

The Hashemite Kingdom of Jordan



**National center for Educational Research and
Development (NCERD)**

**EDUCATION AND TRAINING
IN JORDAN: A DESCRIPTIVE AND
FINANCIAL SURVEY**

by

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Publications Series No. 30

December 1993

This Study was conducted in partnership with the Ministry of Education. It is the first in a series of three reports on the finance of education in Jordan. It was prepared under the auspices of the National Centre for Educational Research and Development (NCERD) under a contract with Harvard Institute for International Development, utilizing a Japanese grant administered by the World Bank. Lynn Ilon is an Assistant Professor of Economics of Education at the State University of New York at Buffalo, USA.

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Overview

Jordan has a relatively educated population with 72 percent of adults aged 15 and older having completed at least six years of education. Fully 92 percent of those aged 20-24 have completed at least six years indicating that contemporary schooling has reached nearly all young adults. Fifty seven percent of adults (aged 20-59) have at least nine years of school, and 38 percent have completed secondary school or beyond. Thirteen percent of this adult population (aged 20-59) is illiterate, but the majority of illiterates are over the age of forty. Table 1 shows education and illiteracy rates for Jordan in 1991. The table demonstrates the substantial and steady increase in education levels over the years.

TABLE 1 Educational Completion Levels: 1991					
Age Group	Illiterate	Percent Completing at Least			
		Grade 6	Grade 9	Grade 12	B.A.
15-19	2.09%	92.82%	67.77%	14.27%	0.00%
20-24	3.26%	91.79%	78.18%	50.03%	4.45%
25-29	5.42%	87.29%	73.88%	49.62%	11.57%
30-34	9.91%	78.70%	61.14%	41.78%	12.87%
35-39	17.05%	67.49%	49.05%	32.61%	10.80%
40-44	25.63%	56.40%	41.24%	28.02%	11.60%
45-49	34.39%	45.22%	31.25%	20.44%	8.39%
50-54	45.74%	32.97%	23.57%	15.00%	6.33%
55-59	52.98%	21.80%	12.23%	7.23%	2.57%
60+	65.71%	11.90%	6.48%	4.01%	1.42%
Total	16.78%	72.03%	56.00%	30.68%	5.99%
Source: 1991 Household Survey: Dept. of Statistics					

At present, there are three primary providers of education for the country's residents - the Hashimite Kingdom of Jordan (HKJ), the United Nations Relief and Works Agency (UNRWA), and private schools. The primary responsibility for education funded by the government is with the Ministry of Education (MOE), The Vocational Training Corporation (VTC), the Ministry of Higher Education (MOHE; which oversees community colleges), and with the government universities. The government also funds a number of other types of institutions as well. Several government ministries and departments have basic and secondary schools, and a number of secondary or tertiary training or professional institutions exist as well.

Participation is high for basic education (grades 1-10) with an estimated 88 percent of all 6-15 year olds in school. Secondary education enrollments are approximately 66 percent of the relevant age group. The government spends about 16.4 percent of its annual budget on education if one includes the amounts budgeted for scholarships within the various ministry's budgets (15.4 % otherwise). Of this, an estimated 62 percent goes to basic education, 12 percent to secondary

(academic and vocational), 26 percent to tertiary and the balance to adult education, training and other activities.

Institutions

A wide range of educational and training activities take place in Jordan. Education at the Basic level (grades 1-10) is nearly universal in most areas. Institutions providing this service fall largely into two types of administering authority - the Ministry of Education and private schools. Beyond Basic education, a variety of educational and training institutions exist. Table 2 lists the various education and training institutions and authorities.

TABLE 2 Education and Training Institutions; 1992/93	
Administering Authority	Institution
Ministry of Education	- Kindergarten (1). - Basic and Secondary schools (2605). - Community Colleges (2).
Ministry of Higher Education	- Ministry of Higher Community Colleges (14). - Scholarships (domestic and abroad)
Ministry of Health	- Institute of Specialized Nursing Studies. - Nussayba Al-Maziniya Nursing and Midwifery College. - Rufayda Al- Aslamiya Nursing and Midwifery College. - Medical Professions Institute. - Continuous Medical Education.
Ministry of Awqaf & Islamic Affairs	- Islamic Science College. - Kuliyat Al-Pawah W Aosal Al-Din (University). - Secondary Schools (4).
Ministry of Defense	- Military College of Islamic Sciences. - Military Technical College. - Basic & Secondary Schools (14). - Sharef Naser Ben Jamil College
Ministry of Social Development	- Community College of Social Work. - Special Education (Deaf, Blind, Handicapped) Various Academic Programs from Grade 1 - 10. - Vocational Education (Handicapped). - Women Education (Local Community Training)
Ministry of Planning	- Statistical Training Center.
Ministry of Communications	- Telecommunication College.
Various Ministries	- Gov't Financed Scholarships (Student Studying Abroad).
University Administrations	- Public Tertiary Institutions (4).
Vocational Training Corporation	- Vocational Training Centers (25).
Central Bank	- Banking studies Institute.
Geographic Center	- Geographic Center College.
Royal Scientific Society	- Princess Sumayya College for Informatics. - Princess Sumayya University College of Technology.
Civil Aviation Authority	- Queen Noor Civil Aviation Technical College.
Noor Al-Hussein Foundation	- Various Adult & Training Programs
The Queen Alia Jordan Social Welfare Fund	- Various Training & Adult Education Programs; Kindergarten.
UNRWA	- Basic Schools (201). - Wadi Al-Sier College. - Amman Training College.
UNESCO	- Training.
Private Sector	- Kindergartens (541). - Basic & Secondary Schools (329). - Tertiary Institutions (21).
Numbers in brackets refer to numbers of institutes.	

In addition to the nearly universal participation in basic education, residents of Jordan have a variety of other educational opportunities. The primary authority of educational provision lies with the Ministry of Education, Ministry of Higher Education and with the public Universities. The Ministry of Education provides education to approximately 74 percent of all students in grades 1-12. The Ministry of Higher Education oversees the operation of the country's 14 public community colleges. The public universities (four in 1992) provide education to approximately 47 337 students.

At the kindergarten and preschool level, more than 600 schools exist throughout the country which service approximately 34 percent of the age 4-5 population. Most kindergartens are private with 622 operational during the 1992/93 school year. The provision of basic and secondary education is the responsibility of the Ministry of Education. A number of private basic and secondary schools also exist in the country. During the 1992/93 school year, there were 384 private schools providing schooling for some or all of grades 1-12. This represents 12 percent of all schools for these grades educating eight percent of the country's students in these grades. Table 3 shows the distribution of schools by level and administering authority.

TABLE 3 Institutional Levels by Authority; 1992/93				
	MOHE/MOE	Other Gov't	UNRWA	Private
Kindergarten	1	1	0	622
Basic (Grades 1-10)	1952	7	200	312
Acad. Secondary (Grades 11-12)	604	9	0	72
Voc Secondary (Grades 11-12)	49	0	0	0
Community Colleges**	14	13	2	21
Universities**	0	4	0	4
Source: MOE Preliminary Tables (unpublished)				
**1990/91 MOHE Annual Statistical Report				

Public and non-profit organizations provide a number of training and educational opportunities for residents. At the MOE, several types of vocational training opportunities exist. The Vocational Training Corporation (VTC) provides short and long terms training for basic education graduates and some training at the professional and instructor level. Many institutes provide specialized training such as the Banking Institute (Central Bank), and Statistical Training Center (Department of Statistical). Finally, adult education is offered through the MOE and through a number of social-service organizations and foundations.

Participation (General Education)

Fully 86 percent of all 6 to 16 year olds attend school in Jordan. School enrollment rates reach their highest levels at age eight where an estimated 97.4 percent of all children in the country are

in attendance. Enrollment rates fall-off to 62.1 percent by age 16. Table 4 shows school enrollment rates by age for all kindergarten, basic and secondary schools in the country.

TABLE 4			
Enrollment Ratios by Age: 1990			
(Kindergarten, Basic & Secondary Only)			
Age	Population Estimate	Student Enrollment	Enrollment Ratio
3	100 546	5 035	5.01%
4	99 715	20 396	20.5%
5	99 306	47 959	48.3%
6	99 220	92 401	93.1%
7	99 357	95 676	96.3%
8	99 617	96 989	97.4%
9	99 900	96 141	96.2%
10	100 236	94 459	94.2%
11	100 651	91 395	90.8%
12	100 407	87 705	87.4%
13	99 148	80 731	81.4%
14	97 158	73 763	75.9%
15	95 058	65 341	68.7%
16	92 742	57 562	62.1%
17	90 265	43 418	48.1%
18	87 740	17 564	20.0%
19	65 084	5 717	8.8%

* Source: MOE 1990/91 Statistical Yearbook

** Source: Derived From Dept. of Statistics Statistical Yearbook 1990, p. 25

The vast majority of students enrolled in basic and secondary schools are in schools funded by the government. Fully three quarters (76 percent) of all students attend basic and secondary schools funded by the government. Of these, the majority are run and financed through the Ministry of Education. The picture is different for kindergartens where less than two percent of enrollees are in government financed schools. At the secondary level, 94 percent of all students are enrolled in government schools. Table 5 shows student enrollments for each of the four categories of administering authorities.

TABLE 5 Student Enrollments by Administering Authority; 1992/93					
	Ministry of Education	Other Government	Private	UNRWA	Total
Kindergarten	60	259	54 436	0	54 755
Basic	765 443	5 421	99 709	172 034	1 042 607
Academic Secondary	80 132	704	6 644	0	87 480
Vocational Secondary	22 359	6 163	136 ¹	563	29 222
Total	867 994	13 740	160 925	152 521	1 214 064
Source: MOE Unpublished 1992/93 preliminary statistics					

Expenditures

Approximately 11.4 percent of GDP for the country is devoted to education of some sort (not including UNRWA and charity expenditures). Of the estimate total amount committed, approximately 74 percent derives from government funds, 26.4 percent from private individuals or families. Table 6 shows expenditures as a percentage of GDP and GNP for the most recent year.

TABLE 6 Public and Private Educational Expenditures as Percent of GNP (market prices) and GDP(producers prices); 1992				
	Public	Private	Other	Total
% of GDP	7.9%	2.7%	.8%	11.4%
% of GNP	8.2%	2.8%	.8%	11.8%
Source: Derived from Central Bank Monthly Bulletin and various educational authorities				

The percentage of public expenditures devoted to education are high in Jordan. In recent years, educational expenditures have amounted to 19 percent of the government budget. Table 7 shows these numbers²

- ¹ No private vocational secondary schools were reported in this preliminary data. Possibly secondary schools are classified as "academic" even when a small number of students pursue vocational subjects.
- ² These numbers taken from MOE 1992 statistics. They differ slightly from some numbers supplied from source agencies. Numbers from source agencies were generally used for calculation of per student costs & revenues.
- ³ See technical notes for an overview of how estimates were made.

TABLE 7 Public Educational Expenditures as Percent of Total Government Expenditures	
	% of Total Gov't Expenditures
1982	13%
1988	16%
1989	18%
1990	18%
1991	19%
1992	18%
Source: Derived from budgets of various government authorities	

In addition to government and private funds, approximately 25.5 million JD was spent on education from other sources - primarily UNRWA. Table 8 shows the sources of these funds and gives an estimate of total expenditures ³

TABLE 8 Educational Expenditures 1992 (current JD)				
	Public	Private	Other Sources	Total
Charitable Foundations			369 436	369 436
Gov't Financed Scholarships	12 816 500			12 816 500
Ministry of Education	149 052 001	2 879 473		151 931 474
Ministry of Higher Education	2 493 000			2 493 000
MOHE Community Colleges	2 334 975	2 049 025		4 384 000
Private Basic & Sec Schools		46 456 686		46 456 686
Private Tertiary Institutions		6 000 000		6 000 000
Private Kindergartens		7 294 424		7 294 424
Public Universities	80 729 800	23 450 000		104 179 800
Other Gov't Institutions	8 865 802	331 769		9 197 571
UNESCO			33 051	33 051
UNRWA		64 821	25 280 179	25 345 000
Vocational Training Corporation	3 314 350	168 020		3 482 370
Totals	259 606 428	88 694 218	25 682 666	373 983 312
Source: Various authorities: See Technical Notes				

The dinars recorded above are probably an under-estimates. Figures were not available for Ministry of Defense expenditures on tertiary education, nor were enrollments for Ministry of Defense tertiary institutions³. Nevertheless, approximately 69 percent of all educational

expenditures derive from government sources while 24 percent derive from private sources including parental contributions for public schooling. (7% are other sources) Charitable organizations and UN organizations account for eight percent of total educational expenditures.

Public expenditures as a percent of public and private expenditures have declined in recent years. Table 9 shows that, in 1982 private expenditures accounted for less than a fifth of all expenditures while in 1992, eleven years later, private expenditures were slightly more than a quarter of the public/private combined expenditures.

TABLE 9 Distribution of Public and Private Educational Expenditures			
	% Public	% Private	% Other
1982	75.0%	16.3%	8.7%
1988	71.7%	22.0%	6.3%
1989	70.0%	23.0%	7.0%
1990	70.1%	22.5%	7.4%
1991	69.5%	22.9%	7.6%
1992	69.4%	23.7%	6.9%
Source: Derived from various educational authorities			

Aside from Ministry of Defense expenditures, an estimated 17.8 percent of all government expenditures are devoted to education. Basic education garners 49.5 percent of these expenditures. Table 10 shows expenditures by level.

⁴ Also, many institutions probably under-reported expenditures are overhead and administrative costs may have been included in the larger department and ministry budgets and not fully attributed to the time, energy and resources required to run the educational institutions under their control.

TABLE 10 Government Expenditures by Education Levels; 1992 ⁴		
	Expenditures	% of Total Education Expenditures
Basic	128 333 535 JD	49.5%
Secondary	26 278 207 JD	10.1%
Tertiary	102 045 294 JD	39.3%
Other	29 449 392 JD	1.1%
Total	259 606 428 JD	
* Division of basic and secondary is estimated		

UNRWA educates 14.6 percent of all basic students and represents 12.8 percent of all expenditures for this level of education⁵. Secondary education is funded by the MOE, and the Vocational Training Corporation (VTC) primarily, although the Ministry of Defense, Ministry of Awqaf & Islamic Affairs, Ministry of Social Development and Queen Noor Foundation also provide some education at this level. A variety of institutions sponsor tertiary level education and professional training. Four public universities receive some of their support through direct government grants or through diversion of specific tax revenues. Several other types of institutes and centers also offer courses at this level. Combined, 39.3 percent of total government expenditures on education go to the tertiary level.

Per student expenditures vary widely across administering authorities. Table 11 shows that non-MOE and non-MOHE government authorities spend considerably more per student than does the MOE or MOHE. At the Basic and Secondary levels, the Ministry of Defense spends more than twice as much per student although included in their costs are costs of food and some boarding (not provided at MOE schools). Tertiary level institutes run by various government authorities tend to be well financed with expenditures running nearly as high as the public universities on a per student basis.

⁵ None of the administering authorities reported separate basic and academic secondary expenses (except where only basic or secondary were administered). Thus, formulas were used to separate total costs into the various categories. For each administering authority, a different strategy was used in order to take advantage of the any details provided. Generally, various types of expenditures were apportioned using student and teacher distributions weighted by relative costs derived from other existing information. The authors have documented these calculations and can provide details upon request.

⁶ It should be noted, however, that expenditures for UNRWA have been figured from figures provided by UNRWA and do not reflect administrative costs at the international headquarters. Administrative costs at this level would add another 3-5 percent.

TABLE 11 Per Student Expenditures; 1992 (current JD)				
	MOE/MOHE	Other Govt ⁶	UNRWA	Private
Kindergarten	n/a	n/a	n/a	128
Basic	168	475	162	396
Secondary	224	471	n/a	1024
Comm.	337	976	585	317
College				
University	n/a	1963	n/a	n/a
Source: Various administering authorities				

Kindergarten

Approximately 34 percent of all four and five year olds are in some types of schools in Jordan; twenty percent of the age group are in kindergarten. Kindergarten consists of one or two years of schooling with 37 percent of enrollees in first year classes and the remainder in second year classes.

The vast majority of kindergarten students attend private schools. Since 1982, the percent served by private kindergartens has remained fairly stable as a percent of total kindergarten enrollments - around 98 to 99 percent. Table 12 shows enrollments by administering authority for 1982 and 1988-1992.

TABLE 12 Kindergarten Enrollment by Authority 1982; 1988-1992				
	MOE	Private	Other Govt	Total
1982/83	48	22 590	292	22 930
1988/89	0	37 081	829	37 910
1989/90	0	41 445	778	42 223
1990/91	33	44 194	629	44 856
1991/92	54	45 260	212	45 526
1992/93	60	54 436	259	54 755
Source: MOE Statistical Yearbooks				

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The Ministry of Defense runs some basic and secondary schools. These are high expenditure schools because they provide food for the students and some of the schools are boarding schools. Since this is not true for the Ministry of Education or UNRWA schools, the per student expenditures are not directly comparable.

Over the ten years from 1982/83 to 1991/92, kindergarten attendance has increase from 11.2 percent to 20 percent of children aged four to five. Table 13 shows the trend in attendance for 1982/83 and previous four years.

TABLE 13 Percent of Age Group Attending Kindergarten; 1982/83; 1987/88-1990/91	
	% of 4-5 year olds attending
1982/83	11.2%
1988/89	17.0%
1989/90	18.0%
1990/91	20.0%
1991/92	n/a
Source: MOE Statistical Yearbooks and Statistical Department Yearbooks	

A survey of 1000 families in Jordan revealed that the average annual fee paid for kindergarten attendance was JD 137 but actual amounts paid varied widely⁷. Twenty percent reported paying fees less than JD 10 while twelve percent reported annual fees of JD 200 or more. Thus the majority (68%) pay between 10 & 200 JD annually.

Assuming these estimates are correct, nearly seven million JD was spent on kindergarten fees in the country in 1992. Nearly all of this was from private sources although the Queen Alia fund has a small kindergarten program and the Ministry of Education usually has one class of kindergartners (for whom no cost information was available). Table 14 shows estimated kindergarten expenditures for the six years studies ⁸

⁸ The sample for this survey was not deliberately weighted to represent the population of Jordan. it was stratified to get good samples of the total range of households in the country.

⁹ See technical notes for a description of how private school fees were estimated across years.

TABLE 14 Kindergarten Expenditures (current JD)			
	Private Schools	Queen Alia Fund	Total
1982	1 468 350	0	1 468 350
1988	4 117 101	7 590	4 124 691
1989	4 724 730	13 492	4 738 222
1990	5 391 668	27 450	5 419 118
1991	6 449 625	22 668	6 472 293
1992	6 942 720	19 277	6 961 997
Source: See Technical Notes			

Per student expenditures have changed over the years in real terms. From a high of 159 (in 1988 JD terms) to 113 JD (in 1992 JD terms). The 1992 expenditures approximately comparable to 1982 expenditures as Table 15 shows.

TABLE 15 Per Student Expenditures for Kindergarten		
	Current JD	1990 JD
1982	64	112
1988	109	159
1989	112	130
1990	121	121
1991	142	131
1992	127	113
Source: See technical notes		

Basic Education

Basic education is primarily provided by the government and by UNRWA. The government provides for the education of three quarters of all basic students while UNRWA provides for 15 percent and 10 percent is provided for by private institutions. Of the government provision, less than one percent (.6 percent) are served in Ministry of Defense schools.⁹ As table 16 shows, the percent provided by UNRWA has declined in the 11 year period from approximately 20 percent to 15 percent while private provision of basic education has risen from about six percent to about 10 percent. It is not clear where shifts are occurring. Perhaps Palestinians living in camps are

¹⁰

The Ministry of Defense was unable to provide enrollments disaggregated by level of schooling. Disaggregation was accomplished by assuming that the same percent of total enrollments attending basic schools applied for the Min. of Defense schools as for the Min. of Education schools. See technical notes.

slowly moving away from the camps into areas served by government schools. Wealthy parents in government served areas, meanwhile, might be opting for private school enrollment. This is a question of interest as it represents a shift in the burden of educational costs and some indication of parents' willingness to pay for educational provision on a private basis.

TABLE 16 Basic School Enrollments				
	Government Schools	Private Schools	UNRWA Schools	Total
1982	486 988	35 182	133 729	656 899
1988	602 785	59 343	134 435	796 563
1989	676 584	67 170	133 808	877 562
1990	711 816	76 902	136 510	925 228
1991	763 675	88 431	136 500	988 606
1992	770 479	99 709	152 521	1 022 709
Source: MOE Statistical Bulletins and Tables				

Basic education has recently been expanded from nine grades before 1989 to ten grades beginning with the 1989 school year. Hence, educational budgets are difficult to judge over the 11 year period but can be compared for the four year period since that time.

The Ministry of Education, along with all other basic and secondary education providers, does not disaggregate their budgets by level¹⁰. While total costs for the institution are accurate,¹¹ totals reported reflect a complex set of disaggregation steps based on known expenditure patterns as well as student and teacher distributions.

Basic education accounts for nearly half of all educational expenditures in the country. Primary among these expenditures are government provided education through the Ministry of Education. Table 17 shows expenditures for basic education by administering authority for the period. The Queen Noor Foundation provides some basic educational services and activities and, while it does not enroll students, it does contribute to overall basic educational expenditures.

¹¹ Basic and secondary educational expenditures are largely grouped together. Some specific categories are clearly designated for a given level of education, but the bulk are not. Reported budgetary expenditures, then, are derived figures. See technical notes

¹² They are accurate insofar as the accuracy of the reporting institution. The MOE was able to provide actual expenditures for the period. UNRWA did likewise. The Ministry of Defense provided total budgeted figures but it is unclear whether all overhead, administrative and building costs are included in their budgeted figures. Private school costs were assumed to equal tuition fees. See technical notes for an explanation of how private school fees were calculated. See technical notes.

TABLE 17 Basic Education Expenditures by Administering Authority (current prices)				
	Government Schools	Private Schools	Queen Noor Foundation	UNRWA
1982	42 499 868	6 823 522	0	11 230 048
1988	71 187 025	18 398 457	0	14 508 665
1989	93 113 842	22 623 950	15 200	17 823 280
1990	108 255 952	27 715 454	17 640	21 940 482
1991	115 418 752	33 358 950	18 217	24 467 210
1992	130 624 764	39 513 966	17 100	24 689 562
Source: See Technical Notes				

About 22 percent of all educational expenditures are derived from private sources. In 1982 only 13 percent of expenditures were derived from private sources. The increase is largely due to private school enrollments.

TABLE 18 Sources of Basic Education Expenditures (current prices)				
	Govt Sources	Private Sources	Other Sources	Total
1982	41 791 801	7 588 424	11 173 213	60 553 438
1988	69 432 049	20 210 568	14 451 530	104 094 147
1989	91 107 624	24 687 036	17 781 612	133 576 272
1990	106 141 224	29 888 199	21 900 105	157 929 528
1991	113 145 580	35 690 135	24 427 414	173 263 129
1992	128 333 535	41 870 016	24 641 841	194 845 392
Source: Various Educational Authorities				

Even given the fact that basic education was redefined in 1989 to include 10th graders (thus, there should have been an increase in expenditures), actual expenditures in constant dinars have not increased significantly. For government financed schools, enrollments have been increasing faster than expenditures. For private schools the opposite is true. In recent years, UNRWA has also had a difficult time keeping pace with enrollments. Table 19 shows the increase in total expenditures on basic education for various authorities for two time periods, 11 years from 1982 - 1992 and four years from 1989 - 1992.

TABLE 19 Expenditure and Enrollment Changes in Basic Education (constant prices)						
	Government Schools		Private Schools		UNRWA	
	Enrollment	Expenditures	Enrollment	Expenditures	Enrollment	Expenditures
1982-1992	+63%	+57%	+176%	+196%	+14%	+12%
1989-1992	+14%	+7.7%	+48%	+34%	+14%	+6%
Source: See Technical Notes						

Rising enrollments without concomitant changes in expenditures means a slow deterioration in expenditures per student. Table 19 shows that although there has been an increase of 63 percent in government school enrollments, expenditures have risen by slightly less (57 percent). Such a loss is not terribly significant if it is exceptional, but as half of the loss as in the first seven years and the other half in the last four years, it possibly signifies a trend. Private school expenditures (as measured by tuition changes) are much higher.¹² In the 11 year period, there has been almost a doubling of expenditures while enrollments are slightly less. The last four years have seen this gain slide slightly - although fees revenues have increased nearly 75 percent in current prices, the real value of the increase has been only 34 percent - not quite keeping pace with increases in enrollment¹³. Enrollments are increasing at nearly 12 percent per year. Tuition costs are also rising rapidly. The educational CPI (consumer price index) indicates an increase of five percent in educational costs in the last year (compared with 3.8 percent overall inflation). Since public school contribution rates have not risen, it is likely that the cost increases are mostly a reflection of private school cost increases although the cost of school materials may also have risen for all students.

In real terms, per student expenditures rose in recent years but dipped most recently to 1982 levels. Private school spend more than twice as much per pupil as either government or UNRWA schools. Table 20 shows per student expenditures in real terms.

TABLE 20 Per Student Basic Education Expenditures (1990 JD)			
	Government	Private	UNRWA
1982	152	329	147
1988	173	453	158
1989	160	391	155
1990	152	360	161
1991	140	349	166
1992	151	353	144
Source: Derived from Governing Authorities			

Nearly a quarter of all public and private (exclusive of UN expenditures for UNRWA) expenditures on basic education come from private sources - fees either for public or private schooling. In 1982, only 15 percent of all costs were private. Private costs are primarily private

¹³ See technical notes for assumptions regarding private schools costs.

¹⁴ It is important to note here that private school tuitions were known only for the current year (and then only were estimated based on limited sampling). Previous years were estimated using an educational deflator. While many private school costs have likely remained fairly constant, anecdotal evidence suggests that for the more exclusive private schools, fees charges have risen rapidly in recent years. See technical notes for more discussion on how these fees were calculated.

schools fees although parental contributions for government and UNRWA schools comprise a small portion of total private sources (six percent).

Overall, the expenditures on basic education have kept fairly good pace with enrollment increases. As the section on MOE expenditures will reveal, however, much of this increase is due to capital expenditures and may disguise erosion of recurrent expenditures which are the hallmark of quality maintenance. Private schooling is becoming an increasing provider of basic education for the country. Marked enrollment increases indicate a growing demand for and willingness to pay for what is largely perceived as a highly quality of education. This trend is likely to continue. UNRWA schools are gradually losing ground as providers of basic education for the country. While enrollments continue to increase, they do so at a pace slower than either the government schools or private schools. If this trend marks the gradual integration of children into regular Jordanian schools, a primary policy issue will concern how such integration will take place and from where the resources will be garnered.

Secondary Education

Secondary education garners about ten percent of all expenditures for education in the country - down from about 17 percent in 1982. In part, this is due to the redefinition of secondary school to include only two years of schooling rather than three. Provision is primarily through the Ministry of Education where 78 percent of MOE students study in academic programs and 12 percent study in vocational programs. The growth in demand for secondary education - averaging a seven percent increase per year will need to have a matching increase in expenditures if quality levels are to be retained. The private sector is relatively small at this level of education - serving only five percent of students and even rapid growth in this sector will not be able to absorb the growing numbers of students who will wish to attend secondary school.

The Government of Jordan is the primary provider of education at the secondary level. Fully 95 percent of all secondary school students attend schools funded by the government. The Ministry of Education provides the bulk of these slots with programs for both vocational and academic secondary education. The Vocational Training Corporation provides vocational training at the secondary level with two largely full-time programs and a small number of short-term programs. Small numbers of students are also served by the Ministry of Defense and the Ministry of Awqaf and Islamic Affairs. Private schools provide secondary education to about five percent of the secondary students - or about 6800 students in the 1992/92 school year. Table 21 shows the distribution of secondary enrollees for the 11 year period.

TABLE 21 Secondary School Enrollees						
	Min. of Defense	Min. of Education	Min of Awoaf	VTC	Private Schools	Total
1982	701	104 145	0	2 932	6 294	114 072
1988	960	130 047	0	8102	6 831	145 940
1989	636	82 798	0	7 054	5 046	95 534
1990	647	89 186	284	7 256	5 414	102 787
1991	652	97 976	378	6 921	6 615	112 542
1992	687	102 491	427	7 331	6 780	117 716
Source: Various governing authorities and MOE Statistical Bulletin						

In 1989 the foundation level of education was redefined as comprising the first 10 years of schooling. Secondary education, then became grades 11 and 12. Ministry of Defense enrollments were reported only in aggregate terms - combining basic and secondary students and have been disaggregated here (see technical notes).

Secondary school expenditures have risen through the years along with enrollments although figures reported here are largely estimates¹⁴. Nevertheless, a rough idea of the magnitude and distribution of expenditures is possible and is reflected in Table 22.

TABLE 22 Secondary Schools Expenditures (current prices)					
	Government Schools	Private Schools	VTC	Others	Total
1982	14 539 264	3 147 000	2 483 303	0	20 169 567
1988	22 273 932	5 172 516	2 944 393	14 332	30 405 173
1989	17 004 285	4 400 112	3 157 767	19 856	24 582 020
1990	19 285 167	5 040 434	2 431 161	35 886	26 792 648
1991	20 693 410	6 449 625	3 514 918	21 164	30 679 117
1992	23 506 338	6 942 700	3 479 743	25 300	33 954 081
Source: See technical notes					

Private expenditures for education have increased as a percentage of total secondary expenditures. In 1982, 17 percent of educational expenditures derived from private sources (primarily private schools, although parental contributions to public schools was also a factor). By 1992, 23 percent of expenditures derived from private sources. Table 23 shows public and private sources of expenditure in current prices.

¹⁵ Once again, total expenditures (which are known) were disaggregated by using various known structural, enrollment and resource allocations for the various authorities. Private schools expenditures are assumed to be equal to tuition receipts (see technical notes).

TABLE 23 Sources of Secondary Education Expenditures (current prices)			
	Government	Private	Other
1982	16 717 350	3 452 217	0
1988	24 331 878	6 058 963	14 332
1989	19 538 104	5 024 060	19 856
1990*	21 073 136	5 683 626	35 886
1991	23 497 879	7 160 074	21 164
1992	26 278 207	7 650 574	25 300
Source: Various Governing Authorities			

The drop in expenditures in 1989 is attributable to the re-definition of secondary schooling to include two grades where it had previously included three grades. Expenditures have not kept pace with enrollments in either government or private schools. As Table 24 reveals, enrollments have outpaced expenditures by nearly twice the rate since 1989 while in private schools, expenditures are outpaced by enrollments by about a third.

TABLE 24 Expenditure and Enrollment Changes in Secondary Education (constant prices)				
	Government Schools		Private Schools	
	Enrollments	Expenditures	Enrollments	Expenditures
1982-1992	-1.6%	-19.1%	+7.7%	+12.6%
1989-1992	+23.7%	+2.7%	+34.4%	+21.1%
Source: See technical notes				

The failure of expenditures to keep pace with enrollments has meant a show deterioration of per student expenditures in real terms. Per student expenditures have declined by 18 percent in the 11 year period for government school students. In the private sector, it is estimated that expenditures per student have risen slightly in the 11 year period from 1982 to 1992 but declined in the near term about 11 percent. It is likely that expenditures at the more exclusive private schools have risen sharply along with tuition charges but that parochial school fees remain low along with expenditures.

TABLE 25 Per Student Secondary Education Expenditures by Authority (1990 JD)		
	Government	Private
1982	284	874
1988	281	1106
1989	281	1013
1990	241	931
1991	226	902
1992	232	913
Source: Various Governing Authorities		

Private expenditures for education, including fees collected from government schools students have risen in the period studied from about 17 percent of all secondary education expenditures to about 23 percent. Partly this is due to government fee increases in the early 1980s. Fees now cover about 2.4 of government school expenditures whereas they covered only 1.9 percent in 1982. Fees have not risen in the last several years, though and, whereas in 1988 fees covered approximately 3.5 percent of all costs, they have declined to the current rate of three percent.

Tertiary Education

Tertiary education is the province of many governing authorities in Jordan. Some 62 institutions provide education at this level (in 1992, not counting the new private universities). The Ministry of Higher Education oversees fourteen community colleges. There are four public universities. Other government agencies sponsor some 20 colleges and training institutes most of which are degree granting. UNRWA has two tertiary institutions and five new private universities are now functional or soon to be. The picture is one of rapid growth with private provision as well as public provision expanding at high growth rates.

Educational expansion at the basic and secondary level have meant an increase in demand for tertiary education. Approximately 11 percent of young adults now hold university level degrees. For those over the age of 45, this percentage declines sharply with only six percent of those aged 50-54 with university degrees and only three percent of those aged 55-59. Maintaining an adult population of approximately 11 percent university educated will provide a substantial challenge to the country.

Overall, enrollments have increased at the rate of six percent per year in the 11 year period. The most recent year for which figures were available revealed an astounding 18 percent increase - largely due to increases in public university enrollments of 28 percent from the 1991/92 school year to the 1992/93 school year. Table 26 shows enrollments for various groups:

TABLE 26 Tertiary Enrollments						
	Public Universities	MOHE & MOE Community Colleges	Other Government Institutions	Private	Other	Total
1982	19 602	7 976	1 583	18 053	1 020	48 234
1988	29 183	9 907	2 090	18 205	906	60 291
1989	30 035	10 842	1 828	24 009	865	67 579
1990	30 711	11 863	2 096	26 078	884	71 632
1991	36 844	13 090	2 396	21 979	917	75 226
1992	47 337	14 364	3 290	23 000	1 000	88 991
Source: Various Government Documents						

Enrollments are up substantially in the most recent year largely due to increased in public university enrollments although all areas showed gains in enrollments. Demand increased in 1992 due to several reasons. Obligatory military service (males only) was abolished so men who previously would have delayed university entrance were now available for immediate entrance. Second, returnees from Kuwait (a result of the gulf crisis) now sought entrance to Jordanian universities. Third, the recent devaluation of the Jordanian dinar meant that educational expenses for overseas study increased substantially for the Jordanian student and their families who may have opted to seek entrance to Jordanian institutions instead.

Provision of tertiary education is increasingly a function of government. In 1982, 60 percent of all tertiary students were enrolled in government schools. In 1992, this percentage rose to 73 percent. Public expenditures for tertiary level education have risen 160 percent in the 11 year period - 39 percent in real terms. Private expenditures are actually down in real terms (about 14 percent) although private expenditures represent a relatively small share of total expenditures. Table 27 shows share of total expenditures and changes in total expenditures for each type of tertiary expenditure.

TABLE 27 Share of Tertiary Expenditure and Growth in Expenditure by Type; 1992 (in constant prices)		
	Share of Total in 1992	Growth in Expenditures 1982/83 - 1992/93
Government Scholarships	9.4%	+76.0%
MOHE Community Colleges	3.6%	-16.1%
Min. of Higher Education	1.8%	n/a
Other Gov't Institutions	2.7%	+74.4%
Private Comm. Colleges	5.4%	+6%
Public Universities	76.6%	+43.5%
Foundations	nil	n/a
UNRWA	.5%	-5.2%
Total		+42.1%
Source: See Technical Notes		

Tertiary education forms a substantial portion of educational expenditures in Jordan. Forty percent of all educational expenditures are at the tertiary level - and this amount has stayed stable over the 11 year period studied. Total expenditures total JD 136 million JD in 1992. Table 28 shows educational expenditures for 1992/93 by authority.

TABLE 28 Tertiary Expenditures; 1992/93 (current JD)				
	Public Sources	Private Sources	Other Sources	Total
Government Scholarships	12 816 500	0	0	12 816 500
MOHE Community Colleges	2 725 149	2 108 795	0	4 833 944
Min. of Higher Education	2 493 000	0	0	2 493 000
Other Government Institutions	3 280 845	320 389	0	3 601 234
Private Community Colleges	0	7 294 424	0	7 294 424
Public Universities	80 729 800	23 450 000	0	104 179 800
Foundations	0	0	4 000	4 000
UNRWA	0	0	655 438	655 438
Total	102 045 294	33 173 608	659 438	135 878 340
Source: See technical notes				

Educational expenditures have not kept pace with enrollments. While total enrollments increased some 84 percent in 11 years, total expenditures rose only 42 percent in real terms. The result has been a deterioration of per student expenditures. Table 25 shows per students expenditures in 1982, 1988 and 1992 for various authorities

TABLE 29 Per Student Tertiary Expenditures by Administering Authority (1990 JD)			
	1982/83	1988/89	1992/93
MOHE Community Colleges	645 JD	738 JD	300 JD
Other Government Institutions	1163 JD	1566 JD	976 JD
Private Community Colleges	358 JD	415 JD	283 JD
Public Universities	3303 JD	3734 JD	1963 JD
Others	605 JD	834 JD	588 JD
Source: Various Administering Authorities			

Clearly, public universities are expensive to run although their per student expenditures have decreased substantially¹⁵. The cost of other government institutions is also high and likely to be

¹⁶ Public universities receive only small direct contributions from the HKJ budget, and thus, might appear to be a relatively small cost to the country. The account procedures and revenues are difficult to trace (but see technical notes for a fuller explanation of expenditures and revenues), but universities receive revenues in the form of grants and loans from the government, sometimes negotiate their own grants or loans from internal or external sources, and invest in property and other revenue sources. The largest portion of this is "off-budget" with regard to the national

an undercount as it is likely that many of the institutions did not include implicit administrative overhead (generally they are attached to a government department or ministry). Community colleges are much cheaper to run - as well they might be because the staff costs, facilities costs and investments in libraries and other learning environments would be much lower.

The overall trend is one of declining expenditures per student in all cases and is cause for reflection. Given the substantial increase in percentages of students completing basic and secondary education, demand for tertiary education can only rise. Even if current levels of education (that of young adults at present) is to be maintained, tertiary enrollments must increase to keep pace. Jordan has enjoyed a rapid increase in the educational attainment of its population. Maintaining this level will pose a challenge as tertiary expenditures decrease.

Ministry of Education

The Ministry of Education offers education from kindergarten through the twelfth grade.

Kindergartens (predominantly private) are regulated and available for children aged 4 to 6. The Ministry of Education has only one kindergarten under its direct control, but, as with basic education, it supervises all private institutions. Attendance at kindergarten is optional.

Basic education comprises ten years of schooling starting at the age of six. As a compulsory cycle, basic education accommodates children aged 6 -16 although older children who have either repeated a grade or began school late are also served. Generally, the maximum age is 19.

Secondary education consists of two years for students aged (16-18) who completed the basic cycle. Secondary education is designed to equip the children either to take up higher levels of education, or to prepare them for entry into the world of work. Children are admitted to secondary education according to their abilities and interests.

Secondary education is comprised of two major programs. Comprehensive secondary education provides general unified cultural base for all children, in addition to a specialized academic or vocational education. Applied secondary education provides intensive vocational training and apprenticeship.

The provision of these educational services is overseen by an administrative structure comprising the central MOE office, district directorates and school-level administration. The central office of the Ministry of Education, is comprised of general directorates (providing general administrative services), specialized directorates (providing services in specialized curricular and instructional areas), sections and divisions. Each district (23 in all) has an administrative office - the District

budget, but has, for these purposes, been considered a public expenditure/revenue. Any monies garnered by or committed to universities can be viewed within the larger realm of public revenues and costs and, in so far as the universities are government institutions, are public funds.

Directorate of Education, comprising technical and administrative sections. Each school has an administrative staff - either a principal or head teacher and, depending upon the size of the school, additional administrative support staff. Advisory bodies also exist at the central and district levels.

The central office is headed by two secretary-generals, (ADMIN, Teaching) accountable to the Minister of Education. Each secretary general has assistant secretary general reporting to him. The general directorates are headed by director-generals accountable to the Secretary - General. The District Directorate of Education is headed by the Director of Education assisted by directors for technical and administrative affairs.

Enrollments

Enrollments continue to rise at MOE schools. With population growth rates of nearly four percent, Jordan can expect that enrollments for all levels of education will continue to increase. In the ten year period from 1982/83 to 1991/92, enrollments rose nearly 35 percent - an annual increase of approximately 2.8 percent. The Gulf Crisis of 1990/91 caused a substantial rise in enrollments calculated in the 1990/91 and 1991/92 schools years.¹⁶ Enrollments for 1990/91 and 1991/92 rose 5.5 percent and 7.7 percent respectively.

In the school year 1992/93, enrollments have grown much more modestly - about 1.3 percent. Given continuing relatively high birth rates, this increase is small and may indicate either some movement of families out of the country or some drift into private schools.¹⁷

¹⁷ Enrollments are taken at the beginning of the school year in September. It is likely that not all returnees had registered in school at the time the 1990/91 statistics were taken.

¹⁸ Private school enrollments for 1992/93 were not available at the time of this publication. Total 1992/93 MOE enrollments include an *estimate* of adult education enrollments as no actual numbers were available for 1992/93. Estimates are based on growth rates from previous years.

TABLE 30 MOE Enrollments 1982; 1988-1992						
	1982/83	1988/89	1989/90	1990/91	1991/92	1992/93
Kindergarten	48	n/a	n/a	33	52	60
Academic 1-12	570 901	707 559	735 329	776 879	835 869	845 575
Hotel College	313	211	256	314	340	419
Agricultural	308	400	442	602	721	893
Other Voc.	16 415	20 288	18 694	18 466	19 943	21 047
Adult	9 047	10 475	8 866	9 667	11 288	11 501
Total	597 032	738 933	763 587	805 961	868 213	879 495
Percent of Total						
Kindergarten	nil	n/a	n/a	nil	0.01%	0.01%
Academic 1-12	95.62%	95.75%	96.30%	96.39%	96.27%	96.14%
Hotel	0.05%	0.03%	0.03%	0.04%	0.04%	0.05%
Agricultural	0.05%	0.05%	0.06%	0.07%	0.08%	0.10%
Other Voc.	2.75%	2.75%	2.45%	2.29%	2.30%	2.39%
Adult	1.52%	1.42%	1.16%	1.20%	1.30%	1.31%
Source: MOE Statistical Yearbooks and Circulars						

Finance

The MOE produces a yearly budget estimate which is approved with the national budget in January of each year. Both recurrent (known as current) and capital expenditures are included. The capital budget appears in two part - that financed by Jordan and that financed by outside sources. Much of the capital budget for the MOE is actually included in either the Ministry of Finance or Ministry of Planning budgets. This is a relatively new phenomenon and, reportedly, is done in order to keep stricter controls over this money. Table 31 shows the percentage of MOE moneys which appears in the budgets of other ministries.

TABLE 31 Percent of MOE Capital Expenditure Not in MOE Budget	
Year	Percent
1982	0%
1988	55%
1989	75%
1990	59%
1991	79%
1992	70%
Source: Government Budgets; 1982; 1988-1992	

A large percentage of the capital expenditures for the Ministry of Education are not reflected in the MOE capital budget. In 1992, seventy percent of all MOE capital expenditures were budgeted in either the Ministry of Finance or Ministry of Planning budgets.

Initial estimates of expenditures tend to be fairly accurate for current expenditures; less so for capital expenditures. Estimates for Fiscal Years 1987-1992 show that any given year's *re-estimate* varies, on average, three percent from the previous years' *estimate* for current expenditures and by 10.6 percent for capital expenditures. Final (actuals or preliminaries) vary an average of 2.3 percent from original estimates in the case of current expenditures and by 9.7 percent for capital expenditures. Some re-estimates differ substantially from the previous year or original years' estimates especially in the case of capital expenditures. The estimate for 1991 capital expenditures (1992 Budget Law) was 21 percent higher than its original estimate.

TABLE 32 Public and Private MOE Expenditures (1992 JD)		
	Private	Public
Basic	2 283 675	125 948 922
Secondary	536 028	22 468 925

Expenditures¹⁸

The government expenditures devoted to the Ministry of Education have grown about three percent over the ten year period from 7.3 percent to 10.4 percent. As a percentage of government expenditures exclusive of government debt, increases have been slightly higher. Table 33 shows these percents for 1982 and 1988-1992.

¹⁸ Unless otherwise stated, the following refers to the HKJ National Budget allocation to MOE. Expenditures derived from the education tax are discussed separately.

TABLE 33 Percent of Government Expenditures to MOE		
Year	Percent of Total Government Budget	Percent of Government Budget Minus Debt Service
1982	7.22	7.36
1988	8.27	9.14
1989	9.55	10.59
1990	10.00	10.81
1991	10.31	11.56
1992	10.15	11.50
Source: Government Budgets, 1982; 1988-1992		

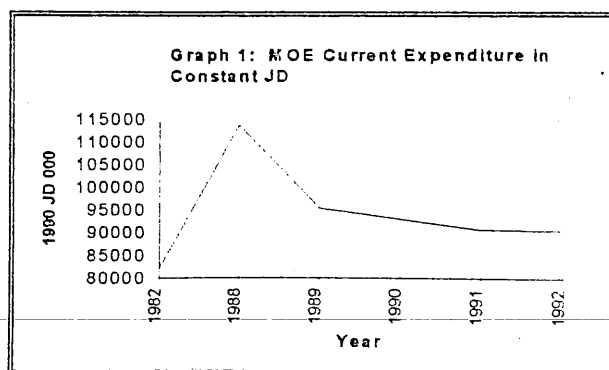
As a percent of current government expenditures, MOE current expenditures have remained fairly constant - about 11 percent. The percentage of total government capital expenditures devoted to education, though, have seen a fairly steady rise from about 2.5 percent to 13.6 percent of total capital expenditures. Table 34 shows these trends.

TABLE 34 Share of Government Current and Capital Expenditures to MOE		
	% of Current	% of Capital
1982	11.2%	2.5%
1988	12.5%	3.2%
1989	11.9%	6.9%
1990	10.9%	10.3%
1991	11.2%	12.9%
1992	10.8%	13.6%
Source: MOE Budget Dept. and National Budget Laws		

MOE expenditures have risen slowly over the years both in current and real terms. Average annual growth rates of total expenditures has been three percent in real terms. Current expenditures have risen only marginally - about one percent per year while capital expenditures have risen at an annual rate of about 11 percent. Table 35 shows current and capital expenditures for the six years surveyed in both current and constant dinars.

TABLE 35			
MOE Expenditures: Current and Constant JD			
	Current	Capital	Total
Current JD			
1982	47 039 000	8 168 000	55 207 000
1988	77 902 000	11 000 000	88 902 000
1989	82 000 000	16 884 000	98 884 000
1990	92 942 000	25 316 000	118 258 000
1991	98 000 000	30 248 000	128 248 000
1992	101 600 000	44 707 000	146 307 000
Constant (1990) JD			
1982	82 177 133	14 269 496	96 446 629
1988	113 814 822	16 071 000	129 885 822
1989	95 284 000	19 619 208	114 903 208
1990	92 942 000	25 316 000	118 258 000
1991	90 650 000	27 979 400	118 629 400
1992	90 424 000	39 789 230	130 213 230
Source: MOE Budget Dept.			

Recurrent expenditures of the Ministry have increased over the period in both current and constant terms although these increases have been small - about one percent per year in real terms. Graph 1 shows trends in current expenditures. Approximately seventy percent of all expenditures by the MOE are budgeted as recurrent expenditures, although this percentage has been shrinking. In 1982, 84 percent of total expenditures were recurrent, in 1988, 88 percent and in 1992, 69 percent.



Very little of the expenditures for MOE schools are paid for by fees. Fees are collected from approximately 85 percent of students and are primarily used at the school level although a portion are sent to the directorate. The percentage of total expenditures covered by fees has declined in recent years as total expenditures have risen and fee structures have remained unchanged. Table 36 shows this trend.

TABLE 36 Percentage of Expenditures from Student Fees	
	Percent
1982	1.8%
1988	2.7%
1989	2.3%
1990	2.1%
1991	2.1%
1992	1.9%
Source: Derived from MOE figures	

Education Tax

In addition to the HKJ national budget allotment the MOE receives revenue from an education property. In 1992, this amounted to 1.8 percent of all MOE expenditures. Table 37 shows education tax expenditures for the past five years.

TABLE 37 Education Tax			
	Current	Capital	Total
1989	3 587 000	3 000 000	6 587 000
1990	2 247 000	2 150 000	4 397 000
1991	1 252 000	1 515 000	2 767 000
1992	1 490 000	1 255 000	2 745 000
1993	1 431 000	1 006 000	2 787 000*
* Includes 350 000 Loan installment payment			

Recurrent expenditures have grown, overall, about one percent per year in the last ten years (in real terms). Not all categories have grown steadily. Adult education is about a third the size (in terms of expenditures) as ten years ago. Most vocational education categories have shrunk. In-service training shrank substantially during most years, but recovered in 1991/92 for an average yearly gain of five percent. Current expenditures of curriculum and texts have also grown. Table 38 shows gains and losses in major expenditures categories:

TABLE 38 Average Annual Changes in Major Spending Categories (constant JD)	
	Average Annual Change
Administration	+0.74%
General Education	+1.22%
Hotel College	-8.26%
Vocational Education	-0.75%
Agricultural Education	-7.22%
Adult Education	-11.47%
Social and Sports Activities	-6.51%
In-Service Training	+5.17%
General Exam	-0.75%
Curriculum and Text Books	+4.36%
Overall Average	+0.96%
Source: MOE Expenditure Report	

Capital expenditures have grown about 11 percent per year with the largest increase occurring from 1991 to 1992 budgets - an increase of 42 percent.

Percent of MOE expenditures going to various levels of education have stayed fairly stable over the years. In 1989, basic education was redefined to include 10th grade resulting in a shift of expenditures from secondary into basic. Other than this shift, expenditure spreads have remained fairly constant with some movement from vocational secondary into academic secondary.

TABLE 39 Distribution of Expenditures to Levels Across Years (Inclusive of Education Tax)				
	Basic	Academic Secondary	Vocational Secondary	Other
1982	73.5	18.5	6.9	1.1
1988	75.6	19.8	3.9	.6
1989	84.2	11.6	3.7	.5
1990	84.6	11.9	3.1	.4
1991	84.5	12.3	2.7	.5
1992	84.5	12.4	2.7	.4
Source: Derived from MOE Expenditures Tables				

Per student expenditures have declined steadily in recent years from JD 128 per basic education student in 1982/83 to JD 101 in 1992/93. Expenditures have declined most rapidly in the Secondary Vocational fields although General Education (covering Basic and academic Secondary) have also declined. Table 40 shows per student expenditures for 1982/83 and 1988/89-1992/93 in real terms for various types of educational programs.

TABLE 40 Per Student Expenditures (1990 JD) ¹⁹ (Inclusive of Education Tax)						
	1982/83	1988/89	1989/90	1990/91	1991/92	1992/93
Recurrent Expend.						
Basic Education	128	145	126	114	102	101
Acad. Sec. Education	186	211	185	167	150	148
Vocational Education	181	169	137	136	106	104
Avg. Recurrent	140	156	132	120	107	106
Avg. Capital	24	22	31	35	34	47
Source: Derived from MOE expeditors data						

Overall, recurrent per student expenditures have declined 24 percent over the ten year period while capital expenditures have increased by 96 percent.

Other Education and Training Institutions

Foundations

Noor Al - Hussein Foundation

The Noor Al-Hussein Foundation was created by Royal Decree in 1985 to coordinate and oversee the many projects and programs which Queen Noor has helped establish or which she personally supports in the fields of culture, education, social welfare and human and community development. The Foundation's projects are supported by private sector contributions from Jordan and abroad, as well as by international organizations. The Foundation's programs reflect its fundamental mission to identify specific human needs, and to develop projects and the requisite human skills to respond to those needs.

The Programs & Activities:

The Royal Endowment for Culture and Education:

- a) The Scholarship Program.
- b) The Research Program.
- c) English Teacher Training.

²⁰ Administrative costs have been distributed over the various programs in proportion to the weight of total expenditures each program represents. All other costs have been explicitly delineated in the MOE budget and were taken as given.

d) The Pioneer Program for Gifted Students.

- The Jubilee School.
- The National Music Conservatory.
- Theater in Education.
- The Center for Early Childhood Education.
- Day of the Arab Child and International Day of the Child.
- Arab Children's Congress.
- Children's Clubs.
- The Children's Heritage and Science Museum.
- The Mobile life and Science Museum.
- The Queen Noor Award for Children and the Arts.
- The Jerash Festival of Culture and Arts.
- The National Hospital for Children.
- Health Communications for Child Survival Program.
- The Institute for Child Health and Development.
- SOS Children's Village.
- Al Noor Project for the Development of Rural Areas.
- Women and Development Projects.
- Handicrafts Development Project.
- Salt Handicrafts Training Center.
- Noor Al Hussein Foundation Center - Aqaba.

Queen Alia Social Welfare Fund

The Queen Alia Jordan Social Welfare Fund came into existence by a Royal Decree in 1977. The fund is an independent, private, non-profit-making social development organization.

The fund strives to bring together support for comprehensive social welfare services and coordinate efforts to meet social needs. It brings social services directly to those who need them. The framework is based on field studies that assess need and recognize the manpower and material capabilities of local communities. It also supports other voluntary societies technically and financially.

The fund provides both technical and financial aid and coordinates with other Arab and international organizations concerned with Jordanian social development. It sponsors programs in voluntary social work, Social Services Centers, rural development women's education and training as well as studies, research and seminars.

The fund receives its financial assistance from individuals, Jordanian institutions and companies, other Arab States, various Jordanian and international organizations, and other sources as agreed by the Board of Trustees.

The Royal Scientific Society

The Royal Scientific Society was established in 1970 as a national institution for research and industrial services. Two types of educational activities occur at RSS - tertiary level education and the educational research activities organized under the National Center for Educational Research and Development.

National Center for Educational Research and Development (NCERD)

The NCERD is a national institution for educational research and development created in 1989 under the Higher Council for Science and Technology (part of the Royal Scientific Institute).

The NCERD is comprised of two units: the Educational Research Unit and the Educational Development Unit. The Educational Research Unit is mainly concerned with conducting research directed toward the improvement of quality of education and efficiency of the educational system. The Educational Development Unit is responsible for appraising subprojects prepared by beneficiaries, supervising the implementations of subprojects and supervising funds for approved subprojects.

Princess Sumayya University College of Technology

The University College of Technology and was granted a license in 1990 and is authorized to provide an undergraduate level of education in computer science, applied engineering for electronic maintenance, computer skills and Engineering of Electronic Maintenance.

The basic preparation for computer skills requires four years of college study. The student pays JD 50 upon registration for each credit hour. One hundred twenty full time students-men and women-were enrolled for the first semester, 1991.

Princess Sumayya College for Informatics

The College was established in 1977 to contribute towards provision of trained manpower in the field of computer science and to establish a long-term and deep rooted association between theory and practical training.

The College provides a two-scholastic year program. The courses of the program constitute sixty-eight credit hours. A Programming and Systems Analysis Diploma is awarded by the Ministry of higher Education. The College also provides specialized short-term training courses for local and regional institutes upon request. These courses are offered in subjects as underlined above. The length of each course varies from two weeks to ten weeks depending on the course.

UNRWA

UNRWA oversees the education of children living in the Palestinian camps in Jordan. As such, approximately fifteen percent of all Basic education students attend UNRWA schools. UNRWA also provides some secondary-level training.

At the age of 5-8 registered Palestine refugee children are accepted into the first grade of UNRWA schools. As a general rule, the education program in UNRWA schools follows the same curricula and uses the same textbooks as the government schools. Within this frame-works, UNRWA offers 10 years of basic education in Jordan. At the higher education level, UNRWA awards a limited number of scholarships to academically outstanding students who pass the State General Secondary Examination. Furthermore, UNRWA provides teacher and vocational co-educational training in its two residential training centers, namely, Amman Training Center and Al-Sier Training Center. In - Service teacher training and supervisory and developmental activities in respect of school education is rendered by the Education Development Center (EDC).

The Department of Education in Jordan is responsible for the administration of school education, teacher training, vocational training and the scholarship program. The Department is headed by Field Education Officer who is administratively attached to Director of UNRWA Affairs, Jordan and professionally to the Director of Education, HQ., Vienna. The Jordan Field is sub-divided into five education areas, each headed by an Area Education Officer who is assisted by a number of school supervisors.

Due to the Agency's lack of funds for school construction it has been resorted to double - shifting. In Jordan, more than 90% of schools are operating on double - shift basis. Pupils who successfully complete the preparatory cycle in UNRWA schools and satisfy the admission requirements as laid down by the Ministry of Education may proceed to the government secondary schools or join the post preparatory vocational training courses at UNRWA's training centers and other institutions.

In the elementary cycle one teacher is assigned for each class-section, while in the preparatory cycle 1.2 teachers are assigned for each class-section. In general, teachers who are not professionally qualified must undergo an in-service training of two-year duration for the elementary cycle and one year for the preparatory cycle. Since 1964, the Agency has carried out intensive in-service teacher training for upgrading the professional qualifications of its teaching staff in both the elementary and preparatory cycles through the UNRWA/UNESCO Institute of Education and departmental courses.

Other Government Tertiary Institutes

Several types of tertiary level training and education institutes exist in Jordan. Below is a list with the overall administering authority identified.

TABLE 41

Non-MOHE Tertiary Institutions

Institution	Administering Authority
Amman Training College	UNRWA
Banking Studies College	Central Bank
Community College of Social Work	Ministry of Social Development
Geographic Center College	Geographic Center
Institute of Specialized Nursing Studies	Ministry of Health
Islamic Science College	Ministry of Awqaf & Islamic Affairs
Kulliyat Al-Pawah W Aoosal Al-Din University	Ministry of Awqaf & Islamic Affairs
Military College of Islamic Sciences	Ministry of Defense
Military Technical College	Ministry of Defense
Nussayba Al-Maziniya Nursing & Midwifery College	Ministry of Health
Medical Professions Institute	Ministry of Health
Princess Sumayya College for Informatics	Royal Scientific Society
Princess Sumayya Univ. College of Technology	Royal Scientific Society
Queen Noor Civil Aviation Technical College	Civil Aviation Authority
Rufayda Al-Aslamiya Nursing and Midwifery College	Ministry of Health
Sharaf Naser Ben Jamil College	Airforce
Statistical Training Center	Ministry of Planning
Telecommunication College	Ministry of Communications
Wadi Al-Sier College	UNRWA

Enrollments in these institutes has nearly doubled in the 11 year period studied - from 1179 in 1982 to 2515 in 1992. Enrollments for those institutes known (Ministry of Defense enrollments are not known) appear below:

TABLE 42

Non-MOHE Tertiary Enrollments

	1982	1988	1989	1990	1991	1992
Banking Studies Institute	87	123	112	110	111	106
Geographic Center	128	75	43	49	15	30
Ministry of Health	544	742	716	744	704	1296
Civil Aviation Authority	196	242	141	183	230	262
Telecommunications Coll.	58	165	136	123	131	142
Min of Awqaf & Islamic Af.	28	67	56	170	330	420
Statistical Training Center	38	46	34	19	24	25
RSS	100	110	140	165	258	234
Full-time Total	1179	1570	1378	1563	1803	2515

Expenditures have nearly doubled as well - from roughly 1 mil JD to just over 2.2 mil JD in 1992. In real terms, this represents a 75 percent increase.

TABLE 43

Expenditures of Non-MOHE Tertiary Institutions (current JD)

	1982	1988	1989	1990	1991	1992
Banking Institute	88 100	142 215	146 010	183 741	168 591	196 794
Civil Aviation Authority	63 500	154 400	166 500	169 804	173 334	195 462
Geographic Center	55 808	45 000	51 400	31 126	38 850	37 000
Ministry of Communications	26 158	72 105	57 528	61 007	78 207	91 306
Ministry of Health	495 320	1 367 378	1 496 774	1 901 217	2 113 675	2 359 573
Statistical Training Center	15 000	42 501	46 255	43 876	45 998	52 125
Min. of Awqaf & Islamic Affairs	59 050	77 100	74 650	92 615	151 100	253 050
Min. of Social Development	198 384	244 112	238 927	205 835	204 763	268 611
Royal Scientific Society	52 500	94 500	105 000	120 000	154 010	145 450
Total	1 053 820	2 239 311	2 383 044	2 809 221	3 128 528	3 599 371

VTC

The Vocational Training Corporation (VTC) was established in 1976, as one of the projects of the Five year Development plan (1976-1980). In 1977 VTC added apprenticeship and in-plant training.

The VTC has established a network of training centers and institutes throughout the country, and has links to about 3000 employers. VTC now has 25 operational training centers and institutes. In addition, the VTC encourages and assists both private and public sectors in establishing their own training centers. There are now (8) training centers owned by large enterprises. They operate under close cooperation and coordination with the VTC.

Since 1977 VTC trained 64082 trainees as follow:

a- Apprenticeship Programs :

VTC started implementing apprenticeship programs in 1977 . At the end of 1991 VTC had trained 26592 apprentices in about 43 training programs. The total number of organizations, companies and private workshops cooperating with VTC in conducting apprenticeship programs reached more than 3260 .

b- Medium - Term Training Programs:

VTC started implementing medium term training programs in 1985. Since then, VTC has trained 5354 trainees in about 27 training programs.

c- Short - Term Training Programs:

VTC started implementing short - term training programs in 1977. In 1987 it started to promote employment opportunities through retraining courses for unemployed youth and adults in some selected trades, in which they are offered an employment opportunity. The total number trained through these courses since 1977 till the end of 1991, is 32136.

d- Skill Upgrading Programs:

In 1990 VTC implemented 27 skill upgrading programs of 150-200 hours duration in 8 specialization's. Total number trained from 1977 till the end of 1991 is 3899 participants.

e- Instructor and Supervisory Training Programs :

In 1991 IST trained about 652 instructors and supervisors in 36 training programs. While 39 participated in these training programs from 1982 to the end of 1991.

f- Occupational safety and Health Training Programs:

In 1991 OSHI trained about 405 participants in (13) training programs. While 3455 participated in these training programs up to the end of 1991.

The table below lists the various training centers and institutes and their capacity levels.

TABLE 44 Full Capacity of VTC Training Centers and Institute			
	Apprentice- ship	Short Term training	Employment for Job seekers
Hakama T.T.C	1000	200	200
Ramtha T.T.C	300	100	100
Yajuz T.T.C	1300	200	150
Al-Hashimeya T.T.C	1100	100	0
Drivrs T.C	0	100	300
Ein-elbasha T.T.C	1300	150	200
Sahab T.T.C	900	100	0
Sahab Hotel T.C	200	100	100
Middle ghore T.T.C	250	100	150
Quesmeh T.T.C	300	200	0
Masharei' T.T.C	600	100	150
Aqaba T.T.C	400	50	150
Marka T.C for girls	250	50	150
Urban development T.C's	0	600	200
Ghore El-safi T.T.C	400	50	100
Occupational Safety & Health Inst.	0	350	100
Instructor & Supervisory Training Ins.	120	600	50
Tafielah T.T.C	200	50	150
Total	8620	3200	2250

The table below shows enrollments in the various programs since 1982.

TABLE 45 Enrollments in VTC by Type of Program							
	Safety Courses	Instructor Courses	Upgrading	Job Seekers	Beginners Courses	Intermediate Courses	Apprentice -ship
1982	0	45	76	0	761	0	1529
1983	0	145	150	0	1229	0	1980
1984	99	293	0	0	1416	0	2776
1985	87	272	165	0	1268	144	2648
1986	187	281	328	0	2031	422	2877
1987	181	431	541	0	2404	665	2540
1988	279	596	548	0	2363	767	2602
1989	417	653	330	294	2282	553	1990
1990	299	491	271	256	1624	1474	1918
1991	405	652	506	2051	3195	1329	3157

Technical Notes

This document was intended to be a survey of financial and expenditure parameters of education in Jordan. As such, a comprehensive picture was attempted of all educational activities in the country. Of course, as with all comprehensive pictures of complex institutions and structures, problems of definition, detail and assumptions arose. Undoubtedly, there are activities in Jordan not included in this overview which could be termed "education." Just where one draws the line between, for example, training and education is difficult. In general, then, any institutions formally organized to provide education to populations generally served by educational institutions are included. Training was included when it served a relevant school-aged population in formal coursework or when other students were engaged in study generally accepted as comparable to a given level of formal schooling.

Six years have generally been studied - 1982, and 1988-1992. The idea was to give a picture of change over the last five years and to take a snapshot of a ten-year change.

In an undertaking of this size and with the intention of surveying an entire population (of institutions, in this case), some data is bound to be missing, incomplete or of dubious quality. The level of cooperation from the various institutions was usually very good and nearly all could give us expenditure and enrollment figures. The occasional missing piece of data (often a figure for the most recent year which was not yet available), was estimated using known structures and distributions of resources. These missing pieces are very few.

A more common problem was filling in incomplete information or estimating distributions (such as between programs) where none were provided. Rather than forego a comprehensive national picture, distributions and estimates were undertaken using known structures. While these estimates may be off slightly, the aggregate should be quite accurate as gross figures equal those provided by individual institutions.

Expenditures of some of these sources are given in more detail in following sections of this report. For government expeditors, the various ministries and institutions were contacted and asked to provide expenditure data. This was then compared, and, where possible, compared with figures given in the HKJ budget. Many institutions do not keep separate accounting records for their institutions, and estimates were constructed given the information they provided. Several HKJ sources that are primarily devoted to education were able to provide detailed expenditures. Expenditures for private schooling were estimated by applying known tuition rates for like institutions and multiplying by enrollment numbers provided to the MOE.

Private school fees

Private schools expenditures represented a particular problem for this survey since private schools do not report their expenditures and are unlikely to be willing to do so given the scrutiny they are currently under. Rather than leave expenditures out of the survey and, thereby, eliminate the total educational expenditure picture analysis for the country, some rather liberal assumptions were made.

Using the general economic assumption that expenditures are roughly equivalent to income, fees were calculated as a proxy for expenditures. This would be true in a competitive and mature industry but is probably not true of private schools in Jordan. Some of the more competitive private schools probably make high profit margins that will be modified as competition increases. On the other hand, some religious private schools probably receive donations that supplement their fee receipts. It is hoped that the two errors roughly cancel themselves out.

School fee information could not be obtained directly from the schools, but two estimates existed. A small family survey (1000 families) had been surveyed as to school costs including fees. Many of these families had children in private schools. Also, on a questionnaire given to 200 school principals in Jordan (some of whom were principals of private schools), fees-per-student and total fees collected were asked. These two pieces of information were used to calculate average fees. Two different scenarios were run using the two types of data. The results were only five percent apart and, thus, were judged to be reliable enough for estimates.

The information used, however, was for only the most current year. Since data was needed for each of the six years estimated, a deflator was used to estimate previous years' tuition. The deflator chosen was that of the Education CPI published by the Central Bank. This CPI is slightly higher than average inflation for the relevant period. This coincides with anecdotal information that some private schools have recently raised schools fees substantially. Since these schools are likely in the minority, the CPI increases should be only marginally above inflation, and they proved to be.

Private school expenditures are, therefore, quite a rough estimate of actual expenditures. It is likely that they are within a reasonable range of actual expenditures. The estimates are probably reasonable given the purpose for which they serve - general estimates of the proportion of overall expenditures in education which can be attributed to private schools. They are also probably reasonable measures of the relative costs of private and public schooling. Their accuracy for other purposes, however, needs to be judged according to the use and with the above estimation parameters in mind.

MOE Basic and Secondary Schools Expenditure Distributions

The MOE does not disaggregate expenditures by level. No doubt this is because many schools serve both basic and secondary students and even teachers may cross over to teach more than one level. Nevertheless, it is useful to have estimates of relative expenditure changes by level both to track trends in per student expenditures and to compare gross expenditures across years by level. Thus, an attempt was made to disaggregate MOE expenditures by basic and secondary levels.

Actual and estimated expenditures were obtained from the MOE at very high levels of detail. The larger categories were individually disaggregated across various levels (basic, academic secondary, vocational secondary, adult, hotel college) using information on the structure of costs and mathematically modeling them. Some expenditures (i.e. salaries and benefits) were disaggregated by using relative numbers of teachers for each level. Other expenditures were similarly disaggregated using student enrollments or using other types of expenditures as weights.

Some expenditures, of course, were clearly attributable to a given level. Vocational education (as a category of expenditure) was clearly vocational secondary. Other types of expenditures could only occur for some levels. Capital expenditures frequently had a specific description from which a reasonable disaggregation could be constructed. Thus, it is likely that estimated disaggregations approach actual disaggregations. Certainly total expenditures equal reported actual expenditures. Nevertheless, disaggregations incorporate certain assumptions regarding the distribution of resources which may not be accurate and mask underlying inequities or inefficiencies. Thus, as an analytic tool for assessing particular expenditure patterns, their use is limited.

Tertiary Institutions

Public Universities

Public universities in Jordan have a complex financing structure. Their expenditures are reported in categories of fees, self-revenues, taxes, government donations, internal grants and loans, external grants and loans. Government donations involve yearly grants from the government budgeted to the universities. These vary from year to year. For example, the University of Jordan received 1.5 mil JD in 1988, .95 mil JD in 1989 and 1990, 2.35 mil JD in 1991 and .5 mil JD in 1992.

Internal grants can sometimes be derived from special grants from the government to the universities. Often these are capital expenditures and may appear in the Ministry of Finance or the Ministry of Planning budgets. External Grants and Loans may also derive from the government either through their guarantee of the loans, or through their cooperation in attracting grants. Self-revenues are generated funds of various sorts - sometimes rents collected on commercial buildings or the like. The tax category refers to a special tax that is imposed by the central government but

whose proceeds are funneled directly to the universities. Nearly all sources of funds (aside from fees) are connected, in some way, to the larger government but only a portion appear in the national budget. And, those portions which appear in the national budget are not in special categories specific to universities or higher education.

A further problem exists in that annual budgets are not balanced. That is, total expenditures do not equal total revenues. Generally, revenues are lower than expenditures. Where this additional money comes from is not clear.

For purposes of this study, annual budgets were accepted at face value. Total revenues were made to equal total expenditures but all revenues were classified in accordance with the scheme used throughout this study - public and private. Public was all revenues not derived from fees. In fact, of course, the public/private division is rather artificial in this case as the universities obviously operate semi-autonomously.

MOHE Community Colleges

In the first year reported here, 1982, there was no Ministry of Higher Education and government community colleges were administered under the Ministry of Education. For comparative purposes, the MOE expenditures for community colleges for that year, have been reported as MOHE community colleges - it is for the same institutions but was budgeted in different ministries.

MOHE community college expenditures were estimated using the figures taken from the national budget. The MOHE has a special category designated for the community colleges. Tuitions were much more difficult to estimate. No information specific to tuition or to budgets was obtainable from the Ministry of Higher Education.

All MOHE Community Colleges charge the same tuition rates. Academic and commercial subjects are cheaper than medical and engineering. Academic and commercial subjects are also taken by the majority of students. Using information on current tuition and using the known structure of students and course offerings, an average tuition was derived for the current year.

Previous years were more problematic. Since no information could be obtained on previous year Tuitions, the tuition for the present year was used as a baseline. It represents about 48 percent of tuition rates at private community colleges. This ratio was assumed to be steady over the period studied. Using this ratio and deflators (overall CPI), average tuitions were estimated for years before 1992.

Private Community Colleges

As with private basic and secondary schools, expenditures at private colleges were assumed to equal revenues. In order to judge revenues, a survey was sent to all private schools asking them for information on tuition and enrollments for each of the years studied. About one third responded. Using this information, an estimate of per student tuition rates was derived for each

year. This rate was then multiplied by the number of students (enrollments were known) to arrive at total revenues for each year.

Other Government Community Colleges

Many institutions exist which are overseen by various government ministries and authorities. These are in addition to those officially organized under the Ministry of Higher Education. These institutes spend nearly twice as much annually on tertiary education as do the MOHE community colleges.

Each of these institutes were visited during the course of this data gathering. All provided some information - usually fairly good enrollment data and more questionable expenditure data. Since most of these institutes operate with some affiliation with larger government bodies, it is not clear to what extent their reported expenditures included all administrative costs. Likely, top officials in the larger government ministry devote at least some of their time to these institutes, as an example. It is unlikely that these expenditures were included. Hence, figures reported are likely undercounts although the undercounts are likely to be small.

Occasionally, some piece of information was missing for a particular institute. Since information on enrollments, expenditures and fees were requested for each of the six years, not all information was received for all years in all categories. This was relatively rare, however. In the case where it was not possible to get the missing information, estimates replaced data. Usually estimates were based on previous growth rates but such rates were modified if other information was available concerning structural changes.

Ministry of Defense Schools

The Ministry of Defense has extensive educational programs from grade one through tertiary level. Information was received only on basic and secondary institutions. Thus, expenditures reported for Ministry of Defense or for "other government" categories (where expenditures were usually reported) are undercounts.

The Ministry of Defense provided only enrollments and expenditures by year - but not disaggregated by basic and secondary. In order to provide estimated of basic expenditures as separate from secondary, the relative proportions of students and expenditures of the MOE for basic and secondary were used to disaggregate both student numbers and expenditures.

Costs were very high for the Ministry of Defense schools. Probably this is largely due to the fact that this ministry feeds its students (thus includes food costs) and many of the schools were boarding. Food costs represented about 16 percent of total costs. An expenditure category called "expenses" probably included boarding costs and was about half of all expenditures. As a comparison, non-salary expenditures at the MOE are about eight percent of total costs for basic students.

VTC

The Vocational Technical Corporation offers a wide range of training programs. Since they are not officially classified as schools - vocational or otherwise - some decisions were made regarding how to classify them. Basically, all program aside from instructor training and occupational safety programs were classified as vocational secondary. Some of these programs, however, do not require that one has completed basic schooling in order to enroll.

VTC was able to report only gross expenditures per year although they were able to disaggregate student enrollments by program for each year. Using student enrollments and known structures (duration, type of training) for each program, enrollments were weighted by the percentage of full-time (annual full-time) they represented. These figures were used to disaggregate expenditures into the various programs. Programs were then reaggregated to form "vocational secondary," "tertiary," and "other" categories of expenditures.

These methods produce estimates only. The total expenditures reported are accurate (they equal those reported by the VTC), but distributions between programs are rough estimates only. They do serve as an estimate of VTC expenditures which represent vocational training, however, and thus have been used for that purpose here.

UNRWA

UNRWA provided total expenditures in US dollars and enrollments by program and year. Expenditures were converted to JD using Central Bank conversion rates for the relevant year. Expenditures were disaggregated by program using reported enrollments and known structures of the programs. Disaggregation of expenditures into various programs, then, are estimates.

Ministry of Health

The Ministry of Health has several institutes and programs at the tertiary level. They provided information regarding enrollments for the relevant years and disaggregated by program, but were unable to provide expenditure information.

For purposes of estimating expenditures the item in their national budget called "Manpower Training" was used. We had been informed that this represented their expenditures for education and training. Since it was not clear whether this item incorporated administrative costs accrued to the Ministry as a result of these extensive educational programs, a portion of the total Ministry administrative costs were also added to the line-item costs. Since all expenditures are accrued at the tertiary level, no attempt was made to disaggregate costs by program.

Scholarships

The government financed many scholarships through various ministries. Scholarship figures were derived by examining each governmental body's budget in the national budget and extracting line items labeled "scholarships" (these are expenditures category 303 in the 1992 budget). In some cases, scholarship are put in the Ministry of Finance budget - three million JD each for 1991 and 1992. In 1982, some scholarship budgets were put in the Ministry of Education budget but have been included in this "scholarships" category for comparative purposes.

