% change in percentage of votes for the European Parliament is likely to change in 0,6 % the result of the party in the local election.

To belong to the party represented in the central government does not appear to affect the variation of the percentage at local level. The variable GOV93 is statistically insignificant and has not the expected sign. To further elaborate on this, we consider the variable GOV93*DUMMY where the dummy variable takes the value one if municipalities have population above 100 000 and zero otherwise. The estimated coefficient is negative but it is not significant. An explanation for our result, taking into account the result of table 9, is that to be in the opposition brought electoral benefits in 1989 as well in 1993. Considering that in 1989 we were in a period of expansion and that in 1993 we were in a period of recession, the behaviour of voters seems to be determined by a need to balance powers. Another explanation is that voters perceive that mayors in the opposition are more active demanding benefits from central government.

The estimated coefficient of PERSON has the expected sign and is significant. The candidacy of the mayor for another party diminishes the percentage of votes in 8 %. REELEI shows again as significant and with the correct sign. An interesting result is related with the variable MAJORITY. According to our estimates, the parties that were in the majority in the executive body of the municipality had a loss of about 3,5 %. It seems that to be in the majority is not important to perform well. On the contrary, it may lead to the adoption of hasty and ill-considered measures.

The variables related to investment, once again, have the expected signs and are significant. In accordance with other studies, voters perceive the performance of local governments through investment but are unable to evaluate other quality of management indicators.

TABLE 10
OLSQ estimations (dependent variable: PER93-89)

	Estimated coefficient	T statistics	Estimated coefficient	T statistics
Constant	- 1,65	- 1,19	- 0,82	- 0,73
PERPE94-90	0,60	7,09	0,62	7,41
GOV93	0,33	0,33	0,27	0,18
PERSON	- 7,85	- 3,12	- 8,10	- 3,25
REELEI	0,34	1,86	0,33	1,82
PRD	0,10	0,03	- 1,26	- 0,41
MAJORITY	- 3,42	- 3,53	- 3,40	- 3,54
PCE-89	11,94	0,62	- 7,78	- 0,41
PCE93-89*DUMMY	- 3,86	- 0,19	15,31	0,76
PFC93-89	- 7,84	- 0,36	- 3,07	- 0,14
PFC93*DUMMY	20,92	0,86	14,68	0,58
PINV93-89			34,9	3,08
PINV93-89*DUMMY			- 35,64	- 2,94
RCAP193/89	1,32	2,00		
RCAP193/89*DUMMY	- 1,10	- 1,93		
	R2 = 0,269 F stat.= 8,02		R2 = 0,282 F stat.= 8,58	

6 — Conclusions

Our main goal in this paper is to determine if voters in local elections account for quality of management of municipalities. The empirical evidence shows that voters are able to evaluate municipal councils using observable information. In this available information, investment seems to be a relevant variable. In very small municipalities the capacity to create employment in municipal services also seems to be significant. Other quality of management indicators, usually unavailable or difficult to be perceived, appear to be non-significant.

Personality of mayors is a very important explanatory variable of electoral results in municipal elections, although in our study we just have indirect signs of this relevance.

Our results show consistently that the general perception on the parties influence the electoral outcome at local level. A change of 1 % in the percentage of votes in the party in the election for the European Parliament generates a change in the local election of about 0,6 %.

Finally, we have clear indications that to be represented in central government hurts in local elections. One possible explanation is the traditional behaviour of voters who prefer to avoid concentration of power in one party. Another explanation is the perception by voters that mayors belonging to the opposition are more effective in defending their local interests.

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