

Measuring Human Capital with Latent Variables

Barbara Liberda* and Anna Grochowska

Warsaw University, Poland

Abstract

The relationship between an individual's human capital and socio-economic factors at micro and macro level is intuitively obvious, however difficult to prove empirically and quantify. The aim of this paper is to identify the social, cultural and environmental variables that affect an individual's human capital creation. Many of these variables are intangible, inestimable or latent. Our hypothesis is that the latent social, cultural, legal, environmental etc. variables affecting human capital creation can be measured by their influence on tangible, "manifest" variables like education or wages.

We test our hypothesis using a method called "latent class analysis", including the Latent Class Regression Model. This theoretical approach is applied to micro data from a Survey on Civilization Competences of individuals in local communities conducted in July-September 2009 in five regions in Poland. The sample size is 2500 respondents. The survey is run by the Warsaw University, Poland, within the EEA and Norway grant.

***Corresponding author: barbara.liberda@uw.edu.pl**

Professor Zofia Barbara Liberda

Warsaw University

Faculty of Economic Sciences

Długa 44/50

00-241 Warsaw, Poland

Tel. +4822 55 49 125, 174