

Modelling human capital as a latent variable

Trinh Le*

The Treasury

Trinh.Le@treasury.govt.nz

Abstract

Human capital is frequently discussed but poorly measured. Part of this problem is due to the fact that human capital is unobservable; it must be measured via some related, observable variables. The existing literature often uses education, especially years of schooling, test scores, current earnings, lifetime earnings and work experience as proxies for the underlying human capital. In this study I depart from that literature by modelling human capital as a latent variable using a Partial Least Squares approach. Exploratory analyses on a number of countries show that age, gender and education combined can capture 65-97 percent of the explained variation in human capital.

*Jan Whitwell entry. This paper draws on my PhD thesis, submitted at the University of Canterbury in 2006. I wish to thank my supervisors, Professors Les Oxley and John Gibson, for the invaluable guidance and support they gave me during the course of the study. Professor Wynne Chin generously provided his PLS-Graph software for use in my thesis and I am grateful for that. Financial aid from Marsden grant UOC 108 is appreciatively acknowledged.