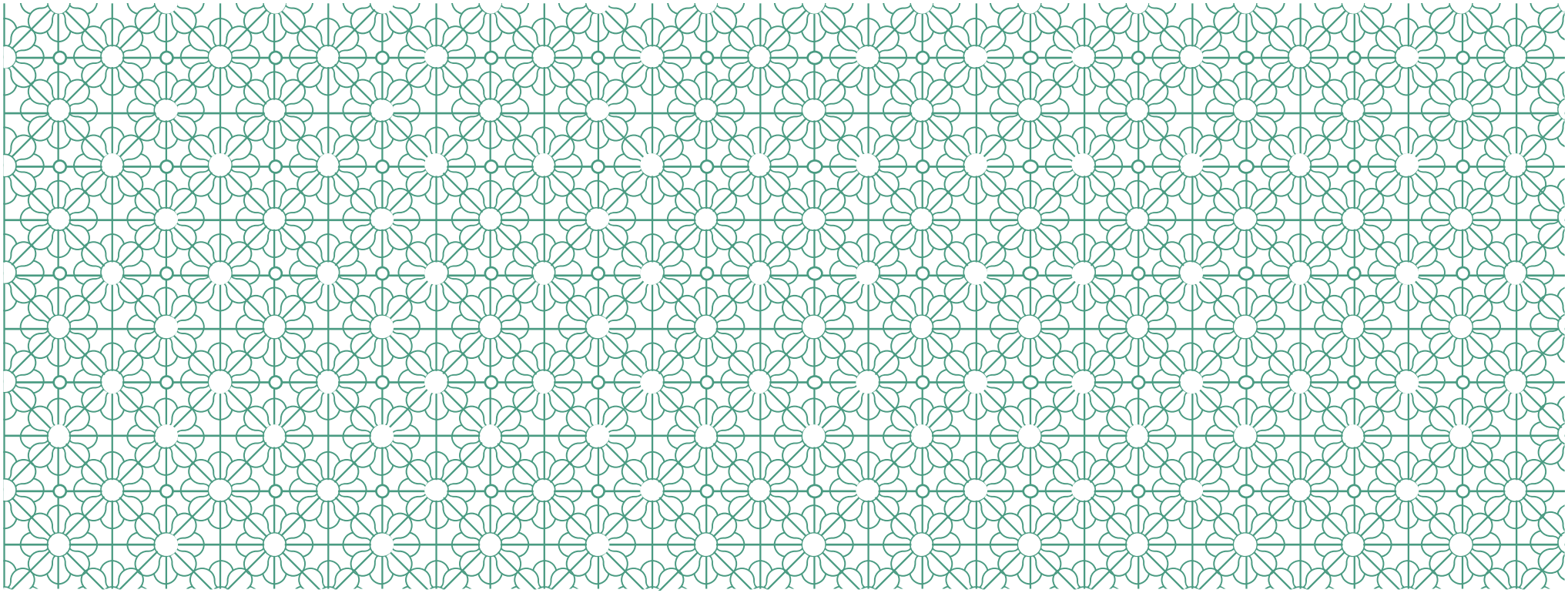


FINANCING EDUCATION: HOW TO RAISE THE MONEY TO PAY FOR SCHOOLING AND WHO SHOULD CONTROL SPENDING IT?

Part II

HOW SHOULD EDUCATION MONIES BE SPENT?

- How much funding should be allocated to the various levels of the education system?
- How to distribute each pool of money among the schools within each level?
- Should some schools receive more money than others?
- How monies within a school should be allocated across students?
- Should more money be spent on some students than on others within the same school?
- What specific educational programs and materials should be purchased for use in schools?

ALLOCATION ACROSS LEVELS

- None of these countries spent equal amounts on the three levels
- The majority of them spent the largest share of their education monies on secondary education with the others (Chile, Poland, and South Africa) targeting primary education with the bulk of their monies
- Most of these countries allocate less than a quarter of their funds to tertiary education
- What are some potential justifications for these various allocation decisions?

EDUCATIONAL EXPENDITURE BY LEVEL AS PERCENT OF TOTAL PUBLIC EXPENDITURE ON EDUCATION 2000/2001, BY SELECTED COUNTRIES (PERCENT)

Country	Primary	Secondary	Tertiary
Australia	33.8	39.7	23.7
Brazil	30.9	38.4	22.1
Chile	43.0	34.3	14.5
China	32.6	37.4	24.0
Finland	21.4	38.8	34.0
France	20.2	49.9	17.6
India	37.6	40.1	20.3
Iran	25.8	34.8	19.4
Japan	35.2	39.8	15.1
Poland	47.5	24.1	14.6
South Africa	45.9	31.3	14.5
Spain	25.8	43.7	21.8
Sweden	27.9	37.7	27.2
Tunisia	33.3	45.0	21.7
United States	32.7	34.5	26.3

Source: UNESCO Institute for Statistics

GROSS ENROLLMENT RATIOS BY LEVEL 2000/2001, BY SELECTED COUNTRIES (PERCENT)

Country	Primary	Secondary	Tertiary
Australia	102.0	160.7	63.2
Brazil	150.7	105.3	16.5
Chile	102.7	85.5	37.5
China	117.8	62.8	7.5
Finland	101.7	125.9	85.3
France	105.0	107.7	53.6
India	98.8	48.5	10.9
Iran	93.0	77.3	21.5
Japan	100.7	102.5	47.7
Poland	99.5	101.3	77.6
South Africa	113.2	88.4	15.0
Spain	107.1	114.2	56.8
Sweden	110.0	148.8	70.0
Tunisia	112.9	77.6	21.7
United States	100.3	94.1	70.7

Source: UNESCO Institute for Statistics

- An investment's rate of return is essentially a measure of its profitability and provides valuable insight into investment behavior
- Higher rates of return attract investment while low rates of return discourage investment
- Public education expenditure ought to be guided, at least in part, by the rates of return, both social and private
- Societal benefits feature prominently in the allocation decision-making process
- Maximizing the societal returns from education is frequently cited as a justification for publicly-funded education
- Given that monies are raised through public taxation, there is the expectation that public monies will be spent in ways that maximize societal benefits

PRIVATE AND SOCIAL RATES OF RETURN FOR OBTAINING A SECONDARY- OR TERTIARY-LEVEL DEGREE WHEN INDIVIDUAL IMMEDIATELY ACQUIRES THE NEXT HIGHER LEVEL OF EDUCATION, 2001 BY SELECTED COUNTRIES

Country	Gender	Private		Social	
		Secondary	Tertiary	Secondary	Tertiary
Australia	Males	40	6.6	20.8	8.3
	Females	40	6.5	17.4	7.6
Finland	Males	(1)	14.2	22.9	10.5
	Females	(1)	15.2	16.1	8.7
Spain	Males	11.5	9.2	10.4	8.1
	Females	20.6	8.5	12.6	6.7
Sweden	Males	(1)	8.8	40.4	8.2
	Females	(1)	7.3	33.3	6.5
United States	Males	92.7	11.0	22.3	11.1
	Females	98.1	7.9	21.9	7.9

(1) Negligible or zero costs cause excessively high estimates. Source: OECD

EDUCATION EXPENDITURE PER STUDENT BY LEVEL AS PERCENT OF GDP PER CAPITA 2000/2001, BY SELECTED COUNTRIES (PERCENT)

Country	Primary	Secondary	Tertiary
Australia	16.0	13.9	25.0
Brazil	10.8	8.8	48.8
Chile	14.3	14.7	19.2
China	6.6	12.6	89.1
Finland	16.8	24.2	37.4
France	18.0	29.0	29.6
India	13.7	23.0	85.8
Iran	9.4	10.2	36.0
Japan	21.4	21.0	17.2
Poland	28.8	11.8	16.1
South Africa	14.3	18.2	56.8
Spain	18.6	24.8	21.5
Sweden	24.3	27.8	52.0
Tunisia	15.8	25.7	68.0
United States	18.0	22.5	23.0

Source: UNESCO Institute for Statistics

- The pattern of spending more per student at the level with the highest social returns does not hold for most of these countries
- Per student spending at the tertiary level is almost twice that at the secondary level in Australia and Sweden
- Yet the social returns at the tertiary level are less than half those at the secondary level in Australia and less than a fourth in Sweden

- Educational expenditures are often used by governments to combat such inequality
- E.g. many governments operate loan and grant programs to help students from disadvantaged backgrounds pay for tertiary education
  - By reducing the costs education, it is hoped that these programs will increase enrollment levels among these groups, enabling these individuals to realize the private returns
  - A desire to reduce inequality may be contributing to the higher per student expenditures at the tertiary level in countries such as Sweden

- Educational expenditures can also, either intentionally or unintentionally contribute to societal inequalities
- E.g. if only individuals from privileged backgrounds attend university, all the private benefits from spending at this level will be accumulated by them
- Educational expenditures are maintaining inequality rather than reducing it – Brazil, China, and South Africa

- Inequality in the distribution of social returns can also be exacerbated by how education monies are distributed
  - Assume that educational attainment varies across segments of a society and that these segments of society are segregated in their residential and employment patterns
  - The social returns will accrue to the same individuals who received the private returns
  - Communities with high educational attainment will have higher incomes, fewer health problems, and lower crime than the communities with lower educational attainment

ALLOCATION ACROSS SCHOOLS

- Expanding access -helps increase the proportion of society to whom the returns to education accrue
- Improving quality - can increase the returns themselves
- How do these goals influence the allocation decision-making process?

EXPANDING ACCESS

1. The desire to meet the existing demand
   - Schools serving communities with low demand could receive additional monies for student outreach activities
2. The preference to increase the current demand
   - New schools could be built in these underserved communities

Allocating monies for this purpose is related to the desire of many governments to reduce societal inequalities

IMPROVING QUALITY

- Due to differences across schools in the inputs used in the education production process, the quality of the educational output produced varies from school to school
- Schools in certain neighborhoods have access to higher quality inputs simply as a result of the characteristics of the community it serves
  - Schools in communities serving students with higher socioeconomic backgrounds and those located in communities with higher employment rates, low crime rates and high levels of community support for education – are better equipped to produce a high quality education

Given the heterogeneity across communities and the fact these inputs are outside the decision-making authority of educational leaders, many argue government educational expenditures should be targeted at school serving underprivileged populations

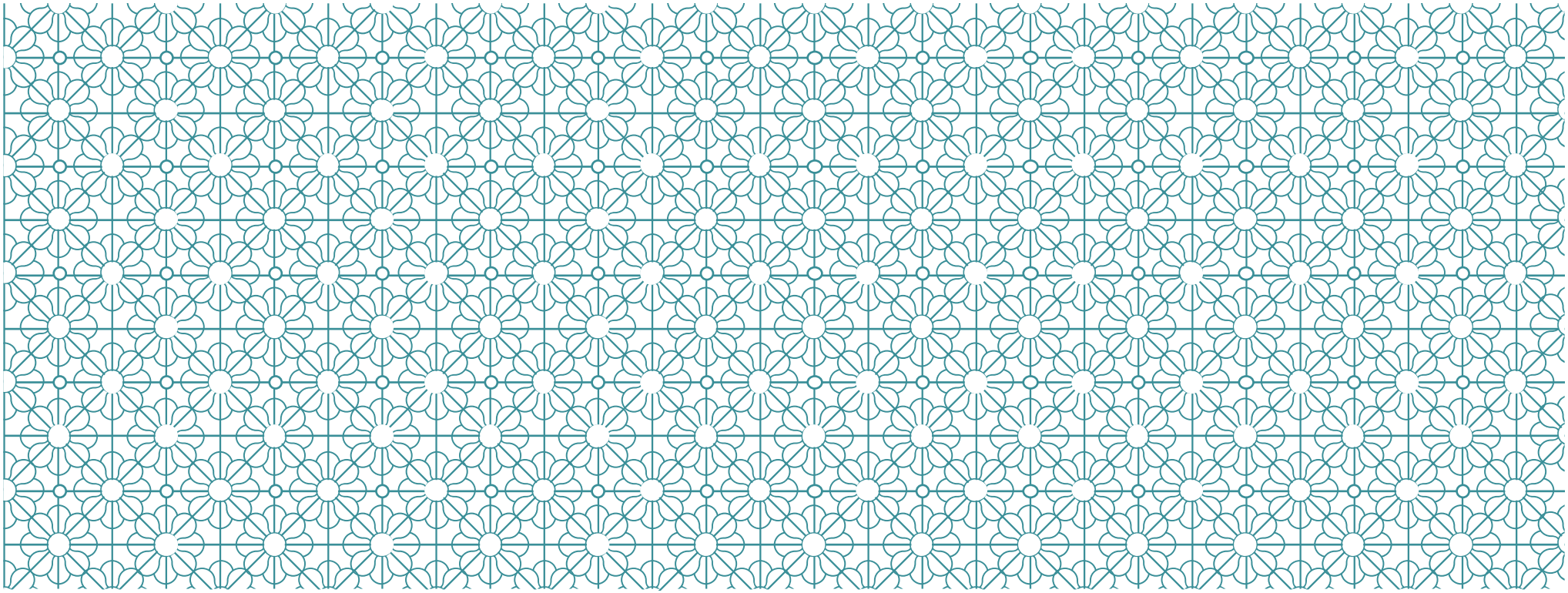
- If these schools get more money, how should it be spent? -Teacher salary?
- All schools do not face the same per-student costs

ALLOCATION ACROSS STUDENTS

- All students within a school do not receive the exact same education and thus, the school does not spend the same amount on each student
- E.g. Schools hire educational aides to work with those students with special educational needs
- A school must pay more to equip laboratories for the teaching of science than classrooms for the teaching of history
- Acknowledging inherent differences in cost, how should schools allocate their educational monies among their students? What criteria should schools use?

ALLOCATION ACROSS PROGRAMS

- When deciding which education programs to implement in schools, decision-makers are faced with a daunting array of choices
- How do they choose which programs to use? – the usefulness of cost benefit and cost-effectiveness analytic techniques in these decisions



DECENTRALIZED OR CENTRALIZED CONTROL OF SPENDING?

TYPES OF EDUCATIONAL SYSTEMS CHARACTERIZED BY CONCENTRATION OF EDUCATIONAL FINANCE AND MANAGEMENT

	Educational Management	
Educational Finance	Local (district school board, school parent council, school director)	Central (Ministry of Education)
Local (property taxes, local sales taxes, tuition)	*Decentralized*	*Regulated*
Centralized (income taxes, wealth taxes, national sales taxes, excise taxes	*Devolved*	*Centralized*

THE BENEFITS OF DECENTRALIZATION

- The closer educational spending and management of school decision-making is to local communities, the more those decisions would reflect parents' and children's educational needs
- Schools would operate more efficiently, and parents would feel greater ownership and loyalty to the school or the local school system
- Parents would therefore be more likely to invest time, effort, and money in their children's achievement, and children would do better in school

- Each school gets to manage its spending and how it delivers education
- The public sector can finance individual public schools with a certain amount per student enrolled, or the government can go farther and provide the same amount per pupil whether the school is public or private
- A voucher plan
  - each school is given a fixed amount of public subsidy per pupil enrolled
  - If a school is well run and produces a high quality of education, it will attract more pupils and get more money
  - If the school is not very effective, it will lose pupils and get less money

The main promised benefits of educational decentralization are

- Greater local control over schools
- Greater parent participation
- Greater teacher accountability
- More competition among schools for pupils

POSSIBLE NEGATIVE EFFECTS OF DECENTRALIZATION

The promised benefits of decentralization assume that all regions, municipalities, school districts, and schools have a reasonably high capacity to allocate resources efficiently

- This assumption is likely not to be valid in practice
- Administrative capacity varies among local communities, particularly in less developed countries
- Neither is there any guarantee that local communities are so democratic and participative that decentralizing education produces more equal and equitable treatment of all groups in the community

- One possible negative effect of decentralizing educational management (devolution) or decentralizing both management and financing (decentralization) is that education becomes much more unequal without necessarily becoming more effective even for the better off students
- Parents and teachers may make educational decisions that are not in the best interest of the children affected by these decisions

EXAMPLES

The relative impact of decentralization and privatization on overall student performance in countries such as Chile, Mexico, and Argentina

- The evidence suggests that decentralization has had relatively little impact on overall educational "effort" in terms of investment in education or on student performance

ARE CENTRALIZED EDUCATIONAL SYSTEMS REALLY MORE INEFFICIENT?

- Centralized educational systems are those that are financed nationally or regionally and heavily regulated by a centralized administration
- In communist country, such as Cuba – teacher supervision is the responsibility of the school director, but the director, in turn, is responsible to the school council, especially the Communist Party representative who sits on the council

Efficient centralized systems

- have the advantage of providing more equal conditions of education for different groups and even compensatory education for the poor
- are much more likely to be able to control the quality of education across various social class groups, both by providing equal (or compensatory) funding per student and by developing programs targeted at low-income or otherwise disadvantaged groups
- Can assure that teachers of equal quality serve in schools with different populations