

Financial Inclusion, Content, and Information Technologies in Latin America

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INTRODUCTION

Information and communication technologies are becoming widespread all over the world, changing the way people interact, consume, produce and learn. Personal computer, Internet, fixed, and mobile broadband penetration are all trending upward in Latin America, although the overall penetration still levels remains low (ITU, 2013a, 2013b). ICT have brought truly new and innovative possibilities to developing countries and Latin America has not been the exception. Here are just a few far-flung examples. In Honduras, farmers receive market price information via SMS (Pineda Burgos, Agüero Rodríguez, & Espinoza, 2010), in Colombia, coffee workers in rural areas can receive and make electronic payments (Chong, Galindo, & Pinzón, 2011); in Bolivia and Peru, individuals receive text messages to remind them to save (Karlan, McConnell, Mullainathan & Zinman, 2010); in Chile, financial literacy campaigns can be delivered with the help of information technology (Hastings, Mitchell, & Chyn, 2010); in Peru, researchers take advantage of the role of new media in order to increase savings among the poor (Chong & Valdivia, 2016); in Bolivia, public officials use computers in order to reduce discrimination (Chong & Yanez-Pagans, 2016).

Policymakers and academics agree that cyber-instruments can be beneficial for economic and social development, yet virtually no systematic or solid assessment exists on the mechanism and impact of ICT on the welfare of people. The

lack of adequate data to better understand basic problems in development economics has been a recurring problem for decades. A number of the interventions summarized in this chapter avoid this problem by relying on a set of field experiments—actual projects that were tested in the field—in several countries in Latin America and the Caribbean. They rely on randomized experiments, or randomized controlled trials (RCTs), which are increasingly used in formal empirical research in development economics. In a RCT, individuals or communities are randomly assigned to different “treatments” – different programs or different versions of the same program. Since the individuals assigned to treatments are exactly comparable (because they were chosen at random), any difference between them is the effect of the treatment. One of the reasons RCTs are becoming a widespread method of testing is that they help identify the specific variable that may have caused the particular result under investigation. RCTs help to disentangle a particular outcome from the various factors that may have caused it. Thus, the method can have many uses in policy-relevant applications.

With adequate policies in place, governments can take great advantage of cyber-instruments for development. But it’s important to keep in mind that greater access to these tools won’t bring about development on its own. Countries must also focus on how these tools are used. The trials presented in this chapter show that in order for cyber instruments to contribute to development it

is necessary to take into account equally crucial elements, such as human capital, the institutional context, and the policy goals of governments. In many cases, adopting the latest technology will not necessarily generate the best development outcome if, for example, the population lacks the basic literacy skills to use such technology properly. This chapter calls for countries to invest in infrastructure, regulation and human capital to improve their capacity to benefit from greater access to technology. And it recommends that governments systematically evaluate the impact of ICT on projects.

BACKGROUND

The earliest scholars studying the link between Information Technologies and development are Professors L. Roller and L. Waverman, who studied the overall impact of cyber-technologies on economic growth. Their most influential publication investigates how telecommunications infrastructure affects economic growth, finding a significant positive causal link, especially when a critical mass of telecommunications infrastructure is present (Roller & Waverman, 2001).

Current leading scholars have dealt with several interventions and cyber-behaviors in South Asia and Africa. To cite some of the most relevant work, Professor Robert Jensen (2007) showed that the adoption of mobile phones by fishermen and wholesalers in Kerala, a state in India with a large fishing industry, was associated with a dramatic reduction in price dispersion, the complete elimination of waste, and near-perfect adherence to the Law of One Price. Professors Banerjee, Esther Duflo and others (2007) evaluated a program in India in which fourth graders shared the use of software for two hours a week to improve learning in mathematics. The authors revealed that the program produced impressive results in learning, although the effect was temporary and most gains faded away a year after the program ended.

For the case of Latin America, the available evidence has been based mostly on anecdotal cases that describe success stories, but provide little solid empirical evidence on the link between cyber-behaviors and purported related gains in productivity and welfare. In evaluating the impact of information and communication technologies—in Latin America and the Caribbean and elsewhere—a critical problem has been the lack of reliable data that may allow the specific role of a particular ICT tool to be isolated. While some advances in data collection have been made in recent years, this central issue persists for the most part. More recently, Chong (2011) made one of the first efforts to provide systematic evidence on the role of ICTs on development outcomes in the region. In more recent years, several researchers have further studied the role of ICT on development outcomes and in particular, have paid attention to financial issues and in the fact that ICT as tools, need primarily good content to be effective.

CYBER INSTRUMENTS AND FINANCIAL INCLUSION

As financial sectors develop, financial inclusion increases and income inequality diminishes. Despite the benefits of establishing links with the financial system, very few households in the developing world use such links. On average, only 35 percent of Latin American and Caribbean households have a bank account—a very low percentage compared to advanced economies, where no less than 90 percent of the population has this type of link with the financial system (Demirgüç-Kunt, Beck, & Hohohan, 2008).

Households can enjoy access to financial services through several types of technological improvements. The development of the Internet has allowed many households across the world to exploit the benefits of online banking, such as paying utilities or transferring money. The possibility of banking through cellular phones is a

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