THE INCIDENCE OF LOCAL GOVERNMENT ALLOCATIONS IN TANZANIA[†]

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SUMMARY

Since 1999, Tanzania has been actively pursuing reforms of the way in which the central government finances local government activities. This article looks at the potential problems with the mechanism that the central government currently uses to distribute budget resources among the 114 local government authorities and sets out to reveal the incidence of central government allocations to local authorities in Tanzania. Two strands of economics literature—the public choice literature and the political economy literature—consider the distribution of central government resources across local governments. Using regression analysis, this study specifies an incidence model that reveals the determinants of variations in local government allocations in Tanzania. The empirical analysis only finds weak evidence supporting the presumed pro-poor allocation of some local government resources by the central government in Tanzania. Instead, the study finds more convincing support for substantial pro-wealthy and pro-urban tendencies in the way in which central government officials divide public resources across local government units. Copyright © 2003 John Wiley & Sons, Ltd.

INTRODUCTION

Since 1999, Tanzania has been actively pursuing reforms of the way in which the central government finances local government activities. Although local government authorities play a significant role in the delivery of key government services in Tanzania, the resources that the central government provides to the local level are tightly controlled by central government officials. While budgetary allocations to local governments are notionally based on a set of objective local service delivery standards, in fact local governments budget requests are vetted and modified both by officials from central government line ministries as well as by the Ministry of Finance as part of the central government's budget formulation process.

This article looks at the current incidence of central government allocations to local authorities in Tanzania and sets out to answer two key questions. First, what are the potential problems with the mechanism that the central government uses to distribute budget resources among the 114 local government authorities in Tanzania? Do all local governments more or less receive the same amount of funding, or are there large variations in the allocation of local government resources? Second, what factors determine the distribution of local government resources in Tanzania? In other words, why do some local governments receive more resources from the central government than other local governments?

These two questions have important policy implications. Members of parliament have expressed concern about the current incidence of local government resources and the discretion that the central government bureaucracy has over local government allocations. In addition, understanding the current incidence of local government finances is crucial as the Government of Tanzania is in the process of considering the introduction of a formula-based system

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of intergovernmental block grants. A thorough understanding of the current incidence of central–local government allocations will aid in the design of a sound system of formula-based block grants, and will probably also reveal possible political obstacles that the introduction of a new block grant system may face.

AN OVERVIEW OF LOCAL GOVERNMENT FINANCES IN TANZANIA

Since reintroduction of a system of local governments in Tanzania in 1982, local governments have played an important role in the delivery of government services, providing such key government services as primary education, basic health care and other government services that are generally considered to be typical 'local' services. In fact, in terms of expenditure responsibilities, Tanzania has achieved a significant amount of decentralisation; approximately, 19% of the on-budget recurrent government spending is done at the local level with central government transfers (Boex *et al.*, 2003).

The structure of Tanzania's current system of local government allocations is straightforward: six sectoral recurrent local government allocation programmes are contained in the central government budget, one for each of five national policy priority areas (primary education, basic health care, water, roads maintenance and agriculture extension), plus an allocation scheme for local administration. Local sectoral allocations are further divided into personal emoluments (PE) and other charges (OC). Capital development resources are funnelled to local governments through a separate mechanism, although these allocations are quite small and highly irregular. Data on local spending from own source revenues are generally not available, but available reports suggest that local governments have limited own source revenues (Fjeldstad, 2001).

Local education is by far the most important local activity, accounting for almost 70% of the local government allocations (Table 1). Basic recurrent health care allocations account for 18% of the local budget (although additional resources for local health care services are also provided from the Ministry of Health budget), while local administration accounts for slightly more than 6% of local government allocations. The remaining three local service sectors (local road maintenance, water and agricultural extension) only play a minor role in local government finance; jointly these three sectors only account for 7% of the total local government allocations.

Table 1. Aggregate budgeted recurrent local government allocations by sector, financial year 2002–2003

	TSh. (billions)	Total (%)	GDP (%)
Education	170.24	68.92	1.857
PE	137.29	55.57	1.497
OC	32.96	13.34	0.359
Health	43.68	17.68	0.476
PE	30.07	12.17	0.328
OC	13.61	5.51	0.148
Roads	3.61	1.46	0.039
PE	2.04	0.82	0.022
OC	1.58	0.64	0.017
Water	6.76	2.74	0.074
PE	2.25	0.91	0.025
OC	4.51	1.83	0.049
Agricultural extension	7.69	3.11	0.084
PE	5.60	2.27	0.061
OC	2.09	0.85	0.023
Administration	15.03	6.09	0.164
PE	13.40	5.42	0.146
OC	1.64	0.66	0.018
Total	247.03	100.00	2.694
PE	190.64	77.17	2.079
OC	56.38	22.83	0.615

Source: Computed by the author based on Ministry of Finance data.

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CONCERNS ABOUT THE CURRENT APPROACH TO LOCAL GOVERNMENT ALLOCATIONS

While local government services are administered by local officials who are (officially, at least) accountable to elected local councils, one of the main concerns in the delivery of local government services in Tanzania is the limited level of discretion that local officials have in implementing their expenditure responsibilities. Local government officials are substantially constrained in responding to local needs by the existence of inflexible central government guidelines and conditionalities attached to the centralised financing of local government services. Since local governments are highly dependent on allocations from the central government to fund their core responsibilities, the limited discretion accorded to local governments as a result of the system of local government allocations is seen as a major impediment to assuring the adequate, efficient and equitable delivery of local government services (Watson, 2001).

An additional cause for concern is the institutional mechanism that is used by central government to distribute resources among local government authorities. No formula-based system of intergovernmental grants is currently in place to divide the available local government resources among the different local government authorities in Tanzania. Instead, local government units are essentially treated the same as central government agencies in the budget formulation process. At the beginning of the central government's budget formulation cycle, budget guidelines are circulated among local governments by the President's Office—Regional Administration and Local Government (PO-RALG), which asks local government authorities to prepare budget requests based on a framework of 'national minimum standards' (NMS). The NMS framework comprises a set of sectoral standards and norms that are supposed to assure a minimum level of service delivery across Tanzania's national territory. For instance, one of the NMS norms for primary education prescribes a student–teacher ratio of 1 teacher for 45 students. In addition, the NMS standards for primary education dictate the minimum required level of teacher training and prescribe minimum funding levels for teacher resource facilities.

In formulating their budget requests, local governments are expected to base their budget figures for personnel emoluments on the existing local government staffing levels (number of staff and specific classifications), plus any additional positions that have been approved by the local government board of the Civil Service Department (CSD). These staffing levels are also supposed to be determined in accordance with the NMS framework. The local government budget proposals are then vetted by PO-RALG and sectoral line ministry officials. At the conclusion of the budget formulation process, the Budget Commissioner of the Ministry of Finance is responsible for reconciling local government requests with available government resources in a process of negotiations with each local government authority. The degree to which the central government feels ownership over these resources is reflected by the fact that local resources are included on a line-item basis as votes in the national budget. As such, the current approach of local government financing is appropriately referred to as local government *allocations*, rather than relying on the term local government *grants*.

The current approach to determining local government allocations based on NMS has a number of important shortcomings, including the following.

● *NMS are supply-focused, rather than demand-driven.* Despite the original intent of the NMS approach, the local government budget allocation process focuses more on the current supply of local government services rather than on the actual need or demand for local government services. For instance, the local government budget guidelines specify that the allocation of educational resources ought to be based on actual enrolment levels (i.e. the current level of schooling that is supplied by a local government) rather than on the number of school-age children in each local government jurisdiction (representing the potential demand for schooling). The reliance on actual enrolment levels structurally biases the funding mechanism against local governments with low attendance rates and under-funds the least developed, most impoverished local governments.

Furthermore, resource allocations to individual local governments are largely determined by the degree to which central government agencies (Ministry of Finance, PO-RALG and sector ministries) believe that local government units are able to spend public funds efficiently. As a result, the budget formulation process focuses even more on the supply-side of local government services, by basing local government funding guidelines on the number of teachers present and existing infrastructure. For instance, while personal emoluments

are determined as a function of the number of approved local government staff in each local government, local governments are not assigned additional teachers if there is a scarcity of classrooms in the local government area.

● *Inequitable allocation of resources.* As a result of the supply (or input) focus of the current system, the current budget allocation process favours relatively well-developed and well-managed districts that can afford to fund additional capital infrastructure development and are seen to 'efficiently' allocate resources. Under-developed (non-urban) districts end up in a vicious circle where they receive relatively fewer resources, in turn are unable to expand their human resource base or construct additional physical infrastructure, which in turn results in relatively smaller resource allocations from the central government.

● *No incentives for efficiency in local service delivery.* As a result of the supply-driven approach, local governments find no incentives to improve the quality or efficiency of local service delivery. First, the current approach focuses on the quantity of inputs used in the delivery of services, disregarding the quality of either the inputs or the services provided. For instance, according to the NMS approach, local governments that have more hospital beds receive more resources. This provides local governments with a financial incentive to buy more hospital beds— whether they are needed or not—but does not provide local governments with an incentive to provide good quality health care. Secondly, the current approach to local government funding does not stimulate local governments to use their resources efficiently. For example, local governments have no incentive to eliminate over-capacity in infrastructure or to terminate poorly qualified staff, as central government funding is directly tied to their presence.

PUBLIC CHOICE, POLITICAL ECONOMY AND THE INCIDENCE OF LOCAL PUBLIC RESOURCES

If the total pool of recurrent local government resources available in Tanzania for the financial year 2002–2003 is distributed proportionally among all local governments based on the number of people that reside in each local government area, then each local government would receive TSh. 7269 per person. As noted in the previous section, in reality, the distribution of resources between local governments follows a more complex process in which some local governments end up receiving more resources than other districts.

However, as a result of the discretionary manner in which local government resources are distributed, it is *a priori* unclear if local government resources are allocated in a fair and pro-poor manner, or if government officials inadvertently (or perhaps knowingly) allocate resources in a manner that benefits wealthier, typically politically more powerful local governments.

Two strands of economics literature consider the distribution of central government resources across local governments. First, the public choice literature provides guidance on the public fiscal behaviour of central governments in pursuing the distribution of local government finances. Second, political economy arguments can also be used to explain the incidence of intergovernmental grants.

While the median voter hypothesis is perhaps the most widely used public choice tool available, the approach is also often criticised for being too simplistic (Turnbull and Djoundourian, 1994). The median voter hypothesis suggests that under certain basic assumptions, politicians would maximise their probability of being elected by adopting the preferences of the median voter. Thus, if the median voter hypothesis were applied to the allocation of intergovernmental grants in a country, we would expect to find local government finances to be allocated in accordance with the preferences of the median voter.

A quick appraisal of conditions in Tanzania would suggest that Tanzania's median voter is rural and lives only slightly above the poverty threshold: 83% of Tanzania's population resides in rural local government districts, almost two-thirds (63%) of the total population engages in agriculture as its primary activity, while 36% of the population falls below the basic needs poverty line (NBS, 2002). Substantial income disparities are likely to affect the fiscal choices of the median voter in favour of redistributive policies, since the median level of household income (as approximated by the median level of monthly consumption expenditures at 7523 TSh. per person) falls considerably below the average (mean) level of per capita consumption expenditures (TSh. 10,120 per person). The income disparity is even more pronounced when comparing rural households with urban households: the

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median level of household consumption expenditures in rural areas is TSh. 6860 per person, compared to TSh. 11,561 in urban areas and TSh. 16,349 in the capital region of Dar es Salaam.

Thus in accordance with the median voter hypothesis, the Government of Tanzania should be inclined to allocate its resources in a pro-poor, pro-rural manner. Indeed, the Government's key policy objectives focus on specific poverty alleviation and rural development objectives, including the provision of universal primary education (reintroduced in 2001), an emphasis on equitable access to basic health care services (particularly in rural areas) and improved agricultural extension services (Government of Tanzania, 2000). As a result of the clearly stated pro-poor, pro-rural objectives of the central government, we should expect poor, rural local governments to receive more funding for the delivery of local public services than wealthy or urban local governments.

Public choice theory also offers more complex models that provide alternatives to the basic median voter hypothesis. Epple and Romano (1996) sketch a scenario in which a coalition of rich and poor households defeats the preferences of the middle-income median voter. For instance, since wealthy households often rely on privately provided substitutes for local public goods (such as private schooling instead of public education or private security as opposed to public safety), a coalition of rich and poor households might actually prefer lower local expenditures than the median voter. Alternatively, a coalition of rich and poor households could structure the fiscal instruments (expenditures and taxes) in such a way that fiscal redistribution benefiting the poor would be achieved disproportionately at the expense of the middle class.

In contrast to the majority-voting schemes that drive the public choice models, the political economy hypothesis of local government finance argues that political decision-making processes are 'captured' by powerful interest groups, so that the distribution of public resources across local government units is determined by political and institutional factors (Grossman, 1994; Atlas *et al.*, 1995).

The empirical literature that has studied the incidence of local government resources generally concurs with the political economy hypothesis: public policy objectives and political factors are generally both found to be key determinants of the way in which central government resources are allocated across the national territory. This general conclusion is supported by studies in countries as diverse as Argentina (Porto and Sanguinetti, 2001), Israel (Alperovish, 1984), Japan (Meyer and Naka, 1999), Nigeria (Alm and Boex, 2002), the Russian Federation (Treisman, 1996; Stewart, 1997; Martinez-Vazquez and Boex, 2001), Uganda (Francis and James, 2003) and the United States (Atlas *et al.*, 1995; Grossman, 1995; Wallis, 1996).

Thus, if we believe that, in line with the political economy argument, the public resource allocation process in Tanzania is beholden to politically powerful interest groups, then we might expect central–local government allocations to be distributed in a predominantly pro-rich and pro-urban manner in spite of the official pro-poor, pro-rural focus of the national government's policies.

THE INCIDENCE OF LOCAL GOVERNMENT ALLOCATIONS IN TANZANIA

A review of descriptive statistics in Tables 2 and 3 uncover significant variations in the distribution of local government resources and reveal some clear patterns regarding the way in which central government resources are distributed among local governments.[1,2] The evaluation of regional variations in local government allocations contained in Table 2 suggests that local governments in certain regions consistently receive more resources than local authorities in other regions.[3] For instance, local governments in Pwani (Coast) Region on an average receive the

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[1]The subsequent analysis is based on budgeted figures for local government allocations for the financial year 2002–2003. In general, disbursements to local government authorities by the Ministry of Finance closely follow budgeted allocations (Boex *et al.*, 2003). The analysis considers per capita allocations rather than total allocations because of the belief that the individual (the citizen, taxpayer, voter and the user of government services) is the ultimate recipient of the government services funded with intergovernmental grants.

[2]It should be noted that the current analysis only considers the incidence of local government expenditures. An arguably more comprehensive approach known as fiscal incidence analysis would take into account both the incidence of local expenditures as well as the incidence of revenue sources across local governments (Atlas *et al.*, 1995; Martinez-Vazquez, 2001). However, no disaggregated revenue collections data are available for Tanzania.

[3]There are 20 regions in Tanzania. Regional administrations are a deconcentrated tier of the central government, with no own expenditure responsibilities. Local government allocations flow directly from the central government's treasury to local government accounts, although regional officials have significant influence over local allocations.

Table 2. Descriptive statistics: total per capita allocations by region, financial year 2002–2003 (in TSh. per person)

Region	PE	OC	Total
Arusha	5507.6	2413.2	7920.9
Dar es Salaam	4820.7	1917.3	6738.0
Dodoma	5605.0	1515.7	7120.7
Iringa	6292.1	1554.8	7846.8
Kagera	4922.6	1569.6	6492.1
Kigoma	5714.8	1573.5	7288.3
Kilimanjaro	6600.7	1384.2	7984.9
Lindi	6696.2	2590.7	9286.9
Mara	5756.5	1573.7	7330.2
Mbeya	6360.4	1583.2	7943.6
Morogoro	6196.8	1420.6	7617.4
Mtwara	5909.5	1851.6	7761.1
Mwanza	4975.4	1134.0	6109.4
Pwani (coast)	8169.7	3064.7	11,234.4
Rukwa	4199.3	1275.8	5475.1
Ruvuma	6482.6	1692.4	8174.9
Shinyanga	4000.8	1258.9	5259.8
Singida	5492.2	1746.0	7238.3
Tabora	5232.2	1976.0	7208.2
Tanga	6618.2	1691.8	8310.0
Regional average	5777.7	1739.4	7517.1
Standard deviation	964.3	474.2	1299.3
Minimum	4000.8	1134.0	5259.8
Maximum	8169.7	3064.7	11,234.4

Source: Computed by the author based on Ministry of Finance data.

Table 3. Descriptive statistics: total per capita allocations by type of local government, financial year 2002–2003 (in TSh. per person)

	PE	OC	Total
Urban local governments			
Average	7383.7	2228.9	9612.6
Standard deviation	2993.7	932.1	3620.4
Minimum	4144.9	1320.9	5564.6
Maximum	18,356.0	4294.8	22,650.8
Rural local governments			
Average	6092.1	1992.0	8084.0
Standard deviation	2216.7	1105.3	3013.5
Minimum	2233.5	624.4	2888.5
Maximum	13,491.5	7066.3	18,911.7
Total local governments			
Average	6313.2	2032.5	8345.7
Standard deviation	2402.2	1077.5	3161.0
Minimum	2233.5	624.4	2888.5
Maximum	18,356.0	7066.3	22,650.8

Source: Computed by the author based on Ministry of Finance data.

largest per capita allocations (TSh. 11,234 per person), whereas local governments in Shinyanga Region on an average receive the smallest amount per capita allocations (TSh. 5259 per person). While these data reflect regional differences in the allocation of local government sources, the Table in itself does not suggest why these variations occur or whether these variations occur in response to sound and plausible policy reasons.

The descriptive statistics for individual local government finances in Table 3 (as opposed to the regional aggregates contained in Table 2) reflect even greater variations in per capita local resource allocations. During

the financial year 2002–2003, budgeted per capita allocations varied from a minimum of TSh. 2888 to a maximum of TSh. 22,651 per person.[4] This range reflects considerable horizontal disparities, with the least well-off local government receiving only one-eighth of the highest per capita allocation. The descriptive statistics in Table 3 reveal another consistent pattern in resources allocations. The data suggest that there is a substantial difference in the way in which local government allocations are distributed between urban local governments and rural local governments, with urban local governments on an average receiving TSh. 1500 more per person than rural districts. This finding is troublesome given the fact that urbanised areas generally have lower poverty rates, lower illness rates, higher literacy rates and higher levels of household income (NBS, 2002), as well as the fact that urban local governments generally collect larger amounts of own source revenues. In this respect, the current local government resource allocation pattern appears to go against the government's policy objective of allocating more resources to local governments with a weaker resource base.

Although the descriptive statistics suggest the existence of a potentially counter-equalising pattern of local government allocations, a more formal model is needed to identify the causes of the variation in per capita allocations between local governments. As a result, the following empirical model explains variations in per capita local government allocations (PCALLOC) based on a number of explanatory variables that reflect variations between local governments in fiscal capacity and expenditure needs, so that:

$$PCALLOC_i = f(POVERTY_i, \ DENSITY_i, \ SCHOOLAGE_i, \ POPULATION_i,$$
$$CONSUMPTION_i, \ URBAN_i, \ UTILISATION_i, \ ERROR).$$

Descriptive statistics for the explanatory variables are presented in Table 4. Several measures of local expenditure need were included in the incidence model, including the regional poverty rate (POVERTY; defined as the share of the population that falls below the 'basic needs' poverty threshold) and the population density of each local government (DENSITY). Since primary education is the most important local government expenditure responsibility in Tanzania, the percentage of the population that is school-age (SCHOOLAGE) is further included in the model as an additional expenditure-need measure. These variables are all common measures of local expenditure needs.[5] Thus, if the system of local government allocations is meant to equalise the expenditure needs of local government authorities, then needier districts (for example, with a lower population density) should receive greater allocations.

The population size of a local government (POPULATION; in thousands of residents) was also included into the incidence model. Inclusion of this variable in the model would determine whether scale economies were considered as a factor in allocating central–local resources among local governments. If this were indeed the case, we would expect local governments with larger populations to receive lower per capita allocations.

Table 4. Descriptive statistics: explanatory variables

Variable	Mean	Standard deviation	Minimum	Maximum	Observations
POVERTY	36.5	10.0	18.0	55.0	20
DENSITY	139.87	359.44	4.78	2554.95	113
SCHOOL AGE	18.23	5.67	7.80	45.13	113
POPULATION	300.75	188.77	44.03	1202.55	113
CONSUMPTION	7939.0	2435.1	5456.0	16,349.0	20
URBAN	0.19	0.40	0.00	1.00	113
UTILISATION	80.08	15.91	36.22	138.48	113

[4]Coincidentally, the local governments receiving the greatest and smallest per capita grant amounts are Iringa Urban Council and Iringa Rural Council respectively.
[5]While relevant in many developed and transition economies, the share of the population above working age is not policy relevant in highly impoverished developing economy such as Tanzania.

Next, local governments' levels of fiscal capacity were proxied in the incidence model by regional median household consumption expenditure levels (CONSUMPTION). After all, as household incomes and consumption expenditures rise, local governments should be better able to tax their residents and raise own source revenues. Thus, if local government allocations are equalising (more specifically, if local government allocations seek to equalise fiscal capacity), then we should find an inverse (negative) relationship between per capita allocations and household consumption.

One major problem in studying the incidence of local government allocations in Tanzania is the limited availability of sound local government data. While data on local government allocations are available from the Ministry of Finance, most other data sources (including most social-economic variables) are either incomplete or only available at the regional level.[6] As a result, local poverty and median consumption are approximated by their regional levels, which are available from the national household budget survey (NBS, 2002). Given the fact that national politicians and policymakers are not able to observe the actual intra-regional variations in poverty and household incomes either, this should not be considered a major limitation of the model.

A dummy variable (URBAN) is included in the empirical model to account for the different nature of urban areas within each region. The inclusion of such a dummy variable is especially relevant given the fact that the empirical model is unable to observe intra-regional variations for poverty and household income. Urban areas in Tanzania are documented to be considerably wealthier than rural areas and urban areas are generally much more developed than rural areas (NBS, 2002). This would suggest that if local government finances were predominantly redistributed to equalise access to local public services, then an inverse relationship would exist between urban status and local government allocations. At the same time, it could be argued that urban local governments have a legitimately higher need for local government services since urban areas serve a broader function as regional hubs. For instance, residents from surrounding rural areas benefit from urban amenities such as municipal markets. Similarly, urban local government officials might claim that a significant number of out-of-district students attend urban public schools. In that case, a positive relationship could be expected to exist between urban areas and local government allocations.

In the end, six variants of the empirical model were estimated. In addition to estimating the incidence model with total per capita local government allocations as the dependent variable (R1), Table 5 separately presents the results for per capita educational local government allocations (R3) and per capita non-education allocations (R5). Finally, in order to specifically account for the supply-side focus of the NMS approach, each of the three equations is also estimated with one additional variable, notably a proxy for the utilisation rate for local public services. This utilisation rate for local public services is approximated in the empirical model by the school attendance ratio which is defined as the percentage of the school-age population enrolled in public primary schools (UTILISATION). Given the fact that the NMS relies on the actual level of services supplied rather than the potential demand for local government services, we would expect local governments with higher utilisation rates (as reflected by higher attendance levels) to receive greater local government allocations.

RESULTS AND DISCUSSION

The regression results in Table 5 suggest that the selected explanatory variables explain between one-third and half of the variation in per capita transfers in Tanzania. The empirical results support several interesting conclusions.

First, the results suggest (perhaps surprisingly) that the way in which per capita allocations are distributed across local governments does not systematically equalise the presumably higher expenditure needs of rural areas, as less densely populated districts do not receive greater allocations. Similarly, local government allocations in Tanzania are not resoundingly pro-poor either. Table 5 suggests that only non-educational allocations be allocated in a pro-poor fashion (equations R5 and R6), whereas the parameter estimate is not statistically significant in the

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[6]For instance, population density, primary school enrolment and school-age population had missing observations for selected local government areas. In order to complete the dataset, missing observations were imputed based on national averages. Expenditures for the Dar es Salaam special district were divided across its constituent municipalities (Kinondoni, Ilala and Temeke) in proportion to their respective populations. As a result of data limitations, Kibaha Urban Council and Kibaha District Council were considered one local government.

Table 5. Dependent variable: per capita local government allocations

	Total allocations		Educational allocations		Non-educational allocations	
	R1	R2	R3	R4	R5	R6
CONSTANT	4622.73	−918.32	4727.84	1468.92	−105.11	−2387.24
	(1.59)	(−0.32)	(2.47)	(0.77)	(−0.07)	(−1.68)
POVERTY	40.7	38.07	−9.06	−10.61	49.76	48.67
	(1.16)	(1.21)	(−0.39)	(−0.50)	(2.93)	(3.08)
DENSITY	0.07	−0.31	−0.47	−0.7	0.55	0.39
	(0.06)	(−0.30)	(−0.63)	(−1.01)	(0.98)	(0.74)
SCHOOL AGE	54.4	74.82	41.99	54.01	12.4	20.82
	(1.18)	(1.81)	(1.39)	(1.94)	(0.55)	(1.00)
POPULATION	−9.13	−8.11	−4.41	−3.81	−4.72	−4.3
	(−5.44)	(−5.35)	(−4.00)	(−3.73)	(−5.79)	(−5.63)
CONSUMPTION	0.47	0.35	0.2	0.13	0.27	0.22
	(2.30)	(1.90)	(1.48)	(1.03)	(2.73)	(2.39)
URBAN	1290.61	726.48	1220.25	888.46	70.36	−161.98
	(1.73)	(1.07)	(2.49)	(1.95)	(0.19)	(−0.47)
UTILIZATION	—	75.7	—	44.52	—	31.18
		(5.17)		(4.52)		(4.23)
Observations	113	113	113	113	113	113
R^2	0.39	0.52	0.32	0.43	0.40	0.48

Note: *t*-statistics are reported in parentheses.

remaining equations. The empirical results further suggest that the size of the school-age population is only significant in equations R2 and R4 in combination with the attendance rate.

Second, as suspected, the empirical results suggest that perceived fixed costs (i.e. scale economies) are an important determinant in the allocation of local government resources in Tanzania. As a result, districts with larger populations indeed receive smaller allocations when measured in per capita terms. For every increase in population of a thousand residents, a local government will receive about 8 Shilling less per person. This result is consistently significant across all models.

Third, the empirical results suggest that the current mechanism for allocating local government resources is counter-equalising in terms of fiscal capacity: wealthier local governments generally receive greater allocations. The policy implications of this finding are addressed in greater detail in the discussion below.

Fourth, the allocation of local government resources in Tanzania is pro-urban, particularly in the case of educational resources: urban areas receive significantly more educational resources than non-urban areas. This is true even after factoring in the increased utilisation levels in urban areas.

There are several potential explanations for this phenomenon. Higher allocations to urban local governments would be justified if urban areas have legitimately higher expenditure needs that are not captured by any of the other independent variables. If so, then the central government is correctly responding to these higher needs by allocating more resources.[7] An alternative explanation might be that urban local governments are able to secure more resources by convincing central government officials that they are able to spend the resources more efficiently than rural local governments. Finally, urban government officials might simply have more political clout within the central government than rural local governments. For instance, unlike in urban areas, Chama Cha Mapinduzi (CCM), the ruling political party, faces no political opposition in rural areas (Mukandala, 1998; Therkildsen, 2000). As a result, one could postulate that the central government feels no real political pressure to 'buy' the loyalty of rural political leaders.

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[7] A common reason for higher expenditure needs in urban areas is that urban local governments often face a higher cost structure in delivering local government services. This is not likely to be the case in Tanzania. First, the salary structure for teachers and other local government staff is determined by national standards. In addition, the non-labour cost of delivering local public services are widely believed to be higher outside the main urban areas as transportation costs are greater in rural areas.

Finally, the empirical results demonstrate that, consistent with the NMS approach, local government that supply higher levels of local public services (as reflected by higher attendance rates) receive significantly greater local government allocations. It should be noted that school attendance rates are found to impact not only education allocations, but non-education allocations as well. This result could be interpreted in two different ways. First, if we take this result at face value, we could take it to mean that a higher primary school attendance rate functions as a proxy for the inter-local usage of other (non-education) local public services. As such, local governments with higher attendance rates would 'deservedly' receive greater allocations from the centre as they bear a greater burden from regional spillovers. Alternatively, this result could be interpreted in a more cynical way, since enrolment rates are basically self-reported and the central government has an extremely limited ability to monitor and verify locally reported data. This more sceptical interpretation suggests that those local governments that artificially inflate their reported attendance rates—and are sufficiently powerful to convince the central government of their inflated figures—simply end up receiving larger allocations. This interpretation has clear implications for the sound design of a future formula-based system of intergovernmental fiscal grants in Tanzania.

In summary, the incidence analysis of local government allocations in Tanzania is yielding mixed results. Despite the official pro-poor, pro-rural policy objectives pursued by the national government, there are important disequalising tendencies in the way in which local government resources are allocated. There are two competing interpretations to explain the positive relationship between higher local government allocations and local fiscal capacity in Tanzania.[8] The first explanation is institutional failure: although the median voter wants a pro-poor, pro-rural allocation of local government resources, the shortcoming of the NMS approach have simply caused wealthier and urban local governments to receive a disproportionate share of local government resources. This institutional failure could be driven by a combination of factors, including urban bias by teachers and other professionals who prefer to locate in urban areas, the inherent higher utilisation of local public services in an urban setting and as a result of the fact that wealthier, better managed urban governments are better positioned to efficiently spend allocations from the central government.

However, if the NMS mechanism is indeed an institutional failure that is preventing the public sector from achieving the median voter's desired outcome, the question then becomes: why is the system of NMS still in place. One possible explanation might be that until the joint government-donor review of local government reforms (Watson, 2001) and the subsequent study of local government finance (Boex et al., 2003), the failure of the NMS approach had not been adequately documented. Since the approach's inadequacies are now fully exposed, the government could be expected to move quickly to introduce a more objective and equitable formula-based system of intergovernmental grants.

The second possible explanation for the observed positive relationship between local government allocations and local fiscal capacity follows the political economy argument in the allocation of intergovernmental resources. This argument suggests that in the absence of an allocation formula, central government bureaucrats and politicians have substantial discretion over local resource allocation decisions, and that in doing so, they respond to pressure from interest groups by favouring the wealthier, urban local governments. In accordance with this argument, the system of NMS should not be considered an institutional failure; instead, this flawed policy tool is left in place because powerful interest groups stand to benefit from its existence. As such, political interest groups would have an incentive to resist the introduction of a formula-based grant mechanism, since wealthy, powerful urban local governments would likely be the big losers of a more objective intergovernmental grant scheme. If this interpretation is correct, then decisive reform of the current system of intergovernmental finances is unlikely to occur any time soon.

CONCLUDING REMARKS

At best, this study finds weak evidence supporting the pro-poor allocation of some local government resources by the central government in Tanzania. Instead, the study finds more convincing support for substantial pro-wealthy

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[8]This result is not unique in any way—other studies have found a positive impact of subnational fiscal capacity on intergovernmental grants, including Nigeria (Alm and Boex, 2002); Japan (Meyer and Naka, 1999); and the United States (Wallis, 1996).

and pro-urban tendencies in the way in which central government officials divide public resources across local government units. These findings are surprising, especially given the strong pro-poor stance taken by the government and the high degree of donor interest in poverty alleviation in Tanzania.

Time will tell whether the Government of Tanzania is resoundingly committed to the introduction of a formula-based system of intergovernmental grants. The depth of upcoming local government finance reforms will reveal whether the system of NMS should indeed be considered an institutional failure, or whether political economy arguments are in fact dominant in maintaining discretionary central government control over local government allocations.

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