

NOTES

1. An important question is whether non-EC based firms will be allowed to compete on an equal basis with EC based firms.
2. However, even the equipment distinctions are somewhat arbitrary, the boundaries between categories progressively blurred by rapid technological changes.
3. European Commission, *The Economics of 1992* (Cecchini Report), p. 17.
4. EC, Green Paper, p. 45.
5. Cecchini Report, p. 51.
6. Cecchini Report, pp. 53-54.
7. For example, one of AT&T's Western Electric plants in the U.S. has the capacity to produce seven million access lines per annum compared to a total demand of less than one million access lines per annum in some large European countries. European sales of PBXs per country are still small enough to result in a cost disadvantage of up to 20 or 30 per cent, when plant output is limited to the national market. INSEAD, *The Benefits of Completing the Internal Market for Telecommunications Equipment in the Community*, April 1988.
8. Cecchini Report, Table 6.1.1, p. 109.
9. These figures are complemented by national spending on R&D and private expenditures by firms. EC-sponsored funding of R&D is estimated to amount to only 6 or 7 per cent of total public funding of R&D in the European Community.
10. This raises an important policy question, that is beyond the scope of this report. Should Canada establish similar scientific and technological support programs? An alternative to R&D subsidies are more liberal rules regarding the magnitude and rapidity of R&D write-offs for tax purposes.
11. Nevertheless, indigenous Canadian computer firms have had some success in product niches such as terminals and word processors. A good example is Gandalf, which developed a niche in the supply of modems. See ISTC, *Industry Profile: Computers and Office Equipment*. However, most Canadian-owned computer hardware firms are now supplying, often via long-term contract, components to the major, multinationally oriented original equipment manufacturers. An example is B.C.-based Comptec International, which ships keyboard parts to factories in Korea, Taiwan, Singapore and other southeast Asian as well as to many European countries. Comptec also supplies U.S.-based Digital Equipment Corporation and has a plant in France. *Financial Post*, May 29, 1989, p. S12.
12. *Financial Post*, May 22, 1989, p. 44; July 27, p. 10.