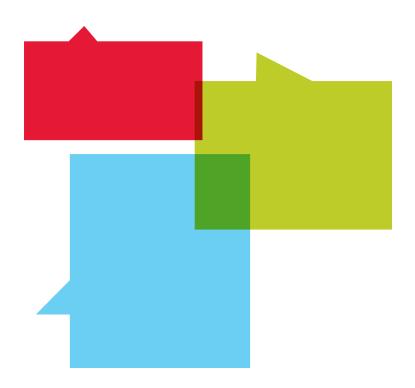
# Financial Literacy Around the World:

INSIGHTS FROM THE STANDARD & POOR'S RATINGS SERVICES GLOBAL FINANCIAL LITERACY SURVEY

Leora Klapper,
World Bank Development Research Group

Annamaria Lusardi, The George Washington University School of Business

Peter van Oudheusden, World Bank Development Research Group



# This report was authored by Leora Klapper, Annamaria Lusardi, and Peter van Oudheusden, with the support of Jake Hess and Saniya Ansar.

The findings, interpretations, and conclusions expressed in this report are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/ World Bank and its affiliated organizations or those of the executive directors of the World Bank or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this volume do not imply on the part of the World Bank Group any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

We are grateful for the support provided by the Standard & Poor's Ratings Services and its parent company McGraw Hill Financial Inc, to highlight financial literacy as a key component of robust and sustainable financial markets around the world.

To download the complete Standard & Poor's Ratings Services Global FinLit Survey and related material, visit <a href="http://www.FinLit.MHFI.com">http://www.FinLit.MHFI.com</a>.

# Financial Literacy around the World:

### **INSIGHTS FROM THE S&P GLOBAL FINLIT SURVEY**

1. Financial literacy: What it is and why it matters	4
2. Summary of the 2014 S&P FinLit Suvey	6
2.1 Lower financial literacy among women and the poor	12
2.2 Many users of financial products lack financial skills	16
2.2.1 Account ownership and savings	16
2.2.2 Credit	19
3. Conclusion	21

# 1.

# Financial literacy: What it is and why it matters

Without an understanding of basic financial concepts, people are not well equipped to make decisions related to financial management. People who are financially literate have the ability to make informed financial choices regarding saving, investing, borrowing, and more.

Financial knowledge is especially important in times where increasingly complex financial products are easily available to a wide range of the population. For example, with governments in many countries pushing to boost access to financial services, the number of people with bank accounts and access to credit products is rising rapidly. Moreover, changes in the pension landscape transfer decision-making responsibility to participants who previously relied on their employers or governments for their financial security after retirement.

Financial ignorance carries significant costs. Consumers who fail to understand the concept of interest compounding spend more on transaction fees, run up bigger debts, and incur higher interest rates on loans (Lusardi and Tufano, 2015; Lusardi and de Bassa Scheresberg, 2013). They also end up borrowing more and saving less money (Stango and Zinman, 2009). Meanwhile, the potential benefits of financial literacy are manifold. People with strong financial skills do a better job planning and saving for retirement (Behrman et al., 2012; Lusardi and Mitchell, 2014). Financially savvy investors are more likely to diversify risk by spreading funds across several ventures (Abreu and Mendes, 2010).

Given the many ways financial literacy affects financial behavior (Lusardi and Mitchell, 2014), it is important to understand the extent of people's understanding of basic financial concepts as well as the degree to which financial skills fall short among groups like women and the poor. The Standard & Poor's Ratings Services Global Financial Literacy Survey (S&P Global FinLit Survey) provides this information across a wide array of countries. It builds on early initiatives by the International Network on Financial Education (INFE) of the Organization for Economic Co-operation and Development (OECD), the World Bank's Financial Capability and Household Surveys, the Financial Literacy around the World (FLAT World) project, and numerous national survey initiatives that collect information on financial literacy. The survey complements these efforts by delivering the first and most comprehensive global gauge of financial literacy to date.



The information on financial literacy is based on questions added to the Gallup World Poll survey. More than 150,000 nationally representative and randomly selected adults in more than 140 economies were interviewed during the 2014 calendar year. The surveys were conducted face-to-face in economies where less than 80 percent of the population has access to a telephone or is the customary methodology. The target population consists of the entire population aged 15 and above, aside from prisoners and soldiers.

Financial literacy was measured using questions assessing basic knowledge of four fundamental concepts in financial decision-making: knowledge of interest rates, interest compounding, inflation, and risk diversification. The S&P Global FinLit Survey findings are sobering. Worldwide, only 1-in-3 adults are financially literate. Not only is financial illiteracy widespread, but there are big variations among countries and groups. For example, women, the poor, and lower educated respondents are more likely to suffer from gaps in financial knowledge. This is true not only in developing economies but also in countries with well-developed financial markets. People with relatively high financial literacy also tend to have a few things in common, regardless of where they live. Adults who use formal financial services like bank accounts and credit cards generally have higher financial knowledge, regardless of their income. Even poor people who have a bank account are more likely to be financially literate than poor people who do not have a bank account, and rich adults who use credit also generally have better financial skills than rich adults who do not. This suggests the relationship between financial knowledge and financial services may work in two directions: While higher financial literacy might lead to broader financial inclusion, operating an account or using credit may also deepen consumers' financial skills.

The S&P Global FinLit Survey can be used by academics, regulators, policymakers, and funders to gauge financial literacy across the globe. By showing where financial skills are strong and where they are lacking, these new data can help stakeholders design policies and programs to improve the financial well-being of individuals around the world.

# 2.

# Country-level financial literacy ranges from 71 percent to 13 percent

In the S&P Global FinLit Survey, the literacy questions that measure the four fundamental concepts for financial decision-making—basic numeracy, interest compounding, inflation, and risk diversification—are as follows. (The answer options are in the brackets, with the correct answer in bold.)

### **RISK DIVERSIFICATION**

Suppose you have some money. Is it safer to put your money into one business or investment, or to put your money into multiple businesses or investments? [one business or investment; **multiple businesses or investments**; don't know; refused to answer]

### **INFLATION**

Suppose over the next 10 years the prices of the things you buy double. If your income also doubles, will you be able to buy less than you can buy today, the same as you can buy today, or more than you can buy today? [less; **the same**; more; don't know; refused to answer]

### **NUMERACY (INTEREST)**

Suppose you need to borrow 100 US dollars. Which is the lower amount to pay back: 105 US dollars or 100 US dollars plus three percent? [105 US dollars; **100 US dollars plus three percent**; don't know; refused to answer]

### **COMPOUND INTEREST**

Suppose you put money in the bank for two years and the bank agrees to add 15 percent per year to your account. Will the bank add more money to your account the second year than it did the first year, or will it add the same amount of money both years? [more; the same; don't know; refused to answer]

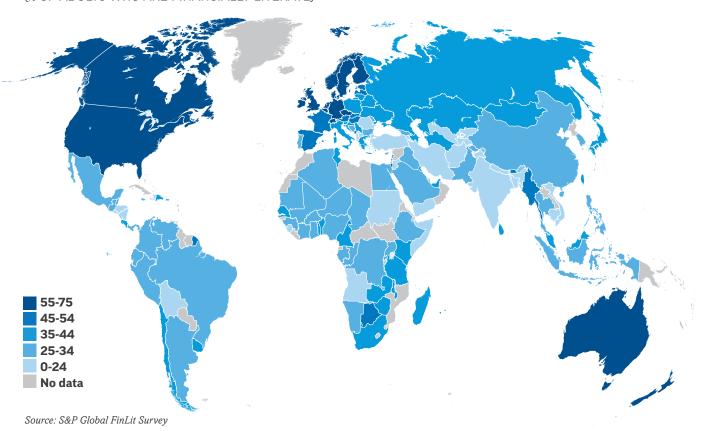
Suppose you had 100 US dollars in a savings account and the bank adds 10 percent per year to the account. How much money would you have in the account after five years if you did not remove any money from the account? [more than 150 dollars; exactly 150 dollars; less than 150 dollars; don't know; refused to answer]



A person is defined as financially literate when he or she correctly answers at least three out of the four financial concepts described above. We choose this definition because the concepts are basic and this is what would correspond to a passing grade. Based on this definition, 33 percent of adults worldwide are financially literate. This means that around 3.5 billion adults globally, most of them in developing economies, lack an understanding of basic financial concepts. These global figures conceal deep disparities around the world (Map 1).

**MAP 1: GLOBAL VARIATIONS IN FINANCIAL LITERACY** 

(% OF ADULTS WHO ARE FINANCIALLY LITERATE)



The countries with the highest financial literacy rates are Australia, Canada, Denmark, Finland, Germany, Israel, the Netherlands, Norway, Sweden, and the United Kingdom, where about 65 percent or more of adults are financially literate. On the other end of the spectrum, South Asia is home to countries with some of the lowest financial literacy scores, where only a quarter of adults—or fewer—are financially literate.

### **BOX 1: A DIVIDED EUROPEAN UNION**

### MAP 2: NORTHERN EUROPE LEADS IN FINANCIAL LITERACY

(% OF ADULTS WHO ARE FINANCIALLY LITERATE)

Financial literacy rates vary widely across the European Union (Map 2). On average, 52 percent of adults are financially literate, and the understanding of financial concepts is the highest in northern Europe. Denmark, Germany, the Netherlands, and Sweden have the highest literacy rates in the European Union: at least 65 percent of their adults are financially literate. Rates are much lower in southern Europe. For example, in Greece and Spain, literacy rates are 45 percent and 49 percent, respectively. Italy and Portugal have some of the lowest literacy rates in the south. Financial literacy rates are also low among the countries that joined the EU in 2004 and after. In Bulgaria and Cyprus, 35 percent of adults are financially literate. Romania, with 22 percent financial literacy, has the lowest rate in the European Union.

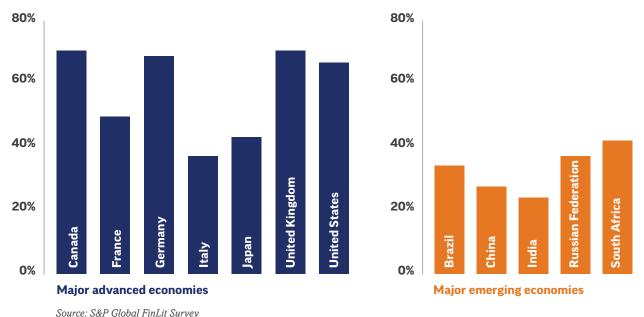


Not surprisingly, financial literacy rates differ enormously between the major advanced and emerging economies in the world. On average, 55 percent of adults in the major advanced economies—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States—are financially literate (Figure 1). But even across these countries, financial literacy rates range widely, from 37 percent in Italy to 68 percent in Canada.

In contrast, in the major emerging economies—the so-called BRICS (Brazil, the Russian Federation, India, China, and South Africa)—on average, 28 percent of adults are financially literate. Disparities exist among these countries, too, with rates ranging from 24 percent in India to 42 percent in South Africa.

### FIGURE 1: WIDE VARIATION IN FINANCIAL LITERACY AROUND THE WORLD

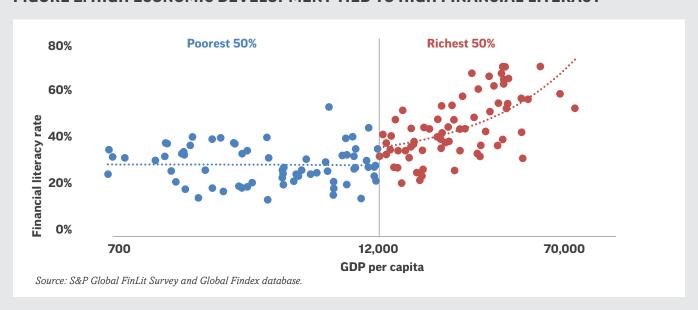
(% OF ADULTS WHO ARE FINANCIALLY LITERATE)



ocuree. Sai Giosai i men sai vey

### **BOX 2: GDP PER CAPITA AND FINANCIAL LITERACY**

### FIGURE 2: HIGH ECONOMIC DEVELOPMENT TIED TO HIGH FINANCIAL LITERACY



Does income explain worldwide differences in financial literacy? In richer countries, proxied by GDP per capita, financial literacy rates tend to be higher (Figure 2). However, the relationship only holds when looking at the richest 50 percent of economies. In these economies, around 38 percent of the variation in financial literacy rates can be explained by differences in income across countries. For the poorer half of economies, with a GDP per capita of \$12,000 or less, there is no evidence that income is associated with financial literacy. What this likely means is that national-level policies, such as those related to education and consumer protection, shape financial literacy in these economies more than any other factor.

Among the four topics that define financial literacy, inflation and numeracy (in the context of interest rate calculations) are the most understood. Worldwide, half the adult population understands these concepts. Knowledge of risk diversification is the lowest, with only 35 percent of adults correctly answering that survey question. Risk diversification also figures into some of the largest disparities among countries. In the major advanced economies, 64 percent of respondents have an understanding of this concept, against 28 percent in the major emerging economies (Figure 3). Differences for the other concepts are less pronounced, ranging from 15 percentage points for inflation to 10 percentage points for the compound interest concept.

### FIGURE 3: STRONGER GRASP OF FINANCIAL CONCEPTS IN ADVANCED ECONOMIES

(% OF ADULTS WITH CORRECT ANSWERS)



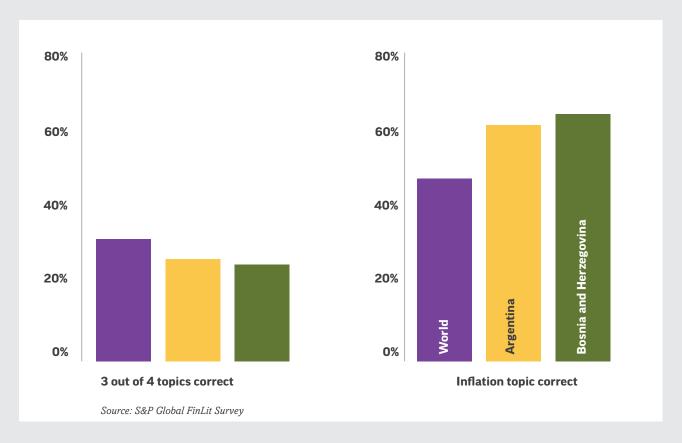
Source: S&P Global FinLit Survey

Note: Major advanced and emerging economies are listed in Figure 1.

### **BOX 3: MEMORIES OF INFLATION**

### FIGURE 4: UNDERSTANDING OF INFLATION HIGHER IN COUNTRIES WITH **RECENT HISTORY OF INFLATION**

(% OF ADULTS WITH CORRECT ANSWERS)



People may have a better understanding of financial concepts when they are confronted with them in their daily lives. The importance of experience is observed in countries that saw periods of hyperinflation. For example, Argentina struggled with hyperinflation in the late 1980s and early 1990s. At its peak, it took less than 20 days for prices to double (Hanke and Krus, 2013). This experience is reflected in their knowledge. While their overall financial literacy rate of 28 percent is lower than the world average, 65 percent of Argentine adults have an understanding of inflation, exceeding the world average (Figure 4). Similar patterns are observed in Georgia, Bosnia and Herzegovina, and Peru, all of which experienced hyperinflation in the 1990s.

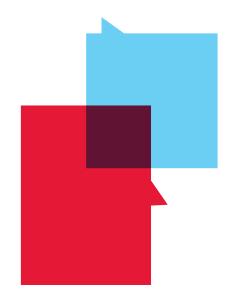
### 2.1

# Lower financial literacy among women and the poor

Financial literacy rates differ in important ways when it comes to characteristics such as gender, education level, income, and age. Worldwide, 35 percent of men are financially literate, compared with 30 percent of women. While women are less likely to provide correct answers to the financial literacy questions, they are also more likely to indicate that they "don't know" the answer, a finding consistently observed in other studies as well (Lusardi and Mitchell, 2014).

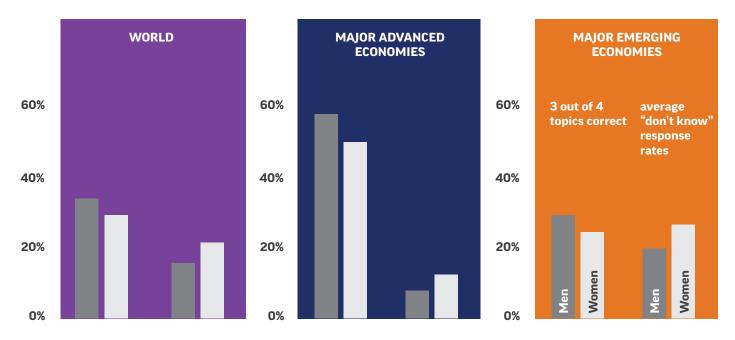
This gender gap is found in both advanced economies and emerging economies (Figure 5). Women have weaker financial skills than men even considering variations in age, country, education, and income.

The average gender gap in financial literacy in emerging economies is 5 percentage points, not different from the worldwide gap, though it is absent in China and South Africa (where financial literacy is equally low for women and men). There is also a gap in financial literacy when looking at relative income in the BRICS economies. Thirty-one percent of the rich in these economies are financially literate, compared to only 23 percent of the poor.



### FIGURE 5: WOMEN TRAIL MEN IN FINANCIAL LITERACY

(% OF ADULTS WITH CORRECT OR "DON'T KNOW" ANSWERS)



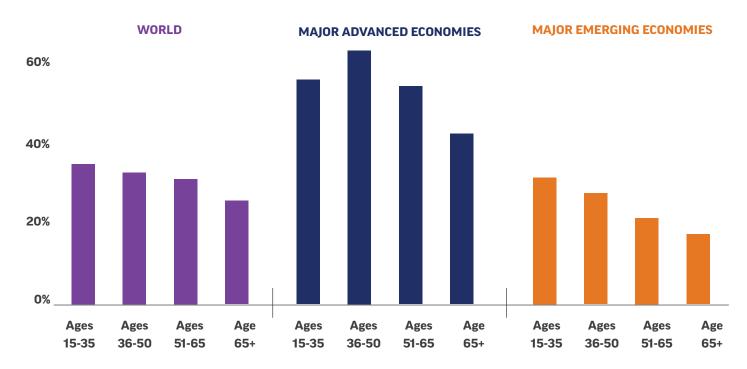
Source: S&P Global FinLit Survey

Note: Major advanced and emerging economies are listed in Figure 1.

For the major advanced economies, financial literacy rates increase with age but then later decline with age (i.e., older people or older generations are less financially literate then middle-age ones). On average, 56 percent of young adults age 35 or younger are financially literate, compared with 63 percent of those age 35 to 50. Financial literacy rates are lower for adults older than 50, and rates are lowest among those older than 65. The pattern is different for the major emerging economies. In these economies, adults age 65 plus have the lowest financial literacy rates of any age group, but the young have the highest knowledge. At 32 percent, financial literacy in these economies is much higher for young adults than for the oldest adults of whom only 17 percent are financially literate.

FIGURE 6: FINANCIAL LITERACY LOWEST AMONG ADULTS AGE 65+

(% OF ADULTS WHO ARE FINANCIALLY LITERATE)



Source: S&P Global FinLit Survey

Note: Major advanced and emerging economies are listed in Figure 1.

Rich adults have better financial skills than the poor. Of adults living in the richest 60 percent of households in the major emerging economies, 31 percent are financially literate, against 23 percent of adults who live in the poorest 40 percent of households. The size of the income gap is similar in the major advanced economies, but some suffer from even deeper inequality. For example, in Italy, 44 percent of adults who live in the richest 60 percent of households are financially literate compared with 27 percent of their counterparts who are poor.

### FIGURE 7: FINANCIAL LITERACY GROWS WITH INCOME

(% OF ADULTS WHO ARE FINANCIALLY LITERATE)



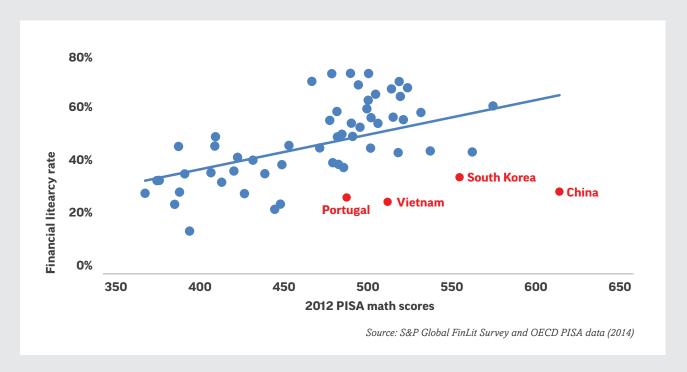
Source: S&P Global FinLit Survey

Note: Major advanced and emerging economies are listed in Figure 1.

Financial literacy also sharply increases with educational attainment—which is strongly associated with math skills, as well as age and income. Globally, a gap of about 15 percentage points separates adults with primary, secondary, and tertiary education. In major advanced economies, 52 percent of adults with secondary education—between nine and 15 years of schooling—are financially literate. Among adults who have primary education—up to eight years of schooling—that figure is 31 percent. A similar divide separates adults with secondary education and adults with tertiary education: Among adults with at least 15 years of schooling, 73 percent are financially literate. The education gaps are similar in the major emerging economies.

### **BOX 4: YOUNG, GOOD AT MATH, AND FINANCIALLY LITERATE**

### FIGURE 8: STRONGER FINANCIAL SKILLS IN COUNTRIES WITH HIGH TEST SCORES



Overall understanding of financial concepts tends to be high in countries where 15-year-old students performed well on the OECD's 2012 Programme for International Student Assessment (PISA) math test (2014). While overall there is a positive relationship, some notable outliers are evident (Figure 8). In China, South Korea, Portugal, and Vietnam, financial literacy rates (proxied by math scores) are much higher among young adults than older adults. In South Korea, 48 percent of adults age 35 or younger are financially literate, against 27 percent of adults age 51 to 65. For Portugal these numbers are 38 percent and 20 percent, respectively. These findings suggest that a general proficiency in math may be beneficial for understanding financial concepts. In some countries, young people have acquired a high math knowledge that may translate into much higher financial literacy in adulthood.

# 2.2

# Many users of financial products lack financial skills

Financial literacy skills are important for people who use payment, savings, credit, and risk-management products. For many, having an account at a bank or other financial institution—or with a mobile money service provider—is an important first step to participation in the financial system. Financial literacy skills are important for people who use payment, savings, credit, and risk-management products. For many, having an account at a bank or other financial institution—or with a mobile money service provider—is an important first step to participation in the financial system (Demirguc-Kunt, et al., 2015). Yet access to financial services is not an end in itself. Rather, it is a means to an end. When people have financial accounts and use digital payments, they are more able to provide for their families, save money for the future, and survive economic shocks. Digital payments can also reduce corruption by increasing transparency, and they help empower women by giving them greater control over their finances (Klapper and Singer, 2014). But people who lack the knowledge to effectively use such services can face financial disaster, such as high debt or bankruptcy. It is, therefore, worth exploring the link between financial services and financial literacy.



# 2.2.1

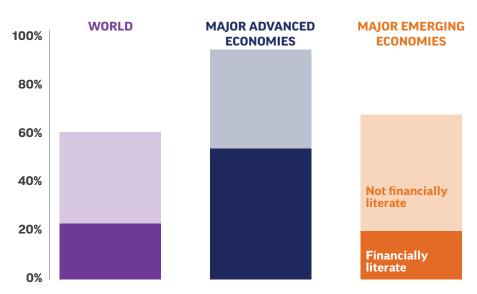
# **Account ownership and savings**

Account owners tend to be more financially savvy, but plenty of them still lack financial skills. Globally, 38 percent of account-owning adults are financially literate, as are 57 percent of account owners in major advanced economies and 30 percent in major emerging economies (Figure 9).



### FIGURE 9: ACCOUNT OWNERS OFTEN LACK FINANCIAL SKILLS

(% OF ADULTS WITH AN ACCOUNT)



Source: S&P Global FINLIT Survey and Global Findex database.

Note: The height of the bar is the percentage of adults with an account. Major advanced and emerging economies are listed in Figure 1.

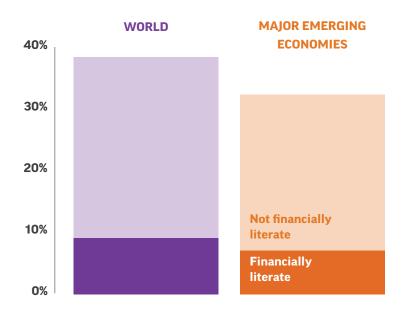
Financial literacy gaps exist among account holders even though they generally have stronger financial skills than the population as a whole. For example, in major advanced economies, a man with an account is 8 percentage points more likely to be financially literate than a woman with an account. A similar gap is found between account owners in the richest 60 percent and poorest 40 percent of households. Account holders with a primary education are half as likely to be financially literate as their counterparts with a secondary education.

Account owners who lack financial knowledge may not be fully benefitting from what their accounts have to offer. One example is savings. Globally, 57 percent of adults save money, but just 27 percent use a bank or other formal financial institution to do so. Others use less safe and less lucrative methods, such as informal savings groups or stuffing cash under a mattress. Only 42 percent of account owners worldwide use their account to save, and 45 percent of these adult savers are financially literate. Improving financial literacy might help these savers get a better deal. For example, about half of account owners in China use their account to save money, but just 52 percent of them correctly respond to the question about interest. In the United States, the interest topic is correctly answered by 58 percent of adults who use formal savings.

Financial skills are even weaker among adults who do not have an account (Figure 10). Globally, 25 percent of these adults are financially literate, as are 22 percent in major emerging economies.

# FIGURE 10: ADULTS WHO LACK AN ACCOUNT ALSO LACK FINANCIAL SKILLS

(% OF ADULTS WITHOUT AN ACCOUNT)



Source: S&P Global FinLit Survey.

Note: The height of the bar is the percentage of adults without an account. Major advanced and emerging economies are listed in Figure 1.

It is difficult to say whether low financial knowledge makes these people less likely to use financial services. According to the Global Findex, 59 percent of "unbanked" adults say they do not have enough money to use an account. In reality, most poor people make payments and other financial transactions every day, but they do so in informal and often more costly and less safe ways. If they were more aware of accounts and how they are used, unbanked adults might sign up for an account. Another possible reason the unbanked lack financial skills is that they do not have experience using financial products. If they used financial concepts in their daily lives, their understanding could increase with time. The concept of interest, for example, would become more concrete as they watched the value of their savings increase. The most straightforward explanation for low financial skills among the unbanked is that they come from poorer and less educated households.

Gender, income, and education inequalities also prevail among the unbanked. Worldwide, 27 percent of unbanked men are financially literate, compared with 22 percent of unbanked women. In major emerging economies, unbanked adults in the richest 60 percent of households are 5 percentage points more likely to be financially literate than those in the poorest 40 percent of households. No matter how the data is spliced, women, the poor, and the lower educated lag behind the rest of the population.

# 2.2.2

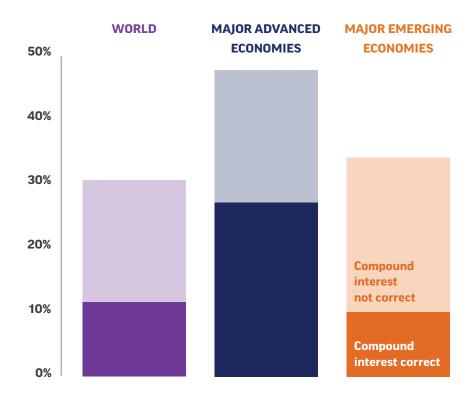
### Credit

Credit is more common in rich countries than poor countries. Many borrowers in the emerging world are dependent on family and friends or on loans through informal lenders such as pawnshops and store credit. Access to formal credit is often confined to the rich and well educated, who tend to be more financially savvy. In the major advanced economies, 51 percent of adults use a credit card, compared with only 11 percent of adults in the major emerging economies. A smaller share of adults borrows from a formal financial institution. Fifty-three percent of adults in major emerging economies who use a credit card or borrow from a financial institution are financially literate, much higher than the average financial literacy rate in these economies.



# FIGURE 11: LOW UNDERSTANDING OF INTEREST PUTS CREDIT USERS AT RISK

(% OF ADULTS WHO USED A CREDIT CARD OR BORROWED FROM A FINANCIAL INSTITUTION IN THE PAST YEAR)



 $Source: S\&P\ Global\ FinLit\ Survey\ and\ Global\ Findex\ database.$ 

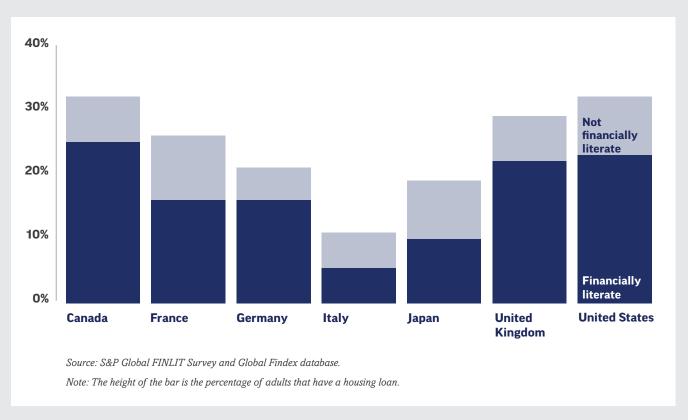
Note: The height of the bar is the percentage of adults that used a credit card or borrowed from a bank or other formal financial institution in the past year. Major advanced and emerging economies are listed in Figure 1.

Credit cards are gaining popularity in many emerging countries, but knowledge of related financial concepts is not keeping up. Many short-term credit users do not fully understand the speed at which interest compounding can inflate total amounts owed (Figure 11). For instance, 32 percent of adults in Brazil have a credit card, yet 40 percent of them are financially literate and only half correctly answer the compound interest question. In Turkey, 33 percent of adults have a credit card, yet just 29 percent of these users are financially literate and only half understand compound interest.

### **BOX 5: THE HOMEOWNERS' EDGE IN FINANCIAL LITERACY**

### FIGURE 12: HIGH FINANCIAL LITERACY AMONG HOMEOWNERS

(% OF ADULTS WHO HAVE A HOUSING LOAN OUTSTANDING)



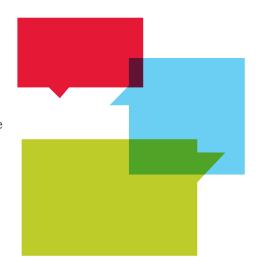
In the major advanced economies, 26 percent of adults have an outstanding loan at a financial institution in order to purchase a home or an apartment. Since paying for a home requires complex calculations, one would expect homeowners to have stronger financial skills than the average person. This is, indeed, the case (Figure 12). Nevertheless, some homeowners still suffer from gaps in financial knowledge and may not understand how quickly their debt can accumulate. In the United States, almost a third of adults have an outstanding housing loan, and 70 percent of them correctly answer the compound interest topic. Put differently, 3-in-10 adults with a housing loan are unable to perform basic interest calculations on their loan payments. Since the global financial crisis was triggered in part by mortgage defaults in the United States, this should concern policymakers, not just homeowners. This is not a problem just for the United States: In Japan, nearly a fifth of adults have an outstanding housing loan, but only half of them are financially literate and just 37 percent of them correctly answer the compound interest question.

### Conclusion

Worldwide, just 1-in-3 adults show an understanding of basic financial concepts. Although financial literacy is higher among the wealthy, well educated, and those who use financial services, it is clear that billions of people are unprepared to deal with rapid changes in the financial landscape. Credit products, many of which carry high interest rates and complex terms, are becoming more readily available. Governments are pushing to increase financial inclusion by boosting access to bank accounts and other financial services but, unless people have the necessary financial skills, these opportunities can easily lead to high debt, mortgage defaults, or insolvency. This is especially true for women, the poor, and the less educated—all of whom suffer from low financial literacy and are frequently the target of government programs to expand financial inclusion.

Financial literacy challenges confront developing economies and advanced economies alike. In China, for example, credit card ownership has doubled since 2011 to 16 percent (Demirguc-Kunt et al., 2015), yet only half of credit card owners can perform simple calculations related to interest. Credit cards are more established in the United States, where they are used by 60 percent of adults. But there, too, understanding of related financial concepts is rather low: just 57 percent of credit card owners correctly answer the interest question. A retirement crisis looms in Europe as governments slash public pensions and call on their citizens to take a bigger role in retirement planning. They are not prepared. The continent is plagued by chronic under-saving for old age, especially in the East, and older adults lack the financial skills needed to deal with the economic challenges of retirement. The numbers in the EU as a whole are hardly more encouraging: Just 47 percent of those who do not save for old age show understanding of basic financial concepts.

Given these risks, policymakers should build strong consumer protection regimes to safeguard citizens from financial abuse and provide a smooth market environment. A research review by a team of World Bank experts found that targeted financial literacy programs that are focused on specific behaviors and populations can lead to smarter financial decisions (Miller et al., 2014). Researchers have also found that financially savvy adults are, in general, less likely to default on loans and more likely to save for retirement (Lusardi and Mitchell, 2014). Because of this, policymakers should consider providing specific financial literacy training to vulnerable groups, such as women, the poor, and adults approaching retirement.





# Financial Literacy: A Country-by-Country Breakdown

ECONOMY	ADULTS WHO ARE FINANCIALLY LITERATE (%)	ECONOMY	ADULTS WHO ARE FINANCIALLY LITERATE (%)
Afghanistan	14	Colombia	32
Albania	14	Congo, Dem. Rep.	32
Algeria	33	Congo, Rep.	31
Angola	15	Costa Rica	35
Argentina	28	Croatia	44
Armenia	18	Cyprus	35
Australia	64	Czech Republic	58
Austria	53	Côte d'Ivoire	35
Azerbaijan	36	Denmark	71
Bahrain	40	Dominican Republic	35
Bangladesh	19	Ecuador	30
Belarus	38	Egypt, Arab Rep.	27
Belgium	55	El Salvador	21
Belize	33	Estonia	54
Benin	37	Ethiopia	32
Bhutan	54	Finland	63
Bolivia	24	France	52
Bosnia and Herzegovina	27	Gabon	35
Botswana	52	Georgia	30
Brazil	35	Germany	66
Bulgaria	35	Ghana	32
Burkina Faso	33	Greece	45
Burundi	24	Guatemala	26
Cambodia	18	Guinea	30
Cameroon	38	Haiti	18
Canada	68	Honduras	23
Chad	26	Hong Kong SAR, China	43
Chile	41	Hungary	54
China	28	India	24

# Financial Literacy: A Country-by-Country Breakdown

ECONOMY	ADULTS WHO ARE FINANCIALLY LITERATE (%)	ECONOMY	ADULTS WHO ARE FINANCIALLY LITERATE (%)
Indonesia	32	Mongolia	41
Iran, Islamic Rep.	20	Montenegro	48
Iraq	27	Myanmar	52
Ireland	55	Namibia	27
Israel	68	Nepal	18
Italy	37	Netherlands	66
Jamaica	33	New Zealand	61
Japan	43	Nicaragua	20
Jordan	24	Niger	31
Kazakhstan	40	Nigeria	26
Kenya	38	Norway	71
Korea, Rep.	33	Pakistan	26
Kosovo	20	Panama	27
Kuwait	44	Peru	28
Kyrgyz Republic	19	Philippines	25
Latvia	48	Poland	42
Lebanon	44	Portugal	26
Lithuania	39	Puerto Rico	32
Luxembourg	53	Romania	22
Macedonia, FYR	21	Russian Fed.	38
Madagascar	38	Rwanda	26
Malawi	35	Saudi Arabia	31
Malaysia	36	Senegal	40
Mali	33	Serbia	38
Malta	44	Sierra Leone	21
Mauritania	33	Singapore	59
Mauritius	39	Slovak Republic	48
Mexico	32	Slovenia	44
Moldova	27	Somalia	15

# Financial Literacy: A Country-by-Country Breakdown

ECONOMY	ADULTS WHO ARE FINANCIALLY LITERATE (%)
South Africa	42
Spain	49
Sri Lanka	35
Sudan	21
Sweden	71
Switzerland	57
Taiwan, China	37
Tajikistan	17
Tanzania	40
Thailand	27
Togo	38
Tunisia	45
Turkey	24
Turkmenistan	41
Uganda	34
Ukraine	40
United Arab Emirates	38
United Kingdom	67
United States	57
Uruguay	45
Uzbekistan	21
Venezuela, RB	25
Vietnam	24
West Bank and Gaza	25
Yemen, Rep.	13
Zambia	40
Zimbabwe	41

### Survey methodology

Surveys are conducted face-to-face in economies where telephone coverage represents less than 80 percent of the population or is the customary methodology. 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. These 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. To increase the probability of contact and completion, attempts are made at different times of the day and, where possible, on different days. 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. In economies where cultural restrictions dictate gender matching, respondents are randomly selected through the Kish grid from among all eligible adults of the interviewer's gender.

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

Data weighting is used to ensure a nationally representative sample for each economy. Final weights consist of the base sampling weight, which corrects for unequal probability of selection based on household size, and the poststratification weight, which corrects for sampling and nonresponse error. Poststratification weights use economy-level population statistics on gender and age and, where reliable data are available, education or socioeconomic status. More information on the data collection period, number of interviews, approximate design effect, and margin of error, as well as sampling details for each economy, can be found in Demirguc-Kunt et al. (2015).

### References

Abreu, Margarida, and Victor Mendes, (2010). "Financial Literacy and Portfolio Diversification," *Quantitative Finance*, Vol. 10(5), pp. 515-528.

Allen, Franklin, Asli Demirguc-Kunt, Leora Klapper, and Maria Soledad Martinez Peria, (2012). "The Foundations of Financial Inclusion: Understanding Ownership and Use of Formal Accounts," World Bank Policy Research Working Paper 6290.

Behrman, Jere R., Olivia S. Mitchell, Cindy K. Soo, and David Bravo, (2012). "The Effects of Financial Education and Financial Literacy: How Financial Literacy Affects Household Wealth Accumulation," *American Economic Review*: Papers & Proceedings, Vol. 102(3), pp. 300-304.

Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, and Peter Van Oudheusden, (2015). "The Global Findex Database 2014: Measuring Financial Inclusion around the World," World Bank Policy Research Working Paper 7255.

Global Findex, 2014. http://www.worldbank.org/globalfindex

Hanke, Steve H., and Nicholas E. Krus, (2013). "World Hyperinflations," in *Routledge Handbook of Major Events in Economic History*, pp. 367-377, edited by Randall E. Parker and Robert Whaples, New York: Routledge Taylor and Francis Group, 2013.

Klapper, Leora, and Dorothe Singer, (2014). "The Opportunities of Digitizing Payments," World Bank, Washington, DC.

Lusardi, Annamaria, and Carlo de Bassa Scheresberg, (2013). "Financial Literacy and High-Cost Borrowing in the United States," NBER Working Paper 18969.

Lusardi, Annamaria, and Olivia S. Mitchell, (2014). "The Economic Importance of Financial Literacy: Theory and Evidence," *Journal of Economic Literature*, American Economic Association, Vol. 52(1), pages 5-44, March.

Lusardi, Annamaria, and Peter Tufano, (2015). "Debt Literacy, Financial Experiences, and Over Indebtedness," Journal of Pension Economics and Finance, Vol. 14, special issue 4, pp. 332-328, October.

Miller, Margaret, Julia Reichelstein, Christian Salas, and Bilal Zia, (2014). "Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature," World Bank Policy Research Working Paper 6745.

OECD, (2014). "PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know," OECD, Paris.

Stango, Victor, and Jonathan Zinman, (2009). "Exponential Growth Bias and Household Finance," *The Journal of Finance*, Vol. 64(6), pp. 2807-2849, December.



HTTP://WWW.FINLIT.MHFI.COM