JEL Classification Number
D90

Summary of
WP/92/35

"Growth, Productivity, and the Rate of Return on Capital"
by Charles Adams and Bankim Chadha

An important public policy question in the United States is whether or not increasing the saving rate will lead to an improvement in the economy's long-term growth performance. Alternative views of the relationship between investment and the economy's growth rate suggest different answers to this question. According to the traditional neoclassical growth model, an increase in the investment (saving) rate raises the medium-term growth rate (and the level of the path of output thereafter) but has no long-run effect on the economy's growth rate. Conversely, in some recent models of endogenous growth, strong externalities associated with an individual firm's investments imply that the returns from raising the investment rate could be much larger than suggested by the neoclassical model and that a higher investment rate might place the economy on a permanently higher growth path.

This paper attempts to shed light on which (if either) of these views on the relationship between investment and growth is most applicable to the U.S. economy. It quantifies--in terms of the level and the growth rate of future output--the potential returns to the United States from raising its investment rate. After outlining the salient features of the two alternative classes of growth models, the paper examines the long-run growth performance of the U.S. economy with a view to ascertaining the contribution of capital to growth. It presents evidence on growth accounting measures of the contribution of capital and the time-series relationship between investment and growth and discusses whether the rate of return on capital has been consistent with the predictions of alternative models.

Based on the growth experience of the U.S. economy, the paper argues that there are no strong reasons for rejecting the central conclusion of the neoclassical model that shifts in investment will have no long-lasting effect on the economy's growth rate. Moreover, given the income share of capital, the effects of shifts in investment on growth in the short to medium term can be expected to be small relative to the U.S. economy's underlying rate of growth. The predictions of endogenous growth models, which suggest a larger contribution of capital to growth and long-run effects of investment on the growth rate, do not seem to be supported by the data. This conclusion does not imply that efforts to raise the saving (and investment) rate would not lead to an improvement in economic performance in the United States. The payoff from such efforts would include, in particular, a faster growth rate in the transition to a new, long-run equilibrium and a permanently higher level of output and labor productivity.