

LEVEL AND GROWTH EFFECTS OF HUMAN CAPITAL:

A Cross-Country Study.\*

by

George A. Kyriacou

Central Bank of Cyprus

May 1991,

revised, May 1992\*\*

ABSTRACT

This paper examines the role of human capital in explaining the inability of some developing countries to "catch up" with more advanced countries. I construct a new proxy for human capital stock, namely the estimated years of schooling in the labor force and reproduce the findings of several cross-country studies that the initial human capital levels are positively related to future output growth. Then, I estimate a cross-country Cobb-Douglas production function for the 1970-1985 period and find that the growth of human capital is not related to the growth of output, contrary to what the Lucas (1988) model would lead us to expect. Two possible explanations are offered for why levels matter and not growth: First, that the output elasticity of human capital is positively related to the human capital level, and second that the level of average human capital is a proxy for the growth of technology.

\* I am especially indebted to Boyan Jovanovic for very helpful comments. I am grateful to Robin Cowan and Mark Spiegel for helpful and valuable discussions. I would also like to thank Jess Benhabib, Roberto Chang, Theofanis Mamuneas and the participants of a World Bank seminar for helpful comments. Finally, I would like to thank the C.V.STARR Center for Applied Economics at New York University and the Center of Applied Research at Cyprus College for technical assistance.

\*\* The original version is published as a C.V.STARR working paper (#91-26)