

1. GENERAL

This publication presents data on manufacturing industries, which derive from the results of a survey of all industries in the economy for 2005. The survey was based on a new sample for 2005, which was drawn from the Business Register established in recent years by the Central Bureau of Statistics. The Business Register is based primarily on combined administrative files – the VAT file of dealers, and the National Insurance Institute’s employers file. In the process of establishing the Business Register, the classification of dealers in the economy was examined and updated. The present sample replaces the two previous ones used in the Manufacturing Survey and in the Survey of Trade, Services, Transport and Communications up to 2003. The Diamonds industry was not included in the survey due to difficulties in obtaining reliable data. Financial statements for the 2005 tax year and their attachments served as the source of the survey data. Most of the statements were collected from the income tax files of the local income tax offices throughout the country, and some were collected from the establishments themselves.

The sample comprised approximately 1,785 manufacturing establishments that had one or more jobs in 2005. It should be emphasized that up to 2003, the manufacturing surveys covered only establishments with five or more job positions.

Comparison of data from the 2004 survey with data from the 2003 survey is problematic, owing to the replacement of the sample and updating of the classification of economic industries.

2. MAIN FINDINGS

According to the Manufacturing Survey data, there were 329,000 jobs in manufacturing in 2005. Table A presents selected data for all manufacturing establishments.

Table A.- Selected Data from the Manufacturing Survey, 2005

	Manufacturing - total	Establishments with 5 or more jobs	Establishments with less than 5 jobs
Jobs (thousands)	329.1	308.7	20.4
NIS millions, at current prices			
Gross output ⁽¹⁾	253,137.3	247,190.3	5,947.0
Gross Domestic Product ⁽²⁾	80,776.3	78,730.3	2,046.0
NIS thousands, at current prices			
Product per job	245.4	255.0	100.3
Compensation per job	141.4	147.1	53.9
Percentages			
Weight of gross domestic product in output	31.9	31.9	34.4
Weight of inputs in output	68.1	68.1	65.6

(1) Henceforth: output.

(2) Henceforth: product.

Manufacturing account for 1995-2007 – Table B below presents data on the output, input, and product of the manufacturing industry in current prices and in 1995 and 2004 prices, including estimates for 2006 and 2007 for all manufacturing establishments, based on the 2005 Manufacturing Survey, as well as on changes in the Manufacturing Production Index.

The data appearing in the first part of this publication are a summary of the nominal profit-and-loss statements of manufacturing establishments. The data in those statements were assessed at uniform average annual prices, and stock was adjusted in order to deduct capital earnings from the stock according to the Consumer Price Index.

The current output data presented in Table B do not include revenue from non-manufacturing activities.

Table B.- Output, Input and Product in Manufacturing Industries, 1995-2007

NIS Millions

Year	At current prices			At constant prices		
	Output	Input	Product	Output	Input	Product
				At 1995 prices		
1995	124,303	81,659	42,644	124,303	81,659	42,644
1996	140,976	92,367	48,609	131,261	86,993	44,268
1997	153,890	98,360	55,529	135,163	88,280	46,884
1998	168,626	106,489	62,137	142,468	92,909	49,560
1999	184,533	116,846	67,686	145,900	96,234	49,666
2000	207,019	131,869	75,150	161,393	104,053	57,340
2001	197,025	128,900	68,125	153,532	102,318	51,214
2002	204,018	136,365	67,653	148,840	100,650	48,190
2003	205,790	136,466	69,324	147,567	96,577	50,990
	New sample			At 2004 prices		
2004(1)	224,327	151,870	72,456	224,327	151,870	72,456
2005	250,521	172,394	78,127	238,878	159,767	79,112
2006(2)	281,620	192,882	88,737	258,505	170,506	87,999
2007(2)	294,622	200,630	93,991	269,831	178,161	91,670

(1) Data for 2004 and thereafter according to the new sample.

(2) The data for 2006-2007 were estimated on the basis of the 2005 Manufacturing Survey, and on the basis of the changes in the Manufacturing Production Index.

Data for 1995-2003 at 1995 prices were calculated by deflating current prices by the output price indices and the input price indices. Because there is no output price index for the manufacturing

industries, the price indices of each group were calculated as a weighted index of local sales prices (the wholesale index of manufacturing output) and of export price indices, which are calculated as the price change per unit or on the basis of price indices published abroad. Moreover, because there are no input price indices for the manufacturing industries, the price indices were calculated as a weighted index of imported inputs and inputs from local production, according to the input weights in the 1995 Input-Output Tables. The results presented above are influenced by the price index estimates used in the calculation.

Data on the product at 1995 and 2004 prices are obtained as the difference between the output and the value of the input at constant prices (by the double deflation method). Table B presents estimates of output, input, and product for 2006 and 2007 – years for which summaries according to manufacturing surveys are not yet available. Estimates at 2004 prices were calculated by extrapolating the 2005 Manufacturing Survey data (output and input data according to groups) based on manufacturing production indices (assuming that input-output ratios are fixed). The data at current prices were obtained from data estimated at 2004 prices, as well as from output and input price indices. Estimates of the product at current prices were obtained as the difference between output data and input data.

Table C presents the percentages of change in output, input and product as calculated from the Manufacturing Survey. In addition, it displays a comparison of these figures with the change in manufacturing production, as measured by manufacturing indices. Manufacturing indices include the indices of manufacturing production that are intended to measure the changes in the added value of the industry, the index of revenue at current prices, the index of revenue at constant prices, and employment indices. Up to 2003, these indices were based on a sample similar to the one used in the Manufacturing Survey. In 2004, the manufacturing indices sample was replaced, and the Manufacturing Survey sample became part of the sample of all industries in the economy (except for Agriculture), which is different from the manufacturing indices sample.

The results in the indices are affected by provisional data and imputations, as well as by the opening and closing of establishments. By contrast, the survey data are final – they include fewer imputations, and are less affected by the process of opening and closing establishments.

The manufacturing production index is based on revenue indicators at constant prices (without change in inventories), production quantities, and work hours (without productivity). In most groups the index reflects the change in output, and - assuming that input-output ratios remain constant - it also indicates the change in the added value of the group. The index for divisions and for manufacturing as a whole is weighted according to the added value of the groups.

Table C.- Output, Input and Product in Manufacturing, 1995-2007

Percentage of Change, Compared to Previous Year

	Manufacturing Survey			Manufacturing indices – Manufacturing Production Index
	Output	Input	Product	
	Nominal change			
1996	13.4	13.1	14.0	
1997	9.2	6.5	14.2	
1998	9.6	8.3	11.9	
1999	9.4	9.7	8.9	
2000	12.2	12.9	11.0	
2001	-4.8	-2.3	-9.3	
2002	3.5	5.8	-0.7	
2003	0.9	0.1	2.5	
	New sample			
2004 (1)				
2005	11.7	13.5	7.8	
2006 (2)	12.4	11.9	13.6	
2007 (2)	4.6	4.0	5.9	
	Quantitative change			
1996	5.6	6.5	3.8	5.3
1997	3.0	1.5	5.9	1.8
1998	5.4	5.2	5.7	2.8
1999	2.4	3.6	0.2	1.3
2000	10.6	8.1	15.5	10.1
2001	-4.9	-1.7	-10.7	-4.9
2002	-3.1	-1.6	-5.9	-1.9
2003	-0.9	-4.0	5.8	-0.3
	New sample			
2004 (1)				6.9
2005	6.5	5.2	9.2	3.7
2006 (2)	8.2	6.7	11.2	9.8
2007 (2)	4.4	4.5	4.2	4.5
	Price change			
1995	9.1	11.9	4.0	
1996	7.4	6.2	9.8	
1997	6.0	4.9	7.9	
1998	4.0	2.9	5.9	
1999	6.9	5.9	8.7	
2000	1.4	4.4	-3.8	
2001	0.0	-0.6	1.5	
2002	6.8	7.5	5.5	
2003	1.7	4.3	-3.2	
	New sample			
2004 (1)	5.1	7.2	1.1	
2005	4.9	7.9	-1.2	
2006 (2)	3.9	4.8	2.1	
2007 (2)	0.2	-0.5	1.7	

(1) The change in 2004 compared with 2003 cannot be calculated, due to replacement of the samples.

(2) Data for 2006-2007 were estimated on the basis of the 2005 Manufacturing Survey and the changes in the Manufacturing Production Index.

Table D presents data for 2005 for all manufacturing establishments, by industry (division), at 2004 prices.

TABLE D.- OUTPUT, INPUT AND PRODUCT IN MANUFACTURING

Code	Industry (division)	2004			2005			Quantitative change		
		Output	Input	Product	Output	Input	Product	Output	Input	Product
		NIS million, At current prices						Percentages		
B	Total	224,327.0	151,870.0	72,456.0	250,521.0	172,394.1	78,126.9	11.7	13.5	7.8
13	Mining of minerals and quarrying of stone and sand	4,001.0	1,919.0	2,082.0	5,116.4	2,395.0	2,721.4	27.9	24.8	30.7
14-15	Food products	28,665.0	21,954.0	6,711.0	29,620.7	22,857.5	6,763.1	3.3	4.1	0.8
16	Beverages and tobacco	4,489.0	3,256.0	1,233.0	4,211.0	2,802.5	1,408.5	-6.2	-13.9	14.2
17	Textiles	6,244.0	4,465.0	1,779.0	6,849.6	4,898.9	1,950.8	9.7	9.7	9.7
18	Wearing apparel (excl. knitted)	1,837.0	1,207.0	630.0	1,571.3	1,031.5	539.8	-14.5	-14.5	-14.3
19	Footwear, leather and leather products	459.0	303.0	156.0	506.4	340.1	166.3	10.3	12.3	6.6
20	Wood and wood products (excl. furniture)	1,875.0	1,357.0	518.0	1,776.9	1,329.2	447.7	-5.2	-2.0	-13.6
21	Paper and paper products	4,595.0	3,292.0	1,303.0	5,206.1	3,738.8	1,467.3	13.3	13.6	12.6
22	Publishing and printing	6,922.0	3,941.0	2,981.0	7,469.0	4,161.1	3,307.9	7.9	5.6	11.0
23-24	Chemicals, chemical products and refined petroleum	48,633.0	36,882.0	11,751.0	61,383.2	46,397.3	14,985.8	26.2	25.8	27.5
25	Plastic and rubber products	11,526.0	7,938.0	3,588.0	13,596.8	9,595.7	4,001.1	18.0	20.9	11.5
26	Non-metallic mineral products	6,008.0	4,124.0	1,884.0	7,055.7	5,062.5	1,993.2	17.4	22.8	5.8
27	Basic metal	5,200.0	4,070.0	1,130.0	5,839.4	4,790.8	1,048.6	12.3	17.7	-7.2
28	Metal products	16,787.0	9,795.0	6,992.0	18,597.5	11,113.7	7,483.7	10.8	13.5	7.0
29-30	Machinery and equipment and office machinery	8,984.0	6,183.0	2,801.0	9,559.0	6,997.3	2,561.7	6.4	13.2	-8.5
31	Electric motors and electric distribution apparatus	3,885.0	2,689.0	1,196.0	4,184.3	2,931.7	1,252.6	7.7	9.0	4.7
32	Electronic components	8,818.0	4,756.0	4,062.0	9,057.8	5,026.6	4,031.3	2.7	5.7	-0.8
33	Electronic communication equipment	13,061.0	8,260.0	4,801.0	14,782.4	9,117.1	5,665.3	13.2	10.4	18.0
34	Industrial equipment for control and supervision, medical and scientific equipment	24,725.0	15,114.0	9,611.0	26,656.7	16,771.1	9,885.7	7.8	11.0	2.9
35	Transport equipment	9,091.0	4,386.0	4,705.0	9,299.1	5,493.8	3,805.4	2.3	25.3	-19.1
36	Furniture	5,427.0	3,800.0	1,627.0	4,680.7	3,110.3	1,570.4	-13.8	-18.1	-3.5
38	Jewellery, goldsmiths' and silversmiths' articles	1,925.0	1,456.0	469.0	2,294.4	1,704.4	589.9	19.2	17.1	25.8
39	Manufacturing n.e.c.	1,170.0	724.0	446.0	1,206.4	727.1	479.4	3.1	0.4	7.5

TABLE D.- OUTPUT, INPUT AND PRODUCT IN MANUFACTURING (Cont.)

Code	Industry (division)	2004			2005			Price changes		
		Output	Input	Product	Output	Input	Product	Output	Input	Product
		NIS million, At 2004 prices						Percentages		
B	Total	224,327.0	151,870.0	72,456.0	238,878.4	159,766.7	79,111.7	6.5	5.2	9.2
13	Mining of minerals and quarrying of stone and sand	4,001.0	1,919.0	2,082.0	4,607.2	2,191.9	2,415.3	15.2	14.2	16.0
14-15	Food products	28,665.0	21,954.0	6,711.0	29,123.2	22,224.7	6,898.5	1.6	1.2	2.8
16	Beverages and tobacco	4,489.0	3,256.0	1,233.0	4,073.4	2,673.1	1,400.3	-9.3	-17.9	13.6
17	Textiles	6,244.0	4,465.0	1,779.0	6,732.6	4,768.7	1,963.9	7.8	6.8	10.4
18	Wearing apparel (excl. knitted)	1,837.0	1,207.0	630.0	1,501.7	1,001.3	500.5	-18.2	-17.0	-20.6
19	Footwear, leather and leather products	459.0	303.0	156.0	477.7	326.7	151.0	4.1	7.8	-3.2
20	Wood and wood products (excl. furniture)	1,875.0	1,357.0	518.0	1,753.1	1,281.3	471.8	-6.5	-5.6	-8.9
21	Paper and paper products	4,595.0	3,292.0	1,303.0	5,035.8	3,540.2	1,495.7	9.6	7.5	14.8
22	Publishing and printing	6,922.0	3,941.0	2,981.0	7,167.4	3,955.1	3,212.3	3.5	0.4	7.8
23-24	Chemicals, chemical products and refined petroleum	48,633.0	36,882.0	11,751.0	54,139.8	38,428.2	15,711.6	11.3	4.2	33.7
25	Plastic and rubber products	11,526.0	7,938.0	3,588.0	12,812.7	8,765.8	4,046.9	11.2	10.4	12.8
26	Non-metallic mineral products	6,008.0	4,124.0	1,884.0	6,768.9	4,816.7	1,952.3	12.7	16.8	3.6
27	Basic metal	5,200.0	4,070.0	1,130.0	5,834.1	4,561.0	1,273.1	12.2	12.1	12.7
28	Metal products	16,787.0	9,795.0	6,992.0	17,826.4	10,523.2	7,303.1	6.2	7.4	4.4
29-30	Machinery and equipment and office machinery	8,984.0	6,183.0	2,801.0	9,327.7	6,816.7	2,511.0	3.8	10.2	-10.4
31	Electric motors and electric distribution apparatus	3,885.0	2,689.0	1,196.0	3,870.7	2,783.2	1,087.5	-0.4	3.5	-9.1
32	Electronic components	8,818.0	4,756.0	4,062.0	9,476.7	4,825.8	4,650.9	7.5	1.5	14.5
33	Electronic communication equipment	13,061.0	8,260.0	4,801.0	15,073.0	9,116.0	5,957.0	15.4	10.4	24.1
34	Industrial equipment for control and supervision, medical and scientific equipment	24,725.0	15,114.0	9,611.0	26,368.6	16,559.9	9,808.7	6.6	9.6	2.1
35	Transport equipment	9,091.0	4,386.0	4,705.0	9,264.2	5,385.5	3,878.7	1.9	22.8	-17.6
36	Furniture	5,427.0	3,800.0	1,627.0	4,214.5	2,904.6	1,309.8	-22.3	-23.6	-19.5
38	Jewellery, goldsmiths' and silversmiths' articles	1,925.0	1,456.0	469.0	2,237.0	1,625.0	612.0	16.2	11.6	30.5
39	Manufacturing n.e.c.	1,170.0	724.0	446.0	1,192.1	692.2	499.8	1.9	-4.4	12.1

2.1 Findings by Industry (Division)

In 2005, there were about 20,600 **manufacturing establishments** with one or more jobs. The largest number of establishments in this category was found in Metal Products (21%) and Furniture (19%), and the smallest number was found in Mining of Minerals and Quarrying of Stone and Sand (0.3%).

The number of jobs in total manufacturing in 2005 was 329,100. The industry with the largest number of jobs was Food Products (about 14% of all jobs in manufacturing industries), whereas the industry with the smallest number of jobs was Footwear, Leather and Leather Products (0.5%).

The highest **product** was found in Chemicals and Chemical Products and Refined Petroleum (19% of the product for total manufacturing), and in Industrial Equipment for Control and Supervision, Medical and Scientific Equipment (12%). The lowest product was found in Footwear, Leather and Leather Products (0.2%).

The highest **output** was found in Chemicals and Chemical products and Refined Petroleum (24% of the output for total manufacturing) and in Food Products (12%), whereas the lowest output was found in Footwear, Leather and Leather Products (0.2%).

The **share of the product in output** was 31.9% on the average. The lowest share of the product in the output was found in Basic Metal (19%), Food Products (24%), and Chemicals and Chemical Products and Refined Petroleum (25%); the highest share (54%) was found in Mining of Minerals and Quarrying of Stone and Sand as well as in Transport Equipment.

In addition, analysis of the data indicates that **output per job** was highest in Chemicals and Chemical Products and Refined Petroleum (NIS 2.7 million), and lowest in Wearing Apparel (except knitted) (NIS 251,000), Footwear, Leather and Leather Products (NIS 335,000), and Publishing and Printing (NIS 310,000).

Product per job was highest in Mining of Minerals and Quarrying of Stone and Sand (NIS 862,000, three times higher than the average in total manufacturing), and the lowest product was found in Wearing Apparel (except knitted) (NIS 87,000).

The highest **compensation per job** was found in Industrial Equipment for Control and Supervision, Medical and Scientific Equipment (NIS 274,000), and the lowest compensation per job was in Wearing Apparel (except knitted) (NIS 60,000).

In 2005, the share of **revenue in the output** measured for manufacturing establishments was 12.0%.

Selected data are presented in Tables E and F.

**Table E.- Selected Components of Manufacturing, by Industry (Division)
2005**

Percentages					
Code	Industry (division)	Income from manufacturing activities, as percentage of total revenue	Product as percentage of output	Compensation for jobs as percentage of product	Consumption of materials as percentage of inputs
	Manufacturing – Total	99.0	31.9	57.6	71.2
13	Mining of minerals and quarrying of stone and sand	98.9	53.7	29.6	23.3
14-15	Food products	98.8	23.8	66.1	74.8
16	Beverages and tobacco products	99.0	34.1	55.2	65.3
17	Textiles	99.7	28.7	65.6	70.1
18	Wearing apparel (excl. knitted)	99.4	34.8	68.6	60.2
19	Footwear, leather and leather products	98.4	34.0	71.3	63.6
20	Wood and its products (excl. furniture)	99.2	25.8	76.3	76.3
21	Paper and its products	99.7	28.4	67.1	76.2
22	Publishing and printing	99.2	44.7	72.0	50.4
11,23-24	Chemicals and chemical products and refined petroleum (incl. extraction of natural gas)	99.4	24.9	31.7	83.8
25	Plastic and rubber products	98.9	30.2	56.1	76.2
26	Non-metallic mineral products	99.4	28.7	62.2	55.9
27	Basic metal	99.1	18.7	68.1	81.4
28	Metal products	99.0	40.8	51.9	68.0
29-30	Machinery & equipment & office machinery	94.9	30.5	76.3	68.1
31	Electric motors and electric distribution apparatus	98.4	31.1	70.2	78.3
32	Electronic components	95.5	47.1	58.1	65.7
33	Electronic communications equipment	99.8	38.4	63.8	64.8
34	Industrial equipment for control and supervision, medical and scientific equipment	99.9	37.2	75.7	56.6
35	Transport equipment	99.2	41.4	71.1	46.6
36	Furniture	99.4	34.0	61.7	74.1
38	Jewellery and gift items, goldsmiths' and silversmiths' articles	97.3	27.7	58.6	79.1
39	Manufacturing n.e.c.	98.6	40.6	60.3	69.3

**Table F.- Distribution of Establishments, Jobs, Output, Product,
and Compensation for Jobs, by Industry (Division)
2005**

Percentages

Code	Industry (division)	Estab- lishments	Jobs	Output	Product	Compen- sation for jobs
	Manufacturing – Total	100.0	100.0	100.0	100.0	100.0
13	Mining of minerals and quarrying of stone and sand	0.3	1.0	2.0	3.4	1.8
14-15	Food products	12.5	14.2	11.8	8.8	10.1
16	Beverages and tobacco products	1.3	1.9	1.7	1.8	1.7
17	Textiles	2.6	3.5	2.7	2.4	2.8
18	Wearing apparel (excl. knitted)	4.1	1.9	0.6	0.7	0.8
19	Footwear, leather and leather products	1.5	0.5	0.2	0.2	0.3
20	Wood and its products (excl. furniture)	3.3	1.2	0.7	0.6	0.8
21	Paper and its products	1.3	3.0	2.1	1.8	2.1
22	Publishing and printing	10.6	7.4	3.0	4.2	5.2
11,23-24	Chemicals and chemical products and refined petroleum (incl. extraction of natural gas)	1.9	7.0	24.4	19.0	10.5
25	Plastic and rubber products	3.0	6.0	5.4	5.1	5.0
26	Non-metallic mineral products	4.2	3.2	2.8	2.5	2.7
27	Basic metal	1.4	1.7	2.3	1.4	1.6
28	Metal products	20.9	12.2	7.4	9.5	8.5
29-30	Machinery & equipment & office machinert machinery	2.1	4.4	4.0	3.8	5.0
31	Electric motors and electric distribution apparatus	2.1	2.1	1.7	1.6	2.0
32	Electronic components	0.8	5.1	3.7	5.5	5.6
33	Electronic communications equipment	1.0	4.4	5.8	7.0	7.8
34	Industrial equipment for control & supervision, medical & scientific equipment	1.1	8.3	10.5	12.3	16.1
35	Transport equipment	0.5	4.6	3.7	4.8	5.9
36	Furniture	18.5	3.8	1.9	2.0	2.1
38	Jewellery and gift items, goldsmiths' and silversmiths' articles	3.2	1.5	0.9	0.8	0.8
39	Manufacturing n.e.c.	1.8	0.9	0.5	0.6	0.6

2.2 Findings, by Size Groups

In 2005, there were about 20,600 manufacturing establishments in the economy that had one or more jobs. The total number of jobs in all of those establishments was 329,000; of those establishments, 19,400 (94%) had less than 50 jobs, which amounted to about 32% of all jobs in manufacturing. The findings indicate that on the average, the output per job is higher in large establishments, and ranged from about NIS 436,000 in establishments with up to 49 jobs, to NIS 1.069 million in establishments with over 300 jobs.

The distribution of establishments and jobs by number of jobs per establishments is presented in Table G and Table 17.

In the group of small establishments (up to 49 jobs), the average product per job (NIS 144,000) was lower than the average in manufacturing (NIS 246,000), and average compensation per job (NIS 91,000) was much lower than the average in manufacturing (NIS 141,000).

In 2005, the share of the profit (including depreciation and amortization)¹ in the output was 12.0% for total manufacturing. Only establishments with more than 300 jobs recorded a higher share of profit, whereas lower shares of the profit were recorded for establishments in the rest of the size groups.

**Table G.- Selected Data, by Size Groups of Jobs Per Dealer (Establishment)
2005**

	Total Manufacturing	Number of Jobs per Dealer			
		Up to 49 jobs	50-99 jobs	100-299 jobs	300+ jobs
		Percentages			
Distribution of establishments	100.0	94.1	3.2	2.0	0.7
Distribution of jobs	100.0	31.9	13.9	19.6	34.7
Distribution of output	100.0	18.0	11.6	22.1	48.2
Distribution of product	100.0	18.7	10.0	19.1	52.3
Distribution of exports	100.0	6.8	7.5	20.2	65.5
Percentage of product in output	31.9	33.0	27.3	27.5	34.7
Percentage of profit in output	12.0	10.0	7.4	9.9	14.9
Share of exports in total revenue	41.6	15.6	26.7	38.1	56.5
		NIS Thousands, at current prices			
Output per job	769.2	435.6	646.7	868.3	1,068.7
Product per job	245.5	143.7	176.3	238.7	370.3
Compensation per job	141.4	90.7	114.4	140.6	199.1

¹ Henceforth: profit.

In 84% of all manufacturing establishments, the annual revenue was less than NIS 5 million, whereas most of the jobs (over 50%) were in establishments with high revenue levels (over NIS 50 million). Those establishments also contributed about 79% of the output and 77% of the product (for selected data by size groups, see Table H and Tables 22-26).

**Table H.- Selected Data, by Size Groups of Total Revenue Per Dealer (Establishment)
2005**

	All manufac- turing	Total Annual Revenue per Dealer (NIS millions)			
		Up to 4.9	5-19.9	20-49.9	50+
		Percentages			
Distribution of establishments	100.0	84.1	8.8	3.6	3.6
Distribution of jobs	100.0	17.3	14.6	12.8	55.3
Distribution of output	100.0	4.9	6.8	9.1	79.2
Distribution of product	100.0	5.8	7.7	9.3	77.3
Distribution of exports	100.0	0.5	1.6	4.7	93.2
Percentage of product in output	31.9	37.6	36.0	32.5	31.1
Percentage of profit in output	12.0	7.0	7.5	8.1	13.2
Share of exports in total revenue	41.6	3.8	9.9	21.6	49.0
		NIS thousands, at current prices			
Output per job	769.2	217.2	358.3	547.0	1,102.4
Product per job	245.5	81.6	128.9	177.8	343.3
Compensation per job	141.4	63.7	95.2	120.3	182.8

2.3 Findings, by Technological Intensity¹

The classification of manufacturing establishments by technological intensity reveals that most of the jobs in manufacturing were in industries classified as low-technology and medium-low technology (64%), whereas the shares of the output and product for those establishments in total manufacturing were 46% and 47%, respectively. Low technology industries include: Textiles, Wearing Apparel, Footwear, Leather and Leather Products, Food Products, Beverages and Tobacco Products, Paper and Printing, and Wood Products and Furniture. Medium-low technology industries include Mining and Quarrying, Rubber and Plastics, Non-Metallic Mineral Products, Non-Ferrous and Precious Metals, Metal Products, Ships and Boats, Jewellery and Goldsmiths' and Silversmiths' Articles, and Manufacturing n.e.c. 37% of all jobs in manufacturing were in low-technology industries, whereas their output comprised only 25% of the total output in

¹ The list of industries by technological intensity was compiled according to the OECD classification. See Appendix, p. 57.

all manufacturing industries, and the product comprised 23% of the manufacturing product. In those industries, the share of the profit (including depreciation and amortization) in the output was 8% (about 33% less than the share of the profit measured for total manufacturing).

High technology industries include Electronic Communications Equipment, Office Machinery and Computers, Pharmaceuticals, Industrial Equipment for Control and Supervision, Electronic Components, and Aircraft. The share of jobs in high technology industries was about 24%, whereas their share of the output reached 29%. The product in those industries amounted to 37% of the total manufacturing product. High technology manufacturing industries contributed 50% to total manufacturing exports. The share of the profit (including depreciation and amortization) in the output for those industries amounted to 16.5% (38% more than the share in total manufacturing, which was 12.0%).

Compensation per job in high technology industries amounted to NIS 225,000 in 2005 – 60% higher than the average compensation per job in total manufacturing (NIS 138,000), and more than twice as high as the compensation per job in low technology industries (for selected data on technological intensity, see Table I and Table 3).

**Table I.- Selected Data, by Technological Intensity
2005**

	Manufac- turing - Total	High technology	Medium- high technology	Medium-low technology	Low technology
	Percentages				
Distribution of establishments	100.0	3.3	6.2	34.8	55.7
Distribution of jobs	100.0	24.1	12.0	26.5	37.4
Distribution of output	100.0	28.7	25.0	21.7	24.7
Distribution of product	100.0	37.1	16.4	24.1	22.5
Distribution of exports	100.0	49.8	23.7	17.3	9.2
Percentage of product in output	31.9	41.2	20.9	35.4	29.1
Percentage of profit in output	12.0	16.5	8.3	14.9	8.0
Share of exports in total revenue	41.6	72.1	40.0	33.1	15.4
	NIS thousands, at current prices				
Output per job	769.2	916.9	1,600.0	629.6	506.9
Product per job	245.5	378.1	334.6	222.9	147.6
Compensation per job	141.4	225.3	171.3	113.0	97.9

Export-intensive establishments (see Definitions and Explanations section)

The share of the product in the output of export-intensive establishments (38%) was slightly higher than the share of the product in total manufacturing (32%). The share of profit in the output of export-intensive establishments (16%) was higher than the share recorded in total manufacturing (12%). However, the share of compensation for jobs in the product of export-intensive establishments (55%) was lower than in total manufacturing (58%).

For selected data on the components of output and product in manufacturing and in export-intensive establishments, see Table J and Table 2.

**Table J.- Components of Output and Product in Total Manufacturing
and in Export-intensive Establishments**

2005

	All manufacturing	Export-intensive establishments
Percentage of profit in output	12.0	15.6
Percentage of product in output	31.9	37.6
Percentage of compensation for jobs in product	57.6	54.7
Percentage of profit in product	37.7	41.6

Of all manufacturing establishments operating in the economy in 2005, there were about 122,000 jobs in export-intensive establishments (about 37% of all jobs in manufacturing). The share of those establishments amounted to about 92% of the sales of manufacturing exports, about 48% of the total annual manufacturing output, and about 57% of the total product.

The vast majority of jobs, output, product, and exports (81%, 86%, 87%, and 99%, respectively) in high-technology industries were in export-intensive establishments; and 53% of the jobs, 52% of the output, and 57% of the product in export-intensive establishments derived from high technology industries. In low-technology industries, the opposite situation was revealed: for those industries, the share of jobs and output in export-intensive establishments was 12% and 18%, respectively; and 12% of the jobs, 9% of the output, and 7% of the product in export-intensive establishments derived from low-technology industries.

Table K presents selected data on export-intensive establishments, by technological intensity.

**Table K.- Selected Data on Export-Intensive Establishments, by Technological Intensity
2005**

	Manufac- turing - Total	High technology	Medium-high technology	Medium-low technology	Low technology
	Percentages, in relation to data for all manufacturing establishments				
Jobs	37.1	81.4	49.6	27.1	11.8
Output	48.0	86.2	40.6	40.0	18.0
Product	56.6	87.3	56.8	46.0	17.1
Exports	91.8	99.3	75.2	95.0	87.9
	NIS thousands, at current prices				
Output per job	993.6	970.8	1,309.6	931.2	770.7
Product per job	373.8	405.5	383.2	378.6	213.0
Compensation per job	204.5	244.7	202.3	146.5	123.8

Findings by sector¹

The division of manufacturing establishments by sector was prepared in accordance with the requirements of the *System of National Accounts 1993*². The recommendations were put forth jointly by five international institutions: the UN, IMF, OECD, Eurostat, and the World Bank. Classification of each business by sector was determined by control of shares in the company. The dealers in the sample were divided into two groups:

1. Dealers whose identification number is their identity card – self-employed dealers were classified as households.
2. Dealers that are registered companies or partnerships, whose identification number begins with “5” were classified as non-financial corporations.

Dealers in Group (2) were further divided into three subcategories:

1. Government corporations;
2. National private corporations, and foreign-controlled corporations;
3. Cooperatives

In 2005, about 81% of the **jobs** in manufacturing were in private corporations, about 7% were in government corporations, 6% were in cooperatives, and 5% were in households. The definition of households included individuals who function as consumers or as entrepreneurs who produce market goods. Corporations with over 50% of their stock under government ownership were classified as government corporations. **Output per job** was found to be highest in government corporations (NIS 1.846 million, twice the average value of total manufacturing). In private corporations, output per job was NIS 710,000, somewhat lower than the average in total manufacturing (NIS 769,000). Output per job was NIS 808,000 in cooperatives, and only NIS 191,000 in households. **Product per job** amounted to NIS 246,000 in total manufacturing, NIS

¹ For detailed definitions of the sectors, see Section 3, “Definitions and Explanations”.

² United Nations, World Bank Commission of the European Communities, International Monetary Fund, Organization for Economic Cooperation and Development, *System of National Accounts – 1993*. Brussels/Luxembourg, New York, Paris, Washington D.C., 1993.

388,000 in government corporations, and only NIS 76,000 in households. **Compensation per job** was highest in government corporations (NIS 256,000, compared with an average compensation of NIS 141,000), followed by private corporations and cooperatives (NIS 139,000 and NIS 124,000, respectively). Compensation per job in households was only about one-fourth of the average amount in total manufacturing (NIS 39,000), and amounted to only one-fourth of the average amount for total manufacturing. **Rates of profit (including depreciation and amortization) in output** were highest for households: 19.2%, compared to 12.0% in total manufacturing. The lowest profit rate was found for Government corporations (only 6.3%). Selected data on the distribution of manufacturing establishments by sector are presented in Table L below and Tables 12-16.

**Table L. – Selected Data on Manufacturing Establishments, by Sector
2005**

	Manufac- turing - Total	Government corporations	Private corporations	Cooperatives	Households
Jobs (thousands)	329	24	267	21	18
NIS Millions, at current prices					
Output	253,137	43,439	189,424	16,876	3,398
Product	80,776	9,126	65,608	4,686	1,356
Compensation for jobs	46,519	6,034	37,211	2,590	684
Exports	105,087	18,251	79,832	6,983	21
Revenue	252,618	43,252	188,915	17,039	3,411
Profit	30,429	2,717	25,260	1,798	654
Data per job, NIS thousands, at current prices					
Output	769.2	1,846.0	709.7	808.0	191.3
Product	245.5	387.8	245.8	224.3	76.4
Compensation	141.4	256.4	139.4	124.0	38.5

Research and development in manufacturing

Three hundred establishments reported on research and development activity.¹ Those establishments provided 83,000 jobs (approximately 25% of the total jobs in manufacturing); their output amounted to approximately 34% of the total manufacturing output, and approximately 42% of the total manufacturing product. It should be noted that exports comprised approximately 75% of these establishments' sales, whereas the proportion of exports for all manufacturing amounted to 42%. The product constituted 39% of the output in these

¹ In some manufacturing establishments, research and development activity is included in production costs and is not regarded as a separate item in the profit and loss report.

establishments, and it exceeded that of the other establishments, in which the gross product comprised 32% of their output.

Net total research and development expenditure in manufacturing amounted to approximately NIS 7.1 billion in 2005 (after deducting research and development subsidies).¹ Compensation for jobs amounted to 55% of the total research and development expenditure. Costs of raw materials and work performed by sub-contractors constituted an additional 20%, approximately.

The leading industries in research and development were Electronic Communications Equipment and Industrial Equipment for Control and Supervision, Medical and Scientific Equipment, in which 67% of the total expenditure for research and development in manufacturing and 76% of the total R&D subsidies were invested. These industries contributed 44% of the output and 43% of the product.

Sales, administration and general expenditures

Sales and administration expenditures are presented after deduction of commissions for sales in Israel and export commissions.

¹ A special survey on the expenditures for research and development by manufacturing establishments indicates higher gross expenditures – NIS 7,937 million (of which NIS 475 million were R&D subsidies). Part of this gap is explained in Footnote 1 on the previous page.

**Table M. – Selected Components of Sales, Administration and General Expenditures –
by Industry (Division), 2005**

Percentages

Code	Industry (division)	General inputs, as percentage of total revenue from manufacturing activity	Compensation for jobs in sales and administration as percentage of total sales and administration expenditures	Compensation for jobs in sales and administration as percentage of total compensation for jobs
	Manufacturing – Total	6.3	35.0	25.0
13	Mining of minerals and quarrying of stone and sand	3.0	10.4	13.1
14-15	Food products	9.1	32.0	39.2
16	Beverages and tobacco products	13.5	37.0	58.2
17	Textiles	5.7	32.4	22.1
18	Wearing apparel (excl. knitted)	12.1	43.9	45.6
19	Footwear, leather and leather products	11.8	38.4	36.3
20	Wood and its products (excl. furniture)	9.9	32.0	27.2
21	Paper and its products	4.4	41.4	23.3
22	Publishing and printing	10.7	37.6	26.4
11,23-24	Chemicals and chemical products and refined petroleum (incl. Extraction of natural gas)	3.8	27.3	26.5
25	Plastic and rubber products	6.7	33.5	28.2
26	Non-metallic mineral products	6.8	37.2	24.9
27	Basic metal	3.9	42.5	25.9
28	Metal products	6.7	44.2	26.6
30-29	Machinery and equipment and office machinery	7.2	42.0	23.5
31	Electric motors and electric distribution apparatus	6.8	45.3	30.7
32	Electronic components	4.8	34.1	12.3
33	Electronic communications equipment	9.6	35.4	28.8
34	Industrial equipment for control and supervision, medical and scientific equipment	5.7	40.4	15.6
35	Transport equipment	2.9	47.5	13.1
36	Furniture	7.8	35.1	26.1
38	Jewellery and gift items, goldsmiths' and silversmiths' articles	7.4	41.2	35.6
39	Manufacturing n.e.c.	8.1	35.2	27.5

To draw the sample, it is necessary to use a list of all the establishments belonging to the survey population. This list will be referred to henceforth as the frame. The source for construction of the frame was the Business Register established at the Central Bureau of Statistics. The Register includes combined information from two administrative sources:

- a. The monthly file of dealers, and the annual file of partnerships from VAT.
- b. The file of deductions form National Insurance.

The administrative sources provided the information relevant for planning the frame. That information included descriptions of the activities of the businesses, which served as the basis for classifying the economic industries according to the *Standard Industrial Classification of All Economic Activities, 1993*.¹, as well as current quantitative data on revenue and employee jobs.

3.2 The Sample

The sample of industries in the economy replaced the two samples that were used in the Manufacturing Survey and in the Survey of Trade, Services, Transport and Communications up to 2003. As mentioned, the new sample covers all industries in the economy (excl. Diamonds and Agriculture).

3.2.1 Sampling Method

In 2004, the sampling method for the survey was changed. The change in method was due to the desire to more effectively address the dynamics of the businesses throughout the period of the survey. The sampling method used until 2003 was based on proportional size. According to that method, the size of the unit was determined in accordance with the number of employee jobs, and sampling was conducted relative to this size in the industry, which is aggregated by size groups. The larger the unit, the higher the sampling probability, to the point of certain sampling. However, in the sampling method used as of 2004, the unit size was determined on the basis of the total annual revenue, which correlates more strongly with most of the variables examined in the survey. For every sampled industry, several size strata were defined. The division of units in an industry into size strata was carried out according to an algorithm that determines the boundaries of the size strata, the size of the overall sample in the industry, and allocation of the sample among the different size strata. In each size stratum, businesses are sampled with equal probability, according to the allocation of the sample and the number of businesses in the stratum. The highest sampling stratum in each industry was the “take-all” stratum of businesses, and the units belonging to those strata had a sampling probability of 1. Other size strata are referred to as “take-some” strata, and their sampling probability was less than 1. Larger units were allocated to higher strata, and their sampling probability was higher.

3.2.2 The Weighting factor

The weighting factor of a dealer is the inverse of the sampling probability, and expresses the number of dealers that the dealer in the sample represents (the weighting factor of a “take-all” establishment is 1).

¹ See: Central Bureau of Statistics, *Standard Industrial Classification of All Economic Activities 1993*, Second Edition, (Technical Publication No. 63), Jerusalem, 2003.

3.2.3 Estimation

The data (either original or imputed) on each establishment were multiplied by its weighting factor, and the sum obtained was the “weighted data” of the establishment. All the estimates were based on the weighted data.

3.2.4 Sources of the Data

The sources of the survey data were:

- a. Data on revenue based on reports to VAT.
- b. Financial statements for the 2005 survey year and their appendices. The statements were collected from income tax files at all branches of the Income Tax authorities in Israel, and the establishments themselves.
- c. The number of employee jobs, based on reports of employers to the National Insurance Institute.

3.2.5 The Survey Period

The survey relates to the 2005 fiscal year (from 1 January to 31 December). A few of the reports related to other periods, and the financial data of those dealers were adjusted to the prices of the survey year.

3.3 Subjects Under Investigation

3.3.1 Definitions

The investigation unit, which is also the reporting unit, is the “establishment” – an economic unit (e.g., a mine, a factory, or a workshop) that produces or manufactures products and/or provides industrial services (e.g., repair of machinery or packaging of industrial products). In this sense, an establishment is generally located on one site and engages in one economic activity. According to this principle, departments of an establishment were also defined as separate establishments if each of them engaged in a different type of manufacturing or provided a different type of service, on the condition that the department kept accounts that enable separate statistical reporting. It should be noted that departments that function as auxiliary units and serve only the establishments themselves were not defined as establishments. Nor were they treated as separate investigation units (for example, a carpentry shop that serves the needs of a metal establishment, or a workshop that maintains the equipment of a textile establishment). When departments were incapable of reporting separately on the major topics of investigation (number of employees, wages, revenue, etc.), the firm was considered one investigation unit.

Employee jobs: All jobs of people appearing on the payrolls as employees, as well as jobs of members of cooperatives, and jobs of workers from Judea and Samaria and the Gaza Area. Jobs of kibbutz members who work in an establishment and appear on its payrolls are defined as employee jobs, even if their wages are transferred to the kibbutz and not to them. Kibbutz members are not defined as employees in the monthly data of the manufacturing indices framework. This figure does not include jobs of workers hired through employment agencies.

Jobs: Jobs of employees, proprietors, workers, and unpaid family members.

Compensation per job – wages and salaries, and other labour expenses – includes all the taxable sums (before deductions) appearing on the payrolls for employee jobs, and all of the expenditures made by the establishment that relate to hiring people for employee jobs and do not appear on the payrolls.

The expenditures appearing on the payrolls include basic wages, allowances (cost of living, vocational, seniority, travel, premiums, bonuses), payments for overtime, absence days (such as vacation, illness, and holidays), recreation allowance, “13th month” salary, vehicle maintenance (including imputation of employer’s vehicle which is at the disposal of the employed person), telephone, clothing, food and lodging (only if taxable), and payments in kind (such as meals, gifts, and housing).

Supplementary expenses for wages include the establishment’s expenses related to the engagement of employees, which do not appear on the payrolls. These expenses include: contributions to the National Insurance Institute, to the *Mivtahim* fund and equalization funds, to pension funds, to provident and compensation funds, and to provident schemes of banks, as well as parallel tax, employers’ tax, severance pay and pension (if paid by the employer on his own account), managers’ insurance, employers’ insurance, education and proficiency allowance, expenditures for transportation of workers, and expenditures on maintenance of dining facilities for workers. Employers’ savings loans are not included. Nor do these expenses include wages of workers hired through employment agencies, an expenditure recorded as payments for outside work.

When the annual financial statement is closed, compensation for jobs also includes special wage supplements such as an imputation of accumulated vacation, as well as bonuses and charges for stockholders which are presumably not included in current monthly data. Therefore, the figures on compensation for jobs obtained in the survey are higher than those obtained in the monthly summary report of manufacturing indices. Additionally, the survey data include wages of kibbutz members who were defined as having employee jobs even though they are not defined as such in the current indices.

Stock: The value of stock owned by the establishment, even if it is stored outside of the establishment. The value of the stock is specified below:

- a. Stock of materials, including raw materials, auxiliary and packaging materials, fuel, etc.
- b. Stock of unfinished products – products which have not yet been completed by the date of the report.
- c. Stock of finished products – finished products owned by the establishment on the date of the report.
- d. Stock of goods – goods that were not processed, and were owned by the establishment on the date referred to in the report.

Adjustment of the prices of stock data – The value of the change in stock (i.e., the difference between the value of the stock at the end of the year and its value at the beginning of the year, obtained from the establishments’ financial data) reflects, in addition to the physical change in the stock, capital gains or losses, caused by price changes between the beginning and the end of the year. Because the survey aimed to present the establishments’ activity without these capital gains or losses, the stock data were adjusted. In the process of adjustment, the value of stock at the beginning of the year and at the end of the year was calculated at mid-year prices.

The difference between the adjusted value of stock at the beginning of the year and the adjusted value at the end of the year reflects the physical change in the stock that year. It is estimated at average prices of that year, and can be compared with other data that represent the economic activity of the establishments such as revenue, purchases and compensation for jobs.

The value of the stock was adjusted to the average prices of that year on the basis of the Consumer Price Index at the level of an individual establishment and for each type of stock – material, finished products, unfinished products, and goods.

Total revenue from manufacturing activities consists of the following items:

- a. **Sales to the domestic market** includes revenue from sales of the establishment's products to the domestic market, and revenue from exports to the Palestinian Authority, less purchase tax and commissions to agents in Israel, and with the addition of participation from the Chief Scientists in R&D expenditures, as well as the value of manufacturing assets for own use.
- b. **Sales for export** includes revenue from sales of the establishment's products for export, less export commissions.
- c. **Income from work and repairs.**

Total revenue consists of the following items:

- a. **Total revenue from manufacturing activity.**
- b. **Total revenue from non-manufacturing activity** includes income from renting out buildings and equipment, other income. Capital gains are not included.

Gross output is defined as total income, with the addition of growth in the stock of finished and unfinished goods, and less the value of goods that were not processed.

Materials include raw materials, auxiliary materials, and packaging materials.

Other input in the manufacturing process includes all inputs that are not components of the product (components of the product include: compensation for jobs, depreciation, royalties), and that appear in the Profit and Loss Statement under the items "cost of sales" or R&D expenditures.

General input includes all inputs that are not components of the product (components of the product include: compensation for jobs, depreciation, royalties), and that appear in the Profit and Loss Statement under sales and administration expenditures and general expenditures or other expenditures. These inputs are after deduction of agents' commissions and export commissions, and include transport expenses.

Gross domestic product is the total gross output after deduction of total inputs.

Data at market prices and at basic prices: The data on gross domestic product are presented in the publication twice:

- a. At purchasers prices – including taxes and excluding subsidies and export incentives.
- b. At basic prices – excluding taxes and including subsidies and export incentives.

Profit and Loss Statement

The first part of the Manufacturing Survey publication presents data based on the profit and loss statements of manufacturing establishments. Most of the statements were collected from the income tax files of the local income tax offices throughout the country. For some of the establishments, questionnaires were filled out during visits to the establishment, and the questionnaires corresponded with the structure of financial statements. The purpose of the profit and loss statement is to show the profit from the establishment's current activities during the year. The statement covers income data in the year under review from sales in Israel and abroad, from the value of work done by the establishment using the materials of the ordering party. The expenditure data relate to expenditures connected with production (cost of sales), expenditures connected with sales, management and financing, and other expenditures. Income after deduction of expenditure reflects the establishment's profit (or loss) in the reported year. The profits appearing in the tables in this publication includes depreciation and amortization.

Establishment expenditures consist of the following items:

- a. Cost of sales: This item includes various expenditures related to production, such as compensation for jobs, purchase of materials, maintenance and repairs, fuel and electricity.
- b. Research and development expenditure; For establishments in which research and development is conducted, this item includes: compensation for jobs of R&D personnel, use of raw materials, work carried out by sub-contractors, and other expenditures related to R&D. Some of the profit and loss reports include R&D expenditures in "cost of sales". In this publication, we did not relate separately to these R&D expenditures, because there is no way of completely separating them from the rest of the expenditures included in cost of sales.
- c. Sales expenditures include all expenditures related to the sale of the products, such as: compensation for jobs of sales workers, office maintenance, and advertising.
- d. Management expenditures and general expenditures include all expenditure items related to managing the establishment: compensation for jobs of managers and clerks, telephone expenses, and legal expenses. Occasionally, there is no distinction in the balance sheets between sales, management and general expenditures and all of these are recorded in one item.
- e. Financing expenditures: Payments made by establishments for credit, such as: interest, linkage differences, rate differences and bank commissions. Net financing expenditures are financing expenditures less financing income.
- f. Other expenditures: Expenditures that were not recorded in the previous items. In most cases, this item includes an allowance for bad debts, balance cancellation, loss of capital, and loss due to disposal of assets.

3.3.2 Classification Types

Classification by industry

The classification of establishments by industry in the 2005 Manufacturing Survey is based on the *Standard Industrial Classification of All Economic Activities, 1993*.¹

Data are published at the level of division and at the level of 77 categories of aggregated groups. The aggregation of the groups of similar activity reduces both the bias caused by the mixed activity of some establishments, which makes it difficult to classify them in separate groups, as well as the sampling errors.

Due to lack of space, the names of the industries were abbreviated in the Introduction and in the tables.

Classification by technological intensity

The manufacturing industries (see "Classification by Industry" above) were divided into four groups, by technological intensity. Classification by technological intensity was carried out in accordance with the classification recommended by the OECD. The types of technological intensity are as follows (from high to low):

- a. High technology includes the following industries: Electronic Communications Equipment; Office Machinery; Pharmaceuticals; Industrial Equipment for Control and Supervision; Electronic Components; and Aircraft.
- b. Medium-high technology includes the following industries: Chemicals and Chemical Products and Refined Petroleum (excluding pharmaceuticals); Machinery and Equipment; Electric Motors and Electric Distribution Apparatus; Motor Vehicles and Transport Equipment.
- c. Medium-low technology includes the following industries: Mining of Minerals and Quarrying of Stone and Sand; Rubber and Plastics; Non-Metallic Mineral Products; Non-Ferrous and Precious Metals; Metal Products; Ships and Boats; Jewellery and Goldsmiths' and Silversmiths' Articles; and Manufacturing n.e.c.
- d. Low technology includes the following industries: Textiles; Wearing Apparel (excl. knitting), Footwear, Leather and Leather Products; Food Products; Beverages and Tobacco Products; Paper and Printing; Wood and its Products; and Furniture.

Classification of establishments by technological intensity was based on the main activity of each establishment and on its industrial classification (see Appendix, p. 57).

Classification by sector

Manufacturing establishments were classified by sectors according to the requirements of the *System of National Accounts 1993*, as determined by five international institutions: the United Nations, IMF, OECD, Eurostat, and the World Bank. Classification of each business by sector was determined by control of shares in the company.

¹ See: Central Bureau of Statistics, *Standard Industrial Classification of All Economic Activities, 1993*, Second Edition, (Technical Publication No. 63), Jerusalem, 2003.

According to that classification, there are five sectors in the economy:

- (1) Non-financial corporations
- (2) Financial corporations
- (3) General government
- (4) Non-profit institutions
- (5) Households

All five sectors represent the overall economy. In this publication, which covers all manufacturing industries, the following sectors are presented.

- (1) Non-financial corporations
- (2) Households

Non-financial corporations are corporations that deal with production of goods or services that are traded on the market.

Households are individuals or groups of individuals that function as consumers or as entrepreneurs that produce market goods and non-financial and financial services (market producers). Entrepreneurs operating as separate entities are treated as quasi-corporations, and their liability of those entities is not limited. The present survey deals only with households that function as entrepreneurs.

The sector of corporations was divided into the following sub-sectors:

- Government corporations
- National private corporations
- Foreign-controlled corporations
- Cooperatives

Classification by Size Groups of Establishments (Jobs per Dealer)

Classification was based on the number of jobs in the establishment (non-weighted) in 2005, as follows:

- Up to 5 jobs
- 5-9 jobs
- 10-19 jobs
- 20-29 jobs
- 30-49 jobs
- 50-99 jobs
- 100-299 jobs
- Over 300 jobs

Classification by Size Groups of Establishments (Revenue per dealer)

Classification was based on the total revenue (non-weighted) of the establishment in 2005, as follows:

Up to NIS 4.9 million

NIS 5-9.9 million

NIS 10-19.9 million

NIS 20-29.9 million

NIS 30-49.9 million

Over NIS 50 million

The purpose of the classification is to present a distribution that provides a picture of small, medium, and large businesses in every industry.

Classification by District and Sub-District

Every business in the sample received a district and sub-district code, according to the address of the establishment.

Classification by City

Every business in the sample received a city code, according to the address of the establishment

3.3.3 Export-intensive Establishments

Export-intensive establishments are those that export over 50% of value of their total revenue, and/or those whose exports amount to over NIS 10 million, where the revenue from exports is over 25% of the total revenue of the establishment.

4. ESTIMATING DATA

4.1 Imputations for establishments that did not report in the survey

In the survey, several types of imputations were carried out:

- a. Imputations for manufacturing establishments that did not report in the survey for various reasons. To carry out those imputations, administrative data existing at the CBS were used. VAT revenue (or income tax turnover) were used to impute total income. Compensation for jobs was imputed according to wages liable for National Insurance, with the addition of other labour costs; and other expenditures were imputed according to categories, and the profits were imputed according to the distribution found for other dealers in the industry.
- b. Imputations of compensation for non-employee jobs. In surveys where no item was listed for compensation for jobs in the Profit and Loss statements, it was assumed that the dealer is not an employee. Therefore, imputation was based on one job, and compensation for jobs was imputed according to the average for the survey in that industry.

5. LIMITATIONS OF DATA

- a. Because the estimates are based on samples, they usually deviate from the "census value", i.e., from the values that would have been obtained in a census. These deviations are referred to as "sampling errors".
- b. For manufacturing establishments that were not reported in the survey, imputations were conducted. The imputations deviate from the "true" figures, which are unknown.

6. COMPARISON OF THE DATA PRESENTED IN THIS PUBLICATION WITH CURRENT MONTHLY DATA

The data on income presented in the Manufacturing Survey are at basic prices, and do not include export expenditure or agents' commissions.

The current monthly data (in the manufacturing index framework) are at purchaser's prices (including taxes and VAT, and do not include subsidies).

For the purpose of comparison, the monthly data were adjusted to basic prices (VAT and other taxes were deducted, and subsidies were added). In the financial statement data, income from non-manufacturing activities was deducted, and export expenditure was added, as well as commissions that were deducted in the data processing stage.

Table O. – Manufacturing Survey Data (Balance Data) and Monthly Data

2005

	Manufacturing Survey Data		Monthly Series Data	
	2004	2005	2004	2005
	NIS Millions			
Revenue (at basic prices)	230,133	255,591	229,910	255,438
Compensation for jobs	44,668	46,519	41,921	43,807

The above table reveals that although there were almost no differences in the balance data for revenue in the monthly series, there was a difference of approximately 6% in compensation for jobs. That difference can be attributed to adjustments in the balance sheets (e.g., imputations for accumulated vacation, special payments, bonuses, and wages of managers). Moreover, the data on compensation for jobs in the Manufacturing Survey include wages of kibbutz members.

7. SUMMARY OF FINANCIAL STATEMENTS OF MANUFACTURING

7.1 General

The second part of the Manufacturing Survey publication is based on a summary of data from the financial statements of manufacturing establishments. Analysis of financial statements is an important tool for examining the situation of companies, their prospects for survival, and their prospects for future growth. Today, this tool has also become important at the levels of industries and the economy at large. Thus, many countries are drawing up statements to examine their financial situation and behaviour.

The new system of national accounts (SNA93) requires the presentation of financial data of manufacturing establishments. SNA93 stresses the importance of compiling balance sheets for the overall economy and for its various sectors, thereby presenting the economy's assets and liabilities. This addition of balance sheets facilitates a more comprehensive analysis of economic development – behaviour of households, distribution of national wealth, relationships among the various economic sectors, profitability, etc. It also allows for additional analyses of the consistency and integrity of the accounts, thereby raising the quality of the estimates.

The profit-and-loss statement expresses the business's results in a given period of time, whereas the balance sheet reflects the condition of the firm on a given date.

In the 2005 survey, the balance sheet data of manufacturing establishments are shown for 2004 and 2005, at the level of aggregated divisions. These data complement the data in the profit-and-loss statements that are published as part of the Manufacturing Survey.

Additionally, tables of the balance sheet components are shown in percentages for 2004 and 2005. The resulting time series makes it possible to examine trends and creates an initial framework for financial analysis.

The main financial ratios for 2005 have also been calculated, although analysis by manufacturing divisions is problematic in the Israeli economy since various establishments, even within one division, differ in number of jobs, extent of revenue, exports, profitability, and other parameters. This, of course, affects the financial ratios and makes it more difficult to perform a division-level analysis. Nevertheless, we continued to examine various financial ratios at the level of groups in the 2005 survey, so that it would be possible to monitor the development of trends in future years. Notably, long-term analysis is the only way to ascertain that a trend indeed exists.

7.2 Main Findings (2005)

Assets: In 2005, total assets of manufacturing establishments amounted to approximately NIS 321 billion (4% more than the amount calculated in 2004). Current assets comprised 50% of all assets; long-term investments and accounts receivable comprised 29%; fixed assets comprised 20%, and the rest were other assets.

Liabilities: The distribution of liabilities shows that 47% of the liabilities were shareholders' equity; 35% were current liabilities, and the rest (17%) were long-term liabilities.

Ratios:

Current ratio: The highest current ratio in the manufacturing establishments was found in Electronic communications equipment (2.484). The establishments in that division were characterized by relatively high rates of current assets.

The lowest current ratio was found in the Beverages and tobacco products division.

Equity structure ratio: A high rate of finance provided by foreign debt (financial leveraging) was observed in the Footwear, leather and leather products division due to the high rate of long and short-term liabilities.

The lowest rate of foreign debt in manufacturing was found in the Electronic components division.

Assets turnover ratio: The assets turnover ratio was highest in Wearing apparel (excl. knitted); and the lowest assets turnover ratio was found in the Electronic components division.

Profitability: The highest operating profit to revenue ratio was found in Mining of minerals and quarrying of stone and sand, whereas the lowest ratio was found in Machinery and equipment and office machinery.

The highest operating profit to capital ratio was found in Paper and printing.

7.3 Definitions and Explanations

7.3.1 Survey Population

The survey population included all establishments that were active in 2005, and that were sampled in the survey of all industries in the economy for that year.

The balance sheets collected for 2004 and 2005 are presented in reported (nominal) values, in accordance with Accounting Regulations No. 12 and 17 of the Israel Accounting Standards Board.

7.3.2 Explanations – Structure and Components of the Balance Sheet and Financial Ratios

a. Structure and components of the balance sheet

Assets

Current Assets

This item includes assets that presumably will become cash within the coming year, cash and cash equivalents, short-term investments, accounts receivable, debitory balances, and inventory.

Long-Term Investments and Accounts Receivable

The long-term investments and accounts receivable item includes investments of more than a one-year term – investments in subsidiaries and affiliated companies, long-term investments in securities (shares and bonds), excess earmarking of reserves, long-term debts, etc.

Other Assets and Deferred Charges

This item includes intangible assets such as goodwill, patents, and copyrights, as well as deferred charges – miscellaneous expenses spread over several years, such as incorporation expenses, expenses of share and bond issues, etc.

Since this component constitutes a small percentage of the total assets, it was combined with long-term investments and accounts receivable.

Fixed Assets

This item includes physical assets such as land, buildings, machinery, motor vehicles, and equipment. Fixed assets are shown at cost, adjusted for inflation, and with deduction of accumulated depreciation.

Liabilities and Shareholders' Equity

Current Liabilities

Current liabilities are those due within one year of the balance sheet date. They include short-term loans, suppliers and other accounts payable, notes and checks due, expenses payable, income received in advance, customer payments received in advance, current maturity of long-term loans, etc.

Long-Term Liabilities

Long-term liabilities are those due more than one year after the balance sheet date. They include loans from various sources such as banks, subsidiaries and affiliated companies, bonds issued by the company, owner's loans and reserves.

Shareholders' Equity

This item includes the company's equity (paid-up share equity) and equity reserved for various purposes or unforeseen circumstances. The equity item also includes surpluses, i.e., net undistributed profit.

b. Financial Ratios

The analysis of financial ratios included four types of ratios: liquidity, equity structure, operating efficiency and ratios measuring earnings.

Liquidity Ratios

Liquidity ratios examine the company's ability to meet its liabilities in the short-term. Our analysis included one ratio – **the current ratio**.

Equity Structure

Equity-structure ratios examine the establishments' sources of finance. We examined three ratios: debt to the total assets (financial leverage), the ratio complementary to it – owner's equity to the total assets (financial strength) and debt to owner's equity.

Operating Efficiency Ratios

This ratio examines how effectively the various establishments utilized the various assets available to them. One ratio was examined: the assets turnover ratio. The higher the revenue turnover relative to assets, the greater the efficiency.

Profit Ratios

We examined three ratios that measure profits: operating profit to revenue examines the marginal profit from each sheqel of revenue; operating profit to shareholders' equity examines profit on investments of shareholders' equity; and operating profit to assets examines the rate of profit obtained by the establishments from all funding sources – i.e., owner's equity as well as foreign debt.

7.3.3 Definitions and Formulas

Financial Ratios

Liquidity Ratios

$$1) \quad \text{Current ratio} = \frac{\text{Total current assets}}{\text{Current liabilities}}$$

Equity Structure

$$1) \quad \text{Debt to total Assets} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

$$2) \quad \text{Owner's equity to total assets (complementary ratio to 1)} = \frac{\text{Shareholders' equity}}{\text{Total assets}}$$

$$3) \quad \text{Debt to owner's equity} = \frac{\text{Total liabilities}}{\text{Shareholders' equity}}$$

Operating Efficiency Ratios

$$\text{Assets-turnover ratio} = \frac{\text{Revenue}}{\text{Assets}}$$

Profit Ratios

$$1) \quad \text{Operating profit to revenue} = \frac{\text{Operating profit}}{\text{Revenue}}$$

$$2) \quad \text{Operating profit to owner's equity} = \frac{\text{Operating profit}}{\text{Shareholders' equity}}$$

$$3) \quad \text{Operating profit to assets} = \frac{\text{Operating profit}}{\text{Total assets}}$$

Revenue

Revenue is calculated from a profit-and-loss statement, and includes income from industrial activity (sales to the domestic market, exports, work and repairs). Other activity is not included.

Operating Profit

Operating profit is derived from a profit-and-loss statement of manufacturing establishments and is computed as the difference between total income and total expenses of the establishment (before financing expenses are subtracted). This figure does not include return on capital.

7.3.4 Imputation of the Data

Two main types of imputations were carried out for the balance sheet data:

1. Imputation of reported data for businesses that only provided a nominal report. The data published in the balance sheets are reported data. In the statements that included only nominal data, the figures were adjusted according to the ratio of the reported and nominal items in statements that contained adjusted and nominal data – by industry and revenue size groups.
2. To impute balance sheets for businesses that did not provide any information, the missing businesses were divided into size groups by revenue and industry. Because each business has revenue data from a profit-and-loss statement, we multiplied revenue by the revenue-to-assets ratio found in the group of businesses that submitted balance sheets. In that way, we computed the assets for each group of industries and for each size group. After the total assets were estimated, the other balance sheet components were calculated by applying the proportions found in the data of the businesses that submitted balance sheets.

8. GROSS CAPITAL FORMATION IN FIXED ASSETS

The publication presents data on capital formation in 2005, according to components. The data, which are published in current prices, were taken from the income tax reports of the businesses in their financial statements.

The data were derived from three sources in the financial statements:

1. Explanation of the fixed assets in the balance sheets – this explanation included the depreciated cost for the beginning of the year, additional fixed assets for the year, and depreciation. It should be mentioned that in the balance sheet, fixed assets appear as the cumulative total since the establishment of the business, whereas capital formation constitutes only the additional fixed assets for the year.
2. Assets Report (Form 11) – a report which provides a breakdown of the assets for which depreciation can be demanded. The report includes acquisition of fixed assets during the survey year.
3. Cash flow report – this report aims to provide information on receipts and cash payments made by the business during the period of the account. Based on the report, it is possible to isolate the data on total acquisitions of fixed assets during the survey year.

Imputations of added capital formation for 2005 were carried out for businesses that did not provide financial statements. For self-employed persons who do not have balance sheets, and for whom data on capital formation could not be isolated, no capital formation in 2005 was imputed.

Capital formation in fixed assets was divided into the following components:

- a. Land and buildings, including improvements in rented property
- b. Machinery and equipment
- c. Motor vehicles (cars and trucks)
- d. Furniture and office equipment
- e. Computers and software

Even though land should not be included in fixed capital according to the definitions of national accounts, the item Land and Buildings includes land that was purchased over the year, because it cannot be isolated from the financial statements.

In some cases, Furniture and Office Equipment also includes data on computers and software (when those data could not be isolated).