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Lessons From Colombia's Shift to Electronic Payments²

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With the government leading the way, and a supportive and innovating private sector, Colombia is making strides in shifting high-value payments to electronic forms. An astounding 69 percent of the value of money changing hands in Colombia each month is paid electronically. This means that Colombia could be considered a "cash-lite" economy.4 Yet, this represents only 9.7 percent of the 828 million payments made monthly in 2012, indicating that the majority of payments by Colombians are in cash.

With government and business bulk payers now transacting primarily through electronic payments, the next phase in Colombia's shift is expanding to businesses paying people and people paying businesses electronically. Success requires that Colombia address significant barriers, including a tax on formal financial transactions, low levels of financial inclusion and a highly informal economy.5

While Colombia's journey away from cash continues, the progress made and remaining barriers offer other governments important insights and lessons. These include:

- 1. The government led the way. With the government leading on the financial inclusion and electronic payment agenda, the private sector had the incentive to participate, which in turn helped shape its business case.
- 2. The government provided the incentives and vision, but let the private sector create the **infrastructure.** Colombia's significant progress is due to a strong partnership between the government and the private sector, both committed to creating an

electronic payments infrastructure that supports highvalue payments in the corporate and financial sectors, and the distribution of social welfare payments.

- 3. It is critical to have a coherent strategy. Colombia aimed deliberately for a shift to electronic payments and financial inclusion, but at the same time the government continued its tax on financial transactions (GMF), creating a disincentive to join the formal financial system and instead to continue with cash payments.
- 4. The high levels of informality in an economy remain a challenge, specifically the cash-only practices. An economy operating mostly in cash facilitates informality, whereas promoting electronic payments contributes to reducing informality.
- 5. Financial inclusion isn't an automatic outcome of a shift to electronic payments. It has to be integrated in the design of the digitization **strategy.** While Colombia had a goal of increasing financial inclusion alongside its pursuit of shifting to electronic payments, they weren't linked together.

















Overview of Colombia's Payments Landscape

The government has pushed for greater access to financial services, but this access is distributed unevenly. Even though Colombian banks have increased their branch network, ATMs, agents, and POS, the acceptance network for electronic payments, these have not expanded as rapidly as hoped. Though 220,000 POS devices were installed by 2012, only 70 percent were active, and they provided coverage to only 53 percent of municipalities, concentrated in formal commercial businesses. Just 46,000 businesses had a POS device, while there are 450,000 commercial outlets in the "traditional" economy ("tiendas"), which account for about 56 percent of household consumption in the country.

High-frequency, low-value payments account for a large percentage of payment volumes in the country and have shifted the least to electronic payments. The vast majority of these payments are still made in cash, with less than 10 percent of the 828 million transactions occurring electronically.

In contrast, high-value payments are generally paid electronically: 69 percent of payment values are electronic transactions, indicating a strong degree of success for the public policy and financial sector.

The majority of government payments are now made electronically. However, large pools of non-electronic payments, valued at \$42 billion per month, remain, most of these made by smaller businesses and individuals.

TABLE 1 Payments by payer in Colombia

Payer	Total payments per month	% volume electronic	Total value COP mill	Total value US\$ mil	% value electronic
Government	11,701,194	75.9%	24,915,163	13,184	94%
Business	93,372,734	47.1%	178,402,818	99,112	80%
Individuals	722,712,617	3.8%	45,962,078	25,534	13%
Donors	311	95%	539	0	94%
Total per month	827,786,856		249,280,598	137,830	
Total per year	9,933,442,272		2,991,367,176	1,653,964	
Weighted avg		9.7%			69%

Colombia has made significant progress in the first phase of the shift away from cash and is entering the second stage

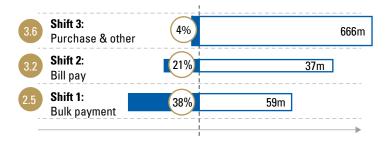
Three phases in the shift away from cash have been documented by BTCA:

- 1. Bulk Payments
- 2. Bill and Tax Payments
- 3. Purchase & Other

Figure 1 shows the trajectory of these three phases.

Colombia has achieved 69 percent of the value of payments electronically primarily through the first phase of shifting bulk public and private sector payments.

FIGURE 1 Trajectories of the shift to electronic payments



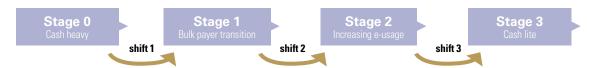
Legend: 2.5 is the trajectory score for the use case connected to each shift; where 1=full shift very likely; 3=slow upward progress; 5=shift unlikely.

Note: (38%) is % of total number of monthly payments in each shift (shown at end of bar) which are electronic as in 2012.

Figure 2 shows an overview of Colombia's progress on each phase, including an analysis of the payment stream, the relative likelihood of each to influence the shift, and key findings.



FIGURE 2 Stages and shifts



	STAGE 0 CASH HEAVY	STAGE 1 BULK PAYER TRANSITION	STAGE 2 INCREASING e-USAGE	STAGE 3 CASH LITE
Flow of Electronic Payments		Few to Many	Many to Few	Many to Many
Main Payment Instruments in Use	Mainly paper (typically cash; maybe some checks)	Mixture: paper and electronic (cards used at ATMs, some online banking)	Mainly electronic (mobile used for bill payments and remittances)	Almost all electronic (use of mobile and/or card at point of sale through inter-connected switches)
What Is Needed to Shift to This Level ?		Sufficient cash-out points; B2P & G2Pshifts	Ability of businesses and consumers to make cheap electronic payments via computer, standing order, ATM (P2P, P2B)	Pervasive acceptance of electronic payments at POS and mobile phone, compelling financial products

Source: The Journey Toward 'Cash Lite,' Better Than Cash Alliance, 2012

1. Bulk Payments: Trending Upwards

Bulk payments refer to the disbursement of funds from one entity to multiple individuals or firms through a single payment transaction (one-to-many). This is the core of the first shift made to electronic payments in Colombia and it is well advanced in terms of the value of payments processed. Electronic payments now account for more than 58 percent of the value of bulk payments in the country, including the following forms:

- Disbursement of resources from federal government to state and municipal-level governments (G2G)
- Salary payments (G2P, B2P)
- Conditional cash transfers, or other social programs and subsidies (G2P)
- Supplier payments (B2P, G2B)

Government initiatives drove the shift through bulk electronic payments. Today, 100 percent of G2G payments are made electronically at the federal and regional level. G2B payments to suppliers are 98 percent electronic by volume. G2P payments, including salaries and social transfers, represent the largest share of payment volumes, and 75 percent of them are made electronically.

In the private sector, the bulk payment shift has happened mostly among large corporations and businesses. To date, it is estimated that 47 percent of the value and 29 percent of the volume of these payment types have shifted to electronic forms.

One of the biggest opportunities is the potential to bring employees into the digital economy by encouraging business-to-person (B2P) salary payments. Because of widespread informal labor contracts, the transition of these payments is lagging. Equally important is the potential to shift business-to-business (B2B) payment streams that connect formal firms with informal suppliers on an electronic platform. While momentum seems to be gathering for this shift, success will depend on formalizing micro small and medium enterprises (MSMEs), increasing access to financial services, and improving public trust in the financial sector.

Overall, this payment stream is considered to be trending upward, with the following key findings:

- 1. Regulatory and market conditions fully support the shift of bulk payments to electronic forms.
- 2. Government-originated bulk payments have already shifted, and this momentum continues to drive the change.
- Some MSMEs may be swayed to transition as GMF taxes are phased out, but this may not be enough to entice many to formalize payments.
- **4.** Demand for bank accounts is low, yet people are not opposed to receiving payments via this method.
- **5.** Clients can be distrustful of the fees and commissions unless there is more transparency.
- The capacity of current infrastructure will soon be reached and must be addressed in order to support the shift.

2. Bill and Tax Payments: Slow Progress, But Upward Progress

Remote bill payments occur when the government or a business issues invoices to a large number of customers. Examples of this include:

- Collection of taxes (P2G, B2G)
- Utility payments (P2B, B2B, D2B, G2B)
- Collection of school fees (P2B)
- Credit card payments (P2B)
- Social security contributions (G2B, P2B, B2B)

Bill and tax payments represent the second most important shift toward electronic payments in Colombia: 62 percent of bills by value are now paid electronically. However, this represents only 21 percent of the total transactions Colombians pay monthly.

In Colombia, businesses rarely use debit or card payments for paying bills, taxes, or social security contributions. Rather, they use the PSE online payment platform or credit transfers to pay communications, utilities, and travel. Use of PSE among individuals remains low though: A mere 2 percent of 34 million utility payments are made electronically.

One of the biggest opportunities in the remote bill payment arena lies in tax collections. By volume, 30 percent of individual and 40 percent of business taxes were paid electronically in 2012. However, the accomplishment is less rosy when measured by value: 6 percent for individuals and 28 percent for B2G.

This payment type is considered to be shifting slowly, but overall showing upward progress. This is largely due to the following key findings:

- Low financial inclusion limits adoption of electronic payments, and low infrastructure limits the potential benefits of shifting to electronic forms.
- Providers currently offer a variety of cash-based, low-cost payment and collection services, making it difficult to compete.
- **3.** The government isn't promoting the benefits of electronic payments to increase trust and adoption.

- **4.** Bill issuers would not necessarily pass on the savings to customers if there was a massive shift to electronic payment formats.
- Electronic payments are not widely available, and there is a steep learning curve and trust gap in the way of shifting.
- Low awareness for all stakeholders along the payment chain of the benefits of shifting to electronic payments.

3. Purchase & Other: A Significant Risk of Drift, not Shift

The third shift that needs to happen is more consumers paying for goods or services electronically, most likely with a debit or credit card, instead of cash. The focus in the Diagnostic is on debit cards, because they replace cash on a 1-to-1 basis. With only 3.9 percent of the 710 million monthly payment transactions from individuals to businesses done electronically, representing 14 percent of the value, this shift has the farthest to go.

This type of payment is considered at risk of drifting away from efforts to shift to electronic payments due to the following key findings:

- Market conditions make it costly for smaller merchants to enroll in payment-card programs, making it difficult to expand coverage.
- 2. The value proposition for banks to expand networks and payment instruments remains low.
- Low levels of financial inclusion limit consumers' access to debit cards.
- For merchants without POS capabilities, the revenue lost when VAT is retained is another significant barrier.

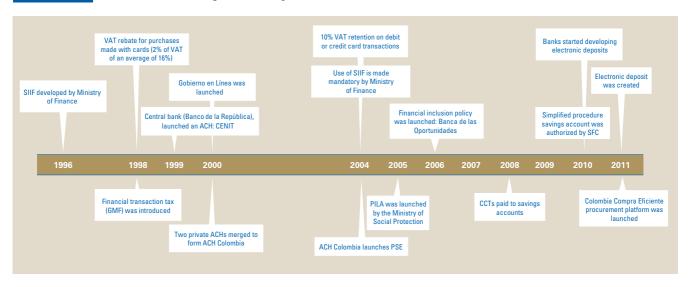


Insights and Lessons

The government led through the development of centralized payments platform and promoting automated clearinghouse. Beginning in 1996, Colombia began centralizing payments made within the government sector. The Treasury at the Ministry of Finance created a centralized government payments platform (SIIF) and the Central Bank created CENIT, an automated clearing house. By 2004, the Ministry of Finance required all 170 federal government institutions to process all of their payments using the SIIF platform.

Figure 3 below shows the timeline of Colombia's shift to date.

FIGURE 3 Timeline of key developments



Realizing that the CENIT presaged the inevitable expansion of electronic payments, the country's commercial banks quickly formed their own automated clearinghouse, ACH Colombia, in 2000. Today, it is jointly owned by 18 banks, and has led to a steep decline in the volume of check transactions.⁶

This development of a centralized government payments platform, at the same time that two new ACHs were being developed, allowed for interoperability and laid the groundwork for bulk electronic payments.

Several other government initiatives continued to build on the government's momentum and private sector's innovation. The 2000 launch of Gobierno en Línea, or Government Online, created access to government procedures and services online, and increased transparency.

This, in turn, inspired the private ACH Colombia to initiate an online payments platform that allows clients (businesses or people) to debit their accounts at financial institutions and pay for services or goods offered by government or private businesses, called Pagos Seguros en Línea, or PSE. Initially, PSE was used to facilitate social security contributions. Now, PSE is used by many private-sector entities for electronic payments, mainly e-commerce. It has created a more secure environment for electronic transfers, and its impact on businesses has been significant.

In 2011, the government refreshed its federal and state procurement platform, Colombia Compra Eficiente, to encourage online procurement transactions for goods and services. An online system added transparency and efficiency to the procurement process, built trust, and ensured optimal value for money spent on public procurement.

TABLE 2 Financial and mobile infrastructure and transactions

	2007	2009	2012	UMIC 2011*
Cash Handling Points/10,000 Adults	6.9	7.3	15.4	
Branches	2.2	2.2	2.3	1.6
Agents	1.7	1.9	9.1	Na
ATM	3.0	3.2	4.0	4.2
POS/10,000 Adults	39.6	47.4	71.0	
% of Financial Transactions done in Cash	n.a.	71.1%	65.7%	
% of Electronic Financial Transactions	n.a.	28.9%	34.3%	
Mobile penetration (subscriptions per 100 people)	64.6%	82.4%	106.8%	87%
% of Individuals using the Internet	21.8%	30.0%	48.9%	

The private sector evolved into a government partner. While initially suspicious that electronic payments were a competitive threat, financial institutions became more engaged and supportive as it became clear there was an opportunity to reduce costs, gain efficiencies, and improve customer service. For example, banks estimated that in 2012, the cost of transporting cash was equivalent to 0.06 percent of Colombia's gross domestic product (GDP).

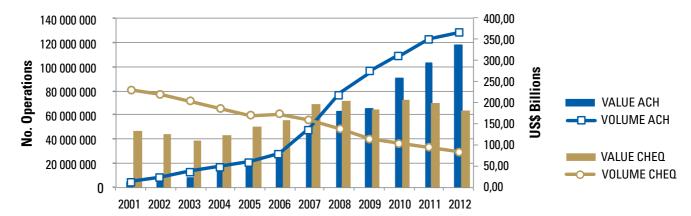
Greater participation among financial institutions is also being driven by pressure to reduce fees and new competition in the payments sphere from non-banks, most notably postal service providers, which offer remittance services.

Many banks are now developing low-cost agent networks, with the support of the Banca de las Oportunidades, to manage cash transactions and are promoting electronic payments as a means to reduce costs.

Despite clear goals, Colombia did not have an integrated, aligned, or comprehensive strategy. One of

the fundamental examples is the Gravamen a las Transacciones Financieras (GMF), a tax on financial transactions. Businesses and individuals pay a GMF tax on withdrawals from checking or savings accounts, regardless of the instrument or channel used, creating an incentive to transact in cash over electronic payments. It is slowly being phased out and will end in 2018. Yet until then, it deters a significant number of individuals and small merchants from adopting electronic payments.

FIGURE 4 Annual transactions with checks and through the ACH



^{*} Averages for Upper Middle Income (UMIC) countries for 2011 from World Development Indicators. *Source*: Banco de la Republica

Note: ACH figures include value and volume of CENIT (public) and ACH-Colombia (private) clearing houses.

Many Colombians and merchants remain in the cash economy.

A significant barrier to the shift in Colombia is the "shadow" economy where the majority of payments are transacted with cash.

In addition to the GMF, merchant resistance to electronic payments has two other causes.

First, the process of getting approved for a POS device is time-consuming and costly, especially for small merchants.

Second, when a purchase is made with a debit or credit card, the acquiring bank automatically has to retain 10 percent of the value-added tax (VAT). Overall, this reduces the merchants' revenue by 3 percent. While merchants can deduct these payments from their taxes at the end of the year, in the short term, electronic payments reduce revenue and working capital.

The reluctance of merchants to accept electronic payments has consequences throughout the payment chain. Whereas most medium and large enterprises pay their suppliers through bank transfers, small merchants pay even large consumer manufacturing companies in cash. Similarly, big supermarket chains pay their providers electronically, but take in 75 percent of their sales in cash.

When Colombia addresses all three of these challenges then the last phase in the shift away from cash can take off and Colombia can embrace a digital ecosystem.

■ Financial inclusion is key to success in the next phase of digitization. The government's financial inclusion policy is called Banca de las Oportunidades and its focus has been on financial access but not on digital financial access. Two of its signature accomplishments to date are changes to the regulatory system that allow private banks to offer services through agents and basic savings accounts to individuals. In 2007, Banca de las Oportunidades began financing the expansion of the private banks' agent networks and extended its support to smaller financial institutions, nongovernmental organizations (NGOs), cooperatives, and small municipalities that lacked other financial delivery channels. Recent efforts focus on the mobile payments, taking advantage of Colombia's high rate of mobile penetration.8

By 2010, 98 percent of Colombian municipalities offered citizens some point of access to financial services, a 26 percent increase since 2006. By 2012, more than 20,000 agents serve the populace and the financial sector, almost four times the number of branch banks (7,100).

P2B payments clearly represent the biggest barrier to significantly moving the needle above 21 percent of the volume of payments digitized. For large-scale conversion of payment volumes to electronic form, Colombia would benefit from integrating its digitization and financial inclusion strategies to emphasize digital financial inclusion.

Conclusion

The government of Colombia's leadership and experience offers important lessons from which others around the world can learn.

Further progress in addressing the informal cash economy, and increasing merchant acceptance and consumer adoption, will result in a digital financial ecosystem that works for everyone.

About the Better Than Cash Alliance

The Better Than Cash Alliance is an alliance of governments, private sector and development organizations committed to accelerating the shift from cash to electronic payments. The Better Than Cash Alliance is funded by the Bill & Melinda Gates Foundation, Citi, Ford Foundation, MasterCard, Omidyar Network, USAID and Visa Inc. The UN Capital Development Fund serves as the secretariat.



















- Content and data in this document are based on information gathered during the third quarter of 2013, and therefore represent data prior to this date.
- This is a summary of the Better Than Cash Alliance Colombia Diagnostic undertaken by Bankable Frontier Associates with the support of the Ministry of Finance and the Social Department for Social Prosperity (DPS) of Colombia. The full diagnostic can be found at: http://betterthancash.org/better-than-cash-alliance-case-studies/
- This report was authored by BFA's Colombia country project team: Country Director: Beatriz Marulanda, Marulanda Consultores, Country Analyst: Mariana Paredes, Marulanda Consultores, Measurement Expert: Caitlin Sanford, BFA and Payments Expert: Xavier Faz, CGAP
- 4 Better Than Cash Alliance (2012), The Journey Toward 'Cash Lite', available at http://betterthancash.org/wp-content/uploads/2012/09/BetterThanCashAlliance-JourneyTowardCashLite.pdf.
- ⁵ A report by World Bank found that informality in Colombia is higher than would be estimated based on its GDP per capita; that 74% of the labor force is informal; and that 43% of the businesses are also informal, only surpassed by Peru (56%) and similar to Brazil (42%).
- The proportion of all transactions processed in the financial system that involve paper (cash or check exchange) whether at branches, ATMs, or agents, has declined to 66% in 2012, down from 71% in 2009, while those involving electronic payments have increased correspondingly from 28% to 34%. By 2012, electronic payments accounted for 42% of all transactions recorded by financial institutions.
- ⁷ The Gravamen a las Transacciones Financieras (GMF) was created by the government as a temporary measure to get funds to support the mortgage sector and prevent the collapse of financial institutions in the late 1990's financial crisis. It was made a permanent general purpose tax in 2000. It is levied on withdrawals made from any account in the financial system.
- Examples include the Ministry of Finance's motivation for a proposed new law allowing non-bank regulated institutions to issue electronic deposits, DPS payments to CCT recipients through m-wallets and Banca de las Oportunidades challenge fund to promote electronic transactions through m-banking solutions.

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