Chapter XLIV
Diffusion of Broadband Access in Latin America

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ABSTRACT

The "geographic" digital divide is obvious when comparing more developed countries to the rest. Its first and most obvious sign is the difference in the diffusion of broadband accesses. However, it is clear that there are also lines of separation in smaller geographic ranges: between countries of a same area, inside each country and, sometimes, in each specific region. This chapter shows this situation by studying the broadband access diffusion in Latin America on a three level basis (regional, national, and local). At the national level, a few explanatory variables of the different situations presented by the countries chosen for the study are researched. Additionally, a description of the environment (market and public action) where this diffusion is occurring is also included.

INTRODUCTION

The generalized use of the services and applications provided on broadband infrastructures is considered a critical element for the full incorporation of individuals and societies into the information society. Setting aside the social or cultural implications this carries,[1] it is broadly accepted that these infrastructures will be (or are already) a key element for the growth of productivity and competitiveness in any economy. The statistics regarding the progress in the number of broadband connections is starting to be used, in this fashion, in indicators of current and future economic vitality of countries.

Availability and interest for its adoption are, as in the case of any other good or service, the two stages that are necessary (and consecutive) for the diffusion of broadband networks to progress.

Access is the first and *sine qua non* condition. Investment in broadband, which requires a significant improvement of the existing infrastructures or even a new network deployment, will mainly come from the private sector. However, many zones do not provide the necessary market conditions to awaken the interest of private initiative. The specific situation varies with the orographical and sociodemographic conditions, and, basically, with the level of economic development. In the most developed countries, the access problem is restricted to rural or isolated zones. In many other countries, the picture is a negative of the above: the "islands" are not the areas without connection but the connected ones instead.

Once the first requirement is met, the second of the factors appears: adoption. This factor depends in turn on a broad set of variables: prominently, the affordability of the service, but also the adaptation of the services and applications to the interests and needs of the users in addition to a broad range of cultural, social, and educational circumstances. The result obtained from adding up these elements does not mitigate the disparities already present in access. On the contrary, it accentuates them. From the market perspective, the issues of access and adoption are inextricably interwoven: adoption is impossible without access, but access is economically difficult to provide without the prospect of rapid and widespread adoption (Hollifield & Donnermeyer, 2003).

Thus, the digital divide has a first and obvious sign: the geographical one. The various deployment and adoption rhythms of broadband threaten to increase the distance separating developed and developing countries. However, on the other hand, inside countries, separating lines are also being traced, at regional or local scales.

This chapter intends to move forward in the knowledge of these divisions in Latin America, both those separating the region from other geographical areas, and those inside the region itself.

In order to meet this objective, we will start by studying, with a double perspective, what the environment where the development of broadband occurs is like. On the one hand, it is necessary to generally be aware of what has been the evolution of the telecommunication services sector and what is the situation of the markets. On the other hand, there is an intense public activity that intends to complete the private activity and the knowledge of which is essential.

Subsequently, the article will focus on the situation of the penetration of broadband in Latin America[2] at three different levels: continental, national, and local. At the first level, we will compare the present Latin American situation (and its recent evolution) to that of other regions. For the second level of study, we have chosen six countries from the main economic blocks: Argentina and Brazil, Mercosur[3] member countries, Chile and Mexico, APEC[4] economies, and Peru and Colombia, members of the Andean Community of Nations.[5] Despite the fact that the nature of the article is basically descriptive, this section provides some investigation on what some of the causes that explain the different levels of penetration are. Last, the local detailed study must obviously restrict itself to a specific case study: Mexico has been chosen.

The conclusions are structured as an examination of the future and, based on the described situation, as orientations towards what the best policies to face this future should be.

BACKGROUND

To proclaim the wonders that will be brought on by the knowledge society, and subsequently label the promotion of its development as vital for both regions and individuals, has become a cliché in the political rhetoric. It would be interesting to know whether behind every statement there exists a clear awareness (or, even better, a reflection) on what model should be adopted and what are the determining factors allowing the progress to occur. It is a fact that there are more variables involved, undoubtedly, than those stated most of the times. But what is really unquestionable is that one of those factors, probably the most important one since it is a prior condition, is the availability of an infrastructure allowing the access to the information that names the new society. In the midterm, these infrastructures will surely tend to form the basic