

Problem Set #3

A Policy Analysis Exercise Evaluating Intergovernmental Grants for Primary Education

A medium-sized developing country is composed of 300 local governments which have principal legal responsibility for primary education. Over the years the central government's Ministry of Education has developed an intergovernmental aid program to provide financial assistance to local governments for this important public function.

Recent reports indicate that major inequalities in expenditures for primary education persist across local governments. Concerned about the implications of these reports, the Ministry of Education is considering the consequences of trying to reform the present intergovernmental grant program to achieve either of the following objectives:

- 1) equal expenditures per student in all towns; or
- 2) a minimum expenditure per student equal to the current average.

The Ministry has hired you to evaluate alternative intergovernmental aid programs that meet each of these objectives under two possible budget constraints:

- 1) total amount of educational aid remains the same as it is now; and
- 2) the total amount of the aid may change, but each local government must be given some amount of positive assistance.

Thus, you are requested to consider four options:

- a) objective 1 under constraint 1
- b) objective 1 under constraint 2
- c) objective 2 under constraint 1
- d) objective 2 under constraint 2

Make a case for the option you would choose.

Summary information regarding the local governments in this country is provided in Table 1: their income levels, the numbers of primary school students, current primary school expenditure levels, and intergovernmental transfers for primary education. In addition, the Ministry has estimated a primary school expenditure function, presented in Table 2, with which to calculate educational expenditures per student. For ease of analysis, you may assume that the town within each income category are identical and have the mean income of that category.

Your response should contain:

- a) a spreadsheet for each of the four scenarios with all your assumptions and restrictions clearly indicated
- b) a 2-3 page (double-spaced) write-up of your analysis and policy recommendations. Consider the four options in terms of fiscal impact, equity, feasibility, etc.

Problem Set DUE: November 12, 2003

Table 1:
Income, Primary School Expenditures, and Intergovernmental Aid in Local Governments

Income Range	Average Income	No. Local Govts.	No. Students	Expenditure/ Student	Aid/ Student
less than 8,000	7,100	50	200,000	880	400
8,000-9,999	9,300	100	350,000	1,045	350
10,000-11,999	11,200	100	350,000	1,170	300
12,000 or more	14,500	50	100,000	1,420	200
National Totals	-	300	1,000,000	-	-
National Averages	10,000	-	-	1,093	327

Table 2:
Estimated Primary School Expenditure Function

Total educational expenditures consist of a family's own contribution plus government aid in the following function:

$$\text{expenditures/student} = 200.00 + 0.08 \text{ Income} + (0.30 * \text{aid per student})$$