The Human Capital Stock: A Generalized Approach

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Francesco Caselli[2,3,4] and Antonio Ciccone[1,2,5,6]

[1]Barcelona Graduate School of Economics, [2]Centre For Economic Policy Research, [3]Centre for Macroeconomics, [4]London School of Economics and Political Science, [5]Mannheim University, [6]Universitat Pompeu Fabra

Benjamin Jones (2014) revisits the measurement of human capital for the purposes of development accounting. "Traditional" (Jones's terminology) accounting treats workers with different educational attainment as perfect substitutes. Jones considers development accounting when workers with different schooling are imperfect substitutes. His main result is that the perfect-substitute case provides a *lower bound* for the magnitude of human-capital differences across countries, and that, using plausible values for the elasticity of substitution between workers with different educational attainment, measured human capital variation can be boosted to the point that factors of production account for the totality of the variation in income across countries. This finding is in sharp contrast with the previous development accounting literature, which could only explain about half of the cross-country income variation with production factors, with the other half left to generic efficiency (technology) differences (Klenow and Rodriguez-Clare, 1997; Hall and Jones, 1999; Caselli, 2005).

If differences in human capital could truly account for all the variation in income across countries, as Jones's calculations indicate, the implications would be far reaching. The academic and policy debate would have to shift away from its current focus on technology, legal and political institutions, and other features of the economic environment. Instead, the focus should be on the determinants of the skills embedded in workers.

In this comment, we show that the amplification of cross-country human capital differences achieved by Jones, and hence his success at removing the unexplained component of income differences, is entirely due to an assumption that the relative wage of skilled workers is *solely* determined by attributes of workers (once the supply of skilled workers is accounted for). If, as we argue, skill premia are also influenced by technology, institutions, and other features of the economic environment, cross-country differences in human capital as measured by Jones will embed differences in these technological, institutional, and other attributes. As a result, Jones's conclusion that human capital can account for all the variation in income across countries is unwarranted.