Modernizing Payment Systems:
Progress and Opportunities in Latin America

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Adopting International Standards

Efficient, secure and sound payment systems make a country more competitive. They also support economic expansion and facilitate integration with regional and international markets. The Latin American region is no exception. At the request of the Western Hemisphere Finance Ministers in the late 1990s, the World Bank and Center for Latin American Monetary Studies, along with other international experts, began documenting and assessing payment systems in countries throughout the region to identify and recommend areas for improvement in their safety, efficiency and integrity. This undertaking, which began in 1999, has resulted in major advances in the development and modernization of payment and settlement systems and contributed to strengthening the liquidity and stability of financial markets in many Latin American countries.

The development and introduction in recent years of new payment systems technology and infrastructure has also paved the way for a migration from traditional paper-based payments to electronic payments. To facilitate the use of electronic payments, banks, companies and governments must continue to play a key role.

Although some countries have made more progress than others, most Latin American central banks have adopted, or begun to adopt, the recommendations published in 2001 by the Bank for International Settlements' Committee on Payment and Settlement Systems, known as the *Core Principles for Systemically Important Payment Systems*. These principles establish international standards for the design and operation of payment systems and help central banks to establish and assess the legal, regulatory and operational frameworks for the safe and efficient functioning of their national payment and settlement systems.

Payment Types

Payment systems are categorized as high- or low-value. High-value payment systems are the most important in terms of liquidity and systemic risk due to the large value and time-sensitive nature of the payments. They are used mainly for financial and commercial funds transfers and are referred to as real-time gross settlement (RTGS) systems because transactions are settled irrevocably in real-time, on a gross basis. RTGS payment systems are owned and operated by a country's central bank. They reduce risk in interbank electronic funds transfers because the completion of the payment requires financial institutions to have sufficient funds in their reserve accounts held at the central bank at the time the payment is executed. For point of reference, the Fedwire system, established decades ago, is the RTGS system owned and operated by the United States' Federal Reserve. The central banks in many Latin American countries have implemented RTGS systems.

The central banks of Argentina, Brazil and Chile also authorized the establishment of private sector high-value payment systems to complement their respective RTGS systems. Today there are three high-value private sector payment systems in Latin America: Interbanking in Argentina (1998), Câmara Interbancária de Pagamentos (CIP-Sitraf) in Brazil (2002) and Combanc in Chile (2005). All three are modeled on the Clearing House Interbank Payments System (CHIPS) developed in the U.S. in the 1970's and which is a complement and alternative to the Fedwire system. These private sector high-value payment systems, also regulated by the central banks, operate in real-time and use pre-funding, bilateral and multilateral netting, allowing banks to better manage their liquidity costs. At the end of each day, final positions are settled through participants' accounts at their respective central banks using the RTGS system.

These private sector high-value payment systems also allow banks to offer a range of payment services which may fall outside what is available or practical through a particular central bank's RTGS system. For example, when Argentina's national tax authority (Administración Federal de Ingresos Públicos - AFIP) made electronic tax payments mandatory for large companies in 2005, Interbanking became the primary channel through which companies make national electronic tax payments. Today, electronic tax payments made via Interbanking represent around 80% of the value of AFIP taxes collected by the Argentine government.

Electronic Revolution

Check volumes in many Latin American countries declined over the past five years due to the availability of new electronic payment systems, but checks remain a predominant payment instrument for companies and consumers. However, most Latin American countries have moved from manual to electronic check clearinghouses. In these newer systems, checks are electronically transmitted to the check clearinghouse so that clearing totals can be calculated, netted and settled among participating banks much sooner than in the past. The physical exchange of checks between banks takes place daily in parallel with or after the electronic clearing.

Electronic check clearing means that clearing times in many countries have fallen from three or more days to just one or two days. Consequently, companies and consumers can now utilize funds faster. Mexico and Argentina have also adopted the electronic capture and exchange of check images, allowing physical checks to be truncated or retained at the bank of deposit. Check imaging also creates an opportunity for banks to offer companies new cash management products.

Besides checks, other low-value payment systems typically include an automated clearinghouse for interbank electronic credit transfers and direct debits. In Latin America, these are commonly referred to as ACH systems (*cámaras de compensación automatizadas*), named after the Automated Clearing House (ACH) launched in the U.S. by the National Automated Clearinghouse Association (NACHA) in the 1970s. ACH systems process ACH credits (*créditos directos*) and/or ACH debits (*debitos directos* or *domiciliaciones*).

In contrast to RTGS systems, ACH and other low-value payment systems like checks, typically operate on a deferred net settlement (DNS) basis and process large numbers of transactions in batches. Net positions are settled daily via participants' accounts maintained at central banks using each country's respective RTGS system.

In most countries in the region, the automated clearinghouses (ACHs) are authorized and regulated by central banks but are privately owned and operated. The exceptions are Costa Rica, Colombia, Ecuador and Venezuela, where central banks own and operate the country's ACH system. In Colombia, there is a second system, ACH Colombia, owned and operated by the Colombian banks. Nevertheless, most countries in the region have adopted the standard NACHA format for ACH transactions which will facilitate regional payment system integration in the future.

Electronic Payments: ACH Systems in Latin America

Country	Year Automated Clearinghouse (ACH) System Operational
Argentina	2002
Bolivia	2006
Brazil	*
Chile	1999
Colombia	1999
Costa Rica	2001
Ecuador	2002
Guatemala	2008
Honduras	2007
Mexico	1996
Panama	1998
Peru	2001
Venezuela	2007

* Author's note: Brazil uses a unique system that includes DOCs and Bloquetos

Source: NLRussell Associates

Use of ACH systems established in Latin America during the late 1990s and early part of this decade got off to a slow start. Momentum was stalled by a variety of factors including in-country or regional financial crises, absence of legislation governing electronic payments, cultural issues, resistance on the part of some banks to promote the ACH, and/or lack of interest on the part of companies and governments accustomed to paying vendors and employees by check.

However, during the past five years countries such as Argentina, Chile, Colombia, Costa Rica, Ecuador, Mexico and Panamá are seeing significant growth in the number and value of ACH credit transfers, indicating a more positive trend and acceptance among governments and companies to migrate from checks to electronic payments. In some countries, government initatives have contributed to this growth. For example, in 2003 and 2004 the Ecuadorian government established a policy requiring that all public sector vendor and salary payments be made electronically, using Ecuador's ACH system (*Sistema de Pagos Interbancarios* – SPI). In 2007, the government of Panama, working with Panama's banks, undertook an initiative to move more than 200,000 public sector employees to electronic salary payments, using the privately-operated ACH *Directo* system. Use of electronic payments not only reduces costs but can expand the number of individuals participating in the banking system when previously “unbanked” employees open checking or savings accounts to receive salary payments.

Driving Growth

Electronic payments are not only more efficient, but the cost to process such transactions is lower than the costs associated with issuing, clearing and collecting checks. The region’s public and private sectors must continue to play a major role in increasing the use of electronic payments:

- Federal, state or provincial governments should be major drivers and users of the ACH systems. They can require companies to make tax payments electronically and can pay public sector employees, retirees and vendors electronically.
- Public and private sector companies should pay vendors and employees electronically. When employees do not maintain bank accounts, banks offer payroll cards for employees to withdraw wages at automated teller machines.
- Entities such as insurance, telephone, electric and water companies, which serve thousands or millions of consumers, should utilize electronic collections methods including pre-authorized debits whenever possible. The new ACH interbank direct debit systems make it more efficient for companies to collect from consumers, regardless of which bank a consumer uses.
- Banks should offer enhanced cash management services for companies to transition smoothly from checks to electronic payments. Banks need to consider how they will capture and transmit remittance details with each electronic payment, and provide timely and automated information on return items – features important to companies. Pricing schemes for electronic payments need to be designed to stimulate and accelerate the migration from checks to electronic methods.

Conclusion

The past decade has seen great progress and many positive changes in the modernization of payment systems in Latin America. The region’s central banks have taken a leadership role in the adoption of international standards for payment system operation, regulation and governance. Now it is up to the banks, companies and the public sector to identify and implement more programs and incentives to increase the usage of these new electronic payment systems and reduce costs. ■

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About the Author

NLRussell Associates (NLR) is an international cash and treasury management consulting firm that specializes in working with companies and banks that have operations in Latin America and/or the United States. The company was founded in 1999 by Nancy Russell with the objective of providing clients with a unique and specialized consultancy.

Prior to 1999, Ms. Russell worked at BankBoston where she served as Division Executive, Global Cash Management Sales and Regional Director, Latin American Cash Management from 1991 through 1998. She also held senior management positions at Mellon Bank and Chase Manhattan Bank.

Ms. Russell has been working in the Latin American region since 1994 and continues to travel and work in countries throughout the region. She is a recognized expert in banking and cash management systems in Latin America and is fluent in Spanish.

NLR clients include some of Latin America’s largest and most prestigious local and international banks as well as companies operating in Latin America.

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