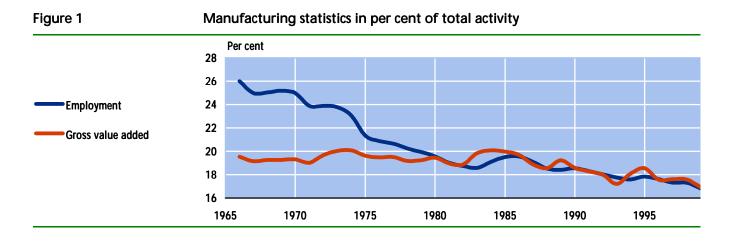
### Manufacturing industries

#### 1. Manufacturing industries significance for the overall Danish economy

#### **National Accounts**

The significance of manufacturing industries for the Danish economy can be described by means of central statistics from National Accounts. Figure 1 shows manufacturing as a percentage of total activity for the period 1966-1999.



#### Employment in manufacturing

Manufacturing industries has experienced a significant reduction in its proportionate share of total employment from 1966 up to 1983, from approximately 26 per cent to approximately 19 per cent. The significance of manufacturing industries to employment increased again until 1986; since then, there has been a general decline up to 1999, where manufacturing industries represented approximately 17 per cent of total employment.

#### Value added

Figure 1 shows the significance of manufacturing industries to the Danish economy in terms of gross value added. When considering these statistics, rather than employment statistics, a somewhat different image of the significance of manufacturing industries emerges. Up until 1982/1983, manufacturing industries represented a more or less constant share of the total value added, approximately 19 per cent. Since then, this figure has gradually fallen to a level of approximately 17 per cent

#### 2. Manufacturing industries trends 1990-1999

#### Production in manufacturing industries

Figure 2 provides an elucidation of manufacturers' production in manufactoring industries by means of quantity indices for manufacturing sales, excluding goods resold without further reprocessing for the period 1990-1999. The monthly indices have been adjusted for seasonal fluctuations.

The period shown comprises a number of different business cycles, which are described in more detail below.

Figure 2

#### Production in manufactoring industries, seasonally adjusted values

Quantity indexes for manufacturing sales, excluding goods resold without further processing (1995=100).



#### Limited economic growth 1990-1991

The period 1990-1991 was characterised by limited economic growth, which was significantly influenced by the Gulf War in the autumn of 1990 and the beginning of 1991. In the autumn of 1992, a period of economic recession followed the international upheaval in foreign exchanges; this recession was also partly caused by the uncertainty which followed in the wake of the referendum on the Maastricht treaty.

#### Economic recovery 1993-1995

The following period of economic recovery, which was partly caused by record-breaking private consumption induced by the 1993 tax reform, began in the middle of 1993, peaked in the spring of 1995 and was followed by a six-month period (approx.) of zero growth.

#### Renewed growth 1996-1997

The zero-growth period was followed by a period of renewed growth in 1996 and 1997, primarily caused by an increase in domestic demand.

#### Declining trends in 1998

In 1998, the Danish economy lost its impetus after a five-year period of more or less uninterrupted growth. The large-scale labour market conflict during the end of April and the beginning of May caused a great lapse of production for manufacturing industries, and during the autumn, the Danish economy was affected by the global financial unrest and a decrease in competitiveness, which affected manufacturing exports.

#### Moderate growth in 1999

Manufacturing production rates saw a moderate increase again during 1999, a fact which was primarily brought about by positive developments within the export markets, while domestic demand was moderated as a result of the 1998 "Whitsun Package", which entered into force on 1 January.

#### 3. Manufacturing industries total turnover by main sectors

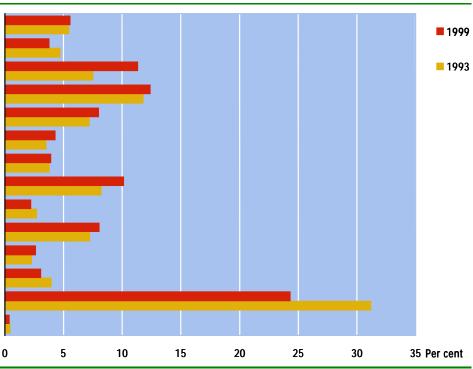
#### Manufacturing industries total turnover

Since 1993, manufacturering industries total turnover (at current prices) for enterprises with 10 employees or more has increased from approximately DKK 344 billion to approximately DKK 450 billion in 1999. In 1999, *Manufacturing of food, beverages and tobacco* had the highest turnover.

#### Figure 3

#### Manufacturers' total turnover by groups of industries

Mfr. of furniture, mfr. n.e.c. Mfr. of transport equipment Mfr. of electrical and optical equipment Mfr. of machinery and equipment n.e.c. Mfr. and processing of basic metals Mfr. of other non-metallic minerals, etc. Mfr. of other non-metallic minerals, etc. Mfr. of tubber and plastic products Mfr. of chemicals, man-made fibres, etc. Mfr. of refined petroleum products, etc. Mfr. of refined petroleum products, etc. Mfr. of paper prod.; printing and publish. Mfr. of textiles, apparel and leather Mfr. of food, beverages and tobacco Mining and quarrying



#### Manufacturing industries sector profile in 1999

As was mentioned in the above, in 1999 manufacturing of food, beverages and tobacco accounted for the bulk of activity; approximately one-quarter of the total turnover. This was followed by manufacturing of machinery and equipment, manufacturing of electrical and optical equipment, and manufacturing of chemicals, man-made fibres, etc.; each of these accounted for approximately 10 per cent, while manufacturing of paper products, printing and publishing as well as manufacturing and processing of basic metals both accounted for approximately 8 per cent of manufacturering industries total turnover. Mining and quarrying, which does not include oil and gas extraction in these statistics, accounted for less than ½ per cent of manufacturing industries total turnover.

#### Changes to manufacturing sector profile since 1993

The relative composition of Danish manufacturing industries has not seen radical changes since 1993, where manufacturing of food, beverages and tobacco also held the dominant position among manufacturers. This dominant position has, however, diminished in terms of relative importance, as the proportionate share of the manufacturers' total turnover has been reduced from almost one third to the 25 per cent mentioned above.

This means that other main groups of industries have increased in terms of relative significance. This is particularly true of the manufacture of electrical and optical equipment, which has risen from accounting for approximately 7 per cent to 11 per cent of the total manufacturing turnover; and to a lesser degree this also applies to the manufacture of chemicals, man-made fibres, etc. (including pharmaceuticals), which has seen an increase in its relative share of total manufacturing turnover from approximately 8 per cent to 10 per cent. Both of these groups of industries feature characteristics such as heavy reliance on technology and research.

### Manufacturers' sales, excluding goods resold without further processing 1998-1999

DB93	Commodity groups	Total sales		Sales, excl. goods resold without further processing	
		1998	1999	1998	1999
			DKK mio		
1009+2	Mining, quarrying, and manufacturing	438 889	450 497	405 438	415 857
1009	Mining and quarrying	1 5 <b>9</b> 4	1 742	1 456	1 603
2	Manufacturing	437 295	448 755	403 982	414 254
15009	Mfr. of food, beverages and tobacco	111 115	109 607	100 339	98 345
151000	Production, etc. of meat and meat products	34 658	34 769	34 121	33 744
155000 158909	Mfr. of dairy products	24 409 39 399	23 965 37 900	18 803 35 918	18 151 34 743
158909	Mfr. of other food products Mfr. of beverages	39 399 9 100	37 900 9 419	35 918 8 270	34 743 8 496
160000	Mfr. of tobacco products	3 550	3 553	3 227	3 211
17009	Mfr. of textiles, clothing and leather	14 256	13 853	13 588	13 072
170000	Mfr. of textile	7 505	7 114	7 104	6 747
180000	Mfr. of clothing	4 733	4 758	4 498	4 397
190000	Mfr. of leather and footwear	2 018	1 981	1 986	1 928
20000	Mfr. of wood and wood products	11 624	11 717	11 139	11 212
21009	Mfr. of paper products; printing and publising	36 026	36 131	34 320	34 476
210000	Mfr. of pulp, paper and paper products	10 180	9 799	9 725	9 393
221200	Publishing of newspapers	7 485	7 229	7 324	7 159
221309 222009	Publishing activities, excl. newspapers Printing activities, etc.	8 629 9 731	8 912 10 192	7 856 9 414	8 061 9 863
23000	Mfr. of refined petroleum products, etc.	7 775	9 984	<b>7 697</b>	9 <b>8</b> 53
24000	Mfr. of chemicals, man-made fibres, etc.	41 701	45 510	37 687	41 752
241009	Mfr. of chemical raw materials	9 008	9 223	8 134	8 423
243009	Mfr. of paints, soaps, cosmetics, etc.	12 927	12 949	10 642	10 592
244000	Mfr. of pharmaceuticals, etc.	19 766	23 338	18 911	22 737
25000	Mfr. of rubber and plastic products	17 627	17 753	16 509	16 752
26000	Mfr. of other non-metallic minerals, etc.	17 590	19 272	16 421	18 138
261009 263009	Mfr. of glass and ceramic goods, etc. Mfr. of bricks, cement and concrete, etc.	4 529 13 061	5 870 13 401	4 360 12 061	5 762 12 376
27009	Mfr. and processing of basic metals	36 979	35 866	35 047	33 936
270000	Mfr. of basic metals	10 668	9 919	10 285	9 533
281009	Mfr. of construction materials of metal, etc.	14 863	14 224	14 327	13 780
286009	Mfr. hand tools, metal packaging, etc.	11 448	11 724	10 435	10 624
29000	Mfr. of machinery and equipment, n.e.s.	58 605	55 813	53 407	<b>50 92</b> 1
291000	Mfr. of marine engines, compressors, etc.	19 009	17 193	16 701	15 183
292000 293000	Mfr. of general purpose machinery Mfr. of agricultural and forestry machinery	18 508 3 760	17 616 5 119	17 026 3 464	16 156 4 738
293000	Mfr. of machinery for industries, etc.	12 582	11 406	11 744	10 625
297000	Mfr. of domestic appliances, n.e.s.	4 747	4 478	4 472	4 220
30009	Mfr. of electrical and optical equipment	42 425	51 027	38 986	<b>47 07</b> 1
300009	Mfr. of computers, electric motors, etc.	17 346	23 810	15 868	21 861
320000	Mfr. of radio and communication equipment, etc.	12 613	14 179	11 543	13 077
330000	Mfr. of medical and optical appliances n.e.s.	12 465	13 038	11 575	12 133
<b>35009</b>	Mfr. of transport equipment	<b>17 203</b>	<b>16 938</b>	16 412	16 132
351000 352009	Building and repairing of ships and boats Mfr. of transport equipment, excl. ships	7 638 9 565	7 817 9 120	7 554 8 859	7 688 8 443
<b>36000</b> 361000	Mfr. of furniture; manufacturing n.e.s. Mfr. of furniture	<b>24 370</b> 18 366	<b>25 286</b> 18 575	<b>22 431</b> 17 758	<b>22 594</b> 17 851
365009	Mfr. of toys, gold and silver articles, etc.	6 003	6 711	4 673	4 743

Note. Manufacturing enterprises with at least 10 employees. Turnover of own goods and services includes sales of own products, salaried work, as well as repair and installation work carried out for others.

## Manufacturers' total turnover, by industry and concentration 1999

DB93	Group of industry	Total turnover	Percentage of total turnover		
			The three	The five	The ter
			largest	largest	larges
			groups	groups	groups
		DKK mio.		- per cent -	
1009+2	Mining, quarrying and manufacturing	450 497	9.5	11.6	16.1
1009	Mining and quarrying	1 742	36.9	55.7	77.7
2	Manufacturing	448 755	9.5	11.6	16.1
15009	Mfr. of food, beverages and tobacco	109 607	31.1	37.1	47.6
151000	Production, etc. of meat and meat products	34 769	62.5	71.4	81.
155000 158909	Mfr. of dairy products Mfr. of other food products	23 965 37 900	82.2 14.6	88.2 20.2	92.9 31.!
159000	Mfr. of beverages	9 419	74.5	84.5	94.0
160000	Mfr. of tobacco products	3 553	93.5	99.3	100.0
17009	Mfr. of textiles, clothing and leather	13 853	17.5	23.7	32.0
170000	Mfr. of textile	7 114	15.7	21.3	32.0
180000	Mfr. of clothing	4 758	26.9	36.6	51.3
190000	Mfr. of leather, footwear and leather products	1 981	81.6	87.5	96.0
20000	Mfr. of wood and wood products	11 717	21.1	29.4	43.:
<b>21009</b> 210000	Mfr. of paper products; printing and publishing	<b>36 131</b> 9 799	<b>10.9</b> 18.7	<b>15.3</b> 28.0	<b>23</b> .4 47.0
210000	Mfr. of pulp, paper and paper products Publishing of newspapers	9 799 7 229	18.7 54.4	28.0 66.2	47.0 85.0
221309	Publishing activities, excl. newspapers	8 912	24.9	33.8	50.
222009	Printing activities, etc.	10 192	11.6	16.6	26.3
23000	Mfr. of refined petroleum products, etc.	9 984	98.7	99.6	100.0
24000	Mfr. of chemicals, man-made fibres, etc.	45 510	40.5	49.6	61.
241009	Mfr. of chemical raw materials	9 223	61.4	71.9	85.8
243009 244000	Mfr. of paints, soap, cosmetics, etc. Mfr. of pharmaceuticals, etc.	12 949 23 338	29.0 75.9	41.0 83.1	65. 93.
25000	Mfr. of rubber and plastic products	17 753	14.4	19.9	30.9
26000	Mfr. of other non-metallic mineral, etc.	19 272	22.6	30.7	41.
261009	Mfr. of glass and ceramic goods, etc.	5 870	56.3	69.0	82.0
263009	Mfr. of bricks, cement and concrete	13 401	22.8	29.7	41.
27009	Mfr. and processing of basic metals	35 866	8.0	11.6	17.
270000	Mfr. of basic metals	9 919	27.2	36.7	55.4
281009 286009	Mfr. of construction materials of metals Mfr. of hand tools, packaging of metal, etc.	14 224	10.6 12.9	15.0 19 5	22.9 27.9
		11 724		18.5	
<b>29000</b> 291000	Mfr. of machinery and equipment, n.e.s. Mfr. of marine engines, compressors, etc.	<b>55 813</b> 17 193	<b>17.1</b> 55.6	<b>22.4</b> 67.3	<b>30</b> . 76.
292000	Mfr. of other general purpose machinery	17 616	11.7	17.7	27.
293000	Mfr. of agricultural and forestry machinery	5 119	44.4	53.2	66.
294009	Mfr. of machines for industries, etc.	11 406	11.9	16.5	25.
297000	Mfr. of domestic appliances, n.e.s.	4 478	60.5	74.8	88.
30009	Mfr. of electrical and optical equipment	51 027	23.1	31.1	<b>40</b> .
300009	Mfr. of computers, electric motors, etc.	23 810	42.4 46.8	50.2	62. 66.
320000 330000	Mfr. of radio and communication equipment, etc. Mfr. of medical and optical instruments	14 179 13 038	46.8 22.4	54.1 32.5	50.
35009	Mfr. of transport equipment	16 938	37.9	44.2	55.
351000	Building and repairing of ships and boats	7 817	68.4	79.0	91.
352009	Mfr. of transport equipment, excl. ships	9 120	27.3	35.3	49.
36000	Mfr. of furniture; manufacturing n.e.s.	25 286	24.3	29.6	37.
361000	Mfr. of furniture	18 575	13.8	19.7	28.
365009	Mfr. of toys, gold and silver articles, etc.	6 711	73.2	76.9	82.2

# Table 303Index for manufactures' sales of goods and services, excluding goods<br/>resold without further processing 1998-1999

		1998	1999
		1995 = 100 ·	
1009+2	Mining, quarrying, and manufacturing, total	109	111
1009	Mining and quarrying, total	94	94
2	Manufacturing, total	110	112
<b>15009</b> 151000 155200 158909 159000 160000	Mfr. of food, beverages and tobacco Production, etc. of meat and meat products Mfr. of dairy products Mfr. of other food products Mfr. of beverages Mfr. of tobacco products	<b>102</b> 102 120 101 89 96	<b>102</b> 102 126 101 82 92
<b>17009</b> 170000 180000 190000	Mfr. of textiles, clothing and leather Mfr. of textile Mfr. of clothing Mfr. of leather, footwear and leather products	<b>106</b> 109 103 106	<b>101</b> 106 93 101
20000	Mfr. of wood and wood products	116	114
<b>21009</b> 210000 221200 221309 222009	Mfr. of paper products; printing and publishing Mfr. of pulp, paper and paper products Publishing of newspapers Publishing activities, excl. newspapers Printing activities, etc.	<b>107</b> 95 107 131 100	<b>112</b> 95 102 141 109
23000	Mfr. of refined petroleum products, etc.	81	85
<b>24000</b> 241009 243009 244000	<b>Mfr. of chemicals, man-made fibres, etc.</b> Mfr. of chemical raw materials Mfr. of paints, soap, cosmetics, etc. Mfr. of pharmaceuticals, etc.	<b>121</b> 89 110 145	<b>142</b> 98 115 179
25000	Mfr. of rubber and plastic products	112	115
<b>26000</b> 261009 263009	<b>Mfr. of other non-metallic mineral, etc.</b> Mfr. of glass and ceramic goods, etc. Mfr. of bricks, cement and concrete	<b>110</b> 98 114	<b>116</b> 120 115
27009	Mfr. and processing of basic metals	109	105
29000	Mfr. of machines and equipment, n.e.s.	106	100
30009	Mfr. of electrical and optical equipment	128	143
<b>35009</b> 351000 352009	Mfr. of transport equipment Building and repairing of ships and boats Mfr. of transport equipment, excl. ships	<b>101</b> 79 129	<b>87</b> 64 115
<b>36000</b> 361000 365009	<b>Mfr. of furniture; manufacturing n.e.s.</b> Mfr. of furniture Mfr. of toys, gold and silver articles, etc.	<b>107</b> 113 93	<b>110</b> 118 89