Municipal Finance in Bangladesh

What Is To Be Done?

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16 Nov 2018
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Introduction

• The rise of cities has been the key driver of growth in the modern era (post industrial revolution)
• Cities have been the magnet which attracted human resources, capital and technology, which the private entrepreneurs ‘fused’ to produce increasing levels of output resulting in sustained rise in the standard of living.
• Economies of scale permitted by the ‘fusion’ in innovative organizational forms, produced strong ‘agglomeration’ effects which drove economic growth.
• However private entrepreneurs maximize profits. They respond to financial incentives and are not concerned about social costs or (‘externalities’) their activities may impose to others or to natural resources. Likewise, they are not concerned about social benefits.
Cities need public goods or amenities or public services. But the private sector has no explicit financial incentive to provide them.

Public services include water supply, sanitation, solid waste management, street lighting, public parks, recreation areas, community spaces, public security, infrastructure, eg, urban roads, bridges, public housing, etc.

Historically, the government (public sector) has provided these public services. But the growth acceleration of cities especially in the emerging economies is making this increasingly difficult.

PPP modalities are thus increasingly being proposed to incentivize the private sector to play a role in the provision of city services.
The Local Government System

• The local government structure consists of several layers of sub national authorities below the central government. Even though the local government system in Bangladesh is not effectively decentralized, the local government bodies are entrusted with a large number of functions and responsibilities relating to civic and community welfare as well as local development.

• The functions of municipalities and city corporations are similar, with one important difference: the Paurashava Ordinance (1997) categorized the functions of municipalities as compulsory and optional. This categorization does not apply to city corporations.
Local Government System 2

• There are 332 municipalities and city corporations in Bangladesh. Data from 329 were used in the study. Data for 3 were not available.

• Article 60 of the Constitution (1972) empowers the municipal corporations to impose taxes, tolls, levies, fees, etc in the dispensation of public services.

• Municipalities are classified as: A class, B class and C class. The criteria for classification are unclear. Government allocations to them appear to be made on an ad hoc basis.
Local Government System

- There are three major types of grants from central to local governments in Bangladesh: (a) block grant for “annual development,” (b) centrally administered grant for project support, and (c) revenue grants for budget support of the respective local governments.

- The block grants are transferred directly from the Ministry of Local Government.

- Other grants are transferred through the development ministries who also conduct the public works at the local level. Very little of the public works are done by the municipalities.
The Research

• The following issues in municipal finance have been analyzed:
  (i) intergovernmental transfers and (ii) municipal services and residents’ willingness to pay higher rates on assurances of improved public services.

• The objective is to facilitate informed policy making to guide the municipal governments in mobilizing resources and providing public goods as well as in designing intergovernmental grant schemes. Data were obtained from the Municipalities and City Corporations. On the beneficiary side, a survey of 6200 households in all municipalities was conducted to obtain user data. Econometric methods have been used.
Analytical Framework

• Any intergovernmental system is designed to ensure equity and efficiency in the distribution of transfers. The mechanism should be transparent and ensure stability across years.

• Three factors critical in allocating grants by the national government: population, population density, and share of own revenue.
Analytical Framework 2

• The empirical studies that analyze the distribution of intergovernmental grants across sub national jurisdictions generally consider four factors, as being important, ie, local expenditure needs, some measure of revenue capacity or revenue effort, political power and/or the relative population size of the jurisdiction.

• Models to explain the variation (allocation) of intergovernmental grants to the municipalities taking all these factors into account were specified and econometrically estimated.

• In assessing the probability of household willingness to pay for the public services, Probit models were used and estimated econometrically.
Analysis: Horizontal Allocation of Resources

Following the above postulate, the model we estimated considered that grant per capita (GPC) in municipality $i$ is determined by NEEDS measured as population density (PD), REVENUE measured as own revenue per capita (RPC), and POLITICS represented by a dummy variable (1 if the Mayor was affiliated to the ruling party Awami League (DMAL) and the share of councilors who belonged to the ruling party (SALC). Moreover, the age of the municipality (AM) and class of municipalities represented as two additional dummy variables (DCA and DCB) were incorporated to control for autonomous variations.
Econometric Results: Horizontal Allocation of Grants

- Determinants of Horizontal Allocation of Grants by the Municipalities
  - Explanatory Variables Coefficients
    - Ln [Population] -0.856***
      (0.292)
    - Ln [Population density] 0.453**
      (0.224)
    - Ln [Total per capita own revenue] 0.424**
      (0.210)
    - Ln [Age of the municipality] 0.279
      0.214)
    - Dummy for Class A [Class A Municipality =1 and else=0] -0.546
      (0.541)
    - Dummy for Class B [Class B Municipality =1 and else=0] 0.293
      (0.284)
    - Political Affiliation of the Mayor [AL =1 and else=0] 0.048
      (0.248)
    - Ln [Share of AL councilors] -0.119***
      (0.035)
    - Constant 4.061*
      (2.198)
    - 2 Adjusted R 0.159
Findings: Horizontal Allocation of Resources

• The results suggest that the three critical factors viz., population, population density, and share of own revenue exert significant influence on the provision of grants by the national government, whereas, the class dummies for A and B municipalities have no insignificant influence.

• Thus, the claim of the central government that grants are based on class factors does not appear tenable when other relevant characteristics are considered.

• Besides, the political affiliation of the mayor does not affect the distribution of per capita grants. It may be noted that the share of own revenue is significant with a positive sign.

• Thus, the allocation of grants from the government rewards revenue performance of the municipalities even though the current system does not explicitly link the two.

• If government uses the international practice of using an explicit formula to match grants with revenue effort, the performance of the municipalities is likely to improve.
Analysis: Vertical Allocation of Grants

• To deepen understanding of the government allocation of grants, a vertical allocation of grants approach is also used.

• This constitutes estimating a model where transfer dependency, fiscal decentralization and revenue mobilization are the factors which influence the share of aggregate government transfers to the municipalities in total tax revenue of the government. The first two factors drive up the share of government transfers, while the last one will dampen it.
Results: Econometric Results: Vertical Allocation of Grants

- **Explanatory Variables**
  - Constant 0.002 0.052
  - (0.76) (1.54)
  - Transfer dependency effect 0.025*** 0.006
  - (13.22) (0.35)
  - Fiscal decentralization effect 2.942*** 0.851
  - (7.39) (0.30)
  - Revenue mobilization effect -0.099** -
  - (-2.45) -
  - Share of agriculture in GDP - -0.21***
  - (-0.05)
  - Openness ratio - 0.110*
  - (1.82)
  - Adjusted R2 0.92

- Source: Authors’ estimates based on BBS data.
- Note: Figures in the parentheses are t statistics. Figures with one asterisk ** indicate significance at 10 percent, those with two asterisks ** indicate significance at 5 percent, and those with three asterisks *** indicate significance at 1 percent error probability levels.
Findings: Vertical Allocation of Grants

• This systematic relationship between the intergovernmental transfers and the covariates is important. While in reality the national government transfers to local governments at different tiers and municipalities on an ad hoc basis, the outcomes are consistent with the predictions of a ‘good practice’ model specified by Bahl and Wallace (2007).

• The transfers to local bodies are positively influenced by the transfer dependency effect and the fiscal decentralization effect and negatively by the revenue mobilization effect.
Fiscal Sustainability of Municipalities

• This is critical issue in view of the rapid growth of Asian cities and the quality of life in the mega cities.

• It is not feasible for government to meet the growing demand for public services to the citizens in the municipalities. It is even more challenging to allocate resources to improve the quality of the public services.
Fiscal Sustainability 2

Households’ willingness to pay for public services.

- A structured questionnaire survey of 6200 households in 319 municipalities was conducted to be able to estimate parameters of probit models to estimate the probability of paying higher rates for property taxes, water supply, solid waste management and street lighting by the households if each of the public service delivery improved.

- The annual household income, age, and education of the holding owner were used to control for price, income, and demographic effects on the demand for security and safety of their property were all used as determinants of the probability in each case.
The results indicate that:

• The resident households (user of services) are willing to pay higher property taxes in exchange for assured security and safety of their homesteads (property) when incomes rise but not in response to increase in the tax rate itself in Class A municipalities. The magnitude of the consumer surplus is high, ie, 2%. A part of CS could be taxed via higher rate but the actual payment would depend on factors such as trust in the local body, actual improvement in the service, etc.
Fiscal Sustainability 4

- In case of water supply, solid waste management and street lighting services, the results were similar to property taxes but significant across all municipality classes. Residents of A, B and C are not likely to pay more in response to higher charges for the services but would do so in response to higher incomes. Other factors such as education of the household head, etc increased the probability of their willingness to pay but the results were not consistent across A, B and C.

- The CS generally positive for all 3 services but highest for water because the current charges are low. The policy implication is that, again it is possible to tax away part of the surplus but in reality it will depend on how effectively the mechanism is implemented. Using participatory approaches and ‘nudging’ options would be innovative ways to raise local revenue mobilization.