

---

## [Financing education and addressing corruption](#)

BRIEF 5

### [Educational finance](#)

#### **Schools need sufficient financing and mechanisms to ensure equity, efficiency, accountability and transparency.**

Increased quality and quantity of schooling for children is associated with higher income, better health and less reliance on public assistance in the long term<sup>(15)</sup>—but sufficient resources need to be invested in order to achieve these outcomes. Education systems need to mobilise and dedicate sufficient funds for schooling, and implement mechanisms that ensure equity, efficiency, accountability and transparency, and maximise positive effects on student learning.

#### **Issues and Discussion**

**Resources and Expenditure on Education:** Globally, public expenditure on education accounted for 4.7% of the world's GDP in 2008, of which expenditure on primary education was 1.5%. The Sub-Saharan African region devoted 5.0% of total GDP to public education expenditure, which is the second highest percentage after North America and Europe (5.3%).<sup>(18)</sup> However, many sources indicate that even more needs to be spent on education in developing countries. International recommendations are that countries spent at least 20% of their national budget, or 4% of GNP, on the education sector. Currently, one third of countries do not meet this recommended minimum. Basic education is underfunded by US\$26 billion per year worldwide, and in low-income countries, an additional US\$6.10 per month per child is needed to provide quality primary education.[cite]

**Mobilising Resources for Education:** The public resources for financing a school system mainly come from national funding and international aid in the case of low-income countries—especially in Sub-Saharan Africa and Central Asia.<sup>(17)</sup> Budget constraints are acute in low-income countries and put pressure on governments and schools to mobilise resources and establish budget priorities, including trade-offs in allocation. In some cases, countries can meet their education needs by reprioritising funding among different sectors—such as reducing military spending in order to free up resources for education. In other cases, more innovative approaches may be needed to mobilise additional resources. The [Leading Group on Innovative Financing for Education](#) has proposed nine mechanisms to raise funds for education, encouraging countries to develop multiple options that fit their regional, bilateral or national contexts. These mechanisms include 1) taxes on international financial transactions; 2) local currency education bonds; 3) education venture funds; 4) diaspora bonds; 5) voluntary contributions from migrants; 6) debt-for-education swaps; 7) sports levies; 8) public-private partnerships; and 9) micro donations from individual bank transactions.<sup>(6)</sup>

---

School Funding Formulae: Every system distributes resources through different school funding formulae, which may also change over time. In general, however, effective funding formulae link resource deployment with learning outcomes. Designing a funding formula that is appropriate for a particular school system requires careful consideration of policy aims and objectives in order to determine the appropriate balance of functions such as aligning with directives, promoting equity, and regulating the market. In decentralised education systems, funding formula increasingly take the form of contracts, placing the school in the role of provider and the funding agency in the role of purchaser on its own behalf or on behalf of parents, students and citizens as ultimate customers.(8)

Main components: National funding formulae for public schools often include four main components:(8)

(1) A basic student allocation consisting of a base amount per student and a grade-level supplement according to year group or age level;

(2) An additional amount for curriculum enhancement including an incentive to encourage selected schools and students to focus on particular types of curricula and specific subjects;

(3) Additional funding for students with special educational needs; and

(4) An adjustment for particular school sites depending on factors such as special buildings, school size, and regional cost variations.

Criteria: The six key criteria which can be useful for either designing or evaluating a funding formula include *effectiveness* (adequate money for expected outcome), *equity* (political judgement on equity by addressing cost differentials), *efficiency* (effective budgeting, disbursement, and successful management of the outputs achieved and inputs used), *integrity* (indicators in a formula cannot be manipulated by the school, e.g. social background of students/parents should not be categorised by the school), *administrative costs* (formulae should be easy to construct and maintain over time including the collecting of necessary data), and *accountability and transparency* (easy to understand and high-levels of accountability to all concerned parties and stakeholders).(8) In order to meet these criteria, the design of the funding formulae must [prevent corruption](#) at all levels. A rule of thumb is to keep the formulae as simple as possible. Furthermore, careful preparation of the manual of financial procedures (procurement) and regulations (audits), regular staff training and effective management practices will reduce fraud.(7)(10)

Cost-sharing Models: Cost sharing is an arrangement whereby the government, on the one hand, and households and community organisations, on the other hand, share the responsibility of financing education.(19) Although in this funding policy the government is still responsible for some key inputs, such as the remuneration of most teachers and education administrators and funding for some school facilities, many other elements are dependent on parental and community contributions. The implementation of cost-sharing models has caused adverse effects on access to education, retention rates, and quality in many low and middle income countries.(19)

Voucher Systems: Voucher systems allow parents to take their child's portion of the public per-pupil spending to a school of their choice, thereby promoting competition among schools and making the education system function more like a market.(5)(14) In some countries, school vouchers challenge the monopoly status of the public schools, causing improvements in quality.(5) However, school vouchers may also exert many adverse effects, including exacerbating segregation by race, socio-economic status, and ability level.(12) Voucher systems can have more positive impacts if they are

---

applied only to public schools, or if private schools must select candidates randomly and accept the voucher as full payment of tuition fees.(1)(11)

Funding and Student Learning Outcomes: Evidence from research shows mixed results about the causal relationship between school funding and academic performance.(3)(9) The overall effects of increased funding appear to be the largest for schools with initially poor performance.(2)(13) On the whole, how the money is spent is more important than the overall size of the increase.

## Inclusiveness and Equity

Vertical Equity in Resource Allocation: School funding formulae must ensure both horizontal equity (for pupils with the same needs) and vertical equity (for pupils with different needs).(8) For example, there are additional resource needs for teaching pupils with learning disabilities, those who come from disadvantaged socio-economic backgrounds, or those whose first language is different from the language of instruction at school. Additional funds for these populations, permitting additional teaching time, specialised learning material, and smaller classes, can advance equity and quality of education.(4)

## Policy Examples

- Sub-Saharan Africa [[PDF](#)]
- Japan [[PDF](#)]
- Finland [ [PDF](#)]
- UK [[PDF](#)]

## References and sources

1. Chakrabarti, R. 2013. [Do Vouchers Lead to Sorting under Random Private School Selection? Evidence from the Milwaukee Voucher Program](#), *Economics of Education Review*, (34):191-218
2. Chaudhary, L. 2009. [Education Inputs, Student Performance and School Finance Reform in Michigan](#), *Economics of Education Review*, 28(1): 90-98
3. Chung, H. 2015. [Education Finance Reform, Education Spending, and Student Performance](#), *Education and Urban Society*, 2015, 47(4): 412-432
4. Fazekas, M. 2012. [School Funding Formulas: Review of Main Characteristics and Impacts](#), OECD Education Working Papers, No. 74, OECD Publishing.
5. Filler, R and Munich, D. 2013. [Responses of Private and Public Schools to Voucher Funding](#), *Economics of Education Review*, (34):269–285
6. Leading Group on Innovative Financing for Development. 2010. [2+3=8 Innovating In Financing Education](#). Report of the Writing Committee to the Task Force on Innovative Financing for Education.
7. Levacic, R. 2008. Financing Schools: Evolving Patterns of Autonomy and Control, *Educational Management Administration & Leadership*, 36(2): 221-234

- 
8. Levacic, R. and Ross, K. 1999. Principles for Designing Needs-Based School Funding Formulae. In Ross, K., & Levacic, R. (Eds.) *Needs-based Resource Allocation in Education*. Paris, France: UNESCO International Institute for Educational Planning.
  9. Levacic, R., Jenkins, A., Vignoles, A., Steele, F. and Allen, E. 2005. [Estimating the Relationship Between School Resources and Pupil Attainment at Key Stage 3](#). Research Report. London: Institute of Education, ISBN 1 84478 571 8
  10. Levacic, R. and Downes, D. 2006. Formula Funding of Schools, Decentralisation and Corruption: A Comparative Analysis. Paper presented at the International Seminar on Strategies for Incorruptness within the Educational System organized by the National Centre for Educational Development Research, Ministry of Education, the People's Republic of China. Xi'an Jiaotong University, China, May 15-17th 2006
  11. Luengo-Prado, M.J. and Volij, O. 2003. Public Education, Communities and Vouchers, [The Quarterly Review of Economics and Finance](#), 43(1):51–73
  12. Mizala, A. and Torche, F. 2012. *Bringing the schools back in: the stratification of educational achievement in the Chilean voucher system*, International Journal of Educational Development, 32(1): 132–144
  13. Papke, L. 2005. [The Effects of Spending on Test Pass Rates: Evidence from Michigan](#), *Journal of Public Economics*, 89 (5–6): 821–839
  14. Piolatto, A. 2010. Education and Selective Vouchers, *Economics of Education Review*, 29(6):993-1004
  15. Terman, L. and Behrman, R. E. 1997. [Financing schools: Analysis and Recommendations](#), *The Future of children*, 7(3):4-23
  16. UNESCO. 2011. [Debt Swaps and Debt Conversion Development Bonds for Education](#). Final Report for UNESCO Advisory Panel of Experts on Debt Swaps and Innovative Approaches to Education Financing.
  17. UNESCO, World Bank and UNICEF. 2014. Education Sector Analysis: Methodological Guidelines. [Volume 1: Sector-wide Analysis with Emphasis on Primary and Secondary Education](#).
  18. UIS. 2011. Financing Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity and Quality. Montreal: UNESCO Institute for Statistics.
  19. Wambugu, J. and Mokoena, S. 2013. [Education financing in Kenya: Parents' perceptions about the implementation of the cost-sharing policy in secondary school education](#), *Mediterranean Journal of Social Sciences*, 4(13):441-446
  20. World Bank (2013). "[World Development Indicators 2013](#)." Washington, D.C.: World Bank.

[print](#)