

# INTRODUCTION

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## 1. GENERAL

This publication presents a summary of the national expenditure on education up to the year 2003<sup>1</sup>. The expenditure up to 2001, which is the last year for which detailed financial reports of actual expenditure were received from the government, local authorities and non-profit institutions, is given in full detail. The estimates for 2002 and 2003 are based on partial data and therefore, indicate only general trends.

Compared with the series that appeared in the previous publication,<sup>1</sup> revisions have been introduced in this publication for the years 1990-2002, following the incorporation of the revised results of the Household Expenditure Surveys (see paragraph 5.2) and a revised estimate in the calculation of consumption of fixed capital.

**In Section A** the tables present multi-annual series:

Table 1 presents a series on national expenditure on education from 1962/63 (budget year) to 2003, by operating sector. The table also presents data on education expenditure and its components in relation to gross national income, consumption and capital formation.

Table 2 presents a breakdown of national expenditure by level of education for the years 1962/63 to 2001.

Table 3 presents series for the main components of national expenditure on education, at constant prices, for the years 1970/71 to 2003. As of 1995, the estimates of national expenditure on education at constant prices have been weighted according to the prices of 2000 as a base year.

Table 4 presents education expenditure, excluding consumption of fixed capital, by financing sector (government and local authorities), for the years 1966/67 to 2001.

**In Section B**, Tables 5 and 6 present additional details by financing sector, for the years 1990 to 2001:

The tables provide details of funding from government, local authorities, non-profit institutions and households, by level of education or by types of receipts and disbursements.

**In Section C**, the tables present details by operating sector, for the years 1990 to 2001:

Table 7 presents a cross-classification of type of service and operating sector.

Table 8 presents the breakdown of expenditure by all agencies that do not usually operate on a commercial basis – the government, local authorities and non-profit institutions.

Table 9 presents the expenditure of the government, local authorities and non-profit institutions for post-secondary and higher education institutions.

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<sup>1</sup> For previous estimates, see: Central Bureau of Statistics, *National Education Expenditure 1962-2002*, Special Publication 1241, Jerusalem, 2005, and *Statistical Abstract of Israel 2005*, no. 56, Jerusalem, 2005.

**Section D** presents appendices on the national expenditure on education:

In Table 10, a combined account of receipts and disbursements in the universities is presented, for the academic years 1993/94 to 2001/2002.

Tables 11 and 12 present combined accounts of receipts and disbursements in non-profit educational institutions in the government sector and in non-governmental non-profit educational institutions, respectively, for the years 1993 to 2001.

## **2. MAIN FINDINGS**

Current national expenditure on education, in constant prices, decreased by 1% in 2003 – in contrast to a rise of approximately 3% in 1999-2002. Current education expenditure per capita decreased by 2% in 2003, following a rise of 1% in 2001-2002.

Total national expenditure on education, including fixed capital formation, decreased by 1% in constant prices in 2003, compared with a rise of approximately 3% in 1999-2002. Fixed capital formation (in school buildings and equipment) decreased by 1%.

National expenditure on education in 2003 amounted to NIS 47 billion, comprising 9.7% of the gross national income. National expenditure on education includes expenditure for all public and private educational institutions, from pre-primary to higher education, households' expenditure for private tutoring, textbooks, etc., as well as expenditure for the construction of new educational institutions and the purchase of equipment.

The government and local authorities financed 79% of the expenditure for education in 2003 – a proportion similar to that of 2000. During 1999 and 2001 the government and local authorities financed 78% of the expenditure for education, and in 2002 – 77%. The rest of the expenditure was covered directly by households through payment of tuition fees, purchase of textbooks, etc., as well as by donations and grants to educational institutions from domestic sources and from sources abroad.

### **International Comparison**

A comparison of Israel's data with data from other countries, for 2002, reveals that the proportion of national expenditure on education in the Gross Domestic Product was higher in Israel than in all the other countries examined – 9.2% of the GDP in Israel, compared with 6.1% in the OECD (Organization for Economic Cooperation and Development) member countries. In a number of countries – Korea, Denmark and Sweden - the percentage of expenditure came close to that of Israel: 7.1%, 7.1% and 6.9% of the GDP, respectively. However, in making this comparison, it is important to bear in mind that Israel has a relatively higher percentage of young people than the OECD countries.

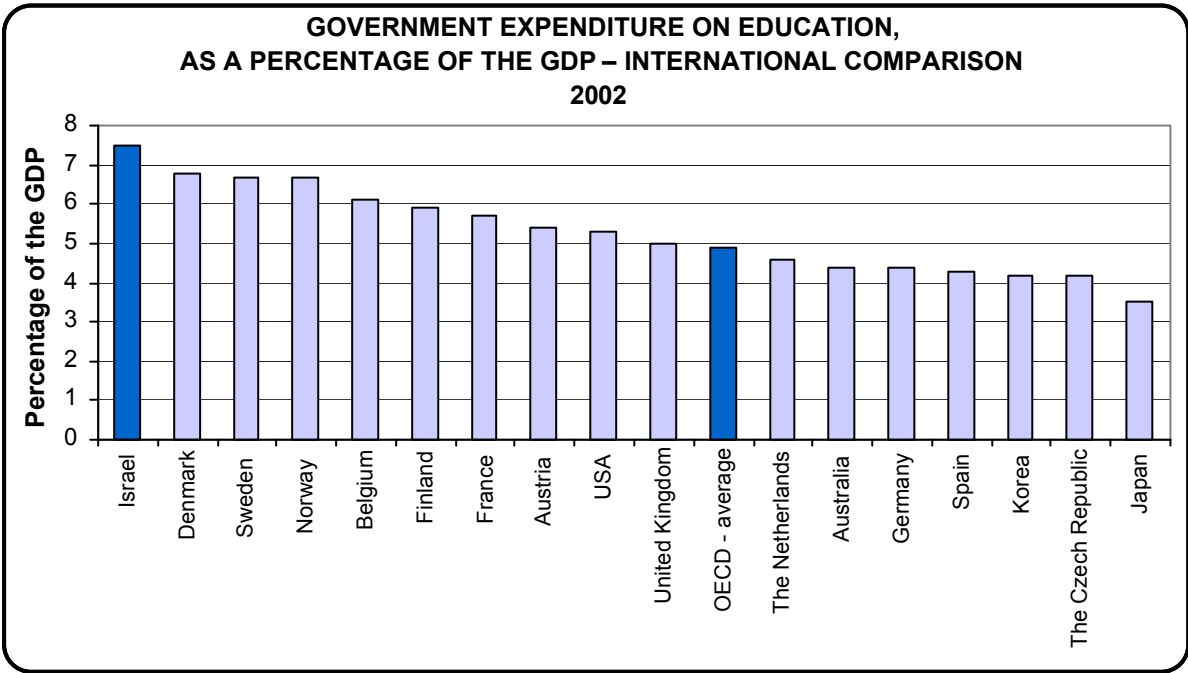
A comparison of the expenditure on education by level of education shows that in Israel the expenditure was particularly high in institutions of primary and secondary (including

intermediate schools) education – 5.3% of the GDP, compared with 3.8% in the OECD; and in institutions of post-secondary and higher education – 2.1% of the GDP in Israel, compared with 1.7% in the OECD.

The government expenditure for education (including expenditure of local authorities), not including scholarships to students, reached 7.5% of the GDP in Israel in 2002, compared with an average of 4.9% in the OECD countries. Of all these countries, only in Denmark did government expenditure come close to that of Israel – 6.8% of the GDP.

The share of expenditure on education out of total government expenditure in Israel was 13.6%, compared with an average of 12.9% in OECD countries. The percentage of government expenditure on primary and secondary education (including intermediate schools), out of total government expenditure in Israel, was relatively higher than the average in the OECD countries (9.1% compared with 8.9%, respectively).

In contrast, the percentage of government expenditure on higher education, out of total government expenditure in Israel, is relatively lower than the average in the OECD countries (2.3% compared with 3.0%, respectively).



A comparison of the average expenditure per pupil/student in Purchasing Power Parity (PPP) terms, reveals that the average expenditure per pupil/student in Israel at all education levels is lower than the average in OECD member countries:

In pre-primary education the expenditure per pupil in Israel was \$3,970, similar to that of Japan, Spain and Finland. In Slovakia, the Czech Republic and Korea there was a lower

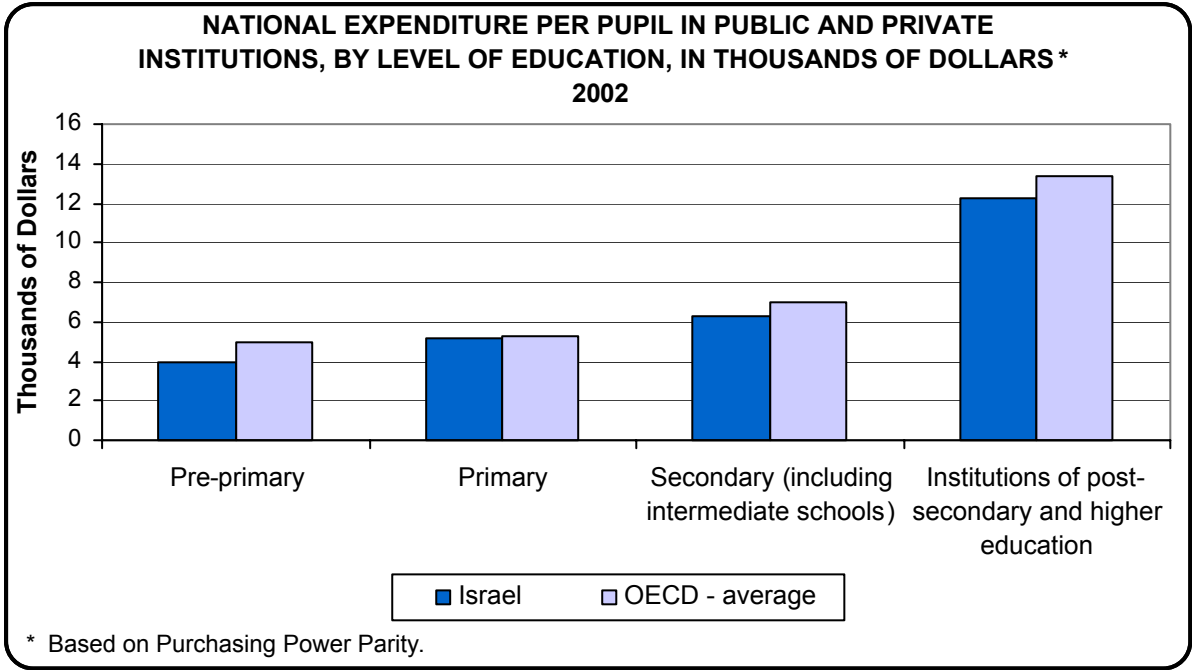
expenditure (\$2,000-2,700), compared with the other countries; and a particularly high expenditure occurred in the United Kingdom - \$8,452.

In primary education the expenditure per pupil was \$5,170, similar to Australia and the United Kingdom – a lower amount than the average in OECD member countries: \$5,273.

In secondary education (including intermediate schools), the government expenditure per pupil in Israel totaled \$6,251, similar to that of Spain. This expenditure is higher than that of Slovakia, The Czech Republic and Korea, and lower than the rest of the OECD countries (\$6,000-8,500).

In institutions of post-secondary and higher education, the expenditure per student on education in Israel reached \$12,242, similar to that of Austria, Belgium and Australia, and lower than that of Sweden, Denmark and the Netherlands.

A comparison of the types of expenditure reveals that in institutions of primary and secondary education (including intermediate schools), the division between current expenditure and investment in fixed assets in Israel is identical to the average division in the OECD countries (92% and 8%, respectively). In addition, in Israel the proportion of labour cost in these institutions out of the total current expenditure is lower (75%) than the average in the OECD countries (81%).



In institutions of post-secondary and higher education, the division between current expenditure and investments in fixed assets in Israel is 90% and 10% (respectively), similar to the average in the OECD countries. The proportion of labour cost in these institutions out of

the total current expenditure in Israel (74%), is higher than the average in the OECD countries (66%).

**National expenditure on education by operating sector**

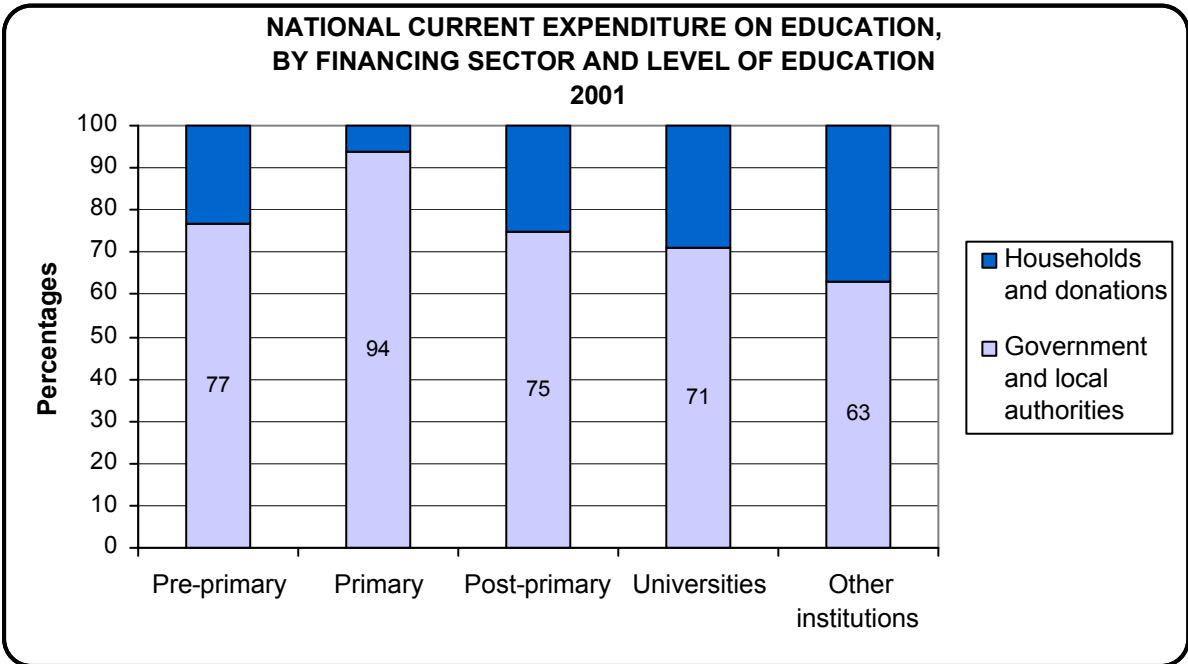
In 2003, most education services (88%) were provided to the population in educational institutions of the government, local authorities and non-profit institutions that are mainly financed by the government (the universities, the Ort and Amal educational organizations, etc.). 27% of the total national expenditure on education was provided by government educational institutions, 24% by local authorities, and 37% by non-profit institutions.

The value of services provided by non-profit educational institutions (mainly financed by private sources) in 2003, was 3% of the national expenditure on education.

The share of educational services provided on a commercial basis, e.g., pre-primary services, private tutoring (including supplementary instruction for primary-level students), courses for adults, textbooks, etc., was 9%.

**Distribution of financing the national expenditure on education**

Detailed data on the funding of expenditure by levels of education (for 2001) show that the government and local authorities financed 78% of the total national education expenditure and 79% of the current national expenditure on education. The government and local authorities financed 94% of the current expenditure at the primary level, 75% at the post-primary level, and 77% at the pre-primary level. The government and local authorities also covered 71% of university expenditure (not including separately budgeted research) and 63% of the expenditure for other institutions of higher and post-secondary education.



Households financed 22% of the national expenditure on education in 2001, through purchases of education services from public institutions, as well as services, textbooks and stationery from commercial bodies.

Donations from households and from institutions in Israel and abroad financed 2% of the national expenditure on education. Most of the donations were earmarked for the universities.

The government and local authorities financed 63% of the investment in buildings and equipment for educational purposes. Local and foreign grants - directly from households or from non-profit institutions and commercial bodies – paid for the remaining 35%.

### **Current national expenditure by level of education**

Data from a breakdown of current expenditure per student by level of education in 2001 show that the cost of studies of a student in higher education institutions is 2.3 times that of a student in secondary education (including intermediate schools). The cost of studies of a student in secondary education (including intermediate schools) is 22% higher than a student in primary school, while the cost per pupil in primary school is 36% higher than for a child in pre-primary schools.

The expenditure on pre-primary education, primary schools (including supplementary lessons) and secondary schools (including tutoring) reached 67% of the current national expenditure on education. Of this amount, 10% of the current national expenditure was on pre-primary education (from age 3), 29% on primary education and 28% on secondary education, including intermediate schools.

The expenditure on post-secondary and higher education institutions amounted to 22% of the total current education expenditure, of which the share of universities was 14%. The 11% of the current national education expenditure consisted of outlays for administration and other types of educational services, e.g., courses for adults, Hebrew teaching instruction and adult education, Jewish religious schools, purchases of textbooks and stationery.

### **Current national expenditure by type of expenditure**

In 2003, 73% of current expenditure by government, local authorities, and non-profit institutions on educational services were for labour costs, 19% for the purchase of goods and services, and 8% were depreciation.

**Combined account of the universities** (for details on the universities, see Para. 3.2)

The combined account of the universities is presented in Table 10. It covers all their activities, including teaching and associated research as well as courses and separately budgeted research. This combined account facilitates examination of the total resources that were available to the universities, compared with the various expenditures on all their activities. It should be noted that national expenditure on education does not include expenditure on separately budgeted research.

The combined account of the universities was compiled in accordance with their financial reports; the recorded income and deficit or surplus does not include financial commitments from various bodies.

The combined account indicates that in the academic year 2001/02 (from October 2001 to September 2002), 85% of the total expenditure of universities was current expenditure for goods and services; approximately 6% was for student scholarships, awards, and other forms of support; and 11% was capital formation in buildings and equipment. That same year, there was a surplus of finance income over finance expenses.

In the 2001/02 academic year, as in 1999/2000 and in 2000/2001, 80% of the current expenditure for goods and services was used for teaching and associated research, 9% for extracurricular courses, and 11% for separately budgeted research.

The government financed 54% of the expenditure of universities in 2001/02, similar to the average of the two preceding years. Income from the government included special allocations to cover the universities' cumulative deficit and to enroll immigrant students.

Funding from donations reached approximately 9% of the universities' expenses in 2001/02, similar to the preceding three years. The income from research remained unchanged - 11% of the total income, as in the last three years.

In addition, income from students remained relatively low: income from tuition fees and other student fees covered 17% of expenditure in 2001/02.

Income from courses accounted for 7% in 2001/02, as in 1998/1999, 1999/2000 and 2000/2001.

TABLE A.- NATIONAL EXPENDITURE ON EDUCATION<sup>1</sup>

Percent

	1999	2000	2001	2002	2003
	<i>Quantity change on previous year</i>				
<b>National expenditure on education – total</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>-1</b>
Current expenditure	3	2	3	3	-1
Fixed capital formation	-4	0	1	-6	-1
<b>National expenditure on education per capita – total</b>	<b>0</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>-2</b>
Current expenditure on education per capita	1	-1	1	1	-2
	<i>At Current Prices</i>				
<b>Share of national expenditure on education in gross national income</b>	<b>9.7</b>	<b>9.6</b>	<b>10.1</b>	<b>10.1</b>	<b>9.7</b>
<b>Current expenditure on education as a percentage of:</b>					
- Total national expenditure on education	92	92	93	94	93
- Private and government consumption	10.2	10.0	10.4	10.2	9.8
- Private and civilian government consumption	11.3	11.1	11.5	11.4	10.9
<b>Fixed capital formation in buildings and equipment for education</b>					
- as a percentage of total fixed capital formation	<b>3.3</b>	<b>3.6</b>	<b>3.7</b>	<b>3.7</b>	<b>3.8</b>
<b>Financing of national expenditure on education by</b>					
- Government <sup>2</sup>	72	72	72	77	79
- Local authorities	6	7	6		
- Tuition fees and households' purchases	20	20	20	23	21
- Donations and transfers in Israel and from abroad	2	1	2		
<b>Expenditure on education of government and local authorities as a percentage of:</b>					
- Their total expenditure	13.9	14.0	13.9	13.5	13.6
- Their expenditure, excluding defence expenditure	16.7	16.7	16.6	16.5	16.4

<sup>1</sup> Updated estimates for the years 1999 to 2001 and preliminary estimates for the years 2002 and 2003.

<sup>2</sup> Includes expenditure on services provided by the government and its participation in finance of educational services provided by local authorities and non-profit institutions.

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**TABLE B.- CURRENT EXPENDITURE PER PUPIL/STUDENT<sup>1</sup>**  
**2001**

	<b>NIS thousand</b>	<b>Indices</b>
Pre-primary education	12.2	100.0
Primary education	16.6	136.1
Secondary education (incl. intermediate schools)	20.2	165.6
Post-secondary education	27.7	227.0
Higher education institutions <sup>2</sup>	47.3	387.7

<sup>1</sup> The financial data relate to the calendar year 2001. Data on students relate to the school year 2000/2001.

Including an estimated imputation of expenditure for consumption of fixed capital.

Including private lessons.

Excluding textbooks and stationery purchased by households.

<sup>2</sup> Institutions that received recognition and authorization from the Council for Higher Education to award academic degrees.

**TABLE C.- NATIONAL EXPENDITURE ON EDUCATION –  
INTERNATIONAL COMPARISON  
2002**

	Percent of GDP	
	Total	General Government Expenditure <sup>1</sup>
Israel	<sup>2</sup> 9.2	<sup>2</sup> 7.5
<b>OECD<sup>3</sup> – total</b>	<b>6.1</b>	<b>4.9</b>
Thereof: selected countries		
United States	7.2	5.3
Korea	7.1	4.2
Denmark	7.1	6.8
Sweden	6.9	6.7
Norway	6.9	6.7
Belgium	6.4	6.1
France	6.1	5.7
Australia	6.0	4.4
Finland	6.0	5.9
United Kingdom	5.9	5.0
Austria	5.7	5.4
Germany	5.3	4.4
Netherlands	5.1	4.6
Spain	4.9	4.3
Japan	4.7	3.5
Czech Republic	4.4	4.2

<sup>1</sup> Including local authorities, direct expenditure and transfers to non-profit institutions (net).

<sup>2</sup> Taxes (net) on imports were added to GDP.

<sup>3</sup> Source: *OECD, Education at a Glance, 2005*.

**TABLE D.- EXPENDITURE PER PUPIL/STUDENT<sup>1</sup> ON PUBLIC AND PRIVATE INSTITUTIONS, BY LEVEL OF EDUCATION, IN \$<sup>2</sup>**  
**2002**

				Tertiary education		
	Pre-primary	Primary	Secondary (incl. Intermediate schools)	Total	Institutions of Post-secondary education	Institutions of Higher education
Israel	3,970	5,170	6,251	12,242	8,413	13,358
<b>OECD<sup>3</sup> – total</b>	<b>4,922</b>	<b>5,273</b>	<b>6,992</b>	<b>13,343</b>	..	..
Thereof: selected countries						
Austria	6,169	7,015	8,887	12,448	9,584	12,701
Australia	..	5,169	7,375	12,416	7,544	13,410
Belgium	4,420	5,665	8,272	12,019	..	..
Germany	4,999	4,537	7,025	10,999	5,739	11,860
Denmark	4,673	7,727	8,003	15,183	..	..
Netherlands	4,923	5,558	6,823	13,101	7,622	13,163
United Kingdom	8,452	5,150	6,505	11,822	..	..
Japan	3,691	6,117	6,952	11,716	9,580	11,984
Slovakia	2,125	1,471	2,193	4,756	..	4,756
Spain	3,845	4,592	6,010	8,020	7,718	8,074
Finland	3,929	5,087	7,121	11,768	3,185	11,833
Czech Republic	2,724	2,077	3,628	6,236	2,703	6,671
France	4,512	5,033	8,472	9,276	9,801	9,132
Korea	2,497	3,553	5,882	6,047	3,772	7,630
Sweden	4,107	7,143	7,400	15,715	..	..

<sup>1</sup> Based on full-time student equivalents.

<sup>2</sup> Converted using PPPs.

<sup>3</sup> Source: *OECD, Education at a Glance, 2005*.

**TABLE E.- INDEX OF EDUCATIONAL EXPENDITURE PER PUPIL/STUDENT,  
BY LEVEL OF EDUCATION  
(EXPENDITURE PER PUPIL/STUDENT AT THE PRIMARY LEVEL=100)  
2002**

	Level of education			
	Pre-primary	Primary	Secondary (incl. Intermediate schools)	Tertiary
Israel	77	<b>100</b>	121	237
<b>OECD<sup>1</sup> - total</b>	<b>93</b>	<b>100</b>	<b>133</b>	<b>253</b>
Thereof: selected countries				
Austria	88	<b>100</b>	127	177
Australia	..	<b>100</b>	143	240
Belgium	78	<b>100</b>	146	212
Germany	110	<b>100</b>	155	242
Denmark	60	<b>100</b>	104	196
Netherlands	89	<b>100</b>	123	236
United Kingdom	164	<b>100</b>	126	230
Japan	60	<b>100</b>	114	192
Slovakia	144	<b>100</b>	149	323
Spain	84	<b>100</b>	131	175
Finland	77	<b>100</b>	140	231
Czech Republic	131	<b>100</b>	175	300
France	90	<b>100</b>	168	184
Korea	70	<b>100</b>	166	170
Sweden	57	<b>100</b>	104	220

<sup>1</sup> Source: *OECD, Education at a Glance*, 2005 and CBS calculations.

**TABLE F.- EDUCATIONAL EXPENDITURE FROM PUBLIC AND PRIVATE SOURCES  
FOR EDUCATIONAL INSTITUTIONS AS A PERCENT OF GDP  
2002**

	Primary and secondary education (Incl. intermediate schools)	Tertiary education	All levels of education
Israel	5.3	2.1	9.2
<b>OECD – total<sup>1</sup></b>	<b>3.8</b>	<b>1.7</b>	<b>6.1</b>
Thereof: selected countries			
Korea	4.1	2.2	7.1
Denmark	4.2	1.9	7.1
New Zealand	4.9	1.5	6.8
Ireland	3.1	1.3	4.4
Sweden	4.6	1.8	6.9
United States	4.1	2.6	7.2
Norway	4.3	1.5	6.9
Belgium	4.3	1.4	6.4
Mexico	4.1	1.4	6.3
France	4.2	1.1	6.1
Australia	4.2	1.6	6.0
Finland	3.9	1.8	6.0
Portugal	4.2	1.0	5.8
Austria	3.8	1.1	5.7
Hungary	3.3	1.2	5.6
Germany	3.6	1.1	5.3
Netherlands	3.4	1.3	5.1
Italy	3.5	0.9	4.9
Spain	3.2	1.2	4.9
Czech Republic	2.9	0.9	4.4

<sup>1</sup> Source: *OECD, Education at a Glance, 2005.*

**TABLE G.- GOVERNMENT EXPENDITURE ON EDUCATION  
AS A PERCENT OF TOTAL GOVERNMENT  
EXPENDITURE, BY LEVEL OF EDUCATION  
2002**

	Total direct expenditure plus transfers to non-profit institutions (net) and to households		
	Primary and secondary education (incl. Intermediate schools)	Tertiary education	All levels of education
Israel <sup>1</sup>	9.1	<sup>3</sup> 2.3	13.6
<b>OECD countries<sup>2</sup> - mean</b>	<b>8.9</b>	<b>3.0</b>	<b>12.9</b>
Thereof: selected countries			
Korea	13.2	1.4	17.0
Iceland	12.0	2.9	15.6
Denmark	8.7	4.9	15.3
United States	10.3	<sup>3</sup> 3.8	15.2
Australia	10.6	3.5	14.3
Sweden	8.5	3.7	13.1
Ireland	9.2	3.6	13.0
Finland	7.9	4.1	12.7
United Kingdom	9.0	2.6	12.7
Portugal	9.2	2.2	12.6
Belgium	8.3	2.7	12.5
Austria	7.6	2.6	11.5
France	7.7	1.9	11.0
Netherlands	7.2	2.7	10.6
Italy	7.2	1.8	9.9
Germany	6.4	2.4	9.8
Czech Republic	6.5	1.9	9.6

<sup>1</sup> Government expenditure on education includes expenditures of local authorities. Total government expenditure includes expenditure in local authorities, defence expenditure and interest payments.

<sup>2</sup> Source: *OECD, Education at a Glance, 2005*.

<sup>3</sup> Transfers to pre-academic preparatory courses are included in post-secondary institutions as well as in higher education institutions.

**TABLE H.- EXPENDITURE ON EDUCATIONAL INSTITUTIONS  
FROM PUBLIC AND PRIVATE SOURCES, BY TYPE OF EXPENDITURE  
AND LEVEL OF EDUCATION  
2002**

*Percent*

	Primary and Secondary institutions (including intermediate schools) and pre-academic prep. courses						Tertiary education institutions					
	Total expen- diture	Thereof:		Total current expen- diture	Thereof:		Total expen- diture	Thereof:		Total current expen- diture	Thereof:	
		Current expen- diture	Invest- ment in constant assets		Com- pen- sation for labour	Other expen- ditures <sup>1</sup>		Current expen- diture	Invest- ment in constant assets		Com- pen- sation for labour	Other expen- ditures <sup>1</sup>
Israel	100	92	8	100	75	25	100	90	10	100	74	26
<b>OECD countries<sup>2</sup></b>	<b>100</b>	<b>92</b>	<b>8</b>	<b>100</b>	<b>81</b>	<b>19</b>	<b>100</b>	<b>88</b>	<b>12</b>	<b>100</b>	<b>66</b>	<b>34</b>
Thereof: Selected countries												
Austria	100	96	4	100	78	22	100	95	5	100	62	38
Australia	100	92	8	100	77	23	100	90	10	100	60	40
Belgium	100	98	2	100	88	12	100	97	3	100	72	28
Norway	100	89	11	100	80	20	100	90	10	100	63	37
Denmark	100	92	8	100	78	22	100	94	6	100	77	23
Netherlands	100	95	5	100	77	23	100	95	5	100	75	25
United Kingdom	100	91	9	100	75	25	100	96	4	100	58	42
United States	100	88	12	100	81	19	100	91	9	100	56	44
Japan	100	89	11	100	88	12	100	84	16	100	68	32
Sweden	100	93	7	100	68	32	100	..	..	100	59	41
Spain	100	93	7	100	85	15	100	81	19	100	79	21
Portugal	100	97	3	100	97	3	100	89	11	100	90	10
Finland	100	90	10	100	66	34	100	95	5	100	62	38
Czech Republic	100	90	10	100	68	32	100	88	12	100	48	52
France	100	92	8	100	79	21	100	90	10	100	70	30
Korea	100	83	17	100	72	28	100	79	21	100	51	49

<sup>1</sup> Including current purchases and calculated estimate of depreciation.

<sup>2</sup> Source: *OECD, Education at a Glance, 2005*.

### 3. DEFINITIONS

**3.1 National Expenditure on Education** distinguishes between (1) *current expenditure* and (2) *fixed capital formation*.

1) **Current Expenditure** includes the expenditure on educational services in various educational institutions, and additional expenses of households for textbooks and stationery purchased from commercial bodies. These expenses were presented under one heading, and were not classified according to the industrial branches in which the goods were manufactured.

2) **Fixed Capital Formation** includes expenditure on construction of buildings and purchase of equipment for institutions providing educational services.

### 3.2 Educational Services and their Classification

The services classified as educational (generally according to the Standard Industrial Classification<sup>1</sup>) include: general administration, pre-primary education institutions, primary education institutions, secondary schools, post-secondary and higher education institutions, Jewish religious schools (Yeshivot), Hebrew teaching and other educational services. Educational services provided by Israel Defence Forces were not included.

Educational expenditure includes expenditures on residential accommodations attached to educational institutions, and university dormitories. Maintenance grants for pupils are not included.

Expenditures on education do not include nursing schools, which are usually attached to the hospitals in which they operate.

The following are some clarifications of different items of educational services:

**Pre-primary education institutions** include kindergartens and day care centers, for children aged 3 years and over.

**Primary education institutions** also include Talmud Torah (schools for religious studies), missions and Special Education schools.

**Secondary schools - general and vocational** - also include **intermediate schools**, since in the financial reports there is no distinction in the expenditures between these types of institutions. Secondary education institutions also include secondary education Yeshivot.

**Jewish religious schools and rabbinic theological seminaries** include "small" Yeshivot (for students up to age 18) and "great" Yeshivot (for students aged 18 and over) and do not include those studying in "Kolelim" attached to "great" Yeshivot.

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<sup>1</sup> Central Bureau of Statistics and The Public Advisory Council for Statistics, *Standard Industrial Classification of All Economic Activities*, 1993, Second edition, Technical publication, no. 63, Jerusalem, 2003.

**Post-primary schools** include the following grouped sub-branches: general secondary schools, vocational, nautical and agricultural schools, Jewish religious schools and rabbinic theological seminaries, Hebrew teaching and adult education and other educational services – Table 5, Table 7 – “Fixed capital formation”.

**Post-secondary education institutions** include technological colleges, regional colleges, teachers and kindergarten teachers training institutions, etc., excluding those institutions that received recognition as institutions of higher education.

**Pre-academic preparatory courses** were included in the past in various teacher training colleges, post-secondary education institutions, and higher education institutions. As of 1996, data related to expenditures and income of college preparatory institutions are published in the tables of receipts and disbursements of non-profit institutions (tables 11, 12).

**Higher education institutions** include institutions that received recognition and authorization from the Council for Higher Education to award academic degrees.

### **1) Universities:**

The Hebrew University of Jerusalem, the Technion – Israel Institute of Technology (excluding the Technion Research and Development Foundation Ltd.), Tel Aviv University, Bar-Ilan University, Haifa University, Ben Gurion University of the Negev and the Feinberg Graduate School (in Weizmann Institute).

In the summary of national expenditure on education, all expenses for research should be deducted from the expenditure of universities. Actually, it was possible to deduct only those expenses on research that were specified in the institutions' financial reports within the framework of the budgets that were earmarked for research. However, it was not possible to separate research expenses that were included in teaching budgets. Such expenses are estimated at one-quarter of the total expenditure of the universities.

The expenditure of medical schools in universities (including medical research) is included in the national expenditure on education.

### **2) Other institutions:**

The Open University; Bezalel – Academy of Arts and Design, Jerusalem; Rubin Academy of Music, Jerusalem; Jerusalem College of Technology; Shenkar - College of Textile, Technology and Fashion; the Program in Economics and Management of Communal Settlements at the Ruppin Institute of Agriculture; the academic program at the College of Management; Center for Technological Education - Holon; the Academic College of Tel Aviv-Yaffo; ORT Braude College; The College of Engineering, Tel Aviv; “Achva” Academic College; academic track of regional colleges; “Hasviva” College – Studio of Architecture and Design; Hadassah Academic College; Netanya College; College of Optometry; The Interdisciplinary

Center, Herzlia; the Schechter Institute of Judaic Studies; the College of Engineering, Jerusalem; "Sha'arei Mishpat" Law College; Leslie University; the Academic College of Law, Ramat Gan; and twenty four training colleges for teachers and kindergarten teachers.

In Tables 5 and 7, "Other Institutions" includes post-secondary institutions that confer academic degrees and other post-secondary institutions.

In Tables 9 and 11 "Other Institutions" includes only post-secondary institutions that confer academic degrees.

**Other educational services** included private teachers' services, courses and extension courses until 1983/84. As of 1984/85, they include mainly courses for adults and post-secondary education provided by the business sector. As of 1995, they include mainly courses for adults. Driving schools are not included.

National expenditure on education does not include activities of sports and recreation centers, other than those activities connected with Hebrew language ulpanim. Expenditure on other activities of these centers is defined as National Expenditure on Culture.

### 3.3 The Value of Educational Services

In measuring the value of educational services, two types of services are distinguished: (1) educational services provided by the government (including national institutions), local authorities and non-profit institutions (above 90%); (2) purchases by households from commercial bodies.

1) The government, local authorities and non-profit institutions generally provide educational services at reduced prices or for free. Since they have no market price, the value of these services is estimated according to the cost of production: (1) Labour Cost - wages and salaries paid directly to workers, employers' contributions to funds and schemes for employees (such as pension funds, national insurance including "parallel tax" etc.) and taxes on labour such as "payroll tax" or "employers' tax"; (2) current purchases of goods and other services (excluding interest payments); (3) an estimated imputation for expenditure on consumption of fixed capital of buildings and equipment; (4) imputed government expenditure representing its commitment to pay budgeted pensions to its employees on their retirement. The last two components were not included in the estimated values of educational services before 1984/85.

In order to enable comparison with earlier years, Tables 1, 2 and 4 present estimates for 1984/85, which were also compiled according to the previous method. The cost of production does not include payment of interest. According to this approach, the value of services provided to the public is not changed whether the government financed its expenditure by means of taxes or by receiving grants, or whether financing was by means of loans for which interest had to be paid.

- 2) Purchases by households from commercial bodies include the following educational services - kindergartens and day-care centres, private teachers' services for primary and secondary schools pupils, post-secondary institutions, professional courses for adults and also textbooks and stationery.

### **3.4 Classification of Expenditure by Sector**

#### **3.4.1 The National Expenditure on Education is classified into the following sectors:**

- 1) Government and national institutions (including expenditure of the Jewish Agency).
- 2) Local authorities – municipalities, local and regional councils.
- 3) Governmental non-profit institutions, whose expenditures are financed mainly by the government, the Jewish Agency or the local authorities (more than 50% of the total expenditure of the non-profit institutions).
- 4) Other non-profit institutions.
- 5) Other – including commercial enterprises and households.

Educational services were classified by operating sector and financing sector:

In the classification by **operating sector**, direct expenditure by the sector on labour, goods and other services was recorded regardless of the financing sector. For example, (1) all expenditure of non-profit institutions (such as the Hebrew University) on labour, on purchase of goods and other services was recorded as expenditure of the institutions themselves and not of other bodies in the economy which financed them; (2) in pre-primary and primary education institutions where the service is given jointly by the government and the local authorities, the expenditure on school teachers' and kindergarten teachers' salaries is recorded as government expenditure, whereas current expenditure on maintenance of these institutions and imputed expenditure on consumption of fixed capital of buildings and equipment are recorded in the expenditure of local authorities.

In the classification by **financing sector**, the financing by each sector is defined as the total direct expenditure on goods and services and the expenditure on subsidies, grants and other net transfers and payments to other sectors (excluding granting of loans).

In calculating the share of each sector in financing the national expenditure on education, evaluations of expenditure on consumption of fixed capital are not included in the sectors' expenditure or in the total national expenditure on education (Tables 4 and 5), because national expenditure on education includes current expenditure and expenditure on fixed capital formation.

Government financing does not include the subsidy component in government loans to other sectors in the education system given at low rates of interest, or non-linked.

Transfers between sectors are determined by the period in which they were recorded in government reports. In reports of other sectors, the transfers may be recorded in a different period.

### **3.4.2 Units or Items which are Included in Each Sector**

**Government expenditure on education** includes the following items:

- 1) Expenditure of the Ministry of Education, Culture and Sport on the ordinary and development budgets, except the following budgetary items: nutrition, Youth Division, premilitary army training (Gadna), science, culture and art, museums, religious culture, the Sports and Physical Education Authority, and the Antiquities Authority.
- 2) In expenditure of other ministries on education, the following items were included: Jewish religious schools and rabbinic theological seminaries (Ministry of Religious Affairs), the Institute for Training of Social Workers, the College for Training of Education and Attendance Workers, the Department of Vocational Training and Extension Studies (Ministry of Labour and Welfare); nautical training (Ministry of Transport); secondary and post-secondary education institutions of government companies, such as the School of Tourism.
- 3) Expenditure of units of the Jewish Agency classified under education: Hebrew language schools (Ulpanim), seminaries for youth leaders, maintaining children and youth in institutions, youth centers, allocations to educational institutions, the Education Fund and educational activities in the framework of "neighborhood renewal projects".

**Expenditure on education by local authorities** includes the following items:

- 1) Expenditure of the Education Departments on the ordinary and the extraordinary budgets, excluding the following expenditures: medical supervision and dental treatment in primary schools, summer day camps, child nutrition and complementary education;
- 2) Expenditure on "Hebrew language teaching" of the Culture Departments.

**Expenditure on education by non-profit institutions** includes the expenditure of educational institutions which are not owned by the government, the national institutions or local authorities, and which do not operate on a commercial basis.

The non-profit institutions are divided, as mentioned, into two categories: (1) non-profit institutions that are mainly *financed by the government*, including: the universities and the Technion, most secondary schools, "independent education"

institutions, most kindergartens belonging to women's organizations, some post-secondary education institutions and some Jewish religious schools (Yeshivot); (2) non-governmental non-profit institutions (where the main *financing is not from the government*) include: most day care centers belonging to women's organizations, some post-secondary education institutions and some Jewish religious schools (Yeshivot).

**Expenditure on education by the "other" sector** includes household expenditure on purchases of educational goods and services from commercial bodies, such as expenditure on private teachers (including supplementary lessons for primary school pupils and private lessons for secondary school pupils), tuition fees for private schools and kindergartens and purchase of textbooks and stationery.

### **3.4.3 Specification of Financing Categories of the Government, the Local Authorities and Non-Profit Institutions**

Table 6 presents estimates on financing of educational services by the government (including national institutions), local authorities and non-profit institutions in the years 1990 to 2001.

The flow of receipts and disbursements between the government and local authorities was adjusted to match the government accounts, whereas the flow of receipts and disbursements between the government, local authorities and non-profit institutions was adjusted according to the government and local authorities accounts.

In Table 6, an estimate of the labour cost of fixed capital of buildings and equipment was included in the expenditure of all sectors. Imputed expenditure, reflecting the government's commitment to pay pensions to its employees after retirement, was also included in labour costs.

The *income side* includes revenue from sale of educational services, mainly to households at a price covering only a part of the cost, such as tuition, registration, examination, dormitory fees, etc., in educational institutions owned by all sectors.

Other revenue include donations from Israel and from abroad for current maintenance (current transfers) and for construction purposes (capital grants).

Also included are current and capital transfers between the sectors.

On the *expenditure* side, the expenditures of each sector are specified:

- 1) Expenditure on provision of educational services to the public, such as running pre-primary and primary education institutions, secondary schools, post secondary and higher education institutions and administrative expenses of the government and local authorities;

- 2) Transfers between sectors with the following specification:
  - (a) Allocations by the government and local authorities to non-profit institutions in the government sector, such as appropriations to the universities and the Technion, appropriations for teacher and kindergarten teacher training institutions, payment of graduated tuition fees for kindergarten children or payment of tuition fees for secondary school pupils;
  - (b) Allocations by the government and local authorities to non-governmental non-profit institutions, such as disbursements for children in day care centers or transfers to post-secondary education institutions;
  - (c) Participation and refunds between sectors;
  - (d) Scholarships, assistance and awards to students;
- 3) Capital formation in construction of educational institutions and equipping them;
- 4) Government capital transfers to local authorities for construction purposes;
- 5) Capital transfers by the government and local authorities to non-profit institutions in the government sector, for the purpose of construction.

#### **3.4.4 Combined Accounts of Universities and Non-Profit Institutions**

Table 10 presents the combined account of the incomes and expenditures of universities - see detail of universities in par. 3.2. The account was prepared for the academic years from 1992/93 (October 1992-September 1993) to 2001/2002 (October 2001-September 2002). This is a summation of the categories of expenditure and income specified in the financial reports of the institutions. These categories include expenditures and income within the framework of all types of budgets; ordinary budgets, special budgets, designated and non-designated budgets, development budgets and special research budgets.

In the activities of endowment funds, the item "Donations in Israel and Abroad" included only income transferred by those funds to the universities; the funds own income from donations and interest, as well as their administrative expenditure were not included.

The combined account includes teaching and associated research, courses, and "separately budgeted research" i.e., commissioned research that receives special financing, and research conducted by the universities out of their own internal funding sources.

Expenditure on financing includes payments by the universities less their income. Whenever possible, linkage differential and revaluation were deducted.

Tables 11 and 12 present combined accounts, which include receipts and disbursements of non-profit institutions in the government sector and non-governmental non-profit institutions, respectively, for the years 1993-2001.

The institutions are classified by level of education, e.g. pre-primary and primary education institutions, secondary and post-secondary schools, universities, etc.

The receipts are divided into current and capital receipts.

Current receipts include: receipts from sales of services to households (e.g. tuition, registration and dormitory fees received from students), allocations, assistance and participation in dormitory fees by the government and the Jewish Agency and from the local authorities and also donations from Israel and from abroad.

The current account also includes income from interest.

The capital account provides details of capital transfers from the government and the Jewish Agency and from the local authorities for construction of buildings and purchases of equipment and grants from Israel and from abroad for these purposes.

The disbursements are classified into current and capital payments.

Current payments include: expenditure on provision of educational services by non-profit institutions, e.g., operation of educational institutions, including labour cost (wages and salaries, other labour expenses and taxes on the employment of labour) and current purchases of goods and other services; transfers to households (e.g. scholarships and awards to students), other donations and interest payments.

The capital account gives details of expenditure on construction building and requisition of equipment by non-profit institutions as well as capital transfers to the local authorities.

Tables 10, 11 and 12 do not include imputed expenditure on consumption of fixed capital of buildings and equipment.

Receipts from the government and the Jewish Agency and from the local authorities on the current and capital accounts and disbursements to these sectors are shown in Tables 10, 11 and 12 without full adjustment to parallel flows in the accounts of these sectors. Consequently, these figures are not the same as the data in other tables, where adjustments were made in accordance with the government accounts.

### **3.5 Period**

The data on national expenditure on education and its components are presented from 1990 on a calendar year basis (January to December), whereas for preceding years they are presented on a financial year basis (April to March).

The financial reports of some non-profit institutions, e.g., universities and a number of secondary schools, refer to academic years (October to September or September to August). The data from these reports are adjusted to calendar years using suitable relationships in the various monthly indicators such as salaries, number of employees and price indices.

## **4. SOURCES AND METHODS**

### **4.1 Sources**

Estimates at current prices were based on a detailed analysis of expenditure items in the government's financial reports (compiled by the Accountant General) and in those of national institutions and local authorities.

The expenditure of non-profit institutions was derived from an annual survey conducted by the Central Bureau of Statistics, which examined the components of expenditure of these institutions based on an analysis of their financial reports.

Estimates were also based on data from the Household Expenditure Surveys<sup>1</sup>, as well as on processing of contractors' reports to local authorities, and direct reports from the Ministry of Construction and Housing on construction of educational institutions that have been begun and completed.

### **4.2 Estimates at Constant Prices**

The annual changes in the national expenditure on education and its main components, at constant prices, were calculated separately for each sector (government, local authorities, non-profit institutions and business sector), for each type of expenditure (wages, current purchases, consumption of fixed capital, construction and equipment) and for each type of service (pre-primary; primary, secondary, post-secondary and higher education, etc.).

1) Government, local authorities and non-profit institutions: the changes in expenditure on labour cost (about 75% of current expenditure), at constant prices, were estimated according to the changes in work-units. Possible changes in the quality and composition of labour force were not taken into account. Likewise, no allowance was made for qualitative changes resulting from fluctuations in class sizes. For example, the arrival of new immigrants at the beginning of the 1990s led to crowding in classrooms, which might have affected the quality of teaching and thereby reduced the value of expenditure on education at constant prices.

Current expenditure on purchase of goods and other services was estimated by deflating the estimate at current prices by a price index, which takes into account the special structure of expenditure of these institutions.

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<sup>1</sup> Central Bureau of Statistics, *Household Expenditure Survey 2003, General Summary*, Special Publication 1246, Jerusalem, 2005.

Since data on the distribution of annual expenditure by month are not available, monthly or quarterly deflating of prices is not possible.

- 2) In the business sector, estimates are calculated at constant prices by means of quantitative indicators, such as the number of children in private kindergartens.
- 3) Capital formation in buildings at constant prices was calculated using the Price Index of Input in Residential Building. The estimate of capital formation in equipment was calculated using price changes in the output of industries that manufacture such equipment, and price changes in imported equipment.

The estimates of national expenditure on education at constant prices, are weighted by base year prices as follows:

Base year of the prices	Used for weighting estimates in the years
2000	1995-2003
1995	1995-2000
1990	1990-1995
1986/87	1986/87-1990/91
1980/81	1980/81-1986/87
1975/76	1975/76-1980/81
1970/71	1970/71-1975/76

## **5. RELIABILITY OF THE ESTIMATES**

**5.1** The preliminary estimates for the years 2002 and 2003 are less reliable than those for the years up to 2000, which are based on analysis of detailed financial reports of the educational institutions. Nonetheless, these preliminary estimates enable an assessment about general trends in these years. The estimates were prepared using data on the Ministry of Education's expenditure, data on wages and number of employees of non-profit institutions obtained from the National Insurance Institute, and global estimates of the expenditure of local authorities and data on the development of educational services in private institutions.

**5.2** Estimates of household purchases from commercial bodies, which constitute about 9% of total national expenditure on education, have a low level of reliability. These estimates are mostly based on data obtained from the Household Expenditure Surveys<sup>1</sup> For years in which no survey was conducted, estimates were made by interpolation or extrapolation, using the changes in similar items of private consumption for which data were available.

In the estimates of national expenditure on education, some of the expenditure in the item "other educational services" such as professional courses is not fully covered. The estimate for expenditure on these services is based on the Household Expenditure Surveys<sup>1</sup>, which record household expenditure only. The employers' participation in financing, e.g., financing of professional courses for employees, was not included in this item due to lack of data.

**5.3** In analysing the findings, it is important to bear in mind that estimates for a particular year are affected by different timing in the recording of expenditure and income by each sector. In addition, because financial reports of the different sectors do not relate to the same period, there may be random fluctuations (although most reports are from January to December, there are also reports from October to September or from September to August). Therefore, it is preferable to consider the share of each sector in financing or in provision of educational services, as the average derived over a number of years.

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<sup>1</sup> See note 1 on previous page.

## 6. REVISIONS OF DEFINITIONS AND CLASSIFICATIONS

Following below are the revisions in definitions and classifications, which have been introduced over the years:

**6.1** As of the year 1974/75, improvements have been introduced into the estimates for national expenditure on education. To enable comparison with the estimates of previous years, estimates for the year 1974/75 are also presented in Tables 1, 2 and 4, consistent with the previous method.

**6.2** From 1984/85, national expenditure on education and its components includes imputed expenditure reflecting the commitment of the government to pay retirement pensions to its employees and imputed expenditure on consumption of fixed capital of buildings and equipment in public educational institutions. In comparing the data for 1984/85 with data for earlier years in this series, it has to be taken into account that these additions increased national expenditure on education for the years 1984/85 and onwards by about 15%.

Another difference is a distinction made between two groups of non-profit institutions: (1) institutions financed mainly by the government, (2) other institutions. The expenditures of the institutions in the first group comprise 90% to 95% of the total expenditure of the non-profit institutions.

As of 1984/85, expenditure on private lessons for pupils is included in the items: "primary education institutions", "secondary general schools" and "Vocational, nautical and agricultural schools". As a result, since 1984/85 the item "other educational services", where this expenditure was previously included, includes mainly courses for adults and post-secondary education provided by the business sector.

For the purpose of comparison, the estimates are also shown for 1984/85 in Tables 1, 2 and 4, consistent with the previous method.

**6.3** Following clarifications in the Ministry of Education, as of 1990, all teachers and kindergarten teachers training institutions were defined as non-profit institutions and not as governmental institutions. Accordingly, revisions were made to the classification of national expenditure on education by sector, which increased the expenditure of non-profit institutions by about 3% and reduced the government sector expenditure by about 4%. It should be noted that labour cost of teachers in these institutions, who are civil servants, is included, as before, in expenditure of the government sector.

**6.4** In 1995, expenditure on post-secondary education provided by the business sector was separated from the item "other educational services" and included in the item "Other post-secondary institutions". The item "Other educational services" from 1995 includes mainly courses for adults.

**6.5** From 1996, all government payments (including the Ministry of Education, the Planning and Budgeting Committee, and money channelled for learning purposes in accordance

with the discharged soldiers law) whose purpose is to cover the students' expenditure on tuition in educational institutions (universities, post-secondary education institutions, teachers' training colleges and pre-academic preparatory courses), were classified in accordance with international directives as transfers to households and not as transfers to the non-profit institutions themselves, as partially classified in previous years. As a result, since 1996, all non-profit institutions' income for tuition in Tables 10, 11 and 12 is defined as income from households and not as income for the government.

- 6.6** From 1996 a separate estimate was made for pre-academic preparatory courses, which in previous years were included in the various teachers' training colleges, post-secondary institutions and higher education institutions.

## **7. COMPARISON WITH PREVIOUS PUBLICATIONS**

In comparison with previous estimates that were published in Special Publication 1241, 2005, revisions have been introduced in this publication due to the incorporation of the findings of the Household Expenditure Survey for 1997-2003 (see Para. 5.2). These surveys served as the basis for estimates of household expenditures for private preschool services, private courses and tutoring, textbooks, and stationery. Revisions related to a revised estimate in calculating depreciation for the years 1995-2000 were also inserted.

Current revisions were also introduced in the preliminary estimates for 2000 and 2001, based on detailed financial reports or additional information.