

FFC

Financial and Fiscal Commission Conference on IGFR

**Sharing the Cake: A Review of the
Provincial Equitable Share Formula**

Scheme of presentation

- Introduction
- System of intergovernmental finance in South Africa
- Ensuring accountability - Challenges in enhancing provincial revenues
- Design of PES formula: Equity and incentives-results of statistical analysis
- Conclusions

Introduction

- Evolution of PES formula
 - FFC recommendations and the Government's responses
- Need to move towards a more scientific Intergovernmental fiscal regime.
- The long-term objective: “needs driven or costed norms approach?”
 - Need for conceptual clarity and assessment of information requirements.

The current system

- The role of provinces in providing CMBS
- Overwhelming dependence of Provinces on transfers - No worthwhile own revenue sources.
- The design of the formula for seven components.
- Conditional transfers

Provincial fiscal autonomy and accountability: *challenges*

- Low share of provincially raised revenues in total
 - Sources are insignificant
 - Provinces have not made effort either.
- Inability to influence service delivery - Inability to change expenditure levels.
- Inability to design the unconditional grants in a scientific manner.
 - Matching requirement from the provinces can not be stipulated.
- Econometric analysis: Own revenues are not related to income levels. In urban provinces revenues are more so also in provinces with low poverty ratio.

Augmenting revenues: *Policy issues*

- Negligible contribution of own revenues
- Low revenue raising effort by provinces
 - small revenue sources currently assigned not fully exploited.
- Need to strengthen the own revenue contribution
 - Opportunities in the Provincial Tax Regulation Process Act (2002)

PES formula : Design issues

- Alternative equalization schemes:
 - Revenue equalization and expenditure Equalization
 - Can not to use revenue equalization -
- General observations on the formulae:
 - They take into account only one or two need variables. They do not consider all need factors such as factors affecting unit cost or scale economy.

PES formula design

- Education: $A_i + 2 [(P_{i6-17})] / \sum_i A_i + \sum_i 2 [(P_{i6-17})]$
 - Where A_i is enrolment, P_{i6-17} is Population in the age group 6-17.
- Inappropriateness of population variable:
 - Wrong incentives - Little incentive to increase enrolment;
 - Inequity - Biased against disadvantaged provinces;
 - Assigning twice the weight compounds inequity.
- Need to phase-in ECD into PES formula.
 - The allocation should be augmented to that extent.

PES formula design -2

- Health: $(Ph_i + 4 Pw_i) / \sum_i (Ph_i + 4 Pw_i)$
 - Ph_i - Population with medical aid support
 - Pw_i - Population without medical aid support
- Need to take into account medically needy population groups
 - Children below 5 years, population above 65 years and women in reproductive age group.

PES formula design - Other components

- Social Development:
 - Should be converted into a conditional transfer program.
- Economic Activity:
 - Need to estimate maintenance requirements directly.
- Backlog Component:
 - Need to make proper assessment of infrastructure backlog.
- Institutional Component:
 - It may be preferable to provide this as a constant fraction of total allocations.

Equity aspects of PES formula

- Regression Models: “Fixed effects” model
 - combining cross section observations of provinces over the time period 1996-97 to 2001-02.
 - (1) $Y_i = a + bX + cDt + e$
 - (2) $Y_i = bX + cDt + dDp + e$, where;
 - Y_i is the per capita (per beneficiary) expenditure,
 - X is the vector of economic variables explaining quantity/need/cost of public services,
 - Dt is the vector of dummy variables representing time (years),
 - Dp is the vector of dummy variables representing provinces.
 - cross section observations pooled to overcome the problem of degrees of freedom.

Results of the econometric analysis

- Total Revenues/ Expenditures:
 - Not related to per capita GDP. No evidence to show that the service levels are higher in richer provinces.
 - Sparsely populated provinces and provinces with higher degree of urbanization have had to spend higher amounts,
 - this has not been provided for in the formula.
 - Additional disadvantage of provinces with larger concentrations of poverty is not taken account of - the poverty variable is not significant.
- Formula helps to ensure that poorer provinces incur as much expenditure per capita as the richer ones
 - Additional disabilities due to poverty are not adequately addressed.

Results of econometric analysis

- Education and Health:
 - Results are similar.
 - Expenditure per child for example enrolled in schools not significantly related to per capita income levels of the provinces.
 - Expenditure not related to factors such as density, urbanization and poverty ratio.
 - Thus, inequity and disabilities due to these factors are not considered . The results are similar in the case of health expenditures

Concluding remarks

- Augmented own-revenue sources necessary
 - Promotes a meaningful role for provinces
 - Essential for accountability in the fiscal transfer system.
 - Conditional transfer system is effective when matching contributions are required.
- The formula has served the important purpose of evolving an equitable transfer system.
 - However, there are shortcomings:
 - it takes only some beneficiary groups and does not take into account all “need” factors.
 - it does not consider all cost disabilities and scale economies.
- The analysis of the design of the PES formula brings out some important sources of inequity.
 - Eg. In the case of education, taking children in the age group and weighting that twice is not only iniquitous, but also provides wrong set of incentives.

Concluding remarks

- In the case of health services, not taking into account the medically vulnerable population groups is a major shortcoming.
- In the case of social development, the transfers are meant to mainly provide transfer payments and this is better outside the PES formula.
- The paper looks at specific sources of inequity. In education and health, in particular, the cost disabilities that are due to urbanization, population sparsity and poverty are not taken into account.
- While it is important to keep the formula simple, it is necessary to take into account some of the cost-disability factors.