

FINANCIAL SERVICES

TRENDS IN PAYMENT INSTRUMENTS 2017



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In collaboration with



Afi



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INTRODUCTION

The power of technological innovation and regulation to set the pace in the world of payments is reaching extraordinary levels. These two main causes of disruption in payments may turn out to be threats or opportunities for participants in the sector. Competition increases daily, with the entry of new players which until recently belonged to other sectors, or simply new native digital players which have identified spaces not yet covered by the traditional providers of payment services.

Today, the discernment of long-term trends is a highly uncertain exercise due essentially to the speed of the changes inherent, or related, to the ongoing digital transformation, with its apparently unending expansion of the boundaries of possibility. In this context, it is necessary for payment service users, faced with a diverse and growing range of options, to show a similar dynamism in the adoption of new services. The usability of new payment solutions is the subject of a good part of the providers' efforts in innovation, along with the handling of the transition from analogical to digital, from "old" to "new", from physical to virtual, and the coexistence of the two.

Latin America is making solid progress in recognising the emerging fintech ecosystem, to the point where Mexico could soon become the first country in the Americas to adopt specific regulations for the sector. In Europe, payments obviously figure as a cross-cutting element in all the various EU strategies for optimising the benefits of the digital transformation in all its aspects. This is because a common activity such as payments cuts across economic sectors, socio-economic groups, regions, etc.

In Spain, many of the usual indicators are recovering their pre-crisis levels. In Latin America, transactions declined by 3% in 2016, though this was due basically to the weakness of its currencies against the US dollar, the currency in which this Report's figures are presented. Paper-based payment instruments (cash and cheques) maintained their falling trend, though the cheque remains the second-ranked means of payment by value of transactions in Latin America, despite its generalised decline, at varying rates, in all markets. Electronic transfers maintain their leadership by value in the universe of retail payment instruments, driven by the gradual incorporation of all types of instant payments in many of the markets covered by the Report. Meanwhile, cards consolidated their unchallenged lead in terms of the number of retail payments. Thus, one of the aspects differentiating Spain from Latin America is the use of direct debits, which account for one out of every four payments in Spain but are hardly used in Latin America, with no sign of change in this respect.

Despite renewed efforts to reduce the dependence on cash, with varying intensity in each country, cash payments continue to increase. Cash is the only payment instrument available to a good part of the Latin American population (the unbanked) and for a sizeable segment of the population in Spain, which is almost fully banked. For a variety of reasons (insecurity, unfamiliarity, financial and digital literacy), they show a preference for cash that helps to explain why access to non-cash payment instruments is not comparable to their use (the former being much higher), nor to their effective acceptance.

For yet another year, it is the banked segment of the population that helps us to understand and provides perspective, from the demand viewpoint, on some of the aspects of payments that currently present challenges. In this, the seventh edition of the INDRA TecnoCom Report on Trends in Payment Instruments, answers can be found to questions such as: how is the transition from physical to virtual payments progressing? Are there barriers to the use of payment cards? How may conversion rates to remote payments be affected by the requirement for stronger authentication? How do payment service users see the role of the new technological players? How prepared are banking customers to provide personal data?

01. HIGHLIGHTS OF THE 2017 REPORT



1. HIGHLIGHTS OF THE 2017 REPORT

After a giddy 2016, which saw the market invaded by innovative transformational solutions (P2P mobile payments and instant payments between accounts), the prevailing view of 2017 is that we have not witnessed any specific disruptive innovations in any of the markets covered by this report. The expectations for 2018 mean that this year may be considered a “year of transition” and of the gestation of legal and regulatory solutions and changes that will emerge subsequently.

In 2018, we do expect disruptive solutions as a consequence of the new rules. By then these will be fully in force both in Europe (PSD2) and foreseeably in Mexico (Fintech Law), Chile (authorisation of “open” prepayment) and Colombia (with the authorisation of several SEDPEs), though it is too soon to be certain what form they will take, how successful they will be and how quickly they will be adopted.

Also in 2017, the most popular cash dispensing network (the ATM) celebrated its 50th anniversary and, in the case of Spain, the “decline” and eventual demise of the bank cheque has been the subject of discussion in the media. Cryptocurrencies, though not recognised as currency by many authorities, also continue to grow in significance, liquidity and, in some markets subject to capital controls, in use.

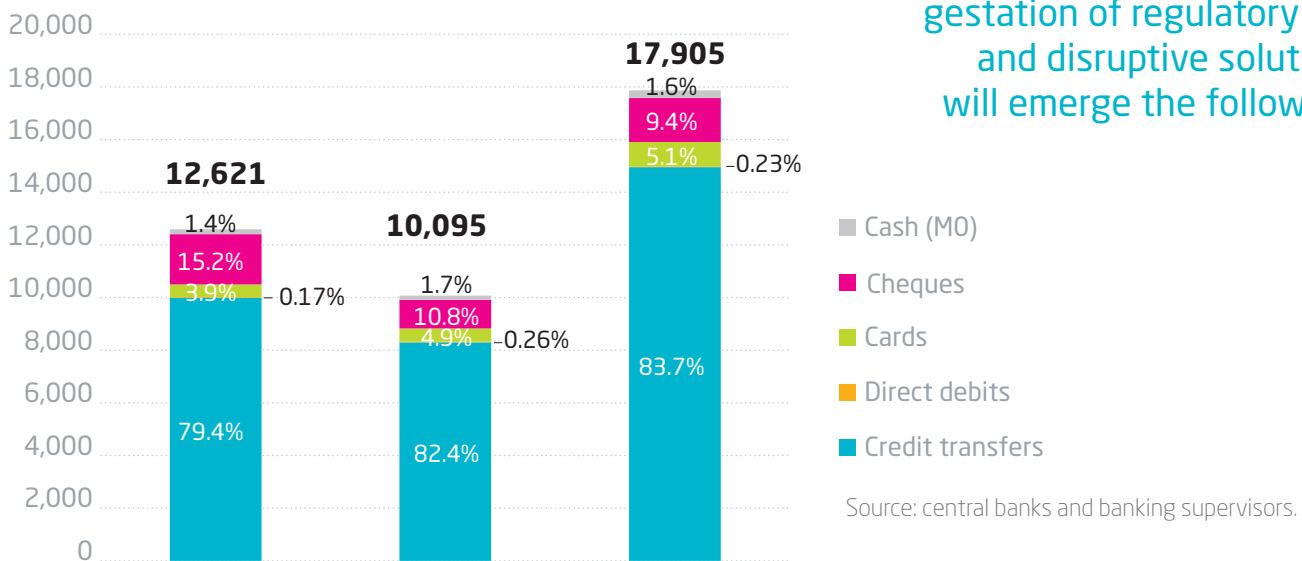
From a regulatory perspective, the last months of 2016 and the year 2017 have been marked by the regulatory changes required for PSD2 to come into operation in January 2018. As we go to press, the European Banking Authority (EBA) is carrying out consultations regarding certain regulatory technical standards. Something similar occurred when last year’s edition was going to press, when the European Payments Council (EPC) was approving the technical processing standards (Rulebook) for the SEPA Instant Credit Transfer (SCT Inst) Scheme. Pending its inauguration in November 2017, it may be joined on a voluntary basis by those SEPA countries which have a “basic” solution which is developed and “connectable”, as is the case of Spain. Meanwhile, in June the European Central Bank (ECB) announced the development of a service for the settlement of instant payments in TARGET (TIPS), with operations expected to be launched in November 2018.

Efforts continue in Latin America to make access to and use of electronic payment instruments universal among the population, as the authorities are convinced that the gradual elimination of the dependence on cash will benefit society as a whole, and that this requires decisive active policies. Interoperability and the creation of standards for retail payment solutions, conditions which are necessary to enable the establishment of universal payment ecosystems at the country level, have yet to be addressed.

The performance of retail payment instruments continues to vary between countries. In Latin America, transactions declined by 3% in 2016, though this was due basically to the weakness of its currencies against the US dollar (see [Chart I](#)), the currency in which this chapter's figures are presented, using the year-end exchange rate for each year covered. The use of paper-based payment instruments (cash and cheques) maintained its falling trend, though the cheque remains the second-ranked means of payment by value of transactions, despite its generalised decline in all markets, though at varying rates. Electronic transfers maintain their leadership by value in the universe of retail

payment instruments, as interbank transfers accounted for 82.4% of all transactions by value in 2016 in Latin America. This position was supported by innovations in faster payments, as in the cases of Mexico (SPEI) and the Dominican Republic (Pagos Instantáneos), the effects of which are included in the Report for the first time. Direct interbank debits in Latin America accounted for only 0.26% by value.

Chart I. Value of payment transactions in Latin America between 2011 and 2016 by instrument (USD billions)



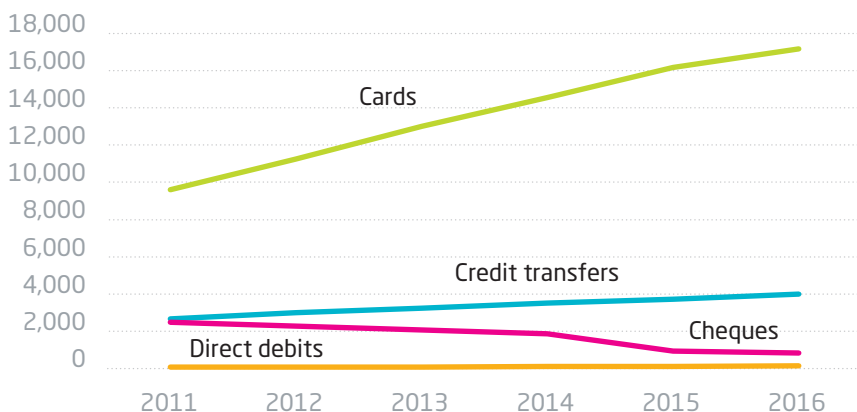
2017 may be considered a year of transition and of the gestation of regulatory changes and disruptive solutions that will emerge the following year.

Note: Low-value instant transfers in Mexico (SPEI) and instant payments in the Dominican Republic are included for the first time. * 2011 exchange rate

By number of transactions, card payments are in the lead (with 77.6%), as can be seen in [Chart II](#). The number of cheque transactions continues to decline, to 3.7% of the total in 2016, from 16.8% in 2011. This is the result of their gradual replacement by electronic transfers as the second most used payment instrument (18.1%) and, to a much

lesser extent, direct interbank debits (0.6%). These continue to grow very slowly in a good many of the countries, and it seems likely that their performance will stagnate in the near future.

Chart II: Number of payment transactions in Latin America, 2011-2016 (millions)



Efforts continue in Latin America to make access to and use of electronic payment instruments universal.

Source: central banks and banking supervisors.

01. Highlights of the 2017 Report

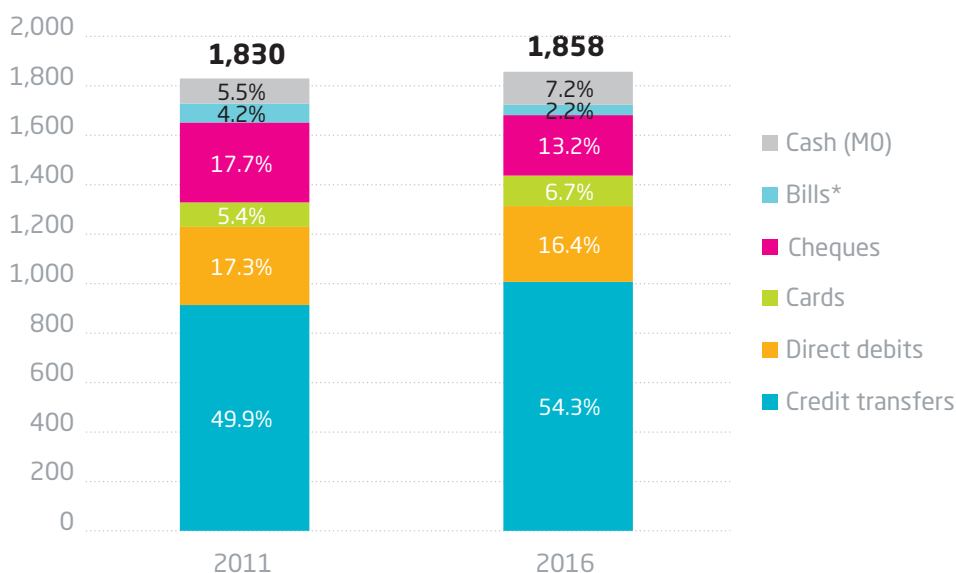
In Spain, meanwhile, many of the usual indicators are recovering their pre-crisis levels. This is also visible in the data for Portugal, with greater dynamism. Interbank transfers are in first place in terms of value (54.3%), as shown in [Chart III](#), while direct debits account for 16.4% and card payments 6.7%.

By number of transactions, cards show a growth trend, and now account for 63.7% of the total ([Chart IV](#)), followed by direct debits, with 24.9% of low-value electronic transactions, though their share has fallen from the 29.7% recorded in 2011. Credit transfers and card payments are the only instruments that rose in number in the 2011-2016 period.

Despite renewed efforts to reduce the dependence on cash payments, with varying levels of intensity in each country, its use has continued to grow in recent years, especially in Mexico (16.0%), while in Peru and the Dominican Republic, where its use is particularly common, growth has been slower, at 4.4% and 5.8% respectively.

In Spain, the use of cash rose by 0.9% in 2016. Notes and coins in circulation stood at EUR 130,414 million, equivalent to 11.5% of GDP, two percentage points (pp) higher than in 2011. Another indicator of the use of cash is the value of withdrawals from ATMs, which reached EUR 118,275 million in 2016, a 3.1% increase on 2015.

Chart III. Value of payment transactions in Spain by instrument in 2011 and 2016 (EUR billion)

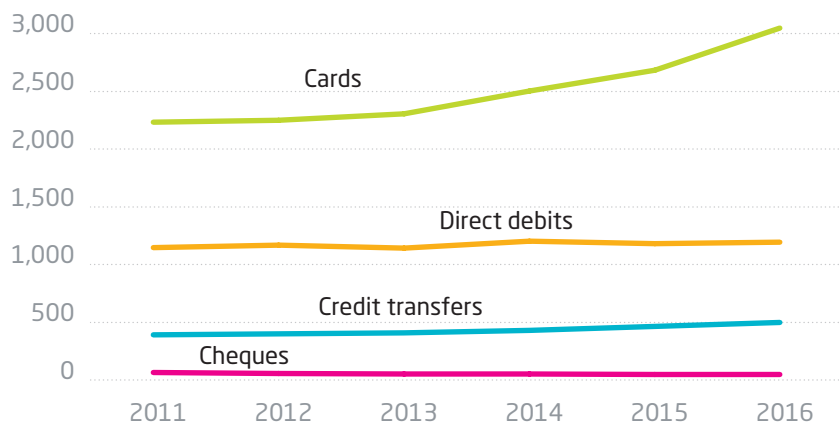


Source: Bank of Spain.

* Bills are credit notes that can be collected (if due) or must be paid (if drawn) at maturity

Despite the efforts to reduce the dependence on cash, its use has continued to grow.

Chart IV: Number of payment transactions in Spain by instrument in 2011 and 2016 (million transactions)



Source: Afi, based on Bank of Spain data

By number of transactions, cards show a rising trend, reaching 63.7% of the total.

The breakdown of bank payment cards varies between countries, with debit cards predominating in all except Spain in 2016 (Table I). In Mexico, from the peak of 5 debit cards for every credit card in 2015, the ratio fell to 4.4:1, while in the other Latin American markets it remains at around 2:1.

Debit cards predominate in every country except Spain.

Table I Number of credit and debit cards in circulation, 2016

	Debit cards	Credit cards	Total
Brazil	318,393,632	148,868,215	467,261,8476
Chile*	21,154,499	12,994,934	34,149,433
Colombia	25,176,567	14,933,713	40,110,280
Mexico*	136,714,377	31,226,708	176,941,085
Peru	15,419,939	8,224,214	23,644,153
Dominican Republic	3,898,940	2,460,763	6,359,703
Spain	25,760,000	48,750,000	74,510,000
Portugal	14,056,221	6,043,522	20,099,743

Source: Afi, central banks and banking supervisors.

*Does not include credit cards of retail establishments.

Chile continues to lead the compound annual growth for both credit cards (up 18%) and debit cards (9.9%), closely followed in the latter by Mexico (9.8%) and Colombia (9.7%). Credit card growth in 2016 was led by Spain, where the total in issue rose by 8.8%; growth has been positive since 2012, which saw the reversal of the declining trend begun in 2007. In Brazil, credit cards declined by 8.6%; together with Portugal, it was the only country to see negative growth over the 2011-16 period, being more pronounced in the latter case.

With regard to the relationship between the number of cards in issue and the size of the population, the ratio for debit cards remained stable in all markets except Colombia and the Dominican Republic, where it increased in 2016. The most significant falls in this indicator were recorded in Mexico (down 4.8%) and Peru (7.2%).

Spain continues on the path of economic growth, and the associated growth in consumption. The change in the trend of the number of cards in issue has consolidated, as shown by the increase of 4.6 million cards in 2016, which took the total in issue to 74.5 million, returning to the level last seen in 2009, but still 2.2 million below the 2008 peak. However, 5 million debit cards were replaced by credit cards. This 6.6% year-on-year rise in the number of cards in issue in Spain was reflected in the number of cards per thousand inhabitants with regard to both debit cards, which have arrested the decline seen since data began to be collected for this Report and, particularly, in the case of credit cards. Debit cards, far below the 31.6 million in issue in 2008, rose by 2.6% in 2016. The change in the trend which began in 2015 was certainly maintained in 2016.

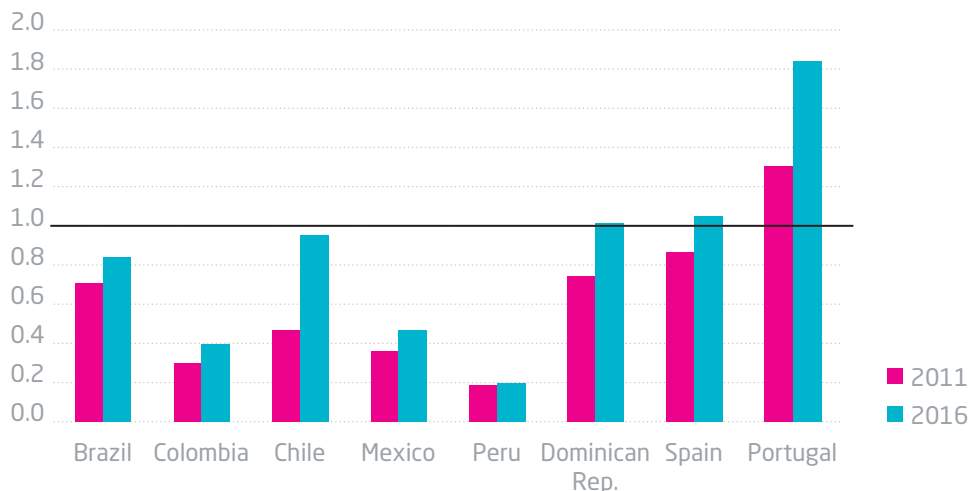
With regard to the frequency with which holders use their payment cards (both payments and withdrawals), Chile and Spain stand out as the most dynamic countries in 2016: for debit cards, these countries recorded growth of 24.0% and 22.7% respectively in the number of operations. In credit cards, Chile undoubtedly remains the most dynamic

market, with growth of 22.4%. It is followed by Colombia (12.7% in credit cards, 10.3% in debit), Peru (11.8% and 17.9% respectively) and the Dominican Republic (11.3% and 10.4%). The last places are occupied by Brazil (4.5%, 6.2%), Mexico in debit (6.9%) and Spain in credit (7.0%).

The use of payment cards at points of sale in Spain (publicly available data does not distinguish between debit and credit cards) increased considerably in 2016, with growth of 13.5% in the number of transactions, almost double the rate in 2014 (7.2%). By value, 2016 growth was 9.8%; these transactions now consistently exceed the value of ATM withdrawals using cards. The ratio of the value of card payments to withdrawals in Spain exceeded 1:1 in March 2016 and stood at 1.1:1 at year-end, still far below the ratio of 1.8:1 in Portugal, which exceeded 1:1 in 2009. The ratio in Chile and the Dominican Republic is close to 1:1. Peru continues to have the lowest ratio, with little change over the past five years.

Chile and Spain were the most dynamic countries with regard to the frequency of use of payment cards (both payments and withdrawals).

Chart V: Ratio of value of POS card transactions to ATM (cash withdrawals) in the 2011-2016 period



Source: central banks and banking supervisors.
 POS: Point of sale terminal. ATM: cash dispenser

With regard to the average ticket of payments with debit and credit cards, it can be seen that in Latin America the behaviour for debit cards is fairly uniform, with an average of USD 24 in the cases of Chile, Mexico, Peru and the Dominican Republic. The exception is Colombia, with an average spend of USD 40. Behaviour with credit cards is more variable. The average ticket is USD 55, but Peru with USD 88, Colombia (USD 85) and Chile (USD 75) are well above this figure, while Mexico (USD 46) and the Dominican Republic (USD 54) are much closer and slightly below it.

In Latin America, the frequency of card use for payments is different for debit and credit cards; unlike Spain and Portugal, official data distinguishes between types of transaction (purchases and cash withdrawals). In debit cards, the highest frequency of use is found in Chile, with 35 transactions per card per year, followed by Brazil with 22. The figures for Colombia, the Dominican Republic, Mexico and Peru are all in the 10-12 range.

For credit card use, the countries fall into three main groupings. The highest frequencies are recorded in Brazil and the Dominican Republic, with around 40 transactions per card per year. Meanwhile, Mexico (26) and Chile (20) fall into the range of 20-25 transactions per card per year. Colombia is in last place with 12.

In Spain, the use of the debit cards (without distinguishing between payments and withdrawals) is slightly more than 80 transactions per card per year.

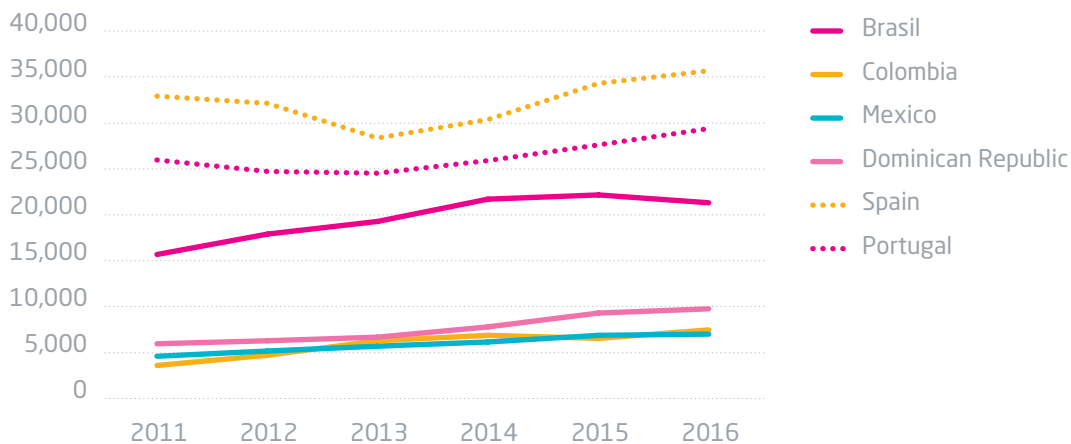
The ease of financing consumption with credit cards shows that Latin America continues to be more dynamic than Spain. Nevertheless, in 2016 growth in Spain was in double figures for the first time ever at 22.0%, though it should be clarified that the figure includes transactions with single-use credit cards even though they have an interest rate of zero, as stipulated in Bank of Spain Circular 1/2010¹. All the countries in the region have higher ratios of lending to GDP than Spain, notably Colombia (5.3%), Peru (3.3%) and Brazil (3.0%) with high use of credit cards to finance consumer spending, in relative terms.

The growth of ATM and POS networks in Latin America has varied significantly between countries over the past five years. In Brazil and Chile, the ATM networks shrank by 3.4% and 3.1% respectively in 2016. In Portugal, the decline was 3.2%, while Spain returned to modest growth (0.2%), stemming the continuous fall since 2008, leaving the stock of ATMs at 81% of its pre-crisis size. The highlight is undoubtedly the exceptional growth in Peru, with a very respectable 10.1% increase in ATMs, which was nevertheless much smaller than in 2015 (122.5%). Analysis of POS networks shows that countries fall into two major categories, as can be seen in Chart VI: the Dominican Republic, Colombia and Mexico with less than 10,000 POS per million inhabitants; Brazil, Spain and Portugal with over 20,000 POS (35,000 in the case of Spain).

Colombia, Peru and Brazil are the markets in which consumption is most likely to be financed with credit cards, relative to GDP.

¹ However, data published by the Spanish National Association of Financial Credit Institutions (ASNEF in Spanish) on consumer finance transactions with cards shows more modest growth (5.5% in the case of revolving cards and 1.2% for non-revolving cards).

Chart VI: Number of POS terminals per million inhabitants in 2011-2016



Source: central banks and banking supervisors. Data unavailable for Chile and Peru

With regard to non-bank correspondents, in our previous edition Peru led the ranking for the number of correspondents per thousand inhabitants, but in 2016 it widened its lead with more than 3 correspondents per thousand inhabitants. Colombia maintained the second place to which it fell in 2015, with almost 2 correspondents per thousand inhabitants; Brazil was once again in third position, after decades of undisputed leadership in this access indicator. The Dominican Republic maintains its lead over Mexico, which brings up the rear with timid growth.

As we have seen in this Report, the electronic retail trade in Latin America has undergone exponential growth in the past five years, with the value of sales through this channel almost tripling (USD 40,000 million in 2016 vs USD 18,000 million in 2011). Total sales in Mexico, less affected in 2016 by the depreciation of its currency, stood at USD 13,700 million, exceeding those in Brazil (USD 12,900 million). Colombia took third place with USD 6,700 million, followed by Chile and Peru, each with USD 2,800 million. The Dominican Republic chalked up USD 840 million, continuing to lag behind.

Meanwhile in Spain, electronic retailing has almost tripled its sales since 2011. This behaviour was confirmed by figures published by the National Commission for Markets and Competition (CNMC) for internet purchases made using credit or debit cards in 2016: 365 million electronic commerce transactions were recorded, a 30% increase on 2015, representing a turnover of USD 24 billion, 20.8% up on 2015.

This Report's in-depth study focusses on the challenges that innovation and the digital transformation pose for the financial sector in general and for the payments industry in particular. Digitalisation is causing the creation of an ecosystem with an ill-defined perimeter, which payment services providers, both traditional and new, are traversing at varying speeds, from different starting points and with diverse degrees of freedom, depending on their nature and legacies. Even central banks have joined this global digital transformation trend, and are assessing the possibility of issuing digital money (e-cash).

Rates of progress are determined both by external trends - technological advances, regulatory pressures and the unprecedented intensification of competition - and by internal factors, both those of the industry as a whole and each institution's strategy, in which decisions regarding legacy infrastructure weigh heavily. The fact is that in the world of payments, the back office, clearing and settlement systems and the rules (both regulations and industry agreements) that shape interbank relationships are fundamental elements of the various payment systems and ecosystems that make them possible.

In this context, the two main variables causing disruption in payments - regulation and innovation - may turn out to be threats or opportunities for agents both traditional and new, as shown in [Chart VII](#).

Mexico overtook Brazil in electronic commerce turnover in 2016.

Chart VII: Factors causing disruption in payment instruments



Source: Afi.

Today it is impossible to predict how the innovations in payments, together with the increase in competitive pressure resulting from regulatory initiatives and the entry of new competitors, will give rise to solutions that substantially change how we pay for things on a daily basis. It is even more difficult to foresee which solution will achieve generalised acceptance and hence what PSP agents or types of agents will consolidate their positions in the new context.

As in the previous edition, the final part of the Report analyses the behaviour and perceptions of the banked population. Many of the issues addressed have been revised to throw light on and provide perspective on the current challenges of the payments sector. Chief among these are the switch from physical to virtual payments, obstacles to the use of cards, stronger authentication in remote payments, the role of the new technological players and the willingness of bank customers to provide personal data in exchange for advantages.

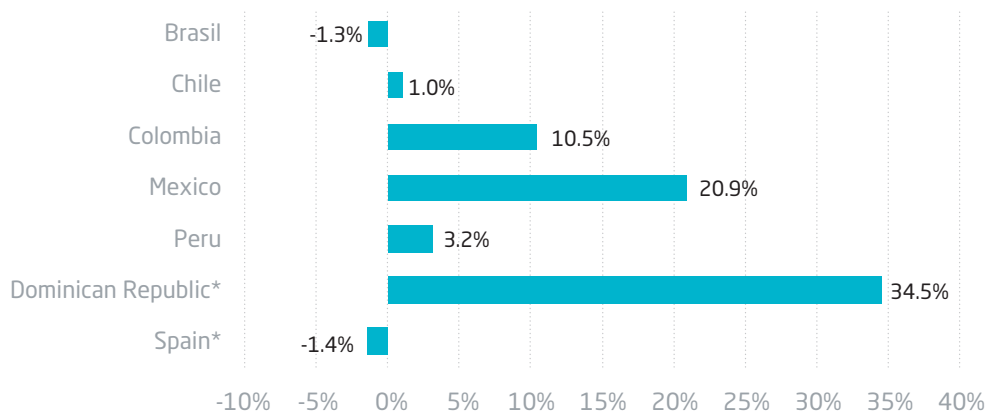
With regard to the penetration of cards, changes are occurring in some countries, while other remain very stable (Chart VIII). The strongest growth has occurred in the Dominican Republic (34.5%), followed by Mexico and Colombia (20.9% and 10.5% respectively), while the other countries do not show significant changes: in Spain, penetration remains stable and in Brazil and Chile it has fallen compared to 2016.

Comparison of these results to those in chapter 4 suggests that the growth in the number of cards seen in some countries, such as Spain, is occurring mainly among bank customers who already have cards, with no increase in the percentage of customers holding cards. In Brazil, it can be deduced that customers are giving up credit cards.

The overall comparative analysis of paper-based payments instruments (cash and cheques) versus electronic instruments (cards, transfers, direct debits) highlights increased equivalence between the two modes in terms of monthly use, while in some countries electronic payments now predominate (Chart IX). This is the case in Spain, where it can be seen that direct debits make a major contribution to the predominance of electronic payment over paper-based. However, there are five countries in which cash accounts for the largest amount of spending. In Mexico, as in Spain, the opposite is true, as cards are the main instrument of payment.

Chart VIII. Annual increase in card-holders in the banked population 2016-2017

Annual increase in card-holding (Debit, Credit, ATM and multiple use prepaid) 2016-2017

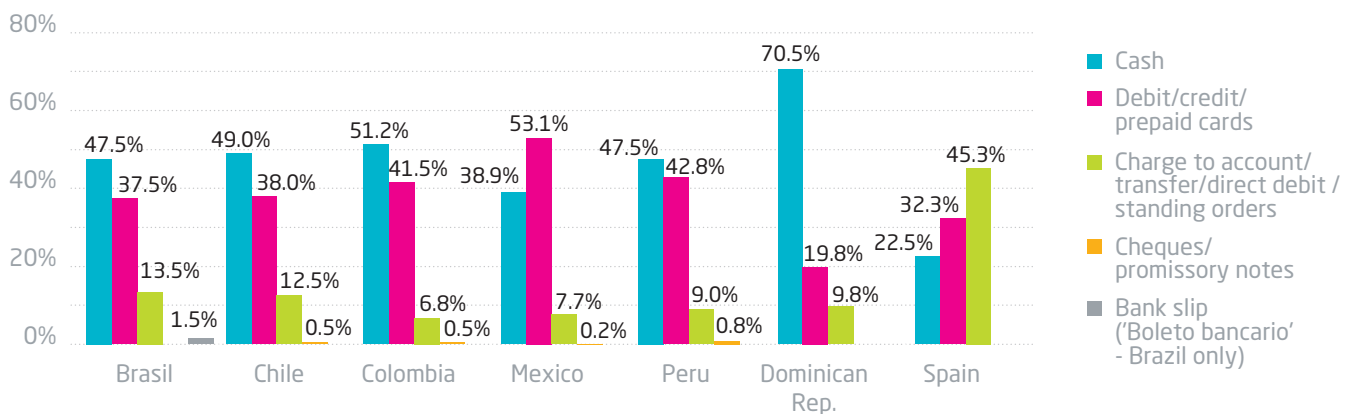


Source: prepared by Tecnomcom based on research.

n: Banked population

*: Excluding ATM cards in Dominican Republic and Spain

Chart IX. Instrument with which largest part of spending was paid in the last month - Banked population - (2017)



Source: prepared by Afi based on research.

n: Total banked population per country (400)

The strongest growth in card-holding is in the Dominican Republic and Mexico.

01. Highlights of the 2017 Report

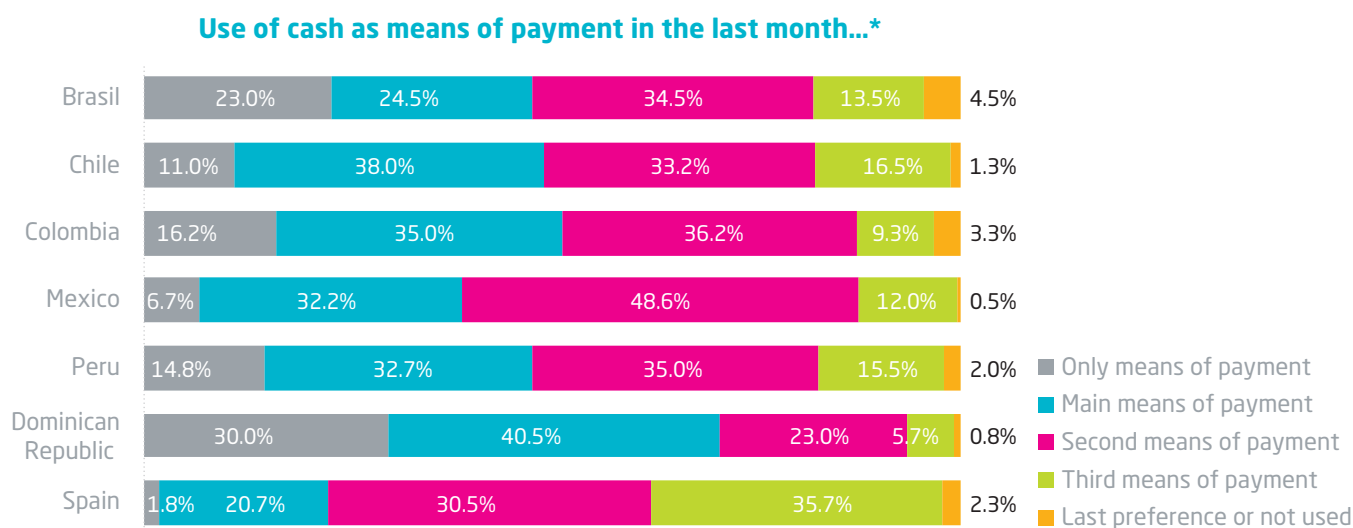
Consistent with the low availability of payment cards, the Dominicans make the greatest use of cash (Chart X), whether as their only means of payment (30.0%) or as the main one (40.5%). Next in this ranking are Colombia (51.2% use it as their main or only means of payment) and Chile (49%). Spain is the country where cash has fallen into relative disuse for monthly payments, though 22.5% of bank customers state that it is their main means of payment.

Regarding the use of cards to make payments, holders have a widespread perception that retailers and shopping channels impose barriers, though this perception varies depending on the country and the type of barrier. Retailers that refuse to accept payment by card is a restriction experienced at least sometimes by a majority of users, except in Brazil. Restrictions are most frequent in Mexico and the

Dominican Republic, where over one third state that this situation arises always or at least quite often (35.8% and 33.4% respectively). These are followed by Colombia and Peru, where one out of four users encounter this restriction with a similar high frequency (28.8% and 25.4% respectively). Spain is the market that has made most progress in eliminating these restrictions, though users continue to find difficulty in making small purchases with cards (74.8% of card-holders have this perception).

The foregoing reveals the existence of considerable room for improvement to stimulate the use of cards as a form of payment in many of the countries, through initiatives aimed at retailers.

Chart X. Use of means of payment in the last month: cash. Banked population (2017)



Source: prepared by Afi based on research.

n: Total banked population per country (400)

* The last month means the month immediately preceding that of the fieldwork (see technical annex).

With regard to the level of technological equipment, there has been notable growth in the availability of personal computers (laptop or desktop) in Colombia, Peru and the Dominican Republic, while in Spain there is a lower level of availability of such equipment among the banked population. Smartphone availability is growing significantly in Brazil, Chile, Colombia and Mexico, as is tablet availability in all the countries studied. Over 85% of the banked population use the internet every day, a percentage that has grown significantly in Spain, Peru and the Dominican Republic.

Regarding the proportion of online shoppers among the banked population using internet, a fall in online shopping can be seen in Brazil (a fall of 23.4%), Chile (19.4%) and Spain (14.4%). This shows that online shopping is not growing in line with the improvement in internet access. A contrary situation is seen in Mexico, Colombia and the Dominican Republic, which maintain the ratio of shoppers to internet users observed in 2016. Peru is the only country where online shopping has grown faster than expected, exceeding the growth in equipment availability and internet access.

As for the frequency of online shopping, Mexico, the Dominican Republic and Brazil maintain the patterns seen in 2016, while weekly and one-off purchases have increased in Colombia and the frequency has declined in Spain, Peru and Chile. There is no single pattern in the trends in online shopping, rather in each country they are a function of social and demographic variables (age, educational level, socioeconomic level, place of residence), access to technological equipment and means of payment.

The experience of banked online shoppers with the different two-factor authentication systems and their attitude to these security measures is analysed in this Report, in view of its relevance to remote transaction payments. In every country, the most common security measure is the use of text/SMS messages with a specific code. This is especially the case in Spain (90.3%) and Peru (85.6%), while in the other countries use levels vary between 63.6% in Brazil and 75.8% in Mexico.

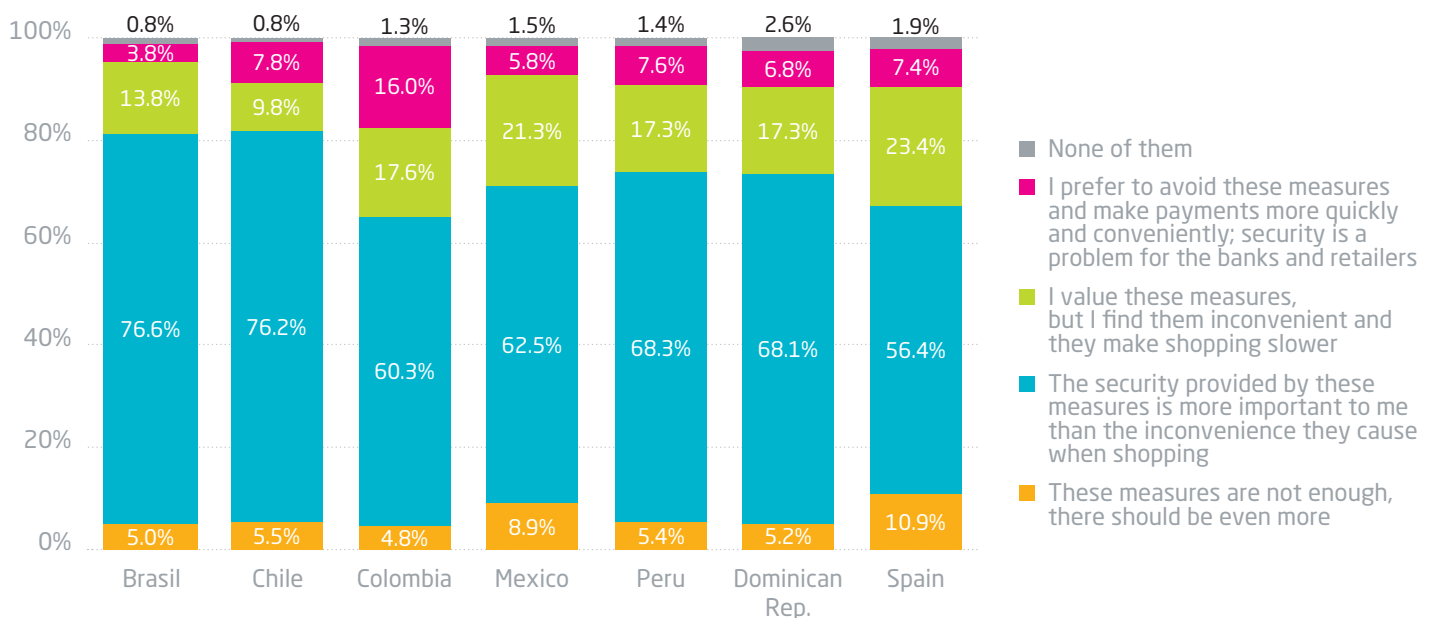
The second most used security feature for online purchases is the token. In Mexico, Peru, Brazil and Colombia, one out of two online shoppers have used this system, while in Chile and the Dominican Republic significantly fewer shoppers (one out of three) have experienced it, though not as few as in Spain, where the token is even less common (18.7%).

The coordinates card is well established in Spain and Chile (62.6% and 52.7% respectively), whereas only 18.6% of Colombians have used it. In the other countries, use levels range from 37.8% in Mexico to 28.9% in Peru and the Dominican Republic. Lastly, biometric authentication solutions (fingerprint or facial, iris or voice recognition) are the least common procedures, though in Brazil the use level is 27.6%, but it does not reach 15% in the other countries.

Online shoppers are more concerned with security than with the inconvenience of having to use these procedures (Chart XI): the great majority show high levels of tolerance and only a few state that they would prefer quicker and more convenient alternatives. Brazilians (76.6%) and Chileans (76.2%) place the highest value on security, while in Spain, Colombia and Mexico fewer, though still the majority, are in favour of security (56.4%, 60.3% and 62.5% respectively).

Online shoppers are more concerned with security than with the inconvenience of having to use stronger authentication procedures.

Chart XI Attitudes to security measures in online shopping among banked online shoppers (2017)



Source: prepared by Afi based on research.

n: Base: banked online shopping population.

The changes continually occurring in the finance sector, as a result of technological innovation and the new business models introduced by fintech companies and other tech players, pose a challenge to the traditional financial institutions. The development by the latter of more adapted and personalised financial products and services, including those relating to payments, depends to a large extent on access to and analysis of the personal data of bank customers. In order to discover clues to understanding the possibilities created by these changes and the attitudes of bank customers to the new digital propositions, we analyse the behaviour of the banked online shopping population when using certain types of digital activities and services.

Personal financial management services and, to a lesser extent, online payments and cash remittances between individuals are the activities with least penetration in all the countries, but their presence is nevertheless considerable and significant in terms of development. The experience and understanding of these propositions is still limited, meaning that there is ample room for improvement. Having said this, the countries which have the greatest development and use of advanced

online services (payments and cash remittances between individuals and financial management) are Chile (with 26.5% of bank customers), Mexico (23.9%) and Colombia (22.0%). Spanish customers are those that least use them (10.3%), followed by Brazilians (15.3%).

Analysis of the readiness of the banked population with experience of online shopping to consider the offerings of tech companies for the purchase of financial services and products indicates that in Latin America there is a good opinion of this aspect of the tech players, while in Spain this attitude is restricted to a minority.

In any case, there is little appetite for handing over personal data to tech companies or financial institutions in exchange for better conditions in products or services, and only a little more with regard to banks. Nevertheless, there is more readiness to share social media profiles than financial data, in which the banks are somewhat more favoured. In any case, the surrender of data requires advantages that are concrete, obvious and relevant if users are to be motivated.

