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METROPOLITAN REVENUE SOURCES
THE NAIROBI CASE

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ABSTRACT

The paper discusses briefly the reasons for budgetary plight which faces most large cities and particularly those in the developing countries. The case of Nairobi, a primary city subject to many of the forces discussed above, is then examined in some detail and a forecast given of its fiscal outlook by 1985.

The almost inevitable gap between revenues and expenditures is, in the case of Nairobi, seriously deepened by the recent abolition of the Graduated Personal Tax, a major revenue source of the city. Various methods of coping with the fiscal crisis are then discussed and a substitute tax measure suggested, designed not only to replace the lost GPT revenues but to improve the efficiency of the city's revenue structure. The suggested measure proposes the imposition of a municipal surcharge on the national income tax liability of Nairobi residents. Albeit tentatively, the paper examines the various economic and administrative aspects of the surcharge.

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INTORODUCTION

In the words of the author of a recent comparative study of municipal finance, "cities everywhere seem to be subject to an iron law of poverty. Even the richest cities of the world confront budgetary crises".

There is mounting empirical evidence that, measured on a per capita basis,

a) the cost of public services in the urban centres is much greater than in the rural areas,
b) these costs in the larger cities are aubstantially greater than in the smaller cities, and
c) the unit costs of the larger cities in the developing countries relative to those of the smaller cities are greater than in the developed countries.

Conceptually, the above propositions derive from the following considerations:

1. Density is an important determinant of per capita expenditure.
2. Urban expenditures are subject to rising unit costs.
3. Large cities in the developing countries experience rates of population increase, thence of accumulation and density, far above those of comparable sized cities in the industrialised countries.

In most testable models of local government expenditures, population density emerges as a highly significant independent variable. This is not surprising in as much as concentration of persons in a given physical space gives rise to expenditures which are not required in rural settlements. Garbage and refuse disposal, public transportation and crime prevention come readily to mind. In very large cities, even factoring out differences in the quality of public services, rising unit costs seem to be the rule, in spite of alleged economies of scale, certainly for police and fire protection. Large cities in the developing world not only experience high rates of population increase both as a result of natural causes and by immigration, but are further characterised by greater relative concentration of cars and disposable items such as cans and bottles,

thus adding to the pressure on the unit costs of public services. Moreover, in those cities where immigration accounts for most of the population increase, the concurrent breakdown in such institutions as the extended family gives rise to higher relative expenditures on welfare and related functions.

On the other side of the balance sheet, the large cities in the developing countries seem to be unable to cope with rising expenditures even though they have higher incomes, greater productivity and a broader range of opportunities than other settlements within their respective countries. This is disquieting because if large cities cannot pay their costs, who can? The answer lies in a variety of circumstances which appear to prevail in most developing countries. In the first place, a number of central governments in these countries are ambivalent about the role and function of the large cities in their midst. Many of the larger cities lack the administrative ability both to control their expenditures and to collect sufficient revenues, because the best administrative talent gravitates to the central government. Moreover, even those cities which are well run and have qualified personnel have to contend with the high capital cost of discontinuous infrastructure outlays, and many of these cities face severe restrictions on their borrowing power. Little wonder then that large cities in general and primary cities in the developing countries in particular face serious budgetary crises. Nairobi is a good case in point. This paper will examine its budgetary outlook, and suggest some measures which could alleviate Nairobi's fiscal position.

NAIROBI'S BUDGETARY POSITION AND OUTLOOK

Table One below summarises the available data on Nairobi's revenues and expenditures. Between 1964 and 1971, all revenues rose at an annual compound rate of 10.8% while current expenditures increased at 7.5% and capital expenditure at a rate of 32% annually. While in 1964 all expenditures, capital and current, were at £5.5 million roughly equal to total revenues, they exceeded them by nearly £2 million in 1971. The growing gap between revenues and expenditures was financed by borrowing and by drawing down of accumulated cash balances.

Table One: Nairobi City Council Revenues and Expenditures, 1964 - 1971

	1964	1971
Revenues (£'s Mil)	5.3	10.9
Current Expenditures	4.9	8.4
Capital Expenditures	0.6	4.1
Total Revenue per capita (£'s)	14.0	19.0
Total Expenditure per capita	15.6	20.9

It would be difficult to accuse Nairobi of being prodigal with its resources. Even though per capita expenditures measured at current prices increased slightly, total per capita expenditures probably declined in real terms given the much larger population. Measured as a proportion of the value added in the city (Nairobi GDP), expenditures rose very slightly from 5.7% in 1964 to 6.6% in 1971, even though Nairobi was certainly subject to the forces mentioned in the preceding section and in spite of the allegedly high income elasticity of public expenditures. Nairobi's share in capital formation is also surprisingly modest even though the city generates about 40% of Kenya's total monetary sector output and some 30% of its total GDP. In 1971, the capital outlays of Nairobi were less than 3% of all capital formation in the country and only 7% of public capital formation in that year. On the other hand, Nairobi capital expenditures account for over 3/4 of the local governments' capital formation in Kenya. International comparisons in the field of municipal finance are treacherous, but it might be worth noting that during the same period in Tanzania, Dar-es-Salaam was allotted over a quarter of all development budget expenditures. Similarly, in the period when GDP doubled, revenue collections as a proportion of GDP rose only from 5.6% to 5.8% notwithstanding the built-in flexibility of a significant portion of the city's revenue structure. The breakdown of the revenues by source is given in Table Two. The Graduated Personal Tax did show a growth rate of nearly 17% over the period, compared with the growth rate of total output which averaged slightly over 10% annually. On the other hand, revenue from rates on property grew at only 8.6% and revenue from so called departmental income (fees, fines and charges) grew at an annual rate of below 6%.

In projecting Nairobi's expenditures till 1985, the Nairobi Urban Study Group has assumed very modest targets and standards and has incorporated into annual expenditure figures smoothed-out capital outlays as well as related recurrent expenditures, but it did not consider additional

functions beyond those existing in 1971. In that year the general fund current expenditure (excluding water and sewerage) amounted to £6.5 million, with education and public health accounting for slightly over half, about equally divided between these two functions. General Fund capital expenditure in 1971 amounted to £2.8 million with housing the most important single item. Over the period 1969-1971 housing accounted for over half of all Nairobi City Council capital outlays.

Table Two: Composition of Nairobi City Council Revenues, 1964 and 1971

£1000's	1964	1971
Rates (unimproved site value)	1,430	2,639
Graduated Personal Tax	1,216	3,626
Departmental Income	1,587	2,366
Miscellaneous	85	126
Total General Fund	4,318	8,657
Tenant Purchase and Housing		369
Sewerage	309	622
Water	687	1,261
Total Revenue	5,314	10,909

The annual total expenditures thus projected give a 1985 value of nearly £30 million against an estimated total revenues of some £22 million. The revenue projection assumes the continuance of the Graduated Personal Tax collections. In per capita terms, total expenditures would run by 1985 to £21 and revenues to £16, both at constant prices. Details of the projections are given in Table Three.

Table Three: Nairobi City Council Revenues and Expenditures, 1985 Projection

£1000's	1971	1985
Revenues		
Rates	2,539	5,360
Graduated Personal Tax	3,626	7,990
Dept. Income	2,366	6,365
Miscellaneous	126	300
Total General Fund	8,657	20,015
Tenant Purchase and Housing	369	1,960
Total Revenue (excl. water and sewerage)	9,026	21,975
Sewerage	622	
Water	1,261	

Table 3 Cont....

£1000's	1971	1985
Current Expenditure, Services	6,287	19,640
Tenant Purchase	289	1,760
Training	109	300
Provisions	130	350
Total, current expenditures (excl.water and sewerage)	6,815	22,050
Sewerage	473	
Water	873	
Capital Expenditure		
General fund	2,831	5,870
Tenant Purchase	957	1,875
Total (excl. water and sewerage)	3,788	7,745
Sewerage	134	
Water	143	

HOW TO DEAL WITH THE BUDGETARY GAP

The projected gap between aggregate revenues and expenditures appears to equal the anticipated capital outlays. Of course, given the nature of the forecast, the shortfall is not likely to be exactly the one given in the preceding Table. The smoothing out procedure for bulky capital investment which was adopted in the forecast precludes, except by accident, the convergence of actual and projected figures in any one year. Nevertheless the fact that capital outlays seem to approximate the size of the budgetary gap would suggest the possibility that the gap could be financed by borrowing.

The Nairobi Urban Study Group has made a lengthy study of the size of the market for government securities, the share of that market which could be tapped by the Nairobi stock issues, the debt burden of those issues and related matters to determine whether borrowing, by itself, could fill the projected revenue-expenditure gap. Very briefly and tentatively, the main conclusion is that by 1985 it would be extremely unwise to count on a maximum volume of annual stock issues of more than some £4 million, about double the annual volume of external city borrowing in recent years. This conclusion depends on both the effects that debt service would have on the

budget and considerations of market capacity. Even if economic considerations alone were to warrant an annual volume of city borrowing to the tune of £4 million, there would still remain considerable doubt whether even this amount would be permitted by the Treasury which faces its own serious problems of debt management.

In any event, an annual volume of borrowing which will reach £4 million by the year 1985 would still require additional revenue if the expenditure goals are to be met. With the abolition of the Graduated Personal Tax, the city faces a very acute budgetary problem and one which clearly requires prompt and determined action.

One theoretical possibility would be for the city to be relieved of its responsibilities for such functions as education and health. If this were to take place, as it did for the County Councils in Kenya a few years ago, it would indeed make the financial affairs of Nairobi manageable. Taking 1985 again as the focus of the projections, the relinquishing of the two functions by the city would reduce aggregate expenditure by some £12 million, so that £4 million of borrowing would balance the accounts in spite of the loss of some £8 million from Graduated Personal Tax proceeds.

Some sort of a case could indeed be constructed for such a drastic reshuffle of responsibilities between the local and the central government, even though the preponderance of the arguments in favor of municipal control over these functions, both political and economic, appears undisputable. But in present day Kenya the issue does not really arise. The central government is both unwilling and unable to assume responsibility for municipal primary education and for health. It should be noted, for example, that since the national Government took over the counties' responsibilities for primary education some 3 years ago, no new schools have been built. In a recent budget speech, which confirmed the abolition of the Graduated Personal Tax, the Minister of Finance and Planning had this to say:

> I am aware that the abolition of GPT' Graduated Personal Tax will aggravate the problem of financing the services of the municipalities. I have, however, provided K£2 million in the Expenditure Estimates for grants-in-aid to the municipalities in order to reimburse them for the GPT revenue they will lose in the first half of 1974. I shall be prepared to continue

> a system of grants-in-aid to the municipalities for a total of five years, but during that period I will expect the municipalities to have developed their own independent source of revenue, particularly the land rate, in order to replace the Government grant - in - aid completely.

It would be superfluous to argue against grants-in-aid in the light of the above statement. Whatever the merits this method of financing budgetary deficits may have for other cities, it is much less attractive for Nairobi. The share of grants-in-aid accruing to Nairobi is not likely to equal the share of the proceeds from GPT, even though the amount retained by Nairobi in 1971 was rather exceptional.

Thus, Nairobi must increase its revenues, both in order to replace the loss of GPT proceeds and to reduce the budgetary gap which loomed ahead even before GPT was abolished.

There can be little question that Nairobi has a considerable and as yet untapped taxable capacity. As shown above, the per capita revenue collections will actually decline in the future, and even at present the crude indices of tax effort constructed for both Kenyan and other cities strongly suggest that Nairobi lags behind.

The Nairobi Urban Study Group has completed its chief task of designing long-term and intermediate-term planning strategies for the metropolis, but its economic division continues to pursue a number of related tasks of which fiscal reform is among the most important. This task is not yet completed but a number of preliminary conclusions have emerged. Thus, for example, it would seem necessary to increase substantially the productivity of the land rates, chiefly by drastically changing the approach to valuation of sites. Inspite of many arguments to the contrary, the present system of taxing the site values rather than the improvements appears consonant with the character of Nairobi and its development strategy. What appears to be needed is some method of insuring that the rapidly rising land values are promptly reflected in the valuation rolls. As of now, the only increase in the valuation rolls since Independence was due almost exclusively to the addition of new areas to the city, with most of the land in the old city area carried on the rolls in 1970 at the same figure as in 1959. While proper revaluation of land is called for, there would appear to be considerable merit in an automatic, annual upvaluation of rolls, perhaps on the basis of some external index, i.e. the value added in transportation, and calibrated according to predetermined zones of the city.

Similarly, the departmental income is capable of substantial increase in yield. Quite apart from such politically sensitive charges as school fees and housing rents, there seems little reason for not increasing a variety of other fees and charges which have remained at the same level for ten or more years. In a number of cases, with parking fees the prime example, there are grounds for increasing the amounts charged even stronger than those of revenue requirements.

Be that as it may, however, a realistic appraisal of the possibilities of increasing the yield from existing revenue sources makes it clear that an additional revenue source will be required. The remainder of this paper will discuss this new revenue source in some detail even though it should be borne in mind that the proposal is still very tentative and that much additional study will be required before the proposal can be seriously considered for implementation.

MUNICIPAL SURCHARGE ON INCOME TAX

Those subject to national income tax in Kenya are assessed a tax liability payable to the national Treasury. The amount of this liability depends on the amount of taxable income, eligible exemptions and exclusions, family status and other considerations, which vary with the legislation and regulations in force. The tax liability under the national income tax covers both municipal residents and other residents of Kenya. Under the present proposal the tax liability of those residing in Nairobi will constitute the tax base for Nairobi municipal tax surcharge and, say, the national income tax liability of Mombasa residents would form the basis of the Mombasa tax surcharge, should it be decided to extend the scope of this tax to municipalities other than Nairobi.

On this tax base the authorised municipalities will then impose a surcharge expressed as a percentage of the national tax liability of its residents. For example, if a Nairobi resident is required, in a given year, to pay £100 to the national Government in income taxes and Nairobi is entitled to levy a 5% surcharge the resident in question will be required to pay an additional £5 in that year to the Nairobi City Treasurer.

Only those taxpayers who reside in Nairobi and who at the same time pay the national income tax will be subject to the Nairobi municipal surcharge.

Those residing outside Nairobi or other large designated cities will not be subject to this tax. Those residing in Nairobi or other large city, but not imposable under the national income tax will be exempt from the municipal surcharge as well.

The extent of the base, i.e. the amount due by residents of a city under the national income tax, is determined by the national tax legislation and by the incomes of the taxpayers. The rate of the surcharge will be determined by the national Government in consultation with the municipality and can either be set at a flat rate (i.e.5%) or else the enabling legislation could provide for a range, say between 3 and 8%, with the actual percentage set, for any given period, by the national Government, or else (subject to approval of the national Government) by the municipality.

Were the municipal surcharge allowed cities other than Nairobi, there is no reason for the rate of surcharge to be the same. The differentiation in the rate of surcharge would depend on the relative needs of the cities, their own fiscal effort, their role in the national economy and other factors.

The base of the proposed national tax liability of city residents would encompass not only the national tax liability of individuals but also of businesses and of limited liability companies. Even though the national income tax liability of certain businesses and companies may well originate outside the jurisdiction of Nairobi or other large city, the municipal surcharge would be based on residence rather than on the origin of taxable income.

THE RATIONALE OF THE PROPOSED TAX

With the possible exception of wealth, income of residents is generally considered to be the best, the fairest and the most comprehensive basis for taxation even though, for a variety of reasons, local units of government resort largely to other tax bases. The reasons for the neglect of income as a source of taxable capacity by subnational units are manifold, but the fact that national Governments often reserve to themselves this form of taxation counts among the most important. It is fortunate that in Kenya, the taxation

of income by a municipality is not constitutionally interdicted and that in fact, the Graduated Personal Tax did sanction taxing incomes by a municipal Government, albeit in a form which was far from satisfactory. The GPT taxed only a part of the income of Nairobi residents. It could not touch substantial incomes derived from interest, dividends, rents and other forms of property income. GPT discriminated in favour of the self-employed and against low income workers. It favoured the professional man as opposed to the civil servant. It was unfair in many respects and especially in that it limited the progression to incomes under £600 per annum. Its passing is hardly to be regretted, except for the severe loss of revenue entailed, but it did establish the principle that in Kenya the taxation of income is open to municipal Government.

It is interesting to note that even though municipal taxes on income are not the predominate form of local revenue in other countries, those cities who do avail themselves of this form of taxation seem to be among those least dependent on central Government aids and grants. Cities in Finland and Sweden are often cited as among the best managed and most progressive. They tend to rely heavily on local income taxes, with Stockholm obtaining about forty percent of its total revenue from income taxes. Singapore is another city which relies heavily on income taxes. In Africa, besides Nairobi with GPT, Lusaka and Ibadan derived a substantial part of their revenues from taxes on income, with Ibadan obtaining some 35% of all its revenues from these taxes.

Reliance on the income of its residents as the main source of municipal taxation is advisable for a number of reasons ; firstly, of all indices of taxable capacity income is the most likely to grow pari passu with the increase in municipal expenditures. Unlike the valuation rolls which tend to respond rather sluggishly to increases in site values over time, income of residents provides a continously growing source of taxable capacity. This is so because not only is the population of large cities bound to grow so that the aggregate income of all its citizens goes up, but also because, especially in a dynamic country such as Kenya, the income of most city residents will grow. Moreover, the taxable base related to taxable income can be expected to grow faster than the total income because more people will become subject to taxes as they cross the threshold of exemptions and exclusions.

This high positive elasticity of taxes based on income is an important fiscal consideration because is means that with a given rate of surcharge, the yield to the municipality will grow faster than income. This permits a low tax rate and reduces the need to raise the rates periodically, a desirable fiscal expedient since any hardship or inequity will be less at a lower rate. Perhaps more importantly, the steadily growing tax base means that there is less need for a plethora of other revenue measures, each one of which brings little revenue, but which in the aggregate cause many nuisances and bear heavily on the administrative capacity of even a well-run city.

Under the concept of municipal surcharge proposed here, there is no need to graduate the rates as was done under the GPT. Moreover, the proposed surcharge can tap income which escaped from the GPT,especially income derived from the ownership of property. The Nairobi Urban Study Group estimated that some 40% of all income originating in Nairobi derives from sources which were not subject to taxation under GPT. Thus, the proposed surcharge is not only fairer and more equitable but potentially much more productive of revenue than GPT, even with the same rate of tax.

For Nairobi at least, there appears to be a strong case for a metropolitan surcharge based on the taxable income of its residents. Because of its unique position and role as the centre of the East African Community, its corporate headquarters and its attraction to rural migrants, it has responsibilities to fulfil and a role to play which warrant a growing and fair source of revenue. It would seem reasonable to expect the residents who benefit from the unique facilities it offers to contribute to the cost of these services, and the ability to pay for these public services resides most effectively in the residents' incomes.

The case for Nairobi imposing a municipal surcharge becomes particularly strong at this juncture because three things have happened at once. First, the abolition of GPT has created a serious loss of revenues which must be made up in one way or another. Second, the changeover from a Community income tax to a national income tax makes it both expedient and possible to base such a surcharge on the national income tax liability. Third, the recently announced changes in national income regulations will have the effect of extending considerably the number of Nairobi residents liable to the national income tax and hence to the metropolitan surcharge.

THE ADMINISTRATION OF THE PROPOSED TAX

As for any other major revenue source, the actual administrative machinery will run into problems and difficulties, some of which cannot even be foreseen at the present time. This is not the place to present a detailed blueprint for the administration of the proposed surcharge. Nevertheless, it can be asserted with a good deal of confidence that the administration and enforcement of the municipal surcharge is likely to be much simpler than that of any alternative designed to yield a comparable amount of revenue. This is so because of the circumstances mentioned at the end of the preceding section and also because the base of the tax will be clearly defined by the national tax authorities. The tax can be administered in one of two ways. One way would be to leave to the national tax authorities the task of collecting the municipal surcharge against the payment of a service fee. Say that the national tax administrators determine from the returns they receive that the aggregate national tax liability of Nairobi residents amounts to £25 million. If then the surcharge rate is 5% those taxpayers resident in Nairobi will be required to remit an additional tax to the national administration, which in turn will remit the proceeds to Nairobi less an agreed amount or percentage. In this example, Nairobi would receive, say £1.20 million, this being the £1.25 million less £50,000 collection charges. In fact, under this system the national tax form could state that Nairobi residents are required to remit an additional 5% to the Treasury.

Another way to administer the tax which although more cumbersome on the surface has much to recommend it, is to leave the administration of the tax collection and enforcement to the city. The national tax administration simply sends the names, addresses and amounts of tax liability to the city which then collects the tax.

This method, even though it involves handling the same basic data twice, has the advantage of relieving the national administration of the task of ensuring compliance. Putting the city apparatus in charge of collecting its own revenues is also advantageous because zeal and strictness of enforcement can be expected when administration and benefits reside in the same authority.

The major administrative problems likely to be encountered are those pertaining to the definition of residence, the treatment of resident income originating outside the city, the taxability of income

incurred during partial residence or temporary residence and so on. In addition, the city's powers of enforcement including legal sanctions, would have to be defined and assured.

THE EXPECTED FIELD OF THE PROPOSED TAX

At this time it is possible to present only very rough estimates of the taxable base, and those for Nairobi only. By the end of 1974, the tax liability under the Kenya income tax of those individuals and businesses residing in Nairobi should approximate £40 million.

A 5% Nairobi surcharge would produce £2 million for 1974. To fully compensate for the loss of GPT revenue, the city would have to levy a 7% surcharge on the estimated 1974 taxable base. On the other hand, the revenues from the proposed tax can be expected to increase faster over time than those retainable under the GPT. In other words, the yield of the tax will depend on the current and future base and on the rate of imposable surcharge. These will also determine whether or not the proposed tax would be expected to compensate fully or only partially for the loss of GPT, with other fiscal measures filling in the shortfall.

One consideration which may be of relevance is that the proposed tax can be expected to absorb most, if not all, of the personnel hitherto employed in the administration of the GPT. In fact, the porposed tax is likely to be more consonant with the skills and experience of the former GPT staff than almost any feasible alternative.