## Is the Impact of IT on Economic Development Limited?

There are dramatic and persistant differences in levels of economic prosperity across nations. The bulk of world wealth resides in the US, Western Europe and parts of South East Asia. Poverty is, on the other hand, the rule in parts of South America, Asia and virtually all of Africa. Attempts to explain why the latter areas have lagged behind tend to fall into three categories. The first emphasizes geography. Levels of economic development are strongly and positively correlated with distance from the equator. Countries on or near the equator tend to have land inhospitable to the production of grain, high mortality rates, and are extraordinarily hot. All these factors limit productivity and income.

A second explanation for the sharp disparities between have and have-not countries focuses on differences in their political and legal institutions. The US and Western European countries tend to have democratic political systems and legal systems protecting individual property rights. Third World nations, in contrast, tend to have political and legal systems that particularly advantage small elite classes.

Yet a third explanation for the income disparity between rich and poor countries attributes the plight of the latter to poor governmental policies.

While these theories of developmental divide are obviously not mutually exclusive, Easterly and Levine (2002) present a compelling, quantitatively based, case that the predominant cause of underdevelopment is institutional failure – institutions shaped by geographic factors. In Africa, the driving force appears to have been mortality rates. The threat death as a result of disease in African countries made them undesirable places to colonize for the purposes of living. Instead, they were used as sources of raw materials. Institutions to foster this objective tended to favor small indigenous groups and undermine property rights (witness the prevalence of slavery). The characteristics of these institutions have persisted long after the colonizers departed. In South America, cultivation of agricultural products subject to economies of scale similarly promoted institutions favoring a select minority and subjugating the rights of the majority.

The finding that institutions play a predominant role in the fortunes of nations raises questions regarding the likelihood that information technology will have profound effects on development. It is a well-established fact that the structure of urban areas is almost completely determined by the location of the original thoroughfares. Once these thoroughfares are established, they are virtually impossible to change no matter how inconvenient or impractical the urban landscape they spawn is. Easterly and Levine's findings suggest governmental institutions exhibit a similar inertia. As such, we must seriously question whether countries with institutions biased toward serving select minorities are likely to admit technologies that might undermine their control. There is, in fact, evidence that they don't -- telephones – a technology that, like the Internet, allows private access to information and private communication – tend to be discouraged in dictatorships.<sup>1</sup>

If Internet access is somehow provided in LDCs it is still not obvious how such access would influence development. The primary promise of the Internet in the

<sup>&</sup>lt;sup>1</sup> Repressive regimes, in contrast, do not tend to discourage forms of communication like newspapers that they can control.

development context is the "death of distance' – at least some goods and services can be received and provided are zero marginal cost independent of distance. Unfortunately, if Easterly and Levine (2002) are correct, it is not distance that has impeded economic growth in certain regions of the world. That Australia, New Zealand, Singapore, and Taiwan are all distant from world concentrations of wealth but nonetheless prosperous contradicts the distance hypothesis. That the first three were colonized by the British (Taiwan was colonized by Japan) and as colonies rather than raw materials sources is as would be expected given the institutions hypothesis.

The preceding paragraphs suggest that prospects for information technology to profoundly impact economic development in lesser developed countries are dim. This conclusion might be altered if the technology fosters institutional changes in ways not to this point anticipated. How these changes might come about or be promoted seems an intriguing line of inquiry.