

DRAFT

Technical Note

Paraguay's 2013 Financial Inclusion Survey





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Acronyms

AML/CFT: Anti Money Laundry and Combating the Financing of Terrorism

ATM: Automatic Teller Machine

BCP: Banco Central del Paraguay (Central Bank of Paraguay)

CEN: Censo Económico Nacional (National Economic Census)

EIF: Encuesta sobre Inclusión Financiera (Survey on Financial Inclusion)

E-money: Electronic money

G2P: Government to Person

GSM: Groupe Speciale Mobile

GSMA: Groupe Speciale Mobile Association

IFC: International Finance Corporation

INCOOP: Instituto Nacional de Cooperativismo (National Institute of Cooperativism)

LAC: Latin America and the Caribbean

MNVO: Mobile Network Virtual Operators

MSMEs: Micro, Small and Medium Enterprises

OLS: Ordinary Least Squares

OTC: Over the counter

PSU: Primary Sampling Unit

PUICA: Programa de Universalización de la Identidad Civil en las Américas (Universal Civil Identity Program in the Americas)

SEPRELAD: Secretaría de Prevención de Lavado de Dinero o Bienes (Secretary for the Prevention of Money Laundering)

SMS: Short message service

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Executive Summary



This report presents the first analysis of the 2013 Paraguay Financial Inclusion Survey (EIF¹), a demand-side data collection effort that measures the financial behaviors of adults in Paraguay. The EIF updates and expands the 2011 Global Findex data for Paraguay and serves as a technical resource to inform the development a National Financial Inclusion Strategy.² Carried out in November 2013 via face-to-face interviews, the EIF questionnaire covers six main themes: Accounts, Savings, Credit, Mobile Money, Insurance, and Financial Capability and Security. The 2013 EIF results are largely consistent with results from 2011 Global Findex data collected in Paraguay, though there are signs that progress has been made in the two years between the surveys, particularly with respect to mobile money.

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The analysis presented in this report will be complemented by forthcoming analysis of financial inclusion from the perspective of the supply-side, that is the availability and quality of financial products, as well as an analysis that will examine the legal and regulatory structure of the financial system in Paraguay.

The EIF data suggests that 58 percent of adults in Paraguay use some sort of formal or commercial financial product³ to manage their day-to-day finances or plan for the future. This number is largely driven by the strong presence of cooperatives and mobile money providers in Paraguay, which together reach 40 percent of the population. Yet 42 percent of adults remain almost totally excluded from the financial system. These adults do not have an account at or borrow from a formal financial institution, do not have a ATM or credit card, do not use mobile money, do not have insurance,

¹ For its initials in Spanish (Encuesta sobre Inclusión Financiera).

² This demand-side technical note will be complemented by a legal and regulatory technical note and a supply-side technical note on financial inclusion. The three notes will served as the analytical base for the National Financial Inclusion Strategy.

³ This category includes adults who report having an account, saving at, or taking a loan from a bank, cooperative, or finance company; adults who report using mobile money; adults who report having insurance; adults who report receiving domestic remittances, wages, or social transfers via a bank, payment card, or mobile phone.

and receive wages and transfer domestic remittances in cash only. These adults – the 'totally excluded' – are disproportionately poor, have a primary education or less, and are unemployed or out of the workforce.

Twenty-nine percent of Paraguayan adults report having an account at a formal financial institution, a commonly used global metric of financial inclusion. The account penetration value in Paraguay is less than that in the rest of Latin America and the Caribbean, which is estimated at 39 percent according to 2011 Global Findex data. Among Paraguayans, variations in the ownership of formal accounts track closely with demographic and socioeconomic characteristics. Regression analysis suggests that the largest gaps are across income and education lines though there are also significant differences between rural and urban populations, across employment categories, and among regions. There is, however, no evidence of a gender gap in account ownership in Paraguay.

Cooperatives play a key role in providing formal financial services to adults in Paraguay. Cooperatives have the broadest reach in providing basic saving and payment services within the formal financial system: 19 percent of adults in Paraguay report having an account at a cooperative, as compared to 12 percent for banks. Cooperatives are also the most widely reported source of credit. Thirteen percent of adults report having borrowed from a cooperative in the past year compared to 8 percent from banks. Overall, 34 percent of Paraguayan adults report some type of borrowing in the past year.

For the 71 percent of Paraguayan adults – approximately 3.2 million people – who lack a formal account, the main barriers to access are a lack of money and documentation. Fifty one percent of unbanked Paraguayans report that they do not have enough money to have a formal account and 24 percent report that they lack the necessary documentation. Bureaucracy and excessive costs are also significant barriers to financial access for the unbanked; each of these reasons is reported by about one in five unbanked Paraguayans. However affordability does not appear to be as large an obstacle to financial access in Paraguay as in the region as a whole, where 41 percent of unbanked adults reports that the cost of financial services is a barrier to account ownership.

Approximately four in ten adults are saving but most savers do not use the formal financial system to do so, a potential opportunity for the financial sector. Thirty-nine percent of adults in Paraguay have set aside money or saved, either formally or informally, in the past year yet just 36 percent of savers – or 14 percent of all adults – report having saved at a formal financial institution. As in many countries, the vast majority of savers in Paraguay choose to store their money at home: 62 percent of savers – or 24 percent of all adults - report having saved at home in the past 12 months. Wealthier adults, those with more education, and those living in urban areas are more likely than other segments of the population to report having saved at a formal financial institution in the past 12 months. Those who report having confidence in financial institutions are more than twice as likely to save formally as those who do not.

With almost a third of adults using a mobile money product, digital payments are quickly becoming integrated into the financial service landscape in Paraguay. Twenty eight percent of adults in Paraguay report having used a mobile money service - such as Giros Tigo, Tigo Money, Envios Personal, or Billetera Personal - in the past 12 months. While the data are not strictly comparable, this value does suggest a marked increase from 2011 when just seven percent of adults reported using a mobile phone to send money, receive money, or make payments.⁴ The LAC average for a similar question in 2011 was three percent. The mobile money usage value is almost identical to that of formal account ownership in Paraguay and while there is considerable overlap between the two categories, a significant number of unbanked adults are using mobile money. Indeed, 23 percent of adults without an account at a formal financial institution report having used mobile money in the past 12 months, fewer than the 42 percent of banked adults using mobile money but a considerable inroad into expanding the use of financial services nonetheless. Mobile money is overwhelmingly the most popular way to send money to or receive money from family or friends living elsewhere in Paraguay. Approximately 80 percent of senders and 70 percent of receivers report having used a mobile money service for these transactions. An additional 10 percent of adults in Paraguay – or 14 percent of nonusers - report that they plan to use mobile money services in the next 6 months.

The data suggests that there is considerable scope to leverage the role of digital payments to provide a wider range of use cases and financial products. The over-the-counter (OTC) mobile money model offered by Tigo - as opposed to a wallet-based models offered by Tigo and Personal - dominates the market in Paraguay. Because users of OTC mobile money products cannot store value, these products may not realize the full potential of mobile money to facilitate savings. Increasing the awareness and usage of wallet-based models can yield nontrivial benefits for users of mobile money. Beyond domestic remittances, digital payments can be



⁴ The 2013 question included the names of the services listed above, while the 2011 question did not.

expanded to improve the efficiency and security of wage and government-to-person (G2P) payments. The distribution of wages and salaries in Paraguay remains mostly cash-based, which is likely related to the fact that 69 percent of workers are in the informal sector according to the International Labor Organization.⁵ Of the 34 percent of Paraguayan adults who report having received money as salary or wages from an employer in the past 12 months, 76 percent report having received this payment in cash. Yet 41 of those receiving cash payments for wages or salary also report having an account at a formal financial institution. Just 21 percent of adults who receive wages or salary report having received this money directly into their account or through a payment card. Accounts used to receive wages and government payments (G2P) should also allow recipients to save and access a full range of financial products and services.

A nontrivial segment of the population reports some degree of financial insecurity and many are borrowing or saving for health or emergencies. In Paraguay, approximately 20 percent of adults report that they always or sometimes run out of money to buy food or other necessary items and just 24 percent of adults report that it would be 'very possible' to come up with 730,000 guaranies within the next month if an emergency arose.⁶ Emergencies are however the most commonly reported reason for saving, reported by 29 percent of adults, though this is done mostly outside of the formal financial system. And one in ten adults report having borrowed in the past year for health purposes, more than any of the other reasons listed. These results suggest that considerable work remains to be done in expanding access to products and services that help people smooth consumption, manage risk, and weather economic shocks.

There is significant scope to expand the availability of financial education programs in Paraguay. Just one in ten adults reports that they or someone in their household has received lessons on personal finances or money management. Schools appear to be most common source of financial education, reported by 56 percent of those living in household that has received financial education, followed by parents or family members, reported by 44 percent. Just 21 percent of beneficiaries - or 2 percent of all adults - report that they or a member of their household has received financial education from a formal financial institution. Those that have received higher education are significantly more likely to have an account at a formal financial institution, save, and report less financial insecurity. While the direction of causality cannot be established from the data, this relationship does hold even after controlling for a full range of socioeconomic and demographic characteristics. However evidence from randomizedcontrolled trails has shown well-designed financial education programs can equip people with the knowledge and skills to take advantage of appropriate financial services to save, borrow, make payments, and manage risk.

⁵ http://www.abc.com.py/internacionales/paraguay-entrepaises-con-alto-porcentaje-de-trabajo-informal-611317.html 6 730,000 guaranies corresponds to approximately five percent of Paraguay's GDP per capita, the same cut off that will be used in the 2014 Global Findex for a similar question.

Introduction

Broad-based participation in the formal financial sector can yield positive outcomes on both the individual and country level. Access to a wide range of financial products and services enables individuals, households, and firms to smooth consumption, manage risk, and make important investments in their education, health, and productive enterprises. Evidence from randomized controlled trials confirms that basic saving and payment tools in particular can generate significant benefits for their owners.⁷ Financial inclusion has also been positively linked to country-level outcomes including economic growth, financial sector development, and financial sector stability.⁸

It is often said that what is not measured cannot be improved - financial inclusion is no exception. For policymakers and private sector leaders seeking to expand the quality and availability of financial services in Paraguay a key first step is to develop an understanding of how adults in Paraguay currently manage their day-today finances and plan for the future, both inside and outside the formal financial system. Collecting survey data from individuals - that is, from the demand side can provide valuable insight into the usage, value and limitations of existing financial services. Demand-side survey data also facilitates analysis of how patterns of financial inclusion vary across different population segments, and the degree to which different financial behaviors - such as saving, borrowing, and making payments - overlap.

To date, the World Bank Global Findex survey offers the most comprehensive demand-side assessment of financial inclusion around the world. Collected in 2011 in 148 economies as part of the Gallup World Poll, the Global Findex data finds that 50 percent of the world's adult population is financially included – defined as owning an account at a formal financial institution. Yet the data also shows considerable variation in the use of formal financial services across countries and individual characteristics. For example, while financial inclusion is virtually universal in many high income economies, just 23 percent of adults living on less that \$2 per day report using basic formal financial products and services. In

7 See Aportela 1999; Dupas and Robinson 2011, 2013; Ashraf, Karlan, and Yin 2010.

8 See Demirguc-Kunt and Maksimovic 2002; Levine 2002; Beck and Levine 2004; Beck, Levine, and Levkov 2010; Han and Melecky 2013.

Paraguay, the 2011 Findex found that 22 percent of adults had a formal account.

THE 2013 PARAGUAY FINANCIAL INCLUSION SURVEY

In recognition of the importance of financial inclusion and the need for robust and in-depth measurement, the 2013 Paraguay Financial Inclusion Survey (EIF)⁹ was carried out to provide a comprehensive, demand-side view of financial inclusion in Paraguay. The EIF data - analyzed for the first time in this report - contributes to the financial inclusion agenda in Paraguay in three important ways. First, the EIF facilitates a deeper understanding of the financial inclusion landscape in Paraguay by updating and expanding the 2011 Findex data. In developing the EIF questionnaire, Findex questions were refined to more accurately capture the Paraguayan context - including the unique role of cooperatives and mobile money - and additional themes were included - such as Payments, Insurance, and Financial Capabilities. Second, the EIF serves as timely analytical resource to inform the development of a National Financial Inclusion Strategy. The data and analysis can be used to identify priority populations, set national financial inclusion targets, and design reforms and interventions to advance financial inclusion in Paraguay. Finally, the EIF provides a baseline survey against which to measure progress of reforms and initiatives generated by the Strategy. Future rounds of surveys - whether as part of the Global Findex or other Paraguay-specific data collection efforts - will shed light on the degree to which the financial inclusion landscape is shifting in Paraguay, and to what extent progress is evenly distributed across different population segments and regions.

The EIF questionnaire covers six main themes: Accounts, Savings, Credit, Mobile Money, Insurance, and Financial Capability. The EIF was carried out from November 6 to 26, 2013 via face-to-face interviews with 1,000 nationally representative and randomly selected adults.¹⁰ As with the Global Findex, the EIF was executed by Gallup, Inc. as part of its annual World Poll. To facilitate comparability with past and future rounds of the Global Findex, the EIF questionnaire was developed



⁹ For its initials in Spanish (Encuesta sobre Inclusión Financiera). 10 See Appendix I for complete Survey Methodology details.

using the 2011 Global Findex questionnaire as a template.¹¹ However, the final EIF questionnaire is tailored to the Paraguayan context and reflects the inputs of key local stakeholders as well as international experts in financial inclusion and household survey research.¹² The result is a financial inclusion questionnaire that reflects the unique financial inclusion landscape in Paraguay but retains comparability with the Global Findex in several important dimensions. The complete EIF questionnaire is included in Appendix II.

Results from the 2013 EIF are largely consistent with those of 2011 Global Findex data collected in Paraguay, though there are signs that progress has been made in the two years between the surveys particularly in the realm of mobile money. The 2011 Global Findex survey found that 22 percent of adults in Paraguay had an account at a formal financial institution. The comparable value from the 2013 EIF is 29 percent, which does represent a statistically significant increase from 2011. However, it should also be noted that the 2013 EIF more explicitly included cooperatives in the measurement of formal accounts so some of this increase reflects likely this methodological improvement.13 Several questions that were identical across the two surveys - such as those relating to debit card ownership and formal savings - yielded estimates that were higher in 2013, but not statistically distinguishable from 2011 results. Other results, particularly those related to the expanded use of mobile money, suggest that significant changes in the way adults manage their day-to-day finances have occurred in a relatively short period of time.

LIMITATIONS OF THE 2013 EIF

All household survey data is subject to biases stemming from sampling, nonresponse, and respondent comprehension. Importantly, the data presented in this report are population estimates based on a sample. Each data point is associated with a margin of error and distinct values (account ownership between men and women, for example) may indeed be statistically indistinguishable. Survey statistics should be interpreted with margins of error in mind. For example, the EIF shows that 29 percent of adults in Paraguay report owning an account at a formal financial institution. This particular value is associated with a margin of error (defined as a 95% confidence interval) of +/- 4.0 percentage points, meaning that if survey is conducted 100 times using the exact same procedures, the range 25 to 33 percent would include the "true value" in 95 out of the 100 surveys. Relatedly, the EIF finds that 30 percent of women have an account at a formal financial institution compared to 29 percent of men. Yet although these values are distinct from one another, they are within the margin of error of each other and so statistical tests indicate that they are not statistically distinct. Thus, the data does not suggest that women are more likely than men to have a formal account. Generally speaking, margins of error increase as the subpopulation examined becomes smaller. So, while it is possible to point to meaningful differences in financial inclusion across broad categories of gender, income, education, and geographic regions, the data does not facilitate reliable estimates of financial inclusion among small subpopulations, for example female business owners under age 30, or urban residents with a tertiary education in the Southern Region. For this reason, the sparsely-populated Northern and Western regions are aggregated when indicators are presented by region and analysis at the department level is not included.

To the degree possible, the analysis presented in this report focuses on variations that are statistically and economically meaningful. When relevant, the analysis emphasizes differences that remain statistically significant even after accounting for a range of other demographic or socioeconomic characteristics in regression analysis.

Collecting data from individuals inherently relies on the recall, comprehension, and honesty of the respondent. Despite the complex nature of the topic, the EIF questionnaire was designed to be simple and easily comprehensible for respondents with varying levels of education and familiarity with financial topics. And to the degree possible, sensitive topics – such as saving money at home, or borrowing from moneylenders – were treated carefully and preceded by assurances of confidentiality. Yet while these biases can be minimized, they cannot be eliminated and additional scrutiny may be required when examining data related to complex or sensitive topics.

Demand-side financial inclusion data should be complemented by other quantitative and qualitative exercises. Targeted demand-side surveys can provide valuable insights into the financial behaviors of specific groups - such as informal business owners or indigenous



¹¹ The 2014 Global Findex will be released in April 2015. The 2017 Global Findex will be released in early 2018.

¹² The following government units provided inputs into the questionnaire: Intendencia de Inclusión Financiera, Gerencia de Supervisión Extrasitu, Superintendencia de Bancos, Banco Central; Dirección de Estudios Económicos, Subsecretaría de Economía, Ministro de Hacienda; Dirección de Estadísticas, Registros e Informaciones, Instituto Nacional de Cooperativismo.

¹³ The 2011 Global Findex questionnaire included cooperatives as part of a list of formal financial institutions, whereas the 2013 EIF had a standalone question on the use of cooperatives. The latter approach is likely more effective in capturing use of cooperatives.

populations - that cannot be comprehensively measured in a nationally-representative exercise. Supply-side data from banks and other financial institutions can provide important measures of financial *access* and well as details on the range and quality of financial products available. Qualitative research methods including focus groups, financial diaries, and mystery shopping exercises

<u>Box 1.1 Other demand-side surveys on financial</u> <u>inclusion in Paraguay</u>

The Global Findex database was launched in 2012 by the World Bank with support from the Bill and Melinda Gates Foundation. The Findex module - covering Accounts, Savings, Credit, and Payments - was included in the 2011 Gallup World Poll in 148 economies, representing 98 percent of the world's adult population. In Paraguay, the 2011 Global Findex found that 22 percent of adults had an account at a formal financial institution and that 7 percent of adults used a mobile phone to send or receive money. Worldwide, the Global Findex data finds that 50 percent of the world's adult population owns an account at a formal financial institution. Yet the data also shows considerable variation in the use of formal financial services across countries and individual characteristics. For example, while financial inclusion is virtually universal in many high income economies, just 23 percent of adults living on less that \$2 per day report using basic formal financial products and services. The 2014 Global Findex data - including an expanded module on payments - will be released in early 2015.14

The Enterprise Survey, a firm-level survey of a representative sample of an economy's private sector, was carried out in Paraguay in 2010 by the World Bank. Since 2002, the World Bank has collected this data from face-to-face interviews with top managers and business owners in over 130,000 companies in 135 economies. The surveys covered a broad range of business environment topics including access to finance, corruption, infrastructure, crime, competition, and performance measures.

can shed light on the experience of interacting with formal financial institutions in Paraguay as well as opinions related to product quality and use cases.

In the area of access to finance, the Enterprise Survey features fifteen indicators focusing in the access to several financial products for firms. Regarding accounts, the survey includes the following indicators: percentage of firms having saving, checking accounts. While when analyzing the access to credit, the survey includes indicators such as: percent of firms with a bank loan/line of credit, proportion of loans requiring collateral and value of that collateral required, percent of firms not needing a loan, approval and rejection rates of loans. There are also indicators evaluating how firms finance investment and working capital; meaning if firms are self-financing or instead using banks to finance investments or supplier credit, stocks sales or equity, etc.

In Paraguay, the 2010 Enterprise Survey found that 90 percent of firms had a checking or savings account and 60 percent had a bank loan or line of credit. Forty-eight percent of firms reported using banks to finance their working capital. Approximately 20 percent of firms identified access to finance as a major constraint, below the regional average of 31 percent

Paraguay's 2011 Censo Económico Nacional (CEN) also provides valuable insight into the use of financial services by firms. According to the data^{15,} 12 percent of firms have a bank account though this value rises to 85 percent among large firms. Thirty percent of firms surveyed have obtained credit, loans, or financing for the operation of their business. Cooperatives were the biggest source of credit, followed by banks. Of firms without credit, more than half responded that they did not need it and about one in five reported that they did not think they would meet the requirements.

http://www.worldbank.org/globalfindex
http://www.dgeec.gov.py/censo/index.php



Accounts

1



Deposit, savings, or checking accounts serve an entry point into the formal financial sector. These basic financial products - held by 50 percent of adults worldwide - provide their owners with a safe place to save and a secure means to receive and send money. Accounts can also serve to establish a relationship with a formal institution which could increase access to credit when it is needed. As noted in the 2014 World Bank Global Financial Development Report on Financial Inclusion, the evidence on the benefits of access to basic payment and savings is supportive. Randomized controlled experiments have demonstrated that access to basic accounts can increase productive investment, consumption, investments in preventative health, and income.¹⁶ The provision of basic or no-frills accounts has been found to be an effective mechanism to facilitate and encourage the electronic distribution of wages, remittances, and government payments. This chapter summarizes EIF results on accounts.

ACCOUNT OWNERSHIP

According to the 2013 Paraguay Financial Inclusion Survey (EIF), 29 percent of Paraguayan adults report having an account at a formal financial institution. This includes checking, savings, deposit, and fixed term accounts at banks, cooperatives, and finance companies. (Fig. 1). This places Paraguay at approximately the median of the country-level distribution of financial inclusion in Latin America and the Caribbean (LAC). which extends from 14 percent account penetration in El Salvador and Nicaragua to 56 percent in Brazil (Fig. 1). When viewed as a whole, 39 percent of adults in LAC report having a formal account. Among the group of countries in LAC classified as lower-middle income by the World Bank - which includes Paraguay - account penetration drops to 20 percent.¹⁷ Thus, when viewed against other lower-middle income economies in LAC, the state of financial inclusion in Paraguay is relatively advanced.

16 See Dupas and Robinson 2011, 2013; Ashraf, Karlan, and Yin 2010.



17 Countries with a GNI per capita between \$1,036 and \$4,085 are

FIGURE 1 Account Penetration in LAC

Adults with an account at a formal financial institution (%)



Note: Data for Paraguay is from 2013. Data for the rest of the countries is extracted from Findex 2011

Among the different types of formal financial institutions, cooperatives have the broadest reach: 19 percent of adults in Paraguay report having an account at a cooperative, as compared to 12 percent for banks. The socially-oriented mission of cooperatives and their historical role in providing a range of service to communities likely make them a popular choice for Paraguayan adults seeking access to basic financial services. Fewer than two percent of adults in Paraguay report having an account at a *finance company*.¹⁸ There is also some overlap across different types of institutions: approximately five percent of adults report having an account at more than one type of formal financial institution, with the most common combination being banks and cooperatives (Fig. 2).

FIGURE 2 Account Penetration in Paraguay

Adults with an account at a formal financial institution (%)



Account holder at multiple types of institutions
 Account holder exclusively at this type of institution

¹⁸ Adults are also classified as having a formal account if they report owning a debit card that is linked to an account in their name, however we are not able to distinguish between the type of financial institution associated with this card. Approximately one percent of adults report this but do not report having an account at a cooperative, bank, or finance company.



<u>Box I.1 Other financial sector data resources for</u> <u>Paraguay</u>

The analysis presented in this report focuses on the use of financial services which is distinct from access to financial services. Adults may have access to affordable financial services and products but decide not to use them. This could be a result of voluntary exclusion due to cultural phenomena or a lack of need for a given financial product. There is, of course, considerable overlap between usage and access. Many non-users of financial products lack financial access because the costs of these services are prohibitively high or the services are unavailable because of regulatory barriers or market failures. Indeed, financial institutions frequently require credit checks to open an account as well as high Know Your Customer requirements, set high minimum account balances, and have high overdraft fees-characteristics that are ill-suited to poor or financially illiterate adults.

While usage is generally measured through demandside surveys like the EIF, access is most often measured via supply-side indicators of the distribution of physical financial access points. According to 2012 data provided to the IMF by the Central Bank of Paraguay, there are 2.24 ATMs and 1.10 bank branch every 1,000 sq. km and there are 19.78 ATMs and 9.72 bank branches for every 100.000 adults. Of course, these data measure only physical access, and not necessarily access as it relates to affordability and quality. While cross-country data on financial institutions and markets does suggest that financial inclusion is positively associated with financial depth, these are also ultimately distinct measurements of the financial sector. Because credit can be concentrated among the largest firms and wealthiest individuals, large amounts of credit in a financial system does not always correspond to broad use of financial services. Indeed, empirical tests confirm that there is significant variation in account penetration among economies with similar levels of financial depth, as measured by domestic credit to the private sector as a percentage of GDP.

Finally, as the 2014 World Bank Global Financial Development Report points out, financial efficiency is positively related to financial inclusion though financial stability is not. However, recent research by Han and Melecky (2013) does find that a broader use of bank saving deposits made the banking systems of middle-income countries more resilient to deposit withdrawals and the slowdown in deposit growth during the 2008 crisis. Nevertheless, there is a general paucity of research in this area and more needs to be done to definitively establish a link between financial inclusion and financial stability.

In the context of Paraguay, financial inclusion (measured by growth of physical access points) and financial depth have increased steadily since 2005, while measures of financial stability and financial efficiency have remained relatively flat.



Outreach, Depth, Efficiency and Stability of Financial Institutions



FIGURE 3: Account Penetration by region

Adults with an account at a formal financial institution (%)



Adults living in the Central Region and urban areas are significantly more likely than their counterparts in other regions and rural areas to report owning a formal account. Account penetration reaches 33 percent in the Central Region, as compared to an average of 24 percent in the rest of the country (Fig.3).¹⁹ This figure is consistent with demographic and economic patterns observed in other sectors. The Central region concentrates most of the population and the industries of the country. In general, adults living in urban areas are five percentage points more likely than their rural counterparts to be financially included. Yet, as discussed later on, distance is reported as a main barrier to account ownership by very few adults, even those in rural areas. This suggests that the rural-urban divide may not relate to the differences in concentration of financial institutions between the two groups but may be driven by demographic or socioeconomic variations.

The national pattern of cooperatives being more widely accessed than banks is driven largely by the Central and Southern regions. In the Central region – the most populous – 22 percent of adults have an account at a cooperative as compared to 12 percent at a bank. In the Eastern region, the values are 14 and 13 percent, respectively. In the Southern region, adults are more than twice as likely to report using cooperatives versus banks (15 versus 6 percent, respectively). However, for the North/West region (the two are aggregated to ensure a statistically robust sample): although simple summary statistics show that 16 percent

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of adults use banks and 12 percent use cooperatives in these two regions, the difference is not statistically significant (Fig. 4).

FIGURE 4: Account Penetration by type of formal financial institution and region

Adults with an account at a formal financial institution (%)



¹⁹ Central Region includes Asuncion and the departments of Caaguazu, Cordillera, Guaira, Caazapa. East Region includes: Alto Parana. North-West Region includes: Alto Paraguay, Boqueron, Presidente Hayes, San Pedro, Concepcion, Amanday y Canindeyu. South Region includes: Misiones, Itapua, Neembucu, Paraguari.

FIGURE 5: Account Penetration and income distribution

Adults with an account at a formal financial institution (%)



RICHEST 42 Q4 32 Q3

32

21

Q2

POOREST

Account penetration by within-economy income quintile

Adults with an account at a formal financial institution (%)

Note: Data for Paraguay is from 2013. Data for the rest of the countries is from 2011

There are sharp variations in financial inclusion across income segments in Paraguay: account penetration among adults in the richest quintile is more than double that of the poorest quintile (Fig. 5). In this sense, financial inequality is present in Paraguay though it is less acute than in other countries in the region. In LAC, on average, the richest 20 percent are almost three times as likely to have an account as the poorest 20 percent (61 percent vs. 21 percent). Across LAC, there does not appear to be a correlation between country-level values of income inequality (as measured by the Gini coefficient) and financial inclusion inequality, which suggests that countries with relatively high inequality (such as Paraguay) can indeed have inclusive financial systems.

Adults in the middle of the income distribution are particularly likely to use cooperatives over banks. Adults in the middle of the income distribution - that is, those not in the poorest or richest income quintile - are more than twice (23 vs. 10 percent) as likely to report

using a cooperative as they are a bank. Yet among the poorest adults there is no difference in institutional affiliation (9 vs. 8 percent), and among the richest adults the gap is much smaller (27 vs. 22 percent).

Education level and age also help to explain part the variation in account penetration in Paraguay. Just 21 percent of those with a primary education or less report having a formal account, but this value rises to 30 percent for those with a secondary education and to 45 percent for those with a tertiary education or more. These differences are confirmed through a multivariate regression analysis that also controls for other individual characteristics. Perhaps relatedly, only five percent of adults with primary education or less live in a household where he or someone has received financial education. Adults, aged between 31 to 65 years old, record the highest account penetration (34 percent). Among youth (those aged 15 to 30), just 23 percent have a formal account (Fig.6).



FIGURE 6: Account Penetration by individual characteristics

Adults with an account at a formal financial institution (%)



Note: "Employed part time and do not want to work full time " and "Employed part time and want to work full time were omitted as the subsample is too small (less than 100 cases)

Employment status may also be a key driver of financial inclusion: adults who are employed full time are more than twice as likely to own an account as those who are unemployed or out of the workforce. This is likely related to income stability as well as the increasingly electronic transfer of wages from employers to employees. While the majority of those employed full time for an employer report receiving their salary or wages in cash (77 percent), a nontrivial minority do report receiving wages directly into a bank account or onto a payment card (22 percent).

There is no gender gap in account penetration in Paraguay, although women are more likely than men to use cooperatives. Indeed, the data shows that 30 percent of women have a formal account as do 28 percent of men – yet this difference is not statistically significant. When examining only account ownership at cooperatives, however, a significant gender gap does emerge in favor of women: 21 percent of women have an account at a cooperative compared to 17 percent of men. This difference remains statistically significant after controlling for other demographic and socioeconomic differences between the two groups. In the rest of LAC, there is a large gender gap in the opposite direction, with men more than nine percentage points more likely than women to have a formal account (44 percent vs. 35 percent).²⁰ This difference also holds even when controlling for a range of demographic and socioeconomic characteristics.²¹

Those who report having confidence in financial institutions are 15 percentage points more likely to have a formal account. Thirty-five percent of those who trust financial institutions also report owning a formal account, as compared to 20 percent of those who say they do not have confidence in formal financial institutions. The difference remains statistically significant even after controlling for a range of demographic and socioeconomic characteristics in regression analysis.

Account penetration among business owners is higher than the country average; 43 percent of business owners report to have an account at a



²⁰ In the larger sample of LAC countries, it is not possible to distinguish between types of formal financial institutions. 21 The coefficient for men is 0.064 when controlling for: age, education, income, region, residence, internet, tv and employment in a multivariate OLS regression (see Annex).

formal financial institution. In addition, among those self-employed, the account penetration is 37 percent. These figures are closely aligned with IFC-McKinsey's estimations regarding the topic of enterprise finance gap, 38 percent for informal MSMEs having access to a checking account, while almost 91 percent of formal MSMEs do have an account at a formal financial institution.²²

USAGE OF FORMAL ACCOUNTS

Only 15 percent of all adults – or half of all account holders - report owning a debit/ATM card.²³ This figure is significantly lower than the average debit card penetration in Latin America and the Caribbean (28 percent). Ownership of debit cards is primarily reported among richer adults and those with an account at a bank. Thirty percent of those in the highest income quintile report owning a debit card as compared to just 10 percent among the rest of the population. And while 63 percent of adults with a bank account report owning a debit card, just 37 percent of those with an account at a cooperative do the same.

FIGURE 7: Modes of withdrawal employed by account holders

Adults with an account by most common mode of withdrawal (%)



Over the counter in a branch at your Financial Institution

Do not withdraw cash

Some other way

The most common method for withdrawing cash is through an ATM, though many adults rely principally

22 See Hommes and Ardic 2013

23 The overall value includes adults who report owning a debit card that is not connected to an account in their name.

on over-the-counter transactions or do not withdraw regularly from their account. About 40 percent of account holders report that their most common method of withdrawing cash from their account is through an ATM. Twenty-six percent of account holders report that their most common method for withdrawing cash is over the counter at a branch of their financial institution. Approximately 16 percent of account holders report that they do not usually withdraw cash from their account, likely because they use it to save or transfer money electronically (Fig. 7).

BARRIERS TO FORMAL ACCOUNT OWNERSHIP

For the 71 percent of Paraguayan adults – approximately 3.2 million people – who lack a formal account, the main barriers to access are a lack of money and documentation ²⁴(Fig.8). Understanding the barriers for non-users offers an opportunity for designing new products and policy interventions to facilitate financial access for the entire adult population. When asked about the main reasons for not having an account, the majority of unbanked Paraguayans reported a lack of money (51 percent). This value is in line with trends in LAC more broadly, where 54 percent state the same reason. This barrier is highly reported particularly among unemployed (75 percent) and part time workers (73 percent), both populations that likely have unsteady income streams (Fig. 9).

The next most commonly cited reason is the lack of documentation. Approximately 24 percent of unbanked adults report that lacking of identity card or wage slip is a barrier to opening an account. Lack of documentation is a particularly severe constraint for those who are unemployed or out of the workforce, which suggests a link between financial inclusion and informality. For those individuals who are not working formally, informality means not being covered by social benefits together with lacking of access to a formal wage slip, a common requirement to open an account. Lastly, informality is also affecting MSME. According to McKinsey's Database on Credit Gap, there are 951,000 informal MSMEs in Paraguay; these firms are unregistered and as for individuals, the lack of a national identification card is



24 Adult population older than 15 years old sums up 4,491,407 according to DGEEC Data (2012)

FIGURE 8: Self-reported barriers to use of formal accounts: Paraguay and LAC

Non-accountholders reporting barrier as a reason for not having an account (%)



Note: "Bureaucracy" and "Do not see any benefit" are not available for LAC. Data for Paraguay is from 2013 and data for LAC is from 2011.

not uncommon. According to the latest statistics available from PUICA,²⁵ regarding the coverage of civil registration systems in Paraguay, only 75-89 percent of births are registered (2001).

Bureaucracy and excessive costs are also significant barriers to financial access for the unbanked in Paraguay. Each reason is reported by about one in five unbanked Paraguayans. However affordability does not appear to be as large an obstacle to financial access in Paraguay as in the region as a whole, where 41 percent of unbanked adults report that the cost of financial services is a barrier to account ownership.

As compared to other LAC economies, lack of trust and lack of physical access are not reported as main barriers to financial inclusion. Lack of trust is one of the least mentioned barriers (only 8 percent of adults) while for the rest of the region, the lack of trust in financial institutions is affecting more than a quarter of adults. Despite being a relatively scarcely population country with a significant rural-urban divide in account penetration, very few adults cite financial institutions being too far away as a main reason why they do not have an account. ²⁶ Even among rural residents, only 4 percent of respondents stated this rationale.

26 In Paraguay there are 16.5 inhabitants per sq. km. On average, population density for Latin American countries is 82 inhabitants per sq.km. The less densely populated countries are Bolivia (10 inhabitants/sq. km), Argentina (15 inhabitants/sq. km) and Paraguay (17 inhabitants/sq. km). On the other extreme, El Salvador, Dominican Republic and Haiti have the highest concentration of population per sq.km in the region. (Source: World Development Indicators, World Bank 2011)



²⁵ http://unstats.un.org/unsd/demographic/CRVS/CR_coverage.htm



FIGURE 9: Top 4 self-reported barriers to use of formal account by individual characteristics Non-account holders reporting barrier as a reason for not having an account (%)

Lack of money (don't have enough money to use financial institutions)

Lack of documentation (such identity card, wage slip)

Bureaucracy (complicated and extensive process)

Financial services are too expensive

Note: "Employed part time and do not want to work full time " and "Employed part time and want to work full time" were omitted as the subsample is too small (less than 100 cases).



Savings 2



Saving helps individuals weather economic shocks, make important investments, and smooth consumption. Individuals may choose to save at home, through informal associations or community groups, via the acquisition of durable goods like gold or jewelry, or by using savings accounts at formal financial institutions. The latter option is likely the most secure and indeed a range of randomized controlled experiments demonstrate that providing individuals with access to savings accounts increases savings.²⁷ This chapter summarizes EIF results on savings.

According to the 2013 Financial Inclusion Survey, 39 percent of adults in Paraguay have set aside money or saved, either formally or informally, in the past year (Fig. 12). As with account ownership, saving behavior is closely related to income, education, and employment status. While just 26 percent of those in the bottom 40 percent of the income distribution report having saved in the past 12 months, 51 percent of those in the top 40 percent report the same. Those having

tertiary education and those employed full time for an employer are also particularly likely to be above the median (59 percent and 47 percent, respectively) (Fig. 10). These differences remain statistically significant even when accounting for a range of other demographic and socioeconomic characteristics in regression analysis.

It should be noted that demand-side measurements of savings activity are inherently subjective due to different understandings of how savings is defined. Anecdotal evidence suggests that adults who channel surplus money into investments in their farm or home, for example, may not consider themselves to be actively saving because they are not holding cash or liquid funds yet of course their investments are a form of saving. Thus it is likely that savings patterns reflected in the EIF are biased towards liquid savings.

²⁷ Aportela 1999; Ashraf, Karlan, and Yin 2006.



FIGURE 10: Savings by individual characteristics

Adults saving or setting aside money in the past year (%)



Note: "Employed part time and do not want to work full time " and "Employed part time and want to work full time were omitted as a omitted as the subsample is too small (less than 100 cases)

Emergencies are the most commonly reported reason for saving: 29 percent of adults saved or set aside money last year for this reason, well above the LAC average of 19 percent (Fig. 11). Saving for future expenses and saving to start, operate or grow a business were each reported by seven percent of adults. Finally, saving for retirement was reported by just 5 percent of adults.²⁸ As would be expected, there are wide variations across individual characteristics in reasons for saving. Interestingly, adults who report having some type of insurance are actually more likely than the uninsured to report saving for emergencies. Women are significantly more likely than men to report saving for emergencies. Even among older adults (those age 65 and above) just 13 percent report having set aside money for retirement in the past year. Among Paraguayan adults who report owning a business, 16 percent report having saved in the last 12 months to start, operate, or grow a business.

FIGURE 11: Reasons for savings

Adults saving or setting aside money in the past year (%)



28 The survey included a list of common reasons to save (those displayed in figure 11). As the list is not exhaustive, it is possible that there are other common reasons to save.



Most savers do not use the formal financial system: just 36 percent of savers – or 14 percent of all adults – report having saved at a formal financial institution. As in many countries, the vast majority of savers in Paraguay chose to store their money at home: 62 percent of savers – or 24 percent of all adults - report having saved at home in the past 12 months. In addition, four percent of savers – or one percent of all adults report having saved through an informal savings association such as a "*rueda*" or circle, or a person outside the family or neighbor associations (Fig. 12) (Respondents can report using more than one savings mechanism).

FIGURE 13: Formal Savings in LAC

Adults saving at a formal financial institution in the past year (%



Note: " Data for Paraguay is from 2013 and data for LAC is from 2011

The level of formal savings in Paraguay is slightly above the regional average in Latin America and the Caribbean. Ten percent of adults in LAC report having saved formally in the past year, as compared to 14 percent in Paraguay (Fig. 13). Yet because of the margin of error associated with these estimates, the incidence of formal savings in Paraguay is not statistically distinguishable from that of most other countries in the

region. It is also important to note that the difference in timing of the surveys may be particularly important in this measure as savings behavior in 2011 (when surveys in the other countries were conducted) may have been depressed in the wake of the global financial crisis.²⁹



FIGURE 12: Saving behavior among adults

Adults saving or setting aside money in the past year (%).



²⁹ According to the 2011 Global Findex survey in Paraguay, 10 percent of adults save formally though this value is not statistically distinguishable from the 2013 value of 14 percent.

Box 2.1 Saving mobilization: Learning from successful cases in LAC.

Saving mobilization refers to creating safe and sound institutions where savers can place their deposits with the expectation that they will receive the full value of their funds, plus a real return, upon withdrawal. One such product whose characteristics seem to best suit the savings needs of the low-income population is the commitment savings account. In this type of account, clients make a plan for monthly deposits or set a goal amount over any specific savings period. Commitment savings accounts could also be used as an alternative collateral, as a substitute when the client lacks the traditional forms of collateral that is often requested by financial institutions for accessing to finance.

Technology can help to increase the savings rates of commitment account owners. Empirical evidence from randomized controlled trials in Peru, Bolivia and Philippines suggests that clients receiving reminders via text message or letter saved more than a no-reminder control group. The total saving balances increased by 6 percent and the likelihood of reaching the goal amount increased by 3 percentage points³⁰. In Colombia, for instance, the Credit and Savings Cooperative -Comultrasan, implemented a

strategy to improve the compliance rates for planned savings products. As a result of the implementation of a call center to remind and motivate clients to make deposits into their commitment savings accounts, they increased compliance rates from 65 percent to 80 percent in the course of a year and half.³¹Commitment savings products involve fewer transactions than traditional savings accounts, but require large efforts in terms of account opening and maintenance so the client can make deposits easily and periodically. The use of mobile devices to collect savings and incorporating geo-positioning technologies allowed Comultrasan to automate and facilitate the deposit collection process. For those clients living in rural areas without branch presence, an at-home savings collection for its commitment savings was implemented.

Relatedly, the adoption of bank agent schemes has allowed many countries in Latin America and the Caribbean to expand the penetration of commitment savings products. In Mexico, Banco Azteca, was able to reach 200,000 clients within a year, with their group commitment savings product, through over 3,000 points of sale at their own branches, Elektra retail locations, and bank agents that operate daily throughout the 365 days of the year from 9:00am to 9:00pm

FIGURE 14: Savings by individual characteristics

Adults who saved at a formal financial institution & adults who saved informal (only) in the past 12 months (%)



Note: 'Saved formal' may include also adults saving both informal and formal. 'Saved informal' includes percentage of adults who saved at saving clubs, with person outside the family, with family or keeping the cash at home. "Employed part time and do not want to work full time" and "Employed part time and want to work full time" were omitted as the subsample is too small (less than 100 cases).

31 http://www.pro-savings.org/sites/default/files/ficha%203%20ingl%C3%A9s.pdf



³⁰ http://www.poverty-action.org/sites/default/files/topmind.pdf

Patterns of formal savings behavior across individual characteristics closely track those of general savings behavior. Wealthier adults, those with more education, and those living in urban areas are more likely than other segments of the population to report having saved at a formal financial institution in the past 12 months. Although women are slightly more likely than men to save in general, the incidence of formal savings between the two groups is identical suggesting that women take advantage of more informal savings mechanisms than do men. Another exception is that older adults (those over 65 years) who save are significantly more likely to do so formally as compared to their younger counterparts. Adults in the Central region are more likely to save and as a result a larger overall percentage also report saving formally, as compared to adults in other regions. Yet as a subgroup, savers in the Central region are not significantly more likely to save formally than their counterparts in other regions (Fig. 15).

There are variations in the incidence and mode of saving behavior among different income quintiles. Fifty one percent of those in the upper 60 percent of the income distribution report having saved in some way, compared to just 26 percent among the bottom 40 percent. And while 23 percent of adults in the upper 60 percent of the income distribution report saving formally, only 8 percent of the bottom 40 percent saves at formal financial institutions (Fig. 14). Again these values are slightly above those found in the rest of Latin America: in the region as a whole, 13 percent of the poorest bottom save at formal financial institutions.

FIGURE 15: Savings by region

Adults saving or setting aside money in the past 12 months (%)



Adults with an account at formal financial institution are significantly more likely to save, and to do so at a bank, cooperative, or other formal financial institution. Fifty-six percent of account holders report saving in the past year, as compared to 25 percent of those without an account. And of course adults with an account are more likely than unbanked adults to save formally: Forty-five percent of those with account save formally compared to just 14 percent of those without an account (the latter group may save using a family member's account). Of course, it is not possible with this data to establish a causal link between financial inclusion and saving; but it is quite likely that access to a secure place to save was a main reason why adults with an account entered the formal financial system in the first place. Interestingly, savers who save using formal financial institutions are no less likely than unbanked savers to save at home as well.

Those who report having confidence in financial institutions are more than twice as likely to save formally as those who do not. Eighteen percent of those who trust financial institutions also report that they have saved at a financial institution, as compared to 9 percent of those who say they do not have confidence in formal financial institutions. The difference remains statistically significant even after controlling for a range of socioeconomic and demographic characteristics in regression analysis.

There is a considerable proportion of the adult population that has the capacity to save yet is not served by the formal financial system. These unserved adults report savings informally and do not own a formal account. They live disproportionately in urban areas, and their confidence in the financial sector is low, compared to the average confidence of those who have saved in general. In addition, 3 percent of adults holding an account are saving informally and may be classified as underserved.



Credit



Access to credit allows individuals to smooth consumption over time and make critical investments in education, health, or housing. For potential entrepreneurs and firms, the availability of credit can encourage new business creation and boost firm productivity and output growth.³² Yet evidence on consumer credit and mortgage markets demonstrate that consumers frequently lack sufficient information or financial skills to make informed and rational decisions about borrowing. When exacerbated by insufficient consumer protections and regulatory oversight, these trends can have destabilizing effects on both the individual and sector-level, as seen in the subprime mortgage crisis in the U.S. and microcredit crises in Morocco, India, and Bosnia-Herzegovina. Thus, while widespread access to credit is vital to a well-functioning economy, increases in borrowing by individuals and firms needs to be achieving responsibly and sustainably. This chapter summarizes EIF results on credit.

Approximately 34 percent of adults in Paraguay report having borrowed money in the past 12 months. This includes borrowing money from a range of sources - from family and friends to banks - and for a range of purposes - from consumer goods to business loans. Wealthier adults, middle-aged adults (those between 31 and 65), adults with a tertiary education, and those employed full-time were more likely to report having borrowed (Fig. 16). After accounting for the full range of demographic and socioeconomic characteristics, there does not appear to be a difference between genders or between urban and rural residents in overall borrowing behavior.

³² See Banerjee and Duflo 2007; Beck, Demirguc-Kunt, and Maksimovic 2005.

FIGURE 16: Loans by individual characteristics

Adults who borrowed money for any reason in the past 12 months (%)



Note: "Employed part time and do not want to work full time " and "Employed part time and want to work full time" were omitted as a omitted as the subsample is too small (less than 100 cases).

Health is the most commonly reported reason for borrowing among adults in Paraguay. Overall, approximately 10 percent of adults – or 38 percent of borrowers – report having borrowed for health or medical purposes in the past 12 months (Fig. 17). Somewhat surprisingly, adults with life or health insurance are significantly more likely than other adults to report healthrelated borrowing. Borrowing for health is also closely related to income levels: while 5 percent of adults in the bottom 40 percent of the income distribution report borrowing for health purposes, 13 percent of those in the top 60 percent do the same And finally, health-related borrowing is most commonly reported in the Central Region: 13 percent vs. 5 percent in other regions

Borrowing for consumer goods, for business purposes, and for education is each reported by about 6 or 7 percent of adults in Paraguay (Fig. 17).

Not surprisingly, most of the business-related borrowing is done by adults who also report owning a business: 25 percent of business owners report having borrowed to start, operate, or expand a business compared to 2 percent of those who do not report currently owning a business. This does suggest however that most of this activity is directed at operating or expanding a business, and not necessarily for first-time entrepreneurs. Borrowing for education is also concentrated among one group: those with a tertiary education. This suggests that it is for university-related purposes though it is not possible to say with certainty since it is also conceivable that adults in this group are borrowing for private secondary school costs for their children. Relatively few (less than 5 percent) of adults in Paraguay report having borrowed to rent or lease a vehicle, purchase clothes or accessories, purchase home or land, or for weddings or funerals.



FIGURE 17: Reasons for loans reported by borrowers

Adults borrowing money in the past 12 months (%)



In contrast to savings patterns, it appears that borrowing is done most commonly through the formal financial system. Twenty-two percent of adults report having borrowed from a formal financial institution in the past year - banks, cooperatives, or finance companies. In contrast, just nine percent of adults in Paraguay report having a loan from an informal source, a category that includes family, friends, moneylenders, pawn shops, and casas de credito (Fig. 18). And there is not much overlap between the two categories: just two percent of adults in Paraguay report having borrowed from both a formal and an informal source. Another five percent of adults who report having borrowed but did not specify the source, either because it was not included in the list of sources in the survey or because they preferred not to report it. Of course, the majority of Paraguayans - roughly 2.9 million adults - do not report any borrowing activity at all in the past year.



Adults in the Central Region are most likely to borrow, both formally and informally. Forty percent of adults in the Central region report having borrowed in the past 12 months with 24 percent doing so formally (Fig. 19). This compares to 26 percent reporting general borrowing and 20 percent reporting formal borrowing on average in other regions. However, when they borrow, adults in the North/West and South Regions are most likely to do so formally. In these regions, close to 90 percent of reported borrowing is done through formal institutions, as compared to around 60 percent in in the Central and Eastern Region (Fig. 19).

FIGURE 19: Loans by source and region Adults borrowing money in the past 12 months (%)



Data suggests that Paraguayan borrowers infrequently borrow across different types of lenders. The vast majority of those who borrow – approximately 85 percent – do so from only one type of lender (Fig. 20). About 10 percent of borrowers – or three percent of all adults – borrow across multiple lenders, for example a bank and family/friends or a *casa de credito* and a cooperative. And just 2 percent of borrowers – or less than one percent of all adults – borrow from three or more types of lender.³³





Note: Source is defined as a type of lender, such a bank, cooperative, family/friends, pawn shop, etc.

33 This refers to types of lenders (i.e. banks or cooperatives or moneylenders, etc.). A respondent who reports borrowing only from banks could potentially borrow from more than one bank.



FIGURE 21: Sources of borrowing by type of lender

Adults borrowing money in the past 12 months (%)



Banks and cooperatives are reported as the two most common loan sources in Paraguay, followed by family and friends. Relatively few adults report borrowing from moneylenders, pawn shops or *casas de credito*. Of course, there are several factors that make measurement of borrowing behavior – particularly informal – quite difficult. First, loans from family or friends may not be considered to be strictly 'borrowing', particularly if there is no fixed term or interest rate. And sensitivity around other types of informal borrowing may affect responses, particularly if family members are present at the time of the interview.

With very few exceptions, cooperatives are used more commonly than banks across all demographic and socioeconomic categories. There is limited evidence to suggest that when it comes to credit, cooperatives are more inclusive among traditionally underserved populations (i.e. the poor, women, and rural residents). Indeed both banks and cooperatives are used disproportionately by the wealthy and those with better education. When it comes to informal borrowing, it appears that informal lenders (such as casas de credito, pawn shops, and moneylenders) are used at similar rates when they are aggregated into one category as borrowing from family and friends.

Business owners and entrepreneurs would benefit from an increased access to credit for boosting their business. Only 7 percent of the adults report having borrowed money for starting a business. Relatedly, among those who are business owners, only 18 percent borrowed money from a cooperative in the past year, nine percent borrowed from banks and five percent from a *casa de credito*.³⁴

Relatively few adults in Paraguay report owning a credit card. Only 8 percent of adults report owning a credit card, though this value doubles to 16 percent when examining just those in the top 20 percent of the income distribution. Rates of credit card ownership are significantly lower in Paraguay than in the region as a whole: 18 percent of adults in LAC report owning a credit card. The majority of credit card owners in Paraguay have only one card: 40 percent of credit card owners – or 3 percent of all adults – report owning more than one credit card. Credit cards are not included in the overall borrowing indicator presented above because the survey asks only about the ownership – not the use – of credit cards. However, if it was included, the overall prevalence



³⁴ While according to McKinsey 2008 Global Banking Profit Pools estimations, on average, 85 percent of formal MSMEs have access to credit, only 13 percent of informal MSMEs are borrowing money for their activities. In addition, 40 percent of the 1.1 million MSMES (either formal or informal) are unserved.

of borrowing would increase only slightly from 34 percent to 36 percent, suggesting that most credit card owners use their card for one of the reasons listed above (and were thus included) or use other sources of credit as well.





Note: Informal lenders includes the following sources: "casa de credito", "pawn shop", "money lenders". "Employed part time and do not want to work full time " and "Employed part time and want to work full time" were omitted as the subsample is too small (less than 100 cases).



Mobile Money and Tranfers



Like many payment products, mobile money can facilitate safe and efficient transfers of money and potentially provide a gateway into the formal financial system for underserved adults. Payments are an area where new technologies and innovations have quickly transformed the availability, quality, and affordability of financial services. The rapid growth of mobile money and mobile banking services have been made possibly by ubiquity of mobile phones in most countries. Evidence suggests that the use of mobile payments can help smooth risk and protect individuals against economic shocks by allowing them to quickly receive support from family and friends. However, it is a challenge for the private sector and policymakers to transform the widespread use of payment services including mobile money - into access to a wider range of financial products to facilitate savings and, when needed, borrowing. This chapter summarizes EIF results on mobile money.

GENERAL USE OF MOBILE MONEY

With almost a third of adults using a mobile money product, digital payments are quickly becoming integrated into the financial service landscape in Paraguay. Twenty eight percent of adults in Paraguay report having used a mobile money service – such as Giros Tigo, Tigo Money, Envios Personal, or Billetera Personal – in the past 12 months (Fig.23). While the data are not strictly comparable, this value does suggest a marked increase from 2011 when just seven percent of adults reported using a mobile phone to send money, receive money, or make payments.³⁵ The LAC average for a similar question in 2011 was three percent. According to Millicom, the operator of Tigo Money, more than 25 percent of Tigo's customers use mobile money.³⁶





- Have used mobile money in the past 12 months
- Will use mobile money in the next 6 months



³⁵ The 2013 question included the names of the services listed above, while the 2011 question did not.

³⁶ Millicom International Cellular S.A. 2012 Annual Report and financial statements: http://www.millicom.com/sites/default/files/Millicom_AR12.pdf_____and

http://www.millicom.com/investor-relations/key-financial-data

FIGURE 24: Mobile money usage by individual characteristics

Adults who used mobile money in the past 12 months (%)



Note: "Employed part time and do not want to work full time" and "Employed part time and want to work full time" were omitted as the subsample is too small (less than 100 cases)

There is however considerable scope to leverage the role of mobile payments to provide a wider range of use cases and financial products. The widely used over-the-counter (OTC) mobile money model offered by Tigo - as opposed to a wallet-based models offered by Tigo and Personal - dominates the market in Paraguay. Because users of OTC mobile money products cannot store value, these products may not realize the full potential of mobile money to facilitate savings. Increasing the awareness and usage of wallet-based models can yield nontrivial benefits for users of mobile money.

In general, there is less variation across demographic and socioeconomic characteristics in the use of mobile money as compared to the use of other financial products such as formal accounts. There are however a few significant differences that emerge from regression analysis. Women, young adults, those employed full time and living in urban areas are heavier users of mobile money services. Indeed, the use of mobile money represents one of the few measures of financial inclusion where youth (those ages 15 to 30) use a financial product in equal proportion to middle-aged adults (those ages 31 to 65; Fig. 24).

Even across regions, there is no statistically significant difference in the use of mobile money services. The highest estimate of usage comes from the Central region where 30 percent of adults report having used a mobile phone to send money, receive money, or pay bills in the past 12 months but this value is not statistically significant from that of other regions, which average 25 percent penetration (Fig. 25).



The mobile money usage value - 28 percent - is almost identical to that of formal account ownership in Paraguay and while there is considerable overlap between the two categories, a significant number of unbanked adults are using mobile money. Indeed, 23 percent of adults without an account at a formal financial institution report having used mobile money in the past 12 months, fewer than the 42 percent of banked adults using mobile money but a considerable inroad into expanding the use of financial services nonetheless. This is consistent with trends in other countries that suggest mobile money products successfully reach those outside the formal financial system. In Kenya, for example, 41 percent of those using mobile payment products are not otherwise financially included. Of course, unlike mobile money products in many other countries, several dominant money products in Paraguay are based on the OTC model and not the personal wallet model which limits the value of these products for storing money over time and increases reliance on agent networks.

FIGURE 25: Mobile money usage by region Percentage of adults (%)



An additional 10 percent of adults in Paraguay – or 14 percent of nonusers - report that they plan to use mobile money services in the next 6 months (Fig. 23). If these adults do indeed begin to use mobile money services, that would mean that 38 percent of adults in Paraguay would be using mobile payment services by mid-2014. The demographic and socioeconomic profile of these adults is generally similar to that of adults already using mobile money,

DOMESTIC REMITTANCES

Twenty nine percent of adults report having sent money to or received money from family or friends living in a different area within Paraguay in the past 12 months. Approximately 18 percent of adults in Paraguay report having sent and 21 percent report having received, with 11 percent reporting both types of payments. Those who receive domestic payments are a more homogenous group than those who send. For example, there is little variation across income quintiles in the percentage of adults who receive these payments, yet the likelihood of *sending* the payments increases sharply as income rises. And while those in the Central region are equally likely to have sent or received domestic remittances, adults living in the other regions are significantly more likely to be receivers than senders.



Box 5.1 Mobile Money landscape in Latin America

Overall, adoption and usage of mobile money in Latin America lags behind other regions yet there are signs that this is about to change. According to GSMA, with 2,165 registered mobile money accounts per 100,000 adults, LAC falls behind all regions but East Asia & Pacific and Europe & Central Asia. By comparison, there are 24,652 registered mobile money accounts per 100,000 adults in Sub-Saharan Africa. Mobile money users in LAC are distributed among the 29 live deployments in 18 countries.³⁷ But with 19 planned mobile money launches, Latin America has the second largest number of planned deployments after Sub-Saharan Africa.

A range of business models are emerging in Latin America; at one end of the spectrum are models where the mobile operator assumes most of the functions in the value chain (e.g. Tigo Money) while at the other end of the spectrum, banks are leading the process, in some cases even acquiring mobile virtual network operators (MVNOs) to offer

Mobile money is overwhelmingly the most popular way to send money to or receive money from family or friends living elsewhere in Paraguay. Approximately 80 percent of senders and 70 percent of receivers report having used a mobile money service for these transactions. The next most popular way is cash in hand, reported by 28 percent of senders and receivers. About 10 percent of those sending or receiving domestic remittances report using money transfer services (like Western Union, Money Gram, transportation agencies or other) and fewer than 5 percent report using banks (Fig. 26).

mobile financial services independently of mobile operators (e.g. Bancolombia's Ahorro a la Mano). New entities dedicated to mobile payments, such as joint ventures between mobile operators and financial institutions and/or card companies (e.g. Transfer and Wanda), are also offering a salient alternative approach to mobile money in the region.

With over 400 million GSM subscribers out of 550 million total subscribers in the region, América Móvil and Telefónica have developed group-level strategies for mobile money. América Móvil launched Transfer in Mexico in April 2012 as a joint venture with Banamex (a Citibank subsidiary) and Banco Inbursa. América Móvil (Claro) has since launched Transfer in Colombia. In Brazil, Claro has partnered with the largest retail bank, Banco Bradesco, to launch a variant of Transfer: Meu Dinheiro Claro. Telefónica/Movistar is also increasingly active in mobile money. Telefónica and MasterCard have a joint venture through which they have launched Wanda in Argentina and Zuum in Brazil.

http://www.gsma.com/mobilefordevelopment/wpcontent/uploads/2014/02/SOTIR_2013.pdf

FIGURE 26: Mechanisms for sending/receiving money domestically³⁸

Adults who sent/received money elsewhere in Paraguay in the past 12 months (%)



<u>Box 5.2 Evolution of mobile money in Paraguay:</u> <u>the case of Giros Tigo</u>

Tigo Money was launched in 2010, firstly focusing on domestic remittances as "Giros Tigo." The product was designed after understanding the unmet demand for sending small amounts of money and for having broader geographical access to these services. Before the development of mobile services, the most popular option in the countries was sending remittances through bus drivers.

At that moment, the product offered an e-wallet, over-thecounter money transfers, utility bill payments and top up services. The total cost of money transfer was set at 4 percent of the remittance, but of that, 2 percent was returned to the client as airtime. To send money the sender visits a Tigo Point and informs the cashier the mobile number of the person in Paraguay that will receive the remittance. The recipient receives an SMS and after passing by any Giros Tigo point, he collects the cash.

New services were soon added including international remittances (in partnership with Western Union), payments

in shops, and cash-out services using ATM machines in the Dinelco network.

According to a GSMA analysis, Tigo's key success factors were its deep market knowledge, the successful distribution network which allows high penetration in previously unserved rural areas, effective marketing tactics and collaboration with an aligned bank partner (Vision Banco). This successful model was later replicated and rolled out in other countries in the region such as Guatemala and Honduras.

At the end of 2010, the Government introduced new AML/CFT regulation³⁹, which became the key regulation in place in terms of remittances and money transfers. In addition, the recently enacted BCP's Resolution N.6 on Electronic Payments (March 2014), regulates issuance of emoney, the electronic accounts and the entities dealing with electronic payments (EMPE or entidad de medios de pago electronicos). Services providers as Tigo are under supervision of the SEPRELAD (Secretaría de Prevención de Lavado de Dinero o Bienes).

39 Resolution 333/2010 from SEPRELAD



³⁸ Bank includes banks and financial institutions. In these cases the transaction could be done over the counter at a branch, at an ATM or through electronic deposit. Mobile money includes services as: Giros Tigo, Envios Personal, Billetera Personal or Tigo Money. Money transfer services include: Western Union, Money Gram, transportation agencies or others.

WAGES AND GOVERNMENT PAYMENTS

Of the 34 percent of adults receiving salary or wages, the vast majority receive them in cash. Seventy-six percent of adults who report having received money in the form of salary or wages for doing work in the past 12 months reported receiving their payment directly in cash. Twenty-one percent of these adults reported receiving a wage or salary payment directly into their account at a financial institution or through a payment card (respondents could choose more than one option). Finally, five percent of respondents reported receiving this type of payment through mobile money and another five percent through a check (Fig. 27). The cash-centric pattern is observed despite the fact that 41 percent of those receiving cash payments report having an account at a formal financial institution.

<u>Box 5.3 Opportunities for banking the</u> <u>unbanked: from OTC transactions to personal</u> <u>wallet model</u>

Mobile financial services have gained traction in many countries by keeping costs low while being more accessible than competing services that rely on physical locations and equipment (such as bank branches, remittance companies or ATMs). On one extreme of the cash-cashless continuum are over-thecounter (OTC) transactions, while on the opposite extreme, there are cashless transactions such as mobile wallets. OTC transactions occur when senders or receivers do not use their own accounts and customers transact in cash with an agent who executes the electronic payment on their behalf. On the other hand, mobile wallet accounts are electronic accounts which clients can manipulate directly to send payments to other wallets or merchants. 40 41

However, the transition from OTC transactions to mobile wallets is far from being automatic or easy for customers. In countries as diverse as Paraguay, Ghana, Pakistan, and Bangladesh the emergence of mobile money is marked by a high proportion of OTC transactions⁴². Transition toward cashless transactions needs a regulatory environment which makes account opening simple and painless enough for people to even contemplate acquiring an electronic repository of value.

FIGURE 27: Mechanisms for receiving wages/salary payments

Adults who report to have received wages/payments in the past 12 months



Four percent of adults report having received government social transfers in the past 12 months. Although the small subsample size limits a statistically sound analysis of this group, the data does suggest that the vast majority of these adults are unbanked.

In addition, financial illiteracy and lack of trust in the system hinders adaptability of clients to new cashless technologies. In Kenya, Safaricom has recently launched M-Shwari⁴³ in partnership with the Commercial Bank of Africa to provide savings and loan services to the 15 million users registered for its M-PESA service, which allows Kenyans to transfer money via text messaging. With M-Shwari, customers can open savings accounts with as little as one shilling and the service offers interest rates of up to 5% per year on savings. With the deposited money, the service then provides microcredit loans starting from 100 shillings (\$1.16).

In Paraguay, there is an unserved market of users of payments and mobile money services that are still financially excluded. Seventeen percent of adults who have received or sent money in the past year or have used mobile money services still don't own an account. Offering e-wallets linked to basic accounts in partnerships with banks or cooperatives, could promote savings, enable the access to loans for customers while keeping low the transaction cost for customers and financial providers.



40 http://www.cgap.org/blog/mobile-money-otc-versus-wallets 41 Pénicaud Claire and Arunjay Katakam. 2013. State of the Industry. Mobile Financial Services for the Unbanked. GSMA. 42 http://www.cgap.org/blog/mobile-money-otc-versus-wallets 43http://sabahionline.com/en_GB/articles/hoa/articles/features/2013/01/09/ feature-02



Insurance

5



Insurance allows individuals to manage risk and avoid catastrophic expenses related to health emergencies, natural disasters, accidents, and sudden death. Empirical evidence suggests that uptake of insurance significantly alters the behavior of individuals, often resulting in more profitable investments and better resistance to economic shocks. This chapter summarizes EIF results on insurance.

Twenty six percent of adults report having health, life, or vehicle/home insurance, with health insurance being the most commonly held insurance product by far. On average, 25 percent of adults have some kind of health insurance or Seguro Medico.⁴⁴ It is likely that respondents included *"medicina prepaga"* or other health related pre-paid services when responding to this question. Less than 4 percent of the adult population has life insurance, and only 2 percent have their house or vehicle insured (Fig. 28).

The majority of respondents with health insurance reports that it is public, or provided by the government. Approximately 25 percent of those with health insurance report that it is private, while 13 percent say that they have both public and private insurance.

44 See Appendix II, Question 15



Most of those with private health insurance report that it is provided to them by a relative or friend (58 percent), while about a quarter say that it is provided to them by their employer.

FIGURE 28: Insurance

Adults having any type of insurance (%)



FIGURE 29: Insurance by individual characteristics

Adults who purchased insurance in the past 12 months (%)



Note: "Employed part time and do not want to work full time" and "Employed part time and want to work full time" were omitted as the subsample is too small (less than 100 cases)

There are sharp differences in the use of insurance across income and education levels, age, and urban or rural residence, perhaps more so than for any other financial product or service. Adults with a tertiary education are approximately three times as likely as those with a primary education and twice as likely as those with a secondary education to have health insurance. Among adults in the bottom 40 percent of the income distribution, just 15 percent report having health insurance as compared to 38 percent among those in the upper 40 percent of the distribution. While approximately 23 percent of adults under 65 years of age report having health insurance, the use of health insurance rises sharply for adults above 65 years of age, reaching 48 percent. Health insurance is also significantly more common among adults living in urban areas as compared to their rural counterparts. Similar patterns are observed for other insurance products including life insurance and home or vehicle insurance.

Consistent with the trend observed for accounts, there is no gender gap in insurance penetration in Paraguay. Men and women report using health, life, and home or vehicle insurance at statistically indistinguishable rates.



Financial Capability and Security



As the availability and complexity of financial products and services increases, it is critical that adults in Paraguay have the knowledge, skills, and confidence to effectively manage their day-to-day finances and plan for the future - that is, must financially Paraguayans be capable. Policymakers across a broad swath of countries have identified low levels of financial capabilities as potentially damaging for both individual outcomes (i.e. low savings, over-indebtedness, use of inappropriate financial products) and national-level economic growth and stability (i.e. systematically high rates of non-performing loans, inefficient financial markets). The problem is particularly acute in countries with rapidly growing financial sectors that are reaching populations with limited experience using financial products and services. To improve individual-level outcomes and reduce the prevalence financial insecurity, the financial sector must also play a keen role in helping adults smooth consumption and weather economic shocks by offering affordable and appropriate savings, credit, payment, and insurance products. This chapter summarizes EIF results on financial capability and security.

FINANCIAL BEHAVIORS AND EDUCATION

Almost all respondents report that they or someone in their household plans how to use the money received by the household. Of the 92 percent who report budgeting, just over half (54 percent) report that the household member responsible for financial planning always respects the plan he or she has made. Most of the remaining respondents (34 percent) report that the responsible household member sometimes respects the plan he or she had made.

As discussed in Chapter 2, just 39 percent of adults report having saved in the past year. Those that do save are likely to do so informally, with only 14 percent of adults – or 34 percent of savers - saving through formal financial institutions. Thus there is a significant opportunity for the financial sector to mobilize savings. This potential can only be realized through appropriate legal and regulatory reforms (such as lowering the barriers to account ownership) and through shifts in the business model of financial service providers to cater to the needs of low-income clients.



FIGURE 30: Sources of personal finance or money management training

Adults who -had himself or someone else in his household- received training or instructions about personal finances or money management in the past 12 months (%)



Note: These percentages were calculated among those who responded positively the question: "Have you or someone in your household ever received any instruction/lesson on personal finances and money management?"

Financial education is not widespread: just one in ten adults report that they or someone in their household has received lessons on personal finances or money management. Schools appear to be most common source of financial education, reported by 56 percent of those living in a household that has received financial education, followed by parents or family members, reported by 44 percent. Just 21 percent of beneficiaries – or 2 percent of all adults - report that they or a member of their household has received financial education from a formal financial institution (Fig. 30).

Those that have received higher education are significantly more likely to have an account at a formal financial institution, save, and report less financial insecurity. While the direction of causality cannot be established from the data, this relationship does hold even after controlling for a full range of socioeconomic and demographic characteristics. However evidence from randomized-controlled trails has shown well-designed financial education programs can equip people with the knowledge and skills to take advantage of appropriate financial services to save, borrow, make payments, and manage risk.

FINANCIAL SECURITY

Financial insecurity related to food and other essential items affects one in five adults in Paraguay. Twenty percent of adults report that they always or sometimes run short of money to buy food or other essential items for the households (Fig. 31). Not surprisingly, patterns of financial insecurity correlate closely with household income: while 27 percent of those in the bottom 20 percent of the income distribution report this type of financial insecurity, 10 percent of those in the top 20 percent report the same. The variation between income groups may actually be less than expected because households define 'essential items' differently according to their income level. Woman are also significantly more likely than men to report that their household always or sometimes runs short of money to buy food or other essential items.

Borrowing from family, friends, and colleagues is the most commonly reported method of coping with financial shortfalls for food and household essentials. For those who report occasionally, sometimes, or always running out of money for food or household essentials, 63 percent report turning to family, friends, or colleagues. Forty-five percent of adults report reducing expenses when this situation arises. And about 18 percent of adults report finding extra work or working extra hours at their current job (Fig. 32).

FIGURE 31: Money management and food security

Percentage of adults (%)



Always or sometimes Few times Never

While the majority of Paraguayans do not report difficulty in covering food and basic needs, more than half of adults (53 percent) report that they never or rarely have money left over after covering these costs (Fig. 31). As with the previous indicator, prevalence of this situation is closely related to household income. Respondents who report having saved in the past year are also significantly less likely than non-savers to report this form of financial stability. The difference between the two groups remains economically and statistically significant even after accounting for a range of demographic and socioeconomic characteristics. The direction of causality cannot be determined from this data. It is possible that savers are less likely to experience financial shortfalls, or that those with financial shortfalls are unable to save or a combination of both.







Finally, in a more standardized approach to measuring financial insecurity, less than a quarter of adults report that it would be very possible to come up with 730,000 guaranies for an emergency within a month. The hypothetical scenario is meant to test respondents' ability to absorb economic shocks like unexpected expenses related to health problems or the loss of a job. Approximately half of respondents report that it would be 'somewhat possible' to come up with the money while 24 percent report that it would be 'not at all possible'. Not surprisingly, richer adults and those that report having saved in the past year were significantly more likely to report that it would be 'very possible'. Family or friends is the most commonly reported source of money for those who report that it would be 'very possible' or 'somewhat possible' to come up with 730,000 guaraníes for an emergency within a month.45 Though respondents could select more than one source, other sources were selected with much less frequency than family and friends. Twenty-six percent of respondents reported that they would use their savings and 22 percent reported that they would get the money from working or a loan from their employer. Borrowing money from a formal financial institution and borrowing money from an informal lender were each reported by about 14 percent of respondents. Virtually all of the respondents who chose borrowing from a formal lender were adults who already have some type of formal credit.

CONSUMER CONFIDENCE AND PROTECTION

A lack of confidence in the financial sector does not

45 730,000 guaranies corresponds to approximately five percent of Paraguay's GDP per capita, the same cut off that will be used in the 2014 Global Findex for a similar question.

appear to be a major constraint in expanding financial inclusion in Paraguay. Fifty-eight percent of adults in Paraguay report that they have confidence in financial institutions. Respondents are more likely to report confidence in financial institutions than they are in most public sector institutions including the military (54 percent), the judicial system (18 percent), and the national governments (37 percent). The level of confidence in financial institutions is significantly higher in Paraguay than in the rest of Latin America where it is reported by only 45 percent of adults (2011). In Paraguay, respondents who report having confidence in financial institutions are significantly more likely to have an account at, save at, and borrow from formal financial institutions after controlling for a range of demographic and socioeconomic characteristics. There is no observable difference however across patrons of different types of financial institutions (i.e. banks and cooperatives) in their confidence in the financial system.

Lack of trust in financial institutions is not a frequently reported barrier to owning a formal account. Just eight percent of adults without a formal account cite a lack of trust as a main reason why they do not have an account. In fact, "lack of trust" is the second-least commonly reported barrier after "financial institutions are too far away." In contrast, 26 percent of adults without a formal account in LAC in 2011 cited a lack of trust. Among those without a formal account in Paraguay, 53 percent report that they have confidence in financial institutions.

Additional research is required to assess the degree to which adults in Paraguay are aware of and use dispute resolution systems when they have a problem with a financial institution. Just three percent of adults in Paraguay report having had a problem with a formal financial institution in the past three years. Given the low prevalence of this event, a targeted survey would be required to present statistically valid estimates of how these adults handle these conflicts (whether they filed a complaint, to who it was filed, and whether the conflict was resolved).



Appendix I: Survey Methodology

The 2013 Paraguay Financial Inclusion Survey (EIF) provides a nationally representative set of financial inclusion indicators based on interviews with adults in Paraguay in November 2013. The survey was carried out by Gallup, Inc. in association with its annual Gallup World Poll.

QUESTIONNAIRE

The EIF questionnaire covers six main themes: Accounts, Savings, Credit, Payments, Insurance, and Financial Capability & Consumer Protection. The questionnaire is modeled on the 2011 Global Findex questionnaire which was carried out by Gallup as part of its 2011 World Poll. To develop the EIF, the 2011 Global Findex questionnaire was expanded and adapted to fit the Paraguayan context through consultations with local stakeholders and experts in financial inclusion and household survey research.^{46,47}

The resulting EIF questionnaire was further refined through extensive qualitative testing. The purpose of these qualitative tests was to explore and evaluate the understanding of the questions, and to identify terms that could generate confusion. Two focus groups, ten cognitive interviews and 20 pilot surveys were conducted in Paraguay during September 19-21, 2013. The pilot surveys were conducted in Aregua and Caacupemi in the Central region.

The final survey was translated into Spanish and Guarani. The complete EIF questionnaire (in Spanish) can be found in Appendix II.

SURVEY EXECUTION

Field work for the EIF was conducted during the period November 6 to 26, 2013. The target population was the entire civilian, non-institutionalized, aged 15 and older population. The fieldwork teams consisted of 22 interviewers and four supervisors. Face-to-face interviews were conducted with 1,000 nationally representative and randomly selected adults.

⁴⁷ The following institutions provided inputs into the questionnaire: Intendencia de Inclusión Financiera, Gerencia de Supervisión Extrasitu, Superintendencia de Bancos, Banco Central; Dirección de Estudios Económicos, Subsecretaría de Economía, Ministro de Hacienda; Dirección de Estadísticas, Registros e Informaciones, Instituto Nacional de Cooperativismo.



Approximately 70 percent of the surveys were carried out in Spanish and 30 percent in Guarani.

The EIF was carried out using a random, stratified, multistage sampling methodology. In the first stage of sampling, primary sampling units (PSUs) made up of clusters of households were identified. The primary sampling units are stratified by population size of the surrounding municipality. Stratification categories are based on the 2002 national census. The selection of PSUs (133) was done in proportion to the population weight of each stratum (Table A.1). For example, 10 percent of the population lives in the stratification category of cities with population 500,000 – 999,999 thousands (Asunción only), therefore 12 of 133 PSUs and 99 of 1,000 interviews were conducted in the Asunción area. Map A.1 shows the location of the selected PSUs.

MAP A.1: Location of Primary Sampling Units



In the second stage of sampling, households with the PSUs were selected using a systematic random route procedure. Unless an outright refusal occurs, interviewers made up to three attempts to survey the sampled household. If an interview could not be obtained at the initial sampled household, a simple substitution method was used. Finally, in the third and final stage of sampling, respondents were selected within the household through a Kish grid.

⁴⁶ The 2011 Global Findex questionnaire can be found at http://www.globalfindex.worldbank.org

Table A.1: Sample Stratification

	Stratums	Population	% Population	Total Cities	Selected Cities	Selected PSUs	Intervie ws
1	500 to 999 thousand	510,91	10	1	1	12	99
2	100 to 499 thousand	1,099,401	21	7	7	25	212
3	50 to 99 thousand	998,86	19	15	11	23	193
4	10 to 49 thousand	1,846,701	36	95	40	53	356
5	Less than 10 thousand	727,21	14	118	18	20	140
	Total	5,183,082	100	236	50	133	1,000

STATISTICAL VALIDITY

Data weighting was used to ensure a nationally representative sample. First, base sampling weights were constructed to account for oversamples and household size. In the case of an oversample, the data were weighted to correct the disproportionate sample. Weighting by household size (number of residents age 15 and above) was used to adjust for the probability of selection, as residents in large households will have a disproportionately lower probability of being selected for the sample. Second, post-stratification weights were constructed. Population statistics were used to weight the data by gender and age. Finally, approximate design study effect and margin of error were calculated. Population estimates made using the survey data are valid within a statistical margin of error, also called a 95% confidence interval. This means that if the survey is conducted 100 times using the exact same procedures, the margin of error would include the "true value" in 95 out of the 100 surveys. For example, the margin of error for the account ownership indicator (29 percent) is ± 4.0 percentage points. Because the EIF uses a clustered sample design, the margin of error varies by question and subsample if only part of the data is examined. The margin of error is generally larger when a subsample of the data is used: the margin of error for the account ownership indicator for the subsample of women (30 percent) is ± 4.8 percentage points.⁴⁸



⁴⁸ Assuming other sources of error, such as nonresponse, by some members of the targeted sample are equal. Other errors that can affect survey validity include measurement error associated with the questionnaire, such as translation issues and coverage error, where a part or parts of the target population, aged 15 and older, have a zero probability of being selected for the survey.

Appendix II: Questionnaire

1. Una cuenta, caja de ahorro o cuenta corriente, se puede utilizar para, hacer o recibir pagos, para recibir su salario o ayuda financiera o para ahorrar dinero. ¿Tiene usted en la actualidad, ya sea por si solo o conjuntamente con otra persona, una caja de ahorro o cuenta corriente en alguna de las siguientes instituciones:

		Si	No	(NS)	(NR)
1A.	Un banco	1	2	3	4
1B.	Una cooperativa	1	2	3	4
1C.	Una financiera	1	2	3	4
1D.	Cajas mutuales o de pensiones	1	2	3	4

2. Una tarjeta de débito es una tarjeta asociada a una cuenta, caja de ahorro o cuenta corriente, en una institución financiera que le permite retirar dinero y éste es debitado de su CUENTA de inmediato (puede ser de un banco, cooperativa o financiera). ¿Tiene usted actualmente una tarjeta de débito? ¿Sí o no?

	MARQUE UNA RESPUESTA:	
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a pregunta WB3)
(NR)	4	

2A. Sólo si contesto "si" a la anterior pregunta: ¿Esta tarjeta de débito está asociada a una CUENTA (caja de ahorro o cuenta corriente) a su nombre?

	MARQUE UNA RESPUESTA:
Sí	1
No	2
(NS)	3
(NR)	4

3. Una tarjeta de crédito es una tarjeta que le permite PEDIR PRESTADO dinero para hacer pagos o comprar cosas y Usted puede pagar después y en cuotas. ¿Usted tiene su propia tarjeta de crédito?

	MARQUE UNA RESPUESTA:	RUTA:
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a Nota antes de pregunta WB4)
(NR)	4	



3A. ¿Cuántas tarjetas de crédito tiene Usted?

		MARQUE UNA RESPUESTA:
1.	Una	1
1.	Dos	2
1.	Tres o más	3
1.	(NS)	4
1.	(NR)	5

4. Si no tiene cuenta: Por favor dígame si las siguientes frases describen o no las razones por las que Usted personalmente NO TIENE una cuenta (caja de ahorro o cuenta corriente) en un banco, cooperativa o financiera ni en ninguna otra institución financiera formal ¿Diría que es...

Marcar Inicio [CS8]			Sí	No	(NS)	(NR)	
1	4A.	Porque las instituciones financieras están demasiado lejos.	1	2	3	4	
2	4B.	Porque los servicios financieros son muy costosos.	1	2	3	4	
3	4C.	Porque no tiene la documentación necesaria (por ejemplo, documento de identidad, comprobante de salario).	1	2	3	4	
4	4D.	Porque no confía en las instituciones financieras.	1	2	3	4	
5	4E.	Porque no tiene el dinero suficiente para usar las instituciones financieras.	1	2	3	4	
6	4F.	Por razones de burocracia (procesos complicados y extensos)	1	2	3	4	
7	4G.	Porque alguien más en la familia ya tiene una cuenta como una caja de ahorro o cuenta corriente.	1	2	3	4	
8	4H.	Porque no le parece beneficioso tener una cuenta en una institución financiera formal.	1	2	3	4	

5. Cuando Usted necesita retirar DINERO EN EFECTIVO de su(s) cuenta(s) (caja de ahorro cuenta corriente) ¿cómo lo retira NORMALMENTE? ¿Diría que...?

	MARQUE UNA RESPUESTA:
Lo saca de un cajero automático (ATM)	1
Lo saca de una caja o ventanilla de una sucursal de su institución financiera	2
Lo obtiene de otra manera	3
(No saca dinero en efectivo)	4
(NS)	5
(NR)	6



SECCIÓN 2:

6. En los últimos 12 meses ¿Usted ha ahorrado o guardado dinero por alguna de las siguientes razones?

		Sí	No	(NS)	(NR)
6A.	Gastos futuros como educación, una boda, 15 años o alguna compra grande o importante	1	2	3	4
6B.	Emergencias	1	2	3	4
6C.	Para iniciar, manejar y hacer crecer un negocio, finca o chacra	1	2	3	4
6D.	Para la vejez	1	2	3	4

7. En los últimos 12 meses, ¿usted ha ahorrado o apartado dinero...?

		Sí	No	(NS)	(NR)
7A.	Usando una cuenta (caja de ahorro o cuenta corriente) en un banco, cooperativa, financiera u otra institución financiera formal (Entrevistador: esto lo puede hacer utilizando la cuenta de otra persona)	1	2	3	4
7B.	Usando un grupo de ahorro informal, como ruedas o círculos, asociaciones familiares o vecinales o una persona fuera de la familia	1	2	3	4
7C.	Guardando billetes y monedas en efectivo, como por ejemplo en la casa	1	2	3	4

8. Si contesto "no" en todas las opciones de las dos preguntas anteriores. En los últimos 12 meses, ¿usted ahorró o apartó dinero por alguna razón?

	MARQUE UNA RESPUESTA:
Sí	1
No	2
(NS)	3
(NR)	4

9. En los últimos 12 meses, ¿Usted ha recibido, solo o conjuntamente con otra persona, un préstamo de dinero por alguna de las siguientes razones?



		Sí	No	(NS)	(NR)
9A.	Para educación o gastos escolares	1	2	3	4
9B.	Para cuestiones de salud	1	2	3	4
9C.	Para establecer, operar o hacer crecer un negocio, finca o chacra	1	2	3	4
9D.	Para comprar una casa, apartamento o terreno	1	2	3	4
9E.	Para funerales, 15 años o bodas	1	2	3	4
9F.	Para adquirir bienes de consumo como televisores o electrodomésticos	1	2	3	4
9G.	Para adquirir prendas de vestir, accesorios	1	2	3	4
9H.	Para comprar o alquilar algun tipo de vehiculo (motocicleta, automóvil,utilitario,etc)	1	2	3	4

10. En los últimos 12 meses, ¿ha recibido Usted solo o conjuntamente con otra persona un préstamo de dinero de alguna de las siguientes fuentes?

			_	10		11
			_	10		11
		Si	No	(NS)	(NR)	Marcar con una X la más reciente
10A/11A	De un banco privado, que no sea del Estado	1	2	3	4	1
10B/11B	De una cooperativa	1	2	3	4	1
10C/11C	De una financiera	1	2	3	4	1
10D/11 D	De cajas mutuales o de pensiones	1	2	3	4	1
10E/11E	De una entidad de crédito o banco del Estado (Crédito Agrícola de Habilitación, Fondo Ganadero, Banco Nacional de Fomento)	1	2	3	4	1
10F/11F	De una casa de crédito	1	2	3	4	1
10G/11 G	De una casa de empeños	1	2	3	4	1
10Н/11 Н	De un prestamista informal, como un usurero	1	2	3	4	1
101/111	De familiares, parientes o amigos	1	2	3	4	

11. Solo si contesto "si" en las de una opción en las pregunta anterior. De los préstamos que menciono, podría por favor decirme de dónde adquirió el préstamo más reciente. Diría que fue de....



12. Solo preguntar sobre la "fuente mas reciente", si contesto la pregunta 11 ¿Buscó o comparó usted información de distintas fuentes o instituciones antes de solicitar este préstamo?

	MARQUE UNA RESPUESTA:
Si	1
No	2
(NS)	3
(NR)	4

13. ¿A través de que medio diría Usted que conoció sobre este préstamo? Diría que lo conoció...

	MARQUE UNA RESPUESTA:	
A través de la institución o persona	1	
A través de familiares y amigos	2	
A través de su empleador, jefe o patrón, o compañeros de trabajo	3	
A través de publicidades en los medios de comunicación (TV, radio, diarios, mensajes a través del celular o correo electrónico)	4	
Lo conoció de otra manera	5	

14 .En los últimos 12 meses, ¿Usted solo o conjuntamente con otra persona ha recibido dinero prestado de cualquier fuente por alguna razón?

	MARQUE UNA RESPUESTA:
Si	1
No	2
(NS)	3
(NR)	4

15. ¿Tiene Usted alguno de los siguientes tipos de seguro?

		Si	No	(NS)	(NR)
15A.	Seguro de vida	1	2	3	4
15B.	Seguro médico	1	2	3	4
15C.	Seguro sobre bienes (casas, vehículos)	1	2	3	4



16. Sólo si tiene seguro médico. ¿Diría Usted que el seguro médico que tiene es...

	MARQUE UNA RESPUESTA
Público	1
Privado	2
Tiene ambos	3
(NS)	4
(NR)	5

17. Solo si contestó "Privado" o "Ambos" en la pregunta anterior. ¿Quién paga principalmente el seguro médico privado que Usted tiene ..

MARQUE UNA RESPUESTA
1
2
3
4
5
6
7

18. Imagine que Usted tiene una emergencia y necesita pagar 730.000 Guaraníes. ¿Qué tan posible es que Usted pueda conseguir 730.000 Guaraníes en el próximo mes? ¿Diría que es...

	MARQUE UNA RESPUESTA:	
Muy posible	1	(Continuer)
Algo posible	2	(continuar)
No es posible en lo	2	(Ir a pregunta 20)
absoluto	5	
(NS)	4	(Continuer)
(NR)	5	(Continuar)



19. Sólo si contestó que era "Muy posible" o "Algo posible". Por favor dígame si alguna de las siguientes sería una fuente principal de dinero que Usted utilizaría para conseguir 730.000 Guaraníes durante el próximo mes

		Si	No	(NS)	(NR)
19A.	Ahorro	1	2	3	4
19B.	Familiares, parientes o amigos	1	2	3	4
19C.	Dinero del trabajo o un préstamo del empleador, jefe o patrón	1	2	3	4
19D.	Una tarjeta de crédito o pedir prestado a un banco, cooperativa o financiera	1	2	3	4
19E.	Otro prestamista privado como una casa de crédito, casa de empeño o prestamistas informales	1	2	3	4
19F.	Alguna otra fuente	1	2	3	4

20. En los últimos 12 meses, ¿ha DADO o ENVIADO usted personalmente DINERO a algún familiar o amigo que viva en otra área DENTRO de Paraguay? Este puede ser dinero que Usted mismo llevó o que envió de alguna otra manera.

	MARQUE UNA RESPUESTA:	
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a la pregunta 22)
(NR)	4	

21. Sólo si contestó "si" en la pregunta anterior. En los últimos 12 MESES, ¿usted ha ENVIADO dinero a un pariente o amigo que viva en otra área DENTRO DE PARAGUAY en alguna de las siguientes maneras?

		Si	No	(NS)	(NR)
21A.	Dinero en efectivo que entregó personalmente a esa persona o por medio de otro conocido.	1	2	3	4
21B.	A través de un banco o institución financiera. Esto puede ser en el mostrador de una sucursal, en un cajero automático, mediante depósito electrónico en una cuenta o corresponsales no bancarios	1	2	3	4
21C.	A través de un servicio de telefonía celular como Giros Tigo, Envios Personal, Billetera Personal, o Tigo Money	1	2	3	4
21D.	A través de un servicio de transferencia de dinero como Western Union, Money Gram, agencias de transporte o encomiendas.	1	2	3	4

22. En los últimos 12 meses, ¿ha RECIBIDO DINERO de un familiar o amigo que viva en otra área DENTRO de PARAGUAY, incluyendo dinero que haya recibido en persona? ¿Sí o no?

	MARQUE UNA RESPUESTA:	
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a la pregunta 24)
(NR)	4	

23. Sólo si contestó "si" en la pregunta anterior. En los últimos 12 MESES, ¿usted ha RECIBIDO dinero de un pariente o amigo que viva en otra área DENTRO DE PARAGUAY en alguna de las siguientes maneras?



		Si	No	(NS)	(NR)
23A.	Dinero en efectivo que recibió por parte de esta persona o por medio de otro conocido.	1	2	3	4
23B.	A través de un banco o institución financiera. Esto puede ser en el mostrador de una sucursal, en un cajero automático, mediante depósito electrónico en una cuenta o corresponsales no bancarios	1	2	3	4
23C.	A través de un servicio de telefonía celular como Giros Tigo, Envios Personal, Billetera Personal, o Tigo Money	1	2	3	4
23D.	A través de un servicio de transferencia de dinero como Western Union, Money Gram, agencias de transporte o encomiendas.	1	2	3	4

24. En los últimos 12 meses, ¿ha utilizado un teléfono celular para pagar servicios, enviar o recibir dinero utilizando un servicio como Giros Tigo, Tigo Money, Envíos Personal o Billetera Personal?

	MARQUE UNA RESPUESTA:	
Sí	1	(Ir a la pregunta 26)
No	2	
(NS)	3	(Continuar)
(NR)	4	

25. Sólo si contestó distinto de "Si" en la pregunta anterior. En los próximos 6 meses, ¿cree Usted que podría utilizar un teléfono celular para pagar servicios, enviar o recibir dinero a través de servicios como Giros Tigo, Envios Personal, Billetera Personal, o Tigo Money?

	MARQUE UNA RESPUESTA:
Si	1
No	2
(NS)	3
(NR)	4

26. ¿Ha recibido dinero de algún empleador o jefe, en forma de sueldo o salario, por trabajar en los últimos 12 meses? Por favor, no considere los pagos que recibe directamente de los clientes.

	MARQUE UNA RESPUESTA:	
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a la pregunta 29)
(NR)	4	

27. Sólo si contestó "si" a la pregunta anterior. Ahora pensando en TODOS LOS TRABAJOS que ha hecho en los últimos 12 MESES, ¿su empleador o jefe ha pagado su sueldo o salario de alguna de las siguientes maneras?



		Sí	No	(NS)	(NR)
27A.	En efectivo.	1	2	3	4
27B.	Directamente en una cuenta bancaria o institución financiera	1	2	3	4
27C.	Mediante una tarjeta de pago o tarjeta prepago (SI ES NECESARIO LEER: una tarjeta que no está asociada a su cuenta personal en una institución financiera)	1	2	3	4
27D.	Directamente a un teléfono celular.	1	2	3	4
27E.	Mediante cheque	1	2	3	4

28. Sólo si contestó "si" en la 27B. Después de que el pago del empleador, jefe o patrón, se transfiere electrónicamente a una cuenta, ¿Usted suele retirar o transferir TODO EL DINERO de la cuenta de INMEDIATO o lo va retirando en la medida que lo va necesitando?

	MARQUE UNA RESPUESTA:	
Retira TODO el dinero de inmediato	1	
Retira el dinero a medida que lo va necesitando	2	
(NS)	3	
(NR)	4	

29. ¿Usted personalmente, RECIBIÓ algún apoyo económico por parte del gobierno en los últimos 12 meses? Este dinero podría ser el pago de gastos educativos o médicos, prestaciones por desempleo, pagos de subsidios, o cualquier tipo de BENEFICIO SOCIAL. Por favor NO incluya salario, jubilación ni pagos relacionados con el trabajo.

	MARQUE UNA RESPUESTA:	
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a pregunta 31)
(NR)	4	

30. Sólo si contestó "Si" en la pregunta anterior. En los últimos 12 MESES, ¿ha recibido ayuda de dinero del gobierno por alguno de los siguientes medios?

		Sí	No	(NS)	(NR)
30A.	En efectivo.	1	2	3	4
30B.	Directamente en una cuenta bancaria o institución financiera	1	2	3	4
30C.	Mediante una tarjeta de pago o tarjeta prepago (SI ES NECESARIO LEER: una tarjeta que no está asociada a su cuenta personal en una institución financiera)	1	2	3	4
30D.	Directamente al teléfono celular.	1	2	3	4



31. ¿Es usted responsable de:

	Si	No	(NS)	(NR)
31A. Planificar cómo se gasta el dinero en su hogar?	1	2	3	4
31B. Asegurarse de que se paguen los gastos regulares del hogar, por ejemplo alquiler, cuentas, servicios o préstamos?	1	2	3	4

32. ¿Alguien en su hogar planifica cómo usar el dinero que ingresa (por salario o por cualquier otra razón)?

	MARQUE UNA RESPUESTA:	
Sí	1	(Continuar)
No	2	
(NS)	3	(Ir a la pregunta <mark>36</mark>)
(NR)	4	

33. Sólo si contestó "Si" en la pregunta anterior ¿Quién diría Usted que es la persona responsable de planificar cómo usar el dinero que ingresa al hogar. Diría que es...

	MARQUE UNA RESPUESTA:
Sólo Usted	1
Usted en conjunto con otra persona	2
Otra persona	3
(NS)	4
(NR)	5

34. Sólo si contestó "Usted en conjunto con otra persona" o "Otra persona" en la pregunta anterior ¿Quién sería la otra persona que es responsable de planificar como usar el dinero en el hogar?

	MAROUE UNA RESPUESTA:
Esposo/Esposa/Cónyuge	4
Hijo/Hija	5
Padre/Madre	6
Otro familiar	7
(NS)	8
(NR)	9

35. ¿Con qué frecuencia diría Usted que se cumple la planificación que se hace para el uso del dinero que ingresa en el hogar? Diría que...

	MARQUE UNA RESPUESTA:
Siempre se cumple	1
Algunas veces se cumple	2
Pocas veces se cumple	3
Nunca se cumple	4
(NS)	5
(NR)	6



36. En un mes típico, luego de cubrir los gastos básicos como comida y artículos necesarios, con qué frecuencia diría Usted que en su hogar queda algo de dinero extra al final del mes. Diría que esto ocurre...

	MARQUE UNA RESPUESTA:
Siempre	1
Algunas veces	2
Pocas veces	3
Nunca	4
(NS)	5
(NR)	6

37. Pensando en un mes típico, con qué frecuencia diría Usted que en su hogar se quedan escasos de dinero para comprar comida o artículos básicos necesarios. Diría que esto ocurre... (Leer 1-4)

		MARQUE UNA RESPUESTA:	
Siempre		1	(Continuar)
1. Algunas	s veces	2	
1. Pocas v	eces	3	
1. Nunca		4	(Ir a pregunta 39)
1. (NS)		5	
1. (NR)		6	

38. ¿Me pudiera decir que hacen normalmente cuándo en su hogar se quedan escasos de dinero para comprar comida u otros artículos necesarios? Diría Usted que...

		Si	No	(NS)	(NR)
38A.	Pide prestado a la familia, a un amigo o a un compañero de trabajo	1	2	3	4
38B.	Pide prestado a su empleador o jefe/un adelanto de sueldo	1	2	3	4
38C.	Pide un préstamo a un banco, cooperativa, financiera o entidad financiera formal, usa su tarjeta de crédito/pide un sobregiro	1	2	3	4
38D.	Pide un préstamo a un prestamista informal	1	2	3	4
38E.	Usa ahorros o vende algo	1	2	3	4
38F.	Busca un trabajo adicional/trabaja horas extras	1	2	3	4
38G.	Reduce sus gastos	1	2	3	4

39. ¿Ha recibido Usted o alguien en este hogar algún entrenamiento / asesoría o apoyo sobre cómo manejar las finanzas personales y la administración del dinero?

	MARQUE UNA RESPUESTA	
Si	1	(Continuar)
No	2	
(NS)	3	(Ir a la pregunta 41)
(NR)	4	

40. Sólo si contestó "Si" en la pregunta anterior ¿A través de qué institución o medio recibió Usted o alguien en su hogar entrenamiento / asesoría o apoyo sobre cómo manejar las finanzas y la administración del dinero? Diría Usted que fue a través de...



	Si	No	(NS)	(NR)
40A. Colegio o escuela	1	2	3	4
40B. Institución financiera formal (banco, cooperativa, financiera)	1	2	3	4
40C. Instituciones comunitarias (instituciones religiosas, organizaciones no gubernamentales, etc.)	1	2	3	4
40D. Los padres u otro miembro de la familia	1	2	3	4
40E. Empleador, jefe o patrón	1	2	3	4
40F. Medios masivos de comunicación como radio, televisión, mensajes al celular o correo electrónico	1	2	3	4

41. Suponga que Usted tiene 100.000 Guaraníes en una caja de ahorro y que el interés es del 2% anual. Luego de 5 años, ¿cuánto cree Usted que tendría en esa cuenta si dejara la totalidad del dinero depositado en todo momento?

	MARQUE UNA RESPUESTA:	
Menos que 102.000	1	
Guaraníes	-	
Exactamente 102.000	2	
Guaraníes	2	
Más que 102.000	2	
Guaraníes	5	
(NS)	4	
(NR)	5	

42. Suponga que recibe prestado de un prestamista 100.000 Guaraníes a un interés del 2% mensual. Si durante 3 meses no realiza ningún pago, cuanto diría Usted que debe, diría que debe...

	MARQUE UNA RESPUESTA:
Menos de 102.000 Guaraníes	1
Exactamente 102.000 Guaraníes	2
Más de 102.000 Guaraníes	3
(NS)	4
(NR)	5

43. En los últimos 3 años, ¿ha tenido algún problema con algún banco, financiera, cooperativa o institución financiera formal?

	MARQUE UNA RESPUESTA:	
Si	1	(Continuar)
No	2	
(NS)	3	(Ir a Nota antes de LAC1)
(NR)	4	

44. Sólo si contestó "Si" en la pregunta anterior. ¿Realizó Usted una queja o reclamo para resolver este conflicto?



	MARQUE UNA RESPUESTA:	
Si	1	(Continuar)
No	2	
(NS)	3	(Ir a pregunta 46)
(NR)	4	

45. Sólo si contestó "Si" en la pregunta anterior ¿A quién presentó su queja o reclamo? Diría que presentó a...

	MARQUE UNA RESPUESTA:	
El banco, financiera, cooperativa o institución financiera que le otorgó el préstamo	1	
Las autoridades del Gobierno responsables de velar por los intereses del consumidor	2	
La Justicia a través de los tribunales	3	
Otra entidad o persona	4	

46. ¿Fue solucionado el problema con la institución financiera?

	MARQUE UNA RESPUESTA:
Si	1
No	2
(NS)	3
(NR)	4

Appendix III: Statistical Annex

A. MAIN INDICATORS DISAGGREGATED BY INDIVIDUAL CHARACTERISTICS

			All	Ger	nder	Age		Education			Income						Empl	oyment		Region				Urban/Ru	ral	
			Mean	Male	Female	15 to 30 yrs old	31 to 65 yrs old	65> yrs old	Elementary or less	Secondary	Tertiary (compl.)	Poorest	2nd quintile	3rd quintile	4th quintile	Richest	Employed full time for an employer	Employed full time for self	Employed part time	Unemployed/ Out of the workforce	North / West	East	South	Center	Urban	Rural
	Account ownership (% adults)	A formal financial institution (any of the below) A bank A cooperative A financiera	29 12 19 2	28 12 17 3	30 12 21 2	23 10 14 2	34 13 25 3	32 15 15 3	21 7 13 2	30 11 20 3	45 28 29 2	20 8 9 2	21 7 15 2	32 10 23 2	32 11 20 4	42 22 27 2	38 17 24 3	35 11 26 5	36 19 18 1	18 6 12 1	24 16 12 1	26 13 14 1	22 6 15 2	33 12 22 3	32 2 12 2 22 2	!8 2 8 3
Ś	Card ownership (%adults)	Debit card ownership Debit card connected to an account in your name Credit card ownership	15 70 8	16 7	13 9	14 8	14 8	21 3	7 3	14 8	40 23	6 2	11 8	16 7	11 7	30 16	27 13	7 8	19 10	7 3	16 5	11 3	11 2	16 75 11	16 · · · · · · · · · · · · · · · · · · ·	4 57 7
ACCOUNT	Self-reported barriers for not having an account (% adults without an account)	Too far away" Too expensive " Lack of documentation" Lack of trust in financial institutions" Lack of money" Tako for money" "Bureaucracy" "Family member already has it" "Do not see any benefit of having an account"	4 19 24 8 51 19 10 9	4 21 24 7 49 22 10 10	3 17 25 8 53 17 11 8	4 15 31 4 42 19 14 9	3 22 18 11 60 20 7 11		5 20 15 9 58 20 7 9	2 18 33 8 44 18 12 11		7 16 23 11 49 25 12 10	1 16 18 8 53 16 16 10	5 21 29 5 55 23 6 8	3 24 34 7 50 14 9 11	2 17 16 6 44 19 10 8	3 22 20 5 46 25 9 14	8 20 14 13 50 19 8 9		3 16 28 7 49 16 13 7	· · · ·	7 24 26 14 63 21 12 15	1 11 13 2 47 18 12 2	4 20 24 8 47 21 9 11	1 20 19 2 8 52 52 8 17 2 8 11	4 8 !7 50 20 11 9
	Most common method of withdrawal from account (% account holders)	Getting cash from ATM Getting cash over the counter in branch at your FI Getting cash some other way Do not withdraw cash	38 26 4 16	43 23 4 13	33 29 4 19		36 30 4 14		28 33 5 18	34 26 5 18						51 24 5 9	48 24 2 9	•			•			39 26 2 12		16 26 5 20
	Overall savings (%adults)	Have saved or set aside money in the last 12 months	39	38	40	37	42	26	28	41	59	26	26	39	45	57	47	38	50	29	25	34	22	45	51 3	34
VINGS	Reasons for saving (% adults)	For future expenses For emergencies To start, operate or grow a business or farm For retirement	7 29 7 5	6 27 7 6	9 32 7 4	8 27 6 3	7 33 8 5	2 19 4 13	3 21 4 4	7 31 8 5	19 47 8 4	5 19 5 3	5 21 4 1	6 29 8 4	7 35 7 5	12 43 10 10	11 38 8 6	4 28 12 4	8 36 8 8	5 21 3 3	8 19 10 6	3 25 3 1	2 17 6 1	9 35 7 6	9 39 2 7 7	6 26 7 4
SA	Methods for saving (% adults)	Saved at formal financial institution Saved informal (saving clubs, person outside the family, family, etc) Saved keeping cash at home	14 1 24	14 1 23	14 2 25	10 2 24	17 1 26	17 2 10	8 0 19	15 1 25	25 7 32	7 1 17	8 2 14	10 0 31	16 2 27	30 2 30	19 2 30	16 0 21	17 6 29	9 0 19	12 0 14	8 0 26	8 2 12	17 2 28	19 · 3 31 2	2 1 21
	Overall borrowing (% adults)	Have borrowed money for any reason in the last 12 months	34	36	32	32	40	14	24	37	53	22	23	38	38	51	51	44	30	19	22	33	20	40	40 3	32
CREDIT	Reasons for borrowing (% adults)	Education Health Business Purchase home or land Funerals, weddings, etc Consumer goods Purchase, rent or lease a vehicle Purchase, rent or lease a vehicle	6 10 7 2 1 7 3 4	5 10 8 2 9 4 5	6 9 5 2 1 5 2 3	5 9 2 1 7 5 3	7 11 10 2 2 7 1 5	2 8 6 2 2 5 4 4	2 6 2 1 5 2 2	6 11 6 2 8 4 5	12 14 11 3 1 7 6 6	2 4 6 2 7 5 3	4 7 3 1 2 5 4 0	6 13 6 2 1 10 3 2	8 13 5 2 0 5 1 5	9 12 14 3 2 7 4 9	9 13 4 3 12 4 6	5 9 20 2 2 6 2 7	6 5 11 0 4 2 4	4 8 1 0 3 3 1	4 5 4 0 3 0 1	2 8 5 0 6 3 4	2 2 8 4 0 3 0 2	8 13 7 2 8 4 5	9 14 7 2 2 7 4 3	4 B 2 1 7 3 4
	Sources for borrowing (% adults)	Borrowed money from non government bank Borrowed money from cooperative Borrowed money from financiera Borrowed money from government credit institution Borrowed money from pawn shop Borrowed money from niformal prestamista or usurer Borrowed money from finformal prestamista or usurer Borrowed money from finifyriends	8 13 2 0 2 0 1 6	9 12 3 0 3 0 1 6	7 13 2 0 2 0 1 5	9 8 2 0 4 1 1 7	8 18 3 0 2 0 1 5	2 5 0 0 0 0 0 2	4 10 2 0 1 0 1 2	8 14 3 0 3 1 1 7	17 16 1 3 0 1 11	4 6 2 0 2 0 1 5	4 9 1 0 0 0 3	9 15 2 0 2 0 0 6	10 12 3 0 4 2 2 4	13 22 4 1 4 0 0 10	15 17 4 1 4 1 1 8	9 20 3 0 4 0 1 2	7 9 3 0 3 0 1 6	3 7 1 0 1 0 1 5	11 7 1 0 2 0 0 1	8 11 2 1 1 0 2 9	7 11 1 0 1 0 0 2	8 15 3 0 3 1 1 6	5 12 3 0 2 0 0 7	€ 3 2 0 3 0 1 5
ш	Has insurance (%adults)	Have life insurance Have health insurance Have house or vehicle insurance	4 25 2	4 24 2	4 26 1	5 23 1	3 24 2	7 48 3	1 16 1	5 25 2	13 51 6	2 15 1	3 16 2	1 19 1	8 34 2	7 42 4	6 34 3	3 12 1	4 28 3	3 23 1	4 29 0	4 13 1	0 12 1	5 31 3	7 36 2 5	3 21 1
INSURANCE	Type of insurance (%of adults with health insurance)	Health Insurance public Health Insurance public Health Insurance private Health Insurance both	62 25 13	58 28 13	65 22 12		63 28 9			61 22 17	•					61 24 13	59 25 15			63 22 15	· · ·		:	58 31 11	51 6 38 7 10 7	i9 17 14
	Provider of insurance (%of adults with health insurance)	State pays for the insurance Employer pays for the insurance Relative/family pays for the insurance Respondant and State pays for the insurance Respondant and employer pays for the insurance Refused to answer	7 24 58 7 2 2	-		-	· · ·	-	-	•	•		· · ·	-			· · ·	-			· · ·	-	•	•	•	•

Note: Indicators that are italicized apply to a subsample of respondents, as determined by preceding question(s) (see Appendix II). Values are not reported when based on a sample of less than 100 respondents.



			All	Gend	er		Age		E	ducatio	ation Income				Employment					Reg		Urban/Rural				
			Mean	Male	Female	15 to 30 yrs old	11 to 65 yrs old	65> yrs old	Elementary or less	Secondary	Tertiary (compl.)	Poorest	2nd quintile	3rd quintile	4th quintile	Richest	Employed full time for an employer	Employed full time for self	Employed part time	Unemployed/ Out of the workforce	North / West	East	South	Center	Urban	Rural
	Mobile money (%adults)	I mobile money in the past 12 months use mobile money in next 6 months (% non-users)	28 14	26 14	31 14	30 15	29 14	12 3	21 11	31 13	37	23 9	23 10	29 18	30 17	37 16	35 18	28 15	31	22 11	26	26 18	24 4	30 16	31 19	27 12
۲	Sending money (%adults)	e sent money inside Paraguay in the last 12 ths	18	19	18	21	18	4	13	20	25	13	12	18	17	32	27	22	15	11	14	16	16	20	23	16
	Methods for sending money (%adults who have sent money)	h in hand ugh a bank or financial institution g mobile money g money transfers	28 2 79 7	•	24 4 79 8		31 3 79 7			30 3 81 7							· · ·			•	•			33 3 80 7		25 2 79 7
NO	Receiving money (% Have adults) mont	e received money inside Paraguay in the last 12 ths	21	20	23	23	21	11	17	23	26	20	15	21	24	26	23	21	22	20	23	22	19	21	22	21
ILE MO	Methods for receiving money (%adults who have received money)	h in hand ugh a bank or financial institution g mobile money g money transfers	28 4 72 11		24 6 75 10	•	35 4 74 9	•	•	27 3 78 8	· · ·	· · ·		•			•	· · ·	· · ·	•	•		•	33 5 72 11		26 4 76 8
B	Salary and wages (% adults)	e received salary or wages in the past 12 months	34	41	26	38	33	16	22	37	54	24	24	36	35	50	79	11	44	5	37	34	35	33	32	34
Σ	Methods for receiving Direct Salary or wages (% adults Rece	ctly in cash ctly into your account eived salary or wages through payment card or	76 8	80 7	71 11	79 7	74 10	:	:	80 8		:	:	:		68 14	77 8				:	•	•	74 8	:	79 6
	who have received salary prepa of wages) Rece	aid card eived salary or wages directly to mobile phone eived salary or wages through check	13 5 5	12 3 4	14 8 8	12 5 3	13 5 8	•	•	6 5	•			•		19 5 6	14 3 4	•	•			•	•	15 8 8	•	13 5 3
	G2P payments (% adults) Rece	eived government payments in the last 12 months	4	4	3	3	3	15	5	2	6	3	6	3	1	6	2	2	5	5	2	6	3	3	3	4
	Financial education (% lesso adults) mana	oondent or someone in the houselhold received ons on personal finances and money agement	10	10	10	11	10	5	5	9	29	5	7	14	9	17	13	11	18	7	5	4	12	13	18	7
JRITY	Source of financial education (% adults who report having received financial education) <i>Empli</i>	ool ncial institution nt or family member loyer/boss ia	56 21 12 44 14 6					•		-		-									· · ·			•		-
EC EC	Budgeting (%adults) Plan	how to use the money the household receives	92	93	92	92	93	87	92	92	93	94	91	92	89	94	92	95	92	91	92	94	91	92	90	93
AND SI	Household has any money left after paying for basic needs (%adults)	ays" netimes" times" er"	10 35 28 25	11 33 32 22	8 36 25 28	10 34 28 24	9 37 28 25	15 23 24 34	7 30 27 35	10 35 31 21	20 47 18 11	7 28 27 33	7 33 26 32	6 39 31 23	12 37 27 22	18 36 30 15	12 37 34 17	12 40 26 22	9 30 24 34	8 32 25 30	5 32 28 35	4 26 35 31	5 34 33 20	13 38 25 23	14 43 25 16	8 32 29 29
LITY /	Household runs short of money to buy food and other necessary items (% adults)	ays" hetimes" / times" er"	2 18 16 64	1 15 19 65	2 22 14 63	1 14 13 72	1 21 20 57	7 22 16 55	2 23 19 56	1 16 15 68	2 15 13 70	3 24 23 49	0 23 18 59	2 16 18 64	2 18 12 69	1 9 10 80	1 15 16 69	1 14 16 69	2 16 19 62	2 23 16 59	1 15 12 72	1 22 22 55	0 7 25 67	2 20 13 65	3 20 19 58	1 17 15 66
FINANCIAL CAPABI	Methods of coping with financial shortfall for buying foods and other necessary items (% adults whose hh runs short)	ry advance wr from formal financial institution/overdraft ow from local money lender savings or sell something le atra work/work extra hours uce expenses wo from family/friends/colleagues	9 5 4 14 18 45 63	9 4 16 22 45 62	9 6 3 12 14 45 64	11 8 2 16 17 45 61	8 3 5 13 20 45 65		8 2 17 17 44 65	9 3 12 18 45 63		7 2 18 16 49 70		· · · ·		· · · ·	13 6 12 28 51 54	- - - - -	- - - - -	7 3 13 10 39 70	· · · ·	- - - - -		9 8 3 9 19 45 58	10 8 4 13 22 54 50	8 3 14 16 41 69
	Possibility of getting 730.000 guaranies within a month is (%adults)	possible ewhat possible at all possible	24 51 24	26 49 23	22 52 25	20 53 25	28 49 22	29 41 31	19 45 34	24 54 21	39 53 5	15 43 41	16 51 29	20 58 21	26 56 18	44 46 10	31 57 11	33 47 19	24 43 32	16 49 34	15 48 36	12 67 21	22 56 22	30 45 23	31 45 22	22 53 25
	Source of money in case of Family needing 730.000 guaranies Cred within a month (%reporting Priva very/somewhat possible) inform	ngs ily, relatives, friends ey from working or loan from an employer lit card or loan from formel financial institution te (casa de credito, casa de empeno) or mal lender	26 70 22 14 12	24 69 25 15 11	27 71 19 13 12	22 74 28 13 12	28 67 19 16 11		19 74 14 11	26 69 27 12 13	36 67 23 26 7	23 71 17 11 17	18 77 17 3 18	26 71 30 17 12	28 66 22 11 6	31 69 24 24 8	28 65 40 19 11	25 59 13 16 12		22 80 7 8 12		15 74 23 13 10	18 80 31 7 13	31 67 19 17 11	37 65 23 19 12	21 72 22 12 11
	Some	e other source	14	16	13	11	17		19	12	12	25	12	11	14	12	13	27		11		10	18	16	14	14

Note: Indicators that are italicized apply to a subsample of respondents, as determined by preceding question(s) (see Appendix II). Values are not reported when based on a sample of less than 100 respondents.





B. REGRESSION ANALYSIS

This table presents OLS estimations for seven main dependent variables on the full sample of 2013 EIF respondents. The dependent variable is listed at the top of each column. The excluded categorical variables are: 'Income quintile 1 (poorest)', 'Unemployed / out of the workforce', and 'Central region'. Standard errors are in parentheses and are calculated accounting for the sampling structure of the survey. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
VARIABLES	Formal account	Saves	Saves formally	Borrow s	Borrow s formally	Uses mobile money	Has insurance
Female	0.07	0.055	0.032	0.025	0.007	0.066**	0.043
	(0.034)	(0.037)	(0.025)	(0.031)	(0.030)	(0.031)	(0.029)
Age	0.013***	0.016***	0.010**	0.022***	0.017***	0.013***	-0.002
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)
Age squared	-0.000*	-0.000***	-0.000**	-0.000***	-0.000***	-0.000***	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Secondary education	0.097**	0.063	0.072**	0.087**	0.058	0.049	0.093***
	(0.038)	(0.041)	(0.030)	(0.039)	(0.036)	(0.037)	(0.033)
Tertiary education or more	0.184***	0.129**	0.101*	0.142**	0.076	0.031	0.299***
	(0.058)	(0.065)	(0.055)	(0.063)	(0.054)	(0.059)	(0.060)
Income quintile 2	-0.007	-0.028	-0.013	-0.012	-0.005	-0.018	-0.021
	(0.042)	(0.049)	(0.028)	(0.045)	(0.036)	(0.047)	(0.044)
Income quintile 3	0.089*	0.068	-0.004	0.085**	0.092**	0.017	0.014
	(0.046)	(0.056)	(0.035)	(0.042)	(0.044)	(0.044)	(0.043)
Income quintile 4	0.037	0.083	0.026	0.056	0.061	0.012	0.091**
	(0.046)	(0.055)	(0.037)	(0.053)	(0.048)	(0.047)	(0.045)
Income quintile 5 (richest)	0.121***	0.174***	0.148***	0.156***	0.147***	0.077	0.145***
	(0.045)	(0.057)	(0.038)	(0.046)	(0.041)	(0.050)	(0.049)
Home has a TV	0.026	0.100	0.011	-0.034	-0.006	0.061	0.058
	(0.066)	(0.061)	(0.029)	(0.072)	(0.065)	(0.071)	(0.047)
Home has internet access	0.033	0.088**	0.045*	0.072*	0.046	0.064	0.044
	(0.037)	(0.042)	(0.027)	(0.039)	(0.036)	(0.042)	(0.036)
Employed full-time for employer	0.139***	0.093**	0.045	0.220***	0.151***	0.087**	0.080**
	(0.042)	(0.042)	(0.032)	(0.043)	(0.039)	(0.038)	(0.037)
Employed full-time for self	0.151***	0.049	0.038	0.182***	0.155***	0.037	-0.106**
	(0.057)	(0.052)	(0.035)	(0.056)	(0.051)	(0.046)	(0.041)
Employed part-time	0.127**	0.159***	0.044	0.065	0.043	0.080	0.013
	(0.055)	(0.054)	(0.042)	(0.050)	(0.042)	(0.059)	(0.053)
Lives in an urban area	0.003	0.120**	0.023	0.037	-0.058	0.028	0.074
	(0.049)	(0.053)	(0.037)	(0.046)	(0.041)	(0.048)	(0.046)
Northwestern region	-0.039	-0.109*	-0.021	-0.107**	-0.027	-0.017	0.058
	(0.048)	(0.065)	(0.040)	(0.046)	(0.045)	(0.056)	(0.045)
Southern region	-0.042	-0.035	-0.062**	-0.028	-0.031	-0.017	-0.127***
	(0.057)	(0.056)	(0.031)	(0.048)	(0.041)	(0.052)	(0.047)
Eastern region	-0.098**	-0.184***	-0.072**	-0.159***	-0.050	-0.030	-0.165***
	(0.042)	(0.058)	(0.034)	(0.043)	(0.041)	(0.059)	(0.046)
Has confidence in financial institutions	0 143***	0 110***	0.087***	0.067**	0 106***	0.023	0.085***
	(0.033)	(0.033)	(0.023)	(0.033)	(0.029)	(0.035)	(0.029)
Constant	-0.340***	-0.283***	-0.267***	-0.322***	-0.315***	-0 147	-0.069
	(0.118)	(0.106)	(0.080)	(0.106)	(0.102)	(0.111)	(0.104)
Observations	992	992	992	992	992	992	992
R-squared	0.126	0.160	0.114	0.183	0.133	0.060	0.195



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