## UNIVERSITY OF THE PEOPLE

BUS 1104-01 Macroeconomics- AY2024-T1

Written Assignment Unit 2

Instructor: Alka Srivastava

Countries starting with low real GDP per capita, poor health systems, and inadequate education typically undergo a period of rapid economic growth known as "catch-up" growth. This allows them to converge with richer nations over time. South Korea has experienced remarkable economic growth, but it is not the only Asian country to do so. Other East Asian countries like Thailand and Indonesia have also seen very fast economic expansion. Since introducing market-oriented reforms in around 1980, China too has grown tremendously. Across East Asia, many nations have achieved rapid and sustained economic development in recent decades. Greenlaw (2017). However, low saving rates create barriers to realizing this catch-up potential. Robert E. Lucas Jr., the 1995 laureate of the economics Nobel Prize, once said: "The consequences for human welfare involved in questions like these are simply staggering: Once one starts to think about them, it is hard to think about anything else." Greenlaw (2017).

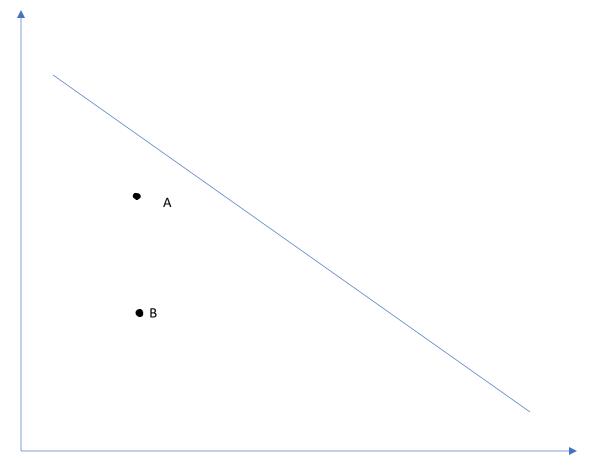
As illustrated in the graph below, countries beginning at point B would normally see accelerated growth in real GDP per capita in comparison to the countries at point A which are more advanced. The reason for accelerated growth of less advanced countries (B) is due to adopting existing technologies from more advanced economies. However, limited savings restricts investment in new capital equipment and factories needed to increase productivity.

Furthermore, an unhealthy and uneducated population reduces human capital. Poor health decreases workforce participation and lifespan, hampering growth. Inadequate education and skills training also lower worker output. These deficiencies in physical and human capital prevent the rapid growth predicted by catch-up theory, trapping countries at a point like B instead.

When poorer countries with lower GDP per capita start to reach the GDP levels of richer countries, this is known as convergence. Convergence can happen even if both richer and poorer nations are

increasing their investments in infrastructure, technology, education etc. with the goal of growing their economies. This is because new investments in things like skills training or equipment can interact with the large labor forces in poorer countries to produce much bigger gains in productivity and output than similar investments in richer countries. So, the poorer countries can start to catch up, even if the rich countries are also actively investing in economic growth. The large gap between the countries' income levels allows the poorer countries to benefit more from the new capital, facilitating convergence. Greenlaw (2017). To enable catch-up growth, countries must implement policies to increase savings and investment in physical capital. Expanding healthcare access and education develops human capital. With the right foundations, developing nations can achieve catch-up growth through technological leapfrogging. But without addressing low savings rates, health, and education, they risk stagnation.





Initial level of real GDP per capita

Reference:

Greenlaw, S., & Shapiro, D. (2017). Principals of macroeconomics 2e. Openstax. Licensed under CC-BY 4.0. https://openstax.org/details/books/principles-macroeconomics-2e

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