

# HD INSIGHTS

HDR Networks March 2007 Issue 6



## ***Causal Chain between Human Development and Economic Growth***

Gustav Ranis, Department of Economics, Yale University

### ***Human Development and Economic Growth***

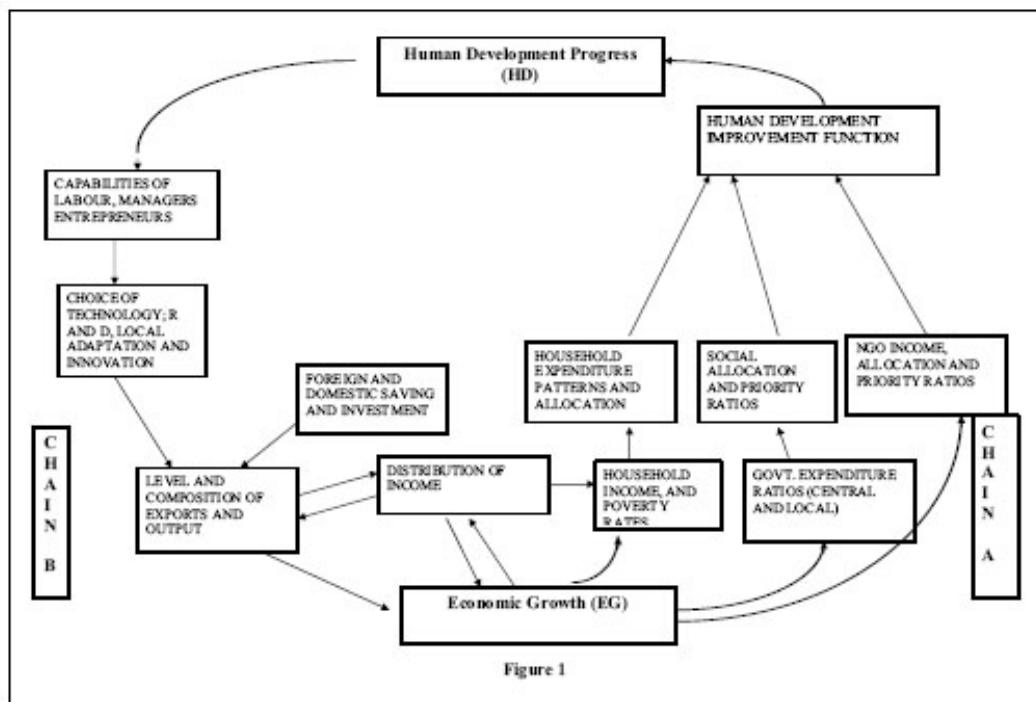
The first Human Development Report stated that “the basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives.” Economic growth, long considered as the ultimate objective, should instead be viewed as a necessary instrument for the achievement of advances in human development.

In order to achieve human development progress, and as the global HDR 1996 argues, the quality of growth matters, or else the following policy failures may occur: (i) jobless growth - that does not expand the opportunities for employment, (ii) ruthless growth – the fruits of growth mostly benefit the rich, (iii) voiceless growth – growth has not been accompanied by expansion of democracy, empowerment, (iv) rootless growth – causes people’s cultural identity to wither, and (v) futureless growth – where present generations squander resources needed by future generations.

There clearly exist strong two-way connections between Economic Growth (EG) and Human Development (HD). On the one hand, EG provides the resources to permit sustained improvements in HD. On the other, improvements in the level of education and health, key ingredients of HD, are an important contributor to EG.

### ***The Causal Chain***

This model thus concentrates on two causal chains (see Figure 1), one leading from EG to HD (Chain A), the other from HD to EG (Chain B).



### How does EG contribute to HD?

On Chain A, EG contributes to HD through household and government activity and Non-governmental Organizations (NGOs). The same EG can lead to very different performances on HD depending on how GNP is allocated.

Households' propensity to spend their income on items that contribute most directly to the promotion of HD, e.g. food, potable water, education and health, varies, depending on the level and distribution of income. Higher and more equally distributed growth is likely to enhance expenditures on HD.

Turning to the government, the allocation of resources affecting increases in HD is a function of total spending, how much is spent on the HD sectors, and the way in which it is allocated within these sectors.

Finally, NGO activity is typically heavily oriented towards HD objectives (e.g. projects generating incomes for the poor and spending on schools, nutrition and health).

A further important link in Chain A is the efficiency with which expenditures are applied in raising HD levels. This is represented by the "Human Development Improvement Function."

### How does HD contribute to EG?

Turning to Chain B, higher levels of HD, in addition to being an end in themselves, affect the economy through enhancing peoples' capabilities and consequently their creativity and productivity. The quantity of investment, domestic and foreign, the choice of technology, domestic and foreign, together with the overall policy environment, represent other important determinants of economic growth.

### What empirical evidence exists to support these links?

In earlier work (Ranis, Stewart and Ramirez, 2000) we empirically explored some of the relationships underlying these two chains, using data from 69 developing countries.

For Chain A, the variable chosen to measure HD progress was Infant Mortality Shortfall Reduction (IMSR), 1960-2001. Please note that shortfall reduction is measured relative to ceiling levels of countries at current maximum achievement, i.e., 3/1000 for infant mortality. Per capita GDP growth showed a significant positive relationship with IMSR. We also found that HD progress was significantly negatively associated with poverty levels and income inequality, as well as positively with female school enrollment, and with public expenditure on both health and education.

For Chain B, the variable chosen was growth of GDP per capita, 1960-2001. We found that EG was significantly associated with various

measures of HD progress, including the level of literacy and the level of life expectancy. We also found that EG was significantly associated with gross domestic investment as a percent of GDP.

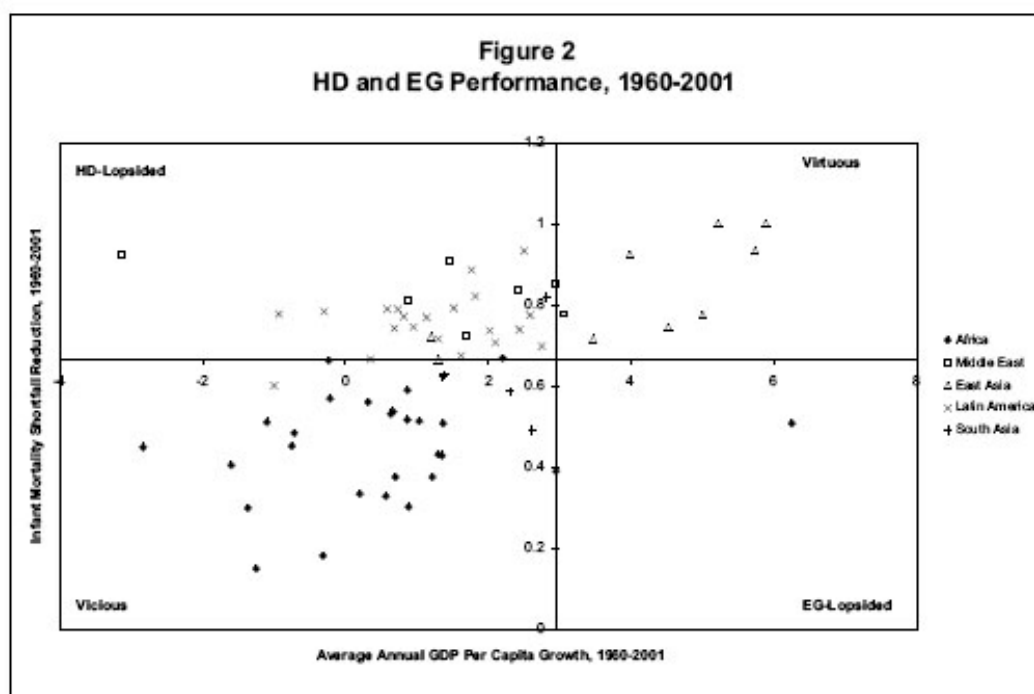
The existence of these two chains linking HD and EG means that an economy may be on a mutually reinforcing upward spiral, with high levels of HD leading to high EG, and high EG in turn promoting HD. Conversely, weak HD may result in low EG and consequently poor progress towards HD improvement.

### ***How can this model be used to assess country performance?***

Consequently, country performance can be usefully classified into four categories: virtuous, vicious and two types of lopsidedness, i.e., lopsided with relatively strong HD/weak EG (called "HD-lopsided") and lopsided with relatively weak HD/strong EG ("EG-lopsided"). In the virtuous cycle case, good HD enhances EG, which in turn promotes HD, and so on. Ditto for the vicious cycle case.

Where linkages are weak, cases of lopsided development may occur, but such cases are unlikely to persist. Either the weak partner in the cycle eventually acts as a brake on the other, leading to a vicious cycle case or, if the linkages are strengthened, possibly by policy change, a virtuous cycle may result.

One way of classifying countries into these four categories is to compare their performance on HD and EG (1960-2001) with the average performance of all developing countries (see Figure 2). Most developing countries appear as either virtuous (NE quadrant) or vicious (SW quadrant); a significant number show an HD-lopsided pattern and only one an EG-lopsided one. A strong regional pattern emerges, with East Asia heavily represented in the virtuous cycle and sub-Saharan Africa in the vicious cycle quadrant. Latin America is heavily represented in the HD-lopsided quadrant.



The important issue for policy purposes, of course, is how a country may move towards the virtuous cycle over time. Over the four decades 1960 to 2001, we find that only five countries succeeded in moving from the HD-lopsided to the virtuous category, while three remained in the virtuous category throughout. The others in that quadrant moved in and out of the HD-lopsided category, often in response to particular short-term economic difficulties, such as the 1980s Latin American debt crisis and the 1997 East Asian financial crisis. There was a strong tendency for countries in the vicious cycle to remain there; only five exited, four into HD-lopsided and one into EG-lopsided. Lopsidedness proved generally unstable. While some countries succeeded in moving from the HD-lopsided category into the virtuous category, no country succeeded in moving from EG-lopsided to virtuous.

HDR teams may find this model useful for their work in assessing sub-national progress, depending on the local context and the availability of disaggregated data. These findings clearly have some strong implications for policy sequencing. They indicate that it is not possible to reach the ideal of a virtuous cycle by first generating improved EG while neglecting HD, since any EG attained in this way is not likely to prove sustainable.

### ***Some general Sources:***

1. Behrman, Jere R. Human Resource Led Development: Review of Issues and Development, New Delhi: ARTEP/ILO, 1990a.  
[Click here](#)
2. Bloom, David E., David Canning, and Jaypee Sevilla. "The Effect of Health on Economic Growth: A Production Function Approach." World Development 32, no. 1(2004): 1-13.  
[Click here](#)
3. Persson, Torsten, and Guido Tabellini. "Is Inequality Harmful for Growth?" American Economic Review 84 (1994).  
[Click here](#)
4. Psacharopoulos, George. "Returns to Investment in Education: A Global Update." World Development 22 (1994).  
[Click here](#)
5. Ranis, Gustav, Francis Stewart, and Alejandro Ramirez. "Economic Growth and Human Development." World Development 28, no. 2 (2000): 197-219.  
[Click here](#)
6. Ranis, Gustav, Francis Stewart, and Alejandro Ramirez. "Strategies for Success in Human Development." Journal of Human Development 1, no. 1 (2000): 49-69.  
[Click here](#)
7. Strauss, John and Duncan Thomas. "Human Resources: Empirical Modeling of Household and Family Decisions." In Jere R. Behrman and T. N. Srinivasan (Eds.), Handbook of Development Economics, Vol. 3. Amsterdam: North Holland, 1995.  
[Click here](#)
8. United Nations Development Programme, Human Development Report (various), New York: Oxford University Press.  
[Click here](#)
9. United Nations Development Programme, HDR Toolkit 2003 New York: UNDP/HDRO  
[Click here](#)

**Note:** *HD Insights* are network members' contributions and do not necessarily represent the views of UNDP.