Balancing Canadian Interests: How has the nature of Canadian interests related to subsidies and countervailing duties changed? Should Canadians be concerned over recent developments in U.S. government-funded R&D and locational incentives?[22]

Technological Protectionism: Is technological protectionism through government procurement and other legislation drawing some Canadian firms south of the border or abroad as they attempt to get behind non-tariff barriers through direct investment and joint ventures?

We begin the discussion with a brief examination of the nexus between trade in technology and subsidies. We then review how subsidies and government procurement practices may not only increase barriers to free trade but affect inward and outward Canadian investment.

3.2 The Policy Context: A Brief Overview

3.2.1 The Trade and Investment Implications of R&D

Conventional wisdom and the theoretical predictions of models of endogenous innovation suggest that increased research effort should lead to more rapid growth. Certain recent economics research, however, has begun to question whether this relationship is always as strong as usually posited. In certain circumstances, incremental R&D may not increase an economy's growth rate.[23] Nonetheless, the standard view, drawing on a number of empirical studies, remains that R&D is a good investment with a positive rate of return at the firm level and significant spill-overs across firms and industries.[24]

Moreover, many nation states are no longer willing to promote and support large-scale R&D subsidies without ensuring that the results clearly and directly benefit "national" firms and that the exploitation of that research stays in the country where

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22 It has been pointed out that there is no evidence of significant demand by Canadian firms for access to foreign technology consortia. See Rhoda Caldwell, *Technology Consortia: A Prisoner's Dilemma?*, Policy Staff Paper No. 93/10, Department of Foreign Affairs and International Trade (July 1993).

23 See Young, *Growth Without Scale Effects* and several articles by Charles Jones, including *Empirical Evidence on R&D Based Models of Economic Growth*, Manuscript, Department of Economics, Stanford University, 1994.

24 Fortin and Helpman, *Endogenous Innovation and Growth*, p.28 report that the social rate of return on R&D is higher than the private rate by a factor that ranges from two to five.