

**AVERAGE ANNUAL GROWTH OF OUTPUT (VOLUME)  
(1970-1980) — per cent**

Electronics	8.1	Electrical	2.8	Oil refining	1.7
Computers	7.5	Food	2.8	Wood/cork/ furniture/	1.6
Drugs	6.8	Shipbuilding	2.4	Ferrous metals	1.4
Automobiles	5.7	Other manuf. industry	2.3	Non ferrous metals	1.3
Chemicals	5.0	Paper/printing	2.1	Manuf. of metal	1.3
Instruments	4.9	Stone/clay/ glass	2.0	Textiles, footwear/ leather	0.8
Rubber/plastics	4.3				

Of the seven industries in the high-growth category, four are high research-intensive, and three are medium research-intensive. Moreover of the three latter industries, it is noteworthy that two are "on the border" between medium and high research. *This indicates that the higher research-intensive industries are providing, throughout the developed world, a principal thrust of economic growth.*

As well, high research industries have increased their share of employment over time:

**EMPLOYMENT WEIGHTS OF HIGH, MEDIUM AND LOW  
R&D INTENSITY IN MANUFACTURING INDUSTRIES**

Country	High Intensity			Medium Intensity			Low Intensity		
	1970	1975	1982	1970	1975	1982	1970	1975	1982
United States	18.4	18.4	21.6 <sup>c</sup>	32.0	31.0	32.9 <sup>c</sup>	49.2	50.5	45.5 <sup>c</sup>
Japan	16.7	16.0	18.2 <sup>b</sup>	33.3	32.0	33.3 <sup>b</sup>	50.1	52.0	48.5 <sup>b</sup>
Germany	16.3	16.6	17.5	33.0	34.2	39.8	50.7	49.2	42.7
France <sup>d</sup>	—	13.6 <sup>a</sup>	14.1 <sup>a</sup>	—	35.2	36.2	—	51.2	49.7
United Kingdom	16.8	17.2	19.9 <sup>b</sup>	30.8	31.8	33.9 <sup>b</sup>	52.4	51.0	46.2 <sup>b</sup>
Italy <sup>c</sup>	—	13.7 <sup>a</sup>	13.5 <sup>c</sup>	—	30.0	32.9 <sup>c</sup>	—	56.3	53.6 <sup>c</sup>
Canada	13.0	11.9	12.9 <sup>c</sup>	24.1	24.5	24.7 <sup>c</sup>	62.9	63.6	62.4 <sup>c</sup>
Australia	—	12.8	12.9 <sup>c</sup>	—	22.6	22.6 <sup>c</sup>	—	64.8	64.5 <sup>c</sup>
Sweden	13.8	14.5	15.7 <sup>c</sup>	28.6	30.4	31.3 <sup>c</sup>	57.6	55.8	53.0 <sup>c</sup>

<sup>a</sup> Not involving aerospace industry

<sup>b</sup> 1980

<sup>c</sup> 1981

<sup>d</sup> Secretariat estimate

However, Canada shows a relatively poor employment record in high research-intensive industries: *we have fewer high research-intensive industries in the first place and spend relatively less on R&D generally.*