Executive Summary

FINTECH FOR FINANCIAL INCLUSION: THE PATH FORWARD FOR COLOMBIA

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Abstract

This project aims to synthesize research on financial inclusion, technology for development, strategy, and policy as they apply to the emerging financial technology (fintech) landscape in Colombia. The capstone seeks to answer, *to what extent is fintech advancing financial inclusion in Colombia, what factors are enabling and challenging its development, and what are the implications for economic development in post-conflict Colombia*. I draw on research by the Institute for Business in the Global Context (IBGC) at The Fletcher School at Tufts University to analyze success factors and inhibitors, in order to offer practical and applicable recommendations for Colombia's trajectory, made unique by its recent emergence from a half-century civil war. I hope this analysis will be of interest to the business community (both financial and digital), as well as policymakers and development consultants who are often in the position of making recommendations regarding such issues.

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Motivations

The literature is nascent, but growing, on how fintech can improve financial inclusion by providing better product design and lowering costs.[1] Above additional access (distribution), beyond new products (cost reduction), there is the potential to reimagine value in a customer-centric way that allows base of the pyramid customers to actually use products and services in a way that improves their lives. While technology has an important role to play, it may be naïve to paint fintech as the solution for financial inclusion. Examining the case of Colombia, where institutional factors favor technology as a tool for development, fintech[2] is helpful in promoting a narrow definition of inclusion—more access. However, if we broaden our definition of inclusion, the potential is less clear. What can the business community and policymakers do to advance fintech for financial inclusion in Colombia?

The Latin American Context

The situation in Colombia is similar to the rest of the region in terms of inclusion indicators, but is differentiated by its relatively advanced fintech landscape. Colombia looks to regional leaders Mexico and Brazil in this respect as benchmarks.[3] Interestingly, the percentage of fintechs that have a focus on "inclusion" is similar in Colombia (45 percent) to the regional average (41 percent).[4] Given the unique political and economic landscape in Colombia—characterized by powerful banks, technological investment by the government, and the recent peace process—it is unclear how applicable Colombia's approach is as a model for the region. However, these characteristics also make it a unique case study with the potential to understand how one country in the region may lead at the intersection of finance and technology for inclusion.

[1] Banco Interamericano de Desarrollo (BID) and Finnovista, "Fintech: Innovations You May Not Know Were from Latin America and the Caribbean" (IDB Group, May 2017),16.
[2] Some definitions refer to fintech as a *company* rather than as the technology and refer to what I am calling fintech as digital solutions. I will use them interchangeably, leaning heavily on the definition used by BFA's inclusive fintech practice.
[3] "Colombia Consolidates Its Position as the Third Fintech Ecosystem in Latin America after Growing 61% in One Year," Finnovista, August 28, 2017.
[4] Edwin Zácipa, Executive Director, Colombia Fintech Association, Teleconference, November 29, 2017.

How Does Colombia Measure Up?

Colombia has a favorable environment for doing business in this space. As the third most populous country in Latin America, with 94 percent literacy rates[5] and 90 percent 3G coverage,[6] Colombia has many of the features of an ideal market for digital financial services. The country ranks above the regional average on the World Bank's "Ease of Doing Business" report,[7] and is receiving significant infrastructure and technology investments as part of the Fourth Generation (4G) and Vive Digital plan spearheaded by the Ministry for Information Technology (ICT).

Colombia also tied for first in The Economist Intelligence Unit's ranking of enabling environments for financial inclusion and third in a joint report by Finnovista and the Inter-American Development Bank (IDB) ranking fintech enablers.[8] The financial inclusion ranking is a reflection of enabling regulation and government policies that promote inclusion, including agent banking, an exemption from the financial transaction tax for a personal savings account, and simplified savings accounts.[9] Importantly, a 2015 regulatory reform allows mobile money business models and MovilRed recently launched Celuplata S.A., the first SEDPE (Sociedad Especializada en Depósitos y Pagos Electrónicos)—a special regulatory formation that allows non-banks to participate in this space.

By the traditional metric of financial product ownership, Colombians have become more included, with almost 80 percent having at least one product. Technology has facilitated this change, with branchless banking in Colombia as perhaps the best example. Mobile money pioneer DaviPlata has seen users grow from 400 to 2.9 million since its launch seven years ago[10] and parent bank Davivienda has evolved the product to be more and more accessible. Bancolombia has also been a leading adopter of the simplified savings account with its "Ahorro a la Mano" product, which allows customers to register with just a phone and national identification, at no cost and without going in person to a bank.[11] Banco AV Villas Mayor has also developed a simplified account, Transfer Aval, though usage is limited to customers of the country's largest telco network, Claro.[12]

Yet while the number of adults with at least one financial product has continued to increase, new metrics conducted by Colombia's chief financial regulator show that the evolution of active users is not nearly as inspiring (an 11 percentage point difference in 2016).[13] What explains the gap between access and usage? In a favorable environment, people have access to a variety of services, but they do not use them if they are not affordable or do not meet their needs.

Financial services are still expensive in Colombia. According to one statistic, 90 percent of Colombians prefer to pay in cash in large part because of the financial transaction tax, which can

[5] World Bank, "Literacy Rate, Adult Total (% of People Ages 15 and above) | Data," accessed November 13, 2017.
[6] GSMA, "Country Overview: Colombia - Mobile Industry Collaborating with Government to Promote Entrepreneurship and Innovation," 2017.
[7] World Bank, "Doing Business in Colombia," accessed November 13, 2017.
[8] The Economist Intelligence Unit, "Global Microscope 2016: The Enabling Environment for Financial Inclusion," 2016, 10; Banco Interamericano de Desarrollo (BID) and Finnovista, "Fintech: Innovations You May Not Know Were from Latin America and the Caribbean," May 2017, 14.
[9] Marulanda Consultores, "Going Mobile with Conditional Cash Transfers" (Consultative Group to Assist the Poor—CGAP, June 2015), 12.
[10] Carlos A. Ruge Muñoz, Director Comercial y de Negocio, DaviPlata, Davivienda, Meeting at DaviPlata, Bogotá, August 2, 2017.
[11] "¿Sabe qué es una Cuenta de Ahorro de Trámite Simplificado?," *Saber más, ser más* (blog), January 19, 2016.
[12] "Transfer Aval," Claro Colombia, accessed December 9, 2017.
[13] Banca de las Oportunidades and Superintendencia Financiera de Colombia, "Reporte Inclusión Financiera 2016" (Bogotá, Colombia, July 2017), 49.

be avoided by not documenting transactions and remaining informal.[14] There is also an important perception that non-cash payments are more expensive, both because it precludes the opportunity to negotiate on prices, and because formal financial products are seen as expensive.[15] As long as cash remains in favor, affordability will remain an issue.[16]

This has not stopped Colombian companies from trying to improve affordability. For its part, DaviPlata negotiated SMS fees down from COP 120 to COP 8 pesos (approximately USD .04 to less than USD .01) per SMS. Their new app is "zero-rated" to not use data or charge for messaging.[17] Compared to the traditional bank business model, this modified structure has made important progress. While there is still work to be done, perhaps it is too early to judge, as one major fintech survey in the region notes that the "fintech boom" occurred from 2014 to 2016, too soon to measure outcomes.[18]

One of the major barriers is a lack of trust, which can be overcome by a user-friendly experience.[19] Bancolombia has three related products with promising customer-centricity implications—Ahorro a la Mano, a simplified savings account; Crédito a la Mano, which uses cash flow analysis from the simplified savings account to offer small loans to account users; and Emilia the robot, a chatbot developed with Silicon Valley fintech start-up Juntos that provides friendly financial advice to users.[20] Davivienda also incorporated principles of human-centered design in developing DaviPlata. Perhaps the most disruptive adjustment was "translating" the very language used in transacting with the product from formal bank terminology into what customers might actually want to accomplish with each function, representing not just a product innovation but also a mindset shift for the bank.

Several other services are developing around the idea of creating trust in financial products. Bogotá-based start-up Aflore uses existing social networks to identify informal "financial advisors" who serve as a mechanism for credit granting, overcoming distrust in formal financial institutions. Medellín was one of the winners of the 2016 Bloomberg Mayor's Challenge with the Bancuadra project, which leverages community networks and a digital platform to provide loans among neighbors. These are promising examples, but have yet to prove themselves at scale.

Recommendations

A successful inclusive fintech ecosystem requires a confluence of efforts from a variety of actors, with different incentives and timelines. While perhaps it is unrealistic to hope for them all to align, here are a few concrete actions each party can take to advance the cause.

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[14] Germán Montoya, Nicolás Rodríguez, and Walden Borj, "La estrategia interinstitucional para la reducción del uso del efectivo y la masificación de los medios de pago electrónicos," in *Ensayos sobre la inclusión financiera en Colombia*, ed. César E. Tamayo and Jonathan Malagón (Asobancaria and BID, 2017), 359–418, 361.
[15] César E. Tamayo and Jonathan Malagón, eds., *Ensayos sobre la inclusión financiera en Colombia* (Asobancaria and BID, 2017), 28.
[16] Carlos A. Arango-Arango, Nicolás F. Suárez-Ariza, and Sergio H. Garrido-Mejía, "Cómo pagan los colombianos y por qué?," Borradores de Economía (Bogotá: Banco de la República, Colombia, April 18, 2017).
[17] Carlos A. Ruge Muñoz, DaviPlata.
[18] Banco Interamericano de Desarrollo (BID) and Finnovista, "Fintech: Innovations You May Not Know Were from Latin America and the Caribbean," 15.
[19] Wajiha Ahmed and Natalia Gomez, "Papayas and Digital Finance: Emerging Consumer Risks in Colombia," January 26, 2015.
[20] Caroline Gutman, "Emilia, Bancolombia's Financial Advice Chatbot Inspired by Juntos," *Juntos* (blog), October 4, 2017. Juntos has been profiled by CGAP as an example of a human centric approach to financial inclusion here: Antonique Koning and Gayatri Murthy, "Customer Empowerment in Finance: Why Greater Choice and Control for Poor Customers Is Better for Business and Will Help Achieve Financial Inclusion," Perspectives 3 (Washington, DC: Consultative Group to Assist the Poor—CGAP, August 2017), 32.

For Banks

1. There is ample room to grow in person to government (P2G), person to business (P2B), and person to person (P2P) transactions. The government has led the push for cash-less transactions, and electronic payments from the government are now almost entirely saturated.[21] P2G, P2B, and P2P is where banks should look to expand their service offerings, keeping in mind the principles of affordability and customer centricity.

2. Organize for innovation. Juan Carlos Rojas Serrano, then DaviPlata's executive director, writes that it is characteristics of the company's DNA: medium-to-long-term focus, innovative culture, and belief in its employees—regardless of position—to create solutions, that have been fundamental to its success.[22] Changing corporate culture is more challenging than developing new products, but may be key to successful innovation in this space.

For Fintechs

1. Partner for success. There is growing consensus that collaboration between fintechs and traditional players—be they banks or telcos—will be key to combining the best of tech and finance.[23] This is the driver behind Finconecta, a partnership of the IDB's Multilateral Investment Fund (FOMIN) and above&beyond to select and accelerate fintechs to collaborate sandbox-style with financial institutions to implement solutions. The creation of the Colombia Fintech Association, which allows fintechs to collaborate and adopt best practices from each other, is another promising development.

2. "Find a use case which really solves a customer problem... which really removes the pain point of solving a financial services issue." Fintechs would be wise to heed this advice offered by Sopnendu Mohanty, chief fintech officer of Singapore.[24] With all the hype around fintech and explosion of services and products, fintechs should not lose sight of the fact that their ability to speak to customer needs is their best competitive advantage.

For Telcos

1. Leverage infrastructure. With an entrepreneurial culture and a focus on profits through high-volume, low-value transactions, research shows that telcos are better positioned than banks to run mobile money services.[25] Affordability is a key sticking point for Colombian customers, yet mobile customers are accustomed to topping up with agents in stores, on the street, and even online. Telcos can use this already-established infrastructure to add value and grow.

2. Focus on customer centricity. The number one challenge for mobile internet in Colombia is safety and security.[26] While government industry-wide efforts, like coordination with the GSMA Device Database of registered devices and mandatory SIM card registration have aimed to

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[21] Germán Montoya, Nicolás Rodríguez, and Walden Borj, "La estrategia interinstitucional para la reducción del uso del efectivo y la masificación de los medios de pago electrónicos," in *Ensayos sobre la inclusión financiera en Colombia*, 406.
[22] Juan Carlos Rojas Serrano, "DaviPlata: 'Self-Service' Financial Inclusion," *Management Innovation EXchange* (blog), May 11, 2012.
[23] Steve Polsky, "A Team Sport — Three Reasons Why Mobile Telcos and Financial Institutions Will Drive Financial Inclusion Together," *Center for Financial Inclusion Blog* (blog), November 3, 2017.
[24] Sopnendu Mohanty, Chief Fintech Officer, Singapore, interview by Sherezade Rodriguez, October 9, 2017, https://twitter.com/SherezadeR/status/925393713173549056.
[25] Nick Hughes and Susie Lonie, "M-PESA: Mobile Money for the 'Unbanked' Turning Cellphones into 24-Hour Tellers in Kenya," *Innovations* (2007), 69.
[26] GSMA, "Country Overview: Colombia," 16.

tackle this, the results have been mixed from a user perspective. Consequences such as deactivation without warning, unclear privacy protections, and agents' current inability to address these issues create friction for consumers.[27] Telcos will need to develop a more customer-centric culture to build a product customers can trust.

3. Improve affordability. Affordability is still a barrier to mobile internet usage for more than half of non-users in a recent GSMA survey.[28] As infrastructure improves, telcos can pass these savings on to their customers and help achieve more comprehensive inclusion, while at the same time gaining new and more profitable customers.

For Government

1. Lead on interoperability. As more services develop, the government should take a more active role to ensure these services are compatible and consumers can transact freely between them. Interoperability and API sharing also helps to de-risk innovation,[29] as innovators can build on what already exists and test solutions, and consumers do not have to commit to one service or another, but can choose among competing options as they develop. Opinions diverge on whether a sandbox is the best approach, but it is certainly one example that has been used elsewhere with success.[30]

2. Reduce reliance on cash. Tax reform, always challenging, could go a long way in promoting digital financial inclusion. Exceptions to the tax on financial transactions have been made for small accounts, but the tax serves as a major disincentive for Colombians to store cash in digital platforms. This is a principle complaint of the banking industry, and government collaboration on electronic payment mechanisms for public transportation, utilities, and taxes is fundamental to achieving the goal of reducing the money supply (M2) to 8.5 percent.[31]

3. Focus on education and rural development to bolster inclusion. Of course, the continuing role of the government in improving education, reducing inequality, and providing technological infrastructure will support not just inclusive fintech, but the economic development of Colombia. It is noteworthy, but perhaps not surprising, that financial product knowledge and preferences vary considerably by income and education level, with the lowest income brackets preferring cash 96 percent of the time, compared to 56 percent for the highest socioeconomic class.[32] While mobile coverage is generally high, rural coverage is just above 50 percent;[33] thus a focus on rural development can have the largest impact.

Context of the Peace Process

[27] GSMA, "The Mandatory Registration of Prepaid SIM Card Users," White Paper, November 2013; Miriam Freeman, "Somewhere Over the Rainbow," The Blakeley Foundation, June 4, 2017.
[28] GSMA, "Country Overview: Colombia."
[29] Fernando Campero, Principal Specialist, Loan and Equity Operations Unit, Multilateral Investment Fund, IDB Group, Teleconference, November 14, 2017.
[30] Simone di Castri and Ariadne Plaitakis, "Going Beyond Regulatory Sandboxes to Enable Fintech Innovation in Emerging Markets," *Stanford Social Innovation Review*, October 26, 2017; Colombia Fintech, "Hacia un sandbox para el fintech en Colombia," *Colombia Fintech* (blog), November 2, 2016.
[31] "Proyecto F," Asobancaria, 2016.
[32] Santiago Castro Gómez, "Construyendo una ruta hacia la masificación de los pagos electrónicos," *Semana Económica 2016*, April 25, 2016, 7.
[33] Germán Montoya, Nicolás Rodríguez, and Walden Borj, "La estrategia interinstitucional para la reducción del uso del efectivo y la masificación de los medios de pago electrónicos," in *Ensayos sobre la inclusión financiera en Colombia*, 408.

Most immediately, the integration of former FARC (Fuerzas Armadas Revolucionarias de Colombia) members poses an important inclusion challenge. The task of due diligence was delegated to government-owned Banco Agrario as part of the peace accord implementation process,[34] and by July 2017 nearly 5,000 former FARC members held accounts with debit cards enabled to receive the government transfers and small business credits that are part of the reintegration process.[35] While the process seems to be going well so far, it speaks to a broader need for financial innovation in a post-conflict context.

The numbers of victims and combatants are small as a percentage of the population, but including both of these segments of society is strategically important from the perspective of national security and reconciliation. This also highlights an underlying characteristic of the financial inclusion gap in Colombia—the regions with the fewest agents are those that have been affected by the conflict,[36] and the number of adults with active financial products drops significantly as you move from urban, to suburban, to rural, to disperse rural populations.[37]

Rural inclusion has become a priority on the national agenda, and along with fintech it now has its own subcommittee on the Cross-Sector Commission on Financial Inclusion (Comisión Intersectorial de Inclusión Financiera).[38] These two things may in fact be closely linked, as demonstrated by the work of startups like IncluirTec that is piloting alternative credit scoring for the rural agricultural population in Colombia. Whichever combination of actors, be it government, fintechs, banks, or telcos, that solves the unique challenges faced by this sector will have the potential to move the needle on not just closing the remaining gaps, but creating a more equitable society and advancing economic development—the ultimate goals of financial inclusion to begin with.

Conclusions and Additional Research

Is fintech advancing financial inclusion in Colombia? While Colombia has the digital and financial infrastructure in place, the tasks of adoption and affordability are more challenging. My answer as of today is, "not yet." But perhaps that is the wrong question to ask. Research and conversations with various stakeholders in Colombia indicate there is incredible momentum around both fintech and financial inclusion, and even the intersection of the two. It is a rapidly developing field, and even in the course of researching the topic I encountered new developments and promising initiatives. As the movement evolves, there is a tremendous opportunity to measure progress and observe "lessons learned" in action. As an ecosystem with diverse actors not behaving in a coordinated fashion, it is difficult to isolate the impact of any one policy change or business model tweak, but there may be opportunities to evaluate smaller subsets of action. One advantage of the active role of businesses in this sector is the opportunity to use their customer bases to inform best practices, in a way governments may not be able to do at a country-wide level. We may have to take a "wait-and-see" approach to the effects of fintech for financial inclusion in Colombia, but if results live up to the promise to even some degree, the next few years will be a time of growth and inclusion for the country.

[34] Congreso de la República de Colombia, "Ley 899 - por el cual se establecen medidas e instrumentos para le reincorporación económica y social colectiva e individual de los integrantes de las FARC-EP conforme al Acuerdo Final, suscrito entre el Gobierno Nacional y las FARC-EP el 24 de noviembre de 2016" (2017).
[35] "Casi 5.000 guerrilleros de las FARC ya tienen cuenta bancaria en Colombia," Agencia EFE, July 30, 2017.
[36] Ulf Thoene and Álvaro Turriago-Hoyos, "Financial Inclusion in Colombia: A Scoping Literature Review," Intangible Capital 13, no. 3 (2017): 582–614, 19.
[37] See Banca de las Oportunidades and Superintendencia Financiera de Colombia, "Reporte Inclusión Financiera 2016," 57.
[38] Ibid, 19.

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