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Bailouts in Costa Rica as a result of Government Centralization and Discretionary Transfers

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Abstract¹

This paper investigates the inter-relation between the central government and the municipalities in Costa Rica. It examines episodes in which the central government has bailed out the local governments from their obligations. We employ empirical and descriptive methods to show how discretionary grants relate to the degree of fiscal discipline of the municipality to produce hidden bailouts. Political, demographic, and economic variables explain the allocation of these discretionary transfers.

We illustrate the effects of the high concentration of decision-making of the central government on the fiscal performance of the municipalities. The municipalities play a limited role and its functioning largely depends upon the central government. We argue that the national administration would face a high political cost if it did not bail out the local government in several of the episodes studied. Using panel data from 1982-1997 on 81 *cantones*, we find that the fiscal effort of the local government is reduced by the presence of discretionary grants. The local governments finance local expenses with these discretionary transfers according to our empirical results. As expected from the centralization issue, political variables such as the affiliation of the local administration have significant effects on the resources received by the municipalities.

¹ This paper benefited from the comments of Ernesto Stein and participants in the Seminars on Fiscal Discipline in Local Governments held in Buenos Aires and Mexico. We thank the IFAM, General Auditing office, Executive Unit of the Landfill, AyA, especially José R. Madrigal and Ricardo Murillo and the assistance of Mitzi Hall, Róger Madrigal and Susan Rodríguez. Javier Cascante was originally a member of the team and helped in the initial stages of the project. Alexandra Mora, the Chief of the Specific Allocation Department of the Treasury Ministry, made available the reports of each specific allocation since 1983. Unfortunately, we cannot be thankful to the secretary of the executive board of IFAM, Gastón Iglesias Montealegre who prevented us from reviewing the correspondence of the executive board. This is a public matter, but his *de facto* control made it impossible for us to study the existence of bailouts in the full set of loans. Errors and omissions are the exclusive responsibility of the authors. Comments may be sent to Dr. Hall at ljh223@nyu.edu

1. Introduction

This paper investigates the most important episodes of bailouts in Costa Rica, showing how the central government bailed out some municipalities from their obligations and discussing the determinants of these episodes. Two types of bailouts are identified. The first type consists of bailouts that are relatively small in dollar terms. These episodes are nonetheless worth mentioning because they demonstrate the institutional framework that characterizes inter-governmental relations. The high degree of centralization largely explains how and why the national government has repeatedly rescued local governments in these cases.

On the other hand, extensive discretionary transfers from the central government to the local government explain a second group of bailouts. This paper postulates and shows a relationship between these discretionary grants and the fiscal discipline (or lack thereof) of several municipalities as measured by their financial surplus. These episodes of hidden bailouts derive their character from the implicit connection between the fiscal indiscipline of the local government and the transfer of grants from the central government. The high degree of centralization of the government explains why these bailouts exist.

Panel data was constructed on the country's 81 *cantones*, traditional econometric methods were applied to identify the interrelation between the fiscal surplus of the municipalities and the transfers received from the central government. Political, demographic, and economic variables explain the transfers of the central government to the municipalities. The different parts of the analysis suggest that the lack of effective delegation is primarily responsible for the occurrence of bailouts. There is a clear feedback loop among this lack of delegation, the influence of national political parties in the local election process and the poor performance of local governments in Costa Rica.

The rest of the paper is organized as follows. The next section examines political organization, the role assigned to municipal councils, and the role of the central government as a source of funds. The section discusses the organization of the central government and describes how recent changes have attempted to revert the high degree of centralization, although the impact of these changes is still unknown. The financing of the local government's duties is explained in detail, and the section closes with a brief description of municipal borrowing that reflects the entire subordination of the local government to the central government by means of special laws.

The third section closely examines the small-value episodes of municipal bailouts by the central government. These episodes involve the Executor Unit of the Rio Azul Landfill, the National System of Aqueducts and Sewage Institute (AyA) and the Municipal Development and Advisory Institute (IFAM). As looking at these cases clarifies the effective role played by local governments in Costa Rica, the section describes the episodes and investigates the determinants of these events. The inability of local governments to face economic crises due to budget rigidities and the implicit involvement of the central government are the two main factors explaining these bailouts. In case of financial hardship, the central government would face high political costs should it decide not to bail out municipalities; the involvement of the central government, however, goes well beyond the implicit backing of debts. Indeed, a main consideration in the election of local representatives is their ability to obtain resources from the Congress.

The fourth and fifth sections examine the political process underlying the allocation of discretionary funds from the national budget to the various municipalities. Econometric methods are employed to assess the relationship between obtaining these discretionary grants and the fiscal effort carried out by the local council. Additionally assessed are the effects of a variety of socioeconomic, demographic, and local and global political variables for the discretionary transfers received by the municipalities. A large database is constructed, with panel data from 1982-1997 on the country's 81 *cantones* and a large set of local and national variables. There is evidence that the chances of receiving transfers from the central governments have a negative impact on the fiscal efforts of the municipalities, as municipalities tend to substitute part of their expenses when they plan to receive discretionary grants. Political variables also have a significant effect on the amount of discretionary resources received by the local government.

2. Municipalities and Intergovernmental Relations

2.1. Political Organization

Costa Rica is a unitary republic divided into seven provinces. There are no provincial governments, however, and provinces are divided into *cantones*. Each of the 81 *cantones* has a local government, the municipality, governed by a municipal council whose size is based on the *cantón's* number of inhabitants. Councils can be of five, seven or nine members, and councils elect one of their members as president. Elections for all municipal councils are held nationwide

at the same time, and the main national parties have always participated in municipal elections, as well as independent and local political parties.

The small amount of resources directly managed by the municipalities reflects the large degree of centralization in the allocation of public resources. This is clearly shown by municipalities' limited responsibilities as well as by the influence of national politics on the election of local representatives.

The influence of national politics on local elections is to some extent built into the electoral system. Not only are all local government elections held on the same day every four years, but also national-level elections for the executive and legislative branches. These synchronized elections also involve a high level of turnover. The President of the Republic cannot be re-elected, and the deputies in the Legislative branch can be re-elected only in non-consecutive terms.

The country's two dominant political parties, the *Partido Unidad Social Cristiana* (PUSC) and the *Partido Liberación Nacional* (PLN), further contribute to the convergence of local and national politics. These two parties have alternated in the control of the Executive and the Legislative branches since 1949.² These two parties have representations in every *cantón* of the country. Indeed, most of the municipal councils have been controlled by these two parties since 1949.³ While many *cantones* are traditionally affiliated with one of these parties (e.g., those in the regions of San Jose and Cartago are traditionally biased towards the PLN, while the regions of Puntarenas, Limón and Guanacaste are more oriented to the PUSC), it is common for control of a *cantón* to alternate between the parties.

2.2. Legal Reforms

The tradition of centralization in the public sector dates back to the Constitution of 1871. The Central Government has circumvented the local governments by creating institutions with national scope that are specialized in providing public services (e.g., security, education, health, and more recently potable water).⁴

² Currently, for example, members of the *Partido Unidad Social Cristiana* hold 27 of the 57 seats in the Legislative Assembly, and members of the *Partido Liberación Nacional* hold 23, with the remainder held by members of minority parties.

³ Yet, recently the importance of local political parties has increased.

⁴ See the historical account in Albarracín and Pochet (1990).

Several reforms increased the independence and scope of the municipalities from the 1970s to the 1990s. The promulgation of the Municipal Code in 1970 implemented three major changes. First, the Municipal Executive could now be elected by the Municipal Council instead of being appointed by the President of the Republic. Second, real estate taxes would be automatically transferred to the municipalities. Previously, these funds were allocated to municipalities from other discretionary grants made by the Central Government. Third, the Instituto de Fomento y Asesoría Municipal (IFAM) was created in 1972 with the mission of improving local government administrations and providing them with low-cost credit.

More recently, decentralization has been fostered by three major legislative changes, the new Municipal Code, the Real Estate law and the Specific Allocations law.⁵ The new Municipal Code replaces the Municipal Executive with the Alcalde (mayor), and after 2002, the Alcalde will be publicly elected and will have the same standing as the Municipal Council. Municipalities will have greater autonomy in spending decisions and flexibility in charging for some services such as municipal police and maintenance of public parks. Moreover, municipalities will be authorized to issue tax-exempt bonds, and they will be able to delegate functions by means that include subcontracting some services.

The Real Estate Law of 1995 transferred the collection of the real estate tax from the Treasury Department to the municipalities. It enabled lower governments to exercise closer supervision of this revenue, including reassessment of property that was usually undervalued. In a subsequent law, the Congress reduced the real estate tax rate from 0.6 percent to 0.025 percent.

Finally, the recent Law of Specific Allocations replaced legislators' ability to distribute these grants on a discretionary basis with an automatic formula that depends on the community's number of inhabitants, size of the territory and degree of poverty.

The full impact of these reforms has yet to be seen. The reform of real estate taxes has clearly increased the revenues of municipalities, and the larger municipalities have expanded the services provided (e.g., the municipal police in San Jose). This municipality has also issued debt.

⁵ See the discussion in Aguilar (1996).

2.3 *Relative Size of Local Government*

Despite the decentralization undertaken in recent years, municipalities' duties largely remain limited to very basic services such as garbage collection, public lighting, local roads and, in some communities, potable water service. The 1998 reform authorizes local governments to provide municipal police protection, but overall responsibilities for expenditures remain highly centralized.

In fact, local governments account for a very small and even declining share of total public expenditure. In 1997 local government expenditures were equivalent to 4.7 percent of central government outlays and accounted for less than 1.1 percent of GDP. By comparison, the central government's share of GDP was 26 percent, as shown in Table 1.

This centralization of expenditures has strengthened over the years as the ratio of local to central government expenditure fell from 5.0 percent in 1980 to 4.2 percent in 1997. During this period the central government not only reduced local governments' duties but also created institutions with national scope specialized in the provision of public services that substituted for and limited the activities of municipalities. The 1970 municipal code, extended in the 1998 reform, clearly defined the fiscal discipline policy that applied to local governments. The municipalities must maintain a balanced fiscal budget, and budget deficits cannot be carried over from one year to the next.

Table 1. Relative Size of Local Governments 1980-1997

Year	Local-Central Expenditure	Local Expenditure - PIB	Central Revenues - PIB
1980	5.0%	1.1%	21.7%
1985	4.9	0.9	18.2
1990	3.9	0.8	21.1
1995	3.1	0.7	23.8
1997	4.2	1.1	26.0

2.4 *Government Revenues*

Local government expenditures are financed by five types of revenues: taxes, service fees, loans, grants and transfers from the Central Executive Government and Specific Allocations (*Partidas*

Específicas, hereafter referred to as SAs). Table 2 summarizes the share of these items during 1998 as well as the average composition of these revenues during the period from 1980 to 1998.

Specific allocations are public resources from the National Budget of the Republic distributed by the deputies in the Legislative Assembly for local or regional needs to local governments and local organizations. Before the 1998 reform, the deputies exclusively allocated these transfers. The 1998 reform introduced specific poverty and human development criteria to local governments to obtain these transfers. Due to their particular form, SAs are not included in the fiscal statements of the local governments. They represented an additional 4.4 percent of total municipal revenue in 1997.

Specific allocations are highly discretionary in comparison to other sources of revenue for local governments. In particular, it is important to contrast these funds with transfers and grants that represent a mandatory source of revenue for the municipalities, as SAs accounted for 6.8 percent of municipal revenues in 1998. The treasury minister as well as several other institutions of the government, including other ministries, autonomous institutions and even the Ministry of Defense must allocate part of their budget to the municipalities.

Table 2. Local Government Sources of Revenue

Item	1998		1980-1988	
	Share	Average	Std Dv.	
Tax	40.6%	40%	4.6%	
Property Tax	13.9%	18	3.0	
Permits	17.9	12	3.8	
Services, Interests, Fines	28.9	22	5.1	
Sale of Services	19.1	16	2.6	
Interest on Transitory	2.9	NA	NA	
Investment				
Tax and Service Fines	4.6	NA	NA	
Loans	4.0	4.0	1.7	
Total Grants	6.8	13	7.0	
Current Grants		5	2.2	
Capital Grants		9	5.1	
Prior Period Surplus	19.7	18	3.3	
Total Revenue	100%	100%		

Table 2 shows in some detail the sources of finance of the municipalities' expenditure. Taxes and service fees are the two most important and stable sources of revenue, accounting for approximately 70 percent of total income, while the share of service fees increased in the last several years and represented 28.9 percent of total revenue in 1998. Fees for services and goods

such as potable water, garbage collection and cleaning public roads represented 19.1 percent of total revenue. On the other hand, loans and grants provide a relatively small share of total revenue. The higher volatility (as measured by the standard deviation), suggests that they provide flexible means to obtain resources and probably provide a form of weak budget constraint on the municipalities.

Most revenue is collected at the local level. When the degree of vertical imbalance is defined as the proportion of total revenue not collected at the local level to total income, this ratio on average across municipalities was found to be 4.7 percent in 1998.⁶ This low degree of vertical imbalance reflects the fact that the few activities assigned to local governments are mostly charged directly to the end user. In addition to being low, the degree of vertical imbalance has steadily decreased since 1980. There is reason to believe that part of this decline is associated with reductions in transfers from the Central Government due to an increasing public debt burden. The reduction also reflects the reassigning of the property tax to local governments in 1995 and increases in revenues from permit and service fees.

The low degree of vertical imbalance contrasts with the low flexibility of revenue. Municipalities can alter only 25 percent of their total revenue, including the sale of services and goods, and even modifying these items is time-consuming and subject to financial rigidities. The General Auditing Office must approve the modification of these fees, which usually takes from six months to one year.

2.5. Municipal Borrowing

Figure 1 and 2 present local governments' share of debt with respect to their total revenue and the total amount of debt in constant terms since 1979, respectively. Municipalities financed on average 5 percent of their expenditures through debt and, as Figure 1 shows, this source of funding has been very volatile, with high and low points of 9 percent and 2 percent, respectively. The lowest level of municipal borrowing is observed during the economic crisis of the 1980s and the period of the closing of the Municipal Development and Advisory Institute (IFAM).

⁶ For discussions on the notion of vertical fiscal imbalances, see Eichengreen and von Hagen (1996), von Hagen (1991), Stein (1998), and IADB (1998).

The experience of borrowing by local governments relates to the creation and developing of the (IFAM). The IFAM was created in 1970⁷ with the main objective of promoting and developing municipal governments, and the provision of low-cost loans was its main channel for reaching this goal. The government financed the IFAM through the collection and transfer of taxes that were initially part of local government revenue. These low-cost funds enabled the IFAM to offer loans at very flexible rates.

Figure 1.

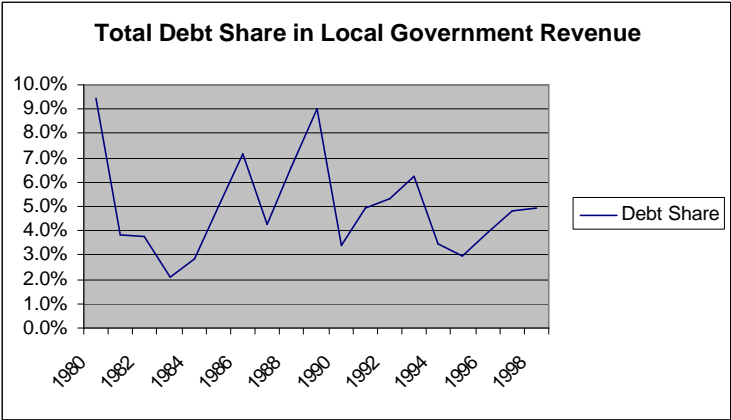
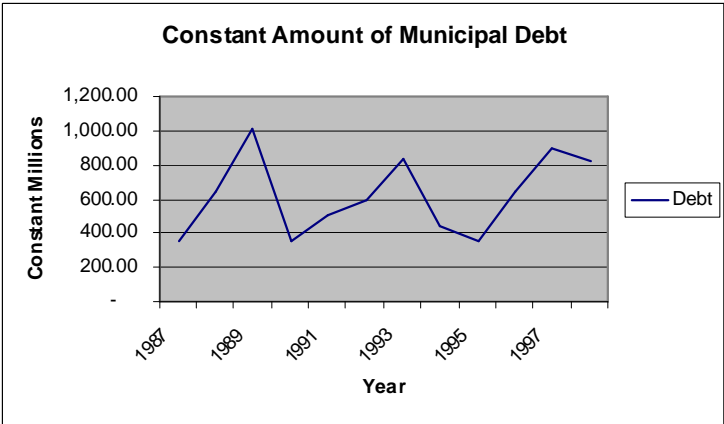


Figure 2.



An important regulation behind the credit intermediation of the IFAM is the inability of the IFAM to revoke any loan previously conceded to the municipalities. Although the

⁷ The IFAM was technically closed in 1996; however, it is still operating.

Contraloría General de la República (CGR) enforced this regulation, the IFAM used several legal exclusions to restructure previous debts with municipalities under financial stress. In particular, the CGR paid special attention to the nominal value of the debt, implicitly allowing the IFAM to refinance several loans by means of weakening the initial loan conditions. Several bailout episodes discussed in this paper were produced in this form.

Local governments were also allowed to borrow from domestic capital banks or issue bonds. This source of revenue and the contracting of external loans were severely regulated by the central government, and they always required the approval of the Legislative Assembly and the CGR. This regulation, which did not apply to IFAM loans, combined with the low cost of the institution's loans, favored this source of debt in comparison to other sources of borrowing.

This tight and highly controlled borrowing policy also reflects the high degree of government centralization. According to the municipal code, local governments were not allowed to carry deficits for periods longer than a year. A local government's deficit created during one fiscal year forces the municipality to provide enough resources during the next fiscal year to cover such deficits if their budget is to be approved, and the CGR has the legal right to reject a municipality's budget until those payments are explicitly considered.

Consequently, debts or other expenses not properly covered during a fiscal year are difficult to carry over to other periods. This restriction, for instance, led to the Rio Azul landfill bailout that will be described below. The CGR will not approve any budget that does not include enough resources to cover repayment of debts, and the 1970 law went so far as to stipulate that no more than 10 percent of the ordinary revenue could be used to pay debts.

The 1998 municipal code changed local governments' access to borrowing, as foreign as well as internal borrowing was facilitated by the emission of tax-exempt municipal bonds. At the same time, however, the balanced budget requirement still exists, and the municipalities are closely supervised regarding fiscal discipline.

3. Bailout Episodes and their Determinants

This section analyzes episodes in which the Central Government has assumed the obligations of local governments. The cases identified in Costa Rica are different in nature and style than those in federal countries, and the restrictions on municipal financing described above practically eliminate municipalities' ability to borrow from public sources. Nonetheless, three major

municipal bailouts were identified: (i) the aqueduct of Cartago, (ii) the Landfill of Rio Azul and (iii) the default on loans from the IFAM. All are associated with the provision of services and responded mainly to the high political pressure faced by both Central and local governments. Estimated at approximately US\$8 million, the bailouts are not large in absolute terms. They are, however, significant in relative terms, accounting for on average 40 percent of the debts contracted. Despite the small amounts involved, these episodes provide useful insights into the intergovernmental relations that produce bailouts.

3.1 The Institute of Aqueducts and Sewers (AyA)

The Inter-American Development Bank (IDB) financed the construction of the aqueduct system of three municipalities in the eastern zone of the Greater Metropolitan Area of Costa Rica: Cartago, Paraiso and Oreamuno. Because of “economic” reasons and the municipalities’ lack of technical capacity, the National System of Aqueduct and Sewage Institute (known by its Spanish acronym AyA) was responsible for this construction. The municipalities signed agreements with the Central government and the AyA in 1987 so that once the works were constructed their value would be paid through a program of payments and fixed quotas under the same conditions as the credit was granted by the IDB.

Construction was completed in 1992 (with the exception of the second stage of construction in Cartago) and the pending amount of debts at that time is shown in Table 3. Nevertheless, the payments of these debts did not begin immediately after the works were finished. Paraiso and Oreamuno began payments in June and January of 1995, respectively, while Cartago did not do so until December of 1997.

Table 3. Total Cost of the Aqueducts

Local Government	Ending Year of Construction	Amount in Dollars (millions)
Cartago		
1 st Stage	1991	3.0
2 nd Stage	1995	0.8
Oreamuno	1991	0.8
Paraiso	1991	1.2

There are several reasons for the arrears. First, the municipalities refused to increase water rates. The existing rates did not cover the cost of the project, and a 60-percent rate increase was recommended for the first year. This was rejected by the municipalities, however, because of the anticipated social and political consequences; in addition, the mechanisms of tax and fees collection are weak and characterized by high rates of default. The municipalities were thus hampered not only by the lack of efficiency in collection have an influence, but also by the high cost of legal action. In addition, the suspension of service represented potential externalities in public health and sanitation that the municipalities would have found unacceptable.⁸

Second, the municipalities objected to the arrangements made by the AyA. Some argued that the AyA did not want to hand the blueprints of the project to the municipalities in order to retain control of the aqueduct's management. As a result, the local governments would not start payments until these engineering and administrative issues were cleared up.

Third, political factors influenced the non-payment of the obligations in those years. The Central Government needed the support of Juan Guillermo Brenes Castillo,⁹ the well-known independent deputy from Cartago, and a compromise between PLN and Brenes Castillo eventually eased the conditions for the municipalities involved. The results included agreements for SAs of more than a million dollars for the Cartago aqueduct dollars (see *La Nación*, 1 May 1995).

Thus, the disputes lasted approximately five years, during which time the Central government made payments to the IADB. Oreamuno and Paraiso began to pay their debts in January and June of 1995, respectively, and Cartago in December of 1997. The municipalities of Cartago and Paraiso maintained the same financial conditions (amount, term, interest rate) as in 1991, however, while the remainder of Oreamuno's debt was reduced by 50 percent. As of March of 1999, the municipalities of Cartago and Oreamuno have not paid their quotas on time; Oreamuno has 14 quotas pending to date, that is, Oreamuno has paid only one quota since 1992.

Table 4 summarizes the financial impact of the bailout. In order to quantify the effects of moratoria, arrears and changes in the terms of the contracts, the value of these changes is computed in present values. The debts are valued in 1998 dollar terms, and the inter-bank

⁸ Even in the opinion of some municipal authorities of the locations mentioned, water is considered a *merit good* and late payment should not be a motive for suspension. It is estimated that the political and social costs would be higher than the social benefit if the service were canceled punctually.

⁹ He is perhaps better-known by his nickname "Cachimbal," a colloquial term meaning a large amount; this relates to his ability to channel Central Government funds and projects to his district.

exchange rate of that year was used. An average inflation rate of 15 percent and a market interest rate of 20 percent annually have been assumed. (The same methodology is employed to calculate all the episodes of bailouts in this paper unless otherwise mentioned.) Particularly noteworthy is that the delay in payments for Cartago meant a 44.8 percent reduction in the value of the loan.

Table 4. Aqueduct Bailout (AYA) 1992-1997 (US dollars)

Local Government	Bailout Amount	Bailout to Total Debt (%)
Cartago	2,622,589	44.8
Oreamuno	259,542	16.5
Paraiso	249,056	14.3
Total	\$3,131,187	

3.2 The Rio Azul Landfill

Since 1972, the 12 municipalities that make up the Metropolitan Area have used the Rio Azul landfill, which is managed by the municipality of San Jose. During the period between 1972 and 1993, the Municipality of San Jose accumulated bills reaching US\$1.4 million, which were never recovered. The General Auditing Office, however, agreed to redeem the municipality's financial status with measures that included forgiving this large debt. The municipality's landfill management lasted until 1993, the same year in which its management was transferred to the Municipal Cooperative Agreement (COCIM). COCIM managed the landfill until May 8, 1994, at which time José María Figueres was starting his presidential administration and designated a Ministry of Special Affairs mainly to provide a solution for the metropolitan rubbish problem.

The Metropolitan Area includes 30 percent of the country's population, but only 1.5 percent of national territory; the resulting population density is 1,600 people per km². The high concentration of population using the landfill, as well as the fact that it is used more as a dump than a recycling plant, caused the overuse of the landfill and its subsequent exhaustion. The solution proposed by both the municipalities and the central government was to build a new landfill. In 1990, it was proposed to transport rubbish by train to Esparza or Orotina, located 95km from the metropolitan area, or else to Santa Ana, 15 km from the capital. These communities, which are not part of the Metropolitan Area, were strongly opposed to the project,

and confrontation between the police forces and community members occurred, as well as street blockage. The opposition candidate, who was later president, José María Figueres included the rubbish treatment problem as a campaign subject. The Calderón Administration opted to continue using the Rio Azul landfill instead, and the problem became national, fully out of reach of any local solution.

Table 5. Debts and Deficit of the Metropolitan Municipalities with the Executor Unit, 1994-1997 (US \$ dollars)

Local Government	1994	1995	1996	1997	Total Bailout - Total Debt Ratio
Alajuelita	6,367	5,561	22,597	6,950	82.60
Aserri	-	9,596	10,884	-	76.55
Coronado	-	-	-	-	49.59
Curridabat	24,253	30,492	29,101	9,140	95.17
Desamparados	-	72,336	43,079	49,426	82.39
Escazu	9,651	13,886	-	-	65.84
Goicoechea	31,945	32,917	23,956	14,569	76.06
La Union	-	-	-	-	49.66
Montes de Oca	-	22,491	-	-	58.75
Moravia	-	-	-	-	48.1
San Jose	-	24,156	58,669	235	54.45
Tibas	-	-	-	-	48.21
Total	72,216	211,437	188,287	80,231	
Deficit EU	-	286,641	1,172,890	1,236,306	
Deficit to Total Revenue EU		(12%)	(81%)	(34%)	
Total Bailout	72,226	498,079	1,361,177	1,316,628	3,248,100

José María Figueres created the Executor Unit of the Landfill, which took over the management and technical closure of the landfill in Rio Azul in May, 1994. Subcontracting a company for the treatment and technical closure of the landfill, the Unit took responsibility for all administrative matters, paying the company and charging fees to the municipalities that use the landfill. The Executor Unit charges the municipalities for the use of the landfill by each metric ton deposited which actually includes service of garbage disposal and the technical closure of the landfill. COCIM collects the charges from the municipalities and receives a 4 percent fee for this collection service.

3.2.1. The Bailout

The administration of the landfill produced two types of bailouts. The first occurred because municipalities did not make full payments of their bills to the Executor Unit. Unpaid amounts accumulated over the years, and their nominal value is currently around US\$550 thousand.

The second type of bailout involves deficits accumulated by the Executor Unit. The financial statements of the landfill show large deficits since 1994, which were covered by central governments transfers to the Executor Unit. These deficits add up to \$3 million over the last five years, the same amount transferred to the Executor Unit from the Central government. This shortfall in Executor Unit revenues is additionally noteworthy in that the fees charged to the municipalities for garbage disposal and technical closure of the landfill are low in comparison to the total cost of execution of the landfill.

In effect, the Central government is assuming the obligations of the Metropolitan Area municipalities through direct transfers to the Executor Unit and charging low garbage disposal fees to the municipalities. The details of these deficits are shown in Table 5, which is divided into two components. The first part shows the detail of the debts accumulated by the municipalities. The second part details the total amount of the deficit per year and also shows these deficits as a percentage of the Executor Unit's total income.

The Executor Unit took over responsibility for these debts for various reasons. First, the municipal tax discipline law makes it very difficult to include within the budgets of the municipalities debts that exceed a one-year expiration date. After a year, the Executor Unit has to write off these debts as unrecoverable. Second, the Executor Unit faces serious challenges in legal debt recovery, as the Unit must pass the complaint to the Emergency Commission, which is its superior body. The Emergency Commission then files the formal complaint before the respective court. At the moment, there is no evidence of a single legal complaint filed for non-payment.

Third, the low fees do not cover the operation and technical closure of the landfill and implicitly call for financial help from the central government. In this case, low fees represent a direct subsidy to the local government.¹⁰

¹⁰ An examination of the landfill's financial statements indicates that the Unit is not charging at all for the technical closure of the landfill. The research undertaken for this study included a request for more detailed information on the Executor Unit's revenue and expenses in order to more thoroughly evaluate this case, but the chief of the Executor Unit considered the information to be classified and confidential and refused to release it.

Finally, the legal constitution of the Executing Unit has been unstable since its creation, which has complicated debt recuperation. Initially directed by the Ministry of Specific Affairs, the Unit was later transferred to the National Emergency Commission during the Figueres Administration. In the current Rodríguez Administration, the Unit forms part of the Ministry of Health. All of these changes happened within a period of five years.

3.3 The Municipal Development and Advisory Institute (IFAM)

The IFAM, created in 1972 with the purpose of advising local governments by means of directing credit to specific purposes, has been the most important source of credit for local governments during the last twenty years. The main characteristics of its loan portfolio are shown on Table 6, and the data are divided by administration period in order to observe major policy changes.

Table 6. IFAM: Destination, Size and Concentration of Loans

Item	1982-1986		1986-1990		1990-1994		1994-1998	
Destination	Amount	Number	Amount	Number	Amount	Number	Amount	Number
Equipment	36%	68%	27	56	46	53	58	60
Construction	49	24	28	24	13	11	16	14
Aqueduct	11	5	43	14	37	29	13	11
Others	4	4	3	6	5	7	13	15
Size	Amount	Number	Amount	Number	Amount	Number	Amount	Number
Small	22	32	18	26	16	32	25	36
Medium	55	47	64	60	58	56	58	55
Large	23	21	17	14	26	12	18	9
Concentration	Local Governments		Local Governments		Local Governments		Local Governments	
0 Loan	7%		22		15		22	
1 Loan	31		30		33		26	
2 Loans	28		28		33		31	
3 + Loans	34		20		19		21	

Although IFAM regulations do not permit forgiving debts and the Municipal Code does not allow the municipalities to be behind in their debts, approximately 85 credit operations in the IFAM were identified where the municipality received financial support from this entity due to problems in paying their debts.¹¹

In the case of the IFAM, the bailout problem leads to very interesting financial behavior. As the IFAM cannot forgive debts, the adjustments are made via modification of the original terms of credit with the same financial conditions, the suspension of interest and principal payments for defined periods, the suspension and later payment of grace period interest and the granting of new credit with subsidized financial conditions.

In such cases the General Auditing Office exclusively corroborates the nominal value, an important aspect to be considered for the determinants of the lack of fiscal efforts. This subsection describes the principal bailout episodes involving IFAM.

3.3.1. Devaluation 1980-1981

In 1980s, Costa Rica faced an aggregate crisis triggered by oil prices and high international interest rates, and the country's long-standing economic stability came to a sudden end. After 5 years with fixed exchange rates (US\$1 = 8.6 colones), in 1980 the foreign exchange market faced a speculative crisis: the exchange rate devaluated 321 percent, the inflation rate reached 89 percent and interest rates, which from 1976 to 1979 did not surpass 10 percent in colones terms, peaked at 37 percent. The next five years were characterized by 10 percent devaluation and 37 percent inflation annually.

At the beginning of the crisis, it was common practice for municipalities to incur indexed debt with commercial banks and suppliers denominated in foreign currency and paid in local currency, mainly for the purchase of machinery. Municipalities assumed the exchange rate risk involved, as debts were indexed while their income was not. Under these circumstances the sudden devaluation led to a severe deterioration in municipalities' finances, and at least 10

¹¹ These cases were identified through interviews with IFAM employees and by studying approximately 250 credit files. Unfortunately, the credit files are not complete, and they do not include some of the executive board agreements that relax some of the loan conditions and produce the bailouts as explained below. The Secretary of the executive board of IFAM, Gastón Iglesias Montealegre, prevented the authors of this paper from reviewing the board's correspondence. Even though this is a public matter, we were not able to study the existence of bailouts in the full set of loans. Therefore, it was not possible to apply empirical methods to studying the determinants of these bailouts.

municipalities sought assistance from the IFAM in resolving their financial hardship. One particularly interesting case was the municipality of Puntarenas, which was sued for a debt incurred in the purchase of machinery. In 1986, the court determined that Puntarenas should pay not only the pending amount, but also the legal costs involved. In this case, the IFAM approved a loan to allow the municipality to pay this debt.

In another instance, the municipality of Cartago (the second largest in Costa Rica), obtained a loan in 1980 to improve its aqueduct. The municipality argued that it was not able to pay its debt because of the devaluation and because of its inability to increase the tariffs. In this episode, the IFAM granted the municipality a loan with lower cost conditions and a longer term. The loans granted by the IFAM in these cases had longer terms, between 5 and 10 years, with lower fixed rates (6 percent in colones) and one-year grace periods. This bailout is evaluated in the same form as the previous cases. The results are shown in Table 7.

Table 7. Devaluation

Local Governments	Bailouts Amount	Bailout to Total Debt
Puntarenas	69,424	60.9
Pococi	40,425	44.7
Alajuela	35,448	39.0
San Carlos	8,910	22.8
Cartago	8,844	32.6
Guatuso	6,388	42.2
Coto Brus	5,406	33.9
San Rafael	3,768	30.4
Bagaces	2,160	30.4
Orotina	2,006	32.6
Total	\$ 182,779	

3.3.2. *Municipal Markets*

The second bailout episode is the case of the Municipal Markets, a project began at the end of the 1980s whose objective was the construction of municipal markets and community centers. The resources for financing these works were provided by the Inter-American Development Bank through an agreement with IFAM. The loans were granted in the period of 1985-1986 to 12 local governments and had diverse purposes such as the purchase of land and the construction of bus stations. Once these works were built, the sites were rented to the private sector to provide

diverse services to the communities. The original conditions of the loans show terms that vary between 16 and 18 years, with fixed annual interest rates of 12 percent for all loans, and municipal income established as collateral. The total amount of loans granted was US \$1.6 million in 1986.

Several reasons explain why the majority of local governments could not meet their obligations with the IFAM. First, serious deficiencies existed throughout the evaluation process in each of the projects implemented by the municipalities. A series of flaws are observed in the studies carried out in relation to the demand projections used and the income received through rent. In other cases feasibility studies were not carried out and there was a low utilization of the physical structure. For instance, in the Colorado municipality (1994) the commercial area of the community center was never rented out. In Parrita (1988) the small size of the service-demanding population stands out, as well as strong competition by the informal sector, which affected the profitability of the project. The municipality of Puntarenas faced a similar situation (1989) when, two years after opening, its market was occupied at only 27 percent of its capacity. Finally, demand and market problems caused the municipality of Acosta to run a deficit of nearly 1.5 million colones per year in this project.

A second factor impeding repayment involved problems associated with the tariff structures used by the local governments, as well as the effects of inexperience in projects that were not normal tasks for either the municipalities or the tenants of the sites. Third, the municipalities were affected by the high rates of default among users of the markets, as well as the municipalities' own limited administrative capacity in revenue collection.

These situations caused seven of the twelve municipalities involved in the project to declare a moratorium on IFAM payments at one time or another. In the majority of the cases studied, the IFAM bailout was characterized by the following elements:

1. Increase in the original term of the loan in some cases up to 7 years in some cases, maintaining the same interest rate and without considering moratoria interests.
2. Approval by the Board of Directors of the IFAM for local governments in order to defer the interest payment of the grace periods without any additional financial cost. The time to fulfill these obligations ranged from 5 to 15 years.

In this way, for example, municipalities that had to pay grace period interest with terms of one year were allowed to pay the same amounts with longer terms. In other situations, not only were the payments of grace period interests deferred, but the grace periods were also extended, which affected the recovery of debt. For example, in the case of the Municipality of Santa Cruz, in 1988 payment of grace period interests was deferred from the original term of 1.5 years to 5 years. In the case of the Municipality of Acosta, in 1989 the grace period interests were deferred from 1.5 to 10 years, and in 1992 the municipality of Parrita canceled its delinquent debt of 1988 by means of a specific allocation. The valuation of the bailout associated with the municipal markets, presented in Table 8, follows the same present value approach as the previous episodes.

Table 8. Municipal Markets

Local Governments	Bailouts Amount	Bailout to Total Debt
Acosta	26,083	10.3
Puntarenas	25,007	8.70
Parrita	23,521	16.10
Santa Cruz	12,661	4.00
Buenos Aires	5,263	2.50
Colorado	3,241	2.90
Jimenez	51	0.10
Total	\$95,827	

3.3.3. *Aqueducts and Sewage (AYA)*

A third episode of IFAM bailout involved the National System of Aqueduct and Sewers Institute and the municipalities. Several of the municipalities went into debt with the IFAM to finance the construction and maintenance of their aqueducts, which were financed at 6 percent, well below the market interest rate. Since the beginning of the 1990s it has been normal to observe the intervention of the AyA and the Ministry of Health in various locations due to problems of negative externalities associated with the existence of terrible systems of waste water disposal in the municipal aqueducts, as well as the existence of high levels of contamination of potable water. Problems involving water rates adjustment and fee structures have subsequently joined this list.

Bailouts have occurred in those cases where the AyA has become the administrator and service provider and where municipalities have outstanding debts to the IFAM. When the AyA

assumes the administration of the service, it also assumes the debt with the subsidized conditions (6 percent rather than the market interest rate). The value of the bailout and the most relevant cases are shown in Table 9.

Table 9. AYA Loans

Local Governments	Bailouts Amount	Bailout to Total Debt
Mora	227,840	49.4
San Ramon	29,940	2.30
Palmares	24,066	2.30
Nicoya	23,929	-
Colorado	18,408	51.20
Santa Cruz	12,596	-
Limon	9,657	1.70
San Pablo	6,928	2.60
Coto Brus	2,318	1.70
Aguirre	1926	1.50
Perez Zeledon	1,007	1.70
Total	\$356,928	

For this reason the quantification of the bailout includes not only the debts that the IFAM had to assume, but also the fact that once the system of aqueducts and sewers is taken over by the AyA, the finance conditions remain subsidized. Particularly noteworthy are Mora and Colorado, where the bailout represented close to 50 percent of the total debt incurred by the local government. These two cases received ample public coverage in Costa Rica due to epidemics of hepatitis and the presence of fecal matter in potable water supplies.

3.4 Determinants of Bailouts

Bailouts in Costa Rica result from the high political cost to the central government of ignoring local government fiscal problems and the local governments' adjustment costs in dealing with the crises themselves. This section explains the main determinants of bailouts in detail.

3.4.1 Factors Affecting Local Governments' Cost of Adjustment

The factors affecting the cost of adjustment for the lower government in the absence of a bailout represent the first determinant of these events. The government of Costa Rica is highly

centralized, with local jurisdictions performing very few activities. Moreover, intergovernmental fiscal relations are characterized by a low degree of vertical imbalance and high rigidity of revenue and expenditure on the side of local governments. These factors affect the bailout decision, since the higher-level government cares about the welfare of the citizens of the jurisdiction to be rescued.

The cases of aqueducts, devaluation and landfill all demonstrate the rigidity of municipal revenues. In the episode of the aqueduct of Cartago, Paraiso and Oreamuno, for instance, the AyA advised a 60-percent increase in water rates, which was ultimately rejected. In the case of the devaluation, the delay involved in approving these fees makes it difficult to use them as a solution to the problem, and depending on the central government to finance the default is always simpler. Finally, in the case of the landfill, municipalities found it easier to be bailed out by the Executor's Office than to adjust garbage disposal rates in their jurisdictions. An important fact explaining this rigidity of service fees is the political cost to the municipal council. Since the communities are generally small, and most of the municipal council members live in the community, a large fee increase can affect members' prospects in future campaigns, as the adjustment in service charges can always be traced to the Municipal Council.

3.4.2 Political Cost for the Higher-Level Government

A second determinant of bailouts in Costa Rica is the high cost to the central government associated with not extending a bailout. As Costa Rica is a unitary republic with a high degree of centralization, most decisions can be traced to the central government. Three specific factors affect the central government's political benefit in denying bailouts: the proximity of elections, the central government's ultimate responsibility for problems left unsolved by local governments, and the weakness of legal restrictions.

3.4.3. Election Period

The high political cost of not extending a bailout in the episodes of the Rio Azul Landfill and the aqueduct in Cartago derived from the proximity of these events to an election. The candidate for the leading party during the election of 1994-1998, José María Figueres, made use of the landfill problem as a campaign issue. The bailout, which occurred after the election, was a direct result of a promise made by the president during his campaign. One can argue for ex-ante behavior

from the local governments that translated afterwards into reducing the payments to the central government for the landfill service. In the case of the aqueduct of Cartago, the executive and legislative branches assessed the high political costs of denying the bailout. In the executive branch, the AyA, whose executive president is chosen by the President of the Republic, accepted a four-year postponement in payments by local governments. Considering that Cartago is the second largest jurisdiction of the country and that elections were tight during the last two campaigns, denying the bailout could have affected the electoral results at the higher government level.

The legislative branch extended the bailout in exchange for a favorable vote in Congress on the part of a minority deputy. In 1996, the election of the president of the legislative assembly required one extra vote to assure this position, and it was widely recognized that the minority deputy representing the region of Cartago negotiated an amount in specific allocation above US\$1 million for the aqueduct of Cartago in exchange for his vote.

3.4.4 Flaws in the Legal System

Since Costa Rica is a small, very centralized country, denying a bailout bears a high political cost, because any resulting can be traced to the government's action. Not only is the central government responsible for solving the problems of the country, but it is also frequently perceived by the population as the cause of those difficulties. The problem of the devaluation of 1982, the overuse of the landfill in the metropolitan area, the deterioration of the aqueducts and sewage system across the country and the inappropriate evaluation of the municipal markets are all examples of local problems that can be traced to central government actions. Mass media play an important role in transforming these local level problems into national difficulties.

The weakness of the legal system represents a final determinant of these episodes. Bailouts of debt are a mechanism to transfer local fiscal obligations to the central government. Consequently, if local governments perceive flaws in the legal system regarding debt enforcement, they will carry out ex-ante overspending, recognizing that the central government will periodically bail them out. The cost of denying a bailout in this case becomes high since the laws in force mix the responsibilities of the different actors.

The General Auditing Office works under a nominal value of debt. Thus, no matter how long loan recovery takes for the IFAM, the Office will control the nominal value of the loan. The

IFAM has the right, though, to extend the terms of the loan while maintaining the interest rate and original amount as a procedure to extend a bailout. This practice has produced implicit bailouts in Costa Rica. A parallel problem occurs with the landfill where debts more than one year old cannot be included in the budget. The Executor Unit of the landfill must then either accept this default as a bailout or undertake legal action with no clear precedent and little chance of success.

Although the Municipal Code establishes that municipalities will take care of the well-being of the inhabitants of its territory, a series of laws creating autonomous institutions has mixed the responsibilities of the different actors. The AyA, for instance, must guarantee the provision of potable water across the nation. Although this was merely a supervisory duty when the institution was established, the AyA rapidly transformed into an executor unit and finally a supplier provider covering approximately 50 percent of the country's municipalities. This mixture of duties reflects the weakness of the legal system and explains the bailout episode in Cartago, which occurred because the Municipality of Cartago and the AyA did not reach an agreement in terms of acceptance of the project. The AyA had particular interests in undertaking the administration of the aqueduct since the province of Cartago is the main source of water for the Metropolitan Area. The municipality finally maintained the administration and resumed payments five years later.

The failure to define the scale at which these goods and services were to be provided represents a key factor in explaining the duplication of functions. While it is clear that the provision of water and the service of garbage collection and disposal have important economies of scale, the question here is whether people desire to join in the large-scale provision of the service. This decision results from the comparison between the benefit received by the reduction in the cost of provision due to larger scales and the losses that arise from people's inability to control their own service levels. If such losses were not present, the result would be central provision (see King, 1984 and 1997). For the cases studied in this paper, this duality is present in the form of two opposite institutions.

Consider first the case of water. Historically, local governments were supposed to provide potable water, with the territory divided into 81 local governments. The development of the Metropolitan Area, however, with its concentration of population and scarcity of water, demanded a unified approach. Hence, the provision of water in the country changed and now

several main sources supply water to the country. The takeover of service by AyA in some localities reflects the economy of scale in the provision of the good. Alternatively, several localities have refused to transfer the service from the municipality to the AyA, reflecting the high losses they perceive from this transference. In some cases this duality of provision and public institutions is understood as a weakness in the legal system, which increases the likelihood of a bailout.

The episode of Cartago and the cases of the aqueduct of the IFAM are examples of this economy of scale dilemma. In the IFAM cases, provision was transferred to the AyA and the bailout occurred. In the Cartago episode, the opposite occurred. Cartago had sufficient water resources to expand water provision and decrease costs by itself, and the losses for transferring the service to the AyA turned out to be very high. As a result of the conflict of interest, there was a 5-year delay that produced the bailout.

A similar analysis applies to the case of the landfill. The problem of garbage disposal exceeds the boundaries of each community in the Metropolitan Area, and the municipalities decided to collaborate in order to provide for the disposal of garbage in a single location. They received the benefit of a very low cost, given the economies of scale present. Nevertheless, the expansion of the Metropolitan Area increases the losses that arise from people's inability to control their own service level. In this case, the municipalities find it very costly to carry out garbage removal. The duplication of functions by the executor unit and the municipalities, and the need to determine the scale of service provision, reveals a weakness in the legal system that led to a large bailout. In this case the solution calls for decentralization in the provision of the service.¹²

4. The Specific Allocations

The Specific Allocations (Partidas Específicas in Spanish) are public resources from the National Budget of the Republic distributed by the deputies in the Legislative Assembly for local, communal or regional public needs. They are to be used in public works such as infrastructure

¹² This problem is becoming hard to solve. Presently, many of the solutions that call for providing the service by means of including a smaller number of municipalities in the Metropolitan Area are being refused by all localities. Since municipalities cannot solve the free rider problem, it seems that each local government will have to dispose of its own garbage. It is at that moment it is expected that the high cost of disposal will create an opportunity for shared provision of service.

(road and sewer repair), recreation (sports facilities, gymnasiums and parks) and social and cultural projects (education and health). The beneficiaries have principally been communal organizations such as municipalities, development associations, educational boards and other groups.

The reason to study the distribution of specific allocations is that they have been highly discretionary, and they may provide a hidden channel for the central government to provide bailouts, or soften the budget constraints on municipalities. The empirical section below tests this hypothesis in order to conclude whether specific allocations are a hidden mechanism for the central government to bail out municipalities.

Table 10. Specific Allocations (SA) to Municipalities 1990-1997

Year	SA to Municipalities	Growth Rate	SA in Total Revenue Terms
1990	32.1%	-	3.0%
1991	16.4	48.8	3.5
1992	42.3	269.8	10.1
1993	24.4	-35.9	4.9
1994	37.1	-51.7	2.1
1995	31.8	268.9	6.5
1996	32.1	31.5	5.8
1997	29.6	-0.6	4.4

Although SAs are not reported in the budget of local governments, they are an important source of additional revenue for municipalities, especially as SAs can be distributed to other social organizations. Table 10 describes trends in specific allocations. The first column of the table indicates the share of the total allocations that were directed to the municipalities, the second represents the growth rate of the SA, and the third reflects the amount of the allocations to municipalities as a percentage of total municipal revenue.

The table shows the overwhelming volatility of these transfers. The fraction going to municipalities rises from 16.4 percent in 1991 to 42.3 percent in 1992, an election year, when the total amount of SAs almost tripled. But, while this is the most extreme increase, high variability is also present in other years. Due to their discretionary nature, the allocation of these resources is highly dependent on national politics and sensitive to innovations in the Legislative Assembly.

4.1 Political Process behind the Specific Allocations

The large volatility of these transfers documented in the previous section illustrates the high degree of discretionality in municipalities' access to resources from the National Budget. Until May of 1998, the process for the approval and execution of SA was as follows: the Treasury Department of the Ministry of Finance proposed the bills for the ordinary and extraordinary budget of the Republic. Specifically, the Treasury Department budgets a maximum amount for SAs according to the fiscal and monetary program. The Treasury Commission (Comisión de Asuntos Hacendarios) of the Legislative Assembly must discuss, modify and approve the budget. The Commission, made up of 11 deputies—including a member from the minority parties—is elected by the President of the Legislative Assembly. The effect of national politics is clear, since the President of the Congress is almost always a deputy of the party that controls the Executive branch. The SA bill is revised and modified by a sub-commission composed of 5 members. Once the Commission approves the budget, it is sent to the Plenary of the Assembly to be voted on and made Law of the Republic.

As expected, the Commission invariably increases the amount of SA, even at the cost of cutting expenses from other divisions of the government. Table 11 shows the amounts proposed by the Ministry of Finance and the amounts finally approved by the Treasury Commission for a selected set of years. In several years the Ministry of Finance did not budget specific allocations but in one of those years the Legislative Assembly approved sums above \$17 million.

Table 11. Amount of Specific Allocations, 1994-1998
(in million of dollars)

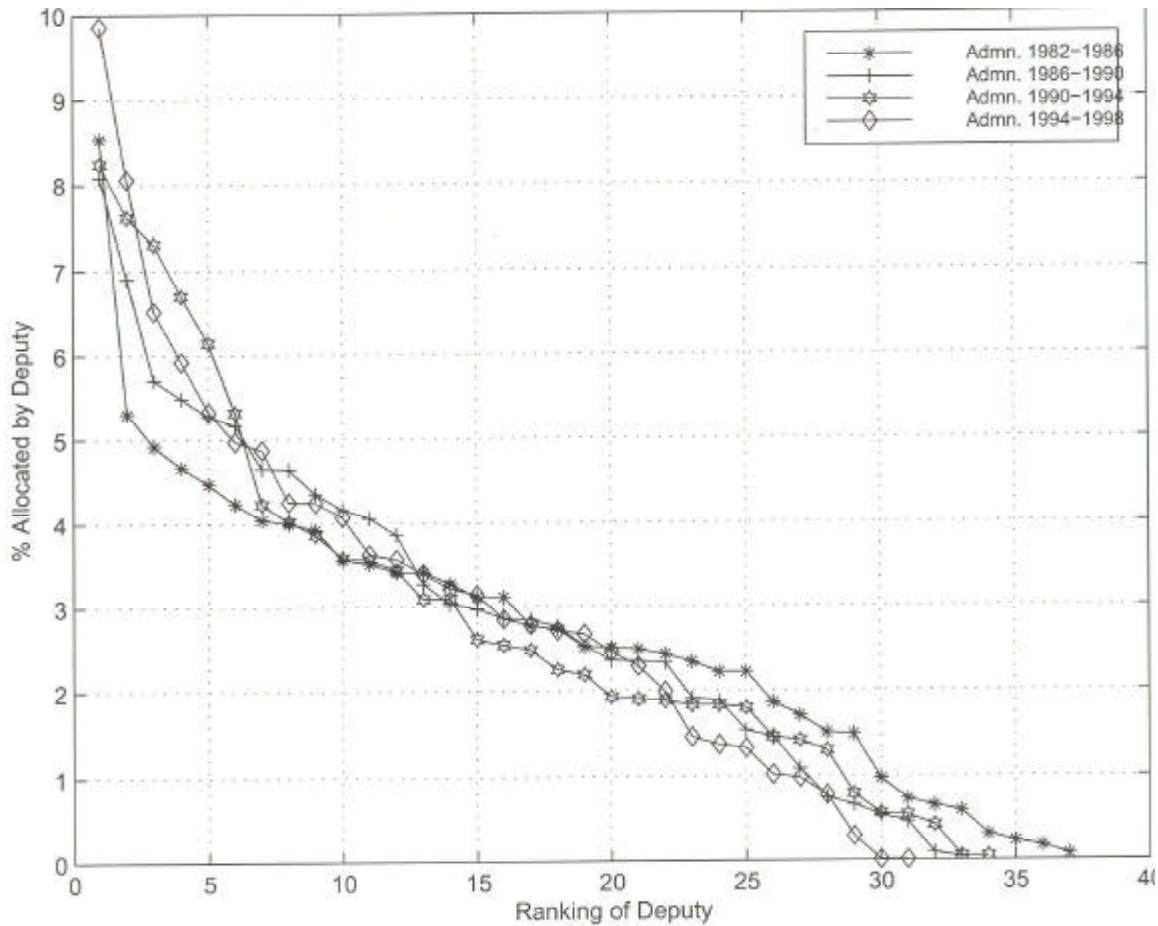
Year	Proposed: Treasury Department	Approved: Legislative Assembly
1994	0	4.7
1995	0	17.6
1996	14.4	19.9
1997	15.1	19.1

Moreover, due to their presence in the commission, some minority deputies can receive larger SA amounts in exchange for supporting the initiatives and position of the ruling party. The best-known case is that of Brenes Castillo from Cartago. His party has been particularly effective

in obtaining resources from the ruling party in exchange for supporting legislation favored by the Executive branch.

Figure 3 plots the amount of SA assigned by deputy during the last four administrations. The share of total allocations distributed by each deputy during the administration is calculated. The deputies are then ranked in descending order, and the percentage, distributed by each rank, is reported in the vertical axis. Particularly striking is the regularity of the relative allocations across different administrations. Almost all administrations show the same concentration per deputy in distributing SA.

Figure 3. Amount of SA Assigned according to Deputy's Rank, 1982-1998



For instance, seven deputies distribute 50 percent of the total local government specific allocations in each administration. The connections of each municipality with the deputies in the Congress are a key determinant of the amount of resources they obtain from the National Budget. It is also true from the data that certain municipalities receive larger amounts of SA due to the presence of a major deputy in the Assembly. Although this relationship is informal, one would like to test for this relationship as well as testing whether political networks impact the amount of specific allocations received. Furthermore, one would like to address the question of whether this institutional framework translates into fiscal indiscipline and represents a source of hidden bailouts.

Although the relationship between politics and the allocation of SAs is not the main issue of this paper, this evidence helps to understand how and why discretionary transfers from the central government encourage or reward municipalities' fiscal indiscipline and thus constitute hidden bailouts. Before describing the empirical tests, however, it is necessary to mention recent changes in legislation that reduced the discretionary character of these transfers.

4.2. Recent Reforms

The distribution of specific allocation has been the subject of much public debate, and many attempts at reform took place during the period studied in this paper.¹³ The allocation of these grants was regulated by means of presidential decrees, mainly those promulgated in 1985, 1987 and 1991¹⁴ before the Law of Specific Allocations was promulgated in April 1998.

The first decree enabled the Treasury Department to follow up on the process of allocation, delivery and control of the transfers. The funds are emitted by the National Treasury and issued directly to authorized individuals or deputies in the legislature, and it previously was customary for community representatives or deputies to withdraw the funds and personally deliver them. In 1987, a second decree improved the control mechanisms, as on many occasions

¹³ Many of the projects proposed at the end of the 1980s, especially by the Decentralization Commission, CORECA, were rejected by the Congress during the Calderón Administration of 1990-1994. It was not until the Figueres Administration, 1994-1998, that the New Municipal Code and the Real Estate Law were approved. In fact, when Oscar Arias was the Minister of Planning in the Oduber Administration 1974-1978, he proposed one of the most daring projects of decentralization ever seen. He proposed that local governments had a minimum of 10 percent participation in the total government expenditure. The project was rejected in the Legislative Assembly. It is important to add to this paper that this 10 percent participation project has been recently approved.

¹⁴ Decree numbers mentioned are 16742-H of November 11, 1985, 17796-H of October 22, 1987, 20720= H-MIDEPLAN and Law No 7755.

the allocated funds did not appear to have been deposited in the beneficiary's account. This decree required that proof of delivery of funds should be delivered to the Treasury Department within 60 days of receipt, but the process continued to lack adequate technical control, as only a letter from a Representative was necessary to process a specific allocation. In 1991, a third decree established that the interested entity should submit an expenditure plan to the Treasury Department for allocations greater than \$2,450. Reports of the project progress should follow the assignment of the transfers four months later. Moreover, the General Auditing Office should audit those SAs whose amounts exceed US\$40,850. This decree enabled the Legislative Assembly to modify the destination of the SAs in the Extraordinary Budget as long as the funds had not already been delivered to their beneficiaries.

The 1998 Law of Control of Specific Allocations rescinded the 1991 decree and declared that those municipalities and private entities best complying with a new set of requirements will benefit from these grants. These new criteria include technical financial analysis, adequate spending and control plans as well as studies justifying the financial needs of the communities and the municipal inability to meet those needs. Currently, the Central government defines the national amount to be distributed, and a Mixed Commission, composed of three members appointed by the Central government and two members named by local governments, evaluates and approves the project proposals. The three key variables are the number of inhabitants, geographical extension and the poverty index. Deputies, however, still have the power to modify programs and carry out transfers.

5. Specific Allocations as a Channel for Hidden Bailouts

5.1. Motivation and Main Results

What relationship should one expect between the deficit of a municipality and the SA that it receives? In theory, there is no clear relationship. On the one hand, if specific allocations could be used to pay local government debt, then municipalities would have incentives to incur debt and then request assistance from legislators and the central government for assistance. Thus, one would expect a negative relationship between surplus and SA.

The opposite case can be made as well. Consider a case in which SA resources cannot be used to repay municipal debts. Instead, the use of SA is decided directly by the congressman according to his assessment of the needs of the locality, and municipalities would simply serve to

carry out the project. Then, it is quite possible that if a municipality receives additional resources it would have less incentive to incur debts, because now one of the local needs is being covered directly by the SA.

Therefore, the key consideration is whether municipalities can influence the amount and use of SAs, which would let them use SAs as a substitute for their own revenue. While the law indicates does not seem to allow for a direct substitution, in practice municipalities could lobby deputies for assistance. The SAs obtained would thus release resources from their budgets, effectively substituting for the fiscal efforts of the municipality.

This section addresses the question of substitution and empirically determines what relation is observed. The purpose is to evaluate whether there exists an informal institutional framework that allows local governments to soften their budget constraints and pursue fiscal indiscipline under the assumption that central government will rescue them. The results suggest a positive relationship between SAs and municipal surpluses; it would appear that, given the rigidity of revenues, municipalities lower their direct expenditures when a SA is received by the *cantón*.

This section attempts to assess the effect of different variables in determining the amount of discretionary transfers and the interaction of these transfers with the deficit of municipalities. There is annual information on the 81 *cantones* from the years running from 1982 to 1997, for a total of 1,215 municipality-year observations.¹⁵ The database compiled contains a wide set of demographic, economic and political variables for each *cantón*.¹⁶ It should additionally be noted that this sections considers SAs, as opposed to direct transfers from the Central Government, because SAs are much more discretionary.

As noted above, the per capita amount of specific allocations granted to municipalities varies considerably across municipalities and over time. The ratio of the cross-municipality standard deviation to the average per capita allocation received across municipalities ranges from \$0.63 to \$2.38 during the sample period. 1981 has the lowest dispersion: municipalities received on average \$8.5 per capita, with a standard deviation of \$5.34. But even then, the disparity is significant: while San Mateo, Puntarenas, received \$25.30 per inhabitant, the inhabitants of

¹⁵ The authors are indebted to Alexandra Mora, the Chief of the Specific Allocation Department of the Treasury Ministry, for making available the reports of each specific allocation distributed since 1983. Her patience in collecting these documents during the last sixteen years has made it possible the study these grants. Of course, the authors are responsible for any errors or omissions in processing these reports.

¹⁶ The variables are defined in the Appendix.

Garabito, Puntarenas, did not receive anything at all. The inequality among municipalities is the highest in 1993. Then, Parrita received \$42.40 dollars in comparison to the \$0.01 received in Aserrí, while seven other localities received nothing. Examination of the data also indicates that the skewedness is very high: SAs are very low for a large fraction of the municipalities but very high for a few.

Instead of looking at each of the cases, the present objective is to determine statistically the effect of different variables, in particular the degree of discipline of the local government as measured by the financial surplus. To this end, this section employs simple and familiar econometric methods to assess the impact of observable variables on the amount of these discretionary transfers that municipalities receive.

5.2. *Econometric Specifications*

This section has two objectives. The first is to discern whether there is a relationship between transfers and municipal surpluses of the municipalities, and the second is to gauge the relevance of different variables in determining the amount of discretionary transfers. It should be emphasized, though, that the results must be seen as a first step. A full-fledged econometric investigation of these issues, which lies well beyond the scope of this paper, will be undertaken by the authors in a separate study.

To assess the effect of the fiscal surplus of the local governments and the other variables described below on the amount of specific allocations received, a model is used in which sac_{it} , the amount of per capita SA received by *cantón* *i* at time *t*, depends linearly on a set of variables:

$$sac_{it} = \mathbf{a}_i^1 + \mathbf{a}_1 x_t^a + x_{it} \mathbf{b}_1 + \mathbf{g}_1 surc_{it} + \mathbf{e}_{it}^1$$

The observable explicative variables are the two vectors x_t^a , x_{it} ; \mathbf{e}_{it} is a random disturbance that captures the unobservable variables. Here, x_t^a is a vector common to all local governments at time *t*, and x_{it} is a vector of variables that may differ across municipalities.

To establish whether SA are related to the fiscal efforts and outcomes of the municipalities, explicitly included is a measure $surc_{it}$ of the surplus of the municipalities. Here, $surc_{it} > 0$ indicates that the municipality *i* had a surplus at time *t*. It is measured as a fraction of the municipality's revenue.

One must consider, however, that the fiscal outcome of the municipalities is the outcome of a political process, including the relationship of the local council with the national government. The surplus or deficit would also respond to the needs of the moment and the socioeconomic characteristics of the locality. The most obvious way to address this possibility is to estimate another regression of the form

$$surc_{it} = \mathbf{a}_i^2 + \mathbf{a}_2 z_t^a + z_{it} \mathbf{b}_2 + \mathbf{g}_1 sac_{it} + \mathbf{e}_{it}^2$$

where, as before, z_t^a , z_{it} are common and specific observables of the municipalities. The RHS variables may or may not coincide with x_t^a , x_{it} . Specifying this system of simultaneous regressions allows for the possibility of feedback between SAs and deficits.

This is a system of two simultaneous equations, as estimating each regression while ignoring simultaneity would render inconsistent estimators. Obviously, if the set of observable variables is the same for the two regressions, this system of simultaneous equations cannot be identified. With additional restrictions (e.g., *a priori* zero restrictions), one or both equations could be identified.

5.3. Data

One contribution of this study is to assemble an exhaustive database on the *cantones* of Costa Rica. The database includes the financial information on the municipalities, local electoral outcomes, and demographic and socioeconomic variables for every canton from 1980 to 1997. Most notably included are the values of SAs and the names of the deputies who assigned them. There is also data on direct transfers from the Ministry of Finance.

The information is taken from various sources. SAs were drawn from printed memos in the Legislative Assembly and the Ministry of Finance, and the revenues, expenditures and deficits of local governments were obtained from the General Auditing Office. Electoral outcomes were obtained from the Tribunal Supremo de Elecciones. Information on the average wages and total wage bill were obtained from the Caja Costarricense de Seguridad Social (CCSS). All other demographic and socioeconomic variables were obtained from a database provided by the School of Statistics of the Universidad de Costa Rica. A detailed description of the data appears in the Appendix.

5.4. Results

Specific allocations (*SACY*) and the surplus of the municipalities (*SURCY*) are expressed as a fraction of the revenue of the municipalities. The regressions include dummies for the Administration using Figueres as the base. They also control for the year of the administration, by including dummies indicating whether the administration is in the first, second or third year (*FYA*, *SYA*, and *TYA*). Also included are variables on the financing structure of the local government such as the flexibility of revenue (*FOR*) and the vertical fiscal imbalance (*VFI*). The regression further includes socioeconomic and demographic variables such as *Rwage* and *POP*, the real average wage and the population of the *cantón*. Other variables were included, but they are not reported, as none proved significant. Additionally used were indicators of the aggregate economy such as *TCRGDP* and *SURGDP*, the rate of growth of Costa Rican GDP and the Surplus of the Central Government as a fraction of the GDP, respectively.

Last and certainly not least is the dummy *POL*, which takes the value of 1 if the municipal council is dominated by the party that leads the Central Government, and zero otherwise. Two variables attempt to measure the connections of the municipality with the Congress. The first, *SUBCOM*, is a dummy indicating whether *cantón i* received an SA at time *t* from a Congressman who is a member of the Subcomisión de Hacendarios, which has direct control over SAs. The second variable, *M2PC*, is motivated by the concentration observed in the allocation of SA. The variable is a dummy that takes the value 1 if the municipality receives, in a given period, SAs from a single legislator that surpass 2 percent of the national total.

All three alternative assumptions are explored for the terms $\mathbf{a}_i^1, \mathbf{a}_i^2$: treating them as common across municipalities (OLS), regressions including fixed effects (Fixed), and random effects (Random). Table 12 shows the results when the LHS variable is *SACY*. Table 13 does the same, but uses municipal deficits as the LHS variable. Both tables have six columns because the exercises are performed twice, first using *SURCY*, the global surplus of the municipality and second using *SURCY*, the surplus subtracting the transfers and grants allocated by the Ministerio de Hacienda (remember that they are different from SA). The numbers in parenthesis are the *t*-statistics, which, whenever possible, were calculated using the Arellano-White consistent standard errors.¹⁷

¹⁷ In the cases where the Arellano-White covariance matrix was not definite, OLS errors were used.

The results point to a positive relationship between SAs and municipal surpluses, as reported in Tables 12 and 13. It appears that, given the rigidity of the revenues, municipalities lower their direct expenditures when the *cantón* receives an SA. The positive association between the municipal surplus and the SA received by the *cantón* is reflected by the positive and significant coefficients in the two set of regressions, as reported in both tables.

Table 12. Specific Allocations as % of Municipality Income: Single Equation Models

Variable	SACY					
	SURY			SURCY		
	OLS	Fixed	Random	OLS	Fixed	Random
SURY	0.0671 (2.925)	0.0658 (1.746)	0.0659 (3.148)			
SURCY				0.0432 (2.064)	0.0583 (1.690)	0.0542 (2.807)
M2PC	0.2639 (14.374)	0.2641 (9.564)	0.2633 (14.863)	0.2657 (14.46)	0.2654 (-9.560)	0.2647 (14.956)
SUBCOM	0.0294 (1.591)	0.0385 (1.506)	0.0365 (2.105)	0.0290 (1.567)	0.0391 (1.504)	0.0369 (2.124)
MONGE	-0.1508 (-2.46)	-0.1403 (-0.686)	-0.1517 (-2.695)	-0.1395 (-2.277)	-0.1276 (-0.608)	-0.1408 (-2.505)
ARIAS	-0.0734 (-1.757)	-0.0568 (-0.396)	-0.0691 (-1.781)	-0.0720 (-1.1719)	-0.0528 (-0.356)	-0.0668 (-1.720)
CALDERON	-0.1198 (-3.263)	-1.1024 (-1.437)	-1.1122 (-3.248)	-0.1188 (-3.227)	-0.0997 (-1.362)	-1.1104 (-3.193)
FYA	-0.0947 (-3.428)	-0.0900 (-1.352)	-0.0935 (-3.690)	-0.0941 (-3.374)	-0.0855 (-1.210)	-0.0904 (-3.537)
SYA	-0.0033 (-0.16)	-0.0061 (-0.158)	-0.0075 (-0.393)	-0.0016 (-0.078)	-0.0046 (-0.118)	-0.0062 (-0.325)
TYA	-0.0235 (-1.034)	-0.0198 (-0.798)	-0.0222 (-1.066)	-0.0246 (-1.078)	-0.0189 (-0.727)	-0.0218 (-1.048)
POL	0.0615 (3.667)	0.0412 (1.191)	0.0459 (2.726)	0.0613 (3.651)	0.0415 (1.183)	0.0459 (2.723)
VFI	-0.0005 (-0.949)	0.0002 (0.202)	0.0000 (0.082)	-0.0004 (-0.871)	0.0002 (0.271)	0.0001 (0.195)
FOR	-0.0008 (-1.020)	0.0006 (0.329)	0.0002 (0.251)	-0.0008 (-1.017)	0.0007 (0.339)	0.0002 (0.275)
POP	0.0000 (-7.926)	0.0000 (-0.036)	0.0000 (-4.426)	0.0000 (-7.993)	0.0000 (-0.027)	0.0000 (-4.434)
RWAGE	0.0000 (-3.019)	0.0000 (0.257)	0.0000 (-1.597)	0.0000 (-3.072)	0.0000 (-0.257)	0.0000 (-1.612)
TCRGDP	-0.1405 (-1.168)	-0.1567 (-1.431)	-0.1515 (-1.382)	-0.1292 (-1.068)	-0.1637 (-1.426)	-0.1537 (-1.395)
DEFGDP	2.3207 (2.089)	2.5012 (1.504)	2.4647 (2.419)	2.2745 (2.043)	2.5113 (1.467)	2.4571 (-2.410)
Constant	0.4128 (5.641)		0.3587 (4.605)	0.4159 (5.668)		0.3610 (4.627)
R^2	0.2568	0.4280	0.2543	0.2540	0.4275	0.2511

Table 13. Municipal Deficits as % of Municipality Income: Single Equation Models

Variable	SURY			SURCY		
	OLS	Fixed	Random	OLS	Fixed	Random
SACY	0.1133 (2.925)	0.1430 (1.768)	0.1181 (2.882)	0.0880 (2.064)	0.1481 (1.698)	0.1230 (2.616)
M2PC	0.0209 (0.807)	0.0240 (0.602)	0.0219 (0.803)	0.0145 (0.507)	0.0073 (0.156)	0.0121 (0.397)
SUBCOM	-0.0411 (-1.711)	-0.0421 (-1.440)	-0.0413 (-1.655)	-0.0530 (-2.005)	-0.0579 (-1.642)	-0.0560 (-2.032)
MONGE	0.1758 (2.206)	0.1794 (-0.640)	0.1762 (2.139)	0.0005 (0.005)	-0.0171 (-0.043)	0.0084 (0.093)
ARIAS	-0.0137 (-0.253)	-0.0243 (-0.125)	-0.0145 (-0.258)	-0.0604 (-1.010)	-0.0966 (-0.350)	-0.0659 (-1.069)
CALDERON	-0.0058 (-0.120)	-0.0174 (-0.176)	-0.0063 (-0.127)	-0.0437 (-0.827)	-0.0668 (-0.522)	-0.0475 (-0.865)
FYA	-0.1205 (-3.356)	-0.1199 (-1.408)	-0.1205 (-3.246)	-0.2106 (-5.327)	-0.2151 (-1.846)	-0.2084 (-5.159)
SYA	0.0373 (1.378)	0.0334 (0.378)	0.0370 (1.322)	0.0184 (0.617)	0.0126 (0.199)	0.0186 (0.612)
TYA	-0.0852 (-2.896)	-0.0895 (-2.413)	-0.0855 (-2.812)	-0.1099 (-3.396)	-0.1178 (-2.645)	-0.1122 (-3.398)
POL	-0.0048 (-0.220)	-0.0028 (-0.059)	-0.0048 (-0.208)	0.0015 (0.061)	-0.0074 (-0.133)	-0.0034 (-0.128)
VFI	0.0007 (-1.070)	0.0007 (0.663)	0.0007 (1.003)	0.0001 (0.217)	-0.0003 (-0.257)	-0.0001 (-0.167)
FOR	0.0002 (0.163)	-0.0003 (-0.123)	0.0001 (0.101)	0.0002 (0.158)	-0.0010 (-0.277)	-0.0003 (-0.279)
POP	0.0000 (0.197)	0.0000 (0.031)	0.0000 (0.237)	0.0000 (1.102)	0.0000 (-0.051)	0.0000 (0.828)
RWAGE	0.0000 (-0.472)	0.0000 (-0.418)	0.0000 (-0.52)	0.0000 (0.081)	0.0000 (-0.353)	0.0000 (-0.548)
TCRGDP	0.8847 (5.739)	0.8951 (5.415)	0.8861 (5.567)	1.1059 (6.517)	1.1299 (5.701)	1.1181 (6.488)
DEFGDP	-2.9404 (-2.036)	-2.9444 (-1.708)	-2.9536 (-1.978)	-3.3125 (-2.083)	-3.4682 (-1.535)	-3.4005 (-2.095)
Constant	-0.0939 (-0.974)		-0.0899 (-0.882)	-0.1820 (-1.715)		-0.1297 (-1.077)
R^2	0.0627	0.0725	0.0627	0.0866	0.1266	0.0849

However, if there is a positive and significant link on both sides, the estimates reported in these two tables are inconsistent, as is well known from basic econometrics. In order to overcome this problem and to identify the equations, one must add structure to the system of equations. The usual method is to impose zero constraints: variables that enter only in a subset of the equations. Before entering into this simultaneous equation discussion and the proposed solution, though, it is useful to summarize the set of results explaining the allocation of these specific grants.

A first consideration involves some common patterns that are robust across regressions. The fixed effects model, as it includes more variables, has better goodness of fit and, in general, gives higher significance to the regressors. Variables that are statistically significantly different from zero in the OLS and random effects model lose their significance in the fixed effects model. This suggests that much of the variation in the sample data is contained across municipalities and not across periods. This is to say, municipality dummies capture the effect of the idiosyncratic variables.

Differences across Administrations were noted in previous sections, and they are captured in the regressions as well. The most significant cases are those of the Monge and Calderón administrations, and to lesser extent the Arias administration, with respect to Figueres. These differences reflect differences in the style and objectives of the President, as well as different macroeconomic conditions and, of course, the composition of the Congress. This last element has particular importance, as SAs have consistently been used by the Party in power to gain support from independent and opposition members of Congress. It should also be noted that the regressions show that differences across Administrations are more pronounced and more significant for SAs than for deficits.

The regressions also indicate the presence of electoral cycles in funding. SAs are significantly lower in the first year of the administration. For the second and third year, they seem lower, but that cannot be established at the conventional levels of significance. Interestingly, municipal surpluses also display a cycle associated with the election of the council, as the surplus is significantly lower during the first three years. The estimates are significant and indicate that municipalities increase their deficit during the election year.

The effect of political variables revealed by the regression results is points not only to the electoral cycle. First, and perhaps not too surprising, the two variables, M2PC and SUBCOM both indicate that the connections of the municipalities with the Congress are important determinants of the SA received. Second, and more interesting, the interaction of the local and national political variables is significant. Notice that the dummy *POL* is positive and significant in the regression of for SACY. Thus, municipalities with Council dominated by the party in Power at the national level receive more specific allocations. It seems clear that Congressmen from the government tend to favor the localities that are governed by their own party.

The regressions also suggest a redistributive role assigned to the SA. The estimates indicate a negative relation between the SA received by a municipality with the average wage (RWAGE) of the *cantón* and with the size of its population. Thus, rural poor areas are receiving more SAs as a fraction of their own revenue. Financing variables of the municipalities such as VFI and FOR are not significant in either set of regressions. This results from their low cross-sectional variability in the sampled data. In addition, undue meaning should not be attributed to the results on the aggregate variables TCRGDP and SURGDP, as these variables had strong differences across periods and across Administrations. While some of these are controlled for, the series are not long enough to provide information not captured by the administration dummies and electoral years dummies.

The results for regressions on surplus are much less conclusive. Indeed, the overall goodness of fit is much, much lower than those in the regressions of SA. Moreover, the regressors have lower significance than in the SA regressions. Both the low goodness of fit and lack of significance are common using different definitions for the surplus, such as per capita surplus and surplus as fraction of the labor earnings of the *cantón*. This is illustrated in the table by showing in the table the results using the surplus series net of other grants from the Central government (*SURY*). All the previous results are robust to different specifications, including the use of measures of SA and surplus per capita terms and as a fraction of total *cantón* labor revenue.

Turning to the relationship between SAs and local government surpluses, the results pointed to a positive relationship between SAs and municipal surpluses, which produces a simultaneity problem. The usual method to address this is to impose zero constraints and, specifically, the following system is postulated:

$$\begin{aligned} sac_{it} &= \mathbf{a}_i^1 + \mathbf{a}_1^1 x_t^a + x_{it}^c \mathbf{b}_1^1 + x_{it}^s \mathbf{b}_2^1 + \mathbf{g}_1 surc_{it} + \mathbf{e}_{it}^1 \\ surc_{it} &= \mathbf{a}_i^2 + \mathbf{a}_1^2 x_t^a + x_{it}^c \mathbf{b}_1^2 + x_{it}^s \mathbf{b}_2^2 + \mathbf{g}_1 sac_{it} + \mathbf{e}_{it}^2 \end{aligned}$$

As long as x^d , x^s are disjoint and both not empty, the two equations are identified. Familiar TSLS methods can be used to estimate the equations consistently. The obvious question is then how to select these two sets of variables. Without an economic model, this answer cannot be answered in a completely satisfactory manner. Table 14 shows the results of the following identification assumption. First, it is assumed that $x^d = sury(-1)$, i.e., the lagged value of the

surplus is used as an instrument of current municipal surplus. This is quite common practice. Second, it is assumed $x^s = [pol, M2PC, sacy(-1)]$. The first two were not significant in the simple regression on *sury* as shown in Table 13. Using lagged values as *sacy(-1)* is a common practice.

Table 14. Specific Allocations and Municipal Deficits as % of Municipality Income: TSLs of Simultaneous Models

Variable	SACY			SURY		
	OLS	Fixed	Random	OLS	Fixed	Random
SURY	0.2263 (4.815)	0.1878 (2.520)	0.2012 (4.544)			
SACY (-1)	0.1900 (-7.180)	0.0014 (0.028)	0.0713 (-2.680)			
POL	0.0465 (2.822)	0.0413 (-1.200)	0.0434 (2.606)			
M2PC	0.2478 (13.751)	0.2619 (9.503)	0.2573 (14.636)			
SACY				0.0472 (0.908)	0.1006 (0.578)	0.0541 (0.918)
SURY (-1)				-0.4627 (-17.449)	-0.4697 (-11.222)	-0.4649 (-17.031)
SUBCOM	0.0362 (2.000)	0.0431 (1.699)	0.0408 (2.362)	-0.0357 (-1671)	-0.0356 (-1.355)	-0.0356 (-1.601)
MONGE	-0.1691 (-2.813)	-0.1598 (-1.789)	-0.1702 (-3.023)	0.2964 (4.187)	0.3047 (1.131)	0.2974 (4.077)
ARIAS	-0.0671 (-1.648)	-0.0526 (-0.374)	-0.0655 (-1.702)	0.0323 (0.666)	0.0221 (0.123)	0.0311 (0.621)
CALDERON	-0.1057 (-2.947)	-0.0985 (-1.403)	-0.1066 (-3.115)	0.0498 (1.171)	0.0394 (0.424)	0.0489 (-1.110)
FYA	-0.0881 (-3.208)	-0.0744 (-1.143)	-0.0817 (-3.171)	-0.1149 (-3.599)	-0.1117 (-1.338)	-0.1147 (-3.482)
SYA	-0.0301 (-1.463)	-0.0104 (-0.255)	-0.0195 (-1.007)	0.0010 (0.04)	-0.0042 (-0.098)	0.0003 (0.011)
TYA	-0.0165 (-0.737)	-0.0087 (-0.353)	-0.0132 (-0.629)	-0.0640 (-2.444)	-0.0683 (-1.934)	-0.0644 (-2.388)
VFI	-0.0005 (-1.031)	0.0001 (0.107)	-0.0001 (-0.255)	0.0008 (1.472)	0.0008 (0.952)	0.0008 (1.376)
FOR	-0.0005 (0.639)	0.0007 (0.352)	0.0001 (0.159)	0.0002 (-0.197)	-0.0003 (-0.114)	0.0001 (0.117)
POP	0.0000 (-6.887)	0.0000 (-0.041)	0.0000 (-5.038)	0.0000 (-0.164)	0.0000 (0.032)	0.0000 (-0.02)
RWAGE	0.0000 (-2.01)	0.0000 (-0.177)	0.0000 (-1.413)	0.0000 (-0.918)	0.0000 (-0.600)	0.0000 (-0.983)
TCRGDP	-0.3058 (-2.489)	-0.2634 (-2.138)	-0.2767 (-2.414)	0.7651 (5.565)	0.771 (5.062)	0.7664 (5.419)
DEFGDP	2.7031 (2.482)	2.8147 (1.721)	2.7773 (2.725)	-5.5000 (-4.238)	-5.5645 (-3.477)	-5.5242 (-4.128)
Constant	0.3663 (5.107)		0.3529 (4.701)	-0.1726 (-1.973)		-0.1660 (-1.776)
R^2	0.2942	0.4324	0.2797	0.2562	0.2699	0.2561

The estimates resulting from the regression are reported in Table 14, for both the regression on SACY as in *SURY*. The most notable effect is on the regression on *SURY*: there is a significant improvement in the goodness of fit by simply including the lagged value *SURY* (-1). Not surprisingly, an important intertemporal element must be present in the behavior of the municipal deficits. The estimates obtained indicate also that there is a positive association between the SACY that a municipality receives with the surplus of the period.

It should be noted, though, that the results on the relationship between SA and municipal deficits reported here should be seen as the first step of what should be a much extensive econometric investigation. Moreover, the results are not quite robust different definitions of the fiscal surplus, such as subtracting the other central government transfers and grants and expressing the series in per capita terms or as a fraction. It would also be necessary to experiment with different identification assumption and different definitions. Moreover, once the use of lagged values as instruments was begun, then, contrary to common practice, the dynamic nature of the system should be recognized. This would lead to a Vector Auto-Regressive system. The estimation of a VAR would provide a much richer set of tools and implications by explicitly incorporating the dynamics between specific allocations and municipal surplus. There, however, the identification would be more challenging, and the selection of the right estimator in the presence of panel data would be a more difficult question. Pursuing this line of inquiry, however, lies beyond the scope of this paper.

Finally, it should be stressed that the results of the effect of local and national political variables as well as demographic factors are quite robust. The second model is consistent with the more parsimonious simple static regressions, though both models are fairly effective in indicating the effect of local and national political variables. The picture drawn by the regressions clearly shows the importance of national politics in the functioning of municipalities and in the resources available to them.

6. Conclusions

This paper has presented evidence that the resource allocation and decision making of the public sector are highly concentrated in Costa Rica's Central Government. By explicit regulations and restrictions, local governments are dramatically subordinated to decisions by the President of the Republic and the Deputies in the National Congress. In addition, the duties of the municipalities

are very minor, and are reduced to basic public services. The restrictions that municipalities face, though, prevent even the investments required to provide those services and effectively make them dependent on transfers from the different Ministries or the Congress.

The cases of municipal bailouts by the Central Government strongly supports the hypothesis of local government subordination to the central government. The episodes uniformly indicate that when local governments face economic hardship, the Central Government must step in. Otherwise, the political cost will be borne by the political party ruling at that time. The involvement of the central government goes well beyond the implicit backing up of debts. Indeed, it is safe to state that a major consideration in the election of local representatives is their ability to obtain resources from the Congress.

In particular, the paper examined the interrelation between the local governments with the Executive and Legislative branches of the Central Government, and the effect of national and local political variables on the transfers received by municipalities. The paper additionally examined the resulting performance and fiscal efforts of local governments, presented results on a large and original database, and examined episodes in which the Central Government has bailed out one or several local governments from financial obligations.

The centralization becomes evident by simply looking at the electoral process. National parties play a key role in the election of all Local Councils, and inhabitants of the *cantones* can only vote for provincial lists of candidates to Congress, which are determined by the national candidates. The data shows that ties with the Congress significantly affect municipalities' budget constraint. Moreover, there is a significant interaction between local and national political variables. Municipalities governed by the party in the Central Government receive more transfers from the national budget than other municipalities.

The main problem in intra-governmental relations in Costa Rica is not the excessive freedom of local governments in public resources. On the contrary, the problem lies in the inability of the municipalities to do very much at all, and the little they have under their responsibility is subject to interference by the Central Government. Such interference further undermines the working of local governments, making it difficult for the population to disentangle the performance of the municipality from the actions of representatives in the Central government. In the end, then, virtually all the incentives for the members of the Municipal

Council are diverted from directly raising local revenue to lobbying Central Government and the Congress for grants.

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Appendix: Variable Definitions

One contribution of the present work is the construction of an exhaustive database on the different *cantones* of Costa Rica. The database, not only include the financial aspects of the Municipalities, it also include local electoral outcomes as well as demographic variables and socioeconomic variables of all the *cantones* for the period of 1980 to 1997. Most notably, we include the value of the SA, including the name of the Deputy that assigned them as well as automatic transfers from the Ministry of Finance. We are unaware of the existence of a comparable database.

Municipal Political Variables

SUBCOM A dummy variable that takes the value one if the municipality i at time t received any specific allocation from a deputy that belongs to the *Sub-Comisión de Hacendarios* of the Legislative Assembly; zero otherwise.

M2PC A dummy variable reports the value 1 if the local government receives at least 2 percent of the total amount of SA from one deputy during one year. To construct this dummy variable we worked in two steps. First, we wrote a matrix with 81 rows representing local governments and the columns representing the number of deputies assigning SA. A_{ij} represents the percentage of total allocations received by municipality i from the deputy j in that year. We assigned the value 1 to the A_{ij} with the value 2 percent or higher, 0 otherwise.¹⁸

National Political Variables

MONGE 1 if the PLN Administration is 1982-1986, 0 otherwise.

ARIAS 1 if the PLN Administration is 1986-1990, 0 otherwise.

CALDERON 1 if the PUSC Administration is 1990-1994, 0 otherwise.

¹⁸ The value of 2 percent originated the largest R^2 between SA and this dummy variable, as increasing the value of 2 percent would exclude several municipalities reducing the number of 1's and hence reducing the R^2 . For the 1990-1998 period, this methodology captured between 11 to 14 municipalities per year receiving at least 2 percent of the total amount of SA from one deputy.

FYA 1 if is the First Year of Administration, 0 otherwise.

SYA 1 if is the Second Year of Administration, 0 otherwise.

TYA 1 if is the Third Year of Administration, 0 otherwise.

POL 1 if the local government shows same affiliation than central government, 0 otherwise.

Local Government Financial Variables

SURY Surplus of the local government i as a fraction of the total income of the county i , at moment t .

SURCY Deficit less transfers of the local government i as a fraction of the total income of the county i , at moment t .

SACY Specific allocations received by the local government i as a fraction of the total income of the county i .

SUR This variable represents the surplus or deficit of the municipality i between the moment $t-1$ and t , i.e., this is the result of the following subtraction: the surplus (deficit) of the local government in the moment t less the surplus (deficit) at $t-1$.

VFI The degree of vertical imbalance measured by the ratio between the total revenue of the local government originated in the central government to the total revenue of the local government.

FOR The Flexibility of Revenue represent the degree of flexibility of revenue of the local government i at the moment t . This is the ratio between the revenues that the municipal council can modify without the approval of the Legislative Assembly dividing this amount by the total revenue of the local government.

Other Variables

POP Population of the Local Government.

RWAGE Average Wage in Constants *Colones*.

GRRGDP Rate of growth of real gross domestic product.

SURGDP Deficit of the Central Government as a fraction of national GDP.