



Evaluation of
Essays on Human Evolution and Economic Growth

By

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Over most of human existence, the process of development was marked by Malthusian stagnation. The Malthusian pressure has governed the evolution of the size of the population, and conceivably, via the forces of natural selection, has shaped the composition of the population as well. Lineages of individuals whose traits were complementary to the economic environment generated higher income, and thus higher reproductive success. The gradual increase in the representation of these growth-enhancing traits in the population presumably has contributed to the process of development and the take-off from stagnation to growth.

In particular, it has been hypothesized that during the Malthusian epoch, natural selection brought about a gradual increase in the prevalence of traits associated with predisposition towards offspring quality. The effect of this evolutionary process on investment in human capital stimulated technological progress and contributed to the reinforcing interaction between investment in human capital and technological progress that triggered the demographic transition and brought about a state of sustained economic growth.

This thesis explores the interaction between human evolution and the process of development. It explores several evolutionary processes that may have been triggered by the epoch of Malthusian stagnation and their importance for the understanding of human behavior as well as comparative economic development across the globe. I find the dissertation very impressive in several dimensions:

1. Chapter two provides an authoritative survey of the literature on human evolution and economic growth, demonstrating an impressive understanding of both the economic and the evolutionary biology literature.

2. Chapter 3 provides a novel calibration of the influential theory of Galor and Moav. The calibration sheds light of the empirical plausibility and the importance of the theory, while adding an important new insight about the potential reversion into the Malthusian epoch. This is an important piece of research that in due course will be part of the essential tool kits of researchers in the field.
3. Chapter 4 explores the interaction between evolution of human potential to innovate and the process of development. It argues that during the Malthusian epoch human traits that reflected a higher propensity to innovate were selected, generating an interaction between population and technology that ultimately brought about the transition from stagnation to growth. This is a creative research that demonstrates vividly the importance of natural selection in reinforcing the economic forces that triggered the transition from an era of Malthusian stagnation to a state of sustained economic growth.
4. Chapter 5 proposes an intriguing mechanism, based on sexual selection that could have contributed to the modern rates of economic growth. The analysis suggests that man were induced to be engaged in larger work effort in order to permit conspicuous consumption and signal their virtues to potential sexual mate. This is a highly creative and technically impressive research.
5. Chapter 6 generates some intriguing predictions about the rise in fertility rates and thus a decline in the fraction of the elderly in the coming decades. The research suggests that natural selection favors individuals with higher fertility rate and as this trait will dominate the population fertility rates will be significantly higher and existing concerns about the increasing fraction of the elderly population may be misplaced.