

competitiveness may require that government procurement place a premium on proposals received from exclusively domestic consortia. We should continue to work against such provisions, as well as seeking to liberalize government procurement practices more generally on a mutually beneficial basis.

The risk of pursuing this is option is that Canadian firms will not take full advantage of the opportunities afforded by improved access and may find their own research programs being dominated by foreign corporate interests, even if they bring their own expertise and funding. The other disadvantage of this approach is that it could stimulate increased demand for public support of R&D in Canada at a time when fiscal resources are at an all time low. What we now require is a comprehensive assessment of the risks involved if we do obtain improved access on these terms versus the risks (opportunity costs) if we don't.

## 5.2 Recommendations for Future Areas of Study

There are noticeable gaps in our knowledge which could be pursued at greater length. Our knowledge of provincial programs designed to promote international cooperation in science and technology is limited. How do provincial programs affect the participation of Canadian firms in foreign-based technology consortia? Do inter-provincial trade barriers impede the formation of pan-Canadian alliances to participate in large international research programs?

There may be some merit to investigating the comparative access of our trading partners to publicly supported technology consortia. How does Canada's record of access to these consortia compare with U.S. and Japanese firms with respect to the Framework Programs? Do Japanese firms have better access to U.S. R&D networks than Canadian firms by virtue of the many informal agreements between U.S. and Japanese firms, or through the presence of Japanese researchers at U.S. research institutes? A recent article in the *California Management Review* by David Mowery and David Teece discusses Japan's growing capabilities in industrial technology and its implication for U.S. public policy. In particular, they explore the links between the U.S. and Japanese systems of R&D. In a table showing the number of international research joint ventures by nation for the period 1982-87, over all technology fields Canada had a total of 4 out of 135 for all nations, compared with 93 for the U.S., 13 for the U.K., 9 for Germany, 7 for France, 5 for Italy, and 4 for other nations.<sup>89</sup>

---

<sup>89</sup> Table 6 (Source MITI, 1987), in David C. Mowery and David Teece, "Japan's Growing Capabilities in Industrial Technology: Implications for U.s. Managers and Policymakers", *California Management Review* (Winter 1993), p. 23.