## In the Midst of the Transition: Challenges and Chances for Latin American Economies

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#### **Abstract**

The advent of the modern Information and Communication Technologies (ICT) has often been compared to the second industrial revolution at the end of the 18th century. It is true; there are various similarities. But nowadays, as in those days, we unfortunately tend to over-estimate the short-term impact of changes and forget to consider the long-term effects. The New Economy is not really reflected in the daily rise and fall of the NASDAQ. The New Economy and the transition to the Knowledge Society are a profound and fundamental change and every single aspect of life is getting invaded. This is opening new doors but also dangerous abysses.

Based on the generally accepted assumptions of the Knowledge Society and the Inter-Net-Working, I shall endeavour to point out the main issues concerning the 'catch up' and the interesting question of whether the Internet is acting as the 'Big Equaliser' or the 'Big Divider'. In this way we can underline the challenges and chances the Latin American economies face. Some people see the Internet as the 'Big Divider'. This view is based on the fact that most of what the Knowledge Society is concerned with, is taking place in a special space, called cyberspace. They assume that once you do not have access to the Internet 'network of networks', you become isolated and do not have a chance to keep up with general development. Others claim the Internet to be the 'Big Equaliser', since, compared to the obstacles we have faced historically, it has never been easier to bring everybody up to the same level.

# The Big Divider

For some regions, the advent of the New Age Economy seems like the beginning of the end. Visions about a global, knowledge-based New Economy and universal electronic commerce are hard to implement in a world where as much as half of its inhabitants have never made a telephone call. Today, you can find more Internet accounts in London than in all of Africa. Starting from the facts; we know that Latin America only represents about 5 per cent of the world's Internet population and mere 0.5 per cent of the world's e-commerce volume. The importance of the 'first mover advantage' in Digital Economics is making things even worse. Of the world's 50 biggest ICT companies in terms of revenue, 36 are American, nine Japanese, and four European. Some countries are already investing heavily in research, investigations and the final integration of the new economic features into their societies in order to benefit as much as possible. Others, though, are fighting just to provide basic access to the knowledge-based economy.

Not to be connected to cyberspace, or not to be able to proactively use the possibilities of modern Information and Communication Technologies for one's own benefit, could mean a dangerous setback in many fields, since communication and information are the means to advance in almost every field including culture, health, politics, education, technology and business.

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If dualism grows, the divide between the haves and have-nots will become even greater. One of the issues, then, of the greatest concern is the 'brain drain' which is partly due to the shortage of ICT experts in industrialised countries.

The phenomenon is not new; qualified labour from developing countries seeks to find work in developed countries. The impact of the brain drain upon developing countries that sorely need all the qualified professionals they can get is obvious. How can these countries compete and grow without the qualified professionals and trained labour force that are fundamental to national development? When developed countries strive to 'import' the best local professionals to fuel their own development, how can the less developed countries not fall further behind? Furthermore, in terms of e-commerce, it is interesting to see that today in Argentina, Chile, Columbia, Peru, Puerto Rico, Venezuela, etc. more than two thirds of the on-line shoppers buy through the net looking for goods that are not available inside their own countries. That implies that the shift in power from sellers to buyers, which the Internet inevitably entails, favours the countries with the richest product selection and will therefore harm less developed countries. This is as though a customer becomes a member of another economy. Assuming the worst scenario. this could result in a kind of 'voluntary imperialism', given that many members of poorer economies are neglecting the long term prosperity of their own economies, by handing themselves over to a tempting, but dangerous dependence. Such a dependency could have an impact upon almost every aspect of life.

### The Big Equaliser

We know that Latin America has one of the fastest growing Internet-adopting communities. We heard about the 'death of distance' prevailing in cyberspace, and experienced the ease of communicating through the 'net of nets'. We know that although, in the past, much of the growth depended on the optimisation of physical labour and financial capital, in the Knowledge Society the generation, processing and distribution of knowledge and information are the fundamental source of growth, power and prosperity. We also know that these crucial inputs, knowledge and information, cannot be used up and that it is quite difficult to keep people from using it.

Herein lies the difference between the digital 'catch up' and all the 'catch up' processes we have seen before. In the past, the leading countries profited highly from patenting and selling the new inventions and products to their citizens and residents. Given the physical embodiment of most inventions, it was common practice to patent them and subsequently, control its spread and profit from its scarcity. Nowadays, the most valuable commodity is information. Unlike material goods, it can be rapidly transferred in today's 'network-economy.' Controlling this transfer, even with patent laws, is difficult.

Given this, many feel that the free flow of information will inevitably cause economic convergence by enabling the developing areas of the world to take part in the world's economic mainstream.

There are those that argue that it is in the interest of those countries that possess networking capability to transfer it. This is due to network externalities. If we already have one million people connected and connect two million more, not only will the newly connected profit from this, but also the original million, due to exponentially growing network possibilities. After obtaining access, the non-rivalry and 'non-excludability' of information in a knowledge-based society, will accelerate the convergence of knowledge and markets. As so often in a time of great structural change, the latecomers can cherry-pick

the best bits and avoid the mistakes already made. Supporters of the idea that the Internet is a 'big equaliser' claim that less developed countries have the chance to leapfrog into the development mainstream by skipping old technologies and bypassing obsolete economic models. The process of adopting and imitating is a lot cheaper than trail-blazing; many cutting-edge innovations (including Business-to-Business, Business-to-Customer, Customer-to-Customer or Business-to-Government commerce) can be cloned in a very elaborate and professional way right from the start. Also, thanks to falling prices in ICT, developing countries could, by 1999, obtain the same level of computer processing power as U.S. firms in 1993 for about 10 per cent of the investment.

The Internet also allows developing countries to keep abreast of academic progress in the sciences more easily. The Internet permits connections, from practically any place in the world, to virtual classrooms wherever they may be and access the world's top libraries. The blurring of the distinction between local goods and services and exportable one and between tradeable and non-tradeable goods, together with the falling costs of worldwide communication are also helping to re-distribute the international division of labour more efficiently. Many goods and services, formerly considered as non-tradeable, have been outsourced to developing countries. As this trend progresses, it should help poorer countries attract even more foreign direct investment.

Developing countries also often have greater flexibility in adapting to the new possibilities than highly developed countries. For example, strict employment-protection laws block the swift re-allocation of workers from old to new industries in Europe and in Japan. A study made by the OECD shows clearly that economies with the most flexible arrangements have adopted ICT more swiftly, and have also performed better in Total Factor Productivity growth in the 1990s. Structural rigidities, which get in the way of e-commerce, will have to be overcome in the old continent and Japan. Here the much greater political and jurisprudential flexibility of many developing countries can favour the pace of their catching up.

## **Policy Issues**

As we can see, the introduction of modern ICT can be looked at from very different perspectives. We know that, by definition, the 'network-economy' is based on sharing information and knowledge. The implementation of the new ideas, though, is left to each country, each business, each person. In a world where information asymmetry has been eliminated, the catch-up process does not automatically occur. Developing country need to put in place a series of enabling policies to facilitate processes such as: opening markets to foreign trade and investment, liberalising telecommun-ications, setting a solid legal basis for intellectual property rights, providing efficient financial markets, creating a proper educational infrastructure and so forth.

Latin America, for example, is well behind in its educational standards, even though they are the foundation of a knowledge-based economy. Parts of Latin America may be in possession of a good telephone network - the 'raw material' for the high-speed evolution we are in - but we have to remember that wiring a country is only the beginning. This revolution is not about technology. Rather, it is about communication, about innovation, about the fast creation of new knowledge, about progress, about networking, about new business models and the like. In short, it is about the creation of a new model of social and economic organisation.

# Conclusion

Comprehension and awareness, within the region, of the new economic order is as important for the countries of Latin America as full access to the network-economy. The continent needs to make its stand in the emerging Digital Economy if it is to take advantage of these promising developments, if it is to avoid a threatening economic set-back and to avoid once again being man-oeuvered into a dangerous dependency. The Latin American and the Caribbean countries face tremendous challenges, but even greater chances.

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