

growth. But, while correlation is almost always observed, causation has not been proven to date. Instinctively, we believe this is the case, and a recent Industry Canada Occasional paper concludes that "the more a country trades overall, the more it gains from the research and development of its partners. The evidence seems to support the view that trade has a favourable effect on productivity".¹⁶

All new growth theories share some common properties, such as the importance of the "idea gap" (lack of knowledge to create value) versus the "object gap" (not enough roads, factories, etc.). Still, there is an important difference in content between the initial models, in which technological progress is assumed to be totally external to firms, and the later models that assume technological progress to result from intentional activities by firms. In some work, this assumption has been extended to countries themselves, explaining the importance of a domestic research and development capability.

Recent work by Helliwell¹⁷ has shown that perhaps differences in growth patterns cannot all be explained by endogenous growth based on national spillovers from domestic accumulation of human or physical capital, because in the Asian context it shows few signs of returns to scale. Helliwell goes on to argue that, where convergence is taking place, it is happening through the international transfer of knowledge which can best be analyzed using theories of production and distribution of knowledge. He also goes on to mention two other potentially important factors: democratization and social capital. That is, institutions and the policy environment might actually have an impact, even in theory, on growth patterns.

Some of the most interesting work being done in the growth theory field is related to how institutional structures can inhibit the diffusion of new technologies. Perez¹⁸ argues that each new "wave" of strong worldwide demand, characterized by huge upswings of investment, is characterized by a dominant technological style. The match with growth theory is that those nations which prove most adept in making institutional innovations that match the technological change are likely to

¹⁶ Pierre Fortin and Elhanan Helpman, "Endogenous Innovation and Growth: Implications for Canada", Industry Canada Occasional Paper No. 10, August 1995.

¹⁷ John F. Helliwell, "Economic Growth and Social Capital in Asia", Paper prepared for the Industry Canada Conference on the Asia-Pacific Region in the World Economy, Vancouver, December 1995.

¹⁸ C. Perez, "Technical Change, Competitive Restructuring and Institutional Reform in Developing Countries", World Bank Strategic Planning and Review, Discussion Paper No. 4, December 1989.