

Economic Watch

Mexico

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Economic Analysis

Financial Inclusion Unit

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Analyzing the potential development of mobile banking in Mexico

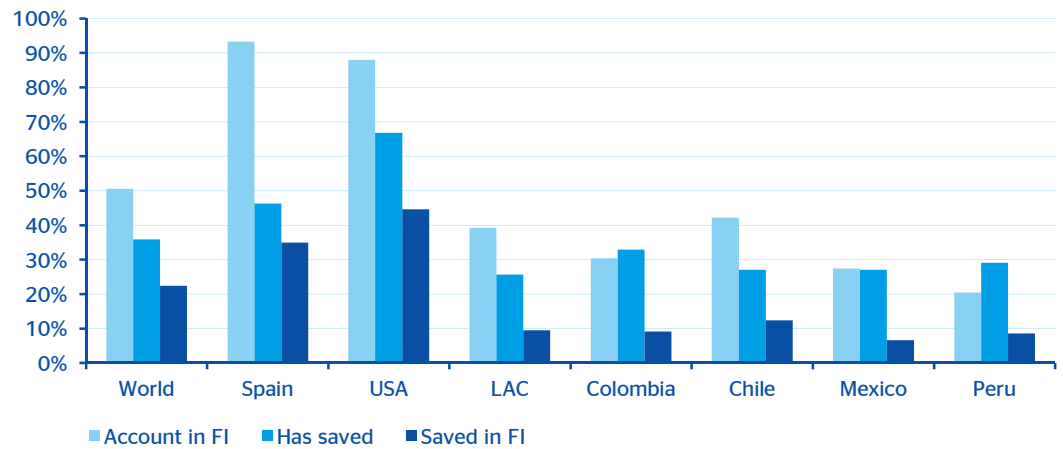
- **In 2011, 27.1% of Mexico's population made some kind of saving; however only 7% did so in financial institutions.** This highlights the limitations of the current supply of formal financial services in meeting demand.
- **Only 55% of municipalities in Mexico have at least one point of access to banking institutions** where people can make cash deposits and withdrawals.
- **In some rural areas, there are no banks**, since the volume of transactions may not compensate for the costs of opening and maintaining a branch. Therefore, other intermediaries such as popular savings banks (cajas) have met the demand for financial services in these areas.
- **The simplified accounts created as a result of mobile banking may contribute to closing this financial exclusion gap.** It is now possible to open a bank account without having to submit documentation, and with no need to maintain a minimum average balance, thanks to the option provided by the widespread availability of mobile telephony.
- **These strategies for financial inclusion may help to close the gap in potential demand for mobile banking, which we estimate to be as high as 40% of the population**, measured as the difference between the number of accounts today and cellphone ownership.

Financial inclusion in Mexico: an international comparison

The World Bank's Global Financial Inclusion Survey (Global Findex) of adults aged over 15 in 148 countries in 2011 serves as a means to monitor the effects of the financial inclusion policies, and provides an in-depth understanding of the way in which the population saves, borrows, makes payments and manages risks.

The figures supplied by this survey reveal that 50.5% of the world population over the age of 15 had an account with a financial institution (bank, credit union, cooperative) and 22% had arranged some form of savings with a financial institution (FI) in 2011. In contrast, in Mexico these percentages drop to 27.4% and 7%, respectively, lower than in Latin America and the Caribbean¹, where the respective percentages are 39.2% and 9.5%, as shown in the following chart:

Chart 1
Population with an account with a FI, with savings, and with savings in a FI, 2011



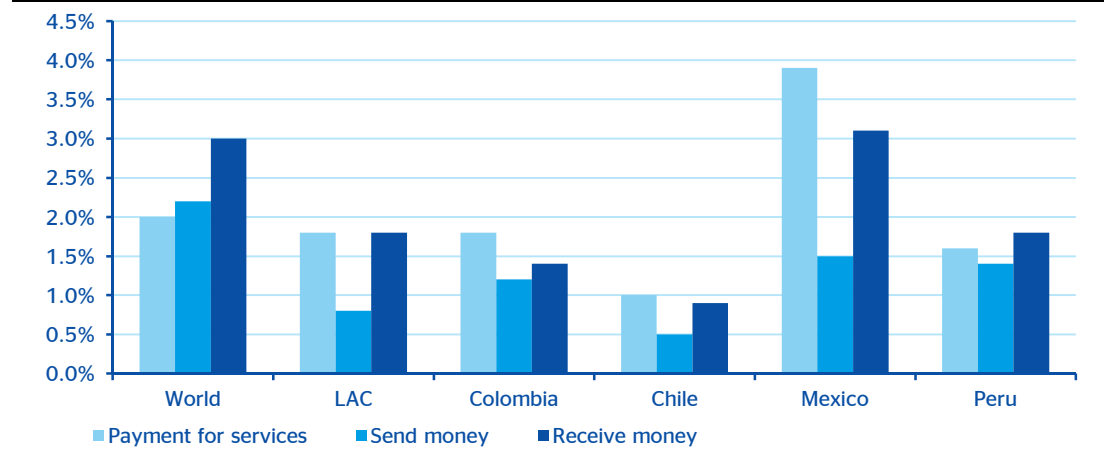
Source: BBVA Research with Global Findex 2011 data

Although only 7% of Mexicans surveyed answered that they had savings in a formal financial institution in the last year, 27.1% claimed to have monetary savings. This gap between savings and the percentage that is channeled to financial institutions shows that the lack of access to formal financial services in Mexico is not due to the absence of demand for those services, but rather to the inability of current supply to meet this demand². Regarding the population that has used cellphones for monetary transactions in the last 12 months, in Mexico, 3.9% of the population has done so to pay bills, 1.5% to send money and 3.1% to receive money. The use of cellphones for monetary transactions in Mexico is high compared to other countries:

¹ Includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela

² See López-Moctezuma (2012)

Chart 2
Population that uses cellphones for monetary transactions, 2011 (% total)



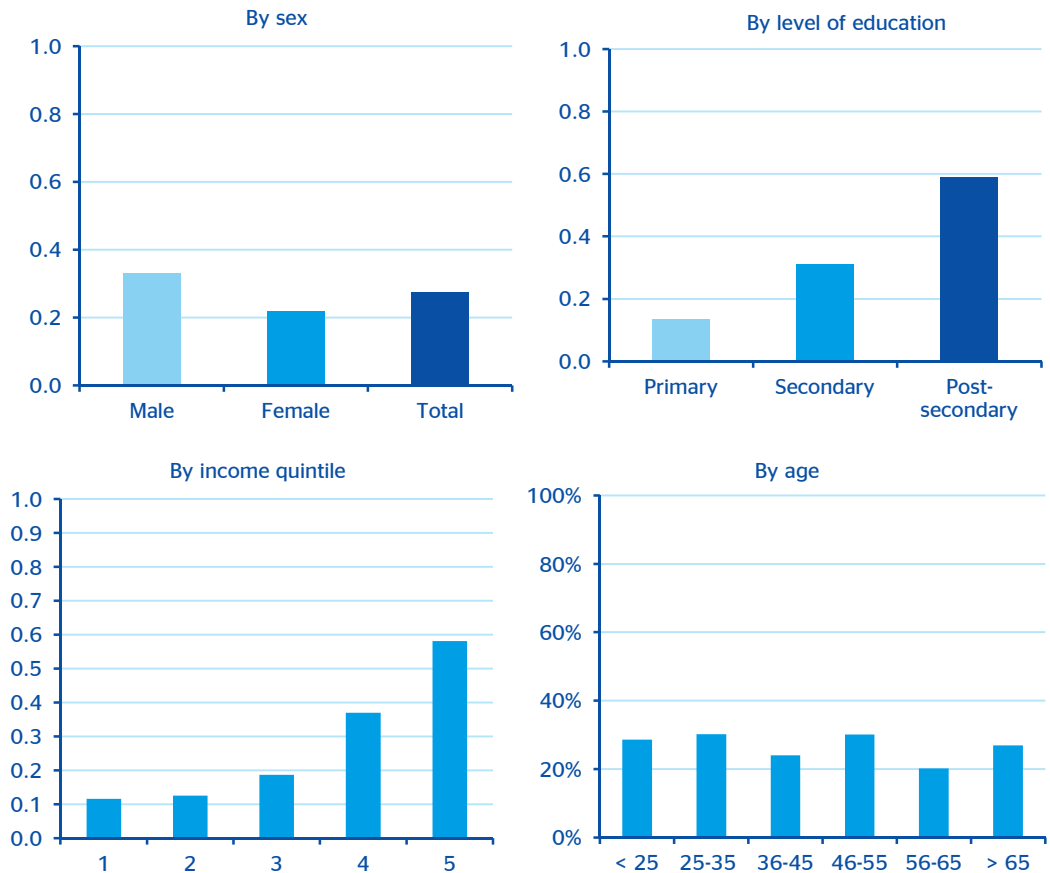
Source: BBVA Research with Global Findex 2011 data

Sociodemographic characteristics: key factors for financial inclusion

For the purposes of detailed analysis, a breakdown of the population who use banking services is shown below in terms of age, gender, level of education and socioeconomic status:

- A total of 33% of men have an account in a FI, as compared to only 22% of women.
- By socioeconomic level, only 12% of individuals belonging to the first income quintile have an account in a FI, 13% in the second quintile, 19% in the third quintile, 37% in the fourth quintile and 58% of individuals with the highest income (fifth quintile).
- By level of education, 13% of individuals with primary education, 31% with secondary education and 59% with higher education have an account.

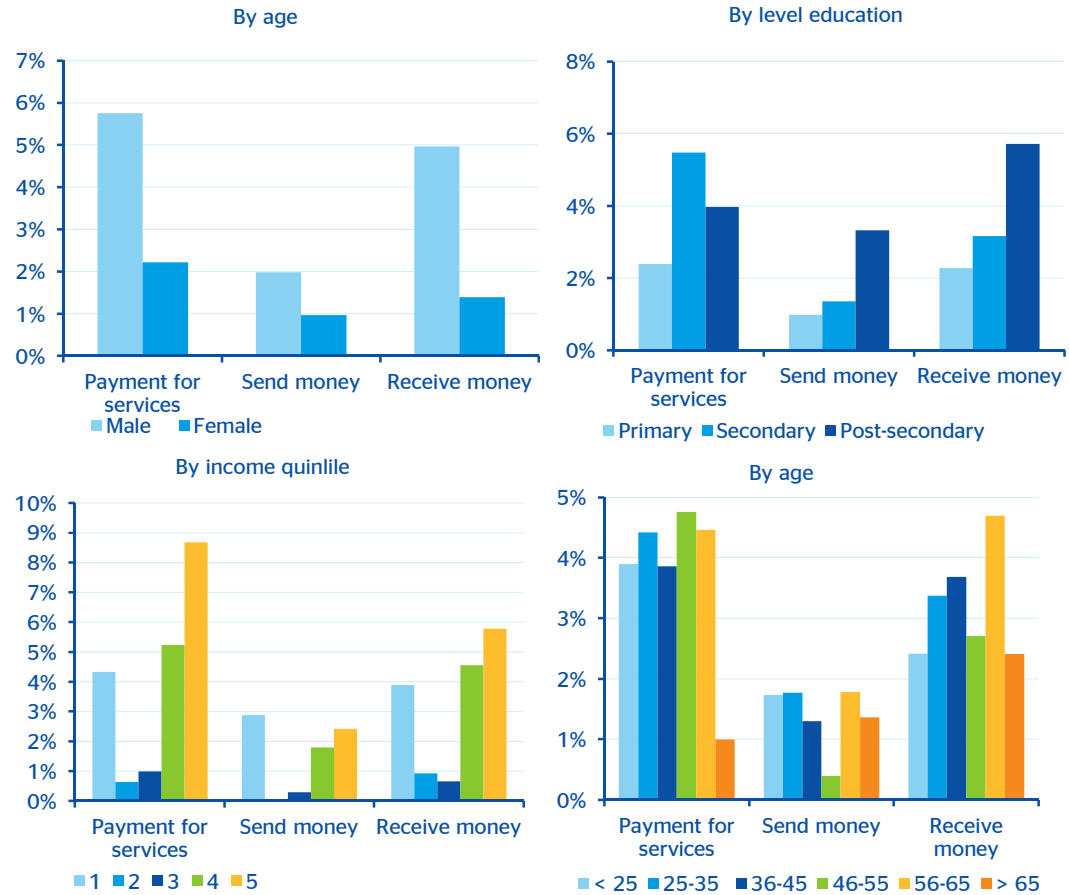
Chart 3
Population in Mexico with an account in a financial institution (% total), 2011



Source: BBVA Research with Global Findex 2011 data

In terms of the use of cellphones for monetary transactions, we observed that men use it more often (6% to pay for services, 2% to send money, 5% to receive money) than women (2% to pay for services, 1% to send money, 1% to receive money). By educational level, the population with primary education uses mobile banking services less (2% to make payments, 1% to send money, 1% to receive money) than individuals with secondary education (5% to make payments, 1% to send money, 3% to receive money) or higher education (4% to make payments, 3% to send money, 6% to receive money). By socioeconomic level, the highest-income quintile is the population that makes the most payments for services (9%) and receives money (6%), while individuals in the first income quintile have the highest percentage for sending money (3%), as can be seen in the chart below:

Chart 4
Population that uses cellphones for monetary transactions (% total), 2011



Source: BBVA Research with Global Index 2011 data

The differences observed in the above classifications give us a clearer idea of the groups that make up the current market of the banking sector and cellphone users for monetary transactions, and therefore the groups that should be the target of the financial inclusion strategy.

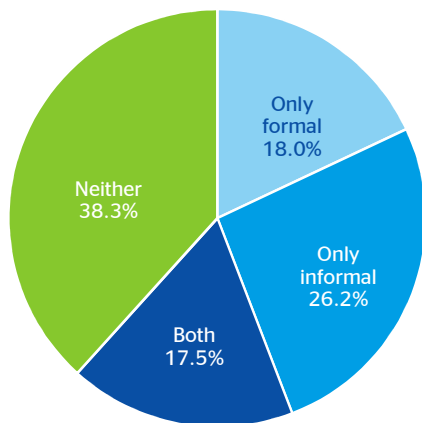
The National Financial Inclusion Survey: a measurement of demand

Furthermore, the National Financial Inclusion Survey (ENIF) 2012 prepared by the CNBV and INEGI helps identify the needs of the population with respect to access to, and use of financial services, as well as the main barriers for non-users. For the first time, results related to the demand for financial products are being obtained at a national level, since the previous measurement of financial inclusion used information related to supply.

Some of the primary results are as follows:

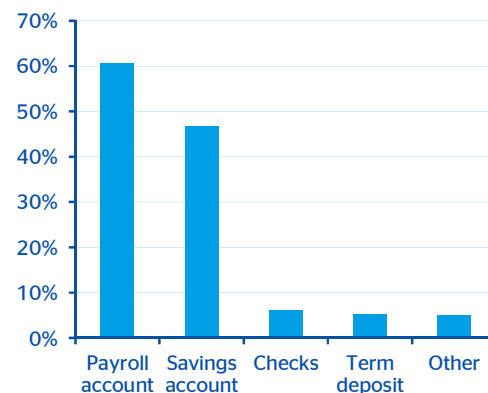
- In Mexico, 97% of the adult population (77.6 million people) have access to the financial system, but only 56% use some type of financial product.
- At the national level, 35.5% of adults (25 million) save through a financial institution. The two most important products for doing so are salary accounts and savings accounts, at 60.5% and 46.6% respectively.
- A total of 43.7% of the adult population saves through informal means: Mexicans prefer to keep their money at home (64.8%), in "tandas" (group savings pools) (31.7%) or lend it to family members.
- The most commonly used channels of access to the financial system are still bank branches (40%) and ATMs (38%), which are mainly used for three operations: cash withdrawals, deposits and balance inquiries.
- On average, the time it takes to reach a bank branch is 26 minutes and the cost is \$28 pesos, while reaching an ATM takes 20 minutes and costs \$21 pesos. In this context, banking correspondents are increasingly important (30% of the population uses them), as well as the option of channels such as mobile banking, which reduces the time and cost of traveling to an ATM or banking correspondent to send money.

Chart 5
Use of savings (% adults)



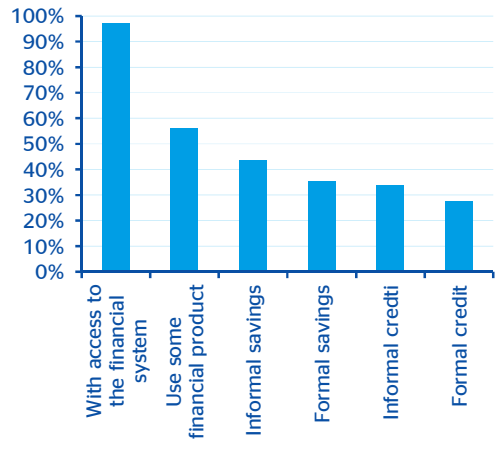
Source: BBVA Research with ENIF 2012 data

Chart 6
Means of formal saving (% users)



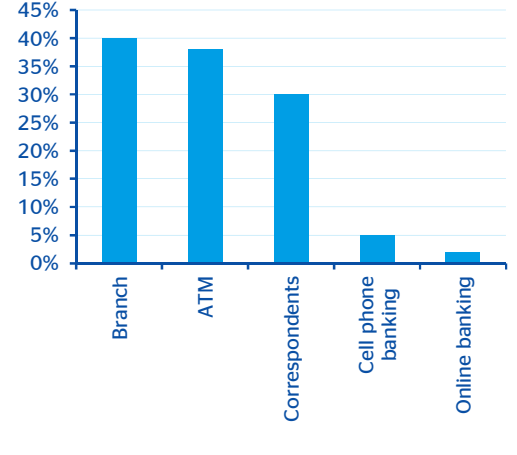
Source: BBVA Research with ENIF 2012 data

Chart 7
Access to the financial system,
use of savings and credit



Source: BBVA Research with ENIF 2012 data

Chart 8
Use of channels for accessing the financial system



Source: BBVA Research with ENIF 2012 data

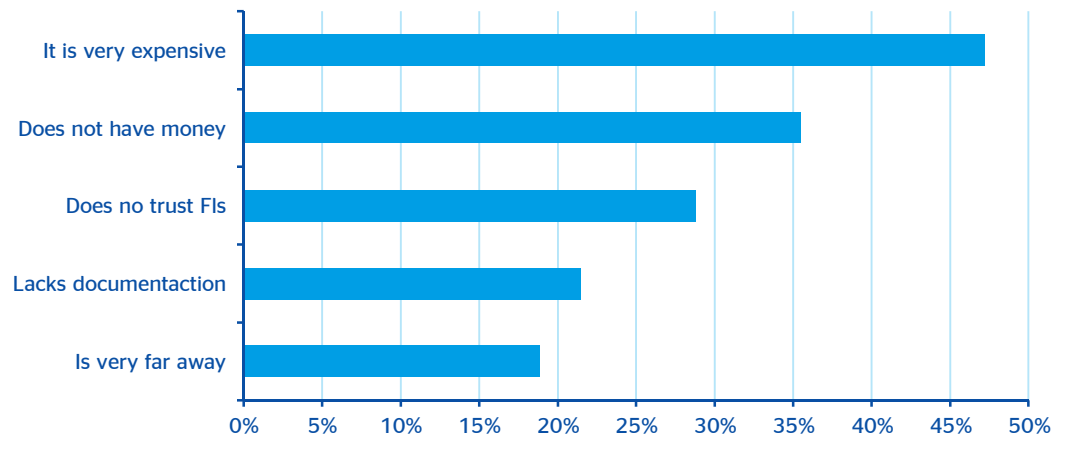
Potential mobile banking market

In order to quantify the potential market for financial services through mobile banking, we need to understand the reasons why individuals do not have an account in a FI, as well as the current market of mobile telephony users. Below we present the results obtained from processing the surveys regarding these topics:

a. Reasons why individuals do not have an account in a FI

According to the Global Findex Survey in Mexico, the reason most commonly cited for not having a formal account is the high cost of maintaining an account. This response is given by 47% of adults without a bank account, with 21% citing it as the only reason (multiple responses were permitted). The following most-commonly indicated reasons for not having an account are lack of money (35%), not trusting a FI (29%), lack of documentation needed to open an account (21%), or the belief that banks are too far away (19%).

Chart 9
Reason for not having a bank account (% of adults without an account), Mexico 2012



Source: BBVA Research with Global Findex 2011 data

b. Current market for mobile telephony users

In Mexico, the MODUTIH (the National Survey on the Household Use of Information Technologies)³ conducted in 2012 provides information on the use of information and communications technologies in households, specifically about the use of computers, the Internet and cellphones, and on the type of electronic transactions carried out by the population over 6 years of age. This survey is conducted with a probabilistic sampling⁴ of homes, which guarantees coverage at the national and state levels.

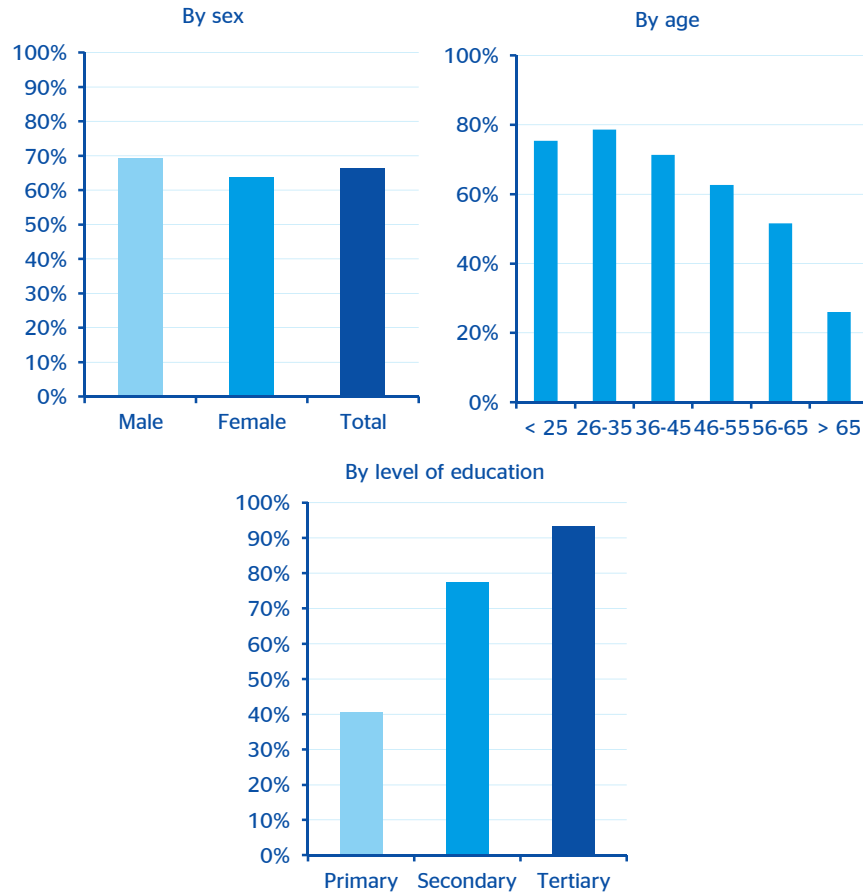
The information contained in the MODUTIH enables us to itemize the variables mentioned by characteristics such as age, gender and level of education, in both individuals and in households. Considering only the population over 15 years of age, below are the responses to the question "Have you used a cellphone in the last 12 months?":

- A total of 66% of the population used a cellphone in the last 12 months; the percentage for use is greater in men (69%) than in women (64%).
- By age group, the population between 26 and 35 years of age shows a greater use of cellphones (79%), while only 26% of adults over 65 use them.
- By level of education, 93% of individuals with higher education, 77% with secondary education and 40% with primary education use a cellphone.

³: Conducted by the Instituto Nacional de Estadística, Geografía e Informática (INEGI, National Institute of Statistics, Geography and Information Technology).

⁴: Survey conducted in 38,426 homes in all States of the country, under a conglomerate, stratified, three-staged, probabilistic sampling.

Chart 10
Population that has used a cellphone in the last 12 months, 2012 (% total)



Source: BBVA Research with data from MODUTIH 2012

c. Potential mobile banking market

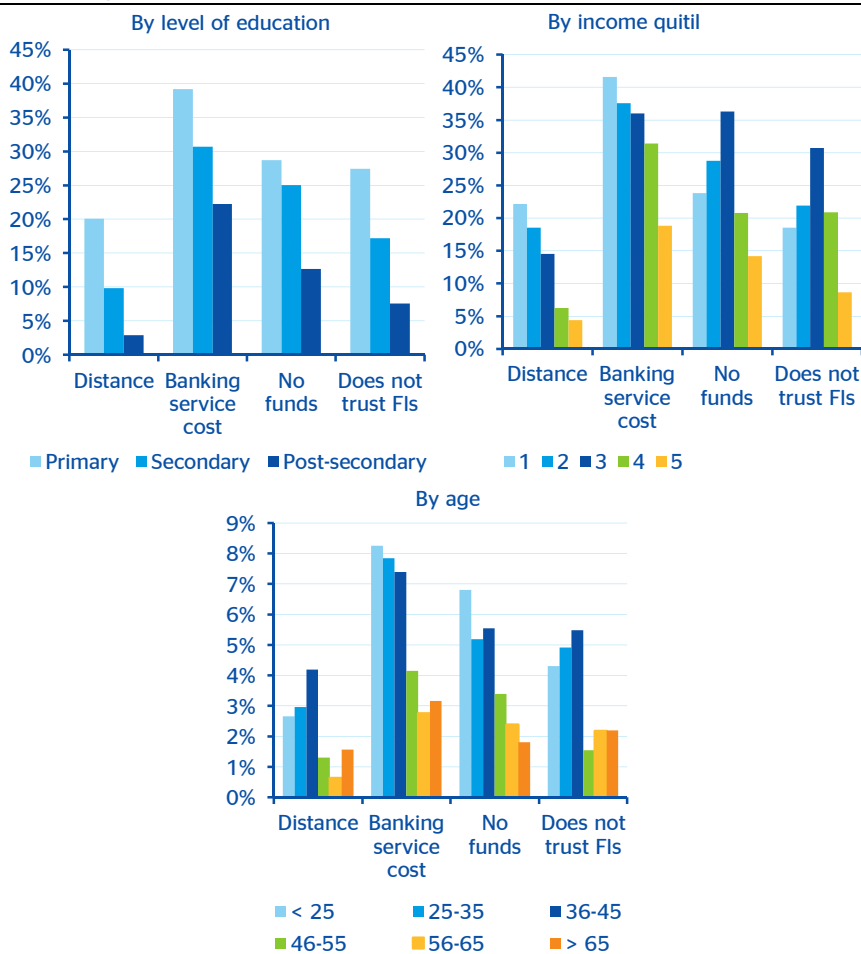
Lastly, if we compare the percentage of cellphone users classified by gender, age and level of education, with the population with an account in a FI, we can estimate the potential demand for mobile banking. However, we need to take into account the willingness of individuals to make use of banking services; even with the use of mobile banking, some of the main reasons why individuals do not have an account in a FI could prevail, such as lack of trust in FIs and lack of money. One barrier that could be eliminated by mobile banking and the use of banking correspondents is the distance to bank branches, while the barrier of the high cost of financial services will depend to a large extent on the prices charged by banks for the mobile banking service (fees and commissions, cost of opening an account, cost per transaction).

Chart 11 shows an analysis of the reasons cited for not having an account in a FI, with the results broken down by level of education and income quintile of the population surveyed in the Global Findex. This shows that the cost of banking services is one of the most

commonly cited reasons for not making use of banking services, regardless of the individuals' level of education and income quintile. However, this figure is even higher among the lowest income quintile, i.e. individuals with primary education and people under the age of 25. The distance reason (not having a bank branch nearby) is the reason most commonly indicated by individuals with primary education, the poorest 20% of the population and people between the ages of 36 and 45. The lack of trust in FIs is greater among the population with primary education, in the third income quintile and in people between 36 and 45 years of age.

The detailed analysis of the obstacles to bancarization by sociodemographic characteristics such as income level, level of education and age is very important when designing mobile banking products that can meet the specific needs of the target population. The development of specific products for each market niche could be highly relevant for achieving the appropriate commercial strategy which would allow improved penetration and acceptance by potential customers.

Chart 11
Reasons for not having an account with a FI



Source: BBVA Research with Global Findex 2011 data

In order to obtain an estimate of the potential market for mobile banking, measured as the difference between the population using cellphones and the bancarized population, a

combination of data from the Global Findex and information from the MODUTIH were used in the following chart; however, the results should only be interpreted as an estimate⁵.

Chart 12
Potential increase in bancarization with the mobile payment model (% population)



Source: BBVA Research with MODUTIH 2012 and Global Findex 2011 data

The total potential demand gap observed for mobile banking could be nearly 40% of the population, which is the difference between the number of current accounts and cellphone ownership, with the latter being understood as a channel to access the financial system. By gender, it was found that men have a greater number of accounts than women, and that the demand gap with respect to cellphone ownership is lower. In terms of level of education, the demand gap of the population is highest in percentage among people with secondary education. Lastly, when segmenting the sample by age into six five-year interval groups, starting from the age of 25, the demand gaps found were fairly similar. In general, there is great potential for the development of mobile banking.

⁵: The financial inclusion data corresponds to 2011, while the mobile telephony user data pertains to 2012.

Conclusions

However, international experience reveals cases where models based on the range of financial services through mobile telephony have reported significant success in the financial inclusion of the population without access to banking services.

Mexico has a range of geographic and sociodemographic characteristics that may catalyze greater take-up of mobile banking services, thereby strengthening its viability and ability to provide access to financial services to the population not served by the traditional channels, as is the case of people living in remote and hard-to-reach areas where there are no branch offices; or to boost the potential market for the sending of remittances via mobile banking, which would involve a much lower cost than at present.

We estimate that the total potential demand for mobile banking could be around 40% of the population, which is the difference between the number of current accounts and cellphone ownership, with the latter understood as a channel to access the financial system.

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