and another that considered technological progress as an output from a separate technology-sector in the economy. The most recent models follow in these footsteps.

In the last few years, proponents of neoclassical models have shown that the contribution of human capital to growth is consistent with the predictions of the Solow-Swan framework when the latter is augmented to include such capital. For example, Mankiw and Romer model human capital accumulation as an exogenous process and show empirically that the underlying production function exhibits diminishing returns to scale in reproducible factors of production. In an earlier Staff Paper, Mueller argued that: "The shortage of complementary human capital could be what is preventing some countries from achieving higher growth rates. Appropriately targeted education is the key to improving the quality of labour. Evidence suggests that development of human capital is highly correlated with growth rates in developing countries."[13]

The implications of the new growth theories for differences in growth and welfare across countries that trade with each other are discussed in most detail by Grossman and Helpman.[14] They show--within a traditional neoclassical general equilibrium setting--that if technological spillovers are international rather than national in character, and a "perfect" international capital market prevails, consumers in all countries tend to be equally well off in terms of welfare (although there may be differences in the growth of output). However, when these assumptions are relaxed, the possibilities for diverging patterns multiply. Hence, there could be a role for the dissemination of technology (which clearly is not freely available at present).

Trade and foreign direct investment can also generate positive spillovers via the flows of knowledge (and transfers of technology) that they generate. The literature has not always been in agreement on whether foreign trade accelerates growth. Mueller[15] gives a detailed presentation showing that, in general, diversion of resources from domestic production to export production may be beneficial for

[13] Richard E. Mueller, "Determinants of Economic Growth in Developing Countries: Evidence and Canadian Policy Implications", Policy Staff Paper No. 94/08, April 1994.

[14] Gene L. Grossman and Elhanan Helpman, Innovation and Growth in the Global Economy, MIT Press: Cambridge, 1991.

[15] Mueller, op. cit.