Economic Analysis

ENIF (National Survey of Financial Inclusion) 2018: 63.2% of Mexicans use informal savings, 70.2% use informal credit

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- **From 2015 to 2018 some progress has been made in access to and usage of financial products in Mexico, but the increases are not significant. Payroll accounts, credit cards and life insurance are the most popular financial products**
- **In 2018, 47.1% of the population aged between 18 and 70, has at least one account with a bank or other financial institution, 31.1% has some form of credit or credit card, 25.4% has at least one insurance policy and 39.5% has a retirement savings account or a retirement fund**
- **The South and East Central Region and the South of Mexico lag behind in the use of financial products and services**
- **Informal savings: 63.2% of the population risks all or part of their savings by not keeping them with regulated financial institutions**
- **70.2% of borrowers in Mexico obtain financing wholly or partly through informal channels**
- **Access to banking by mobile phone is increasing, with 7.9 million Mexicans making use of this service in 2018**
- **The new administration headed by President Andrés Manuel López Obrador has the challenge of continuing to increase financial inclusion in Mexico together with the financial institutions, mainly in the regions and sectors with the highest use of informal savings and credit. The implementation of new financial technologies, correspondents, and the reduction of the informal Mexican economy can contribute to this end**

A week before the end of President Peña Nieto's administration, the results of the 2018 National Survey of Financial Inclusion (ENIF) were announced by the Secretariat of Finance and Public Credit (SHCP), the National Banking and Securities Commission (CNBV) and the National Institute of Statistics and Geography (INEGI). The survey, which was carried out nationwide between 30 April and 22 June of this year, is the third of its kind, previous surveys having been conducted in 2012 and 2015. In this edition of *Economic Watch*, we present the main analytical results deriving from the ENIF 2018 and some reflections on the importance of financial inclusion in Mexico and the challenges facing the new administration of President Andrés Manuel López Obrador in the area of financial inclusion and education.

1. Background: financial inclusion as a driver of development

The origins of the G20's commitment to financial inclusion are linked to the creation of the Financial Inclusion Experts Group (FIEG) during the Pittsburgh Summit of 2009.(SHCP, 2012). It was created with the commitment of identifying and applying innovative approaches to improving access to financial services for poor people, micro-enterprises and small and medium-sized enterprises (SMEs) ; promoting successful regulatory and political approaches; developing standards on financial access, financial education and consumer protection; and calling on the private sector to present its proposals as to how public finance can best maximise the deployment of private finance in a sustainable and scalable manner (G20 Research Group, 2009).

In 2010 the FIEG presented its Principles for Innovative Financial Inclusion, with the aim of helping to create a favourable normative environment for generating access to financial services (FIEG, 2010). In 2014, the G20 published its Financial Inclusion Action Plan, aimed at bringing the 2.5 billion people (or about half the working age population) currently excluded, into the formal financial system on the premise that financial inclusion helps build domestic savings, bolster household, domestic and financial sector resilience and stimulate business and entrepreneurial activity, whereas the cumulative effect of widespread exclusion is increasing inequality, economic distortions and slower growth and development. (FIEG, 2014).

To substantiate the effects of financial inclusion, understood as the access to and use of formal financial services by individuals and businesses, a number of studies have been conducted, with the following results:

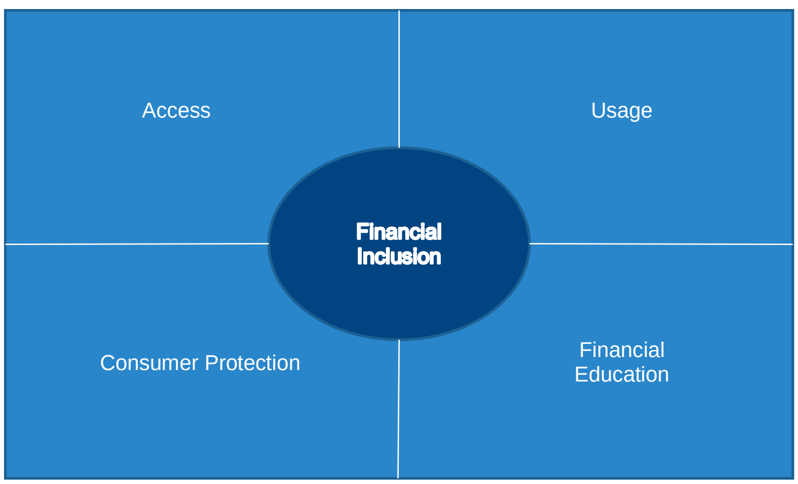
- Financial inclusion encourages economic growth to some extent. Greater business and household access to a range of banking services and increased numbers of users of these services lead to increased growth. Furthermore, sectors dependent on external financing grow faster in countries with greater financial inclusion. However, the marginal benefits for growth wane as both financial inclusion and depth increase (Sahay et al., 2015).
- According to Demirgüç-Kunt, Klapper and Singer(2017):
  - Financial inclusion can help reduce poverty and inequality by helping people invest in the future, smooth their consumption, and manage financial risks.
  - Access to formal financial services allows people to make financial transactions more efficiently and safely. It even helps poor people climb out of poverty by making it possible to invest in education and business.
  - By providing ways to manage income shocks like unemployment or the loss of a breadwinner, financial inclusion can also prevent people from falling into poverty in the first place.
  - Shifting payments from cash into accounts allows for more efficient and more transparent payments from governments or businesses to individuals – and from individuals to government or businesses. Although no conclusive evidence exists at this point, access to the formal financial system and appropriate credit can potentially facilitate investments in education and business opportunities that could, in the long run, boost economic growth and productivity.
- For Mehrotra (2012):
  - Access to appropriate financial instruments may allow the poor or otherwise disadvantaged to invest in physical assets and education, reducing income inequality and contributing to economic growth.

- Financial inclusion has important implications for monetary and financial stability. Increased financial inclusion significantly changes the behaviour of companies and consumers, in turn influencing the efficacy of monetary policy. For example, greater inclusion should make interest rates more effective as a policy tool and it may facilitate central banks' efforts to maintain price stability.
- Financial stability may also be affected, since the composition of savers and borrowers is altered. On the one hand, a broader base of depositors and more diversified lending could contribute to financial stability.
- On the other hand, greater financial access may increase financial risks if it results from rapid credit growth or the expansion of relatively unregulated parts of the financial system.

In Mexico, within the conceptual framework of the National Financial Inclusion Policy (CNIF, 2016) financial inclusion is defined as access to and use of formal financial services under appropriate regulation ensuring consumer protection and promoting financial education to improve the knowledge and skills of all segments of the population. This definition has four main components: access, use, consumer protection and financial education.

It is worth pointing out that the definition of financial inclusion in Mexico does not explicitly take account of some concepts used internationally, such as affordability, opportunity and financial literacy, which might bolster national financial inclusion.

Figure 1. Components of financial education in Mexico



Source: BBVA Research based on information from the National Banking and Securities Commission (CNBV).

2. Sampling design of the ENIF 2018 survey sample size doubled: 6 geographical regions, making it more representative

The ENIF 2018 is the third edition of the survey carried out by the INEGI. It uses the same kind of sampling as the two previous editions (INEGI, 2012, 2015 y 2018): probabilistic, three-staged, stratified and by clusters. It had 12,446 effective interviews, more than double that in previous years allowing a breakdown by geographical regions, which are:

- Region 1 - Northwest: Baja California, Baja California Sur, Chihuahua, Durango, Sinaloa and Sonora.
- Region 2 - Northeast: Coahuila, Nuevo León, San Luis Potosí and Tamaulipas.
- Region 3 - West and Bajío: Aguascalientes, Colima, Guanajuato, Jalisco, Michoacán, Nayarit, Querétaro and Zacatecas.
- Region 4 - Mexico City: Mexico City.
- Region 5 - Central, South and East: Hidalgo, Mexico State, Morelos, Puebla, Tlaxcala and Veracruz.
- Region 6 - South: Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco and Yucatán.

Table 1. Sampling characteristics and parameters of the ENIF 2012, 2015 and 2018

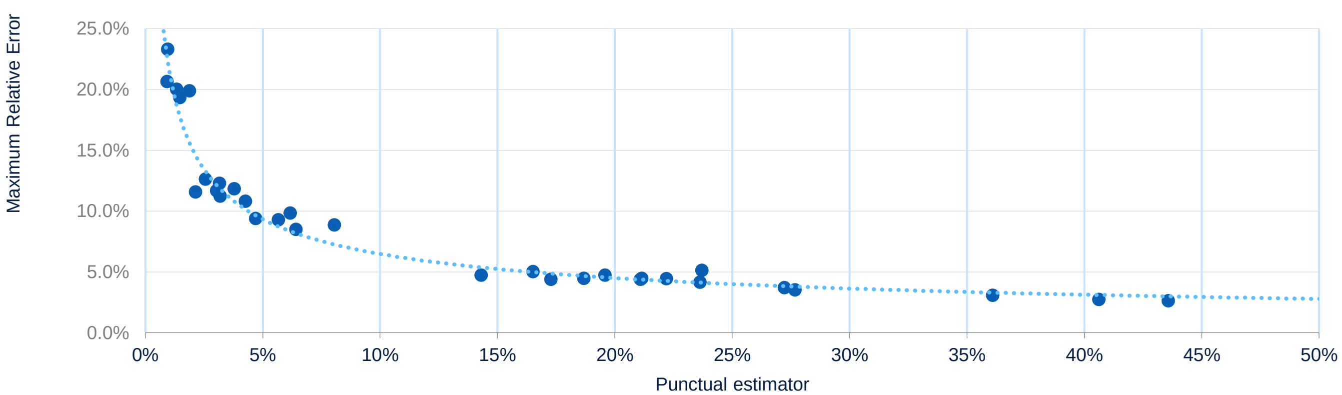
Concept	ENIF 2012	ENIF 2015	ENIF 2018
Type of sampling	Probabilistic, three-stage, stratified and by clusters	Probabilistic, three-stage, stratified and by clusters	Probabilistic, three-stage, stratified and by clusters
Levels of disaggregation	National Urban and rural	National Urban and rural	National Urban and rural 6 regions
Adult population represented (18 to 70 years of age)	70,382,459	76,157,088	79,096,971
Survey dates	3 to 31 May	20 July to 28 August	30 April to 22 June
Level of confidence	90%	90%	90%
Design effect	4.27	4.27	3.07
Expected maximum relative error	15%	15%	15%
Estimate of the proportion of interest (p)	8.00%	8.00%	2.91%
Non-response rate	15%	15%	15%
Sample size	7,016	7,000	14,500
Effective sample	**6,113**	**6,039**	**12,446**
Observed non-response rate (no interview and incomplete questionnaires)	**12.9%**	**13.7%**	**14.2%**
Estimated relative error	**---**	**---**	**12.9%**

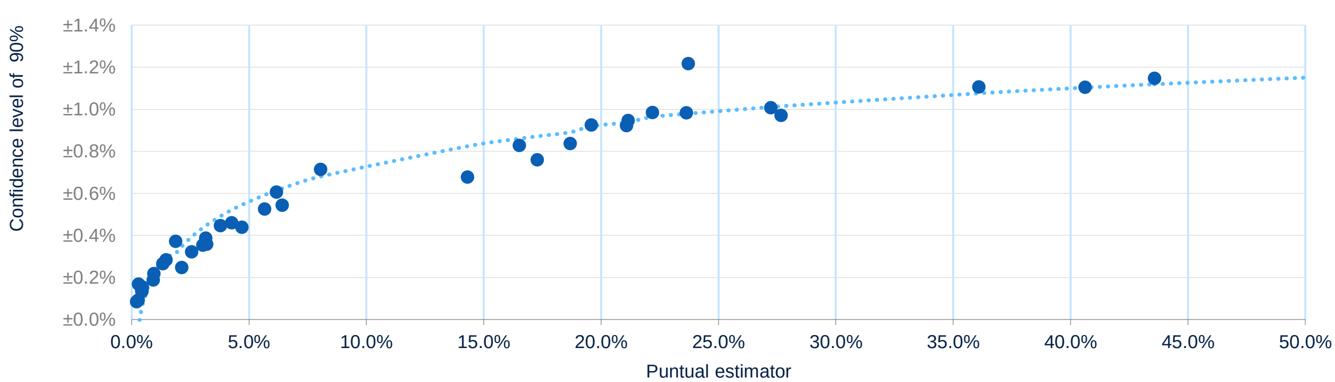
Source: BBVA Research calculations based on data from INEGI, ENIF 2012, 2015 and 2018.

The observed non-response rate (NRR) was 14.2%, below the maximum parameter 15% established for this variable. Given that the observed NRR is very close to its limit and that it has increased from 12.9% in 2012 and 13.7% in 2015 to 14.2% in 2018, the CNBV and the INEGI may have to raise this limit for subsequent surveys. However, this would not be an ideal solution, since non-response is partly auto-selective, and could therefore introduce significant bias to survey estimates. The best solution would be to design fieldwork mechanisms to keep the NRR below the established 15% limit.

The calculation of the sampling design of the ENIF 2018 established the minimum proportion of interest at 2.91%, with an expected maximum relative error of 15%. Our calculations of the empirical estimates for values close to the proportion of interest established give an average relative error of around 12.9%, so the type of sampling and the design effect parameter are appropriate, and the relative errors are below the expected maximum. The following figures show estimates of the expected maximum relative error and the confidence interval at a confidence level of 90%. For a given indicator of 20%, for example, we obtain an expected maximum relative error of just under 5% with a confidence interval of ±0.9% at a confidence level of 90%, so the confidence interval of this particular variable would be between 19.1% and 20.9%.

Figure 2. Estimate of the expected maximum relative error and confidence interval at a confidence level of 90% for specific indicators of the ENIF 2018





Source: BBVA Research estimates based on data from INEGI, ENIF 2018.
Note: The estimates were made based on the complex sampling design, with variances estimated using Taylor linearisation for questions 3.1, 3.2, 3.3, 3.4 and 3.5.

3. Use of financial services. From 2015 to 2018, some indicators of account holding show advancement, but the increases are not significant

Savings accounts. Although the questions about holding accounts with financial institutions were different in each of the three years on which the ENIF has been conducted[1], we can see that from 2015 to 2018 the percentage of the population with a savings, payroll,pension or savings account for receiving government assistance increased from 44.1% to 47.1%.

Credits. As with the previous point, the questions regarding loan accounts and credit cards are not the same in each of the three years[2], but it can be seen that from 2015 to 2018 there was an increase of two percentage points in the proportion of the population with a bank loan or a credit card issued by a bank, a department store, supermarket or another financial institution such as INFONAVIT (the National Workers Housing Fund Institute), FOVISSSTE (the Institute for Social Security and Services for State Workers, an institution that provides housing mortgages to state employees) or FONACOT (the National Fund for Employee Consumption, a government institution for providing consumer credit to Mexican workers).

Insurance. The questions posed in the three ENIF years are similar, except that in 2018 respondents were asked not to include *Seguro Popular* (public health insurance) or the Mexican Social Security Institute (IMSS) or the Institute for Social Security and Services for State Workers (ISSSTE) in their responses[3]. In this case, we see an increase from 2012 to 2015 in the proportion of the population stating that they have insurance, whether car, home, life, medical expenses or others. As for the period 2015 to 2018, if we counted insurance under government programmes such as PROSPERA (a government social assistance programme) and *Madres Jefas de Familia* ('Female Heads of Family', a life insurance programme), there would be an increase of 0.6%.

Retirement savings. The questions in the last two ENIF surveys were the same, but in 2012 it was different. In 2018 the proportion of the adult population with a savings account for retirement or a pension fund declined by 1.6 percentage points relative to 2015. No comparison is made with 2012, since the question had a different meaning from that of 2015 and 2018.

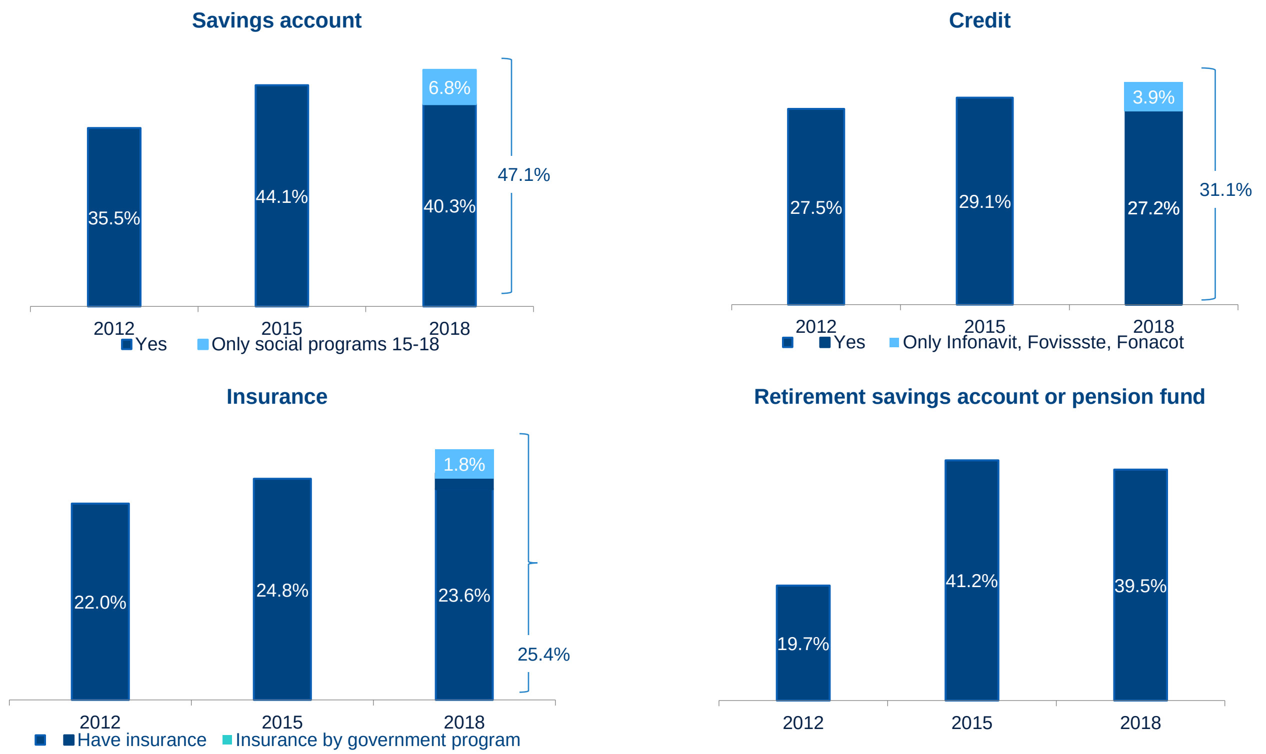
We consider that the results for usage of savings, credit, insurance and retirement savings products must all be treated with caution since the 2018 measurements are not directly comparable with those of the previous years. However, it is possible to affirm that progress has been made in some areas of financial inclusion from 2015 to 2018, albeit marginal; indeed, in certain areas setbacks have been observed.

1: In 2012 the question was: Do you have a savings, payroll, investment or other account with a bank? In 2015 it was: Do you have a payroll, savings or pension account or bank card in which to receive government assistance with a bank or financial institution? In 2018 the questions were: Do you have a payroll, savings or pension account or bank card with a bank or financial institution? and Do you have an account or bank card with a bank or financial institution for receiving government assistance?

2: In 2012 the question was: Now, as far as lending institutions and department stores are concerned, do you have any loan, credit or credit card? In 2015: Do you have any bank loan or credit card issued by a bank, department store, supermarket or some other financial institution such as INFONAVIT, FOVISSSTE or FONACOT? In 2018 the questions were: Do you have any bank loan or credit card issued by a bank, department store, supermarket or some other financial institution? Do you have a FONACOT loan or a housing loan from INFONAVIT, FOVISSSTE or another financial institution?

3: In 2012 the question was: Do you have any insurance (life, car, home, medical expenses, etc.)? In 2015: Do you have any insurance for car, home, life, medical expenses or other? In 2018: Do you have any insurance for car, home, life, medical expenses or other (not counting *Seguro Popular*, IMSS or ISSSTE)?

Figure 3. Use of financial services among the population aged 18 to 70 in Mexico, 2012-2018
(%)



Source: BBVA Research estimates based on figures from INEGI, ENIF 2012, 2015 and 2018.

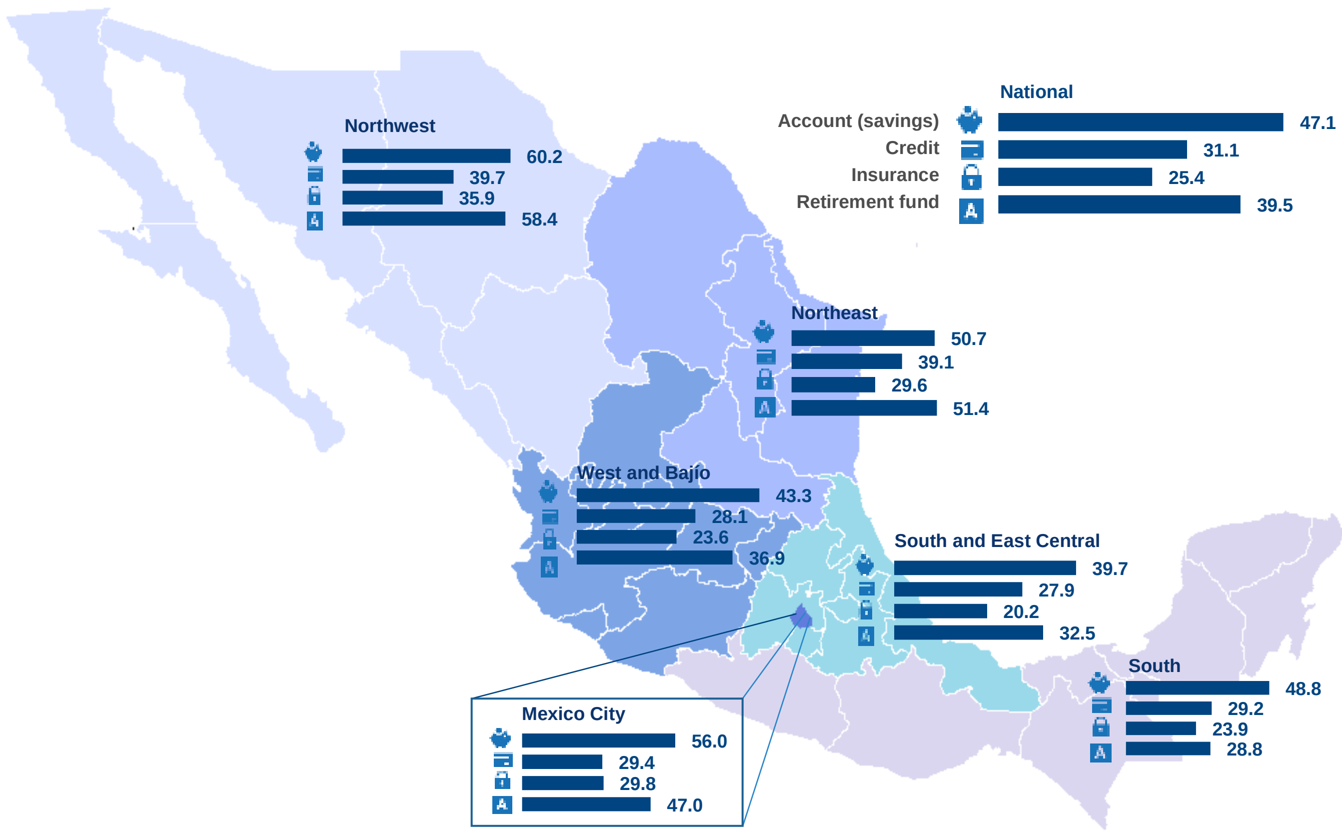
4. The South and East Central Region and the South of Mexico are the biggest laggards in account holding

Nationwide, 37.2 million people have a formal savings account, equivalent to 47.1% of the adult population; only 25.4% of the country's population (20.1 million) have any insurance; 31.1% (24. 6 million) said they had at least one loan; and 39.5% of the population (31.3 million) have a pension fund.

INEGI divides its analysis into six regions: Northwest, Northeast, South and East Central, West and Bajío, Mexico City, and South. The regional analysis shows that there is a greater proportion of the population in the North of the country (Northwest and Northeast) using products such as debit and credit accounts, insurance and pension funds. The regions least advanced in the use of these financial products are South and East Central, Southern, and West and Bajío.

The case of the Southern Region stands out because 48.8% of the population of this region have a bank account, more than the national average (47.1%). This may possibly be explained by the number of people in these states receiving government transfers; for the other three variables (credit, insurance and pension funds) the region lags behind, with percentages below the national average as can be seen from the following map. Lastly, in Mexico City, the population using credit (29.4%) is below the national average (31.1%).

Figure 4. Population aged 18 to 70 holding formal financial instruments for savings (account), credit, insurance and pension funds, by regions, 2018 (%)



Source: BBVA Research estimates based on data from INEGI, ENIF 2018.

5. Payroll accounts, credit cards and life insurance are the most popular financial products.

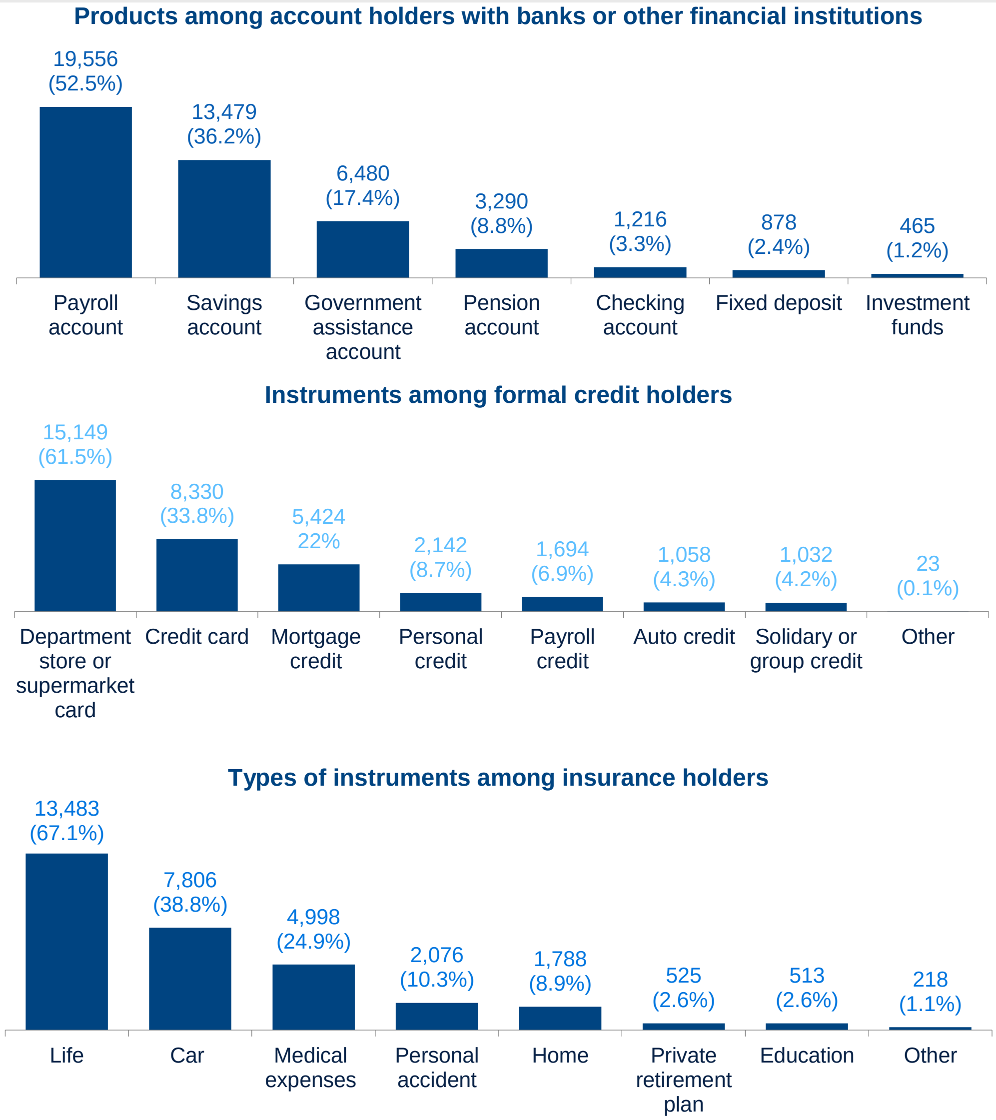
According to the ENIF 2018, the accounts most used by people with formal savings financial products are payroll accounts (52.5%), savings accounts (36.2%) and government assistance accounts (17.4%). Of these, the first and last are products of which the origin is normally external to the user, as opposed to the user's approaching a financial institution. More complex financial savings products such as term deposits or investment funds are relatively little used, by 2.4% and 1.2% of the population, respectively.

As for formal credit, revolving credit financial instruments are the most widely held in the country, with 61.5% of respondents having a department store or supermarket card and 33.8% a bank credit card. It is also striking that one in every four persons with a formal loan has a mortgage (housing) loan.

With regard to insurance, we see that around two thirds of people with insurance have life insurance, but only a quarter have cover for medical expenses.

It is worth highlighting the removal and addition of questions about financial instruments in this edition of the ENIF, since it affords us a better view of the part played by government programmes in these indicators. Such is the case of government assistance accounts in savings instruments; FONACOT, INFONAVIT and FOVISSTE lending in credit instruments; and of insurance under the PROSPERA programme in the last category of financial instruments.

Figure 5. Distribution of the main formal savings, credit and insurance financial instruments in Mexico, 2018
(Thousands of people and %)



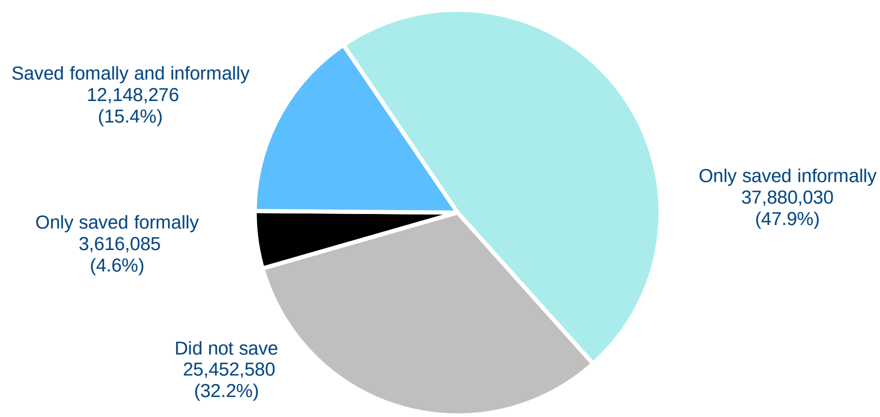
Source: BBVA Research estimates based on data from INEGI, ENIF 2018.
Note: The total is not 100%, because one person may have two or more instruments.

6. Informal savings. 63.2% of the population risks all or part of their savings by not keeping them with regulated financial institutions

In the glossary of the conceptual design of the ENIF 2018, informal savings are defined as savings kept in cash at home or with a relative or by means of mechanisms such as informal group savings schemes, piggy-banks or unauthorised institutions, (INEGI, 2018) and in the survey respondents are asked whether they saved: 1) by lending money, 2) by buying livestock or goods, 3) by keeping money in a safe at work or with acquaintances, 4) by keeping money with relatives or acquaintances, 5) by taking part in an informal savings scheme, and/or 6) by keeping money at home.

One significant point to be commented on is that the response about saving by lending could cease to be classified as informal, since with the coming into force of the Law to regulate Fintechs in March this year, lending money through a Fintech could be a regulated activity. What is certain is that all the informal modes of saving referred to in the ENIF 2018 have one characteristic in common: the money is kept in places where it is less safe than it would be if deposited with institutions that have the proper infrastructure and security, and are regulated, supervised and, in some cases, savings are protected by the government.

Figure 6. Formal and informal savings in Mexico, 2018
(Population and %)



Source: BBVA Research estimates based on data from INEGI, ENIF 2018.

The figure describes the way savings are kept:

- **Formal savings.** People who said that since April 2017 they had kept or saved money in at least one of the following instruments: payroll account or bank card, pension account or bank card, account or bank card for receiving government assistance, savings account, checking account, fixed deposit, investment fund or other.
- **Informal savings.** People who said they saved between 2017 and the date of the survey: by lending money, buying livestock or goods, keeping money in a safe at work or with acquaintances, keeping money with relatives or acquaintances, taking part in an informal savings scheme, or keeping money at home.
- **Formal and informal savings.** Respondents saying they had made both formal and informal savings.

- **No savings.** Those who did not indicate having saved formally or informally.

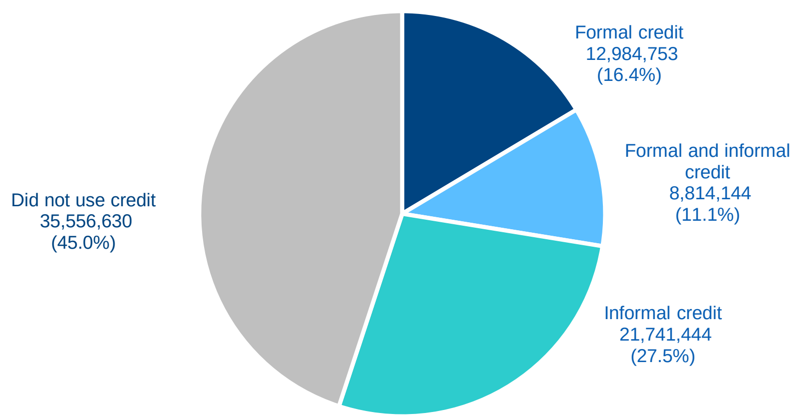
If we consider that formal saving occurs when money is kept in a financial institution (bank or otherwise) by means of certain products such as savings accounts, investment accounts or others, with the advantage of the security they provide through the money's being protected by the Bank Savings Protection Institute (IPAB), Mexico's deposit insurance agency) (INEGI, 2018), **only 4.6% of respondents said they saved exclusively with financial institutions, and nearly 50 million people (63.2%) risks their savings partly or totally in informal products.** It is also striking that 25.5 million people, aged between 18 and 70, did not save at all, either formally or informally.

We should point out that the tables of formal and informal savings presented by the INEGI differ mainly in that they count people holding a formal savings card or account, whereas in this document we count the number of people saying they had saved.

7. Informal credit. Of those seeking credit, 70.2% financed themselves wholly or partly through informal channels

In the conceptual design glossary of the ENIF 2018 informal credit is defined as loans made between private individuals or between private individuals and pawnbrokers, which, strictly speaking, are not financial institutions but service providers who facilitate money in return for pledged assets or solid guarantee.

Figure 7. Use of formal and informal loans in Mexico, 2018
(Population and %)



Source: BBVA Research estimates based on data from INEGI, ENIF 2018.

To look into the composition of formal and informal lending in Mexico, the ENIF 2018 asked respondents whether between April 2017 and the date of the survey they had made use of any of these channels, using the following definitions:

- **Formal loans.** When a person had, between April 2017 and the date of the survey (30 April to 22 June 2018), at least one of the following credit mechanisms: payroll loan; personal loan; car loan; housing loan; group, joint or joint and several; or other. Also, under this heading are respondents saying they had a credit card issued by a bank or a department store, divided into those that used it more than once a month.

- **Informal loans.** When the person indicated that, between April 2017 and the date of the survey he had sought to borrow money from at least one of the following: a savings group at work or run by acquaintances, a pawnbroker, friends or acquaintances, relatives, or others.

- **Formal and informal loans.** When a person indicated having used both formal and informal loans in the reference period.

- **No credit.** When a person gave no indication of having had either formal or informal credit.

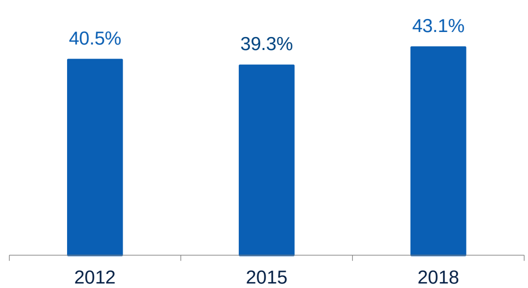
Close to 45.0% of the population made no use of credit between April 2017 and the date of the survey, 16.4% used only formal credit, 11.1% used both formal and informal credit and 27.5% used only informal credit. This implies that, **of those that sought credit (43.6 million people aged between 18 and 70), 70.2% financed themselves totally or partly by informal means** and the remainder exclusively by formal means.

We should point out that this information differs from the tables presented by the INEGI in that in our analysis we looked not just at whether a person had a bank or department store credit card but also whether they had used it more or less than once a month. The INEGI table looks only at holdings of department store or bank cards.

8. Access. 43.1% of the population used a bank branch and 10.0% did their banking by mobile phone in 2018

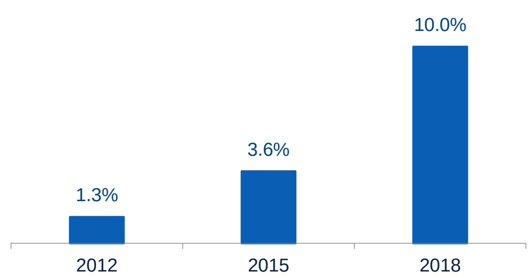
According to the information from the survey, between April 2017 and the date of the survey (31 April to 22 June 2018), the proportion of the population using branches of banks or other financial institutions was 43.1%, as can be seen in the following figure. This figure is higher than that of the results presented in 2012 and 2015. On the other hand, it can be seen that the number of people using the mobile banking service increased from 937,000 in 2012 to 2.7 million in 2015 and to nearly 7.9 million in 2018, meaning that approximately 10.0% of the population now have this service. We should point out that for the 2018 survey, the number of people that have a mobile banking contract, but do not use it, cannot be reliably estimated.

Figure 8. Population aged between 18 and 70 using branches of banks or other financial institution, 2018 (% of the population)



Source: BBVA Research estimates based on figures from INEGI, ENIF 2012, 2015 and 2018.

Figure 9. Population aged between 18 and 70 using mobile banking service, 2018
(% of population)



Source: BBVA Research estimates based on figures from INEGI, ENIF 2012, 2015 and 2018.

9. Final considerations

Nowadays, Mexican consumers can access financial products and services through traditional channels such as branches and ATMs, or through electronic devices such as PCs, laptops, tablets and smartphones; and they have access to new financial products and services such as those regulated as Fintechs; in this context, and considering some of the results of the ENIF 2018 Survey, we observe the following areas of opportunity for the new administration of President Andrés Manuel López Obrador, and for financial institutions:

1. Challenges to continue increasing financial inclusion in Mexico:

- Using technology to increase not just access but also the administration and use of financial products and services.
- Making focused efforts, considering the regions of the country that lagged behind on some indicators of financial inclusion in the ENIF 2018.
- Continuing to work to improve certain indicators of financial inclusion which, as a proportion of the total population, did not show significant change between 2015 and 2018.
- Working to boost penetration of certain financial products and services that continue to show relatively low levels of usage, such as investment funds and certain types of insurance.
- Implementing strategies to reduce the number of people in informal employment, who tend to have very few links to the formal financial system.
- Strengthen financial education programmes.

2. Challenges to continue compiling information on financial inclusion in Mexico:

- To isolate the effects of government from those of private initiative so as to generate financial inclusion (some questions in the ENIF 2018 started to make this distinction).
- To introduce information related to access, use and financial education on Fintechs in the surveys.
- To generate indicators of financial education more appropriate to the means of access, main characteristics of the products and services, and to update them as and when major problem areas are identified.

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