## Manufacturing industries

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

## Relatively constant share of the overall Danish economy since the 1960's

The significance of manufacturing industries for the Danish economy can be described by means of central statistics from the National Accounts. Up until 1980, manufacturing industries represented a more or less constant share of the total value added of 19 pct. Since then, this share has gradually fallen to a level of 18 pct. in 2003.

## Manufacturing industries share of total employment is declining

Manufacturing industries has experienced a significant reduction in its share of total employment over the period 1966 to 1983, from 26 pct. to 19 pct. The significance of manufacturing industries to employment increased again until 1986; since then, there has been a general decline up to 2003, where manufacturing industries represented 15 pct. of total employment.

Figure 1
Manufacturing shares in per cent of total activity 1966-2003

| Per cent |
| :--- |
| Employment |
| Gross value added |

## 2. Manufacturing industries trends

## Production in the manufacturing industries

Production in the manufacturing industries can be illustrated by means of an index of production calculated at constant prices. The period 1990-2003 comprises a number of different business cycles, which are reflected in the index of production.

1990-2000
The period 1990-1991 was characterised by moderate economic growth, which was significantly influenced by the Gulf War. In the autumn of 1992, a period of economic recession followed the international instability in foreign currency markets. The following period of economic recovery at the middle of 1993, peaked in the spring of 1995 and was followed by a six-month period (approximately) of zero growth. The
zero-growth period was followed by a period of renewed growth in 1996 and 1997, but in 1998 the Danish economic lost its impetus after a five-year period of more or less uninterrupted growth. Manufacturing production increased again in 1999 and 2000, which was due to the positive international economic trends.

2001-2003
The decline in the world economy from 2001 has affected the Danish manufacturing production, which only experienced a very modest increase in 2002 and 2003.

Figure 2
Production in the manufacturing industries, seasonally adjusted values


Note: Quantity indexes for manufacturing sales, excluding gods resold without further processing, Mining and quarrying, manufacturing.

## 3. Exports of the manufacturing industries

## Export shares of the manufacturing industries

Export markets are of great importance to the Danish manufacturing industries. In 2003, total export turnover accounted for 58 pct. of total turnover of the manufacturing industries.

There are among the groups of industries wide differences in the export shares of the manufacturing industries. The industries manufacture of paper production; printing and publishing and manufacture of other non-metallic minerals, etc. accounted for an export share of 17 pct. in 2003, while manufacture of machinery and equipment and manufcture of chemicals, man-made fibres accounted for very high export shares of 77 pct. and as high as 86 pct.

Figure 3
Export shares of the manufacturing industries by groups of industries 2003


Note: Data for the industry mining and quarrying are not published for reasons of confidentiality.

## 3. Manufacturing industries total turnover by main sectors

## Manufacturing industries total turnover

Since 1993, manufacturing industries total turnover (at current prices) for enterprises with 10 employees or more has increased from approximately DKK 344 billion to approximately DKK 516 billion in 2003. Manufacturing of food, beverages and tobacco had the highest turnover.

Figure 3
Manufacturers' total turnover by groups of industries, per cent


## Manufacturing industries sector profile in 2002

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 12 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 manufacturing industries total turnover. Mining and quarrying, which does not include oil and gas extraction in these statistics, accounted for 1 per cent of manufacturing industries total turnover.

Growth in the manufacture of electrical and optical equipment and pharmaceuticals 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 to 12 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 from 8 to 12 per cent. Both of these groups of industries feature characteristics such as heavy reliance on technology and research and development.

## 5. Concentration ratio of enterprises and commodity groups

## Concentration of industrial enterprises

The three largest enterprises in the manufacturing industries account on average for 11.9 pct. of total turnover of the manufacturing industries, while the ten largest enterprises account for 20.5 pct. The concentration ratio, i.e. the share of total turnover accounted for by a limited number of enterprises differs widely among the groups of industries. For example, within manufacture of refined petroleum products, manufacture of tobacco products and manufacture of dairy products turnover is concentrated on few large enterprises. Manufacturing and processing of basic metals and manufacture of paper products; printing and publishing are examples of industries characterised by a very low concentration of large enterprises.

## Production in the manufacturing industries by commodity

The production of industrial products can be divided into about 100 main commodity groups, where the ten commodity groups accounting for the highest output in Denmark appears from figure 5. Boilers, machinery and mechanical apparatus make up 10.9 pct. of total turnover of the manufacturing industries, while electrical machinery, radio and television sets, etc. make up 7.9 pct.

The ten commodity groups accounting for the highest output as a share of total turnover in the manufacturing industries 2003


The production of industrial products can be divided into even more detailed commodity groups, of which there are about 10,000 groups. In the present statistics, the production of pharmaceuticals has a prominent part in line with windmills and pigmeat and gas oils.

| DB03 | Group of industry | Total turnover | Percentage of total turnover |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | The three largest groups | The ten largest groups |
|  |  | DKK mio. | per | cent |
| 1009+2 | Mining, quarrying and manufacturing | 516107 | 11.9 | 20.0 |
| 1009 | Mining and quarrying | 5413 | 65.7 | 89.9 |
| 2 | Manufacturing | 510694 | 11.5 | 20.5 |
| 15009 | Mfr. of food, beverages and tobacco | 130599 | 34.5 | 48.6 |
| 151000 | Production, etc. of meat and meat products | 36752 | 70.0 | 87.6 |
| 155000 | Mfr. of dairy products | 23883 | 90.7 | 96.3 |
| 158909 | Mfr. of other food products | 63604 | 12.6 | 29.8 |
| 159000 | Mfr. of beverages | 11004 | 72.6 | 95.5 |
| 160000 | Mfr. of tobacco products | 4207 | 92.8 | 100.0 |
| 17009 | Mfr. of textiles, clothing and leather | 11051 | 14.9 | 29.7 |
| 170000 | Mfr. of textile | 6721 | 21.9 | 42.0 |
| 180000 | Mfr. of clothing | 3807 | 24.6 | 49.9 |
| 190000 | Mfr. of leather, footwear and leather products | 523 | 66.9 | 98.9 |
| 20000 | Mfr. of wood and wood products | 12063 | 20.5 | 45.0 |
| 21009 | Mfr. of paper products; printing and publishing | 36392 | 8.6 | 22.6 |
| 210000 | Mfr. of pulp, paper and paper products | 10661 | 17.7 | 49.3 |
| 221200 | Publishing of newspapers | 6872 | 42.8 | 81.4 |
| 221309 | Publishing activities, excl. newspapers | 9478 | 29.5 | 54.0 |
| 222009 | Printing activities, etc. | 9802 | 11.9 | 29.8 |
| 23000 | Mfr. of refined petroleum products, etc. | 14671 | 99.6 | 100.0 |
| 24000 | Mfr. of chemicals, man-made fibres, etc. | 60281 | 50.6 | 69.7 |
| 241009 | Mfr. of chemical raw materials | 10440 | 65.1 | 90.7 |
| 243009 | Mfr. of paints, soap, cosmetics, etc. | 14282 | 31.9 | 64.6 |
| 244000 | Mfr. of pharmaceuticals, etc. | 35559 | 83.0 | 96.4 |
| 25000 | Mfr. of rubber and plastic products | 20624 | 20.3 | 34.3 |
| 26000 | Mfr. of other non-metallic mineral, etc. | 16708 | 18.1 | 37.2 |
| 261009 | Mfr. of glass and ceramic goods, etc. | 2857 | 40.5 | 75.7 |
| 263009 | Mfr. of bricks, cement and concrete | 13851 | 21.8 | 43.5 |
| 27009 | Mfr. and processing of basic metals | 41708 | 7.9 | 19.0 |
| 270000 | Mfr. of basic metals | 8897 | 31.5 | 65.4 |
| 281009 | Mfr. of construction materials of metals | 18347 | 13.6 | 24.9 |
| 286009 | Mfr. of hand tools, packaging of metal, etc. | 14463 | 13.5 | 30.3 |
| 29000 | Mfr. of machinery and equipment, n.e.s. | 62241 | 17.7 | 30.0 |
| 291000 | Mfr. of marine engines, compressors, etc. | 20022 | 55.1 | 77.3 |
| 292000 | Mfr. of other general purpose machinery | 19442 | 12.0 | 29.5 |
| 293000 | Mfr. of agricultural and forestry machinery | 4778 | 42.9 | 67.7 |
| 294009 | Mfr. of machines for industries, etc. | 15178 | 9.7 | 25.1 |
| 297000 | Mfr. of domestic appliances, n.e.s. | 4297 | 60.0 | 87.9 |
| 30009 | Mfr. of electrical and optical equipment | 59632 | 25.5 | 43.1 |
| 300009 | Mfr. of computers, electric motors, etc. | 28970 | 44.4 | 65.6 |
| 320000 | Mfr. of radio and communication equipment, etc. | 14626 | 51.3 | 71.3 |
| 330000 | Mfr. of medical and optical instruments | 16037 | 22.9 | 48.4 |
| 35009 | Mfr. of transport equipment | 17053 | 42.4 | 62.8 |
| 351000 | Building and repairing of ships and boats | 6611 | 73.6 | 92.5 |
| 352009 | Mfr. of transport equipment, excl. ships | 10443 | 41.1 | 62.0 |
| 36000 | Mfr. of furniture; manufacturing n.e.s. | 27671 | 28.7 | 47.1 |
| 361000 | Mfr. of furniture | 19625 | 23.6 | 41.2 |
| 365009 | Mfr. of toys, gold and silver articles, etc. | 8046 | 73.3 | 85.3 |

$\sim$ New data is expected published 2005
몽 For further information visit www.statbank/oms2

|  |  | 2002 | 2003 |
| :---: | :---: | :---: | :---: |
|  |  | 2000 |  |
| 1009+2+4009 Mining, quarrying, manufacturing and energy |  |  |  |
| 1009+2 | Mining, quarrying, and manufacturing | 103,1 | 102,4 |
| 1009 | Mining and quarrying | 104,0 | 102,1 |
| 2 | Manufacturing | 103,0 | 102,5 |
| 15009 | Mfr. of food, beverages and tobacco | 107,4 | 114,2 |
| 151000 | Production, etc. of meat and meat products | 95,0 | 99,9 |
| 155200 | Mfr. of dairy products | 90,3 | 95,2 |
| 158909 | Mfr. of other food products | 123,3 | 133,2 |
| 159000 | Mfr. of beverages | 107,8 | 112,2 |
| 160000 | Mfr. of tobacco products | 94,0 | 94,8 |
| 17009 | Mfr. of textiles, clothing and leather | 85,3 | 81,4 |
| 170000 | Mfr. of textile | 90,2 | 88,4 |
| 180000 | Mfr. of clothing | 83,6 | 73,7 |
| 190000 | Mfr. of leather, footwear and leather products | 66,7 | 66,7 |
| 20000 | Mfr. of wood and wood products | 95,3 | 91,7 |
| 21009 | Mfr. of paper products; printing and publishing | 94,1 | 88,9 |
| 210000 | Mfr. of pulp, paper and paper products | 96,8 | 91,0 |
| 221200 | Publishing of newspapers | 89,0 | 85,6 |
| 221309 | Publishing activities, excl. newspapers | 90,5 | 83,3 |
| 222009 | Printing activities, etc. | 98,4 | 94,0 |
| 23000 | Mfr. of refined petroleum products, etc. | 80,0 | 78,2 |
| 24000 | Mfr. of chemicals, man-made fibres, etc. | 113,6 | 111,2 |
| 241009 | Mfr. of chemical raw materials | 102,4 | 102,8 |
| 243009 | Mfr. of paints, soap, cosmetics, etc. | 101,8 | 95,2 |
| 244000 | Mfr. of pharmaceuticals, etc. | 122,1 | 120,1 |
| 25000 | Mfr. of rubber and plastic products | 100,4 | 101,0 |
| 26000 | Mfr. of other non-metallic mineral, etc. | 88,8 | 93,8 |
| 261009 | Mfr. of glass and ceramic goods, etc. | 77,7 | 92,4 |
| 263009 | Mfr. of bricks, cement and concrete | 91,7 | 94,2 |
| 27009 | Mfr. and processing of basic metals | 101,3 | 104,4 |
| 29000 | Mfr. of machines and equipment, n.e.s. | 102,7 | 99,2 |
| 30009 | Mfr. of electrical and optical equipment | 107,8 | 106,9 |
| 35009 | Mfr. of transport equipment | 105,6 | 97,6 |
| 351000 | Building and repairing of ships and boats | 105,2 | 89,5 |
| 352009 | Mfr. of transport equipment, excl. ships | 105,9 | 102,8 |
| 36000 | Mfr. of furniture; manufacturing n.e.s. | 105,4 | 99,9 |
| 361000 | Mfr. of furniture | 91,7 | 89,4 |
| 365009 | Mfr. of toys, gold and silver articles, etc. | 150,9 | 135,0 |
| 4009 | Electricity, gas and water supply | 101,9 | 120,5 |


|  | 2002 | 2003* |
| :---: | :---: | :---: |
|  | [ DKK thousands |  |
| Production, total | 457620092 | 454056110 |
| Medicaments containing insulin but not antibiotics, put up in forms or packings for retail sale | 10202943 | 9524981 |
| Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes, put u | 7733678 | 8865693 |
| Windmills, output over 750 kVA | 8942868 | 8317769 |
| Frozen boneless meat of domestic swine (excl. bellies and cuts thereof) | 8187793 | 7205897 |
| Gas oils of petroleum or bituminous minerals, with a sulphur content of max. $0,05 \%$ by weight per cent | 5797710 | 5862088 |
| Fresh or chilled boneless meat of domestic swine (excl. bellies and cuts thereof) | 4736935 | 4685544 |
| Newspapers, published at least 4 times weekly, from the publishing house, printed by own printing works | 4102989 | 4351775 |
| Iron and steel structures and parts thereof, mainly sheets excl. sluices, chimneys and ceiling sheets with ridge | 4946600 | 4280834 |
| Feeding stuffs for pigs | 2954740 | 4104954 |
| Transmission apparatus, incorporating reception apparatus, for cellular networks mobile telephones | 4698750 | 4094538 |
| Fresh or chilled with bone in, domestic swine hams and cuts thereof | 4101866 | 3864268 |
| Enzymes and prepared enzymes, n.e.s. (excl. rennet and concentrates thereof, lipoprotein lipase and | 3603567 | 3779286 |
| Roll-On/Roll-Off and other containers, seagoing, new | 3625552 | 3663616 |
| Motor spirit, with a lead content min. $0,013 \mathrm{~g} / \mathrm{l}$, with an research octane number RON of min. 95 and less than 98 | 3573270 | 3448257 |
| Windmills, output over 375 but max 750 kVA | 3345980 | 3185185 |
| Medicaments containing hormones or steroids used as hormones, but not antibiotics, put up in forms | 2988068 | 3087171 |
| Articles of plastics (excl. plastic films) n.e.s. | 3062594 | 3020378 |
| Books (excl. dictionaries and encyclopaedias) also in serial instalments, from the publishing house, not printed by own | 2994465 | 2939486 |
| Danbo, Fontal, Fontina, Fynbo, Havarti, Maribo and Samsø, of a fat content by weight of over $40 \%$ but max 72 weight per cent | 2332657 | 2756501 |
| Beer, tax schedule 1, in bottles | 2443310 | 2699858 |
| Insulin and its salts, used primarily as hormones | 2234882 | 2674571 |
| Cigarettes, containing tobacco (excl. containing cloves) | 2638910 | 2612093 |
| Cartons, boxes and cases, of corrugated paper or paperboard | 2657800 | 2593259 |
| Articles of iron and steel, n.e.s. | 2626333 | 2592725 |
| Natural butter of a fat content, by weight, of max. $85 \%$, in retail sale packings of max 1 kg | 2368177 | 2464657 |

[^0]Note 2. The table is based on a 10 -digit nomenclature which is based on the 8 -digit CN (Combined Nomenclature).
ㅁ. For further information visit www.statbank.dk/varer


[^0]:    Note 1. Commodities may be absent because for confidentiality reasons.

