There is evidence to indicate that MNEs were not reducing the size of their Canadian operations and increasing home country exports to Canada in 1988, the year leading up to the implementation of the FTA.<sup>67</sup> This is consistent with the hypothesis that the MNE's prime motivator in choosing a location for a firm is not to avoid tariffs but to optimize its global position.

## 4.2.3 Technology

R&D is an important determining factor in export and productivity performance. Its social rate of return has been shown to exceed its private rate of return by 50% to 100%. This creates an opportunity for beneficial government involvement. The effect of spillovers should not be ignored when formulating policy. It is evident that there are certain key sectors where the social rates of return to R&D are highest. Policies should encourage R&D in these sectors, in order to get the most social return for total cost. Program effectiveness would then be maximized.

R&D which is undertaken outside of the domestic economy has been found to be complementary to domestic R&D, though the positive relationship is not as strong as may have been suspected. Transmission of foreign technology can occur through FDI, trade and joint research. Policies that encourage freer trade (such as NAFTA), reduce restrictions on FDI, and foster international and domestic information sharing should be beneficial to domestic R&D performance.

However, R&D remains highly centralized at or around the MNE's home base or some other central R&D location, which is not usually Canada. Therefore, FDI cannot be seen as the key remedy for domestic under-investment in technology. Although it is true that some R&D takes place in foreign affiliates in Canada, there is also the question of the quality of this R&D. For example, routine product testing and R&D undertaken in order to fulfil host country product or safety standards does not have the same social or industrial benefits as core R&D performed at the MNE's home office.

Canada should not rely solely on R&D imported from foreign countries, because of its lower social return, i.e., fewer spillovers. A competitive domestic scientific knowledge base, appropriate research centres and targeted academic research should

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<sup>&</sup>lt;sup>67</sup>Covari and Wisner, op. cit., p. 64.

<sup>&</sup>lt;sup>68</sup>Bernstien, *op. cit.*, notes that in four special or "strategic" industries (non-electrical machinery, rubber and plastics, chemical products and petroleum products) the social rate of return is two to four times higher than the private rate of return.