InFo Vol. 10, No. 1 April 2007 pp. 39 - 50

### **FEATURE**

# The Role of the Academy in the Economic Development of Nations

## Ronald Vyhmeister

Abstract. The reasons behind the complexity of economic development are important for academics to understand if they are to effect change or contribute to economic development. Economic development is difficult to define and measure, but is seen as necessary for progress. Factors impacting economic development include political stability, health, culture, and information technology. Potential contributions by academic institutions include motivating students to participate in activities contributing to economic development, and knowledge transfer to the community.

This paper addresses the issue of the development of nations, not in an attempt to recite the history, nor in an attempt to lay blame for any country's lack of development, but rather to take a look at how we, particularly in an academic environment, can contribute to the process of economic development in any given nation.

In order to address this issue, this paper first discusses the definition of development and the question of why it is important. From this definition, we can then see what factors impact development, and how to evaluate it. Finally, we take a look at what the future promises, as well as the course of action that educational institutions can take in order to enhance the economic development in the place where they live and work.

## **Defining Economic Development**

Economic Development has been defined in many ways. Initially, it was perceived as something which just happened, yet over time we have realized that

April 2007, Vol. 10, No. 1

human design and action has a significant impact on it (Arndt, 1981). Simply stated, it is "the development of the economic wealth of countries or regions for the well-being of their inhabitants" ("Economic Development," n.d., para 1). A more comprehensive definition states that:

Economic development is a sustainable wealth creation process that works within the framework of community parameters to maximize the efficient and effective utilization of community resources for economic gain for the local population. More simply, [it is] the process of creating wealth for as many people as possible. (Delaware County, 2001)

There are three aspects that are consistently a part of these (and other) definitions: it creates wealth, it affects the population in general (not just a small segment of it), and it implies change. There are many other definitions of economic development, but all of them make reference to the same three aspects, regardless of the words used (see for example Schumpeter, 1983; Lucas, 1988; Meier & Rauch, 2000).

# The Importance of Development

In the late 20<sup>th</sup> century, economic development became a key focus of multilateral organizations, such as the IMF and the World Bank, spawning a flurry of research activity, as evidenced by the fact that even though the term *Economic Development* has only been used significantly over the last 50 years, Google Scholar shows over 1 million entries for the phrase, and works by Lucas (1988) and Schumpeter (1983) are both cited by more than 5,000 scholarly publications, even if they are barely 20 years old. Additionally, entire academic journals (such as the *Economic Development Quarterly, The Journal of International Trade and Economic Development*, and *Organizational Patterns and Socio-Economic Development*) are now dedicated to this field.

Economic development is perceived as an imperative by many, particularly in developing countries. Regardless of individual ideas about environmental issues, politics, or economic theories, the idea is that economic development is good for a country. After all, who wouldn't want to be better off than they are currently? The push towards development is actively supported by (and in fact is a significant priority of) multilateral organizations such as the UNDP, World Bank, ADB, and the IADB.

Economic development is seen as the vehicle through which poverty can be alleviated and wealth created, leading to a more comfortable life for the citizens of the country. Economies either grow or shrink, with only brief moments when they do neither. Therefore, continued growth is necessary, since the alternative

is certainly not pleasant. Stagnating economies tend to lead to unhappy citizens, and have been fodder for revolutions and coup d'états (Latin America in the 70s and 80s; the Philippines for the last 40 years). So in addition to being a good idea, economic development is also recognized as a requirement for political stability (Lipset, 1959).

## **Measures of Development**

One of the greatest difficulties in discussing economic development is to agree on how it will be measured. Different organizations and individuals use different measures. Some measures are chosen for convenience (they use readily available data, typically from government sources), accuracy (depending on the circumstances, readily available data may not be very accurate), or due to a desire to focus on some specific aspect of development (such as information technology or communications). For our purposes, we will take the broad definition of development, recognizing that it is possible (even probable) that while one or more measures may show growth, there may be simultaneous decreases in other areas.

Probably the most widely used measure for overall economic development is Gross Domestic Product (GDP). This measure can be useful when comparing one country or region to another, or the same country or region over time. There are, however, at least two issues that make this not a perfect measure. First of all, there is no information on the distribution of the wealth. It is quite possible for one segment of the economy to be growing, while others are rapidly shrinking. Secondly, GDP tends to measure the formal economy, leaving out other types of transactions, such as barter or other non-cash activities. The UNDP has even developed its Human Development Index (UNDP, n.d.) in an attempt to address this issue.

Because of the difficulty of measuring development, many other surrogate measures have been used. Some researchers have looked at the physical infrastructure for economic transactions, focusing particularly on the transportation system (Banister & Berechman, 2000). The quality/effectiveness of the transportation system of a country is often indicative of, as well as a contributor to, the economic development of the country. Rather than using merely the distance between locations (particularly between production and consumption) other measures such as transport time are used. Others (see also Linneker & Spence, 1996) have focused on the transportation system, because even having good roads does not necessarily enable the transportation of goods and persons, which facilitates trade. Other writers (Brown & Lauder, 2004; Meier & Rauch, 2000) have focused on the educational system, looking at such factors as the average level of education, or the equality in education (from a

April 2007, Vol. 10, No. 1

variety of perspectives, including gender, geographic distribution and socio-economic status). Others (Roller & Waverman, 2001) have focused on the development of the telecommunications system, given the significant evidence that good communications can have a significant positive impact on the wealth of citizens. In using telecommunications as a measure of economic development, relevant factors include items such as the cost and availability of telecommunications. Also, the distribution of the telecommunications infrastructure is looked at, because often it is concentrated in urban areas, and there is limited or no availability in rural areas.

One other measure of economic development which is of particular interest with the advent of e-commerce is the financial system. Because e-business happens without physical contact between buyer and seller, having a financial system that is reliable and trustworthy is critical for this new means of exchange to take hold. In many countries, new ways of dealing with this situation have begun to spring up, including the sending of credits via the cellular phone systems, such as in the Democratic Republic of Congo (Sullivan, 2006).

Last, but not least, economic development is often looked at in terms of employment, where unemployment and underemployment are seen as measures of economic development (Todaro, 1969). It is generally held that countries with lower unemployment and underemployment rates are more developed. This is one of the reasons why many developing countries may underreport the jobless and underemployed (in addition to making the leaders look better).

The factor chosen to represent economic development is often a matter of priorities and is subject to bias. Because no factor is perfect, it is important to look at the overall development. If we chose to do so, we could assign weights to each measure and then produce a balanced scorecard. Regardless of how we measure economic development, however, every country can improve in some areas. Development is not a panacea, and with change there is always some discomfort, if not real pain. Given we believe that economic development is generally positive, however, the more important question is how to facilitate economic development, rather than merely how to measure it. For that reason, we must know what factors truly drive development.

## **Factors That Impact Development**

There are many factors which can either facilitate development or stymie it. Following is a discussion of factors which clearly impact development.

#### The Political System

The political system is one of the keys to successful economic development (Lipset, 1959). It is the government, after all, which sets the rules for economic activity, and can facilitate growth throughout the economy. Countries with a legitimate political system where there is broad and adequate representation of the population will work to ensure that their citizens' lives are better because of the decisions they make, otherwise they will be removed from power. On the other extreme, corrupt dictatorships that focus only on their own enrichment and self-preservation do not generally lead to significant economic development. One of the problems, however, of the broad, representative governments, is the possibility of inertia due to the number of competing interests (Italy is one example of this). There are times when a strong government (even a dictatorship that we may dislike for philosophical or moral reasons) may facilitate economic development more than a democracy (Chile under Pinochet is one example of this).

# The Legal System

The legal system is another key to economic development. For an economy to develop, there must be clear rules that are enforced, and some expectation of being able to reap the fruits of the investments made (Lipset, 1959, Meier & Rauch, 2000). In countries where the legal system is subject to the whim of the current political leadership, or where bribery is the key to getting a favorable outcome in any legal matter, it is much more difficult to encourage long-term investments because of the risks involved.

#### Education

For an economy to develop, it is necessary to have access to qualified employees. If the educational system is weak, skilled workers will have to be imported (limiting the income potential of national workers) or the quality of the output will be lowered. On the other hand, if the educational system is strong and the labor force is qualified, there is increased incentive for foreign investment. Additionally, when there is an educated labor force, the creativity it provides can assist in finding new products and/or services, or new ways of producing and delivering existing products and services, adding value to the local economy. Whatever the circumstance, the quality of the education available to local citizens will have an impact (positive or negative) on the country's possibilities for economic development.

## Access to Information Technology

Over the last 15 years, productivity has been greatly enhanced through the use of information technology. There is evidence that without information *April 2007, Vol. 10, No. 1* 

technology, much of the economic progress of the last years would not have existed (Brynjolfsson, 1993; Stiroh, 2002). Through the use of telephones, faxes, cell phones and the internet, access to information has dramatically increased the ability of smaller producers to receive higher value for their products and services. This process has taken place at the expense of a few middlemen, but the overall benefit to the economy is undisputed (see Mansell, 1998).

## Geography and Climate

Over the years there has been a vigorous debate regarding the impact of geography and climate on economic development (see for example Gallup, Sachs & Mellinger, 1999, Fankhauser & Tol, 2005). Regardless of the position held in the debate, a few things are generally agreed to by all discussants:

- The existence of natural resources can drive development. In order to see this, we only need to look at the United Arab Emirates and their development over the last 50 years. However, the existence of natural resources alone is not sufficient, as is evidenced by the lack of development of the Democratic Republic of Congo, even though it is very well endowed with natural resources.
- 2. The distance to markets for the products is an issue. It is much easier to benefit from production of something when the markets are close by (Schumpeter, 1983, Gallup, Sachs & Mellinger, 1999).
- 3. Very hot climate tends to shorten the productive work day.
- 4. Long and bitter winters also decrease productive time.

# Culture

Arguably one of the more powerful factors influencing development is culture. In the 1980s, when the "Asian Tiger" countries economies were growing rapidly, the question arose as to why they were able to grow when others weren't. Research by Hofstede & Bond (1988) showed that the key cultural difference between the countries that were growing rapidly and those that were not was the issue of the time-frame for decision-making and planning. Those countries that grew more rapidly were found to take a long-term view of life, and make decisions not based on the short-term benefits, but on the long-term benefits. With today's increasing expectation of instant gratification, this factor may become even more telling.

Culture also affects how decisions are made, which influences development, as well. There are cultures that are more individualistic, where decisions are made for the good of the individual making them, while in cultures, decisions are based on the collective good. In the former, the economic benefits to the

community depend on the success of the individual, while in the latter, the development will tend to come to the community as a whole (Hofstede 1984, 1997).

#### Health

No one will argue that in order to be productive, we must be healthy. As such, health is a significant factor affecting economic development (Deaton, 2003). The impact of AIDS and Malaria in Africa is well known. When economies with limited resources are forced to spend heavily on health, it prevents them from spending the same amounts in other areas, and when life expectancy is short, the productive years are also shortened, making economic development more difficult.

#### Religion

Religion can be a significant influencer of economic development, due to the worldview that religion implies. Some religious beliefs (such as Protestantism) dictate that the individual is to put forth their best effort and leave the remainder to God. Other religious beliefs are extremely fatalistic, in that all has been predetermined, and that nothing one can do will change what has been predetermined by the deity. Of course, in its most extreme form, this fatalism can seriously retard economic development, since it removes the incentive to do anything. The worker reasons that if he/she is supposed to receive something, it will happen, whether or not personal action is taken. There is no incentive to try to be productive, since it will make no difference to the outcome.

# What does the Future Promise?

The globalized economy that we live in (regardless of whether or not we believe that globalization is good) is based on the theory that each country or region has some kind of competitive advantage. This means that each country/region should have some product or service for which they have advantages over other regions. This advantage could be cost, quality, or even physical proximity.

As economies participate in the global economy, and resources shift from one country to another, however, we see a new parity coming into existence. This is evidenced by Apple Computer's statement (Kripalani & Burrows, 2006) that they chose not to relocate one of their facilities to India, because India had become expensive enough that it was no longer cost-effective to make that shift. In other areas, such as human resources, we are seeing this more and more, with salaries for airline pilots and meteorologists rising due to the global competition for qualified human resources.

April 2007, Vol. 10, No. 1

The cost advantages that existed not so many years ago may well disappear. In the 1980s, Korea, Taiwan and Singapore were manufacturing and exporting large amounts of low-technology goods. Today, they export very little. Their standard of living has risen far enough, that the comparative advantage they used to hold is substantially reduced.

While the comparative advantage may be diminishing due to the mobility of capital and personnel, human selfishness continues to have a major effect on the environment of international economics. The desire of those who have resources (capital, labor, knowledge) to maximize their returns can lead to situations where those who have can seek to enslave those who do not have. There are cases where a country, in order to obtain needed financing for a priority project, must accept collateral conditions which are irrelevant to the project, yet at the same time may have an impact on economic development (Dreher, 2006). This situation leads to comparative advantage not being fully exercised, and the disparity between nations is maintained, if not made more pronounced.

## **Potential Contributions by Academia**

There are many things that academic institutions can do to contribute to the economic development of the nations that host them. But the truth is, before doing anything, we must examine why we should. We must understand our objectives, for otherwise we could very easily wind up focusing on the wrong activities, or on the right activities, but for the wrong reasons.

As Christians, we are first and foremost followers of Christ. This means that we follow Christ's teachings, such as the Golden Rule: "do unto others what you would like them to do unto you" (Matt. 7:12). This means that just as we would like our nation to make economic progress, we want others to be able to have economic progress too. If we would want someone to help us if we were in a given situation, we should help others when they are in that same situation. We cannot ignore the plight of those around us; we must demonstrate compassion, as Jesus did.

So, as academic institutions, how can we do this? First of all, we must ensure that our educational institutions are places where our students are able to learn not just the facts, and not just how to get by, but how to go beyond the current status and innovate. Students must be able to analyze their environment, and find creative ways of responding to current and new situations.

Not only must our students be able to think and analyze, but they must hold some core values. Given the evidence, if we do not prepare students who have a solid set of values, the economic development of a country will be limited.

Unless values such as hard work, honesty, transparency, etc. (see Eldred, 2005) are inculcated, it is impossible for economic development to be sustained.

At the same time, educational institutions can be catalysts of change, providing the knowledge which enables economic development. A recent study (Alalade, 2007) shows that often business owners are not aware of resources which can enable them to improve their situation. Academic institutions could develop training and communications which would increase community awareness of these resources. A second example of educational institutions as change agents is the GlobalText project (www.globaltext.org), which, if successful, will provide free textbooks to students and teachers worldwide.

Economic development does not happen in a vacuum. Because of this, it is vital that educational institutions at all levels provide students with an opportunity to experience activities which support economic development. In many cases, students see their education as a ticket to a better life, which they interpret to mean having a higher income. There is evidence that students that participate in service learning are more likely to be involved in service activities later. This cannot but have a positive impact on the availability of human resources in promoting economic development.

#### Conclusion

Economic Development is necessary if we are to alleviate poverty and suffering in today's world. As Christians, we are constrained to do what we can for others. As Jesus said, "as you did it to the least of these, you did it to me" (Matt 25:40). It is true that economic development may be difficult to measure and difficult to implement, but the reality is that successful economic development is based on knowledge and values, both of which can be increased through education. Educational institutions need to focus on increasing both the knowledge base, as well as the ethical foundations of the society within which they operate. As it has been said, "integrity without knowledge is weak and useless, and knowledge without integrity is dangerous" (Johnson, 1759, para. 489). If we, in the academic community, do our part, our world should become a better place, where poverty is diminished and pain and suffering are significantly reduced.

#### References

- Alalade, S. Y. (2007). A study of growth financing patterns of small-scale and micro businesses in the municipality of Silang, Cavite, Philippines. Unpublished MBA thesis, Adventist International Institute of Advanced Studies, Silang, Cavite, Philippines.
- Arndt, H. W. (1981). Economic development: A semantic history, *Economic Development and Cultural Change*, 29(3), 457-466.
- Banister, D., & Berechman, J. (2000). *Transport investment and economic development*. London: Taylor & Francis.
- Brown, P., & Lauder, H. (2004). Education, globalization and economic development. In S. J. Ball (ed.), *The RoutledgeFalmer reader in sociology of education* (pp. 50-71). London: Taylor & Francis.
- Brynjolfsson, E. (1993). The productivity paradox of information technology. *Communications of the ACM*, *36*(12), 66-77.
- Deaton, A. (2003). Health, inequality, and economic development, *Journal of Economic Literature*, 41(1), 113-158. doi:10.1257/002205103321544710
- Delaware County Business Resource Center. (2001). In *Glossary of terms*, retrieved November 1, 2006 from http://www.delawarecountybrc.com/glossaryterms.htm
- Dreher, A. (2006) IMF and economic growth: The effects of programs, loans, and compliance with conditionality. *World Development 34*(5), 769-788.
- Eldred, K. (2005). God is at work. Ventura, CA: Gospel Light Publications.
- Fankhauser, S., & Tol, R. S. J. (2005). On climate change and economic growth, *Resource and Energy Economics*, 27(1), 1-17. doi:10.1016/j.reseneeco.2004.03.003
- Gallup, J. L., Sachs, J. D., & Mellinger, A. D. (1999). Geography and economic development. *International Regional Science Review*, 22(2), 179-232. doi:10.1177/016001799761012334
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values*. Thousand Oaks, CA: Sage Publications.
- Hofstede, G., & Bond, M. H. (1988). The confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, *16*(4), 4-21.

- Hofstede, G. (1997). Cultures and Organizations: Software of the Mind. New York: McGraw-Hill.
- Johnson, S. (1759). *Rasselas*. In "Quotes on knowledge: The Samuel Johnson sound bite page." Retrieved from http://www.samueljohnson.com/knowledg.html
- Kripalani, M., & Burrows, P. (2006, June 19). India: Why Apple walked away. *Business Week*, 48.
- Lipset, S. M. (1959). Some social requisites of democracy: Economic development and political legitimacy. *The American Political Science Review*, 53(1), 69-105. doi:10.2307/1951731
- Linneker, B., & Spence, N. (1996). Road transport infrastructure and regional economic development: The regional development effects of the M25 London orbital motorway. *Journal of Transport Geography*, *4*(2), 77-92. doi:10.1016/0966-6923(96)00001-4
- Lucas, Jr., R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics* 22(1), 3-42.
- Mansell, R. (1998). Knowledge societies: Information technology for sustainable development. New York: United Nations.
- Meier, G. M., & Rauch, J. E. (2000). *Leading issues in economic development*, 7<sup>th</sup> ed., New York: Oxford University Press.
- Roller, L. H., & Waverman, L. (2001). Telecommunications infrastructure and economic development: A simultaneous approach. *The American Economic Review*, *91*(4), 909-923.
- Schumpeter, J. A. (1983). *Theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle* [Theorie der wirtschaftslichen Entwicklung], R. Opie, (tr.). Piscataway, NJ: Transaction Publishers.
- Stiroh, K. J. (2002). Information technology and the U.S. productivity revival: What do the industry data say? *The American Economic Review*, 92(5), 1559-1576.
- Sullivan, K. (2006, July 9). In war-torn Congo, going wireless to reach home. *Washington Post*, p. A01. Retrieved July 10, 2006 from http://www.washingtonpost.com/wpdyn/content/article/2006/07/08/AR2006 070801063\_pf.html

Todaro, M. P. (1969). A model of labor migration and urban unemployment in less developed countries. *The American Economic Review*, *59*(1), 138-148.

United Nations Development Program. (n.d.). *Human Development Reports*. Retrieved from http://hdr.undp.org/en/

Ronald Vyhmeister, PhD Professor, School of Graduate Studies Adventist International Institute of Advanced Studies Silang, Cavite