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Human capital and the future of transition economies

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Compared to developing economies, transition economies have high human capital relative to GDP per capita initially, which provides the potential for growth. We present a model in which a large number of children of well-educated parents take advantage of their family backgrounds and invest substantially in their own human capital in the good equilibrium. However, in the bad equilibrium, past educational achievements are wasted because children fail to build upon their parents' achievements. Policies and economic conditions are shown to be decisive in determining the equilibrium. This model provides a basis for distinguishing transition economics from development economics. *Journal of Comparative Economics* **34** (1) (2006) 44–56. Royal Holloway, University of London, Egham, Surrey, GU21 4QE, UK.

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1. Introduction

The countries in transition from Communism are unusual in several ways, but one vital fact is that educational achievements in transition economies are high relative to per capita GDP.[1] Barro and Sala-i-Martin (1995) and Benhabib and Spiegel (1994, in press) demonstrate that education

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[1] Using cross section regressions on 148 countries, including transition economies, Gros and Suhrcke (2000) find that transition countries have much higher secondary and tertiary enrollment rates than their per capita GDP would predict. The existence of a positive educational legacy of Communism is documented in a variety of studies, e.g., World Bank (1995, 1996).

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is important for economic growth.[2] Further support for this view comes from the historical work of Sandberg (1979) and Williamson and O'Rourke (1997) on the spectacular growth of the Scandinavian countries when they joined the leading edge of Europe in the four decades before World War I. These authors find that above-average schooling in these countries played an important role in their convergence to European standards. Although this historical analogy is encouraging for transition economies, it is not decisive. We argue that the levels of human capital in some transition economies may decrease to fall in line with current living standards rather than supporting the growth of living standards consistent with the existing human capital levels. In our model, two types of equilibria are possible; rapid growth is associated with the good equilibrium while deterioration occurs in the bad equilibrium.[3]

The empirical literature supports the notion of two sharply different educational paths for transition economies.[4] Micklewright (1999) shows that enrollment rates in kindergarten, which is noncompulsory, have dropped sharply during the transition in the Caucasus, Central Asia, Southeast Europe and the Western CIS while similar rates have fallen only slightly in Central Europe and the Baltic States.[5] Although noncompulsory general secondary education enrollment rates have remained steady in most countries, they have dropped sharply in the Caucasus and Central Asia.[6] Educational expenditure figures are consistent with this pattern; the Caucasus and Central Asia are imploding, Central Europe and the Baltic States are in reasonable condition, and the rest of the European transition economies are in marginal or bad shape.[7] In addition, Micklewright (1999) documents substantial differences in within-country educational opportunities based on family background and location, with rural locations being particularly disadvantaged.[8] Thus, some countries may become dual economies having poor education in rural areas and good education in urban areas, particularly in the capital cities.

In a contribution to the sparse theoretical literature on human capital and transition, Alexeev and Kaganovich (1998) uses an adverse selection argument to show how uncertainty over whether or not a major reform will be implemented can lead more-able people to prepare less for the possible change than do less-able people because the former group do better in the unreformed system.[9] Hence, if reform is actually implemented, the more-able people are worse off

[2] The importance of human capital for growth and the relative impact of human capital levels versus human capital growth rates is debated widely. However, Krueger and Lindahl (2001) and Temple (2001–2002) confirm the intuitive notion that human capital is important for growth from extensive literature surveys.

[3] Barry (2003) argues that the EU accession countries have very high potential growth rates if they follow good policies but our model stresses the potential for deterioration.

[4] A recent EBRD report concludes: "... firms in transition economies lag behind advanced industrialized countries in terms of the quality of their workforce. Such quality gaps are larger in the CIS than in CEE. This finding qualifies the view that the region has abundant human capital resources, despite considerable achievements in formal education. Moreover, the lack of restructuring in the less reformed economies of the region means that many skilled workers are performing jobs that do not reflect their levels of education. Over time, there will be a continuing loss of skills, leading to an even greater gap in quality." (EBRD, 2000, p. iii of executive summary.)

[5] The material in the next two paragraphs is based on Micklewright (1999) as supported by UNICEF (2000, 2001).

[6] Enrollments rates in vocational education have plummeted throughout the transition countries reflecting the extreme mismatch between the skills taught and the needs of the labor market. Sabirianova (2002), Campos and Dabušinskas (2002), Jeong et al. (2005) analyze the adjustment process of individuals whose human capital acquired under Communism is not consistent with the needs of the new labor market.

[7] These data can be downloaded directly from the TransMONEE database at http://www.unicef-icdc.org/documentation/index.html.

[8] OECD (1998), UNICEF (2000, 2001) and World Bank (2000) support these conclusions.

[9] Roland (2000) provides a general survey of the theoretical work on transition but puts no emphasis on human capital.