

Statistics in focus

INDUSTRY, TRADE AND SERVICES

THEME 4 – 15/2004

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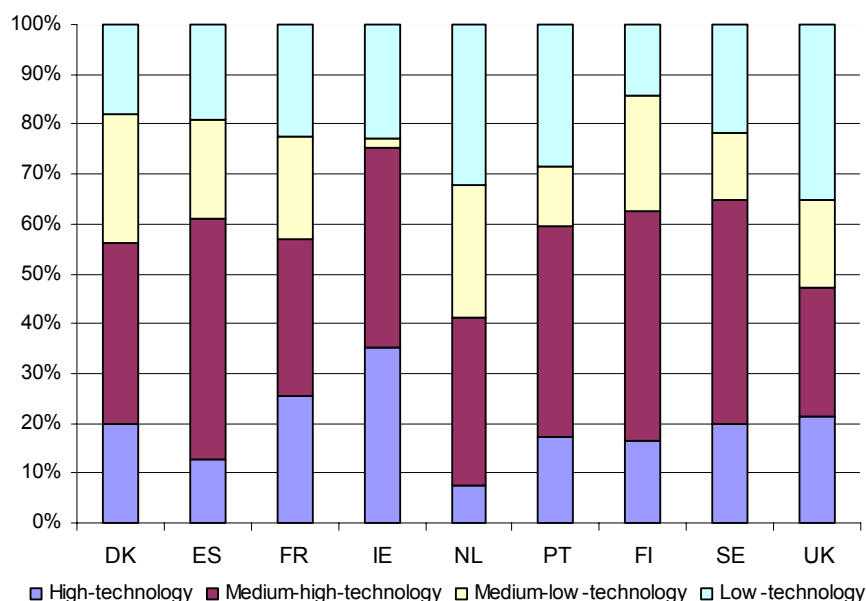
Foreign-controlled enterprises in high-tech manufacturing and services

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The General Agreement on Trade in Services (GATS) names the establishment of foreign affiliates as one of the modes of supply of services. For many services, such as hotel and restaurant services, commercial presence abroad constitutes the only viable means of trading; for others, such as the retail trade, it is by far the most attractive channel. The recent general focus on globalisation issues has resulted in an increased interest in statistics on the economic activity of foreign affiliates as a topic in their own right. Foreign Affiliates Statistics (FATS) show that, in relative terms, foreign-controlled enterprises are more attracted to manufacturing industries than to the services sector¹: in nine Member States the share of foreign-controlled value added generated in manufacturing industries was above the 50% line, ranging from 54.1% to 86.7%.

¹ For a definition of the manufacturing industries and services sector aggregate, please see the methodological notes on p.11.

Figure 1: Distribution of foreign control in terms of value added in Manufacturing (NACE section D) by level of technological intensity in nine Member States, 2000¹⁾ (%)



¹⁾ For DK and UK 1999 data were used



In all participating Member States, the highest share of value added was generated by foreign-controlled enterprises in Manufacturing (NACE section D).

The breakdown of this section by level of technological intensity shows that the value added generated by foreign-controlled

enterprises in manufacturing is higher in high-tech and medium-high-tech manufacturing than in low-tech and medium-low-tech manufacturing.

The second most important business sector for foreign affiliates was distributive trades (NACE section G). High-tech and

knowledge-intensive services were less important.

Further information on the importance of foreign-controlled enterprises in the European Union is provided in Statistics in Focus, "Characteristics of foreign-controlled enterprises", to be issued in spring 2004.

Interpreting the data:

1. The notion of control implies the ability to direct an enterprise and determine its strategy. This ability can be exercised by an investor holding the majority (more than 50%) of the shares. The aggregate "nationally-controlled enterprises" includes enterprises controlled by the reporting economy and enterprises under multiple minority ownership. Enterprises under multiple minority ownership are those with two or more shareholders (foreign or of the reporting economy), each holding between 10% and 50% of the shares. "Foreign-controlled enterprises" include enterprises under majority ownership which are under foreign control.
2. It is important to keep in mind that the comparisons are made between enterprises with a relatively small average size (nationally-controlled) and those with a much larger average size (foreign-controlled enterprises) and that there are certain activities where the average size of an enterprise plays an important role in determining productivity, due to minimum efficient scales of production.
3. It has also to be noted that some Member States survey mainly large enterprises, and therefore the coverage of foreign-controlled enterprises is sometimes skewed in favour of large companies. As a result, size differences are likely to be overstated.
4. In calculating the aggregates for the business economy, manufacturing industries and services sector, different aggregations have been used for different countries because data were missing for individual activities in individual reporting countries. The results for different countries may therefore represent different activity coverages and may be under or overestimated. The methodological notes show which activities are not included for individual countries.
5. Comparability is restricted because data from two reference years had to be used and not all variables and activity breakdowns are available for every participating Member State.
6. Value added at factor cost was used as the economic measure of the importance of certain sectors or aggregates. The use of another measure (e.g. employment) might lead to different results (see last paragraph on page 10).

How much foreign activity is there in the business economy?

Table 1: Share of foreign-controlled enterprises in business economy (NACE sections C-I, K) in nine Member States, 2000¹⁾ (%)

| Member State | Number of enterprises | Turnover | Value added at factor cost | Number of persons employed ²⁾ | Personnel costs |
|--------------|-----------------------|----------|----------------------------|--|-----------------|
| DK | 0.4 | 10.5 | 9.2 | 7.2 | 9.7 |
| FR | 0.8 | 21.0 | 18.1 | 16.5 | 18.5 |
| IE | 1.4 | 48.9 | 53.9 | 21.2 | : |
| LU | 1.0 | 23.7 | : | 20.8 | : |
| NL | 0.6 | 15.5 | 13.6 | 9.9 | 12.9 |
| PT | 0.3 | 15.6 | 14.7 | 7.3 | 12.5 |
| FI | 1.0 | 16.1 | 13.5 | 12.8 | 15.2 |
| SE | 1.1 | 24.4 | 22.0 | 17.2 | 21.8 |
| UK | 0.9 | 9.2 | 6.8 | 10.3 | 6.2 |

¹⁾ For DK and UK 1999 data were used.

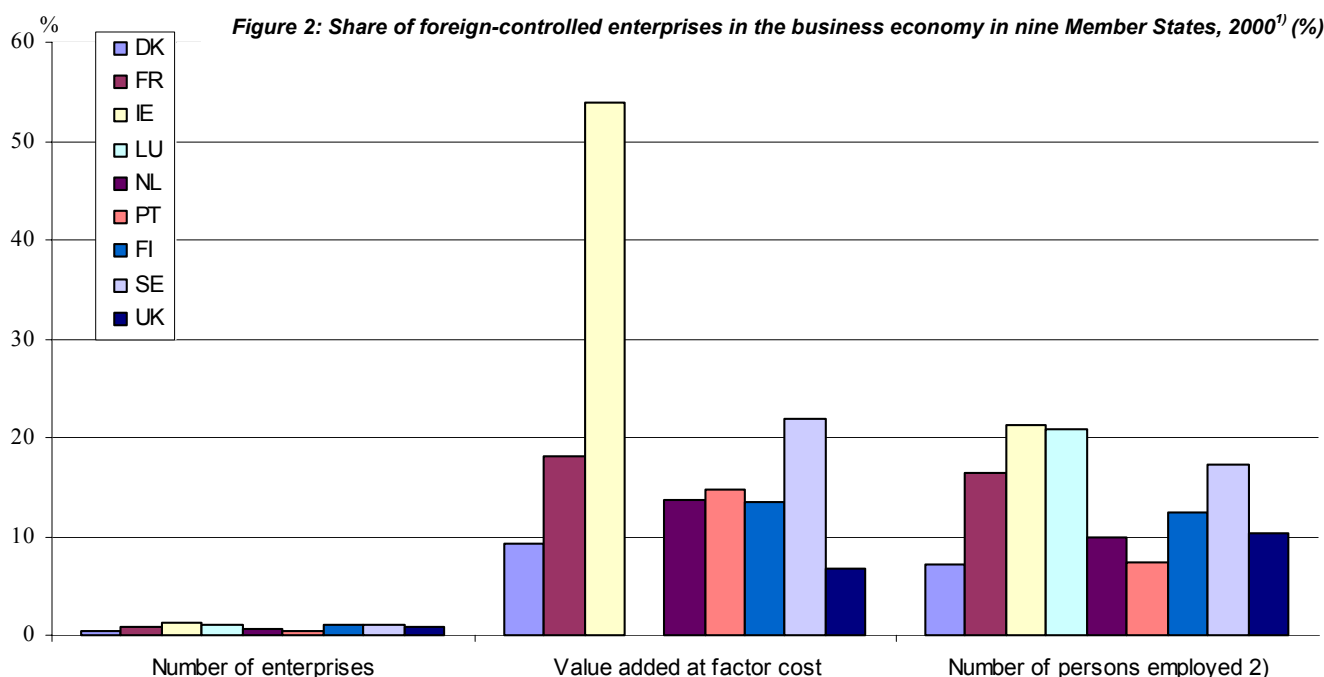
²⁾ For FR and LU the number of employees was used as a proxy.

Table 1 presents an overview of the impact of foreign-controlled enterprises within the business economy² in nine Member States. It shows that, in 2000, foreign affiliates accounted for a significant share of turnover, value added, employment and personnel costs and a low share of the number of enterprises. Whilst the share of foreign-controlled enterprises in the total business economy was less than 1.0% in five participating Member States, the share of turnover generated by foreign-controlled enterprises varied between 9.2% (United Kingdom) and 48.9% (Ireland). The share of foreign-

controlled enterprises in total value added was over 10% in six Member States and under 10% only in the United Kingdom (6.8%) and Denmark (9.2%). The highest share was in Ireland, where more than half of the value added was generated by foreign-controlled enterprises. Measured in terms of employment, the highest level of foreign control was recorded in Ireland (21.2%). The lowest percentage of persons employed in foreign-controlled enterprises was in Denmark (7.2%). The highest share of total personnel costs spent by foreign-controlled enterprises was reported in Sweden (21.8%), and the lowest in the

United Kingdom (6.2%). In most countries, the share of enterprises under foreign control in the business economy is greater in terms of turnover and value added than in terms of employment. As Tables 2 and 3 show, this is particularly true in the manufacturing industries. More insights into the productivity of foreign-controlled enterprises can be gained from Statistics in Focus "Characteristics of foreign-controlled enterprises", to be issued in spring 2004.

² See methodological notes on page 11.



¹⁾ For DK and UK 1999 data were used. ²⁾ For FR and LU the number of employees was used as a proxy

Table 2: Share of foreign-controlled enterprises in manufacturing industries (NACE sections C-F) in ten Member States, 2000¹⁾ (%)

| Member State | Number of enterprises | Turnover | Value added at factor cost | Number of persons employed ²⁾ | Personnel costs |
|--------------|-----------------------|----------|----------------------------|--|-----------------|
| DK | 0.5 | 11.4 | 12.1 | 8.8 | 10.3 |
| ES | 0.5 | 27.3 | 22.8 | 15.2 | 23.8 |
| FR | 0.9 | 27.7 | 22.6 | 18.3 | 21.7 |
| IE | 12.1 | 75.3 | 77.5 | 45.7 | 50.7 |
| LU | 3.3 | 35.7 | : | 28.2 | : |
| NL | 0.9 | 19.0 | 18.6 | 12.9 | 15.6 |
| PT | 0.4 | 17.5 | 16.2 | 9.4 | 14.4 |
| FI | 0.8 | 14.0 | 13.3 | 13.8 | 15.1 |
| SE | 1.1 | 28.0 | 28.1 | 22.3 | 26.1 |
| UK | 1.2 | 15.1 | 11.4 | 16.3 | 9.3 |

¹⁾ For DK and UK 1999 data were used.

²⁾ For FR and LU the number of employees was used as a proxy.

Table 3: Share of foreign-controlled enterprises in the services sector (NACE sections G-I, K) in nine Member States, 2000¹⁾ (%)

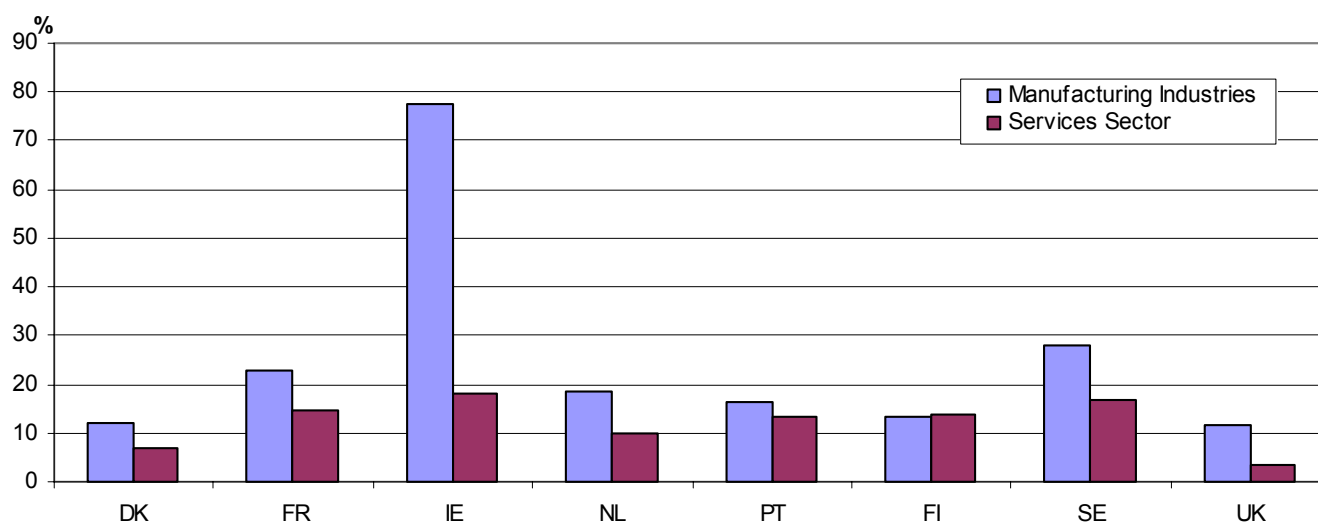
| Member State | Number of enterprises | Turnover | Value added at factor cost | Number of persons employed ²⁾ | Personnel costs |
|--------------|-----------------------|----------|----------------------------|--|-----------------|
| DK | 0.4 | 10.0 | 7.0 | 6.1 | 9.2 |
| FR | 0.8 | 16.0 | 14.4 | 15.2 | 16.0 |
| IE | 0.5 | 18.8 | 18.0 | 8.7 | : |
| LU | 0.6 | 16.7 | : | 10.2 | : |
| NL | 0.5 | 13.3 | 9.9 | 8.5 | 11.0 |
| PT | 0.3 | 14.4 | 13.2 | 5.5 | 10.7 |
| FI | 1.1 | 18.3 | 13.8 | 11.0 | 15.2 |
| SE | 1.1 | 21.8 | 16.7 | 13.6 | 18.2 |
| UK | 0.8 | 5.8 | 3.5 | 7.4 | 4.1 |

¹⁾ For DK and UK 1999 data were used.

²⁾ For FR and LU the number of employees was used as a proxy.

Tables 2 and 3 show that, in 2000, foreign control was less important in the services sector than in manufacturing industries. There were two exceptions: in Finland the share of foreign-controlled enterprises in the total business economy was higher in the services sector than in manufacturing industries. Foreign control accounted for a far higher share of manufacturing industries in Ireland than in the other participating Member States, regardless of which of the four measures was chosen.

Figure 3: Share of value added generated by foreign-controlled enterprises in the total business economy in eight Member States, 2000¹⁾ (%)



¹⁾ For DK and UK 1999 data were used.

Table 4: Distribution of foreign-controlled enterprise activity between manufacturing industries (NACE section C-F) and services sector (NACE section G-I, K) in ten Member States, 2000 (%)

| Member State | Number of enterprises | | Turnover | | Value added at factor cost | | Number of persons employed ²⁾ | | Personnel costs | |
|--------------|-----------------------|------|----------|------|----------------------------|------|--|------|-----------------|------|
| | M | S | M | S | M | S | M | S | M | S |
| DK | 33.3 | 66.7 | 37.4 | 62.6 | 56.1 | 43.9 | 49.2 | 50.8 | 47.6 | 52.4 |
| ES | 17.2 | 82.8 | 58.2 | 41.8 | 72.3 | 27.7 | 60.6 | 39.4 | 67.7 | 32.3 |
| FR | 32.3 | 67.7 | 55.9 | 44.1 | 56.2 | 43.8 | 46.1 | 53.9 | 51.5 | 48.5 |
| IE | 67.9 | 32.1 | 82.0 | 18.0 | 86.7 | 13.3 | 72.9 | 27.1 | : | : |
| LU | 48.7 | 51.3 | 55.1 | 44.9 | : | : | 79.6 | 20.4 | : | : |
| NL | 37.3 | 62.7 | 46.9 | 53.1 | 58.8 | 41.2 | 40.8 | 59.2 | 49.7 | 50.3 |
| PT | 33.6 | 66.4 | 44.4 | 55.6 | 54.1 | 45.9 | 61.4 | 38.6 | 55.8 | 44.2 |
| FI | 26.4 | 73.6 | 44.3 | 55.7 | 56.7 | 43.3 | 53.2 | 46.8 | 53.1 | 46.9 |
| SE | 23.9 | 76.1 | 48.6 | 51.4 | 59.2 | 40.8 | 53.6 | 46.4 | 54.3 | 45.7 |
| UK | 31.2 | 68.8 | 60.1 | 39.9 | 69.9 | 30.1 | 51.2 | 48.8 | 61.3 | 38.7 |

¹⁾ For DK, ES and UK 1999 data were used.

²⁾ For FR and LU the number of employees was used as a proxy.

M: Manufacturing Industries, S: Services Sector

Table 4 shows the distribution of foreign-controlled enterprise activity between manufacturing and services. In nine Member States the majority of foreign-controlled value added, ranging from 54.1% in Portugal to 86.7% in Ireland, was generated by foreign-controlled enterprises in the manufacturing sector, whereas the vast majority of

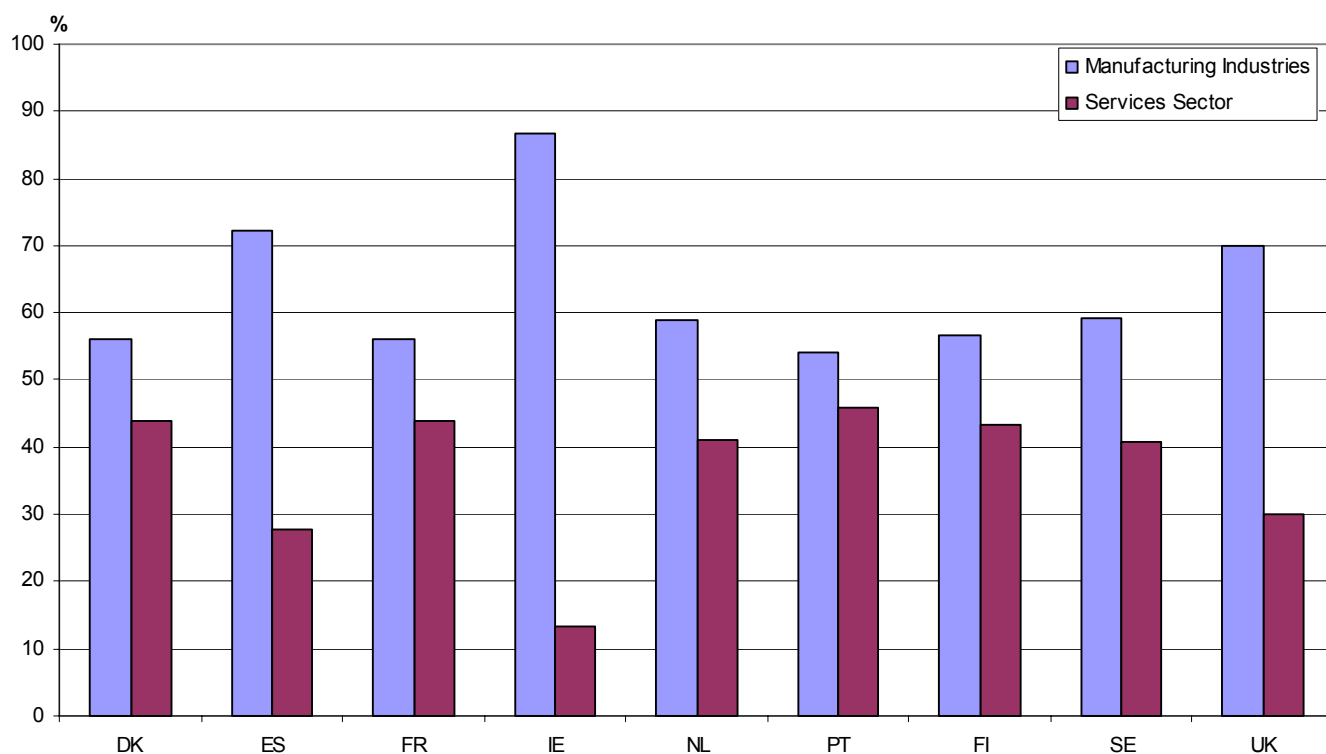
foreign-controlled enterprises were in the services sector. There was one exception: in Ireland, 67.9% of foreign-controlled enterprises were in manufacturing industries.

In five participating Member States, more than half of turnover was generated in the services sector, with the highest share in Denmark

(62.6%).

The differences between Member States in terms of numbers of persons employed by foreign-controlled enterprises and their personnel costs were smaller in both manufacturing and services.

Figure 4: distribution of foreign-controlled enterprise activity between manufacturing industries and services sector in nine Member States measured in terms of value added, 2000¹⁾ (%)



¹⁾ For DK, ES and UK 1999 data were used.

Which activities attract foreign enterprises?

Table 5: Share of foreign-controlled enterprises in terms of value added at section level of NACE Rev. 1 in nine Member States, 2000¹⁾(%)

| Member State | Manufacturing Industries | | | | Services Sector | | | |
|--------------|--------------------------|------|------|------|-----------------|------|------|------|
| | C | D | E | F | G | H | I | K |
| DK | .. | 11.5 | 0 | 7.5 | 13.1 | 3.5 | 1.0 | 5.5 |
| ES | .. | 25.6 | .. | : | 10.7 | 6.8 | 3.3 | 6.4 |
| FR | 19.0 | 29.8 | 0 | 1.5 | 15.1 | 8.0 | 3.2 | 27.0 |
| IE | 30.8 | 80.8 | .. | : | 18.3 | 6.0 | 9.4 | 8.9 |
| NL | 20.5 | 24.8 | 12.6 | 3.2 | 10.0 | 12.3 | 5.7 | 13.0 |
| PT | .. | 21.4 | 8.4 | 3.9 | 17.6 | 10.1 | 8.0 | 8.8 |
| FI | 16.1 | 14.2 | .. | 10.1 | 21.2 | 8.1 | 4.6 | 12.7 |
| SE | 16.0 | 35.3 | 1.3 | 6.3 | 23.5 | 13.8 | 14.3 | 13.1 |
| UK | 41.1 | 10.8 | 17.0 | 0.2 | 4.0 | 0.8 | 7.4 | 7.5 |

¹⁾ For DK and UK 1999 data were used.

²⁾ For ES data from 1999 were used for NACE sections G to K.

Table 5: Looking at the figures at the NACE Rev. 1 section level, it is possible to identify particular areas of the business economy that attract foreign affiliates. In six participating Member States, the highest contribution of foreign-controlled enterprises to the value added of the section was found in NACE Section D, manufacturing. In Ireland, 80.8% of all value added in manufacturing (NACE section D) was generated by foreign-controlled enterprises. The lowest share was in the United Kingdom (10.8%), where the concentration of foreign-controlled activity was highest in NACE Section C, mining and quarrying. It should be noted that there are very

few active enterprises in this sector and as a result figures are often distorted. High contributions were also found in NACE Section G, distributive trade. The highest proportion was in Sweden (23.5%) and the lowest in the United Kingdom (4.0%). In Finland and Denmark, NACE Section G was the most attractive activity for foreign-controlled enterprises, contributing 21.2% and 13.1% respectively to total value added.

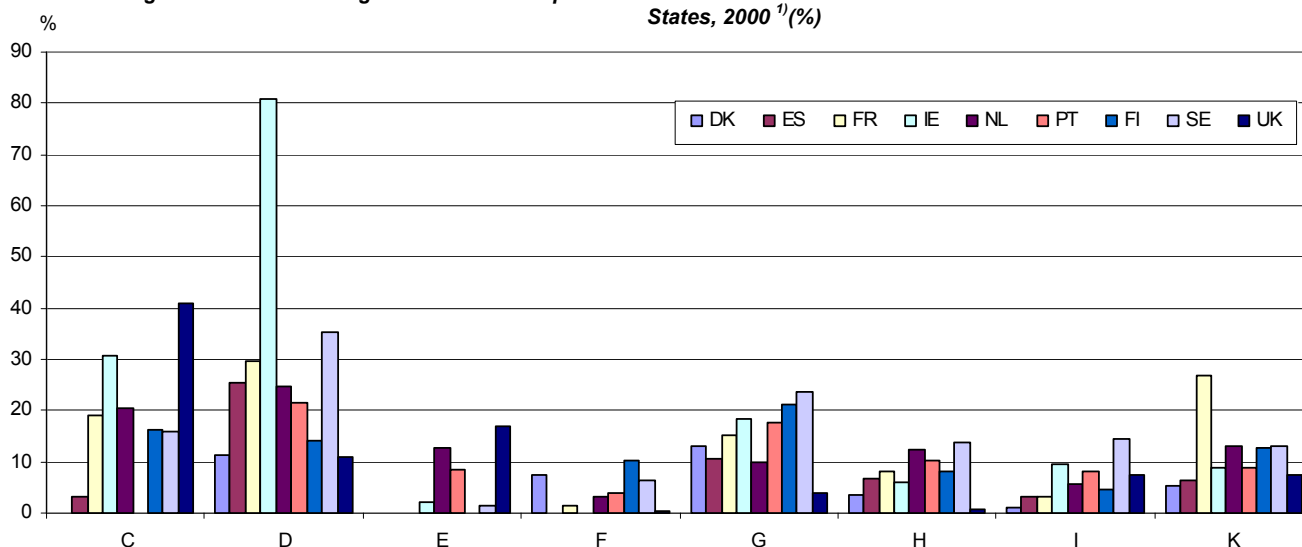
Low percentages were found for NACE Section E, electricity, gas and water supply, NACE Section F, construction, and NACE Section I, transport, storage and

communication. For most countries these sections' contribution to total value added was below 10%.

In NACE section H, hotels and restaurants, the contribution to the reporting countries' value added was above 10% for three countries: the Netherlands (12.3%), Sweden (13.8%) and Portugal (10.1%).

The highest share of value added in NACE section K, real estate, renting and business activities, was in France, at 27.0%.

Figure 5: Share of foreign-controlled enterprises in terms of value added at section level of NACE Rev. 1 in nine Member States, 2000¹⁾(%)



¹⁾ For DK, ES and UK 1999 data were used.

Table 6: Distribution of foreign-controlled enterprises between NACE Rev. 1 sections in terms of value added in nine Member States, 2000¹⁾ (%)

| Member State | Manufacturing Industries | | | | Services sector | | | |
|--------------|--------------------------|------|-----|-----|-----------------|-----|------|------|
| | C | D | E | F | G | H | I | K |
| DK | .. | 35.9 | 0 | 7.1 | 30.2 | 0.9 | 1.8 | 11.1 |
| ES | 0 | 64.8 | 7.5 | : | 17.3 | 1.1 | 3.0 | 6.3 |
| FR | 0.4 | 55.2 | 0 | 0.7 | 15.8 | 1.5 | 2.1 | 24.5 |
| IE | 0.4 | 86.2 | .. | : | 4.7 | 0.4 | 1.7 | 6.5 |
| NL | 3.8 | 50.3 | 2.3 | 2.4 | 17.8 | 2.7 | 5.1 | 15.6 |
| PT | .. | 48.2 | 2.9 | 2.8 | 27.8 | 2.8 | 6.5 | 8.8 |
| FI | 0.4 | 49.1 | .. | 5.7 | 25.0 | 1.3 | 4.0 | 12.9 |
| SE | 0.3 | 56.7 | 0.2 | 2.0 | 18.9 | 1.3 | 7.5 | 13.0 |
| UK | 17.4 | 45.0 | 7.3 | 0.3 | 12.9 | 0.4 | 12.5 | 4.2 |

¹⁾ For DK, ES and the UK 1999 data were used.

Table 6: Restricting the population to foreign-controlled enterprises, the vast majority of foreign-controlled enterprises in all participating Member States - measured in terms of value added - were in manufacturing (NACE section D). The lowest share was found in Denmark (35.9%), the highest in Ireland (86.2%). Distributive trade ranked as the second most common activity in all countries, with three exceptions: real estate, renting and business activities took second place in France and Ireland, and mining and quarrying in the United Kingdom.

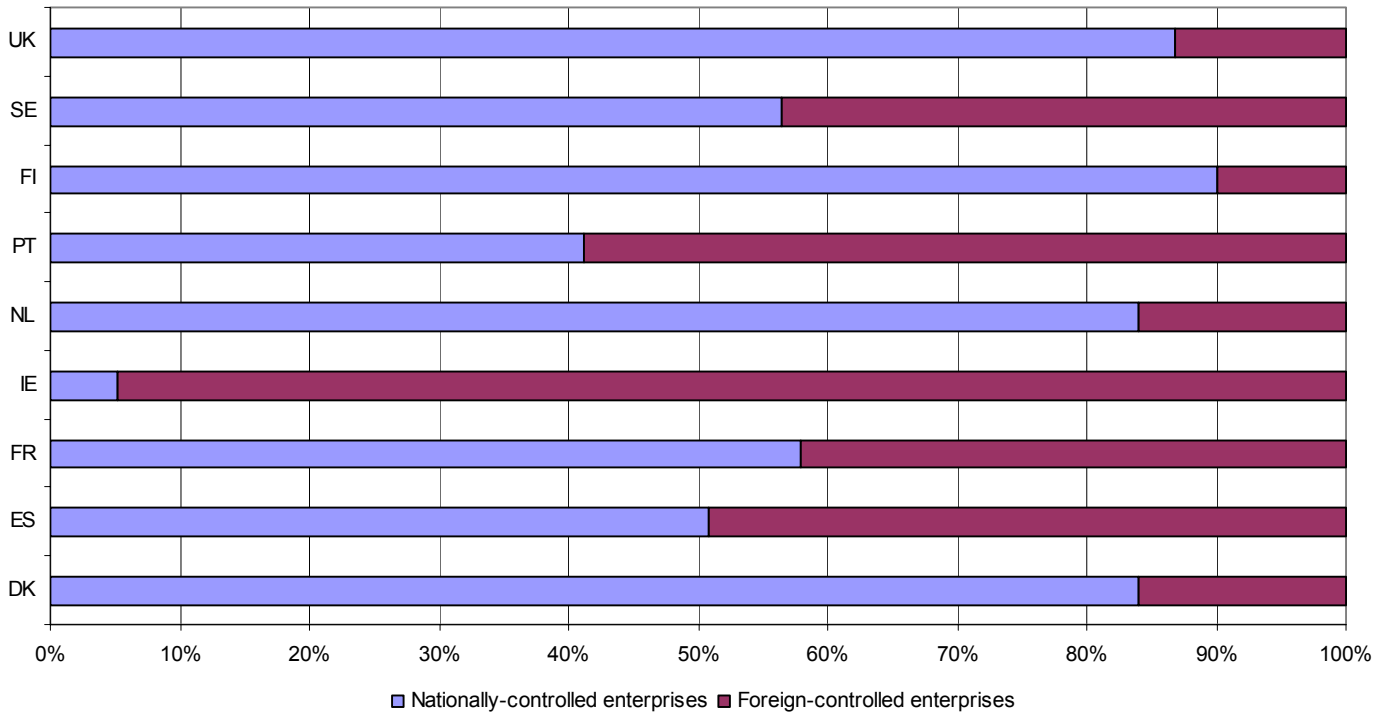
Breakdown of manufacturing by level of technological intensity

Table 7: Distribution of control in terms of value added in manufacturing (NACE section D) according to level of technological intensity in nine Member States, 2000¹⁾ (%)

| Member State | High-technology | | Medium-high-technology | | Medium-low-technology | | Low-technology | |
|--------------|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|
| | Foreign-controlled enterprises | Nationally-controlled enterprises | Foreign-controlled enterprises | Nationally-controlled enterprises | Foreign-controlled enterprises | Nationally-controlled enterprises | Foreign-controlled enterprises | Nationally-controlled enterprises |
| DK | 15.9 | 84.1 | 18.3 | 81.7 | 13.8 | 86.2 | 5.0 | 95.0 |
| ES | 49.1 | 50.9 | 47.2 | 52.8 | 16.6 | 83.4 | 13.4 | 86.6 |
| FR | 42.1 | 57.9 | 33.9 | 66.1 | 25.1 | 74.9 | 22.3 | 77.7 |
| IE | 94.8 | 5.2 | 93.4 | 6.6 | 26.5 | 73.5 | 62.8 | 37.2 |
| NL | 16.0 | 84.0 | 31.6 | 68.4 | 26.9 | 73.1 | 21.5 | 78.5 |
| PT | 58.8 | 41.2 | 48.6 | 51.4 | 9.9 | 90.1 | 12.4 | 87.6 |
| FI | 9.9 | 90.1 | 35.0 | 65.0 | 16.6 | 83.4 | 5.4 | 94.6 |
| SE | 43.6 | 56.4 | 48.2 | 51.8 | 23.8 | 76.2 | 24.6 | 75.4 |
| UK | 13.1 | 86.9 | 11.6 | 88.4 | 8.5 | 91.5 | 10.5 | 89.5 |

¹⁾ For DK and UK 1999 data were used.

Figure 6: Share of foreign control in terms of value added in high-tech industries in nine Member States, 2000¹⁾ (%)



¹⁾ For DK and UK 1999 data were used.

Table 8: The breakdown of value added generated in NACE section D by level of technological intensity shows that foreign-controlled enterprises generate more value added in high-tech and medium-high tech manufacturing than in medium-low and low-tech manufacturing, whilst the opposite is true of nationally-controlled enterprises.

This relation is not surprising, because foreign-controlled enterprises tend to be larger and it can be seen from Statistics in Focus "High-tech industries in the EU"³ that high-tech manufacturing is dominated by large companies. The share of value added generated by foreign-controlled enterprises in high-tech manufacturing in NACE section D varied widely between participating countries, from

7.7% (Netherlands) to 35.4% (Ireland).

³ *European Communities, Theme 4-11/2003, p.4.*

Table 8: Distribution in terms of value added generated in manufacturing (NACE section D) by level of technological intensity in nine Member States, 2000¹⁾ (%)

| Member State | Foreign-controlled enterprises | | | | Nationally-controlled enterprises | | | |
|--------------|--------------------------------|------------------------|-----------------------|----------------|-----------------------------------|------------------------|-----------------------|----------------|
| | High-technology | Medium-high-technology | Medium-low-technology | Low-technology | High-technology | Medium-high-technology | Medium-low-technology | Low-technology |
| DK | 20.0 | 36.2 | 25.8 | 18.1 | 13.7 | 20.8 | 20.8 | 44.7 |
| ES | 12.7 | 48.1 | 20.1 | 19.0 | 4.5 | 18.5 | 34.6 | 42.3 |
| FR | 25.6 | 31.5 | 20.6 | 22.4 | 14.9 | 26.0 | 26.1 | 33.0 |
| IE | 35.4 | 39.9 | 2.0 | 22.8 | 8.2 | 11.8 | 22.9 | 57.1 |
| NL | 7.7 | 33.4 | 26.8 | 32.1 | 13.3 | 23.9 | 24.0 | 38.8 |
| PT | 17.2 | 42.3 | 11.9 | 28.6 | 3.3 | 12.2 | 29.5 | 55.0 |
| FI | 16.5 | 46.0 | 23.2 | 14.2 | 24.9 | 14.2 | 19.4 | 41.5 |
| SE | 19.7 | 45.1 | 13.2 | 21.9 | 13.9 | 26.4 | 23.0 | 36.6 |
| UK | 21.2 | 26.0 | 17.5 | 35.2 | 17.0 | 24.1 | 22.7 | 36.2 |

¹⁾ For DK and UK 1999 data were used.

High-tech and knowledge-intensive services

Table 9: Share of value added generated by foreign-controlled enterprises in manufacturing (NACE section D) by level of technological intensity and in high-tech and knowledge-intensive services in eight Member States, 2000¹⁾ (% of value added generated by foreign-controlled enterprises)

| Member State | Manufacturing | | | | Knowledge-intensive Services | |
|--------------|-----------------|------------------------|-----------------------|----------------|------------------------------|-----------------|
| | High-technology | Medium-high-technology | Medium-low-technology | Low-technology | Total | High-technology |
| DK | 7.2 | 13.0 | 9.2 | 6.5 | 12.5 | 6.2 |
| FR | 14.1 | 17.3 | 11.4 | 12.3 | 21.5 | 2.5 |
| IE | 30.5 | 34.4 | 1.7 | 19.7 | 7.9 | 6.2 |
| NL | 3.8 | 16.8 | 13.5 | 16.1 | 16.9 | 6.2 |
| PT | 8.3 | 20.4 | 5.8 | 13.8 | 13.3 | 5.5 |
| FI | 8.1 | 22.6 | 11.4 | 7.0 | 14.2 | 3.5 |
| SE | 11.2 | 25.6 | 7.5 | 12.4 | 15.4 | 6.3 |
| UK | 9.6 | 11.7 | 7.9 | 15.8 | 12.1 | 3.7 |

¹⁾ For DK and UK 1999 data were used.

Table 9: A high level of technological intensity is less common in the services sector than in manufacturing. Between 2.5% (France) and 6.3% (Sweden) of the value added generated by foreign-controlled enterprises was generated in high-tech services (post and

telecommunications, computer and related activities, research and development).

Looking at knowledge-intensive market services, which include high-tech services, water and air transport, real-estate activities, renting of

machinery, equipment without operator and personal and household goods, and other business activities, the contribution of foreign-controlled enterprises to value added is slightly higher, ranging from 7.9% (Ireland) to 21.5% (France).

Table 10: Share of high-tech and knowledge-intensive services in nine Member States, 2000¹⁾ (% of services sector total)

| Member State | Knowledge-intensive services | | | |
|--------------|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|
| | Total | | High-technology services | |
| | Foreign-controlled enterprises | Nationally-controlled enterprises | Foreign-controlled enterprises | Nationally-controlled enterprises |
| DK | 28.4 | 45.9 | 14.2 | 12.1 |
| ES | 25.2 | 36.4 | 0.3 | 7.3 |
| FR | 42.1 | 22.3 | 4.9 | 6.9 |
| IE | 59.1 | 45.6 | 46.7 | 18.9 |
| NL | 40.9 | 40.5 | 15.0 | 12.3 |
| PT | 29.0 | 37.2 | 11.9 | 12.7 |
| FI | 32.7 | 44.2 | 8.1 | 15.9 |
| SE | 37.9 | 25.1 | 15.4 | 7.6 |
| UK | 40.1 | 46.7 | 12.1 | 15.5 |

¹⁾ For DK, ES and UK 1999 data were used.

Table 10: Between 0.3% (Spain) and 46.7% (Ireland) of the value added generated by enterprises under foreign control in services sector are generated in high-tech services. For nationally-controlled enterprises the respective share varied from 6.9% (France) to 18.9% (Ireland).

The share of knowledge-intensive services was much higher. In foreign-controlled enterprises between 25.2% (Spain) and 59.1% (Ireland) of the services sector value added was generated in knowledge-intensive services, in nationally-controlled enterprises this was between 22.3% (France) and 46.7% (United Kingdom).

Table 11: Distribution of control in high-tech and knowledge-intensive services in nine Member States, 2000¹⁾ (%)

| Member State | Knowledge-intensive services | | | |
|--------------|--------------------------------|-----------------------------------|--------------------------------|-----------------------------------|
| | Total | | High-technology services | |
| | Foreign-controlled enterprises | Nationally-controlled enterprises | Foreign-controlled enterprises | Nationally-controlled enterprises |
| DK | 4.4 | 95.6 | 8.1 | 91.9 |
| ES | 5.4 | 94.6 | 0.3 | 99.7 |
| FR | 17.0 | 83.0 | 7.1 | 92.9 |
| IE | 22.1 | 77.9 | 35.1 | 64.9 |
| NL | 10.0 | 90.0 | 11.8 | 88.2 |
| PT | 10.6 | 89.4 | 12.5 | 87.5 |
| FI | 10.6 | 89.4 | 7.5 | 92.5 |
| SE | 11.9 | 88.1 | 15.4 | 84.6 |
| UK | 3.0 | 97.0 | 2.7 | 97.3 |

¹⁾ For DK, ES and UK 1999 data were used.

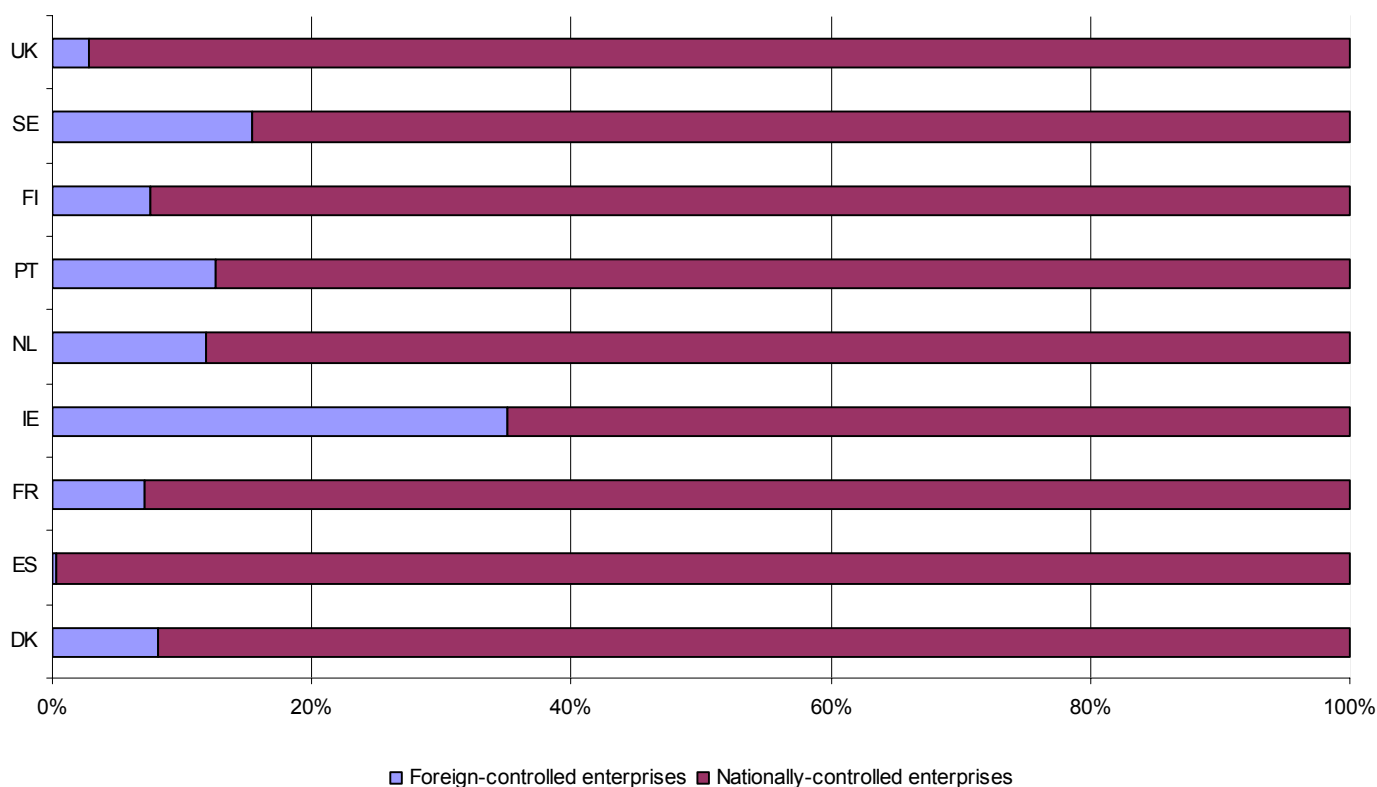
Table 11: Looking at the distribution of control between foreign-controlled and nationally-controlled enterprises, only a small minority of value added generated in high-tech services (between 0.3% and 35.1%) and knowledge-intensive services

(between 3.0% and 22.1%) was generated by foreign-controlled enterprises.

Value added was used in this Statistics in Focus to measure the extent of technological intensity.

Employment shows a similar pattern, but to a lesser degree for high-tech manufacturing and a slightly higher degree for high-tech and knowledge-intensive services.

Figure 7: Distribution of control in high-tech services in nine Member States, 2000¹⁾ (%)



¹⁾ For DK, ES and UK 1999 data were used.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

The Project

The statistics published in this report relate to inward Foreign Affiliates Statistics (inward FATS), describing the overall activity of foreign-controlled affiliates in the reporting economy.

The legal basis for the project is Annex 1 section 10 of Council Regulation (EC, EURATOM) No. 58/97 of 20 December 1996 on structural business statistics (SBS).

FATS data collection began with the collection of data for reference year 1996. The results presented in this Statistics in Focus are data for reference year 2000 for eight Member States - Spain, France, Ireland, Luxembourg, the Netherlands, Portugal, Finland and Sweden. For Denmark and the United Kingdom, data from 1999 are included in this report because 2000 data were not yet available. For Spain no 2000 data were available for the services sector. However, in some tables data for reference year 1999 have been used. Luxembourg provided three variables: number of enterprises, number of employees and turnover.

Methodological Notes

The breakdown of the FATS variables is based on the concept of control. Control over an enterprise is defined as the ability of an entity to determine the general corporate policy of the enterprise by choosing appropriate directors if necessary. However, control is often difficult to determine and in practice, in the data collection process the share of ownership is often used as a proxy for control. In the case of multiple owners the FATS owner is determined according to the majority ownership rule. Direct majority ownership is defined as owning directly more than 50% of the voting shares of an incorporated enterprise or the equivalent of an unincorporated enterprise.

FATS are collected according to the concept of the ultimate controlling institutional unit (UCI). The UCI is the first institutional unit in the chain – beginning with and including the first foreign parent – which is not majority owned by another person.

The total values of variables are allocated to the UCI and values of variables are not split according to shares of ownership, nor double counted.

The country of origin is the country in which the controlling unit is resident.

Control is determined at the end of the reference year.

Most of the data in this report are presented at an aggregated level to provide global figures. In some cases, aggregates have been calculated despite the fact that one or more constituent parts of the aggregate are confidential or not available. For Denmark, Spain and Ireland NACE section F is missing, for the Netherlands C and K. For Luxembourg, number of employees for NACE section K and all three variables for NACE section I are not available for the aggregate “nationally-controlled enterprises” and data for NACE section C are nil for the aggregate “foreign-controlled enterprises”. Thus, NACE sections C and I were not taken into account when calculating the aggregates, and K was not taken into account when calculating the share of number of employees. Because of the lack of data for the services sector of Spain for reference year 2000, no aggregates for the business economy or the services sector have been calculated.

Economic variables

The definitions of the characteristics are the same as for Structural Business Statistics and are laid down by Commission Regulation (EC) No. 2700/98 of 17 December 1998.

Economic Activities

Data were requested for Sections C (mining and quarrying), D (manufacturing), E (electricity, gas and water supply, F (construction), G (wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods), H (hotels and restaurants), I (transport, storage and communication), J (financial intermediation) and K (real estate, renting and business activities) of the statistical classification of economic activities in the European Community (NACE Rev. 1).

The aggregate business economy includes Sections C to K; manufacturing industries is composed of NACE Sections C to F and the services sector, G to K.

NACE Section J was excluded from the publication and thus from the business economy and services sector aggregates for reasons of comparability: only France, Luxembourg, Portugal and Finland supplied data for this section or parts thereof.

The special aggregates include the following activities:

| Aggregate | NACE Rev.1 |
|--------------------------------|---------------------------------------|
| High-tech manufacturing | 24.4, 30, 32, 33, 35.3 |
| Medium-high-tech manufacturing | 24-24.4, 29, 31, 34, 35.2, 35.4, 35.5 |
| Medium-low-tech manufacturing | 23, 25 - 28, 35.1 |
| Low-tech manufacturing | 15 to 22, 36, 37 |
| High-tech services | 64, 72, 73 |
| Knowledge-intensive services | 61, 62, 64, 70 to 74 |

Symbols

- 0 Less than half the final digit shown
- .. Confidential data. Data not conclusive or withheld owing to non-disclosure practice.
- : Data not available

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➤ Databases

New Cronos, Theme 4

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