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Measuring Financial Inclusion

The Global Findex Database

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Abstract

This paper provides the first analysis of the Global Financial Inclusion (Global Findex) Database, a new set of indicators that measure how adults in 148 economies save, borrow, make payments, and manage risk. The data show that 50 percent of adults worldwide have an account at a formal financial institution, though account penetration varies widely across regions, income groups and individual characteristics. In addition, 22 percent of adults report having saved at a formal financial institution in the past 12 months, and 9 percent report having taken out a new loan from a bank, credit union or microfinance institution in the past year. Although half of adults around the world remain unbanked, at least 35 percent of them report barriers to account use that might be addressed by public policy. Among the most commonly reported barriers are high cost, physical distance, and lack of proper documentation, though there are significant differences across regions and individual characteristics.

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Measuring Financial Inclusion: The Global Findex Database

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INTRODUCTION

Well-functioning financial systems serve a vital purpose, offering savings, credit, payment, and risk management products to people with a wide range of needs. Inclusive financial systems—allowing broad access to financial services, without price or nonprice barriers to their use—are especially likely to benefit poor people and other disadvantaged groups. Without inclusive financial systems, poor people must rely on their own limited savings to invest in their education or become entrepreneurs—and small enterprises must rely on their limited earnings to pursue promising growth opportunities. This can contribute to persistent income inequality and slower economic growth.¹

Until now little had been known about the global reach of the financial sector—the extent of financial inclusion and the degree to which such groups as the poor, women, and youth are excluded from formal financial systems. Systematic indicators of the use of different financial services had been lacking for most economies.

The Global Financial Inclusion (Global Findex) database provides such indicators. This report presents the first round of the Global Findex database, a new set of indicators that measure how adults in 148 economies save, borrow, make payments, and manage risk. The indicators are constructed with survey data from interviews with more than 150,000 nationally representative and randomly selected adults age 15 and above in those 148 economies during the 2011 calendar year.²

The Global Findex data show sharp disparities in the use of financial services between high-income and developing economies and across individual characteristics. The share of adults in high-income economies with an account at a formal financial institution is more than twice that in developing economies. And around the world, men and more educated, wealthier, and older adults make greater use of formal financial services.

Novel cross-country data on self-reported reasons for not having a formal account make it possible to identify barriers to financial inclusion. Moreover, the ability to disaggregate data by individual characteristics allows researchers and policy makers to identify population groups that are excluded from the formal financial system and better understand what characteristics are associated with certain financial behaviors.

As the first public database of indicators that consistently measure people's use of financial products across economies and over time, the Global Findex database fills a big gap in the financial inclusion data landscape. The data set can be used to track the effects of financial inclusion policies globally and develop a deeper and more nuanced understanding of how people around the world save, borrow, make payments, and manage risk. The main indicators on the use of formal accounts and formal credit will be collected yearly, and the full set of indicators every three years.

The use of formal accounts varies widely across regions, economies, and individual characteristics

Worldwide, 50 percent of adults report having an individual or joint account at a formal financial institution. But while account penetration is nearly universal in high-income economies, with 89 percent of adults reporting that they have an account at a formal financial institution, it is only 41 percent in developing economies. Globally, more than 2.5 billion adults do not have a formal account, most of them in developing economies.

The differences in account ownership by individual characteristics are particularly large in developing economies. While 46 percent of men have a formal account, only 37 percent of women do. Indeed, there is a persistent gender gap of 6–9 percentage points across income groups within developing economies. Among all adults in the developing world, those in the richest quintile (the top 20 percent of the income distribution within an economy) are on average more than twice as likely as those in the poorest to have a formal account.

Unique data on the mechanics of account use across economies show that here too there are sharp differences between high-income and developing economies—in the frequency of deposits and withdrawals, in the way that people access their accounts, and in the payment systems they use. In developing economies 10 percent of adults with a formal account report making no deposits or withdrawals in a typical month; in high-income economies only 2 percent report this. Most account holders in developing economies make deposits and withdrawals primarily through tellers at bank branches; their counterparts in high-income economies rely more heavily on automated teller machines (ATMs). Debit cards, checks, and electronic payments are also far more commonly used in high-income economies.

But there is a bright spot in the expansion of financial services in the developing world: the recent introduction of "mobile money." The greatest success has been in Sub-Saharan Africa, where 16 percent of adults—and 31 percent of those with a formal account—report having used a mobile phone in the past 12 months to pay bills or send or receive money.

The purposes and benefits of account use vary widely. Worldwide, 26 percent of account holders use their account to receive money or payments from the government. This practice is most common in high-income economies and relatively rare in South Asia and East Asia and the Pacific. Compared with counterparts in other parts of the world, adults with a formal account in high-income economies, Europe and Central Asia, and Latin America and the Caribbean are the most likely to report having used their account in the past year to receive wage payments, and those in Sub-Saharan Africa the most likely to report having used their account to receive payments from family members living elsewhere.

Worldwide, 22 percent of adults report having saved at a formal financial institution in the past 12 months, including about half of account holders in high-income economies, Sub-Saharan Africa, and East Asia and the Pacific. In developing economies savings clubs are one common alternative (or complement) to saving at a formal financial institution: in Sub-Saharan Africa 19 percent of adults report having saved in the past year using a savings club or person outside the family. But a large share of adults around the world who report having saved or set aside money in the past 12 months do not report having done so using a formal financial institution, informal savings club, or person outside the family. These adults account for 29 percent of savers worldwide and more than half of savers in 55 economies.

Analysis of Global Findex data shows that account penetration is higher in economies with higher national income as measured by GDP per capita, confirming the findings of previous studies.³ But national income explains much less of the variation in account penetration for low- and lower-middle-income economies. Indeed, at a given income level and financial depth, use of financial services varies significantly across economies, suggesting a potentially important role for policy.

Removing physical, bureaucratic, and financial barriers could expand the use of formal accounts

Poor people juggle complex financial transactions every day and use sophisticated techniques to manage their finances, whether they use the formal financial system or not.⁴ We cannot assume that all those who do not use formal financial services are somehow constrained from participating in the formal financial sector—access and use are not the same thing. But the recent success of mobile money in Sub-Saharan Africa shows that innovations can bring about dramatic changes in how people engage in financial transactions. To allow a better understanding of the potential barriers to wider financial inclusion, the Global Findex survey includes novel questions on the reasons for not having a formal account. The responses can provide insights into where policy makers might begin to make inroads in expanding the use of formal financial services.

Worldwide, by far the most common reason for not having a formal account cited by 65 percent of adults without an account—is lack of enough money to use one. This speaks to the fact that having a formal account is not costless in most parts of the world and may be viewed as unnecessary by a person whose income stream is small or irregular. Other common reasons reported for not having an account are that banks or accounts are too expensive (cited by 25 percent of adults without a formal account) and that banks are too far away (cited by 20 percent).

The self-reported barriers vary significantly across regions as well as by individual characteristics. Among adults without a formal account, those in Sub-Saharan Africa and Latin America and the Caribbean are the most likely to cite missing documentation as a reason for not having one. Those in Europe and Central Asia have the least trust in banks. Women tend to report using someone else's account significantly more than do men, highlighting the challenges that women may encounter in account ownership. Adults who report having saved, but not using a formal account to do so, are significantly more likely to cite distance, cost, and paperwork as barriers to having a formal account.

This systematic evidence on barriers to the use of financial services allows researchers and policy makers to understand reasons for nonuse and to prioritize and design policy interventions accordingly. But because at this point the data are cross-sectional, they cannot be used to determine what impact removing these self-reported barriers would have. Measuring that impact requires rigorous evaluation and is beyond the scope of this report. Moreover, since people often face multiple barriers to the use of formal accounts, and the survey allows multiple responses, addressing individual constraints may not increase the use of accounts if other barriers are binding.

Nevertheless, a cursory look at these self-reported barriers provides interesting information. Distance from a bank is a much greater barrier in rural areas, as expected. Technological and other innovations that help overcome this barrier of physical distance could pay off—potentially increasing the share of adults using a formal account by up to 23 percentage points in Sub-Saharan Africa and 14 percentage points in South Asia. Relaxing documentation requirements could also potentially increase the share of adults with an account by up to 23 percentage points in Sub-Saharan Africa.

Perhaps even more important than barriers of physical access and eligibility are barriers of affordability. These issues seem to be particularly important in Latin America and the Caribbean, where 40 percent of non-account-holders report that formal accounts are too expensive. Worldwide, reducing withdrawal charges and balance fees could make formal accounts more attractive to more than 500 million adults who are without one. Again, these statements are meant to be indicative, not causal, and further analysis is required.

Whether in response to these barriers or for other reasons, many people use informal methods to save money or make payments as an alternative or complement to formal banking. Informal savings clubs and mobile money are two popular examples of financial management tools that can operate outside the formal financial sector.

Formal borrowing and insurance are relatively rare in the developing world

While the share of adults who report having taken out new loans in the past 12 months is surprisingly consistent around the world, the sources and purposes for these loans are extremely diverse. Globally, 9 percent of adults report having originated a new loan from a formal financial institution in the past 12 months—14 percent of adults in high-income economies and 8 percent in developing economies. In addition, about half of adults in high-income economies report having a credit card, which might serve as an alternative to short-term loans. In developing economies only 7 percent report having one. Seven percent of adults around the world have an outstanding mortgage, a share that rises to 24 percent in high-income economies report having an outstanding loan for emergency or health purposes. Less than 20 percent of those in this group report borrowing only from a formal financial institution.

Only 17 percent of adults in developing economies report having personally paid for health insurance, though the share is as low as 2 percent in low-income economies. Of adults working in farming, forestry, or fishing in developing economies, only 6 percent report having purchased crop, rainfall, or livestock insurance in the past year.

The Global Findex database fills an important gap

A growing literature examines household finance and especially the borrowing and savings decisions of households.⁵ Using evidence from the FinMark Trust (FinScope) surveys in 2009 in Kenya, one study shows that savings and credit services are used mostly for family-related purposes and less for business-related purposes.⁶ This finding is consistent with another study showing that about half the volume of borrowing by poor households is for nonbusiness purposes, including consumption.⁷ Still another study, conducting field experiments in Kenya, finds that people with access to savings accounts or simple informal savings technologies are more likely to increase productivity and income, increase investment in preventive health, and reduce vulnerability to illness and other unexpected events.⁸

Yet because of the lack of systematic data on household use of financial services, empirical literature investigating the links between household access to finance and development outcomes remains scarce. The Global Findex database extends this literature by providing cross-country, time-series data on individuals' use of financial services.

There have been earlier efforts to collect indicators of financial access from providers of financial services (financial institutions) as well as from the users (households and individuals). But those collecting individual- and household-level data have been limited and questions—and the resulting data—often are not consistent or comparable across economies. The Global Findex indicator on account penetration lends itself most easily to comparison. While the results are broadly consistent with those of earlier efforts, the correlation is imperfect and in a few cases there are nontrivial discrepancies.

These differences are likely to stem from three important variations in user-side data on the use of financial services. First, the definition of an account varies across surveys and respondents are often prompted in different ways. The Global Findex survey defines an account as an individual or joint account at a formal financial institution (a bank, credit union, cooperative, post office, or microfinance institution) and notes in the question text that an account can be used to save money, to make or receive payments, or to receive wages and remittances. It also includes those who report having a debit or ATM card. Other surveys may list an array of institutions (formal or semiformal) or products (savings account, checking account, pension scheme, Islamic loan) that are specific to the economy or region, while still others may simply ask, "do you have a bank account?"

Second, there are important differences in the unit of measurement across surveys. While the Global Findex account penetration indicator refers to individual or joint account ownership, many earlier surveys measured account penetration

at the household level, an approach that captures use but not ownership and tends to result in higher estimates for penetration, especially among youth and women. In addition, the Global Findex survey includes adults age 15 and above, while other surveys often use 16 or 18 as an age cutoff.

Third, many of the most recent individual- or household-level surveys on financial use in a given economy or region were carried out several years ago and may not reflect recent reforms or expansions of financial access.

Two commonly cited cross-country user-side data collection efforts are the FinMark Trust's FinScope initiative, a specialized household survey in 14 African countries and Pakistan,⁹ and the European Bank for Reconstruction and Development's Life in Transition Survey (LITS), which covers 35 countries in Europe and Central Asia and includes several questions on financial decisions as part of a broader survey.¹⁰ The Global Findex country-level estimates of account penetration are generally higher than those of the FinScope surveys, perhaps because of the difference in timing (most of the FinScope surveys were carried out in the mid-2000s) and the variation in the definition of an account. The Global Findex country-level estimates of account penetration are within 7 percentage points of the LITS estimates for the majority of economies, with discrepancies perhaps explained by the fact that the LITS financial access questions focus on households, not individuals, and are less descriptive than those of the Global Findex survey.¹¹

On the provider side, Beck, Demirguc-Kunt, and Martinez Peria collected indicators of financial outreach (such as number of bank branches and ATMs per capita and per square kilometer as well as the number of loan and deposit accounts per capita) from 99 country regulators for the first time in 2004.¹² These data were updated and expanded by the Consultative Group to Assist the Poor (CGAP) in 2008 and 2009 and by the International Monetary Fund in 2010. These data sets are important sources of basic cross-country indicators developed at a relatively low cost. Yet indicators based on data collected from financial service providers have several important limitations. First, data are collected only from regulated financial institutions and thus provide a fragmented view of financial access. Second, aggregation can be misleading because of multiple accounts or dormant accounts. Most important, this approach does not allow disaggregation of financial service users by income or other characteristics. That leaves policy makers unable to identify segments of the population with the lowest use of financial services, such as the poor, women, or youth.

The Global Findex database can serve as an important tool for benchmarking and for motivating policy makers to embrace the financial inclusion agenda. By making it possible to identify segments of the population excluded from the formal financial sector, the data can help policy makers prioritize reforms accordingly and, as future rounds of the data set become available, track the success of those reforms. The questionnaire, translated into and executed in 142 languages to ensure national representation in 148 economies, can be used by local policy makers to collect additional data. Adding its questions to country-owned efforts to collect data on financial inclusion can help build local statistical capacity and increase the comparability of financial inclusion indicators across economies and over time. As future rounds of data collection are completed, the database will allow researchers to provide empirical evidence linking financial inclusion to development outcomes and promote the design of policies firmly based on empirical evidence.

The complete economy-level database, disaggregated by gender, age, education, income, and rural or urban residence, is available at http://www.worldbank.org/globalfindex. Individual-level data will be published in October 2012.

- 1. See, for example, King and Levine (1993); Beck, Demirguc-Kunt, and Levine (2007); Beck, Levine, and Loayza (2000); Demirguc-Kunt and Levine (2009); Klapper, Laeven, and Rajan (2006); and World Bank (2008a).
- 2. The Bill & Melinda Gates Foundation funded three triennial rounds of data collection through the complete questionnaire. In addition, data on two key questions relating to the use of formal accounts and formal loans will be collected and published annually.
- 3. For example, Beck, Demirguc-Kunt, and Martinez Peria (2007); and Cull, Demirguc-Kunt, and Morduch (forthcoming).
- 4. Collins and others 2009.
- 5. For a detailed literature review, see World Bank (2008a) and references therein. Campbell (2006) also provides an overview of the household finance field.
- 6. Beck 2009.
- 7. Johnston and Morduch 2008.
- 8. Dupas and Robinson 2009, 2011.
- 9. In addition, the World Bank has designed surveys to assess financial access in developing economies including Brazil, Colombia, India, and Mexico.
- 10. The LITS includes high-income economies in Europe and Central Asia. For additional information, see EBRD (2011).
- 11. See Beck and Brown (2011) for a discussion of the use of banking services in transition economies using the LITS data set.
- 12. See Beck, Demirguc-Kunt, and Martinez Peria (2007). In addition, Honohan (2008) and World Bank (2008a) used these indicators as well as other data to estimate a headline indicator of access. In a separate exercise Beck, Demirguc-Kunt, and Martinez Peria (2008) documented cross-country eligibility, affordability, and geographic access barriers by surveying banks.

METHODOLOGY

The Global Findex indicators measure the use of financial services, which is distinct from access to financial services. *Access* most often refers to the supply of services, while use is determined by demand as well as supply.¹ *Use* refers to the levels and patterns of use of different financial services among different groups, such as poor people, youth, and women.

Indicators

The first set of indicators focuses on formal accounts; the mechanics of the use of these accounts (frequency of use, mode of access); the purpose of these accounts (personal or business, receipt of payments from work, government, or family); barriers to account use; and alternatives to formal accounts (mobile money).

The account penetration indicator measures individual or joint ownership of formal accounts—accounts at a formal financial institution such as a bank, credit union, cooperative, post office, or microfinance institution. It includes those who report having a debit or ATM card tied to an account.

Indicators relating to the receipt of payments measure the use of formal accounts to receive wages (payments for work or from selling goods), payments or money from the government, and family remittances (money from family members living elsewhere).

The second set of indicators focuses on savings behavior. This relates to the use of accounts, as people often save at formal financial institutions. Other indicators explore the use of community-based savings methods and the prevalence of savings goals.

The third set focuses on sources of borrowing (formal and informal); purposes of borrowing (mortgage, emergency or health purposes, and the like); and use of credit cards. The fourth focuses on use of insurance products for health care and agriculture. (See the questionnaire for the survey questions.)²

Data coverage

The Global Findex indicators are drawn from survey data collected over the 2011 calendar year, covering more than 150,000 adults in 148 economies and representing about 97 percent of the world's population. The survey was carried out by Gallup, Inc. in association with its annual Gallup World Poll, which since 2005 has surveyed about 1,000 people annually in each of up to 157 economies,³ using randomly selected, nationally representative samples.⁴ The target population is the entire civilian, noninstitutionalized population age 15 and above. Surveys are conducted in the major languages of each economy. (For details on the data collection dates, sample sizes, excluded populations, and margins of error, see the annex to this methodology section.)

The 148 economies covered by the Global Findex indicators include both high-income economies and developing (low- and middle-income) economies. The regional and income group classifications are those used by the World Bank, available at http://data.world-bank.org/about/country-classifications. The regions exclude high-income economies.

The regional and worldwide aggregates omit economies for which Gallup excludes more than 20 percent of the population in the sampling either because of security risks or because the population includes non-Arab expatriates. These excluded economies are Algeria, Bahrain, the Central African Republic, Madagascar, Qatar, Somalia, and the United Arab Emirates. The Islamic Republic of Iran is also excluded because the data were collected in that country using a methodology inconsistent with that used for other economies (the survey was carried out by phone from Turkey). The exclusion of the Islamic Republic of Iran has a nontrivial effect on regional aggregates because its population is larger and wealthier than those of other economies in the Middle East and North Africa. For example, account penetration in the region is estimated to be 18 percent when the Islamic Republic of Iran is excluded but 33 percent when it is included.

Survey methodology

The survey methodology is that used for the Gallup World Poll. Surveys are conducted face to face in economies where telephone coverage represents less than 80 percent of the population. In most economies the fieldwork is completed in two to four weeks. In economies where face-to-face surveys are conducted, the first stage of sampling is the identification of primary sampling units, consisting of clusters of households. The primary sampling units are stratified by population size, geography, or both, and clustering is achieved through one or more stages of sampling. Where population information is available, sample selection is based on probabilities proportional to population size; otherwise, simple random sampling is used. Random route procedures are used to select sampled households. Unless an outright refusal occurs, interviewers make up to three attempts to survey the sampled household. If an interview cannot be obtained at the initial sampled household, a simple substitution method is used. Respondents are randomly selected within the selected households by means of the Kish grid.⁵

In economies where telephone interviewing is employed, random digit dialing or a nationally representative list of phone numbers is used. In selected economies where cell phone penetration is high, a dual sampling frame is used. Random respondent selection is achieved by using either the latest birthday or Kish grid method.⁶ At least three attempts are made to reach a person in each household, spread over different days and times of day.

Data weighting

Data weighting is used to ensure a nationally representative sample for each economy. First, base sampling weights are constructed to account for oversamples and household size. If an oversample has been conducted, the data are weighted to correct the disproportionate sample. Weighting by household size (number of residents age 15 and above) is 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, poststratification weights are constructed. Population statistics are used to weight the data by gender, age, and, where reliable data are available, education or socioeconomic status. Finally, approximate study design effect and margin of error are calculated. The average country-level margin of error for the account penetration indicator is plus or minus 3.9 percent.

All regional or income group aggregates are also weighted by country population (age 15 and above).

- 1. World Bank 2008a.
- 2. In a few instances surveyors and supervisors reported that respondents were somewhat taken aback at the series of questions, given the personal nature of the topic. This concern was particularly relevant in economies with large security risks, such as Mexico and Zimbabwe, and in economies where personal finances are widely regarded as a private matter, such as Cameroon, Italy, and Portugal. There were also reports from the field that the terminology and concepts used in the survey were entirely new to some respondents. Although efforts were made to include simple definitions of such terms as accounts and debit cards, the unfamiliarity and complexity of the topic were still reported to be a hurdle in several economies, including Afghanistan, Cambodia, Chad, and rural Ukraine. Overall, however, the rate of "don't know" or "refuse" responses made up less than 1 percent of the total and no more than 2 percent in any region.
- 3. The Gallup World Poll has been used in previous academic studies. For example, Deaton (2008) uses Gallup World Poll questions on life and health satisfaction and looks at the relationships with national income, age, and life expectancy. Gallup World Poll questions are also used by Stevenson and Wolfers (2008) and Sacks, Stevenson, and Wolfers (2010) as part of their research to analyze relationships between subjective well-being and income; by Clausen, Kraay, and Nyiri (2011) to analyze the relationship between corruption and confidence in public institutions; by Demirguc-Kunt, Klapper, and Zingales (2012) to study changes in trust in banks over the financial crisis; and by Stevenson and Wolfers (2011) to examine trust in institutions over the business cycle.
- 4. In some economies oversamples are collected in major cities or areas of special interest. In addition, in some large economies, such as China and the Russian Federation, sample sizes of at least 4,000 are collected.
- 5. The Kish grid is a table of numbers used to select the interviewee. First, the interviewer lists the name, gender, and age of all permanent household members age 15 and above, whether or not they are present, starting with the oldest and ending with the youngest. Second, the interviewer finds the column number of the Kish grid that corresponds to the last digit of the questionnaire number and the row number for the number of eligible household members. The number in the cell where the column and row intersect is the person selected for the interview. In economies where cultural restrictions dictate gender matching, respondents are randomly selected using the Kish grid from among all eligible adults of the interviewer's gender.
- 6. In the latest birthday method an interview is attempted with the adult in the household who had the most recent birthday.

ACCOUNTS AND PAYMENTS

Worldwide, 50 percent of adults report having an account at a formal financial institution—a bank, credit union, cooperative, post office, or microfinance institution.¹ For most people, having such an account serves as an entry point into the formal financial sector. A formal account makes it easier to transfer wages, remittances, and government payments. It can also encourage saving and open access to credit.

These benefits accrue to account holders around the world. But beyond these commonalities are many differences across regions, income groups, and individual characteristics—in the prevalence of accounts, in potential barriers to their use, in the purposes of their use. And in the developing world especially, many people rely on alternatives to formal accounts.

How does account ownership vary around the world?

Not surprisingly, account penetration differs enormously between high-income and developing economies: while it is nearly universal in high-income economies, with 89 percent of adults reporting that they have an account at a formal financial institution, it is only 41 percent in developing economies. Among regions, the

Middle East and North Africa has the lowest account penetration, with only 18 percent of adults reporting a formal account (figure 1.1).

In several economies around the world including Cambodia, the Democratic Republic of Congo, Guinea, the Kyrgyz Republic, Turkmenistan, and the Republic of Yemen—more than 95 percent of adults do not have an account at a formal financial institution (map 1.1). Globally, more than 2.5 billion adults do not have a formal account, most of them in developing economies.²



What explains the large variations in

account penetration? Why do more than 99 percent of adults in Denmark have a formal account while virtually none do in Niger? Does account penetration depend simply on an economy's income level? Or are there other determining factors? And if so, what are they?



VARIATION BY INCOME AND INEQUALITY

Without a doubt, national income, proxied by GDP per capita, explains much of the variation in account penetration around the world (figure 1.2). Denmark is among the world's richest economies while Niger is among the poorest. Above a GDP per capita of \$15,000, with only a few exceptions, account penetration is virtually universal.³ Indeed, regression analysis shows that national income explains about 70 percent of the variation among the world's economies in the share of adults with a formal account.⁴

Yet among the bottom 50 percent of the income distribution in the sample (economies with a GDP per capita below \$2,200), the relationship between GDP per capita and account penetration is much weaker.

National income explains much of the variation in account penetration across all economies—but far less among lower-income ones

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



Note: GDP per capita data are for 2010.

Source: Demirguc-Kunt and Klapper 2012; World Bank, World Development Indicators database.



Source: Demirguc-Kunt and Klapper 2012; Gallup World Poll, 2011.

Consider Ghana and Benin. Both have a GDP per capita of about \$560.⁵ But while 29 percent of adults in Ghana report having a formal account, only 10 percent in Benin do. Thus even among economies with similar income levels and in the same region there can be significant differences in account penetration.

Indeed, when the analysis is restricted to the bottom 50 percent of economies by income level, GDP per capita explains only 22 percent of the variation in account penetration among economies. This suggests that the variation across economies is not determined solely by national income as proxied by GDP per capita.

At the individual level, household income—both absolute and relative—plays an important part in explaining the variation in account penetration. The role of absolute household income can be assessed by looking at the share of adults living on less than \$2 a day who have a formal account (figure 1.3).⁶ Worldwide, only 23 percent of adults in this income category report having an account at a formal financial institution. Economies in South Asia and in East Asia and the Pacific have been most successful in expanding financial services to this group. In these regions about 27 percent of those living on less than \$2 a day have an account. In the Middle East and North Africa only 6 percent do.

Comparing account penetration across within-economy income quintiles sheds light on the role of relative income (figure 1.4). Account penetration in the *poorest* quintile in high-income economies is 37 percent higher on average than in the *richest* quintile in developing economies. Within developing economies, adults in the richest income quintile are on average more than twice as likely to have an account as those in the poorest. While average account penetration in the poorest quintile varies widely across regions, the average in the richest quintile clusters around 55 percent—except in East Asia and the Pacific (with the highest, at 76 percent) and the Middle East and North Africa (with the lowest, at 25 percent). Account penetration by within-economy income quintile

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



Source: Demirguc-Kunt and Klapper 2012.

The difference in length between the bars in figure 1.4—that is, the difference in account penetration between income quintiles—is a rough measure of the gap in financial inclusion between rich and poor people within economies. Because the upper limit is 100 percent, there is little absolute difference in length between the bars for high-income economies, showing that in these economies on average, poorer adults are not significantly less likely than richer adults to have a formal account. But there are stark differences within some developing economies. In both Cameroon and Nigeria about 13 percent of adults in the poorest quintile have an account. Yet while only 22 percent of those in the richest quintile have an account in Cameroon, 62 percent do in Nigeria.

There is a strong correlation between inequality in the use of formal accounts and general income inequality as measured by the Gini coefficient (with higher values indicating higher income inequality). The contrasting situations in two countries illustrate. In Sweden, which has one of the lowest Gini coefficients (25), account penetration in the poorest income quintile is essentially the same as in the richest (resulting in a value of close to 1 on the *y*-axis of figure 1.5). In Paraguay, at the other end of the spectrum with a Gini coefficient of 52, there is a large gap in account penetration: only 4 percent of adults in the poorest quintile have a formal account, compared with 51 percent in the richest (resulting in a value of about 13 on the y-axis).

The correlation between these two measures of financial and economic inequality (0.42) shows a strong relationship, which holds even when controlling for national income. But it also suggests that there are factors beyond income inequality that explain the large variation in the use of formal accounts. Consider the example of the United Kingdom and the United States (figure 1.6). These two countries have relatively similar Gini coefficients and relatively similar account penetration among adults in the top four income quintiles (92 percent in the United States

and 98 percent in the United Kingdom). But there is a sharp difference in account penetration in the poorest income quintile: in the United States 26 percent of adults in this group report having no formal account, while in the United Kingdom only 3 percent do. A 2009 FDIC survey found a similarly large gap in account penetration between rich and poor households in the United States.⁷ A comparison with account penetration in the poorest quintile in Australia and Canada—two other countries with Gini coefficients and legal traditions broadly similar to those of the United States adds further support to the suggestion that factors beyond income inequality help explain the variation in the use of formal accounts.

A strong correlation between inequality in the use of formal accounts and inequality in income

Account penetration in the richest quintile as a multiple of that in the poorest



VARIATION BY INDIVIDUAL CHARACTERISTICS

Financial inclusion also differs in important ways by individual characteristics such as gender, education level, age, and rural or urban residence. There are significant disparities in account penetration along gender lines. In developing economies 46 percent of men report having an account at a formal financial insti-



Adults in the poorest quintile without an account at a formal financial institution (%)



Note: Data on Gini coefficients are for the latest available year. Source: Demirguc-Kunt and Klapper 2012; Organisation for Economic Co-operation and Development data. tution, while only 37 percent of women do. These shares reflect the use of both individually and jointly owned formal accounts, as the Global Findex survey captures the use of an account together with a family member.

The gender gap is particularly large in South Asia and the Middle East and North Africa (figure 1.7). But it is relatively small in Sub-Saharan Africa, where 27 percent of men and 22 percent of women report that they have an account.⁸ The gender gap is statistically significant in all regions, even when controlling for education, age, income, and countrylevel characteristics.

The gender gap in account penetration persists across income quintiles. In developing economies women are



less likely to have a formal account than men across all income quintiles, with the differences in account penetration averaging between 6 and 9 percentage points (figure 1.8). In high-income economies, however, the average difference exceeds 4 percentage points only for women in the poorest income quintile.

Education level also helps explain the large variation in the use of formal accounts. In developing economies adults with a tertiary or higher education are on average more than twice as likely to have an account as those with a primary education or less (figure 1.9). The difference is particularly stark in Sub-Saharan

Africa: adults with a tertiary or higher education are more than four times as likely to have an account as those with a primary education or less—though only 3 percent of adults in the region report having completed tertiary education.

These gaps underscore the importance of education, particularly financial literacy, in expanding financial inclusion—an issue that is receiving growing recognition.⁹ Analysis shows that even after accounting for national income level, there is a strong relationship between investment in education (as measured by spending per student on primary education) and account penetration.¹⁰

Age is another characteristic that matters for the likelihood of having an account. In both high-income and developing economies those ages 25–64 are more









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



likely to report having an account at a formal financial institution than both younger and older adults (figure 1.10). Among regions, East Asia and the Pacific has the highest account penetration among young adults (those ages 15–24) both in absolute terms and relative to those ages 25–64. At the other end of the spectrum, in 29 economies—including Azerbaijan, Colombia, the Comoros, Italy, and Jordan—young adults are less than half as likely to have a formal account as those ages 25–64. Latin America and the Caribbean has higher account penetration among older adults (those age 65 and above) than any other region. Age group is a statistically significant predictor of having an account when controlling for gender, income, and country-level characteristics.



The urban-rural divide also figures prominently in the use of formal accounts in the developing world (figure 1.11).¹¹ In all regions adults living in cities are significantly more likely than those living in rural areas to have a formal account—in the Middle East and North Africa, more than twice as likely. This relationship persists even after controlling for income and other individual characteristics.

What are the barriers to the use of accounts?

Income levels and individual characteristics clearly help explain differences in the use of accounts around the world. But what are the conditions in the economy and in people's lives that may put up barriers to the use of accounts? Does the relative supply of credit in an economy—its financial depth—play a part? What do people themselves say when asked why they do not have an account? And what do the answers suggest about the potential for policy interventions to expand financial inclusion?

FINANCIAL DEPTH A FACTOR?

Large amounts of credit in a financial system—both commercial and consumer do not always correspond to broad use of financial services, because the credit can be concentrated among the largest firms and wealthiest individuals. Indeed, the use of formal accounts is imperfectly correlated with a common measure of financial depth—domestic credit to the private sector as a percentage of GDP particularly in the bottom half of the distribution of economies (figure 1.12). Country examples bear this out. Vietnam has domestic credit to the private sector amounting to 125 percent of GDP, but only 21 percent of adults in the country report having a formal account. Conversely, the Czech Republic, with relatively modest financial depth (with domestic credit to the private sector at 56 percent of GDP), has relatively high account penetration (81 percent).

$^{\circ}$ Use of financial services is not completely explained by financial depth

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



Self-reported barriers to use of formal accounts

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



percentage of adults who reported only this reason. Source: Demirguc-Kunt and Klapper 2012. This suggests that financial depth and financial inclusion are distinct dimensions of financial development—and that financial systems can become deep without delivering access for all.¹² The large variation in account penetration among economies with similar levels of national income and financial depth also suggests that there is likely to be room for policy interventions to increase financial inclusion.

SELF-REPORTED BARRIERS

The Global Findex survey, by asking more than 70,000 adults without a formal account why they do not have one, provides insights into where policy makers might begin to make inroads in improving financial inclusion.

Globally, the most frequently cited reason for not having a formal account is lack of enough money to use one (figure 1.13). This is the response given by 65 percent of adults without a formal account, with 30 percent citing this as the only reason (multiple responses were permitted).¹³ This segment of the population is less likely to be bankable.

On average, respondents chose 1.7 responses, including most commonly the lack of enough money to use an account along with a second barrier. The next most commonly cited reasons for not

having an account are that banks or accounts are too expensive and that another family member already has one, a response identifying indirect users. Each of these is cited by about a quarter of adults without an account. The other reasons reported (in order of importance) are banks being too far away, lack of the necessary documentation, lack of trust in banks, and religious reasons.

Examining these self-reported barriers by region, income group, and individual characteristics is useful (see indicator table 4). While such analysis cannot support causal statements about what effect removing these barriers would have, it can nevertheless help identify potential target groups for expanding the use of accounts.



Source: Demirguc-Kunt and Klapper 2012; World Bank, Bank Regulation and Supervision Database; World Bank Payment Systems Database

For example, distance from a bank is a much greater barrier in rural areas, as expected. Technological and other innovations that help overcome the barrier of physical distance could potentially increase the share of adults with a formal account by up to 23 percentage points in Sub-Saharan Africa and 14 percentage points in South Asia.¹⁴ Among developing economies there is a significant relationship (after accounting for GDP per capita) between distance as a self-reported barrier and objective measures of providers such as bank branch penetration. Tanzania has a large share of non-account-holders who cite distance as a reason for not having an account—47 percent—and also ranks near the bottom in bank branch penetration, averaging less than 0.5 bank branches per thousand square kilometers.¹⁵

Documentation requirements for opening an account may exclude workers in the rural or informal sector, who are less likely to have wage slips or formal proof of domicile. In Sub-Saharan Africa documentation requirements potentially reduce the share of adults with an account by up to 23 percentage points. Analysis shows a significant relationship between subjective and objective measures of documentation requirements as a barrier to account use, even after accounting for GDP per capita (figure 1.14). Indeed, the Financial Action Task Force, recognizing that overly cautious Anti-Money Laundering and Terrorist Financing (AML/ CFT) safeguards can have the unintended consequence of excluding legitimate businesses and consumers from the financial system, has emphasized the need to ensure that such safeguards also support financial inclusion.¹⁶

Affordability is another important barrier. Fixed transactions costs and annual fees tend to make small transactions unaffordable for large parts of the population. Maintaining a checking account in Sierra Leone, for example, costs the equivalent of 27 percent of GDP per capita in annual fees. So it is no surprise that

44 percent of non-account-holders in that country cite cost as a reason for not having a formal account. Analysis finds a significant relationship between cost as a self-reported barrier and an objective measure of costs.

But fixed fees and high costs of opening and maintaining accounts also often reflect lack of competition and underdeveloped physical or institutional infrastructure. These issues seem to be particularly important in Sub-Saharan Africa and Latin America and the Caribbean, where improvements that reduce costs could potentially increase the share of adults with a formal account by up to 24 percentage points.¹⁷

Lack of trust in banks can be a difficult barrier to overcome. This distrust can stem from cultural norms, discrimination against certain population groups, past episodes of government expropriation of banks, or economic crises and uncertainty. In Europe and Central Asia 31 percent of non-account-holders cite lack of trust in banks as a reason for not having an account—a share almost three times that in other regions on average.¹⁸

Religious reasons for not having a formal account are most commonly cited in the Middle East and North Africa and South Asia. In these regions, developing financial products compatible with religious beliefs (Islamic finance) could pay off—potentially increasing the share of adults with a formal account by up to 10 percentage points in the Middle East and North Africa and by up to 5 percentage points in South Asia.

Global Findex data suggest that indirect use of an account is most common in South Asia: 34 percent of adults in the region without a formal account cite another family member already having one as a reason, compared with a global average of 23 percent. Women tend to be more likely to be indirect users as well: in South Asia and the Middle East and North Africa there is a gender gap of about 10 percentage points in citing this reason. A recent study shows that lack of account ownership (and personal asset accumulation) limits women's ability to pursue self-employment opportunities.¹⁹ Such voluntary exclusion may be linked to individual preferences or cultural norms, or it may indicate a lack of awareness of financial products or lack of financial literacy more generally.²⁰

How—and how often—are accounts accessed?

Beyond the simple ownership of formal accounts, how frequently people access those accounts, and the methods they use to do so, mark a stark difference in the use of financial services between high-income and developing economies.

DEPOSITS AND WITHDRAWALS

In developing economies 10 percent of adults with a formal account—more than 150 million people—maintain what can be considered an inactive account: they make neither withdrawals from nor deposits into their account in a typical month (although they may keep a positive balance). In high-income economies only 2 percent of account holders have an inactive account.



The majority of adults with a formal account in developing economies make deposits or withdrawals only one to two times in a typical month (figure 1.15). They may access their accounts only to withdraw monthly or semimonthly wages (deposited by an employer). In high-income economies, by contrast, more than half withdraw money from their accounts six or more times in a typical month. ATMs and electronic payment systems (debit cards, electronic bill payments, and the like) facilitate more frequent access to accounts. Indeed, adults with a formal account in high-income economies report most commonly using ATMs for withdrawals. Those in developing economies report most commonly making withdrawals over the counter in a branch of their bank or financial institution (figure 1.16).

In recent years the proliferation of "branchless banking" has received growing attention as a way to increase financial access in developing economies, particularly among underserved groups.²¹ One mode of branchless banking centers on bank agents, who often operate out of retail stores, gas stations, or post offices. By taking advantage of existing infrastructure and client relationships, this way of operating makes it more cost-efficient to expand financial access. Bank agents can also be mobile, making daily or weekly rounds among clients. Few account holders report relying on bank agents (whether over the counter at a retail store or from some other person associated with their bank) as their main mode of withdrawal or deposit. But in several Asian economies—including Bangladesh, the Lao People's Democratic Republic, Nepal, and the Philippines—more than 10 percent of account holders already report using bank agents, and this share is expected to grow globally. Over time the Global Findex data can serve as a benchmark for studies and policy interventions examining the effect of bank agents on financial access.



Source: Demirguc-Kunt and Klapper 2012.

The use of debit or ATM cards, another vehicle for carrying out financial transactions, is far more common in high-income than in developing economies. In the Netherlands, for example, about 98 percent of adults report having a debit card. In South Asia no country has more than 10 percent of adults reporting that they have a debit card. Yet in a handful of developing economies—including Belarus, Brazil, the Islamic Republic of Iran, Lithuania, Mauritius, and Mongolia—more than 40 percent of adults report having a debit card.

An interesting question is what share of account holders have a debit card. South Asia again stands out, with only 22 percent of account holders having one (figure 1.17). Europe and Central Asia has the largest share among regions, with 81 percent of account holders reporting that they have a debit card. In high-income economies 69 percent of account holders have a debit card.

PAYMENT SYSTEMS

Just as the most common methods that account holders use for making withdrawals and deposits differ between developing and high-income economies, so do the payment systems they use. As might be expected, checks and electronic payments are far more commonly used in high-income than in developing economies. Adults in high-income economies are nine times as likely to report having used a check to make a payment or to buy something in the past 12 months. In the developing world use of electronic payments—such as wire transfers or online payments—is rare. Only 5 percent of adults in developing economies report having used any type of electronic payment to make payments on bills or to buy things in the past year.

What are the purposes and benefits of having an account?

People have myriad reasons for maintaining an account at a formal financial institution. Some use their account to do little more than receive wage payments. Others see their account as an essential tool for transferring financial support to or from relatives living elsewhere. And still others are interested mainly in having a safe place to save. The purposes and benefits of having an account vary just as much across regions and income groups as do other aspects of account use.

BUSINESS OR PERSONAL USE

Adults with a formal account by purpose of its use BUSINESS 2 1 ONLY 15 8 BOTH 28 PERSONAL 88 ONLY 82 70 DEVELOPING ECONOMIES ALL ECONOMIES HIGH-INCOME ECONOMIES Note: Data exclude adults who have an account at a post office only.

Personal and business use of accounts

Source: Demirguc-Kunt and Klapper 2012.

Worldwide, the vast majority of adults with

a formal account use it for personal rather than business purposes (figure 1.18). In high-income economies, however, 25 percent of adults—and nearly a third of account holders—report using an account for business purposes. In developing economies only 4 percent of adults—and 11 percent of account holders—report doing so. There are a few notable exceptions, however: in Chad, Morocco, Togo, and Uganda, for example, more than 35 percent of account holders report using their account for business purposes. These exceptions aside, the contrast between high-income and developing economies is consistent with the overall lower account penetration and the smaller number of formally registered businesses in developing economies.²²

RECEIVING WAGES AND GOVERNMENT PAYMENTS

Using a formal account to receive wages is most common in high-income economies, Europe and Central Asia, and Latin America and the Caribbean (figure 1.19). In Europe and Central Asia 27 percent of all adults (and 61 percent of account holders) report having used an account to receive money or payments for work or from selling goods in the past 12 months. Relying on an account to receive money or payments from the government is most common in high-income economies, where 42 percent of all adults (and 47 percent of account holders) report having used an account for this type of transaction in the past year.

Using accounts to receive either wages or government payments is least common in South Asia. In Sri Lanka, for example, fewer than 10 percent of adults use an account to receive wages or government payments, even though the country has relatively high account penetration (69 percent) for its region and income level.



Source: Demirguc-Kunt and Klapper 2012.

Use of accounts for family remittances

Adults using a formal account in the past year to transfer money to or from relatives living elsewhere (%)



SENDING OR RECEIVING REMITTANCES

In 2011 remittance payments of more than \$350 billion were sent around the world.²³ While sending financial support to—or receiving it from—relatives living elsewhere often does not require having an account, accounts do frequently help facilitate this worldwide transfer of wealth. In Sub-Saharan Africa, where a comparatively large share of account holders report using their account to save, a primary (and not unrelated) use of accounts also appears to be the receipt of remittances. Indeed, Sub-Saharan Africa has the largest share of account holders reporting the use of their accounts to send or receive family remittances. Some 38 percent of adults with a formal account (and 9 percent of all adults) report having used their account to receive remittances in the past 12 months (figure 1.20). Use of a formal account to receive remittances is particularly common among account holders in several countries of southern Africa, including Botswana, Lesotho, and Swaziland. The steady receipt of remittances has been shown to ease access to credit in some cases, because banks view regular remittance payments as a reliable source of income.²⁴



Fragile states and economies with large security concerns are also among those with the highest reported use of accounts to receive remittances. In Somalia 66 percent of account holders (and 20 percent of all adults) report using their account to receive remittances, in Zimbabwe 55 percent (22 percent), and in Haiti 49 percent (11 percent).

What is the role of mobile money?

Although people who do not have an account at a bank, credit union, or microfinance institution may lose out on the security and reliability that a relationship with a formal institution provides, they often employ fairly sophisticated methods to manage their day-to-day finances and plan for the future.²⁵ A growing number are using new alternatives to traditional banking made possible by the rapid spread of mobile phones.

The recent growth of mobile money—sometimes a form of branchless banking—has allowed millions of people who are otherwise excluded from the formal financial system to perform financial transactions relatively cheaply, securely, and reliably. Those using mobile money maintain a type of account allowing them to make deposits and withdrawals through cash transactions at a network of retail agents. They can then transfer money or pay bills using text messaging. Many mobile money accounts—such as those provided by M-PESA in Kenya or GCash in the Philippines—are not connected to an account at a financial institution, though the providers are often required to store the aggregate sums of the accounts in a bank. Customers are generally charged a fee for sending money to others or making a withdrawal from their account.

Mobile money has achieved the broadest success in Sub-Saharan Africa, where 16 percent of adults report having used a mobile phone in the past 12 months to pay bills or send or receive money (map 1.2). The share using mobile money is less than 5 percent in all other regions—though a few economies are notable exceptions to regional patterns, including Albania, Algeria, Haiti, the Philippines, and Tajikistan.

Another way to assess the prevalence and potential of mobile money is to look at what share of mobile phone subscribers use mobile payments. In Kenya, for example, 79 percent of adults report having a mobile phone in their household and 68 percent report having used a mobile phone in the past 12 months to pay bills



or send or receive money. This means that 86 percent of all mobile phone users in the country are mobile money users. By comparison, the share in all of Sub-Saharan Africa is 23 percent.²⁶

Many of those who use alternative banking tools may also use formal financial services. But a growing share of people—especially in the developing world—rely solely on systems outside the formal banking sector. In the 10 economies with the highest reported use of mobile payments, many mobile money users are not otherwise included in the formal financial system (figure 1.21). In Kenya 43 percent of adults who report having used mobile money in the past 12 months do not have a formal account. In Sudan 92 percent do not. Overall in Sub-Saharan Africa, 12 percent of those without a formal account use a mobile phone to conduct financial transactions.

The degree to which mobile money is capturing the nonbanked market clearly differs across economies. This may reflect the varied and quickly evolving public policies surrounding mobile money. When M-PESA began in Kenya, it had no association with the formal banking sector and mobile banking customers there were exempt from the documentation requirements imposed by banks.²⁷ But governments increasingly are favoring bank-led models in which mobile money providers have partnerships with or are formed directly through banks. In India the government introduced regulations in 2008 requiring that mobile money schemes be operated by banks, making it difficult for an M-PESA–type market entrant to lead the nascent mobile money movement.²⁸ This has probably contributed to the slow growth of mobile money in India, where only 4 percent of adults in the Global Findex sample report having used a mobile phone in the past 12 months to pay bills or send or receive money.

- 1. This includes respondents who report having a debit card.
- 2. According to the latest available data from the World Bank's World Development Indicators database, there are 5.08 billion adults age 15 and above worldwide.
- 3. Exceptions include, for example, Italy (with an account penetration of 71 percent) and the United States (88 percent).
- 4. Reported *R*-squared of a country-level ordinary least squares (OLS) regression of account penetration on the log of GDP per capita.
- 5. GDP per capita as shown for all economies in this section is in constant 2000 U.S. dollars.
- 6. Gallup's regional-level statistics on population shares living on less than \$2 a day are calculated using Gallup World Poll household data on monthly income, which is converted to international dollars using household consumption data from the World Bank's International Comparison Program 2005 report (World Bank 2008b) adjusted for inflation relative to the United States. The regional averages are broadly consistent with the 2008 poverty line estimates from the World Bank's Development Research Group (see http://iresearch.worldbank.org/PovcalNet/index.htm?0,0). The two estimates are within 5 percentage points of each other for East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, and Sub-Saharan Africa. For the Middle East and North Africa, Gallup's regional estimate is 37 percentage points higher than the World Bank's, though both estimates omit several populous countries in the region. For South Asia, Gallup's estimate is 15 percentage points lower than the World Bank's. The World Bank measures are based mostly on pre-2008 data and cover 127 economies. The 2005 World Bank estimates are discussed at length in Chen, Ravallion, and Sangraula (2010).
- 7. FDIC 2009.
- 8. Aterido, Beck, and Iacovone (2011) find no evidence of discrimination or lower inherent demand for financial services by women when key individual characteristics are taken into account.
- 9. Cole, Sampson, and Zia 2011.
- 10. The data on spending per student on primary education are from the World Bank's World Development Indicators database.
- 11. Gallup World Poll data include two variables related to the urban-rural divide: municipality population data that are used to stratify the sample, and interviewer-coded data on area size category. Municipality population data are not available for all regions because strata are sometimes based on geographic categories. The analysis in this report and the country-level data release are based on the interviewer-coded urban-rural data. The correlation between the population-based and interviewer-coded categorizations is very strong.
- 12. The positive but imperfect correlations of account use with financial depth and national income level raise questions about the drivers of cross-country differences in financial use and access that are explored in Allen and others (2012).
- 13. Among respondents, 12 percent chose none of the given reasons for not having an account.
- 14. Estimated increases are based on the percentage of adults who report not having a formal account for a given reason and thus by how many percentage points account penetration could increase if a given barrier was eliminated. For example, 31 percent of adults without an account in Sub-Saharan Africa cite distance as a barrier. Since the unbanked make up 76 percent of the Sub-Saharan Africa adult population, 23 percent of all Sub-Saharan African adults report not having an account in part because of distance (31*0.76 = 23). So, if distance barriers were alleviated, this segment of the population could become banked, thereby increasing the percentage of banked adults by 23 percentage points. Clearly these statements are indicative at best and should not be interpreted as causal.

- 15. World Bank Global Payment Systems Survey, 2010.
- 16. For more on documentation requirements and safeguards against money laundering, see Yikona and others (2011) and FATF (2011).
- 17. This figure is consistent with the findings of Beck, Demirguc-Kunt, and Martinez Peria (2008). Surveying an international sample of banks, they show that in many Sub-Saharan African economies annual fees and minimum balances required to open and maintain accounts exceed those elsewhere, constituting significant barriers to access.
- 18. In the core Gallup World Poll questionnaire respondents are asked to rate their trust in banks, and again respondents in Europe and Central Asia—account holders and non-account-holders—report the least amount of trust (Demirguc-Kunt, Klapper, and Zingales 2012).
- 19. Hallward-Driemeier and Hasan forthcoming.
- 20. The institutional barriers to financial inclusion are further analyzed in Allen and others (2012).
- 21. For more information, see Mas and Kumar (2008).
- 22. Klapper and Love 2011.
- 23. World Bank, World Development Indicators database.
- 24. Ratha 2006.
- 25. Collins and others 2009.
- 26. Gallup World Poll, 2011.
- 27. Jack and Suri 2011.
- 28. CGAP 2010.

SAVING

Saving to cover future expenses—education, a wedding, a big purchase—or to provide against possible emergencies is a universal tendency. Globally, 36 percent of adults report having saved or set aside money in the past 12 months. Adults in high-income economies are the most likely to do so, followed by those in Sub-Saharan Africa and East Asia and the Pacific. In other regions only between 20 and 25 percent of adults report having saved in the past year (figure 2.1).

More interesting, there are marked differences in how people save. Many who save do so using an account at a formal financial institution. Many others, including some who have a formal account, turn to alternative methods of saving.



Source: Demirguc-Kunt and Klapper 2012.

How does formal savings behavior vary around the world?

Worldwide, about a fourth of adults report having saved at a bank, credit union, or microfinance institution in the past 12 months—though the share ranges from 45 percent of adults in high-income economies to less than 7 percent in Europe and Central Asia and the Middle East and North Africa (map 2.1). Sub-Saharan Africa has a larger share of adults who report having saved at a formal financial institution in the past 12 months than any other region except East Asia and the Pacific. This is in part because three of the countries with the largest shares of adults reporting formal saving in the region are also three of its most populous countries: Nigeria (with 24 percent of adults reporting formal saving), South Africa (22 percent), and Kenya (23 percent).





Formal saving by individual characteristics

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



Note: Primary includes those with less than a primary education; *tertiary* includes those with more than a tertiary education. *Source:* Demirguc-Kunt and Klapper 2012. Formal savings behavior varies not only by region but also by individual characteristics (figure 2.2). As with owning an account, men, adults in higher income quintiles, and those with more education are more likely to report having saved at a bank, credit union, or microfinance institution in the past 12 months. In high-income economies the gap in formal saving between the richest and poorest income quintiles is much larger than it is for account penetration. In developing economies adults in the richest income quintile are on average more than three times as likely to save formally as those in the poorest—and in high-income economies nearly twice as likely. The differences by income, gender, and education level are statistically significant in both groups of economies.

Clear patterns emerge in saving across age groups. In both developing and highincome economies the share of those who report having saved formally in the past year varies little across income quintiles among young adults (those ages 15-24) and among older adults (those age 65 and above), who are likely to be retired. And there is little difference between adults in these age groups and adults ages 25–64, who are most likely to be in the workforce. But among these working-age adults the share of those who report formal saving more than doubles from the poorest to the richest income quintile in all economies on average—and rises from 10 percent to 38 percent in developing economies.



This is unsurprising: working-age adults could be expected to have a greater propensity to save formally—and this propensity could be expected to rise with income. Yet the Global Findex data also show a gap of about 28 percentage points between developing and high-income economies in the share of working-age adults who report having saved formally in the past year—a gap that persists across all income quintiles.

How does savings behavior vary among account holders?

Having a formal account does not necessarily imply formal saving; even among account holders there is great variation in the use of formal accounts to save (figure 2.3). Worldwide, about 43 percent of account holders report having saved or set aside money at a formal financial institution in the past 12 months. In high-income economies, East Asia and the Pacific, and Sub-Saharan Africa about half of account holders report having saved using a formal account in the past 12 months. This suggests that in these groups of economies the ability to save in a secure location may be an important reason why people open and maintain a formal account. In Indonesia and Tanzania, for example, about 70 percent of account holders report having saved or set aside money at a financial institution in the past 12 months. The security of a bank, credit union, or microfinance institution may be particularly attractive to savers in fragile states: more than 75 percent of account holders in Haiti and Sierra Leone report formal saving in the past year, though less than 25 percent of adults in these countries have a formal account.

In Europe and Central Asia, by contrast, saving does not appear to be a primary use of formal accounts. In that region less than one in six adults with a formal account reports having saved or set aside money using a formal account in the past 12 months. In Georgia just 3 percent of account holders (and 1 percent of all adults) report having saved using a formal account in the past year. As reported in the previous chapter, adults in Europe and Central Asia are particularly likely to



use their accounts to receive wages and government payments, so accounts may be opened mainly for this purpose and not specifically for saving.

Many adults, despite having a formal account, save solely using other methods. These people, who might be classified as "underbanked," make up 12 percent of account holders worldwide and more than 30 percent in several economies, including Mali and Mexico. Those choosing to use an informal savings method rather than their formal account may do so because the costs of actively using their account are prohibitive—as a result of such barriers as balance and withdrawal fees and physical distance. It is also possible that wage accounts set up by employers cannot easily be used to save. New products that target existing account holders could be used to encourage adults to save in formal financial institutions. These could be especially important in economies with aging populations.¹

What are common alternatives to formal saving?

In some parts of the world a large share of people who save are clearly choosing alternatives to formal accounts to do so. Among adults who report having saved or set aside money in the past year, only about 35 percent did so using a formal account in Europe and Central Asia, Latin America and the Caribbean, and Sub-Saharan Africa. In three Central Asian countries—the Kyrgyz Republic, Turkmenistan, and Uzbekistan—about 35 percent of adults report having saved in the past 12 months, but less than 5 percent of these savers report having done so at a financial institution. What are the main alternatives being used?

In high-income economies savers may choose from a wide variety of complex (and sometimes risky) investment products offered by equity and other traded markets, purchase government securities or commodities such as gold, or simply hold cash. In developing economies savings clubs are a common alternative (or complement) to saving at a formal financial institution. One common form is the rotating savings and credit association (ROSCA)—known as a *susu* in West Africa, an *arisan* in Indonesia, and a *pandero* in Peru. These clubs generally operate by pooling the weekly deposits of their members and disbursing the entire amount to a different member each week.

Community-based savings methods such as savings clubs are widely used in some parts of the world but most commonly in Sub-Saharan Africa (figure 2.4). In that region 19 percent of adults report having saved in the past year using a savings club or person outside the family. Among just those who report any savings activity in the past 12 months, 48 percent use community-based savings methods. The practice is particularly common in Nigeria, where ROSCAs are called *esusu*, *ajo*, *cha*, or *adashi*. In that country 44 percent of adults (and 69 percent of those who save) report using a savings club or person outside the family. Perhaps because of the widespread use of this savings method, the share of Nigerians who report any type of saving in the past year is equal to that in Canada and the Republic of Korea and far higher than that in other developing economies.

The use of savings clubs in other regions, while less widespread than in Sub-Saharan Africa, is still substantial: in the Middle East and North Africa 18 percent of savers report having saved using a savings club in the past 12 months, in South Asia 16 percent, in Latin America and the Caribbean 15 percent, and in East Asia and the Pacific 11 percent.

Many people use both formal and community-based savings methods, especially in the developing world. In Sub-Saharan Africa 5 percent of adults (and 14 percent of savers) report having saved using both formal and community-based methods in the past year. Globally, slightly less than half of all adults who report having saved in the past 12 months using an informal savings club or person outside the family also report having saved using a formal financial institution.

While many savers in the developing world blend formal and informal methods, an even larger share use only community savings clubs. In Sub-Saharan Africa 34 percent of savers report having saved using a community savings club (and not a formal financial institution) in the past 12 months.

The popularity of savings clubs speaks to their advantages, but these arrangements also have downsides. Their essential characteristic—informality—is accompanied by risks of fraud and collapse (although formal accounts are not immune to these risks where explicit government-run deposit insurance is absent or inadequate, as it is in many developing economies). In addition, the cyclical nature of contributions and disbursements can be too rigid for some people and out of sync with their needs to deposit surplus income or quickly withdraw funds for an emergency.

Community-based savings methods and formal financial institutions are not the only options for saving. A large share of adults around the world who report having saved or set aside money in the past 12 months do not report having done so using a formal financial institution, informal savings club, or person outside the family. While the Global Findex survey did not gather data on these alternative



methods, they might include saving through asset accumulation (such as gold or livestock) and saving "under the mattress." These adults account for 29 percent of savers worldwide and more than half of savers in 55 economies.

Among the 11 economies with the highest use of such alternative savings methods, 7 are in Europe and Central Asia (figure 2.5). These include the Kyrgyz Republic, Turkmenistan, and Uzbekistan, where more than 85 percent of adults who report having saved in the past year did so using neither a formal financial institution nor a community-based savings scheme. Interestingly, more than 85 percent of all savers in these three economies report saving for a wedding, an education, or another future expense, a larger share than report saving for a future emergency. This suggests a potential market for financial products that cater to specific savings goals, such as the education savings bonds that are common in many highincome economies.

How does the motivation for saving vary?

Adults who save at a formal financial institution are more likely to report having specific savings goals than those who save using other methods. Worldwide, 67 percent of formal savers report having saved for future expenses such as an education, a wedding, or a big purchase. Concrete savings goals are reported by 63 percent of savers who use a community-based savings group and not a formal financial institution, and by 59 percent of savers who use neither. Though it is unclear from the data whether these differences arise because people with concrete savings goals are more likely to open a formal savings account, there is other evidence that simply having an account encourages people to save toward a specific purchase or investment.²

^{1.} See, for example, Chawla, Betcherman, and Banerji (2007), who provide an overview of the challenges of aging populations in Eastern Europe and the former Soviet Union.

^{2.} Dupas and Robinson 2009, 2011.

CREDIT

Most people need to borrow money from time to time. They may want to buy or renovate a house, to invest in an education, or to pay for a wedding. When they lack the money to do so, they turn to someone who will lend it to them—a bank, a cousin, an informal lender. And in some parts of the world many people may rely on credit cards for short-term credit.

The introduction of credit cards has had a big effect on the demand for and use of short-term formal credit. In high-income economies 50 percent of adults report having a credit card. Credit card ownership in developing economies, despite a surge in recent years, still lags far behind: only 7 percent of adults in these economies report having one. Israel leads in credit card ownership, with 80 percent of adults reporting that they have one. The share of adults who report having a credit card is also high in Latin America and the Caribbean, particularly in Brazil and Uruguay (map 3.1), and in Europe and Central Asia, particularly in Turkey. But the credit card market is virtually nonexistent in such economies as the Arab Republic of Egypt, Moldova, Pakistan, and Senegal, where less than 2 percent of adults report having one.

As a result of the extensive ownership of credit cards, people in high-income economies may have less need for shortterm loans from financial institutions. This may help explain why the share of adults in these economies who report having received a loan in the past year from a formal financial institution (such as a bank, cooperative, credit union, or microfinance institution) is not particularly high. Indeed, if the adults in high-income economies who report owning a credit card are included in the share of those who report borrowing from a formal financial institution in the past year (a measure that may not include credit card balances), that share increases by 40 percentage points-from 14 percent to 54 percent.¹ The rest of the discussion in this chapter focuses on measures of borrowing activity that do not include credit card ownership, though both measures of credit use are included in the country table.

The overall rate of the origination of new loans—formal and informal—is fairly steady across income groups, regions, and individual characteristics. On average, slightly more than 30 percent of adults report having borrowed money in the past 12 months in both high-income and developing economies. Measures of new (or rolled-over) household debt are sensitive to the business cycle and current economic factors, however, and future rounds of data collection may yield significantly different estimates. Moreover, the use of credit is sensitive to the tax, legal, and regulatory environment; for example, the provision of private credit is higher in countries with better creditor protection and broader credit information coverage.²

Beyond the overall rate of new borrowing the similarities largely end. Both the sources of new loans and the reasons for borrowing tend to vary widely.

What are the most common sources of new loans?

In Finland 24 percent of adults report having borrowed money from a formal financial institution such as a bank, credit union, or microfinance institution in the past 12 months (map 3.2). In Ukraine only 8 percent report having done so, and in Burundi only 2 percent. Conversely, while 37 percent of adults in Ukraine and 44 percent in Burundi report having borrowed money from family or friends in the past 12 months, only 15 percent report having done so in Finland.

Friends and family are the most commonly reported source of new loans in all regions, though not in high-income economies (figure 3.1). In Sub-Saharan Africa 29 percent of adults report friends or family as their only source of new loans in the past year, while only 2 percent report a formal financial institution as their only source. In several regions more adults report borrowing from a store (using installment credit or buying on credit) than report borrowing from a formal financial institution. In high-income economies formal financial institutions are the most commonly reported source of new loans.

Note: Respondents could report borrowing from more than one source *Source:* Demirguc-Kunt and Klapper 2012.

A few economies stand out for the reported use of formal loans: Bangladesh, where 23 percent of adults report having borrowed from a financial institution in the past 12 months, and Bolivia, Sri Lanka, and Thailand, where more than 15 percent report having done so. This may reflect the broad coverage in these economies of community-based models (such as cooperatives, village banking, credit unions, and self-help groups) that make small formal loans to the poor.

In all regions only about 5 percent or fewer adults report having borrowed money from a private informal lender in the past 12 months. But a few economies are exceptions to regional patterns: more than 10 percent of adults in Cambodia, the Dominican Republic, Liberia, and the Syrian Arab Republic report having taken out a loan from a private informal lender in the past 12 months. Social norms may have a large effect on the degree to which this type of borrowing is reported.

Another group of adults report having borrowed in the past 12 months both from a formal financial institution and from another source. For these adults the formal financial sector appears to be meeting some but not all of their credit needs. These borrowers make up more than 13 percent of all adults who report having borrowed from at least one source in the past year worldwide and more than 20 percent in such economies as Belarus, Croatia, and Mongolia.

In both high-income and developing economies a significantly larger share of men than women report having originated a new loan from a formal financial institution in the past 12 months. And in both income groups new formal loans are most common among those ages 25–64. Disparities among income quintiles are much larger on average in high-income than in developing economies. While there is almost no increase in the origination of new formal loans between the poorest and richest income quintiles in developing economies on average, in high-income economies those in the richest income quintile are almost twice as likely on average as those in the poorest to report having originated a new formal Reasons for loans reported by borrowers in developing economies

Adults with an outstanding loan for purpose specified (%)

loan in the past year.

Looking at the origination of new formal loans by education level across income quintiles reveals interesting patterns. In developing economies the share of adults with at least some tertiary education who report having originated a new formal loan in the past year remains fairly steady across income quintiles; the gap between the poorest and richest quintiles is only about 3 percentage points on average. The story is similar for those with a primary or secondary

education. The challenges of using formal credit in developing economies appear to affect the wealthy as well as the poor.

But in high-income economies adults in the richest quintile with at least some tertiary education are more than twice as likely on average to report a new formal loan as those in the poorest quintile with the same education level; the gap averages about 15 percentage points. As in developing economies, however, the likelihood of having a new formal loan in the past year differs little across income quintiles among adults with lower education levels.

All this means a large gap in the origination of new loans among wealthy adults with different education levels in high-income economies. What explains this gap? The difference may indicate lower creditworthiness or less demand for loans among less educated adults. Or it may suggest that less ability to understand complex loan terms and navigate the loan process could be a barrier to the use of formal credit.

What are the main purposes for loans?

Why are people most likely to borrow? Data gathered in developing economies show that emergency or health purposes are the most common reason for having an outstanding loan (figure 3.2).³ This is especially so in Cambodia, Guinea, Madagascar, Sudan, and the Republic of Yemen, where more than 30 percent of adults report having an outstanding loan for such purposes. Emergency and health loans are also more commonly reported among those in the poorest income quintile: on average in developing economies, 14 percent of adults in the poorest quintile had a loan for emergency or health purposes, compared with 8 percent of those in the richest.

Outstanding loans for school fees are most common in Sub-Saharan Africa, reported by 8 percent of adults in that region. Outstanding loans for funerals or weddings are reported by 3 percent of adults in the developing world as a whole. But they are significantly more common in fragile and conflict-affected states such as Afghanistan (29 percent), Iraq (13 percent), Somalia (11 percent), and West Bank and Gaza (11 percent).

Data on the use of mortgages show a large difference between income groups: in high-income economies 24 percent of adults report having an outstanding loan to purchase a home or apartment, while only 3 percent do in developing economies. Even within the European Union there is large variation in the use of mortgages, with very low rates of use in some of the new member states. For example, while 21 percent of adults in Germany have an outstanding mortgage, only 3 percent in Poland do (map 3.3). Such differences may in part reflect differences in housing finance systems across economies—such as in product diversity, types of lenders, mortgage funding, and the degree of government participation, all of which have been shown to affect

the availability of loans to individuals.⁴ Collateral and bankruptcy laws that define legal rights of borrowers and lenders have also been shown to affect housing finance.⁵ And to develop in the first place, a mortgage market requires formal property rights and an efficient framework to record ownership of property.⁶

- 1. Information is collected on the ownership of credit cards but not their use.
- 2. Djankov, McLiesh, and Shleifer 2007.
- 3. Data on the main purpose of outstanding loans were gathered only in developing economies because Gallup, Inc. enforces a time limit for phone interviews conducted in high-income economies, limiting the number of questions that can be added to the core questionnaire. Respondents chose from a list of reasons for borrowing so it is possible that reasons not listed (borrowing to start a business, for example) are also common.
- 4. IMF 2011.
- 5. Warnock and Warnock 2008.
- 6. De Soto 2000.

INSURANCE

Insurance is a critical tool in managing risk, whether that risk relates to personal health or to one's livelihood. Health problems can be catastrophic for someone with no health insurance. They can be especially so in developing economies, where government-provided safety nets and emergency room care are less common.

Seventeen percent of adults in developing economies report having paid for health insurance (in addition to national health insurance where applicable). This share ranges as low as 3 percent in Sub-Saharan Africa and 4–5 percent in Europe and Central Asia and South Asia (figure 4.1). The relatively high value for East Asia and the Pacific is driven by China, where 47 percent of adults report having personally paid for health insurance. With China excluded, the share of adults who report having purchased health insurance in East Asia and the Pacific drops to only 9 percent.

People who work in farming, forestry, or fishing are critically vulnerable to severe weather events. In recent years the microinsurance concept has become popular for managing weather-related risks, especially for those self-employed in agricultural industries in developing economies. The need to mitigate these risks has grown with mounting evidence on the effects of climate change on extreme variations in weather.

Yet the vast majority of adults who work in farming, forestry, or fishing in developing economies do not report personally purchasing the kinds of insurance that could protect against weather-related risks.¹ Only 6 percent of those working in these industries report having purchased crop, rainfall, or livestock insurance in the past 12 months. In Europe and Central Asia only 4 percent report having done so (figure 4.2).

1. An important caveat is that it cannot be ascertained whether these adults chose not to purchase insurance or were not offered it.

Purchasers of agricultural insurance

REFERENCES

- Allen, F., A. Demirguc-Kunt, L. Klapper, and M. S. Martinez Peria. 2012. "Policies to Expand Financial Inclusion." Development Research Group, World Bank, Washington, DC.
- Aterido, R., T. Beck, and L. Iacovone. 2011. "Gender and Finance in Sub-Saharan Africa: Are Women Disadvantaged?" Policy Research Working Paper 5571, World Bank, Washington, DC.
- Beck, T. 2009. "FinAccess 2009: Trends, Analysis and Policy Conclusions." Consultant report for FSD Trust Kenya, Nairobi.
- Beck, T., and M. Brown. 2011. "Use of Banking Services in Emerging Markets: Household-Level Evidence." European Banking Center Discussion Paper 2011-024, Tilburg University, Netherlands.
- Beck, T., A. Demirguc-Kunt, and R. Levine. 2007. "Finance, Inequality, and the Poor." *Journal of Economic Growth* 12 (1): 27–49.
- Beck, T., A. Demirguc-Kunt, and M. S. Martinez Peria. 2007. "Reaching Out: Access to and Use of Banking Services across Countries." *Journal of Financial Economics* 85 (2): 234–66.
- ——. 2008. "Banking Services for Everyone? Barriers to Bank Access and Use around the World." World Bank Economic Review 22 (3): 397–430.
- Beck, T., R. Levine, and N. Loayza. 2000. "Finance and the Sources of Growth." *Journal of Financial Economics* 58 (1): 261–300.
- Campbell, J. 2006. "Household Finance." Journal of Finance 61 (4): 1553-604.
- CGAP (Consultative Group to Assist the Poor). 2010. "Technology Program Focus Country: India." http://www.cgap.org/.
- Chawla, M., G. Betcherman, and A. Banerji. 2007. From Red to Gray: The "Third Transition" of Aging Populations in Eastern Europe and the Former Soviet Union. Washington, DC: World Bank.
- Chen, S., M. Ravallion, and P. Sangraula. 2010. "The Developing World Is Poorer Than We Thought But No Less Successful in the Fight against Poverty." *Quarterly Journal of Economics* 125 (4): 1577–625.
- Clausen, B., A. Kraay, and Z. Nyiri. 2011. "Corruption and Confidence in Public Institutions: Evidence from a Global Survey." World Bank Economic Review 25 (2): 212–49.
- Cole, S., T. Sampson, and B. Zia. 2011. "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?" *Journal of Finance* 66 (6): 1933–67.
- Collins, D., J. Morduch, S. Rutherford, and O. Ruthven. 2009. *Portfolios of the Poor: How the World's Poor Live on Two Dollars a Day.* Princeton, NJ: Princeton University Press.
- Cull, R., A. Demirguc-Kunt, and J. Morduch. Forthcoming. *Banking the World: Empirical Foundations of Financial Inclusion*. Cambridge, MA: MIT Press.
- Deaton, A. 2008. "Income, Health, and Well-Being around the World: Evidence from the Gallup World Poll." *Journal of Economic Perspectives* 22 (2): 53–72.
- Demirguc-Kunt, A., and L. Klapper. 2012. "Measuring Financial Inclusion: The Global Findex Database." Policy Research Working Paper 6025, World Bank, Washington, DC.
- Demirguc-Kunt, A., L. Klapper, and L. Zingales. 2012. "Trust in Banks." Working paper, Development Research Group, World Bank, Washington, DC.
- Demirguc-Kunt, A., and R. Levine. 2009. "Finance and Inequality: Theory and Evidence." *Annual Review of Financial Economics* 1: 287–318.
- de Soto, Hernando. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else.* New York: Random House.
- Djankov, S., C. McLiesh, and A. Shleifer. 2007. "Private Credit in 129 Countries." *Journal of Financial Economics* 2 (84): 299–329.

- Dupas, P., and J. Robinson. 2009. "Savings Constraint and Microenterprise Development: Evidence from a Field Experiment in Kenya." NBER Working Paper 14693, National Bureau of Economic Research, Cambridge, MA.
- ———. 2011. "Why Don't the Poor Save More? Evidence from Health Savings Experiments." NBER Working Paper 17255, National Bureau of Economic Research, Cambridge, MA.
- EBRD (European Bank for Reconstruction and Development). 2011. *Life in Transition: After the Crisis.* http://www.ebrd.com.
- FATF (Financial Action Task Force). 2011. FATF Guidance on Anti-Money Laundering and Terrorist Financing Measures and Financial Inclusion. FATF/OECD: Paris.
- FDIC (Federal Deposit Insurance Corporation). 2009. "FDIC National Survey of Unbanked and Underbanked Households." http://www.fdic.gov/householdsurvey/.
- Hallward-Driemeier, M., and T. Hasan. Forthcoming. *Empowering Women: Legal Rights and Economic Opportunities in Africa*. Development Forum Series. Paris: Agence Française de Développement; Washington, DC: World Bank.
- Honohan, P. 2008. "Cross-Country Variation in Household Access to Financial Services." *Journal* of Banking and Finance 32: 2493–500.
- IMF (International Monetary Fund). 2011. Global Financial Stability Report: Grappling with Crisis Legacies, September 2011. Washington, DC: IMF.
- Jack, W., and T. Suri. 2011. "Mobile Money: The Economics of M-PESA." NBER Working Paper 16721, National Bureau of Economic Research, Cambridge, MA.
- Johnston, D., and J. Morduch. 2008. "The Unbanked: Evidence from Indonesia." *World Bank Economic Review* 22 (3): 517–37.
- King, R. G., and R. Levine. 1993. "Finance and Growth: Schumpeter Might Be Right." Quarterly Journal of Economics 108 (3): 717–37.
- Klapper, L., L. Laeven, and R. Rajan. 2006. "Entry Regulation as a Barrier to Entrepreneurship." Journal of Financial Economics 82: 591–629.
- Klapper, L., and I. Love. 2011. "The Impact of the Financial Crisis on New Firm Registration." Economics Letters 113: 1–4.
- Mas, I., and K. Kumar. 2008. "Banking on Mobiles: Why, How, for Whom?" Focus Note 48, Consultative Group to Assist the Poor, Washington, DC.
- Ratha, D. 2006. "Leveraging Remittances for Development." Federal Reserve Bank of Dallas Proceedings, pp. 173–85.
- Sacks, D., B. Stevenson, and J. Wolfers. 2010. "Subjective Well-Being, Income, Economic Development and Growth." NBER Working Paper 16441, National Bureau of Economic Research, Cambridge, MA.
- Stevenson, B., and J. Wolfers. 2008. "Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox." *Brookings Papers on Economic Activity* 39 (1): 1–102.
- ——. 2011. "Trust in Public Institutions over the Business Cycle." American Economic Review Papers and Proceedings 101 (3): 281–87.
- Warnock, V. C., and F. E. Warnock. 2008. "Markets and Housing Finance." *Journal of Housing Economics* 17 (3): 239–51.
- World Bank. 2008a. Finance for All? Policies and Pitfalls in Expanding Access. Washington, DC: World Bank.
- ——. 2008b. Global Purchasing Power Parities and Real Expenditures: 2005 International Comparison Program. Washington, DC: World Bank.
- Yikona, S., B. Slot, M. Geller, B. Hansen, and F. el Kadir. 2011. *Ill-Gotten Money and the Economy: Experiences from Malawi and Namibia*. Washington, DC: World Bank.

Afghanistan Albania Algeria® Angola Argentina Armenia Australia Australia Australia	SAR ECA MENA	Low	Apr 24–May 2	1 000						Exclusions and other sampling details
Albania Algeria® Angola Argentina Armenia Australia Australia Azerbaijan	ECA MENA			1,000	1.60	3.9	Face to face	Dari, Pashto		Gender-matched sampling was used during the final stage of selection.
Algeria ^e Angola Argentina Armenia Australia Australia Austria	MENA	Upper middle	Jul 4–Jul 18	1,006	1.58	3.9	Face to face	Albanian		-
Angola Argentina Armenia Australia Austria Azerbaijan		Upper middle	Mar 9–Mar 30	1,000	1.28	3.5	Face to face	Arabic		The sample excludes the deep South and governorates that represent security risks within Algiers Province. The excluded area represents approximately 25% of the total adult population.
Argentina Armenia Australia Austria Azerbaijan	SSA	Lower middle	Sep 23–Oct 9	1,000	1.52	3.8	Face to face	Portuguese		The sample excludes some rural areas because of inaccessibility and security risks. The excluded area represents approximately 15% of the total adult population.
Armenia Australia Austria Azerbaijan	LAC	Upper middle	Oct 27–Nov 28	1,000	1.46	3.7	Face to face	Spanish		
Australia Austria Azerbaijan	ECA	Lower middle	Jul 6—Aug 2	1,000	1.28	3.5	Face to face	Armenian		
Austria Azerbaijan	n.a.	High	Mar 9–Apr 16	1,010	1.51	3.8	Landline and cellular telephone	English		
Azerbaijan	n.a.	High	Apr 6–May 16	1,004	2.11	4.5	Landline and cellular telephone	German	Vienna	
	ECA	Upper middle	Jul 17–Aug 7	1,000	1.27	3.5	Face to face	Azeri, Russian		The sample excludes Nagorno-Karabakh and territories because of security risks. The excluded area represents approximately 10% of the total adult population.
Bahrain ^e	n.a.	High	Mar 3–May 31	1,010	1.37	3.8	Face to face	Arabic		The sample includes only Bahraini nationals and Arab expatriates. The excluded popula- tion represents approximately 25% of the total adult population.
Bangladesh	SAR	Low	Apr 15–Apr 30	1,000	1.23	3.4	Face to face	Bengali		
Belarus	ECA	Upper middle	Jun 7–Jul 7	1,007	1.23	3.4	Face to face	Russian		
Belgium	n.a.	High	Apr 6–May 16	1,002	1.93	4.3	Landline and cellular telephone	Dutch, French	Brussels	
Benin	SSA	Low	Aug 25–Sep 9	1,000	1.33	3.6	Face to face	French, Fon, Bariba		
Bolivia	LAC	Lower middle	Nov 19-Dec 3	1,000	1.40	3.7	Face to face	Spanish		
Bosnia and Herzegovina	ECA	Upper middle	Jul 6–Jul 24	1,009	2.10	4.5	Face to face	Bosnian, Croatian, Serbian		
Botswana	SSA	Upper middle	Oct 15-Oct 29	1,000	1.57	3.9	Face to face	English, Setswana		
Brazil	LAC	Upper middle	Dec 1-Dec 31	1,042	1.23	3.4	Face to face	Portuguese		
Bulgaria	ECA	Upper middle	Apr 12–May 10	1,006	1.49	3.8	Face to face	Bulgarian	Sofia	
Burkina Faso	SSA	Low	Sep 21-Sep 30	1,000	1.48	3.8	Face to face	Dioula, French, Fulfulde, Moore		
Burundi	SSA	Low	Aug 1-Aug 10	1,000	1.33	3.6	Face to face	French, Kirundi		
Cambodia	EAP	Low	Apr 22–May 5	1,000	1.62	4.0	Face to face	Khmer		
Cameroon	SSA	Lower middle	Mar 20–Apr 2	1,000	1.78	4.1	Face to face	English, French, Fulfulde		
Canada	n.a.	High	Jun 17–Jun 30	1,013	1.66	4.0	Landline telephone	English, French		The sample excludes Yukon, Northwest Territories, and Nunavut. The excluded area represents approximately 0.3% of the total adult population.
Central Africar Republic ^e	SSA	Low	Nov 14–Nov 28	1,000	1.24	3.5	Face to face	French, Sangho		The sample excludes areas bordering Sudan and Chad because of insecurity. The excluded area represents approximately 35% of the total adult population.
Chad		Low	Oct 6-Oct 17	1,000	1.81	4.2	Face to face	Chadian Arabic French		The eastern part of the country was not covered because of conflict on the border

Economy	Region ^a	Income group	Data collection period	Interviews	Design effect⁵	Margin of error ^c	Mode of interviewing	Languages	Over- sample ^d	Exclusions and other sampling details
Chile	LAC	Upper middle	Nov 9–Dec 8	1,009	1.41	3.7	Face to face	Spanish		
China	EAP	Upper middle	Jun 17–Jul 27	4,220	2.06	2.2	Face to face and landline telephone	Chinese		
Colombia	LAC	Upper middle	Nov 19-Dec 15	1,000	1.32	3.6	Face to face	Spanish		
Comoros	SSA	Low	Feb 26–Mar 14	1,000	1.19	3.4	Face to face	French, Comorian		
Congo, Dem. Rep.	SSA	Low	Jun 26–Jul 9	1,000	1.58	3.9	Face to face	French, Lingala, Kituba, Swahili, Tchiluba		The sample excludes North and South Kivu, Ituri, and Haut-Uele because of security risks. The excluded area represents approxi- mately 20% of the total adult population.
Congo, Rep.	SSA	Lower middle	Jul 14-Aug 8	1,000	1.49	3.8	Face to face	French, Kituba, Lingala		
Costa Rica	LAC	Upper middle	Aug 22-Sep 4	1,000	1.43	3.7	Face to face	Spanish		
Croatia	n.a.	High	Jun 29–Jul 18	1,030	1.08	3.2	Face to face	Croatian		
Cyprus	n.a.	High	Apr 11—May 10	1,005	1.40	3.7	Landline telephone	Greek		
Czech Republic	n.a.	High	Apr 15–May 9	1,000	1.31	3.5	Face to face	Czech	Prague	
Denmark	n.a.	High	Apr 5–Apr 25	1,005	1.84	4.2	Landline and cellular telephone	Danish	Copenhagen	
Djibouti	MENA	Lower middle	May 21–Jun 1	1,000	1.15	3.3	Face to face	French, Afar, Somali		
Dominican Republic	LAC	Upper middle	Nov 21-Dec 14	1,000	1.77	4.1	Face to face	Spanish		
Ecuador	LAC	Upper middle	Oct 10-Nov 29	1,003	1.34	3.6	Face to face	Spanish		
Egypt, Arab Rep.	MENA	Lower middle	Jun 10–Jun 17	1,044	1.20	3.3	Face to face	Arabic		
El Salvador	LAC	Lower middle	Aug 22-Sep 3	1,000	1.21	3.4	Face to face	Spanish		
Estonia	n.a.	High	May 14—Jun 4	1,007	1.29	3.5	Face to face	Estonian, Russian		
Finland	n.a.	High	Apr 5–Apr 28	1,000	1.62	3.9	Landline and cellular telephone	Finnish	Helsinki	
France	n.a.	High	May 13—Jun 17	1,001	1.82	4.2	Landline telephone	French	Paris City	
Gabon	SSA	Upper middle	Sep 2–Sep 21	1,000	1.38	3.6	Face to face	French, Fang, Mbere, Sira		
Georgia	ECA	Lower middle	Jun 15–Jul 15	1,000	1.30	3.5	Face to face	Georgian, Russian		The sample excludes South Ossetia and Abkhazia because of security risks. The excluded area represents approximately 7% of the total adult population.
Germany	n.a.	High	Mar 1–Mar 31	1,000	1.65	4.0	Landline and cellular telephone	German		
Ghana	SSA	Lower middle	Apr 15–Apr 29	1,000	1.56	3.9	Face to face	English, Twi, Hausa, Ewe, Dagbani		
Greece	n.a.	High	Apr 14–May 3	1,000	1.38	3.6	Face to face	Greek		
Guatemala	LAC	Lower middle	Aug 22-Sep 2	1,000	1.15	3.3	Face to face	Spanish		
Guinea	SSA	Low	Apr 23–May 8	1,000	1.33	3.6	Face to face	French, Malinde, Soussou, Poulah		
Haiti	LAC	Low	Oct 23-Oct 28	504	1.22	4.8	Face to face	Creole		
Honduras	LAC	Lower middle	Aug 13-Aug 26	1,002	1.18	3.4	Face to face	Spanish		
Hong Kong SAR, China	n.a.	High	Jun 7–Jul 8	1,028	1.48	3.9	Landline and cellular telephone	Chinese		
Hungary	n.a.	High	Apr 12–Apr 30	1,014	1.42	3.7	Face to face	Hungarian	Budapest	

Economy	Region ^a	Income group	Data collection period	Interviews	Design effect ^b	Margin of error ^c	Mode of interviewing	Languages	Over- sample ^d	Exclusions and other sampling details
India	SAR	Lower middle	Apr 11–Jun 16	3,518	1.47	2.0	Face to face	Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Tamil, Telugu		The sample excludes the Northeast states and remote islands. The excluded area represents approximately 10% of the total adult population.
Indonesia	EAP	Lower middle	May 18-May 31	1,000	1.48	3.8	Face to face	Bahasa Indonesia		
Iran, Islamic Rep.º	MENA	Upper middle	Feb 26–Mar 30	1,003	1.41	3.7	Face to face	Farsi		
Iraq	MENA	Lower middle	Sep 13-Sep 25	1,000	1.51	3.8	Face to face	Arabic, Kurdish		
Ireland	n.a.	High	Apr 7–Apr 27	1,000	1.79	4.1	Landline telephone	English	Dublin City	
Israel	n.a.	High	Oct 31-Dec 18	1,000	1.35	3.6	Face to face	Arabic, Hebrew		The sample excludes East Jerusalem. This area is included in the sample of West Bank and Gaza.
Italy	n.a.	High	Mar 15–Mar 31	1,005	1.96	4.3	Landline and cellular telephone	Italian	Rome	
Jamaica	LAC	Upper middle	Nov 27-Dec 14	506	1.23	4.8	Face to face	English		
Japan	n.a.	High	Nov 9-Dec 4	1,000	1.52	3.8	Landline telephone	Japanese		
Jordan	MENA	Upper middle	Mar 30–Apr 14	1,000	1.46	3.7	Face to face	Arabic		
Kazakhstan	ECA	Upper middle	Jun 9–Jul 1	1,000	1.19	3.4	Face to face	Kazakh, Russian		
Kenya	SSA	Low	Jun 3–Jun 14	1,000	1.62	3.9	Face to face	English, Swahili		
Korea, Rep.	n.a.	High	Jun 16–Jul 12	1,001	1.29	3.5	Landline and cellular telephone	Korean		
Kosovo	ECA	Lower middle	Jun 28–Jul 15	1,047	1.59	3.8	Face to face	Albanian, Bosnian, Montenegrin, Serbian	Serbs in Serbian North and Serbian Enclaves	
Kuwait	n.a.	High	Mar 5–Mar 28	1,000	1.39	3.6	Face to face	Arabic		The sample includes only Kuwaiti nationals and Arab expatriates. The excluded popula- tion represents approximately one-fifth of the total adult population.
Kyrgyz Republic	ECA	Low	Jun 4–Jun 30	1,000	1.34	3.6	Face to face	Kirgiz, Russian Uzbek	,	
Lao PDR	EAP	Lower middle	Jun 10-Aug 6	1,000	1.45	3.7	Face to face	Lao		The sample excludes some remote rural areas. The excluded area represents approximately 6% of the total adult population.
Latvia	ECA	Upper middle	May 20–Jun 14	1,006	1.29	3.5	Face to face	Latvian, Russian		
Lebanon	MENA	Upper middle	Mar 1–Apr 25	1,004	1.23	3.4	Face to face	Arabic		
Lesotho	SSA	Lower middle	Nov 7–Nov 17	1,000	1.53	3.8	Face to face	Sotho, English, Isithembu		
Liberia	SSA	Low	May 13–May 22	1,000	1.66	4.0	Face to face	English, Pidgin English		
Lithuania	ECA	Upper middle	Apr 19–May 8	1,000	1.23	3.4	Face to face	Lithuanian		
Luxembourg	n.a.	High	Apr 11–May 5	1,000	1.53	3.8	Landline telephone	French, Germar	1	
Macedonia, FYR	ECA	Upper middle	Jul 7—Aug 25	1,018	1.91	4.2	Face to face	Albanian, Bosnian, Macedonian	Albanians in Northwest	
Madagascar ^e	SSA	Low	May 12–May 25	1,000	1.51	3.8	Face to face	French, Malagasy		The sample excludes some rural areas because of inaccessibility and security risks. The excluded area represents approximately 70% of the total adult population.
Malawi	SSA	Low	Dec 9-Dec 19	1,000	1.50	3.8	Face to face	Chichewa, English, Tumbuka		

Malaysia Mali Malta Mauritania	EAP SSA	Upper middle	lul 4—Aug 4				internetting	Lunguages	oumpro	Exclusions and other sampling details
Mali Malta Mauritania	SSA		Jul 1 Mag 1	1,000	1.38	3.6	Face to face	Bahasa Malay, Chinese, English		
Malta Mauritania		Low	Oct 23–Nov 4	1,000	1.26	3.5	Face to face	French, Bambara		The sample excludes the northern part of the country because of inaccessibility and nomadic population. The excluded area represents approximately 10% of the total adult population.
Mauritania	n.a.	High	Apr 7—Apr 18	1,004	1.27	3.5	Landline telephone	Maltese, English		
	SSA	Lower middle	Feb 11–Feb 24	1,000	1.66	4.0	Face to face	Arabic, French, Poulaar, Wolof, Soninke		
Mauritius	SSA	Upper middle	Mar 28–Apr 30	1,000	1.30	3.5	Face to face	Creole, English, French		
Mexico	LAC	Upper middle	Oct 7–Oct 20	1,000	1.50	3.8	Face to face	Spanish		
Moldova	ECA	Lower middle	Jun 21–Jul 20	1,000	1.09	3.2	Face to face	Romanian, Russian		The sample excludes Transnistria (Pred- nestrovie) because of security risks. The excluded area represents approximately 13% of the total adult population.
Mongolia	EAP	Lower middle	Jun 3–Jun 26	1,000	1.22	3.4	Face to face	Mongol		
Montenegro	ECA	Upper middle	Jul 2–Aug 6	1,000	1.67	4.0	Face to face	Albanian, Bosnian, Croatian, Montenegrin, Serbian		
Morocco	MENA	Lower middle	Apr 1—Apr 24	1,001	1.17	3.3	Face to face	Moroccan Arabic, French, Berber		
Mozambique	SSA	Low	May 21–Jun 4	1,000	1.39	3.7	Face to face	Portuguese		
Nepal	SAR	Low	Apr 17—May 4	1,000	1.58	3.9	Face to face	Nepali		
Netherlands	n.a.	High	Mar 16—May 2	1,000	1.95	4.3	Landline telephone	Dutch	Amsterdam	
New Zealand	n.a.	High	Sep 26—Nov 1	1,000	1.30	3.5	Landline telephone	English		
Nicaragua	LAC	Lower middle	Aug 16-Aug 29	1,003	1.25	3.5	Face to face	Spanish		
Niger	SSA	Low	Oct 29–Nov 7	1,000	1.36	3.6	Face to face	French, Hausa, Zarma		The sample excludes the northern part of the country (Agadez region) because of security risks. The excluded area represents approximately 5% of the total adult population.
Nigeria	SSA	Lower middle	Jul 23–Aug 4	1,000	1.57	3.9	Face to face	English, Hausa, Igbo, Yoruba, Pidgin English		
Oman	n.a.	High	Sep 21-Oct 17	1,000	1.30	3.5	Landline telephone	Arabic		The sample includes only Omani nation- als and Arab expatriates. The excluded population represents approximately 10% of the total adult population. The sample over- represents adults with more than a primary education.
Pakistan	SAR	Lower middle	Apr 25-May 14	1,000	1.42	3.7	Face to face	Urdu		The sample excludes the Federally Admin- istered Northern Areas (FANA) and Federally Administered Tribal Areas (FATA) because of security risks. The excluded area represents less than 5% of the total adult population. Gender-matched sampling was used during the final stage of selection.
Panama	LAC	Upper middle	Aug 18-Sep 11	1,000	1.28	3.5	Face to face	Spanish		
Paraguay	LAC	Lower middle	Nov 21-Dec 15	1,000	1.46	3.7	Face to face	Spanish, Jepora		
Peru	LAC	Upper middle	Nov 10-Dec 10	1,000	1.45	3.7	Face to face	Spanish		
Philippines	EAP	Lower middle	May 22-May 28	1,000	1.52	3.8	Face to face	English, Filipino, Iluko, Cebuano, Hiligaynon, Maguindanaon, Bicol, Waray, Chavacano		
Poland	n.a.	High	Apr 14-May 16	1,029	1.57	3.8	Face to face	Polish	Warsaw	

Economies included in the Global Findex survey a	and database
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Economy	Region ^a	Income group	Data collection period	Interviews	Design effect ^b	Margin of error ^c	Mode of interviewing	Languages	Over- sample ^d	Exclusions and other sampling details
Portugal	n.a.	High	Apr 5–May 12	1,000	1.81	4.2	Landline and cellular telephone	Portuguese	Lisbon	
Qatar ^e	n.a.	High	Feb 10—Apr 19	1,032	1.49	3.7	Cellular telephone	Arabic		The sample includes only Qataris and Arab expatriates. The excluded population represents approximately 50% of the total adult population.
Romania	ECA	Upper middle	Apr 16–May 12	1,008	1.57	3.9	Face to face	Romanian, Moldovian	Bucharest	
Russian Federation	ECA	Upper middle	May 8–Jun 30	2,000	1.68	2.8	Face to face	Russian	Urban	
Rwanda	SSA	Low	Aug 11-Aug 22	1,000	1.56	3.9	Face to face	French, English, Kinyarwandan		
Saudi Arabia	n.a.	High	Mar 1–Mar 27	1,000	1.23	3.4	Face to face	Arabic		The sample includes only Saudi Arabians and Arab expatriates. The excluded popula- tion represents approximately 20% of the total adult population. Gender-matched sampling was used during the final stage of selection.
Senegal	SSA	Lower middle	Mar 2–Apr 10	1,000	1.54	3.8	Face to face	French, Wolof		
Serbia	ECA	Upper middle	Jul 8–Jul 31	1,001	1.32	3.6	Face to face	Serbian	Muslims in Sandzak	
Sierra Leone	SSA	Low	Sep 30-Oct 10	1,000	1.52	3.8	Face to face	English, Krio, Mende, Temne		
Singapore	n.a.	High	Sep 1–Oct 30	1,000	1.48	3.8	Face to face	English, Chinese, Bahasa Malay		
Slovak Republic	n.a.	High	Apr 12–May 8	1,012	1.49	3.8	Face to face	Slovak	Bratislava	
Slovenia	n.a.	High	Apr 4–May 20	1,001	1.53	3.8	Landline telephone	Slovene	Ljubljana	
Somaliaº	SSA	Low	Mar 12–Mar 21	1,000	1.18	3.4	Face to face	Somali		The sample includes only the Somaliland re- gion. The excluded area represents approxi- mately 65% of the total adult population.
South Africa	SSA	Upper middle	Aug 27—Sep 9	1,000	1.31	3.5	Face to face	Afrikaans, English, Sotho, Zulu, Xhosa		
Spain	n.a.	High	Mar 14–Mar 30	1,006	1.63	3.9	Landline and cellular telephone	Spanish	Madrid	
Sri Lanka	SAR	Lower middle	Apr 5–Apr 22	1,000	1.60	3.9	Face to face	Sinhala, Tamil		
Sudan	SSA	Lower middle	Mar 11–Mar 20	1,000	1.68	4.0	Face to face	Arabic, English		The sample does not include South Sudan. The Darfur region was excluded because of security risks. The excluded area repre- sents approximately 15% of the total adult population.
Swaziland	SSA	Lower middle	Nov 13-Nov 21	1,000	1.67	4.0	Face to face	Siswati, English		
Sweden	n.a.	High	Apr 4–May 2	1,006	1.75	4.1	Landline telephone	Swedish	Stockholm	
Syrian Arab Republic	MENA	Lower middle	Mar 4–Apr 3	1,011	1.29	3.5	Face to face	Arabic		
Taiwan, China	n.a.	High	Jun 15–Oct 6	1,001	1.52	3.8	Landline and cellular telephone	Chinese		
Tajikistan	ECA	Low	Jun 23-Aug 19	1,000	1.23	3.4	Face to face	Tajik, Russian		
Tanzania	SSA	Low	Jun 18–Jul 1	1,000	1.54	3.8	Face to face	English, Swahili		
Thailand	EAP	Upper middle	Jun 11–Jul 22	1,000	1.41	3.7	Face to face	Thai		
Togo	SSA	Low	Aug 18-Aug 28	1,000	1.30	3.5	Face to face	French, Ewe, Kabye		
Trinidad and Tobago	n.a.	High	Nov 9–Nov 17	504	1.35	5.1	Face to face	English		
Tunisia	MENA	Upper middle	Mar 27–Apr 8	1,021	1.15	3.3	Face to face	Arabic		

Economy	Region ^a	Income group	Data collection period	Interviews	Design effect⁵	Margin of error ^c	Mode of interviewing	Languages	Over- sample ^d	Exclusions and other sampling details
Turkey	ECA	Upper middle	Apr 14–May 11	1,001	1.28	3.5	Face to face	Turkish	Istanbul	
Turkmenistan	ECA	Lower middle	Jun 9–Jul 29	1,000	1.20	3.4	Face to face	Turkmen, Russian		
Uganda	SSA	Low	Aug 11-Aug 21	1,000	1.48	3.8	Face to face	Ateso, English, Luganda, Runyankole		The sample excludes the Northern region because of security risks. The excluded area represents approximately 10% of the total adult population.
Ukraine	ECA	Lower middle	Jul 3–Aug 28	1,000	1.50	3.8	Face to face	Russian, Ukrainian		
United Arab Emirates ^e	n.a.	High	Mar 4–Apr 23	1,024	1.40	3.6	Face to face	Arabic		The sample includes only Emiratis and Arab expatriates. The excluded population represents approximately 50% of the total adult population.
United Kingdom	n.a.	High	Mar 1–Mar 31	1,024	1.38	3.6	Landline and cellular telephone	English		
United States	n.a.	High	Jun 17–Jun 30	1,008	1.56	3.9	Landline and cellular telephone	English		
Uruguay	LAC	Upper middle	Nov 11-Dec 29	1,000	1.43	3.7	Face to face	Spanish		
Uzbekistan	ECA	Lower middle	Aug 29-Sep 18	1,000	1.48	3.8	Face to face	Uzbek, Russian		
Venezuela, RB	LAC	Upper middle	Nov 9–Nov 27	1,000	1.62	3.9	Face to face	Spanish		
Vietnam	EAP	Lower middle	Feb 18–Feb 28	1,000	1.35	3.6	Face to face	Vietnamese		
West Bank and Gaza	MENA	Lower middle	Apr 11–Apr 26	1,000	1.41	3.7	Face to face	Arabic		The sample includes East Jerusalem.
Yemen, Rep.	MENA	Lower middle	Jul 23–Jul 29	1,000	1.48	3.8	Face to face	Arabic		Gender-matched sampling was used during the final stage of selection.
Zambia	SSA	Lower middle	Jun 25–Jul 6	1,000	1.94	4.3	Face to face	Bemba, English, Lozi, Nyanja, Tonga		
Zimbabwe	SSA	Low	Feb 26–Mar 5	1,000	1.21	3.4	Face to face	English, Ndebele, Shona		

n.a. = not applicable.

Note: Data provided by Gallup, Inc. For more details, see https://worldview.gallup.com/content/methodology.aspx. a. Regions exclude high-income economies. EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SAR = South Asia; SSA = Sub-Saharan Africa.

b. The design effect calculation reflects the weights and does not incorporate the intraclass correlation coefficients because they vary by question. Design effect calculation: n*(sum of squared weights)/((sum of weights)*(sum of weights)).

c. The margin of error is calculated around a proportion at the 95 percent confidence level. The maximum margin of error was calculated assuming a reported percentage of 50 percent and takes into account the design effect. Margin of error calculation: $\sqrt{(0.25/N)^*1.96^*\sqrt{(DE)}}$. Margins of error that take into account the design effect and intraclass correlation for individual statistics, by economy, can be found in Demirguc-Kunt and Klapper (2012). Other errors that can affect survey validity include measurement error associated with the questionnaire, such as translation issues, and coverage error, where a part of the target population has a zero probability of being selected for the survey.

d. Areas with a disproportionately high number of interviews in the sample.

e. Economy excluded from regional and global aggregates because of the sampling or data collection methodology used.

COUNTRY TABLE

	Accounts and payments Share with an account					Saving, credit, and insurance									
	All Poorest income quintile Women (%) SE (%) (%)			unt al	Adults	i	Adults savi in the past y	ng ear	Adults c i	originating a n the past ye	new loan ar			۵ ماریا د م	
	ad (%)	AII ults SE	Poorest income quintile (%)	Women (%)	mobile money in the past year (%) ^a	U a forma (%)	sing al account SE	Using a community- based method (%)	From a financial (%)	a formal institution SE	From family or friends (%)	Adults with a credit card (%)	Adults with an outstanding mortgage (%)	paying personally for health insurance (%)	
Afghanistan	9	2.1	0	3	7	3	1.1		7	2.0	30	1	8	0	
Albania	28	2.1	7	23	31		1.4	3	8	1.3	11	11	2	11	
Algeria	33	1.8	22	20	44	4	1.1	2	1	0.5	25	1	6	4	
Angola	39	3.0	31	39	26	16	2.3	8	8	1.3	26	15	4	3	
Argentina	33	1.8	19	32	1	4	0.8	2	7	0.9	7	22	0	9	
Armenia	17	1.4	16	18	4	1	0.4	0	19	1.7	32	2	1	1	
Australia	99	0.4	97	99	_	62	1.9	7	17	1.4	13	64	37	_	
Austria	97	1.0	93	97	_	52	2.3	13	8	1.2	6	39	25	_	
Azerbaijan	15	1.5	13	14	0	2	0.6	1	18	1.5	27	3	0	1	
Bahrain	65	2.1	64	49	_	16	1.6	25	22	1.9	21	19	4	_	
Bangladesh	40	1.9	33	35	3	17	2.1	4	23	1.9	11	1	2	2	
Belarus	59	2.6	37	58	5	7	1.2	1	16	1.7	39	8	10	3	
Belgium	96	1.0	92	97	_	43	2.1	4	11	1.2	5	54	33	_	
Benin	10	1.4	5	10	0	7	1.2	16	4	0.9	32	0	0	1	
Bolivia	28	2.2	12	25	9	17	1.6	4	17	1.7	8	4	4	4	
Bosnia and Herzegovina	56	3.3	35	48	2	6	1.3	1	13	1.9	16	12	4	4	
Botswana	30	2.4	12	28	9	16	1.6	14	6	1.1	4/	11	1	5	
Brazil	56	2.1	33	51	1		1.2	2	6	0.9	16	29	1	8	
Bulgaria	53	2.7	29	55	1	5	1.2	0	8	1.3	22	10	2	4	
Burkina Faso	13	1.5	0	6	5	2	1.2	8	3	0.7	31	1	1	2	
Cambodia	/	1.0	0	0	1		0.0	2	10	1.7	30	1	2	3	
Cameroon	15	1.9	14	11	10	10	1.7	32	15	1.7	45	2	1	1	
Canada	96	0.9	91	97		53	2.0	7	20	1.4	16	72	29		
Central African Republic	3	0.7	1	3	2	2	0.5	10	1	0.3	20	1	1	0	
Chad	9	1.7	6	7	18	7	1.3	12	6	1.9	31	5	7	1	
Chile	42	2.4	19	41	2	12	1.5	3	8	1.2	9	23	4	6	
China	64	2.9	39	60	2	32	3.0	2	7	0.9	25	8	5	47	
Colombia	30	2.1	9	25	3	9	1.1	6	12	1.3	18	10	3	6	
Comoros	22	1.7	9	18	4	11	1.4	16	7	1.1	25	1	1	2	
Congo, Dem. Rep.	4	0.8	0	3	2	1	0.5	8	2	0.5	30	2	0	1	
Congo, Rep.	9	1.2	1	7	37	5	0.8	6	3	0.5	27	4	0	0	
Costa Rica	50	2.3	30	41	0	20	1.6	15	10	1.2	7	12	3	4	
Croatia	88	1.2	75	87	_	12	1.3	2	14	1.2	20	35	4	_	
Cyprus	85	1.4	76	83	_	30	1.7	4	27	1.7	12	46	23	_	
Czech Republic	81	2.0	70	81	—	35	2.1	1	9	1.2	18	26	8	—	
Denmark	100	0.2	99	99	_	57	2.1	4	19	1.6	12	45	47	_	
Djibouti	12	1.5	4	9	7	3	0.9	7	4	0.8	18	4	5	4	
Dominican Republic	38	2.5	19	37	8	16	1.9	10	14	1.5	15	12	2	8	
Ecuador	37	2.4	22	33	1	15	1.6	2	11	1.5	15	10	2	3	
Egypt, Arab Rep.	10	1.2	5	7	1	1	0.2	2	4	0.9	25	1	2	1	
El Salvador	14	1.4	1	10	1	13	1.3	2	4	0.8	6	5	2	1	
Estonia	97	0.8	94	97	_	29	2.0	5	8	1.0	25	30	16		
Finland	100	0.2	99	100	_	56	2.0	1	24	1./	15	64	30		
Caban	9/	0.8	96	9/	-	50	2.1	ŏ	19	1.6	5	38	27		
Gapraia	19	1.5	4	25	50	- 9	1.0	y 1	2	0.5	2/	3	U 1	2	
Cormany	33	2.0	20	30	2	55	0.3	1	11	1.5	14	36	21	3	
Chana	98	2.4	97	29	2	16	2.1	10	13	1.5	20	30	21	10	
Greece	29	2.4	75	27	2	00	2.0	10	b Q	1.1	29	17	3	12	
Guatemala	22	2.5	8	16	4	10	1.9	1	14	1.0	10	7	2	2	
adatomand		1.0	0	10	,	TO	± • ±	-	17	1.7	10	,	4	4	

Country table

	Accounts and payments					Saving, credit, and insurance									
	Share with an account at a formal financial institution Poorest All adults adults Poorest income adults Poorest income			Adults		Adults savin in the past y	ng ear	Adults	originating a in the past ye	new loan ar			Adults		
	A ad	All ults SE	Poorest income quintile (%)	Women (%)	using mobile money in the past year (%) ^a	a form (%)	Using nal account SE	Using a community- based method (%)	From financial (%)	a formal l institution SE	From family or friends (%)	Adults with a credit card (%)	Adults with an outstanding mortgage (%)	Adults paying personally for health insurance (%)	
Cuinco	4	0.7			7		0.5	E E	2	0.7	25	1	1		
Haiti	22	2.5	2	21	15		2.2	6	2	1.5	36	2	2	4	
Honduras	21	1.6	15	15	3	9	1.0	2	7	0.9	11	5	2	1	
Hong Kong SAR, China	89	1.2	78	89		43	1.9	3	, 8	1.1	12	58	11		
Hungary	73	2.0	58	73	_	17	1.4	2	9	1.1	10	15	13	_	
India	35	1.7	21	26	4	12	1.0	3	8	1.0	20	2	2	7	
Indonesia	20	2.3	8	19	1	15	2.4	14	9	1.2	42	0	1	1	
Iran, Islamic Rep.	74	1.7	63	62	_	20	1.4	6	31	1.7	50	24	15	19	
Iraq	11	2.0	5	8	8	5	1.6	6	8	5.7	41	2	15	0	
Ireland	94	1.1	88	92	_	51	2.1	9	16	1.5	11	56	32	_	
Israel	90	1.6	88	92	_	25	2.3	3	17	2.1	20	80	15	_	
Italy	71	2.1	61	64	_	15	1.5	1	5	0.9	3	31	10	_	
Jamaica	71	2.5	71	67	8	30	2.6	17	8	1.5	21	7	3	8	
Japan	96	1.0	94	97	_	51	1.9	7	6	0.8	5	64	16	_	
Jordan	25	1.9	16	17	0	8	1.4	4	4	0.8	26	3	3	1	
Kazakhstan	42	2.2	30	44	7	7	1.0	3	13	1.5	31	9	5	2	
Kenya	42	3.2	19	39	68	23	2.3	19	10	1.4	58	6	1	5	
Korea, Rep.	93	0.9	86	93	—	47	1.8	11	17	1.4	17	56	20	_	
Kosovo	44	2.5	24	31	18	5	0.9	1	6	1.2	17	8	2	1	
Kuwait	87	2.9	86	80	—	40	6.3	13	21	4.4	18	58	22	—	
Kyrgyz Republic	4	0.6	1	4	2	1	0.3	3	11	1.2	26	1	0	0	
Lao PDR	27	2.0	16	26	0	19	1.8	8	18	1.7	16	3	1	5	
Latvia	90	1.4	82	92	4	13	1.2	2	7	1.0	19	20	8	7	
Lebanon	37	2.1	20	26	0	17	1.9	3	11	1.3	12	11	6	8	
Lesotho	18	1.8	8	17	7	8	1.1	16	3	0.6	51	2	1	2	
Liberia	19	2.2	3	15	19	14	1.6	16	6	1.1	42	3	4	6	
Lithuania	74	2.4	66	76	2	20	1.7	4	6	0.8	25	13	6	15	
Luxembourg	95	1.0	97	95	—	52	2.0	8	17	1.5	6	72	34	—	
Macedonia, FYR	74	2.2	66	72	16	8	1.0	1	11	1.5	24	17	4	6	
Madagascar	6	0.9	1	5	1	1	0.3	0	2	0.5	58	0	1	0	
Malawi	17	1.4	9	17	1	8	1.1	10	9	1.2	44	1	5	0	
Malaysia	66	2.7	45	63	3	35	2.2	7	11	1.5	20	12	13	16	
Mali	8	1.1	4	7	1	4	0.8	12	4	0.8	24	1	1	1	
Malta	95	0.8	93	94		45	1.8	3	10	1.1	5	53	18	—	
Mauritania	17	2.0	7	12	19	6	1.0	4	8	1.5	34	4	5	2	
Mauritius	80	1.8	66	75	9	31	2.5	6	14	1.4	6	14	5	10	
Mexico	27	2.6	12	22	6	7	1.5	5	8	1.2	15	13	3	8	
Moldova	18	1.3	6	17	6	4	0.7	2	6	0.8	42	2	1	2	
Mongolia	/8	1./	68	82	8	23	1.9	3	25	2.0	16	2	3	3	
Montenegro	50	3.1	34	49	5	3	0.8	2	22	2.3	35	14	4	4	
Morocco	39	2.9	-	27	10	12	1.0	9	4	0.6	41	4	5	5	
Mozambique	40	2.5	21	35	3	1/	2.1	23	6	0.9	35	4	1	4	
Nepal	25	2.1	15	21	0	10	1.4	6	11	1.6	33	1	5	2	
New Zester d	99	0.4	98	98	_	58	2.2	4	13	1.6	17	41	40	_	
New Zealand	99	0.2	100	99		60	1.8	9	27	1.6	1/	59	35	1	
Nicaragua	14	1.6	4	13	2	1	1.3	3	8	1.0	4	2	0	1	
Niger	2	0.5	0	20	3	1	0.4	9	1	0.4	43	U 1	1	0	
Omon	30	2.2	12	26	13	24	2.0	44	2	0.6	44	1	1 /	U	
Dekisten	10	1.0	63	04	-	23	1.5	14	9	1.1	33	2/	14	1	
Panama	10	1.2	5	3	3	10	0.5	3	2	0.5	23	11	11		
i diidiiid	20	1.9	10	23	0	12	1.2	/	10	1.2	17	11	11	C	

Country table

	Accounts and payments Share with an account							Sa	l insuran	ce				
	Share with an account at a formal financial institution All All Quintile Women Quintile Women (%) (%) (%)				Adults		Adults savi in the past y	ng ear	Adults c i	originating a n the past ye	new loan ar			Adults
	a	All dults SF	Poorest income quintile	Women	mobile money in the past year (%) ^a	a forr	Using nal account SF	Using a community- based method (%)	From a financial	a formal institution SF	From family or friends	Adults with a credit card (%)	Adults with an outstanding mortgage (%)	paying personally for health insurance
Paraguay	22	2.1	(78)	- (70)	(70)	10	1 7	(/0)	12	1.6	15	(78)	1	(78)
Poru	22	2.1	6	19	/		1.7		13	1.0	1.0	9	1	
Philippines	20	2.6	4	34	15	15	1.1	7	11	1.0	39	3	I	
Poland	70	1.8	60	68	15	18	1.0	, 1	10	1.0	13	18	3	
Portugal	81	1.0	64	78	_	26	1.4	2	8	1.1	7	30	23	
Qatar	66	1.9	47	62	_	25	1.6	9	13	1.2	31	32	19	
Romania	45	2.7	25	41	1	9	1.0	0	8	1.2	18	12	4	6
Russian Federation	48	1.6	34	48	3	11	1.0	1	8	0.8	23	10	1	7
Rwanda	33	2.7	23	28	4	18	2.4	4	8	1.4	28	3	2	5
Saudi Arabia	46	1.8	32	15		17	1 7	4	2	0.5	26	17	12	
Senegal	-0	1.0	4	5	1		0.7	5	4	0.0	26	1	0	1
Serhia	62	2.1	47	62	3	3	0.7	3	12	1.4	29	23	1	4
Sierra Leone	15	1.0	4	13	2	14	2.1	10	6	1.4	43	23		1
Singanore	98	0.6	98	98		58	1.9	0	10	1.0	16	37	19	
Slovak Republic	80	1.9	66	79		37	21	2	11	1.1	18	20	7	
Slovenia	97	0.7	92	98		20	1.8	6	13	1.3	13	20	10	
Somalia	31	2.2	12	27	34	14	1.0	9	2	0.5	26	1	5	0
South Africa	54	2.2	35	51	11	22	1.7	14	9	1.3	34	8	4	7
Spain	03	2.5	Q1	92	11	35	1.5	2	11	1.3	12	12	32	
Sri Lanka	69	3.3	52	67	3	28	3.6	9	18	2.5	12	42	1	
Sudan	7	1.2	4	4	52	- 20	0.6	9	2	0.5	47	4	6	9
Swaziland	20	2.4	12	27	20	18	2.0	8	12	1.1	51	13	6	
Sweden	20	0.5	90	99	20	64	2.0	6	23	1.4	12	54	54	0
Sweden Svrian Arab Republic	23	1.6	20	20	0	5	0.7	1	13	1.0	20	34	5	10
Taiwan China	23	1.0	77	20	0		1.0	5	10	1.2	7	16	21	10
Tajikistan	3	0.6	1	2	29	40	0.1	2	5	0.9	25	40	0	
Tanzania	17	1.6	3	14	23	12	1.3	2	7	1.0	16	1	1	3
Thailand	73	2.0	61	73	23	12	2.5	5	10	2.0	40	5	5	24
Togo	10	1.2	2	7.5	1	43	0.7	1	19	0.7	10	1	2	1
Trinidad and Tobago	76	2.9	70	70	1	4	3.5	10	8	1.1	19	15	1	1
	32	2.5	14	25	0		0.8	2	3	0.7	21	15	2	6
Turkey	58	2.2	46	33	5	4	0.0	1	5	0.7	43	45	1	4
Turkmenistan	0	0.1	40	1	0		0.5	1	1	0.3	26	45	1	
Ilganda	20	2.0	7	15	27	16	2.0	10	9	1.2	16	2	1	1
Ilkraine	/1	2.0	21	30	12	5	1.0	2	8	1.2	37	10	1	2
United Arab Emirates	60	2.4	57	17	12	10	1.0	5	11	1.5	2/	30	18	
United Kingdom	97	0.7	97	98		1.5	2.0	5	12	1.7	1/	52	31	
United States	88	1.1	7/	8/		50	2.0	6	20	1.5	14	62	31	
	24	1.4	74	24	1	6	2.0	1	15	1.5	6	27	2	
IIzhekistan	24	1.9	15	24	6	1	0.3	1	1	0.4	12	2	<u></u>	
Venezuela RR	<u>۵</u> ۸	3.8	27	36	3	11	2.2	4	2	0.4	10	10	0	6
Vietnam	21	3.0	6	10	7	Q	1.5	5	16	2.4	21	10	3	18
West Bank and Care	10	1.0	Q	19	/		1.5	3	10	0.9	12	1	5 	10
Vemon Ron	19	0.7	0	10	4		0.9	3	4	0.9	42	4	1	0
7amhia	21	1 9	8	23	5	12	1 3	7	6	1 1	40	1	1	1
Zumbahwa	40	2.0	20	23	5	17	1.5	11		0.0	42	4	1	1
ZIINDADWe	40	2.0	22	3/	4	1/	1./	11	5	0.8	5/	6	1	10

— = not available.
 Note: Complete data can be found on the Global Findex Web site (http://www.worldbank.org/globalfindex).
 a. Data refer to adults who report having used a mobile phone in the past year to pay bills or send or receive money.
 Source: Demirguc-Kunt and Klapper 2012.

INDICATOR TABLES

TABLE Account penetration

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

			INCOME GROUP				REGION					
	World	Developing economies	Low income	Lower middle income	Upper middle income	High income	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East & North Africa	South Asia	Sub- Saharan Africa
All	50	41	24	28	57	89	55	45	39	18	33	24
GENDER												
Male	55	46	27	34	62	92	58	50	44	23	41	27
Female	47	37	20	23	53	87	52	40	35	13	25	22
AGE GROUP												
15-24	37	31	16	21	49	76	50	32	26	13	25	17
25-64	55	46	29	31	61	93	58	51	44	20	36	29
65+	54	35	18	26	43	89	38	35	43	20	32	19
WITHIN-ECONOM	IY INCOME	QUINTILE										
Poorest	38	25	16	16	36	85	33	32	21	7	21	12
Q2	45	35	17	25	49	90	46	41	30	10	31	16
Q3	52	42	21	28	58	92	54	44	42	14	35	22
Q4	57	50	29	32	69	93	70	52	47	15	36	31
Richest	67	62	39	47	76	91	76	58	61	25	51	45
EDUCATION LEVE	EL											
Primary or less	37	35	15	23	52	74	50	30	30	14	28	12
Secondary	62	49	35	33	62	91	62	46	42	19	45	38
Tertiary or more	83	72	54	63	82	97	84	71	69	43	70	56
RESIDENCE												
Rural	44	38	22	26	54	88	50	39	35	9	31	21
Urban	60	50	35	34	63	89	69	53	43	19	37	38
Note: Regions exc	lude high-i	income econom	ies. See the ar	nev to the me	thodology sect	ion for regions	al and income g	roup classific:	ations Data by	education level	evolude 7im	hahwe data

Note: Regions exclude high-income economies. See the annex to the methodology section for regional and income group classifications. Data by income quintile exclude Morocco; and data by rural or urban residence exclude Germany, Guatemala, Morocco, and the United Kingdom. *Source:* Demirguc-Kunt and Klapper 2012.

Formal saving

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

			INCOME GROUP						RE	GION		
	World	Developing economies	Low income	Lower middle income	Upper middle income	High income	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East & North Africa	South Asia	Sub- Saharan Africa
All	22	17	12	11	24	45	28	7	10	5	11	14
GENDER												
Male	24	19	13	14	25	47	28	7	12	6	15	16
Female	21	16	10	9	24	43	28	7	8	3	7	12
AGE GROUP												
15-24	15	11	7	8	16	42	20	4	7	2	8	9
25-64	25	20	14	13	28	48	32	8	11	6	13	17
65+	20	12	5	9	14	35	16	8	8	2	11	9
WITHIN-ECONOM	IY INCOME	QUINTILE										
Poorest	13	8	7	6	11	32	13	4	4	1	8	5
Q2	18	13	7	10	17	40	19	5	5	2	12	8
Q3	23	16	10	9	24	51	27	5	10	3	9	12
Q4	28	23	14	12	33	55	41	8	11	4	11	18
Richest	35	30	22	22	38	56	45	13	21	6	18	31
EDUCATION LEVE	EL											
Primary or less	15	14	7	8	22	20	24	4	6	3	9	6
Secondary	29	21	17	16	26	45	36	6	11	4	16	24
Tertiary or more	44	28	27	25	32	63	47	15	21	15	24	37
RESIDENCE												
Rural	19	16	11	10	23	41	24	6	8	2	11	12
Urban	27	21	16	13	27	47	40	8	11	4	11	23

Note: Regions exclude high-income economies. See the annex to the methodology section for regional and income group classifications. Data by education level exclude Zimbabwe; data by income quintile exclude Morocco; and data by rural or urban residence exclude Germany, Guatemala, Morocco, and the United Kingdom. Source: Demirguc-Kunt and Klapper 2012.

Origination of new formal loans

1 PS

Adults borrowing from a formal financial institution in the past year (%)

				INCOME	GROUP				RE	GION		
	World	Developing economies	Low income	Lower middle income	Upper middle income	High income	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East & North Africa	South Asia	Sub- Saharan Africa
All	9	8	11	7	8	14	9	8	8	5	9	5
GENDER												
Male	10	9	12	8	9	16	9	8	8	6	10	5
Female	8	7	11	7	7	12	8	7	7	4	8	4
AGE GROUP												
15-24	4	4	7	4	3	7	4	4	3	3	5	2
25-64	11	10	15	9	10	18	10	10	10	7	10	6
65+	5	4	6	5	4	6	3	3	9	3	7	3
WITHIN-ECONOM	Y INCOME	QUINTILE										
Poorest	8	8	13	6	8	10	10	5	4	4	9	3
Q2	9	7	10	7	7	13	7	6	7	5	10	3
Q3	9	8	11	9	7	14	9	7	8	6	11	4
Q4	9	7	10	7	6	17	6	10	9	6	7	6
Richest	11	10	13	7	12	18	12	10	13	6	6	10
EDUCATION LEVE	L											
Primary or less	7	7	10	7	7	6	8	4	7	4	8	3
Secondary	10	8	14	7	8	14	9	8	8	6	11	6
Tertiary or more	16	13	11	10	15	20	15	14	17	7	8	12
RESIDENCE												
Rural	9	8	12	8	8	14	9	8	8	5	9	4
Urban	9	8	11	6	8	14	9	8	8	6	6	6

Note: Regions exclude high-income economies. See the annex to the methodology section for regional and income group classifications. Data by education level exclude Zimbabwe; data by income quintile exclude Morocco; and data by rural or urban residence exclude Germany, Guatemala, Morocco, and the United Kingdom. Source: Demirguc-Kunt and Klapper 2012.

Self-reported barriers to use of formal accounts

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

	Not enough money	Religious reasons	Family member already has account	Too expensive	Too far away	Lack of necessary documentation	Lack of trust	None of the reasons given
DEVELOPING ECONOMIE	S							
All	66	5	23	25	20	18	13	11
GENDER								
Male	67	5	20	25	21	18	13	12
Female	66	4	26	24	20	17	12	11
AGE GROUP								
15-24	65	4	26	25	19	23	11	10
25-64	68	5	21	25	21	16	13	11
65+	60	4	24	21	19	13	13	17
WITHIN-ECONOMY INCOME O	QUINTILE							
Poorest	75	4	13	28	23	17	10	10
Q2	71	4	21	26	22	17	13	11
Q3	64	5	23	24	21	19	15	12
Q4	58	6	31	23	18	17	14	12
Richest	52	4	39	17	14	17	13	12
EDUCATION LEVEL								
Primary or less	67	5	23	24	22	17	10	11
Secondary	66	4	22	26	17	20	17	11
Tertiary or more	53	5	30	24	13	12	21	16
RESIDENCE								
Rural	68	4	22	25	25	18	12	11
Urban	61	5	26	23	8	18	15	13
WORLD								
INCOME GROUP								
Low income	76	6	10	32	28	23	16	8
Lower middle income	69	6	24	26	23	20	11	9
Upper middle income	58	2	26	20	14	12	14	15
High income	45	6	31	21	10	14	24	24
REGION								
East Asia & Pacific	64	1	24	18	20	14	6	13
Europe & Central Asia	65	4	18	17	15	15	31	16
Latin America & Caribbean	55	2	17	40	15	21	26	17
Middle East & North Africa	77	12	9	21	8	10	10	7
South Asia	65	8	34	23	22	16	9	9
Sub-Saharan Africa	81	4	7	36	31	30	16	7

Note: Respondents could choose more than one reason. Regions exclude high-income economies. See the annex to the methodology section for regional and income group classifications. Data by education level exclude Zimbabwe; data by income quintile exclude Morocco; and data by rural or urban residence exclude Guatemala and Morocco.

Source: Demirguc-Kunt and Klapper 2012.

GLOBAL FINDEX QUESTIONNAIRE

1		Do you, either by yourself or together with someone else, currently have an account at any of the following places? An ac- count can be used to save money, to make or receive payments, or to receive wages and remittances. Do you currently have an account at (read A and then B, where applicable)?
	A	A bank or credit union (or another financial institution, where applicable – for example, cooperatives in Latin America)
	В	The Post Office (for example, [insert local example])
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
2		Do you use your account(s) for personal transactions, business purposes, or both?
	1	Personal transactions
	2	Business purposes
	3	Both
	4	(DK)
	5	(Refused)
2a		A microfinance institution is an organization that provides small loans [(where applicable, read:) such as INSERT LOCAL EX- AMPLES]. Are you aware of any microfinance institutions?*
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
2b		In the past 12 months, have you borrowed any money from a microfinance institution?*
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
2c		In the past 12 months, have you saved any money at a microfinance institution?*
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
3a		A debit card [(where applicable, read:) sometimes called [insert local example(s) here - a bank card, bank book or salary card] is a card that allows you to make payments, get money, or buy things and the money is taken out of your bank account right away. Do you have a debit card?
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
3b		A credit card is like a debit card, but the money is not taken from your account right away. You get credit to make payments or buy things, and you can pay the balance off later. Do you have a credit card?
	1	Yes
	2	No
	3	(DK)
	4	(Refused)

4		In a typical month, about how many times is money deposited into your personal account(s)? This includes cash or electronic deposits, or any time money is put into your account(s) by your- self or others. (Read 1-4)
	1	0
	2	1 - 2 times
	3	3 - 5 times
	4	6 times or more
	5	(DK)
	6	(Refused)
5		In a typical month, about how many times is money taken out of your personal account(s)? This includes cash withdrawals, electronic payments or purchases, checks, or any other time money is removed from your account(s) by yourself or others. (Read 1-4)
	1	0
	2	1 - 2 times
	3	3 - 5 times
	4	6 times or more
	5	(DK)
	6	(Refused)
6		When you need to get cash (paper or coins) from your account(s), do you usually get it (read 1-4)?
	1	At an ATM
	2	Over the counter in a branch of your bank or financial institution
	3	Over the counter at a retail store, or
	4	From some other person who is associated with your bank or financial institution
	5	(Do not withdraw cash)
	6	(DK)
	7	(Refused)
7		When you put cash (paper or coins) into your account(s), do you usually do it (read 1-4)?
	1	At an ATM
	2	Over the counter in a branch of your bank or financial institution
	3	Over the counter at a retail store, or
	4	Using some other person who is associated with your bank or financial institution
	5	(Do not deposit cash)
	6	(DK)
	7	(Refused)
8		In the past 12 months, have you used any of the following to make payments on bills or to buy things using money from your account(s)? (Read A-B)
	A	Checks
	В	Electronic payments that you make or that are made automati- cally, including wire transfers or payments made online
	1	Yes
	2	No
	3	(DK)
	4	(Refused)

9		In the past 12 months, have you used your account(s) to (read A-D)?
	Α	Receive money or payments for work or from selling goods
	В	Receive money or payments from the government
	C	Receive money from family members living elsewhere
	D	Send money to family members living elsewhere
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
10		Please tell me whether each of the following is a reason why you, personally, DO NOT have an account at a bank, credit union or other financial institution. (Read & rotate A-G)
	Α	They are too far away
	В	They are too expensive
	C	You don't have the necessary documentation (ID, wage slip)
	D	You don't trust them
	Ε	You don't have enough money to use them
	F	Because of religious reasons
	G	Because someone else in the family already has an account
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
11		In the past 12 months, have you saved or set aside any money?
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
12		In the past 12 months, have you saved for (read A-B)?
	A	Expenses in the future such as education, a wedding, or a big purchase
	В	Emergencies or a time when you expect to have less income
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
13		In the past 12 months, have you saved or set aside money by (read A-B)?
	A	Using an account at a bank, credit union (or another financial institution, where applicable – for example, cooperatives in Latin America), or microfinance institution
	В	Using an informal savings club or a person outside the family (If necessary, provide local examples (chit fund, tontine, merry-go-round, ROSCA, burial society, etc.)
	1	Yes
	2	No
	3	(DK)
	4	(Refused)

14		In the past 12 months, have you borrowed any money from (read A-E)?
	A	A bank, credit union (or another financial institution, where applicable – for example, cooperatives in Latin America), or microfinance institution
	В	A store by using installment credit or buying on credit
	C	Family or friends
	D	Employer
	E	Another private lender (Translation note: Should include "infor- mal money lenders")
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
15		Do you currently have a loan you took out for any of the following reasons? (Read A-E) $% \left(e_{A}^{2}\right) =0$
	Α	To purchase your home or apartment
	В	To purchase materials or services to build, extend, or renovate your home or apartment*
	C	To pay school fees*
	D	For emergency/health purposes*
	Е	For funerals or weddings*
	1	Yes
	2	No
	3	(DK)
	4	(Refused)
15a1		In the past 12 months, have you used a mobile phone to (read
		A-C)?*
	A	A-C)?* Pay bills
	A B	A-C)?* Pay bills Send money
	A B C	A-C)?* Pay bills Send money Receive money
	A B C 1	A-C)?* Pay bills Send money Receive money Yes
	A B C 1 2	A-C)?* Pay bills Send money Receive money Yes No
	A B C 1 2 3	A-C)?* Pay bills Send money Receive money Yes No (DK)
	A B C 1 2 3 4	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused)
16	 A B C 1 2 3 4 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?*
16	 A B C 1 2 3 4 1 1 1 2 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes
16	 A B C 1 2 3 4 1 1 2 3 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (C)(2)
16	 A B C 1 2 3 4 1 2 3 4 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (For for the
16	 A B C 1 2 3 4 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused)
16	 A B C 1 2 3 4 1 2 3 4 4 4 1 1<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?*
16	 A B C 1 2 3 4 1 2 3 4 1 2 3 4 1 2 1 2 1 2 1 2 1 2 1 2 3 4 1 2 3 4 1 2 4 1 2 4 1 2 4 4<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No
16	 A B C 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 4<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused)
16	 A B C 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?*
16	 A B C 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 4<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused)
16 17 18	 A B C 1 2 3 4 1 2 3 4 1 2 3 4 4 	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) In the past 12 months, have you personally paid for crop, rain- fall, or livestock insurance?*
16 17 18	 A B C 1 2 3 4 1 1<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) In the past 12 months, have you personally paid for crop, rain- fall, or livestock insurance?* Yes
16 17 18	 A B C 1 2 3 4 1 2 4 1 2 4 1 2 4 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) In the past 12 months, have you personally paid for crop, rain- fall, or livestock insurance?* Yes No
16 17 18	 A B C 1 2 3 4 4<	A-C)?* Pay bills Send money Receive money Yes No (DK) (Refused) Do you, personally, have health or medical insurance [(where applicable, read:) in addition to national health insurance]?* Yes No (DK) (Refused) Did you, personally, purchase this insurance?* Yes No (DK) (Refused) In the past 12 months, have you personally paid for crop, rain- fall, or livestock insurance?* Yes No (DK) (DK)

* Question omitted in high-income economies. *Note:* DK = don't know. The questionnaire is available in 14 other languages on the Global Findex Web site (http://www.worldbank.org/globalfindex). *Source:* Demirguc-Kunt and Klapper 2012.