

## **POLICY NOTE 2**

# **Making Egyptian education spending more effective**

Egypt Public Expenditure Review  
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Social and Economic Development Group  
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## **About this Policy Note**

This Policy Note is part of the analytical work supporting the Public Expenditure Review (PER) in Egypt, a collaborative effort between the Government of Egypt and the World Bank. The PER is led by Richard Allen, Lead Public Sector Specialist, MNSED.

This Note is the second in a series being prepared during 2005 and 2006. Its purpose is to assess the efficiency of education spending in Egypt, in terms of financial resources, budgeting processes, and expenditures. Given the key characteristics and outcomes of the education system, the Note discusses issues that likely affect the cost and quality of education in Egypt, with a focus on pre-university education. In addition, the full PER will produce a general note on fiscal decentralization, and education will figure prominently in that note.

The Note was prepared by Alec Ian Gershberg, Senior Education Economist, Human Development Network Education Department, and Nagwa Riad, Consultant, Social and Economic Development Group (MNSED), with assistance from Mona Zikri and Mahmoud Gamal El Din, MNSHD, and Dr. Mohamed Ragheb, external consultant. Richard Allen and Mae Chu Chang, Lead General Educator, MNSHD, supervised the project and Heba Nassef provided invaluable research assistance. The team appreciates the financial support of the European Commission, which augmented the research capacity of the effort. Helpful comments at various stages of this report were provided by Farrukh Iqbal, Lead Economist, MNSED. Peer reviewers provided excellent comments: Jeffrey Hammer, David Carroll, and Donald Winkler (who also provided significant input in key areas).

For a list of other Policy Notes in this series, see [http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EGYPTEXTN/0,,contentMDK: 20601542~pagePK:141137~piPK:141127~theSitePK:256307,00.html](http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EGYPTEXTN/0,,contentMDK:20601542~pagePK:141137~piPK:141127~theSitePK:256307,00.html).

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# Abbreviations and acronyms

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<b>CAI</b>	Central Agency for Inspection
<b>CAOA</b>	Central Agency for Organization and Administration
<b>CAPMAS</b>	Central Agency for Public Mobilization and Statistics
<b>CFOA</b>	Community Finance Officers Association
<b>GAEB</b>	General Authority for Educational Buildings
<b>GDP</b>	gross domestic product
<b>GPO</b>	Government Printing Office
<b>MENA</b>	Middle East and North Africa
<b>MoE</b>	Ministry of Education
<b>MoF</b>	Ministry of Finance
<b>MoP</b>	Ministry of Planning
<b>NCEEE</b>	National Center for Examinations and Education Evaluation
<b>NIB</b>	National Investment Bank
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PER</b>	Public Expenditure Review
<b>PETS</b>	Public expenditure tracking survey
<b>PPP</b>	purchasing power parity
<b>UNDP</b>	United Nations Development Programme
<b>USAID</b>	U.S. Agency for International Development
<b>WEI</b>	World Education Indicators



# Summary

*The education system in the Arab Republic of Egypt is the largest in the Middle East and North Africa (MENA) region.* By 2004 major obstacles in access to pre-university education had largely been addressed. Gross enrollment in basic education for both girls and boys is now nearly universal, and secondary and tertiary enrollments are rising. The overall incentive environment for school attendance and achievement is strongly influenced by two conditions: poor labor market outcomes for youth, and high stakes testing at the end of secondary schooling. Underpinning these achievements are high and rising public and private expenditures on education.

*Egypt's public spending on education is high by international standards.* Relative to other countries with comparable incomes, its spending on education as a proportion of total public spending (19 percent) is topped only by Jordan's. As a share of GDP, Egypt's spending is comparable to the Organization for Economic Cooperation and Development (OECD) average of 5 percent and higher than the 4 percent average of lower middle income and MENA countries. Problems in education thus stem more from ineffective and inefficient spending than from a lack of resources.

*Because the school-age population is expected to rise until 2011, the challenges for the Egyptian government will be several:*

- To expand access to secondary education while preserving and fine-tuning access to basic education.
- To improve the efficiency of expenditures and budget processes and seek nontraditional sources of funds in some areas.
- To improve the quality and equity of the overall education system, particularly primary education.
- To promote accountability in all institutional arrangements, enhance the partici-

pation of stakeholders (including parents) in budgetary decision-making, and explore strategies for decentralization.

## Holding down costs

*The cost of providing basic and secondary education in Egypt has been rising, with unit costs rising faster for primary and preparatory education.* Between 1995/96 and 2002/03 per student expenditure increased by an average of 4 percent per year in basic education, reaching LE 922. Per student expenditure in secondary general and secondary vocational education rose modestly, at less than 1 percent and 2.4 percent a year on average, respectively. These figures suggest faster increases in costs in basic education than in secondary education.

## Making textbook spending less wasteful and more efficient

*Textbooks have generally been free, and there are no repercussions for not returning them.* They account for 63 percent of the central Ministry of Education's (MoE) nonwage and salary current expenditures, 44 percent of the total nonwage and salary current expenditures

including governorates, and 6 percent of overall pre-university expenditures in 2003/04. The requested allocation for textbooks in the 2004/05 budget is about LE 1.6 billion, to print 481 million copies. Of this amount, LE 450 million are arrears to printshops for previous years' textbooks. The MoE and Ministry of Finance (MoF) plan to increase the recovery of used textbooks is a necessary first step but a short-term one. Overall, the system of textbook production needs a major overhaul so that it produces (and re-uses) textbooks efficiently, while also integrating the process into (1) the overall budgeting process including national, governorate, and local management and (2) the ongoing reform of curriculum, teacher training, and instruction. Cost recovery, also to be encouraged, need not hurt equity.

### **Encouraging entrepreneurship and efficiency in universities**

*The university system in Egypt is largely publicly financed.* The decline in per student spending has led to a virtual collapse of the quality of university education in many areas. Without significant increases in cost recovery, the current system of finance is unsustainable, especially given the likely increases in future enrollments. The government must seriously explore legal and political means to re-interpret precisely how the constitutional provision of “free education” relates to university education.

*There is untapped potential for revenue generation and cost savings in universities.* For example, free university education means that students face no institutional incentives to finish in four years. Limiting the years of free university education, though politically contentious, would free valuable resources to allocate to basic education or to improve universities. Universities also have capacity for entrepreneurial revenue enhancement if given the right incentives. But there are some important caveats. For instance, many professors devote minimal time to their teaching and do a lot of outside work, essentially generating income for themselves rather than for the university. This will need to

change significantly but in a manner that does not hamper entrepreneurship.

*To address these issues, universities are now promoting two main strategies.* The first is to introduce means of cost-sharing with students, especially in postgraduate studies and in some undergraduate disciplines. The second is to establish research centers that provide services on a commercial basis to the public and business communities.

### **Improving budgetary processes**

*Budgeting for education takes place within the overall structure and processes for public sector budgeting.* The budget's presentation and publication (for education as well as for other sectors) is rigid, confusing, and not transparent, with excessive variability between planned and actual budgets. The MoE's budget has in practice several largely self-contained components—relating to the existing four chapters of the budget, the central ministries, the service authorities, and the governorates—each brought together only at the final stage, when the budget proposals and data are consolidated by the MoF.

*Neither governorates nor MoE officials at any level have much flexibility for transferring resources between budget chapters once allocations are made.* Central MoE officials have some limited flexibility to move between and within chapters, while governorate officials have only limited authority to move funds within chapters—and even then many items are “untouchable.” Senior MoE staff believe that real budget authority is isolated in a few senior officials in the MoF and that most key decisions are made either in the MoF or in parliamentary committees, with the prime minister and the MoF in the lead. Inevitably, MoF staff end up making educational rather than simply financial or budgetary decisions.

*In the short run, consideration might be given to extending the capacity of governorates to transfer funds across line items in budget chapters, and even across chapters.* Although this capacity would relate to reallocation of resources



already budgeted for a given year, it would also have an impact on the overall distribution of funding over time, given the strong relationships between one year's budget execution and the next year's budget proposals. It would also allow for a closer match between the uses of funds and the actual needs as perceived by policymakers closer to the schools. For instance, many schools have computers but lack the funds to pay monthly Internet connection fees, so those computers are underutilized. Similarly, subnational budget directors should have some capacity to allocate resources to such priorities—albeit with the proper accounting, procurement, and other fiduciary controls. These steps would improve the efficiency of spending.

### **Beginning to move on decentralization**

Recently, decentralization has surfaced as a key and consistent theme from government

officials and the UNDP. The Ministry of Planning (MoP) devoted the latest Egypt Human Development Report (UNDP 2004) to the theme, "Choosing Decentralization for Good Governance." Educational decentralization generally takes one (or both) of two forms: to subnational government or to schools (through school autonomy and school-based management). Both are part of the policy dialogue in Egypt, and both would involve significant changes in budgeting, administration, accountability, and (in some cases) policy development. Part of the future work plan of the Public Expenditure Review (PER) will explore international experience in educational decentralization and potential applications for Egypt. *It appears that decentralization—if well designed, sequenced, and executed—holds promise for improved efficiency and educational outcomes in Egypt.*

# Key findings

Egypt spends a comparatively high proportion of its resources on education; thus, inefficient (and to some extent inequitable) expenditure is more problematic than a lack of resources.

- Overstaffing is inefficient and has a negative impact on educational quality.
- Growth in staff numbers at rates above the growth in student enrolments is obviously unsustainable.
- Teacher hiring and deployment is inefficient and impairs school quality.
- There is untapped revenue generation potential in universities.
- Households (especially the poor) are over-tapped for tutoring and other fees.
- All revenues from fees should remain at the school site.
- Nonwage recurrent expenditures are low.
- Textbook spending is wasteful and inefficient.
- As much as possible must be learned from the recent TIMSS results to help guide future efforts at improving efficiency.

Budget processes are rigid, confusing, and not transparent, with excessive variability between the planned and actual budgets. They are also highly centralized, as is school governance.

- Neither governorates nor MoE officials at any level have sufficient impact on the ultimate budget allocations to chapters or significant flexibility for transferring resources between budget chapters.
- Capital investment and recurrent (including maintenance) expenditures are not as well coordinated as they could be, due largely to the split authority between the MoF and MoP.
- Large and persistent deviations in actual expenditures from budget allocations are inefficient and inhibit effective planning and administration.
- Authority and information flow vertically through many different departments and agencies—which are like silos—but not horizontally between the silos.
- Several entities collect information on student, teacher, and school characteristics, conditions, and performance.
- Improved data collection should allow connections between inputs and outputs to be identified.
- Budget data cannot be analyzed at the level of the school, which is the unit of production of services.
- The MoE and governorates need flexibility to reallocate funds within the same budget chapter (and in the medium term, among the different chapters), with a particular emphasis on improving maintenance and a few other targeted school investments (such as computer purchase and maintenance, teacher training, and Internet access).
- Decentralization, barely nascent, is seriously on the table. It should be encouraged.

# 1

## Egypt's education system

*Egypt's education system is the largest in the Middle East and North Africa (MENA) region.* By 2004 major obstacles in access to pre-university education had largely been addressed. Gross enrollment in basic education for both girls and boys is now nearly universal, and secondary and tertiary enrollments are rising. Underpinning these achievements are high and rising public and private expenditures on education. Total public spending on education—high by international standards at 5.9 percent of gross domestic product (GDP) and 19 percent of total public spending in 2002/03—has generally grown slightly faster than GDP in real terms. When combined with the relatively high private costs of public education (say, for private tutoring) spending may be as much as 40 percent higher.

*Because the school-age population is expected to rise until 2011, the challenges for the Egyptian government will be several:*

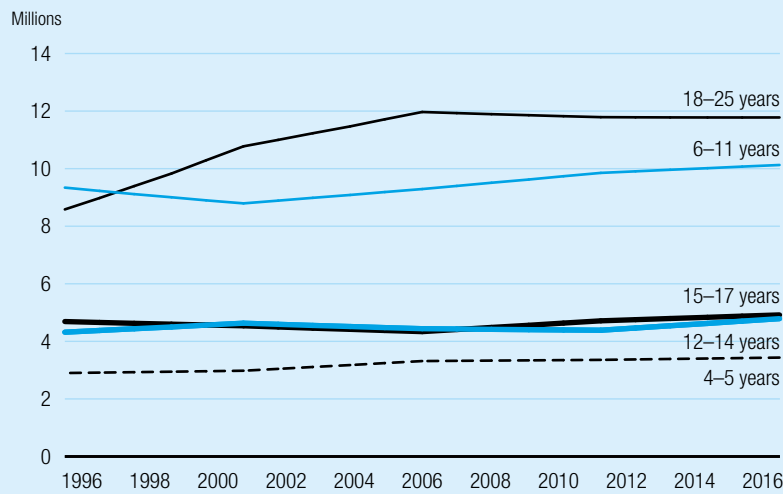
- To expand access to secondary education while preserving and fine-tuning access to basic education.
- To improve the efficiency of expenditures and budget processes and seek nontraditional sources of funds in some areas.
- To improve the quality and equity of the overall education system, particularly primary education.
- To promote accountability in all institutional arrangements, enhance the participation of stakeholders (including parents) in budgetary decision-making, and explore strategies for decentralization.

In 2003/04 the system enrolled more than 18 million students: about 8 million in primary education (6–10 years old),<sup>1</sup> 4.5 million in preparatory education (11–13 years old), 3.7 million in secondary education (general and vocational), and 1.6 million in tertiary education, in addition to almost 440,000 students in preschool (kindergarten, enrolling students 4–5 years old).<sup>2</sup> There are close to 1.5 million teachers and administrators.

*The majority of students from primary to tertiary levels (about 85 percent) are enrolled in public institutions.* With the exception of preschool education, the private sector and Al Azhar religious schools enroll a modest but significant proportion of students, and this share declines progressively at higher levels. Public provision of preschool education has expanded rapidly, with its share in enrollment rising from 30 percent in 1996 to 62 percent in 2004.

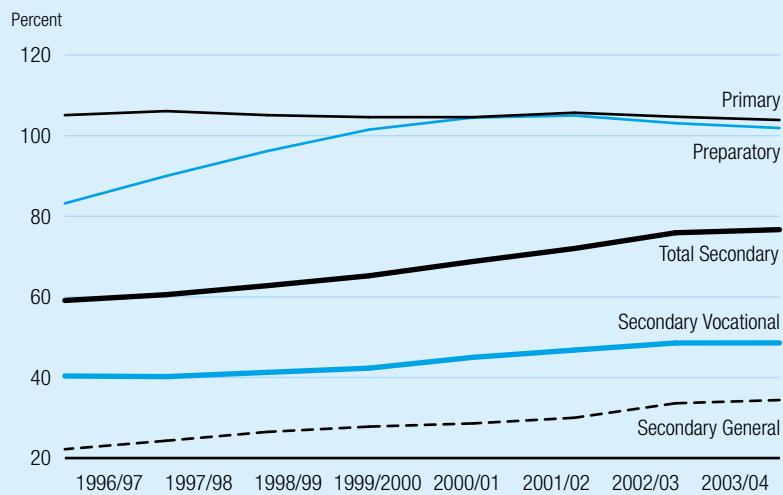
After stabilizing slightly in 2000, the pre-university population (4–17 years old) is expected to grow at an average of less than 1 percent a year from 2007 until 2016, while the population in the university age bracket (18–25 years old) will continue to grow at an average of more than 2 percent a year until 2006, before stabilizing at about 11.8 million through at least 2016 (figure 1). ***Student population growth is significant but not overwhelming.*** Gross enrollment rates and net enrollment rates for primary, preparatory, and secondary education increased between 1995/96 and 2003/04 (figure 2). Gender gaps, measured by the gender parity index, have been narrowed considerably, especially in basic education (figure 3).

**Figure 1** Trends in education-age population in Egypt



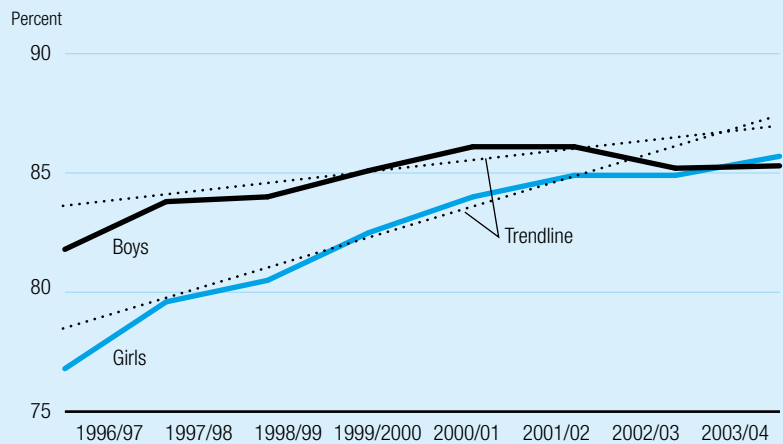
Source: MoE based on 1999/2000 Census.

**Figure 2** Gross enrollment rates, 1995/96–2003/04



Source: MoE (2004) and author's calculations.

**Figure 3** Net enrollment rates by gender in basic education



Source: MoE (2004) and author's calculations.

The overall incentive environment for school attendance and achievement is strongly influenced by two conditions: poor labor market outcomes for youth, and high stakes testing at the end of secondary schooling. *By some measures Egypt's youth unemployment is the most problematic in the region—at least in the difficulty of entering the job market* (figure 4). Although low returns to education surely reduce the incentives for children to stay in school through upper secondary and university, the promise of near-guaranteed public sector employment is strong, too. High stakes tests lead parents who can to pay for extra tutoring—often from the same teachers their children have in public schools, thus muddling the incentive both for effective teaching and for school attendance and completion. These two conditions present large political and economic challenges. Although sustained improvement in economic growth is most important in the medium to long term, the political challenges of improved efficiency in upper secondary and higher education cannot be discounted. The causal relationship between school performance and achievement and sustained economic growth is clearly two-way and dynamic. Examining this relationship in depth is beyond the scope of this report, but it is important to recognize it. Not doing so would understate the challenges policymakers face in remedying the problems and sustaining the progress we highlight in this report.

### Overall education spending is high

*Egypt's public spending on education is high by international standards* (figure 5).<sup>3</sup> Relative to other countries at comparable incomes, its spending on education as a proportion of total public spending is topped only by Jordan's (20.6 percent). As a share of GDP, Egypt's spending is comparable to the Organisation for Economic Co-operation and Development (OECD) average of 5 percent and higher than the 4 percent average of lower middle income and MENA countries. Problems in education thus stem more from ineffective and inefficient spending than from a lack of resources.

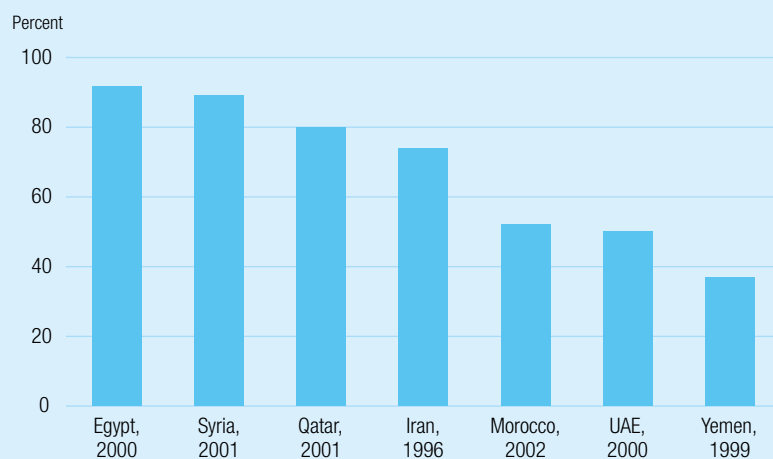
*Shares and composition of pre-university and university spending.* The proportion of spending on pre-university education is relatively low. About 70 percent of overall education spending is allocated to basic and secondary (pre-university) education—lower than in comparable countries, such as Jordan (80 percent) or Indonesia (76 percent). And the 1.7 percent of GDP allocated to tertiary education dwarfs all other comparable countries, and is nearly 50 percent higher than the OECD average. Universities absorb about 30 percent of the budget for about 6 percent of the students, despite lower social rates of return than for pre-university.

This expenditure pattern is not likely efficient or equitable. It is rooted in the ideals of the 1952 revolution and the constitution—and has been part of creating a large first-generation middle class, whose children now have similar expectations of the system even though economic conditions (high youth unemployment and low economic growth) may not allow fulfillment of the promise. In other words, politically feasible solutions will be difficult to find and will require significant leadership by government.

*Trends and allocations in pre-university spending.* Pre-university education spending reached LE 17.2 billion in 2002/03, or 4.1 percent of GDP and 13.5 percent of total public spending. Within the pre-university budget, spending on basic education (including preschool) is estimated at 72 percent (including about 2 percent for preschool).<sup>4</sup> Spending on general and vocational secondary education is estimated to be around 11 percent and 17 percent, respectively (figure 6).<sup>5</sup>

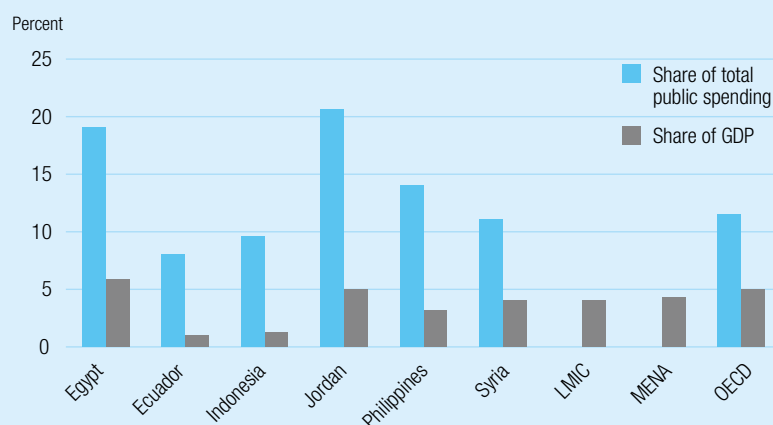
Egypt spends 30.2 percent of its total education expenditure on primary schooling. This is lower than Jordan (43.3 percent), the Philippines (60.4 percent), Turkey (48.4 percent), and even the OECD average (40.4 percent). Even if one were to argue that the high overall spending in Egypt drives the outcomes to some degree, the figure for Egypt would still be relatively low. Whether a higher proportion of education spending should be allocated to primary schooling is open for debate, but the need to

**Figure 4** Proportion of first-time job seekers among the unemployed



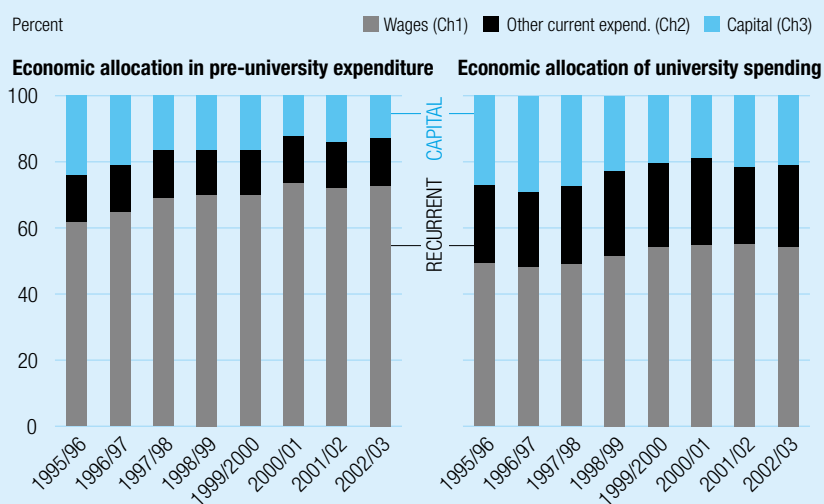
Source: LABORSTA (2003), Jordan (DOS, 2004), Syria (CBS, 2003).

**Figure 5** International comparison of public expenditure on education



LMIC is lower middle income countries.  
Source: LABORSTA (2003), Jordan (DOS, 2004), Syria (CBS, 2003).

**Figure 6** Economic allocation in pre-university and university spending, 1995/96–2002/03



Note: Ch1, Ch2, and Ch3 are chapters of the budget.  
Source: MoF (2004).

redistribute and improve spending for primary education is not. In general, unit costs are rising faster for primary education than for other parts of the system, without the right incentives to ensure effective spending.

*Trends and allocations in university spending.* University spending as either a proportion of GDP or a proportion of total education spending has hardly varied since the mid-1990s. Of total allocations to universities, about 45 percent are channeled to the three main urban universities.<sup>6</sup> Al Azhar University receives about 9 percent of university allocations and enrolls about 12 percent of university students. Currently there is no funding formula for allocating public resources among universities that accounts for enrollments, number of faculty, or performance outcomes.<sup>7</sup>

### Recurrent vs. capital spending

The share of recurrent expenditures increased from 75 percent of total education spending to 85 percent between 1995/96 and 2002/03. *Growth in overall public education spending was driven mainly by the increase in wages.* As a proportion of total education spending, the share of wages rose from 58 percent to 67 percent, and as a proportion of recurrent

expenditures, to 79 percent, confining other current expenses to 21 percent. For pre-university education the figure is even higher (about 84 percent) (see figure 6). If effectively invested, an increase in recurrent expenditures can allocate funds to items likely to improve education's quality. But the increase was largely due to increased wages, raising questions about how the investment will improve quality.

*The current economic allocation of education resources to capital investment is on the high side* (table 1). Capital spending in pre-university education in Egypt is higher than the mean for the World Education Indicators (WEI) group of countries and OECD countries. This expenditure pattern is, in part, a remnant of Egypt's expansion of access. With school supply issues largely addressed, the share of capital investment should decline over the coming years to free up resources for other current expenditures. This should largely be achieved through significant cost savings and through improving efficiency in the construction and rehabilitation of schools. In addition, Egypt's allocation to recurrent expenditures other than staff compensation is lower than for comparator countries (see table 1). There is thus scope to increase allocations to those activities that directly and indirectly affect the quality of instruction, such as classroom maintenance, teacher training, and equipment facilities. There is also scope to introduce greater flexibility in the budget by reducing the proportion of restricted accounts, which make up about 10–11 percent of other current expenses and transfers.

The General Authority for Educational Buildings (GAEB) is entrusted with school construction, maintenance, and furnishing new classrooms. Total allocations to the GAEB in 2002/03 amounted to LE 1.7 billion, of which LE 1.5 billion went to capital investment spending (68 percent of total pre-university investment expenditures). These funds were used to construct, maintain, and furnish 927 schools, 90 percent of them in primary and preparatory education. School construction is based on an automated GIS system that maps current students and school distribution along with

**Table 1** International comparison of economic allocations in pre-university spending

	Total pre-university expenditure		Current expenditure	
	Current	Capital	Total staff compensation	Other current
<b>Egypt (2002/03)</b>	<b>87.0</b>	<b>13.0</b>	<b>83.5</b>	<b>16.5</b>
Indonesia (2000)	93.9	6.1	85.8	14.2
Jordan (1999)	89.0	11.0	92.5	7.5
Tunisia (1999)	88.7	11.3	95.1	4.9
Philippines (2000)	91.6	8.4	85.6	14.4
WEI mean <sup>a</sup> (1999)	90.7	9.3	82.9	17.1
OECD mean (2000)	92.1	7.9	80.3	19.7

Note: Parentheses indicate year for which data are available. Information for individual countries included refers to expenditures from public sources only; those for WEI and OECD averages include expenditures from public and private sources.

a. WEI group of countries includes Argentina, Brazil, China, Egypt, India, Indonesia, Jamaica, Jordan, Malaysia, Paraguay, Peru, Tunisia, and Uruguay.

Source: OECD (2002b), Annex A4, Table 18; OECD (2003), Table B6.3. Data for Egypt based on MoF statistics.



projections of population densities by the relevant education age. Based on this method, the five-year work plan for the GAEB (2002–07) envisions the construction of 132,144 classrooms (in 8,384 schools), of which 26,616 (20 percent) had already been implemented by 2003/04. Of the planned classrooms, about 25 percent (31,088) address the re-introduction of sixth grade to primary education.

***The GAEB’s planning process for school construction is in principle reasonably efficient, but in practice it is compromised by:***

- Inaccurate population projections, which may overestimate population growth in a given education age bracket and thus the need for more schools.<sup>8</sup>
- The lack of availability of land to construct a school within reasonable walking distance from the community and the inability of school design to compensate for second best land sites.
- The availability of financial resources slated for school construction within any given governorate.
- The lack of coordination with Al Azhar and in some cases relevant private and nongovernmental organization schools.<sup>9</sup>

Fragmentation of the budgeting process at the governorate level seems to be an important obstacle to efficient decision-making on school construction.<sup>10</sup> (A separate PER Policy Note on the capital investment process in education will review these issues.)

*Allocations to maintenance and recurrent expenditures other than staff compensation.* In pre-university education, the trend of growing wages leaves fewer resources for items that have an impact on the quality of instruction,

such as maintenance of school buildings and equipment. While major and emergency maintenance of school buildings is the responsibility of the GAEB, the school is still responsible for routine maintenance needs that may arise during the school year.<sup>11</sup> The budget for this type of maintenance comes from the MoE (and local administration) as a proportion of student fees.

In general, allocations to maintenance are too low to protect investments in school construction and major rehabilitation. Maintenance allocations in local departments constitute less than 1 percent of other current expenses and transfers and less than 3 percent of the Ministry of Education (MoE) budget. And funds from international donors are not free of similar bias: one governor told of millions of dollars worth of heavy equipment from a donor that goes unused because of not having funds to maintain it. And while procurement methods have recently been analyzed and largely approved, many officials still complain about inefficiencies and high costs, as well as a bias toward low cost with low quality.

*Capital investment, construction, and maintenance.* In many instances, the localities provide sites for school construction in poor areas with great need. But in some instances, sites are selected only so that the governorate or the MoE does not lose the budget allocation. This is clearly an inefficient use of scarce resources, and actions could be taken to find cost savings in the short term. In addition, not enough use of school buildings is made outside school hours. (A review of capital investment will analyze the criteria and procedures used by the GAEB as part of a wider assessment of the capital investment process within the education sector.)

## 2 The inefficiency of public spending on education

*Although substantial progress has been made in increasing access to and equity in basic education, the pre-university system suffers from excessive costs associated with oversupply and misallocation of education personnel.* This section provides an assessment of public spending in pre-university education, in terms of internal efficiency (essentially repetition rates) and key educational inputs (student–teacher ratios, class size, and unit costs). We then consider equity and quality.

### Repetition and internal efficiency

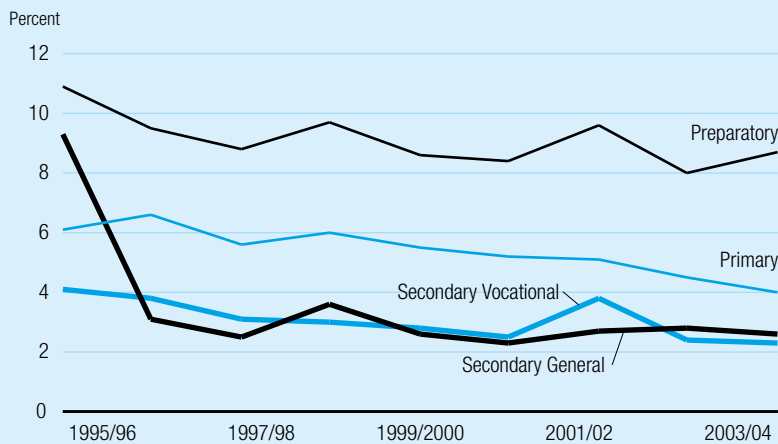
*Repetition rates have been reduced to less than 4 percent in primary education and to about 8.5 percent in preparatory education* (figure 7). The biggest improvement occurred in secondary general education, where repetition rates fell from more than 9 percent in 1995/96 to about 2.5 percent in 2003/04. Repetition rates in primary education (at 4 percent in 2003/04) have been reduced to levels below those of lower middle income and MENA countries, though they are much higher than in Jordan (0.5 percent) or the Philippines (2.3 percent) (OECD 2002b).

And comparing public spending and primary repetition rates together across countries shows that Egypt is not achieving a great deal more with its greater level of investment (figure 8).

### Student–teacher ratios, class sizes, and the geographic distribution of teachers

In 2003/04, the pre-university education system had about 1.4 million personnel, of whom 795,000 were teaching staff (57 percent), 89,000 were nonteaching staff (6 percent), and 516,000 were administrators (37 percent).<sup>12</sup> Whereas pre-university student enrollment grew at an average of about 1 percent a year between 1995/96 and 2003/04, employment of teaching staff and nonteaching staff grew at 2 percent and 3.6 percent. *Student–teacher ratios in primary education came down to levels existing in comparable income countries, and may be inefficiently low in secondary education.* In primary education, there are now 22 students per teacher, down from 25 in 1995/96, in line with averages for lower middle income countries (21.7) and lower than MENA countries (23.6)—although there is no empirical evidence that such changes improve outcomes. In secondary education (general and vocational), there are 14 students per teacher—lower than the OECD average of 15.5 and the MENA average of 17.2.

Figure 7 Repetition rates by education stage, 1995/96–2003/04



Source: MoE (2004) and author's calculations.



Table 2

**Change between 1995/96 and 2003/04 in student enrollment, teaching and nonteaching staff (MoE only, excluding Al Azhar)**

Percent

	Students	Teaching staff	Nonteaching staff
Primary	-3.42	7.77	5.16
Preparatory	17.9	19.2	85.0
Basic	3.45	11.95	29.42
Secondary (total)	32.94	24.10	40.16

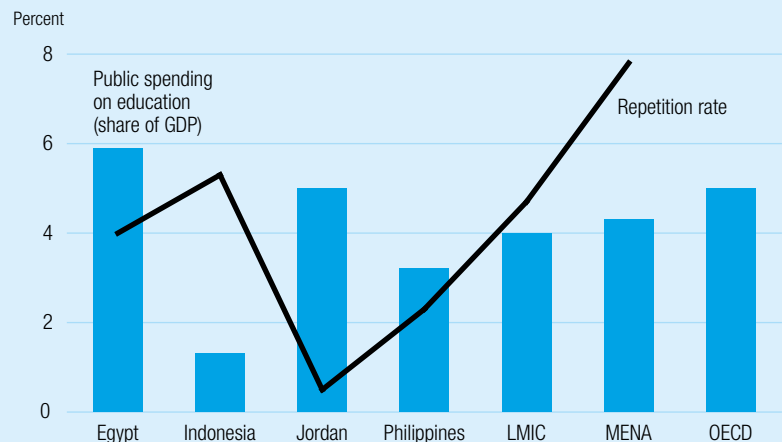
Source: MoE (2004) data and author's calculations.

*Other indicators, such as the teaching-nonteaching staff ratio and teacher-administrator ratio, also worsened.* In primary and preparatory education, there is now, stunningly, about one administrator for every teacher (compared with one administrator for every 6.2 teachers in Jordan) and one nonteaching staff member for every 8 teachers, down from one for every 11 teachers in 1995/96.<sup>13</sup> Some governorates have more administrators and other staff than teachers. The incentives and promotion criteria for teachers dictate this tendency to some degree, since teachers cannot get promoted and remain in teaching posts. Promotion for veteran teachers means going into administration, inspection, or technical supervision—leaving the most inexperienced teachers in the classroom. The creation of a career track for “master teachers” would mitigate this trend and improve the quality of instruction. Other than changes at the margin, it is not clear how much improvement can be made in this regard without significant civil service reform. But a public expenditure tracking survey (PETS) would provide valuable benchmarking data and perhaps some motivating revelations about how little educational investment ends up in the classroom.<sup>14</sup>

*The employment pattern for MoE personnel is obviously unsustainable.* In general, growth in MoE personnel has outstripped growth in student enrollments at all stages, and this was driven mainly by employment of nonteaching staff, especially in basic education. Given the projected relative stabilization of the basic cycle

Figure 8

**Public spending on education and primary repetition rates**



LMIC is lower middle income countries.  
Source: OECD, Education at a Glance (2002a).

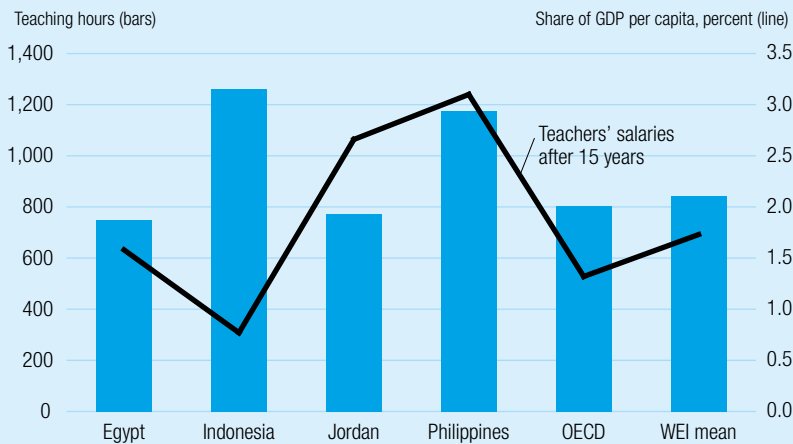
school-age population during the next few years, measures must be taken to cap employment, especially of nonteaching personnel. This would achieve budgetary savings on the wage bill and allow the system to converge with more efficient norms and indicators on student-teacher ratios over the medium term.

*The growing number of education personnel and the growing volume of the wage bill in pre-university education are obviously likely to raise the overall costs of public provision of basic and secondary education.* Although teacher salaries are low by international standards, the teaching load, in terms of number of hours of teaching, is also relatively lower (figure 9).<sup>15</sup> So there may be room for cost savings through requiring greater effort by teachers.

*While Egypt has low student-teacher ratios and an oversupply of teachers, some sub-national areas have teacher shortages.*<sup>16</sup> Across governorates, the imbalance is worse for teachers in preparatory education and in math and computer science.

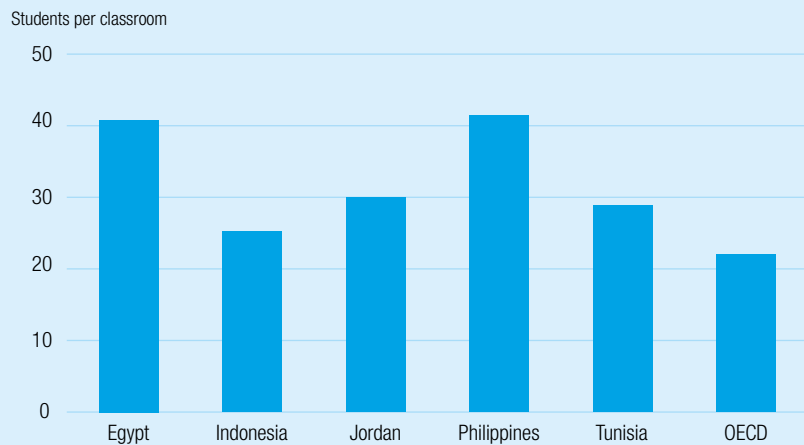
Analyzing class size yields different insights largely because many teaching positions do not involve classroom instruction. In 2003/04, the education system in Egypt (excluding Al Azhar and special education) had about 34,000 schools and 380,000 classrooms. School construction grew at an average of 2 percent a year

**Figure 9** Teachers' salaries and workload in primary education



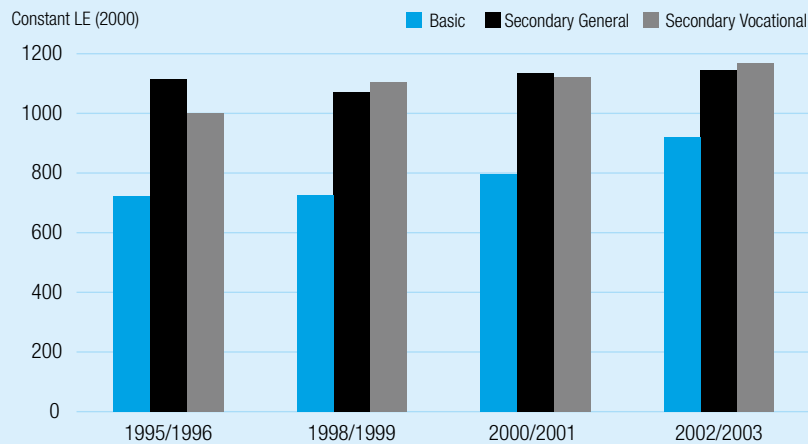
Source: OECD, Education at a Glance (2002a).

**Figure 10** International comparison of average class size in primary education



Source: OECD, Education at a Glance (2003).

**Figure 11** Per student unit cost by education level (MoE and Al Azhar)



Source: MoE, MoF, and author's calculations.

in basic education and 4 percent in secondary education between 2000/01 and 2003/04. As a result, average class size in primary education was reduced from 44.3 to 40.8, but has remained relatively unchanged for preparatory education at about 42 students. Despite a bigger increase in the number of schools and classrooms in secondary education (general and vocational), gross enrollments in these cycles have risen faster; the average class size in secondary education increased slightly from 37.2 students to 39.5 students.

In general, average class sizes in primary education are either in line with or slightly higher than comparable income countries, such as 30 students in Jordan (Siniscalco 2002) or 41 students in the Philippines (figure 10) (OECD 2003). Nonetheless, there is evidence of some inefficiency in the allocation of these classrooms. About 18 percent of classrooms in primary education had fewer than 30 students. *These results, together with the wide divergence between student-teacher ratios and class size—as well as the geographic imbalances in teacher surpluses and deficits—indicate very high inefficiency in the staffing levels and distribution of teachers.*

### Unit costs are rising

*The cost of providing basic and secondary education in Egypt has been rising, with unit costs rising faster for primary and preparatory education.*<sup>17</sup> Between 1995/96 and 2002/03 per student expenditure increased by an average of 4 percent per year in basic education (figure 11). Per student expenditure in secondary general and secondary vocational education rose modestly, at less than 1 percent and 2.4 percent a year on average, respectively. Although caution should be exercised when interpreting absolute values (because of the assumptions underlying unit cost estimation by education level), these figures suggest faster increases in costs in basic education than in secondary education.

*When adjusting unit costs for purchasing power parity, Egypt in general spends less to educate a child than do other countries at*

*comparable incomes—especially at the primary and preparatory levels* (table 3). In Egypt in 1999, the average cost of educating a child in the primary cycle was comparable to the Philippines and much lower than Malaysia, Tunisia, and Jordan. At the secondary level, Egypt's average unit cost in secondary education was comparable to Jordan's and much lower than Tunisia's.<sup>18</sup>

### Textbook spending is wasteful and inefficient

*Textbooks have generally been free, and there are no repercussions for not returning them.*

They account for 63 percent of the central MoE's current nonwage and salary expenditures, 44 percent of the total current nonwage and salary expenditures including governorates, and 6 percent of overall pre-university expenditures in 2003/04. The requested allocation for textbooks in the 2004/05 budget is about LE 1.6 billion, to print 481 million copies. Of this amount, LE 450 million are arrears to printshops for previous years' textbooks.

*The MoE and the Ministry of Finance (MoF) plan to increase the recovery of used textbooks as a necessary first step but a short-term one.* Cost recovery, also to be encouraged, need not hurt equity. For instance, the Education Enhancement Project has a community-targeting mechanism for such items as school uniforms and could include textbooks as well. Overall, the system of textbook production needs a major overhaul so that it produces (and re-uses) textbooks efficiently, while also integrating the process into (1) the overall budgeting process including national, governorate, and local management and (2) the ongoing reform of curriculum, teacher training, and instruction.

*Textbook provision is dominated almost entirely by the public sector.* The existing private involvement does not operate under the best incentives, nor is it subject to a thorough financial analysis and audit. Internationally, the trend is very clear to include some form of public-private partnership in textbook provision in

which the private sector takes on some of the risk while making overall textbook provision more efficient (box 1). Such arrangements have the added benefit of strengthening the private publishing market. Many countries have also decentralized the final selection of textbooks to the schools, which choose from an approved list of texts. (As part of the PER, the World Bank is writing a note applying international best practice in textbook provision to generate policy recommendations specifically for Egypt.)

### Encouraging entrepreneurship and increased efficiency in universities

*The university system in Egypt is largely publicly financed.* The decline in per student spending has led to a virtual collapse of the quality of university education in many areas. Without significant increases in cost recovery, the current system of finance is unsustainable, especially given the likely increases in future enrollments. The government must seriously explore legal and political means to re-interpret how the constitutional requirement for "free education" relates to university education.<sup>19</sup>

*There is untapped revenue generation and cost-savings potential in universities.* For example, free university education means that students face no institutional incentives to finish in four years. Limiting the years of free university education, though politically contentious, would free valuable resources to allocate

**Table 3** International comparison of per student unit costs, 1999

Current PPP\$	Primary	Lower secondary (preparatory)	Upper secondary
Egypt	542	518	782
Jordan	775	782	806
Malaysia <sup>a</sup>	1,015	—	1,813
Philippines	474	411	384
Tunisia <sup>a</sup>	988	—	1,868
WEI mean	797	939	1,188
OECD mean	4,148	5,210	5,919

— is not available.

a. Upper secondary costs include lower secondary education.

Source: OECD (2002b); data for Egypt estimated based on MoF statistics and World Development Indicators 2004.

The MoF and the MoE want to increase textbook recovery by as much as 40 percent in the next year through either rental fees or payment incentives for returning books. This ambitious plan, a step in the right direction, may face several obstacles. First, it must be determined whether the physical quality of textbooks is sufficient to withstand re-use. Books designed to last one year are unlikely to last longer. So any attempt to encourage re-use may require immediate improvements in the quality of the paper or binding of the books. Second, a culture of care for and re-use of texts must be created. This is not as simple as charging a refundable deposit for books, though that often is necessary. Public relations campaigns (often on the radio) about the importance of caring for and returning books have also proven important and successful and are not costly. In Egypt, this could be tied to issues of history and national pride, given that the Egyptians invented paper. The practice of writing on products of the papyrus plant (from which the word “paper” is derived) dates to 4000 B.C.

Teachers and other school actors also need to play a role. If teachers and school directors are held accountable for textbook recovery as part of their supervision—perhaps even personally responsible in part for costs—they are likely to prevent the distribution of the texts in the first place and to store them safely (and unused) to ensure they can be returned. School staff must thus be brought in as partners in cost recovery and re-use plans in a positive and supportive manner.

#### What do other countries show?

*Reform of textbook provision usually involves developing a relationship with private sector printing and publishing industries.* Public-private partnerships can improve the efficiency and quality of textbook provision while supporting private firms and economic development in ways that have positive impacts outside the education sector. Egypt has strong publishing and printing industries and thus should be in a good position to develop an effective partnership for textbooks in ways that would improve cost efficiency, student learning, and private sector development.

*The World Bank’s policy is to support affordable, sustainable systems of textbook supply, characterized by private sector involvement and the exercise of choice at the lowest feasible level.* Some countries have decentralized the final selection of textbooks to the schools (which choose from an approved list), and many more have encouraged local roles in the development and selection of supplemental materials. This involves the articulation of agreed roles of the public and private sectors in the development, production, and equitable distribution of textbooks—with assurances that cost will not be an obstacle for poor students. Where government requires textbooks to be produced or distributed by a state monopoly or parastatal agency, the cost of the arrangement should be calculated. A thorough financial analysis of the agency should be made, because the agency may not be operating economically.

Source: World Bank (2002d, 2002e, 2003); Sosale (1999); interview with Alfonso de Guzman, December 15, 2004.

*Government will always play a role in developing and regulating the content of textbooks and reading materials.*

- In the *United States* the private sector has assumed nearly all the risk: large private publishing houses produce texts, vie for contracts with many governments, and absorb all losses for texts that are unsold or not adopted.
- In *Fiji* the government is obliged to pay for the entire first printing of any book it approves, but the publishers assume the risk beyond the first printing.
- *South Africa* has nearly pure private provision of textbooks, though the government initially provided protection, incentives, and subsidies for national publishing companies to allow them to get up to international standards.
- *Chile* went in the opposite direction, starting by using European publishing houses, and over time Chilean companies learned to compete (often through partnerships with the international houses).
- *Kenya* abolished the parastatal with a monopoly in publishing and gave schools the right to select and purchase books from local booksellers at prices negotiated by the central government: this reform has provided significant returns and won international praise and the support of several donors.
- In *Mexico* nearly 500 institutions publish books, but 70 percent still come from the government. Although this has significant efficiency costs, “the Mexican government is reluctant to abandon the idea of a single, free textbook, written and produced by an official body, because it has long been the means to convey the government’s desired message to the population, as well as to record national history” (Sosale, 1999, p. 126). Mexican publishing houses now provide textbooks to other countries in Latin America.

*For printing, there are virtually no efficient government houses, even in developed countries.* For example, the U.S. Government Printing Office (GPO) is a dinosaur being dismantled. In general, governments are also rarely efficient in the timely distribution of texts or in the operation of bookselling (wholesaling or retailing). But ministries of education can benefit from some in-house printing expertise (such as that shown by the GPO) in preparing camera-ready materials to send to printing houses.

*Equity and access to textbooks for the poor must always be a concern.* Cost recovery in primary education, if any, should be far less than for secondary and university education. Several guiding principles and practices: First, subsidies to student families should be favored over those to producers. Second, there will always be families who will purchase if given the opportunity, and these funds can be used to subsidize the poor. Third, a certain proportion of inventory can be set aside for school staff or communities to provide free books to the poor. Fourth, book sharing is common and helpful, though school staff and local communities should have a say in how this is practiced.

to basic education. Universities also have capacity for entrepreneurial revenue enhancement if given the right incentives. But there are some important caveats. For instance, many professors devote minimal time to their teaching and do a lot of outside work, essentially generating income for themselves rather than for the university. This will need to change significantly but in a manner that does not hamper entrepreneurship.

***To address these issues, universities are now promoting two main strategies.*** The first is to introduce means of cost-sharing with students, especially in postgraduate studies and in some undergraduate disciplines. The second is implemented by establishing units parallel to the traditional system that charge higher fees and offer a slightly differentiated service, such as language sections (English and French) in faculties of arts disciplines (commerce, economics, and political science). There are now plans to set up similar units in more capital- and technology-intensive disciplines such as dentistry, engineering, and

computer science. The objective is to cater to a segment of students who can afford to pay for a differentiated service—and to use those revenues to subsidize traditional units. This activity should be encouraged and supported.

***The second strategy is to establish research centers that provide services on a commercial basis to the public and business communities.*** The financial management of these centers is typically regulated through “special accounts” frameworks, proposed (and ratified) by the university and approved by the MoF. Depending on how active a particular university’s staff is in promoting the centers’ activities, special accounts can be an important source of revenue for the university.<sup>20</sup> This untapped entrepreneurialism should be encouraged and supported if universities are to meet the challenge of rising enrollments and free tertiary education while improving the quality of instruction and overall competitiveness of its graduates—especially if public spending is to prioritize pre-university education.

# 3

## Equity and quality

*The proportion of poor children aged 6–15 years not enrolled in education is three times that of the non-poor (6 percent and 2 percent, respectively)* (World Bank 2002b).<sup>21</sup> But given enrollment rates to date, Egypt should achieve the education Millennium Development Goal of attaining 100 percent primary school enrollment by 2015. Given rising net enrollments for girls but slightly fluctuating net enrollments for boys, efforts must now focus on improving the quality of primary education to preserve existing enrollments and expand access to the remaining school-age population.

A benefit-incidence analysis of education spending by quintile from 1997 showed relatively equitable distribution of lower secondary education expenditures but a very inequitable distribution of higher education expenditures, with the poorest quintile receiving 3 percent and the richest 45 percent (World Bank 2002a, table 9). There is little reason to believe that this distribution has changed significantly.<sup>22</sup>

*Inequalities in public education subsidies may reflect existing biases in regional allocations of education resources, especially for poorer governorates in Upper Egypt.* In 2003/04, Upper Egypt accounted for 38 percent of total enrollments but received only 32 percent of governorate education resources. Primary enrollment rates are also lowest, and class sizes and student–teacher ratios highest.

Private tutoring is very high and surely inequitable in its impact, with the poor unable to pay as much. Thus any analysis of equity that does not include private tutoring costs likely underestimates the inequity in the system. Often families hire the child’s teacher as a tutor, a negative incentive for teacher performance in the classroom. These tutoring sessions often take place at school in the afternoons and evenings.

### **Private spending on education: Equity impacts and issues**

*Household spending on education in Egypt is high.* Based on the nationally representative 1999/2000 Household Income and Expenditure Survey, household spending on all levels of education is estimated at 3.6 percent of GDP. Average household spending at the different education levels is shown in table 4. In 1995/96, average spending for children in higher education was higher than those in basic and secondary education. This pattern is corroborated by other surveys such as the 1997 International Food and Policy Research Institute household survey and reported in the 2002 Education Sector Review. However, by 1999/2000, average household education spending was highest for secondary education, increasing by more than twofold in real terms, followed by university and basic education.

The evidence so far points to the important contributions that households make in financing education at all levels in general, but most importantly, at the basic and secondary levels. Added to average public spending of 5.6 percent of GDP between 1999/2000 and 2002/03, private spending brings total education spending to about 9.2 percent of GDP (figure 12). This



figure is well above the average for any OECD or developing country (OECD 2003).

*More than a quarter of private spending on education is for private tutoring* (table 5). While precise figures on the private tutoring market are unavailable, some reports estimate it at LE 7–10 billion a year—or more than 2 percent of GDP and almost half of the public education budget in 1998/99. On average, about 40 percent of students receive private tutoring at the preparatory level, 60 percent at the secondary level (Assaad and Elbadawy 2004).

*Partly to address deteriorating quality issues in public education, private tutoring has become a pervasive problem in the Egyptian education system, with implications for equity.* About a third of the education spending of poor households is devoted to private and group tutoring. Private tutoring is likely to affect access and retention of poor children in schools, as suggested by the proportion of children in poor households not enrolled in education. There is also some evidence that this practice may undermine recent efforts to eliminate gender disparities in enrollments, especially in primary education. Although the 1998 Egyptian Labour Market Survey data showed no differences by gender in access to tutoring (private or group) at the preparatory and secondary levels, it did show a bias against girls in tutoring at the primary level (Assaad and Elbadawy 2004).

Perhaps the best ways to improve equity would be (1) to solve the private tutoring situation and take steps to ensure more efficient spending of funds for pre-university schooling to improve quality; (2) to develop compensatory funds to match local contributions to pre-university schools from parents on a sliding scale (poor communities would receive a higher level of match); and (3) to support greater decentralized management and accountability of schools.

### Quality of educational services

For the first time Egypt participated in the Trends in Mathematics and Science Study (TIMSS) for the eighth grade. The results,

**Table 4** Average household spending on education, 1995/96 and 1999/2000

	Basic	Secondary	University
1995/96 (current LE)	122.9	128.6	246.9
1999/2000 (current LE)	208.4	379.6	291.1
1999/2000 (1995/96 constant LE)	245.5	447.2	343.0
Percent change 1996–2000	99.8	247.7	38.9

Source: Al Shawarby (2004) and author's calculations.

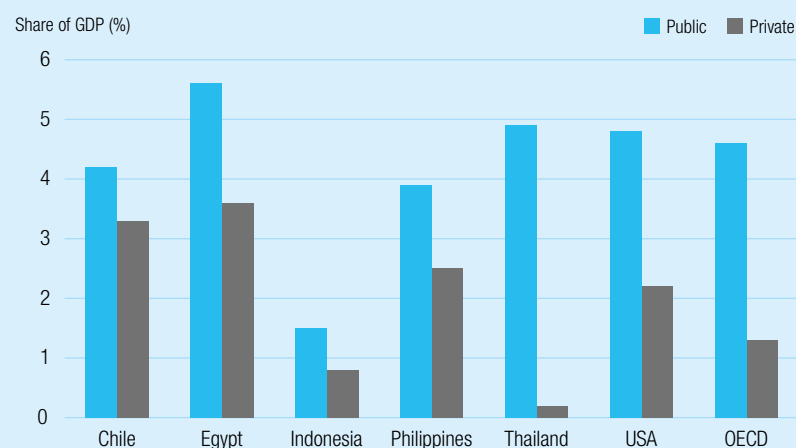
**Table 5** Structure of spending on education by poverty status of household, 1999/2000

Percent

	Non-poor	Poor	Total
Fees	24.2	28.5	24.2
Private tutoring	28.3	23.8	27.6
Group tutoring	5.5	7.1	5.5
Uniform	15.9	23.1	16.2
Textbooks	2.3	2.6	2.3
Other books	4.6	3.1	4.4
Stationery	10.2	2.1	10.8
Transport	9.0	9.7	9.0
Household spending on education as a share of total education spending	3.72	2.97	3.65

Source: World Bank (2004a), calculated from CAPMAS, HIECS, 1999/2000.

**Figure 12** Public and private expenditure on education



Source: MoE, MoF, and author's calculations.

recently released, present a first opportunity to view the quality of educational achievement in Egypt on an internationally comparative basis.<sup>23</sup> Egypt scored a 406 in math and 421 in

**Table 6** Trends in Mathematics and Science Study (TIMSS) for eighth grade, Egypt, 2003

	National average	Private schools (language)	Public experimental schools (language)	Private Arabic schools	Public Arabic schools
Mathematics	406	529	509	487	400
Science	421	528	507	505	415

Source: Egyptian authorities and World Bank staff.

science. This placed the country's eighth graders below the international averages (467 and 474, respectively) and Jordan (424 and 475); on par with Indonesia (410 and 420) and Tunisia (410 and 404); and ahead of the Philippines (378 and 377) and all participants from Sub-Saharan Africa. This is an encouraging entry into this international testing arena.

The MoE produced approximate scores for subsamples of different kinds of schools in Egypt (table 6). Care must be taken in interpreting these results because the samples within school groups are not representative, they likely reflect underlying student characteristics as much as school quality, and similar subgroupings in other countries would likely show higher scores as well. Even so, the results are instructive. Egypt has schools, including a group of experimental public schools practicing more decentralized administration, that are on par with or above international averages. *It is critical for Egypt to continue to participate in these studies, and to find funds to participate in fourth grade testing.* In addition, future testing samples should be chosen in a way that better allows causal inferences about outcomes in different kinds of schools.



# 4

## The root of the problem: institutional structures, budget processes, and intergovernmental relations

Budgeting for education takes place within the overall structure and processes for public sector budgeting.<sup>24</sup> *The budget's presentation and publication (for education as well as for other sectors) is rigid, confusing, and not transparent, with excessive variability between planned and actual budgets.* The MoE's budget has in practice several largely self-contained components—relating to the existing four chapters of the budget, the central ministries, the service authorities, and the governorates—each brought together only at the final stage, when the budget proposals and data are consolidated by the MoF.<sup>25</sup> Neither governorates nor MoE officials at any level have much flexibility for transferring resources between budget chapters once allocations are made. Central MoE officials have some limited flexibility to move funds between and within chapters, while governorate officials have only limited authority to move funds within chapters—and even then many items are “untouchable.” Senior MoE staff believe that real budget authority is isolated in a few senior officials in the MoF and that most key decisions are made either in the MoF or in parliamentary committees, with the prime minister and the MoF in the lead. Inevitably, MoF staff end up making educational rather than simply financial or budgetary decisions.<sup>26</sup>

### **Institutional framework for budget processes**

*The MoE budget exists within the MoF budget management system according to the same four chapters as the rest of the government.* An additional 10 percent (approximately) is allocated to Al Azhar, which runs pre-university schools and one university almost autonomously. Within the MoE each department and supporting agency at the central MoE and each governorate has a separate subbudget using the same four chapters. Thus the total ministry budget is distributed between the central ministry and the governorates (87.5 percent) and the supporting agencies (12.5 percent) (table 7). The supporting agencies include the GAEB, which receives nearly 90 percent of the supporting agencies' budget allocation.<sup>27</sup>

Of their combined share, the central ministry receives about 15 percent and the governorates about 85 percent, almost entirely for salaries, determined centrally by the civil service system, the parliament, and the President.

*Like all entities involved in capital investment, the GAEB must negotiate its budget with both the MoF and the Ministry of Planning (MoP).* Since GAEB budgets first with the MoP and has a great deal of autonomy within the MoE, it appears that the information flow between the central MoE, governorates, and its main supporting agency is not transparent and effective. As with other sectors, the policies for capital investment and recurrent expenditures are not as well coordinated as they could be, due largely to the split authority between the MoF

**Table 7** Budget allocations within the Ministry of Education, 2002/03

Percent

	Central MoE and governorates		Supporting agencies
	Central MoE	Governorates	
	87.5		12.5
Chapter 1 Salaries	23.3	92.3	7.6
Chapter 2 Nonwage recurrent costs	60.5	6.1	15.8
Chapter 3 Capital investment	16.2	1.6	76.6

Note: Includes Al Azhar religious schools.  
Source: MoF (2004).

and MoP. In addition, the governorates do not necessarily interface with the central MoE in the budgeting process, but instead communicate directly with the MoF to formulate and submit their budget request—thus increasing the siloed nature of different entities providing education. In fact, the chief budget officials in the central MoE do not know what the governorate budget requests and allocations are unless the governorates choose to send them. And, of course, there is an entirely separate Ministry of Higher Education and a virtual ministry in Al Azhar.

*In general, reporting requirements between different government entities should be clarified, strengthened, and enforced.* For instance, Al Azhar could maintain its independent and virtually separate status, but in the interest of transparency and efficiency be required to provide significantly more information to the MoE than it currently does (for instance, school location and much basic data on the number of classrooms, students, and teachers).

*Because of its role in school construction and maintenance—coupled with its status as a*

*semi-autonomous entity—the GAEB is an important institution in the overall budget process.* The MoP approves its capital expenditures and the MoF approves its operating expenditures. To determine capital investment needs, the GAEB forecasts the growth of the school-age population for all localities. Based on this forecast it then does the investment planning for school construction for the nation’s five-year investment plans and the corresponding capital investment plans for each year.

*Another often ignored but important player in the budget process is the Central Agency for Organization and Administration (CAOA), which reports to the prime minister.* This agency monitors and to some extent controls the matrix in which every permanent civil service position in the country is placed. For instance, if a governorate has several administrative vacancies it can apply to the CAO A to use those salary allocations to hire contract teachers for a single year.<sup>28</sup> The administrative positions cannot be converted to other uses, but the funds can be used for other purposes on a temporary and largely ad hoc basis. The extensive practice of yearly contracting of teachers suggests that permanently converting some administrative posts in the organizational chart to teaching posts would improve efficiency. Negotiations over contract teachers appear to take place between the governorates and the MoF, largely bypassing the central MoE. The MoF must then negotiate with the CAO A.<sup>29</sup> The central MoE does play a role in resolving issues such as teacher shortages across governorates, but in general it negotiates more over the size of the education pie than the size or distribution of slices. *In sum, the MoE has few true policy levers fully under its control.*

# 5

## Key institutional challenges

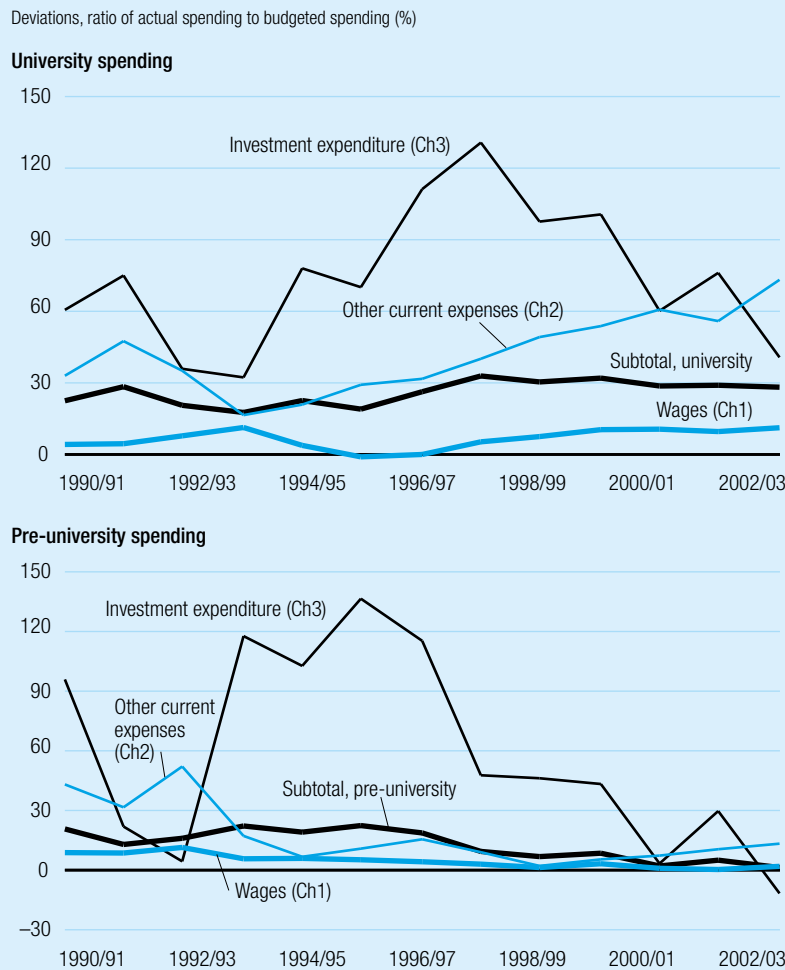
*The budget structure is etched firmly in the minds of budget makers at every level, resulting in budget data that are nearly impossible to analyze in a manner that matches the probable unit of production of services.* For instance, although schools are treated as cost centers in most advanced systems, it is difficult to calculate the level of resources consumed at the school level (such as teacher salaries), which will hamper school-based budgeting. It is very difficult to separate primary and secondary school expenditures. And the multiple compensation branches in the budget (providing low basic wages and then a series of expected bonuses that often more than triple or quadruple pay) are clearly inefficient, though this would require civil service reform to change.<sup>30</sup> On the positive side, this pay system's dependence on bonuses might allow the inclusion of some form of performance pay and incentives in the future.

*In the short run, consideration might be given to extending the capacity of governorates to transfer funds across line items in budget chapters, and even across chapters.* Although this capacity would relate to reallocating resources already budgeted for a given year, it would also have an impact on the overall distribution of funding over time, given the strong relationships between one year's budget execution and the next year's budget proposals. It would also allow for a closer match between the uses of funds and the actual needs as perceived by policy-makers closer to the schools. For instance, many schools have computers but lack the funds to pay monthly Internet connection fees, so those computers are underutilized. Similarly, subnational budget directors should have some capacity to allocate resources to such priorities—albeit with the proper accounting, procurement, and other fiduciary controls. These steps would improve the efficiency of spending.

*No single entity appears to have a broad and complete vision of the structure of the flow of*

*funds and information throughout the system, let alone how these flows might be optimized across types of expenditure or across schools or subnational jurisdictions.* It is not even clear if enrollment rates and student outcomes affect the budget allocations. The MoF is the only place where the entire picture of the structure of the flow of funds and the various budgets could be assembled, yet even the MoF does not apparently have one person devoted to understanding how all the parts of the education budget come together, let alone someone with particular expertise in financing education. The budget process in effect requires MoF officials to make decisions about resource allocation at a high level of detail and disaggregation. In countries with more developed budget systems, the MoF proposes allocations at a more aggregate level, and the MoE is allowed to decide how to implement the results of the MoF's more aggregated decision. In Egypt information flows vertically up isolated silos, not horizontally across them. For example, Al Azhar religious schools, which make up as much as 10 percent of the

**Figure 13** Deviations in actual vs. budgeted spending in education



Note: Ch1, Ch2, and Ch3 are chapters of the budget.  
Source: MoF (2004).

total public expenditure on basic education, are budgeted separately. They could be made part of an overall planning and resource allocation strategy while retaining their autonomy.

At least four different entities collect information on student, teacher, and school characteristics, conditions, and performance (among them the Central Agency for Inspection [CAI], the National Center for Examinations and Education Evaluation [NCEEE], and the technical supervision done by MoE supervisors at the governorate and subgovernorate levels). There is

concomitantly duplication of effort and insufficient means for using data holistically in making decisions. Many data do not feed back into the budget process. The MoE should consider creating an undersecretary of information, supervision, and evaluation to oversee and coordinate efforts.<sup>31</sup> Overall, it is clear that the Government's willingness to explore performance-based budgeting in certain sectors should be encouraged. *Whatever policy avenue is pursued, it is critical that the Government put considerable effort into communicating information on expenditures, performance, and the like downward to the governorates and the schools.*

*Large deviations in actual expenditures compared with budget allocations suggest that some items, especially capital investment expenditures, are poorly budgeted* (figure 13).<sup>32</sup> Although overall deviations in pre-university spending are tapering off, those for university spending are still large, especially for other current expenses and transfers (chapter 2) and investment expenditures.<sup>33</sup> Such deviations are inefficient on several levels, and several department heads in several different ministries have complained that official budget allocations are meaningless, thus making even short-term planning very difficult.

*Finally, it is difficult to determine what proportion of resources actually end up in the classroom.* The previous analysis of the workforce suggests a bloated nonteaching staff, but there are many other potential reasons why resources might not reach the classroom—including insufficient capacity in the MoE to exercise and enforce efficient budget execution and control procedures.<sup>34</sup> A public expenditure tracking survey could help locate the largest sources of leakage and thus help improve efficiency of expenditure. This could be particularly important if plans to decentralize proceed (box 2).

In recent years, developing countries have increased their spending on primary and secondary education to fulfill their commitments to provide quality education for all. Several countries have been disappointed in the results of their additional investments and have begun to investigate the reasons for the meager gains. An important tool in their investigations is the public expenditure tracking survey (PETS).

*Objectives.* A PETS studies the flow of public funds and other resources, with the aim of identifying how much of government's funding actually makes it to the classroom and locating the major point of resource leakage and misuse. All public funding for education has financial auditing and other mechanisms to ensure accountability for the appropriate use of funds. A PETS can also help policymakers diagnose how these accountability systems are working in practice and how they can be improved. Finally, accountability systems often work best when information on financial and resource flows is easily available to all stakeholders in the system. Thus the dissemination of the results of a PETS may help improve accountability and set in motion the steps to reduce leakage and misuse of funds. It is up to the government and other stakeholders to make administrative reforms and mobilize civil society so as to translate recommendations from the PETS into reality.

*Data.* The data required for the PETS are obtained through sample-based surveys and interviews carried out at every point where decisions are made about the use of educational resources. The most important is the school survey, which documents the source and use of educational resources. The school survey is complemented by questionnaires administered at the national, regional, and local levels to accurately determine the flow of funds. In many cases, education finance is so complex and lacking in transparency that simply showing the flow of funds contributes to better understanding the incentives and possibilities for leakage in the system. The data collected in the PETS depend on the major questions a country wishes to answer. Some PETS are comprehensive, while others may focus on leakage of a particular resource (such as teachers paid but not working).

*Results.* Among the results that may emerge from the PETS are estimates of leakage, information about the percentage of funds spent at each level of the education hierarchy, and descriptions of how funding is targeted among different schools and subpopulations. School survey questionnaires can also be designed to provide information about school facilities, teacher quality and absenteeism, dropout rates, test scores, and school governance.

Some form of PETS has been carried out in at least 35 countries in Africa, Asia, and Latin America, including Algeria, Colombia, India, Pakistan, Peru, and Yemen. The first PETS was conducted in

Uganda in 1996. Its principal finding was that of the total nonwage funding intended for schools, only 22 percent actually reached the classroom. Another PETS in Ghana found that only 51 percent of funding for books and other instructional materials actually reached the schools. A PETS in Zambia found that increased government spending on education was having no effect on outcomes because parents responded to the increased spending by reducing household spending on education by an equivalent amount. In Peru a PETS revealed the poorly understood complexity of the flow of funds from the national government through regional governments down to the schools and found extreme differences in administrative expenditures across schools. Most recently, in Cambodia, the findings suggest that despite an environment with some corruption, schools get most of the funding they are entitled to but do not get it in either a timely or predictable manner, which has negative implications for operational efficiency.

Several PETS have included investigations into teachers who are employed but absent from the classroom. Some teachers have regular teaching positions but are frequently absent from the classroom. Teacher absenteeism rates can be very high—27 percent in Uganda, 25 percent in India, and 19 percent in Indonesia. Other teachers are “ghosts”—paid for teaching but with no teaching assignment. PETS studies have found the proportion of teachers who are “ghosts” varies from 5 percent in Honduras to 35 percent in Ghana.

*Impact.* The impact of the PETS findings depends critically on the degree of commitment by the government to take action to resolve problems. The most striking impact occurred in Uganda, where after receiving the findings of the PETS, the government waged a publicity campaign to inform citizens about how much money they should spend on education and how much they should expect their schools to be receiving. The government then conducted a second PETS to determine the impact of the publicity campaign. The result was that leakage of education funding decreased from 78 percent to 20 percent. The least significant impact may have been in Peru, where frequent changes in the education minister and other high-level education ministry staff reduced ownership of the PETS results and weakened the incentives to change policy in response to the results.

*Lessons.* The PETS is a potentially powerful tool for revealing leakage and mismanagement in the use of educational finance. For the results to be credible, the survey and analysis must be undertaken by local, independent researchers not affiliated with the education ministry. But education and finance ministry personnel must serve on the advisory committee overseeing the PETS if there is to be ownership and follow-through on the results. Collaboration with the press to disseminate the results is essential.

(continued on next page)

*Possible application in Egypt.* An application of the PETS in Egypt could help document the magnitude of resource inefficiencies in the education sector and reveal the incentives giving rise to those inefficiencies. Analytic work on resource use in Egypt has revealed:

- High numbers of administrative to teaching staff.
- Relatively large class sizes despite a low ratio of students to teachers.
- Inadequate school supplies and materials in the classroom.
- High wastage in the production and distribution of textbooks.

A PETS study would produce reliable estimates of the magnitude of these problems, identify which locations and which students are most harmed, and provide the government the basic information required to find solutions to the problems. The cost of most PETS ranges between \$50,000 and \$100,000. Given the size and

population of Egypt and the extent of problems the government may wish to investigate, the cost would be higher, but small relative to the likely magnitude of the leakage of educational resources.

*References.* Consistent with the transparency of information that is the objective of PETS, the sampling frame, questionnaires, and analyses of data from each of the PETS carried out under the auspices of the World Bank can be found at <http://www1.worldbank.org/public-sector/pe/trackingsurveys.htm>. Additional information can be found in Ritva Reinikka and Nathanael Smith, *Public Expenditure Tracking Surveys in Education*, International Institute of Educational Planning, UNESCO, Paris, 2004. IIEP and the World Bank Institute have jointly developed an annual training course on PETS, which was delivered in East Asia in 2004 and in Southern Africa in 2005.

*Source:* World Bank and IMF (2004c); Martin and others (2004).

# 6 Prospects for educational decentralization

*Egypt has a highly centralized system of government and the education sector is no exception.* Finance and personnel decisions are made by the Government of Egypt—specifically the CAO, the MoF, and, to a lesser extent, the MoE. As with all government entities, national civil service rules dictate most hiring, wages, wage incentives, and career trajectories of all employees, including teachers. The CAO approves hiring requests, in part based on requests from the governorates and the central MoE, and then coordinates with the MoF to fund the positions. The central MoE does then have some control in allocating the remaining budget and (to some extent) the approved hiring and personnel decisions across governorates. Thus, initial staff deployments are highly centralized. Redeployment of staff across or within districts is difficult, not entirely locally controlled, and not based on merit or even need. The same is true within governorates.

*Governorates have little real discretionary budget, even less so at the subgovernorate level.* School-based management is virtually nonexistent in the vast majority of schools, though it is increasingly prominent (if nascent) in a small number of experimental schools and other schools funded by projects of the World Bank, the U.S. Agency for International Development (USAID), and other international donors.

Recently, decentralization has surfaced as a key and consistent theme from government officials. The UNDP and the MoP devoted the latest Egypt Human Development Report (UNDP 2004) to the theme, “Choosing Decentralization for Good Governance.” Educational decentralization generally takes one (or both) of two forms: to subnational government or to schools (through school autonomy and school-based management). Both are part of the policy dialogue in Egypt, and both would involve significant changes in budgeting, administration, accountability, and (in some cases)

policy development. Part of the future work plan of the PER will explore international experience in educational decentralization and potential applications for Egypt. *It appears that decentralization—if well designed, sequenced, and executed—holds promise for improved efficiency and educational outcomes in Egypt.*

## **Decentralization to subnational government**

*The primary policy discussion revolves around transferring some powers to the governorates.* The proposals include appointing a governorate-level MoE representative, giving greater flexibility to reallocate funds across budget lines and chapters, and allowing greater governorate and even community involvement in school construction, including design and location.<sup>35</sup> Depending on the precise nature of the ultimate reforms, this kind of reform could produce improvements. But there is little evidence



from international experience that simply transferring general responsibilities for educational service provision to subnational governments improves results, particularly if there is no effective political decentralization. The track record for school construction is somewhat better, but outcomes are highly context-specific. The fact that governors are not elected officials is an obstacle, particularly to improved accountability.<sup>36</sup> However, well designed administrative decentralization to governorates or schools, even in the absence of political decentralization, holds promise and should be explored.

### **Decentralization to schools**

*School headmasters have had little decision-making authority and nearly no culture of management or being managers.* Following and implementing central rules and regulations are paramount, as is compliance with myriad inspections and requirements of technical and administrative supervision from district and governorate regulators. Parental participation through parent–teacher committees has not generally involved actual governance responsibility—although they have been involved in regulating to some extent the fees charged and other policies for private tutoring done through the schools.

*Two related trends have sought to foster greater school-based management and parental participation.* The first is a set of reform pilot schools supported by USAID that implement school councils with governance capacity. The second is a growing set of experimental schools throughout the country that mobilize significant resources from parent contributions and have had apparently strong outcomes. Thus, in this area there is deep enough experience on which to build. These schools show promising school-council development, but there is insufficient information for them to be able to improve accountability (school report cards, budget information).

Note some important cautions about using the experience of the current set of experimental schools. The subsector is very small, mainly

experimental language schools. They have little in common with the other groups, such as the USAID “new schools.” As detailed in the section on quality, the experimental language schools (and only those among the experimental schools) have shown encouraging achievement results. They are better housed and equipped than the regular schools, in some ways (such as computers) dramatically so. Instructional time is longer. These experimental schools pay incentives to recruit better teachers.

But these schools are quite remarkable in their demographic characteristics. They are overwhelmingly located in areas with populations greater than 500,000 and they have very few disadvantaged students—even fewer than private schools—as well as a very large proportion of affluent students. The students’ parents have a very high educational level—more than 80 percent of the mothers have a first or higher degree—and they are very supportive of the school and of the educational process, shown for instance in their being much more likely to make sure students complete their homework. Their homes have a lot more books and are far more likely to have computers.

In terms of process and pedagogy, however, they are not that much different from the regular schools.<sup>37</sup> For these reasons, caution is needed in applying any lessons to the regular government schools. *Expanding the experimental language school subsector would please the educated middle class but would not do much to increase equity, because that subsector is so small and so selective.*

### **School fees and maintenance**

*Of overall student fees, regulations have historically stated that only about 25 percent stay within the school (an average of LE 10 per student) (figure 14).* And even though the school keeps about LE 2 per student in building maintenance fees, this represents only 30 percent of the total maintenance charge. The bigger portion is allocated to the respective service authority—in this case, the GAEB. (Note that we have no generalizable information on actual fee collection.) Actual collection performance

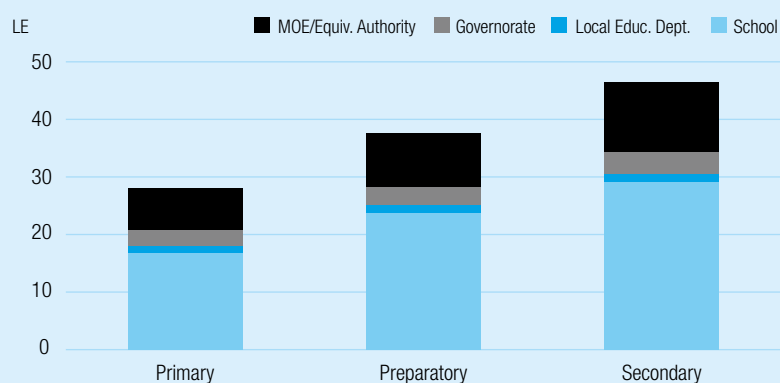


is likely to differ from the formal requirements set out in the regulations, and fees collected by schools in poorer areas are significantly lower. There is a small but growing number of experimental schools that are using more decentralized management and thus are charging higher fees—some upwards of LE 200 per year.<sup>38</sup> The experience with fees at these schools leads to several important conclusions:

- There is a willingness to pay for quality schooling.
- The poor are willing but often unable to pay such elevated fees.
- The Government would need to develop compensatory funding streams to aid schools and parents in poor areas if the experimental school model is to be scaled up.

In the short term, the MoF and MoE have indicated their willingness to allow nearly all school fees to remain at the school site. Schools should also be allowed to fund other nonwage recurrent items such as Internet access and computer maintenance.<sup>39</sup> International experience supports this action. This would allow more local management of basic maintenance, which would also promote other efforts at decentralization and local participation. But to avoid heightening the imbalance in funds for maintenance, the MoF and MoE would need to find cost savings elsewhere in the budget to maintain the level of effort in most maintenance done centrally. **Overall, expenditure on maintenance should rise in the short term, and the Government should explore allowing**

Figure 14 Distribution of student fees over education entities, 2003/04



Source: MoF and author's calculations.

**other decentralized uses of school fees (such as teacher incentives) in the medium term.** Also in the medium term the Government should explore an overall restructuring of the way maintenance and other fee-supported activities are budgeted.

**From a public budgeting perspective, it will be necessary to reform the structure of budget chapters and the overall budget processes significantly before serious decentralization can take place.** Governorate budget and accounting staff would also require training in how to use any new budget authority, particularly training in linking budgeting with policy development and implementation. In addition, it will be necessary to be able to understand and analyze schools as cost centers—units of production—which the current data do not allow.<sup>40</sup>

## List of tables

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# Notes

1. Starting in the 2005/06 academic year, a sixth-year addition to the primary cycle that was re-introduced in 1999 will become effective. This will bring up the number of years in compulsory (basic) education to nine.

2. Following World Bank (2002a), preschool education refers to early childhood education programs in formal settings, mainly through kindergarten programs for children ages 4–5 years, and is distinct from nurseries or other programs in informal environments.

3. Based on per capita GDP (in PPP\$) in 2003, comparator countries for Egypt are Armenia, Azerbaijan, Ecuador, Guatemala, Indonesia, Jamaica, Jordan, Morocco, the Philippines, Sri Lanka, and Syria. International comparisons may be limited by availability of relevant indicators for comparator countries. For Egypt, data refer to 2002/03; for all other countries, data refer to 2000 or latest available year (World Bank, EdStats 2004).

4. The pre-university budget is not classified by level of education. Inference about allocations to different education levels is made through proportions of teaching and nonteaching staff in each level and distribution of aggregate capital expenditures by level. For details, see the section on unit cost estimation.

5. Note that USAID data (2002) provide a slightly different distribution of expenditure: preschool (0.05 percent), primary (38.9 percent), preparatory (23.8 percent), general secondary (10.4 percent), technical secondary (25 percent), special needs (0.7 percent), and one-room schools (0.7 percent). We were unable to verify the method for calculating these figures, however, and thus we rely on our own. The basic messages do not change, although these data do indicate a lower proportional allocation to primary school.

6. Cairo University (22 percent), Ain Shams University (14 percent), and Alexandria University

(9 percent), which together enroll about 37 percent of all university students.

7. Comprehensive information on education outcomes at the university level was not available at the time of preparing this report.

8. Demographic data are provided by the Central Agency for Public Mobilization and Statistics (CAPMAS). It is important that the accuracy of these data be studied and improved, for they are the backbone of any planning process.

9. Note that while it might not be as efficient for pure enrollment purposes, the location of Al Azhar and government schools in close proximity could serve other purposes, such as providing parents choice and supporting different teaching philosophies and world views.

10. For instance, while a certain district (*idarab*) within the governorate may receive financial allocations for school construction through GAEB, financial allocations to pave the road leading to the school may not be slated until the following year. The district therefore ends up with a school that is partially populated with students because the supporting infrastructure is missing-without addressing overcrowding in existing schools.

11. According to GAEB officials, the Authority performs three main types of maintenance: (1) emergency maintenance (works such as sewage and electric repairs that require technical [engineering] expertise that the school cannot handle); (2) annual maintenance (technical supervision is performed jointly by the GAEB branch office in the governorate and the district office); and (3) major maintenance (every five years after handing the school over to the MoE).

12. Data refer to MoE system only; they exclude Al Azhar and personnel in special education. Teaching staff include the categories of headmaster, assistant headmaster, supervisor senior teacher, senior teacher, and teacher. Nonteaching staff include

the categories of general director, headmaster, and assistant headmaster. Support workers include the categories of employees, workers, technical workers, and registered not working. Administrators include the categories of nonteaching staff and support workers.

13. These ratios are likely to be different if “contract” teachers are included in the calculations. However, the MoE does not keep records on the numbers or subject destinations of contract teachers.

14. Such an exercise should include, if possible, expenditures on private tutoring.

15. In 2000, the average teacher salary in Egypt after 15 years of experience is estimated at 1.58 times per capita GDP; this is lower than in Jordan (2.6 times) or the Philippines (3.1 times) but above Indonesia (0.77 times). Lower teacher salaries are somewhat offset by smaller teaching loads. The average number of teaching hours in pre-university education is 748, compared with 774 in Jordan and 1,176 in Philippines (OECD 2002b).

16. According to the Minister of Education, H. E. Dr. Ahmed Gamal El-Din Moussa, there is currently a shortage of more than 160,000 teachers in pre-university education (November 29, 2004). Presumably this figure is based on not reallocating teachers across jurisdictions—which is difficult to do under current rules but should be maintained as a medium-term goal.

17. Because the pre-university budget does not provide a breakdown of expenditures by education level, unit costs are estimated using the following procedure. Since wages constitute the bulk of expenditures, the proportions of teaching and nonteaching staff in each education level are used as proxies for allocating spending in both wages and other current expenses.

18. The dual characteristics of low unit costs and high spending as a proportion of GDP are not incompatible. They stem largely from low GDP per capita ratios and low GDP growth overall. This is obviously a much larger issue and a more intractable problem than educational efficiency, although the two could also be related. See World Bank (2005).

19. Note that we recognize the legitimate reasons for government involvement in higher education: the externality of pure research and a capital market failure in getting tuition fees to levels ap-

proaching university costs. But the level of subsidy in the Egyptian system is excessive and not economically justifiable. For instance, much research can be paid for directly (and some will surely be passed on to students as research assistants). And credit market constraints on unsecured loans can be handled with a loan guarantee (with enough incentives for lenders to chase defaulters).

20. For instance, at Cairo University, revenue generated from approximately 140 special accounts amounts to about one-fourth of public funding. Although detailed budgets for other major universities are not available, there is evidence to suggest that the proportion of revenues from specialized accounts at universities other than Cairo University is much smaller (less than 5 percent), largely because of limited capacity in promoting and managing such entrepreneurial activities.

21. Assessment of the equity of education expenditure is typically undertaken through benefit-incidence quintile analysis of enrollments or education subsidy (expenditure). Because quintile enrollments are not available, enrollments by poverty groups, based on the 1999/2000 Egyptian Household Income and Expenditure Survey, provide the data for this rougher measure.

22. Note that our team performed an updated benefit-incidence analysis but we had doubts about the reliability of the household survey upon which it was based, as well as other data concerns. We should explore, with the government, if and how a more accurate update could be performed.

23. [http://timss.bc.edu/timss2003i/conference\\_IR.html](http://timss.bc.edu/timss2003i/conference_IR.html). Accessed December 14, 2004.

24. To be reviewed in a forthcoming PER Policy Note.

25. The MoF is changing the method of classifying budgetary expenditures and revenues, with support from the IMF. By 2007 the budget will be prepared on a basis consistent with the international standard for budget classification (the IMF’s GFS 2001). A dual system will be used for the 2006 budget. This reform will change the traditional classification of expenditures into four chapters and greatly improve the transparency of budgetary information.

26. At the operational level, an example of where such decision-making has negative impacts is the relationship between successful pilot projects

and their impact in the long term. It is relatively easy to have a successful pilot; but when attempts are made to go to scale, plans often get cut to fit the funds available and the cuts may appear independent of the priorities of the ministry unit implementing the programs. There is thus a premium on funding that is dependable across budget and time boundaries.

27. Other supporting agencies include the Services Fees Revenues Fund, Regional Center for Adult Education, Library of Alexandria Authority, National Authority for Educational Research, Projects Development Fund, National Center for Examinations and Education Evaluation (NCEEE), General Authority for Literacy and Adult Education, Education Development Fund, and Mubarak City Authority.

28. Note that contract teachers can be paid out of either chapter 1 or chapter 2 of the budget.

29. Any activity that involves changes in personnel-job descriptions, salary, numbers of staff-comes under the scrutiny of the Community Finance Officers Association (CFOA). Relatively simple changes in staffing in an MoE unit, for example, take time and effort and may not be allowed. Also, the legal framework under which an institution (such as the NCEEE) is established will constrain the organogram, and also the grades at which people can be appointed and their levels of qualification and experience. Thus, it is difficult to be truly innovative in the creation of new institutions. Also, CAO covers the entire public sector and aims to harmonize across ministries and departments. That can make some kinds of changes (such as increasing or differentiating teachers' pay) very hard to make. However, working around these rules in the interests of speed, as some donors try to do, more or less guarantees that the resulting unit or center will not be sustainable.

30. This practice is costly even in its basic administration. There are cadres of financial accountants throughout the government who work nearly full time to prepare, authorize, and execute all the various payments and bonuses.

31. While making this recommendation, we are aware that it is usually relatively easy to set up something new, but the result can be ever-increasing overlap and duplication of functions, despite CAO's best efforts to eliminate them. Positions are

not likely to be eliminated. Any efforts in this area must take these tendencies into account.

32. The source of financing for budget chapters 1 and 2 is the central government budget through the MoF. The basic component of wages is regularly deposited in governorate-level accounts with the Central Bank. However, payment delays may occur with respect to incentives and bonuses above basic pay because they are disbursed upon availability of funds at central levels. The capital investment budget is disbursed in quarterly tranches through the National Investment Bank (NIB). In general, the budget for many line items cannot be rolled over to the following year. Line ministries and local education departments may spend resources inefficiently simply so they do not lose budget allocations and also to support future requests for budget increases.

33. Interviews with NIB officials suggested the sizable budget overruns reflect inadequate cost projections and hedging for price variability, especially exchange rate variation, given the high content of imported materials (such as steel and cement) in most NIB projects.

34. A separate PER Policy Note will evaluate the capacity of the MoE in the areas of accounting, control, financial reporting, audit, and procurement.

35. For example, a local community might decide to have an all-girls' school to improve gender equity, but if this is not in the plan being implemented by the GAEB, they would not likely get one for years, even if they were in line to get a school.

36. Governors appear to have less autonomy than university presidents, at present.

37. They do not exhibit a great number of characteristics of effective schools. For example, they make (if anything) less use of group, project-based, or experimental activities-or remedial or enrichment work-than the regular schools.

38. Experimental schools (such as those funded by USAID) are public schools allowed to charge much higher fees to students, ranging from LE 200 to LE 2,000. A much bigger portion of fees collected remains within the school and is used for instruction-related expenses, such as building and equipment maintenance and incentives for teachers. Although accurate information on experimental schools by education level is still unavailable, some preliminary data show the number of such schools

in Egypt in 2003/04 to be more than 850 (from preschool to secondary), enrolling about 222,000 students.

39. Currently many schools have computers but no Internet access, and staff say they often do not allow students to use the computers because staff have to pay for maintenance out of their personal funds.

40. A future PER Policy Note will address these issues.

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