

Measuring the Revenue Gap and Level of Underspending

A central task in implementing the provisions of Article 243 Y of the Constitution is to determine the size and nature of the revenue gap of municipalities . Only after the size and nature of the gap is known, can a state government decide upon, and design, its policy in respect of the devolution of funds to municipalities. The size and nature of the revenue gap is a crucial input to developing a package of fiscal and other measures for bridging this gap. An accompanying task that impinges directly on the size of the gap is to measure the adequacy of spending levels of municipalities, particularly on such core services as water supply, sewerage and drainage, solid waste collection, city-wide roads, and street lighting. A revenue gap has relevance only when it is measured in relation to the level of services that a municipal government is able to provide to its citizens.

Revenue Gap

A revenue gap is generally understood in terms of the difference between the own resources of municipalities and their revenue expenditure. However, when the task is to determine the **future** financial needs of municipalities, a gap so worked out is of little value. Using such a gap for projecting the financial requirements is also inappropriate as it is usually based on overstated expenditures and understated revenues. For the purpose of determining the future financial needs, it is the difference between the expenditure **needs** and revenue-raising **capacity** of municipalities that constitutes the revenue gap. Revenue-raising capacity is defined as the amount of money a city could raise at a given tax burden on its citizens. Expenditure need is the amount a city must spend to provide public services of a given quality.

A revenue gap may arise for any of the following reasons:

└ **Asymmetry in expenditure and revenue assignment.** A municipality

Same tax base and same tax rate may yield lower or higher revenues on account of differences in the level of economic activity.

Both revenue-raising capacity and expenditure needs are influenced by a city's economic and social structure and by its fiscal institutions. Economic and social factors determine the potential taxable resources in the city and the cost of providing city services, whereas state-determined fiscal institutions determine which taxes a municipality is allowed to employ and the extent of a municipality's responsibilities for providing public services.

—John Yinger and Helen F. Ladd, The Determinants of State Assistance to Central Cities, in National Tax Journal. XLII

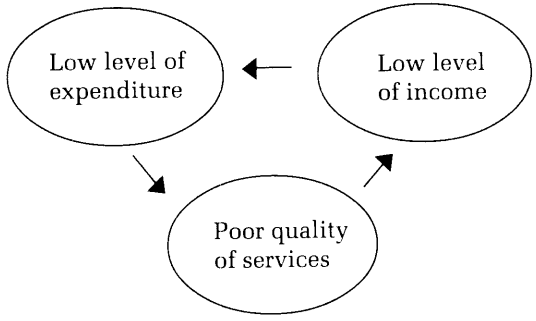
may have a comparative advantage in the provision of a class of goods and services, but may not possess a similar advantage in revenue generation. This asymmetry produces what is commonly known as the vertical fiscal gap or imbalance.

- **Fiscal handicap of municipalities.** Some municipalities have a poor economic base, with the result that even with the same tax powers and authority, they are unable to generate revenues that are sufficient to meet their expenditures. Such differences in the per capita revenue of municipalities of roughly the same size and placed in a somewhat similar socio-economic context result in a gap. This gap has implications for designing a fiscal transfer system which is able to accommodate the highly disparate requirements of municipalities.

- **Variation in the unit cost of providing services across municipalities.** Unit costs may vary on account of such factors as the choice of a municipality on the type and standard of a service as also the differences in the administrative processes and efficiency with which a service may be provided. In addition, these may also vary on account of cost disabilities caused by factors over which municipalities have little control, e.g., high cost of service delivery on account of topography, density patterns, climate, physical shape of a city, and a host of similar factors. A revenue gap resulting from the high cost of service delivery has the same effect as that of fiscal handicap among municipalities.

- **Limited autonomy with municipalities.** One of the reasons why a revenue gap may arise or persist is the absence of autonomy with municipalities to adjust their revenue base in order to meet their revenue account expenditures.

Measuring the revenue gap of municipalities requires some standardisation of expenditure and revenue components. Standardization is necessary in order to ensure comparability of the estimates of gap between municipalities. Such a standardisation is also necessary for purposes of designing a grants or transfer system. The purpose of the exercise should be to capture, on the one hand, the gap caused by the asymmetry in expenditure and revenue-raising authority, and on the other hand, the fiscal disabilities of municipalities caused by factors that are



external to them. Estimates of revenue gaps, it should be noted, are neither intended nor designed to find out whether municipalities are spending too much or too little; rather, these are aimed at measuring the fiscal condition of municipalities in relation to each other. Establishing a benchmark is another step for measuring the revenue gap of municipalities in relation to each other.

Some municipalities may show a low level or zero revenue gap. A zero or low level gap does not necessarily mean that such municipalities are efficient or that their fiscal health is satisfactory. Indeed, it may well portray a vicious circle, characterised by poor quality of service, low level of income, and low expenditure levels. Similarly, a large revenue gap may not necessarily mean inefficiencies in the functioning of municipalities.

Revenue gaps, i.e., the difference between revenue expenditure and own revenues can be used in three complementary ways: First: these can be used to determine whether disparities among municipalities are so large as to require the intervention of state governments. Second, the distribution of relative gaps can provide a benchmark against which the existing grants/transfer policy can be evaluated. Third, they can be used as the basis for designing a formula for allocating grants among local governments. Thus, cities and towns in a state could be ranked by their relative need-capacity gaps, and a system of grants designed so as to allocate grants in proportion to the relative gaps of municipalities - relative to a baseline municipality. Alternatively, all municipalities could be given per capita grants with the neediest municipality getting the most and the least needy municipality getting the least. The advantage of this approach is that all municipalities receive some transfers; the disadvantage is that the total amount is thinly spread.

Level of Municipal Underspending

Underspending on the operations and maintenance of services is a common feature among municipalities in India. On an average, municipalities in India spend Rs. 2.04 per capita per day.⁶ In several states, the per capita level of spending is less than Rs. 1.00 which, when

⁶These figures are drawn from a survey of 249 municipalities undertaken in 1999 by NIPFP and other research institutions.

The Zakaria Committee Aggregate Expenditure Norms

City size	Per capita operation and maintenance expenditure (Rs)	
	All services	
Lakh	1960/61	1997/98
>20	43.50	698.89
5-20	39.03	627.07
1-5	33.40	536.62
0.5-1	27.62	443.75
0.2-0.5	24.27	389.93
<0.2	21.07	338.52

The Zakaria Committee Expenditure Norms for Core services

City Size	Per capita operation and maintenance expenditure (Rs)	
	1960/61	1997/98
Lakh		
>20	28.50	457.89
5-20	27.15	436.20
1-5	24.90	400.05
0.5-1	21.59	346.87
0.2-0.5	19.61	315.06
<0.2	18.72	300.76

Source: Table 7(b.36) and Table VIII (117) of the Zakaria Committee report for 1960/61 norms. The price index (consumer, urban non-manual) is used for adjusting the expenditure to 1997/98

Per Capita Investment Norms as Established by the Planning Commission. 1997/98

Services	Low	High
Water Supply		
Surface system	1066.74	1523.91
Ground system	870.80	1306.21
Sewerage/sanitation		
Water borne system	1523.91	2177.02
Septic tank	870.80	979.66
Pit latrines	522.48	653.10
Solid waste disposal	108.85	174.16
Roads	870.80	1306.21
Street lighting	261.24	261.24

Note: All India Consumer Price Index, urban non-manual (Base 1984/85=100) is used as inflator

Source: Planning Commission, Government of India (1983), Task Forces on Housing and Urban Development (Vol. II), Financing of Urban Development, New Delhi.

considered in the context of the myriad responsibilities that municipalities are required to meet would by any norm or standard, seem to be a gross underspending. Annual expenditure on conservancy and sanitation which is one of the most important duties of municipalities is just about Rs. 12 per capita in Assam, Rs. 40 in Bihar, Rs. 37 in Madhya Pradesh, and Rs. 60 in Tamil Nadu. The prevalence of large deficits on services understates the revenue gap. The gap would be significantly higher, if service levels were to be anywhere close to the norms and standards.

Determining the level of spending is a basic exercise for measuring the revenue gap. Spending levels represent the level of services; higher the level of spending, higher is assumed to be the level of services.⁷ Since it is often difficult to compare the service levels, spending levels are used to determine whether or not these are adequate in relation to the prescribed norms and standards.

Norms and standards are crucial factors in determining the adequacy of municipal spending. They provide a benchmark for estimating the deficits in services. These constitute an equally important factor in estimating the financial requirements of municipalities. The purpose underlying the specification of norms and standards is to ensure for citizens a minimum environmental quality; however, fixing norms and standards is a complex exercise as these vary according to the size of city, climate, and density. Factors such as the level of economic activity, income profile, and the capacity of municipalities to provide and maintain services are equally important in fixing norms of expenditure.

Norms and standards relate to:

- ❑ **Service** standards and norms, e.g., 70 ltrs per capita/day of water supply, X number of street lights per running kilometer, and the like.
- ❑ **Expenditure** norms, e.g., Rs. 145 per capita for operating and maintaining a water borne system of waste disposal or Rs. 1060 per capita investment for a surface water system.
- ❑ **Staff** norms, e.g., x number of sanitary workers per 1000 population.

⁷It assumes that spending levels are not unduly affected by inefficiencies in operating services.

**Estimating the Level of
Underspending**

$$US = \frac{\sum_{i=1}^q (z - y_i)n_i}{n} \dots (i)$$

$$n = \sum_{i=1}^q n_i \dots (ii)$$

where US is the per capita underspending; z refers to the per capita average expenditure of municipalities in a state; y_i is the average per capita expenditure of those municipalities whose expenditure is below the average of all municipalities in a state; n_i (1, 2, - - q) refers to the population of those municipalities whose expenditure is below the state average; and n is the total population of those municipalities whose expenditure is below the state average.

The Zakaria Committee (1963) established service norms⁸ for water supply, sewerage and storm water drainage, and roads, and expenditure norms for these and several other services including street lighting, horticulture operations, medical and health services, education, and general municipal administration. Other agencies such as the Planning Commission, Committee on Plan Projects (COPP), and a few state governments like the Government of Uttar Pradesh have, from time to time, proposed desirable levels of services, norms of investment, as also expenditure norms for operating and maintaining services.

Which norms to use for assessing the level of spending and estimating the financial requirements is a contextual decision. The Zakaria Committee norms are, in the existing context, considered to be excessive and unaffordable. A recent survey showed that only ten out of the 249 municipalities met the expenditure norms established by the Zakaria Committee. The basis of norms suggested by other committees and their country-wide relevance and application has been questioned on other grounds. As an alternative, norms such as the following are possible to be used, whose main purpose is to enhance the level of spending of deficit municipalities to at least the average per capita expenditure of municipalities or the average per capita expenditure of the better-off municipalities.

- Average per capita expenditure of municipalities.
- Average per capita expenditure of the better-off municipalities.
- Average per capita expenditure of municipalities on core services.
- Average per capita expenditure of the better-off municipalities on core services.

An assessment of the level of underspending involves calculation of the distance of the current municipal expenditure from the preferred norms and standards. This methodology is identical to that employed by the Eleventh Finance Commission (EFC) in calculating the distance of a state's per capita non-agricultural GSDP from the benchmark which in

⁸The report entitled, Augmentation of Financial Resources of Urban Bodies, known as the Zakaria Committee report provides details of how service norms were worked out.

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its case, was the highest per capita GSDP.

These exercises set the stage for estimating the future financial requirement of municipalities and determining the mechanisms of financing them. The future financial requirements are sums of expenditures projected on the basis of assumed rates⁹ and the sums that may be needed to scale up the services. The levels to which scaling is to be done are indicated by spending deficits. The mechanisms of financing expenditures include the sums of own revenues of municipalities, projected to rise at assumed rates and the sums that they may need by way of transfers for closing the revenue gap.

⁹Assumed rates can be the past growth rates, or rates of inflation, or any other rate that may be considered appropriate.

...there should be an efficient and equitable balance of resources within and between governmental tiers. Without a relative correspondence between responsibilities and resources among (vertical) and across (horizontal) the various governmental layers, the system may not be sustained. In terms of the vertical dimension, each layer of government should have access to resources roughly equal to its share of the total public sector burden. In its horizontal dimension, this means that governance entities of a given tier should have comparable command of resources and the ability to provide roughly similar service levels. However, the comparative advantage of one tier in the provision of a class of public sector goods may not be matched with a similar advantage in revenue generation. It is thus possible for the revenues and expenditure to be disjoined at the local/municipal levels. A higher level of government may take a larger share of the system's overall resources, and systematically transfer funds to lower levels of government.