

Reducing the Digital Divide through Smartphone Financing in Latin America and the Caribbean

- Mobile broadband is a key enabler for achieving the Sustainable Development Goals (SDGs); however lack of access to mobile technologies is a major barrier to expanding broadband use.
- In Latin America and the Caribbean (LAC), 57% of people with access to 4G have not adopted mobile technologies due to cost.
- Smartphone financing programs can help close the digital divide, but Mobile Network Operators (MNOs) face challenges with continuing to offer device installment plans.
- Supply chain finance can help carriers respond to the challenges of offering smartphone financing programs.
- In 2018, IDB Invest approved US\$140 million in revolving credit lines in five countries to purchase carriers' receivables arising from mobile device sales.
- With this first-of-its-kind transaction in LAC, IDB Invest aims to generate knowledge on the development impact of this approach and catalyze more investment toward similar receivables programs.

SMARTPHONES: THE KEY TO ACCESSING BROADBAND

Rapid growth in access to mobile technologies has reshaped how we live and work. Mobile broadband penetration¹ has proven to reduce information asymmetries, promote social inclusion, and facilitate service delivery in high-impact areas such as health, finance, education, and disaster relief, among others.



Mobile broadband services also play a key role in achieving the United Nations Sustainable Development Goals (SDGs).² For example, they can power innovations in industry and infrastructure projects (SDG 9), facilitate sustainable cities and communities (SDG 11), and promote economic growth (SDG 8). Studies have shown that each 10% increase in broadband penetration can lead to a 1.38% increase³ in per capita gross domestic product (GDP) in low- and middle-income countries and up to a 3.2% increase in GDP in LAC.⁴

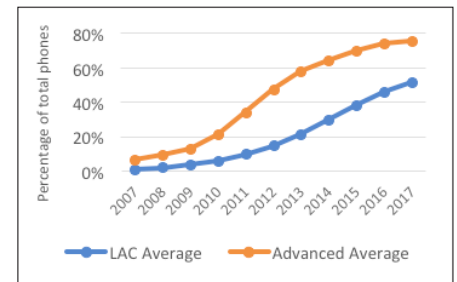


Despite the importance of mobile broadband, LAC faces a gap in access to and adoption of digital infrastructure and services both within and across countries. Less than 20% of the region's population uses 4G, compared to 69% in more advanced economies.⁵ For some, it is a matter of access: 10% of the region's population does not have access to 3G or 4G infrastructure. Of those with access, 57% have not adopted newer technologies due to the cost of network services, devices, and applications, among other factors.

For many low-income people in emerging markets, their first internet experi-

ence is with a mobile phone.⁶ So lack of access to mobile technologies, including smartphones, is a major barrier to expanding broadband use. As shown in Figure 1, smartphone adoption has increased in LAC over the past decade but still falls short of levels in advanced economies.

Figure 1. Smartphone Adoption (GSMA Intelligence data)



THE ROLE OF SMARTPHONE FINANCING PROGRAMS

Smartphone financing programs offered by Mobile Network Operators (MNOs) can help make devices more affordable. According to a 2016 GSMA Intelligence consumer survey with a sample of non-mobile phone owners, the cost of the handset and SIM card was cited as the top barrier for acquiring a device by 58% of respondents in Asia, 70% in Latin America, and 64% in Africa.⁷ And the cost of mobile phone ownership is typically more salient for women as they often have limited financial independence, lower incomes, and less access to external sources of finance.⁸

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2. International Telecommunications Union. [ICTs for a Sustainable World](#).
3. World Bank (2009). [Economic Impacts of Broadband](#).
4. IDB (2012). [Socioeconomic Impact of Broadband in Latin America and the Caribbean](#).
5. IDB Invest (2018). [The Evolution of Mobile Telecommunications in Latin America and the Caribbean](#).
6. GSMA (2017). [Accelerating Affordable Smartphone Ownership in Emerging Markets](#).
7. Ibid.
8. GSMA (2015). [Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-income Countries](#).



Smartphone financing not only helps first-time buyers acquire mobile devices, but also allows current users to more easily access the latest technologies. Smartphone life expectancy is less than 4.7 years,⁹ and users worldwide keep their devices no longer than 21 months¹⁰ on average due to technological obsolescence, among other reasons. In fact, the smartphone market has increasingly counted on consumers upgrading existing devices rather than relying on a large number of first-time buyers.¹¹

In recent years, MNOs have made devices more accessible by allowing customers to pay in monthly installments, such as over a period of 12 or 24 months. Installment programs can benefit the working poor in particular who find it difficult to adjust household expenditures to pay for a smartphone upfront.¹²

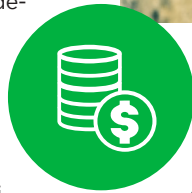
CHALLENGES WITH SMARTPHONE FINANCING

Despite the rise of installment sales programs, MNOs face significant hurdles in continuing to expand this approach. This is primarily due to carriers having to repay smartphone manufacturers in less than 90 days, while payments from end-users are received over the course of 12 to 24 months. This creates balance sheet and cash flow pressures for the company.¹³ And there is limited local financing available to help MNOs access the liquidity needed to fill in these gaps.

Moreover, new international financial reporting rules require MNOs to recognize the revenue and accrued profit from the sales of devices upfront at the time of sale.¹⁴ This poses a potential problem in the case of non-payment by installment plan subscribers, making it less viable for MNOs to continue offering smartphone installment plans at the same pace.

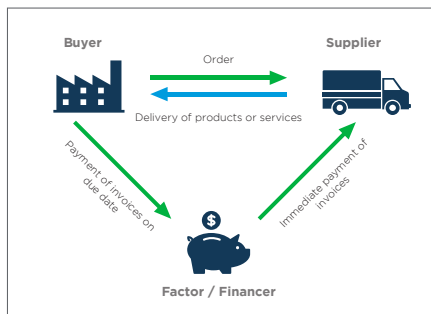
THE POWER OF SUPPLY CHAIN FINANCING

Supply chain finance (SCF) can help MNOs address these challenges. Also known as supplier finance or reverse factoring, SCF is a set of solutions that optimizes cash flow



and minimizes risk across the supply chain. As shown in Figure 2, SCF works by allowing suppliers (e.g., MNOs) to sell their invoices or receivables at a discounted rate, to banks or other financial service providers, often called factors. In return, the suppliers get faster access to the money they are owed, enabling them to use it for working capital while buyers (e.g., MNO clients) generally get more time to pay.

Figure 2. Supply Chain Finance Illustration



INNOVATIONS IN SMARTPHONE FINANCING

In 2018, IDB Invest approved US\$140 million in revolving credit lines in five countries (Chile, Costa Rica, Ecuador, Guatemala, and Panama) for the purpose of purchasing eligible receivables arising from the sale of mobile devices from carriers such as Movistar. This financing aims to lower the digital divide by helping subscribers of carrier companies acquire smartphones for as low as US\$4 a month, allowing them to take full advantage of mobile broadband services and web applications to improve their lives and businesses. By providing a longer tenor than what is available in local markets, IDB Invest is also helping MNOs fill a financing gap for receivables programs.

This is a first-of-its-kind transaction in LAC due to its innovative structure. As opposed to traditional receivables programs (Figure 2), the risk is not associated with the end-subscribers (i.e. buyer)

but with the originating MNO, making this kind of transaction more attractive for other potential investors and financial institutions in the future.

The approach is also novel due to its simplicity versus other accounts receivable financing programs. Traditionally, carriers, as well as firms in other industries, alleviate balance sheet pressures by securitizing their assets (selling bonds or securities to the open market based on secured revenue streams). The securitization process is complex, requiring rating agencies, high legal fees, and significant time to develop. Finally, this approach allows for more flexibility since as few or as many receivables can be discounted at any time.

LOOKING FORWARD

As these programs roll out, it is expected that LAC financial markets will learn from this experience, attracting more investors to this area. Overall, this approach shows that multilateral development banks can play a key role in spearheading innovative receivables programs across sectors. IDB Invest aims to generate knowledge on the effectiveness and development impact of this novel approach, and is actively working with other clients to replicate the model.

Ultimately, by making smartphones more accessible and affordable, more people and entrepreneurs across the region will be able to harness the potential of the digital revolution in the palm of their hand. ■

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