

continue to be encouraged so that domestic industries can more readily absorb foreign technological spillovers and pursue R&D independently. Canadian affiliates of foreign MNEs should also be encouraged to undertake at least basic research and development in-house. Instead of applying a "band-aid" solution by directly encouraging MNEs to undertake R&D in Canada through coercion or financial inducements, it would be more beneficial to channel resources into improving the domestic education system, infrastructure and scientific base. This would be a longer term, more lasting solution in which Canada could become more attractive globally as a location for R&D to be undertaken by both domestic and foreign firms.

In addition to these domestic policies, Canada should work multilaterally and bilaterally to restrict direct R&D locational inducements offered by other countries, in order to make the playing field as level as possible. Direct inducements can turn into bidding wars in which the gains from foreign-affiliate R&D are eroded.⁶⁹ All policy makers need to be aware of the opportunity costs of their programs. If the socially efficient amount of R&D can only be achieved at a cost equalling, or exceeding, the whole amount of the gain over the privately efficient solution, then there is no net gain and the policy should not be pursued.

Technology transfer requirements

Although some policy makers may suggest the use of technology transfer requirements for MNEs, there is evidence that, although conformity with the requirement may induce diffusion, at best the result is diffusion of a larger share of a smaller stock of technology, with the net effect indeterminate⁷⁰. These types of requirements usually do not work well, because individual host countries have limited possibilities to influence MNEs in their location choices and because diffusion also depends upon the absorptive capacity of the competing domestic firms in the industry. If these firms are not at a sophisticated enough level (i.e., personnel are not competitively educated, trained, skilled or furnished with adequate capital) then it will be difficult for them to use the diffused technology efficiently. Compulsory or coercive diffusion requirements, therefore, seem to be an erroneous path to follow

⁶⁹Some recent work by the Office of Technology Assessment of the U.S. Congress, (*Multinationals and the National Interest: Playing by Different Rules*, September 1993, p. 67) highlights this problem. The study shows that the cost of direct inducements per job created for individual states in the U.S. has been escalating rapidly, with the incentive package won in the last settlement becoming the opening bid for the next settlement. The study questions whether this competition has reached a stage where the costs of incentives outweigh the benefits, even at the local level.

⁷⁰Blomstrom, *op. cit.*, p. 104-5.