

# Human capital and financial development in economic growth: new evidence using the translog production function

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## Abstract

In this paper we evaluate the contributions of human capital and financial development to economic growth in a panel of 82 countries covering 21 years. The main innovations in the paper stem from the fact that we use a translog production function as a framework for estimating the relationships among economic growth and factor inputs. The factor inputs considered are: labour, physical capital, human capital (deriving from endogenous growth theory), and a monetary factor (money or credit, deriving from the theory of money in the production function). The translog production function enables a richer specification of the relationships among growth and factor inputs, than the more commonly used Cobb–Douglas approach, as it allows for interactions among factor inputs. We find significant evidence of such interactions, suggesting that studies which ignore such interactions are likely to be misleading. Overall, our results suggest that financial development is at least as important as human capital in the growth process. Copyright © 2002 John Wiley & Sons, Ltd.

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