

# Financial Inclusion in the Europe and Central Asia Region

## Recent Trends and a Research Agenda

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## Abstract

Financial inclusion can help promote development. Inclusive financial systems allow people to invest in their education and health, save for retirement, capitalize on business opportunities, and confront shocks. In the Europe and Central Asia region, there is great variation in financial inclusion. In the euro area, most adults already own an account. Account ownership—which is the first step of entry into the formal financial system has increased in the developing countries in the region, to 65 percent of the adult population from 45 percent in 2011. Tajikistan, Armenia, Moldova, the Kyrgyz Republic, and Georgia are among the countries that have seen the greatest increases globally, despite starting from a very low base. These experiences underline the potential role of digital payments in driving financial inclusion. Nevertheless, almost 30 percent of unbanked adults report lack of trust in banks as a barrier, which is nearly double the developing country average. And

in some countries, gender and income gaps in account ownership remain significant. For example, the gender gap is close to 30 percentage points in Turkey, which is three times the average gap in developing countries. And in Romania, the gap between richest 60 percent of the population and poorest 40 percent is 33 percentage points, which is more than twice the average gap in developing countries. But there are many opportunities to increase account ownership. Over 80 percent of the unbanked have a mobile phone, and simply moving public sector pension payments into accounts would reduce the number of unbanked adults in the region by up to 20 million, including 8 million in the Russian Federation alone. Given the heterogeneity of experiences, there are ample opportunities for countries in the region to learn from each other, which lays out a rich research and operational agenda going forward.

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# Financial Inclusion in the Europe and Central Asia Region: Recent Trends and a Research Agenda

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## Introduction

Well-functioning financial systems serve a vital purpose by offering savings, payment, credit, and risk management services and contribute to economic development. Inclusive financial systems are those with a high share of individuals that use financial services (World Bank, 2014; Demirgüç-Kunt, Klapper, and Singer 2017). Such systems provide individuals with greater access to resources to meet their financial needs, such as saving for retirement, investing in education, capitalizing on business opportunities, and confronting shocks. Inability to use these financial services can contribute to persistent income inequality and slow economic growth.

However, financial systems around the world are far from inclusive. Many poor people around the world lack the financial services that can serve these functions, such as bank accounts and digital payments. They rely on cash, which can be unsafe and difficult to manage. Without access to financial services that enable formal savings and borrowing, these “unbanked” people are also less likely to be able to come up with emergency funds to meet unexpected expenditure needs. This paper focuses on financial inclusion of individuals, provides an overview of how Europe and Central Asian countries fare in the global context, and identifies opportunities and challenges in promoting financial inclusion.

## Why Does Financial Inclusion Matter?

Development theory provides important clues about the impact of financial inclusion on economic development. Available models illustrate how financial exclusion and, in particular, lack of access to finance can lead to poverty traps and inequality (Aghion and Bolton, 1997; Banerjee and Newman, 1993; Galor and Zeira 1993). For example, in the model of Galor and Zeira (1993), it is because of financial market frictions that poor people cannot invest in their education, despite their high marginal productivity of investment. In Banerjee and Newman’s model (1993), the occupational choices of individuals (between becoming entrepreneurs or remaining wage earners) are limited by the initial endowments. These occupational choices determine how much individuals can save and what risks they can bear, with long-run implications for growth and income distribution. These models show that lack of access to finance can be critical for generating persistent income inequality or poverty traps, as well as lower growth.

There is also a growing body of empirical literature that documents the potential development benefits of financial inclusion, especially from the use of digital financial services, including mobile money services, payment cards, and other financial technology applications. Recent research shows financial inclusion yields a wide range of benefits. Mobile money services, which allow users to store and transfer funds through a mobile phone, can improve people’s income-earning potential and reduce poverty. A study in Kenya finds that among households headed by women, access to mobile money services increased their savings by more than 20 percent and helped reduce extreme poverty by 22 percent (Suri and Jack 2016).

Digital financial services can also help people manage financial risks and smooth consumption. When times are tough, mobile money services can make it easier for families to receive money from friends and relatives living far away. Digital payment systems can lower the cost of remittances and save time

and travel costs. Financial services also help people accumulate savings and increase spending on necessities. Women-headed households in Nepal, for example, spent 15 percent more on nutritious foods and 20 percent more on education after receiving free savings accounts (Prina 2015).

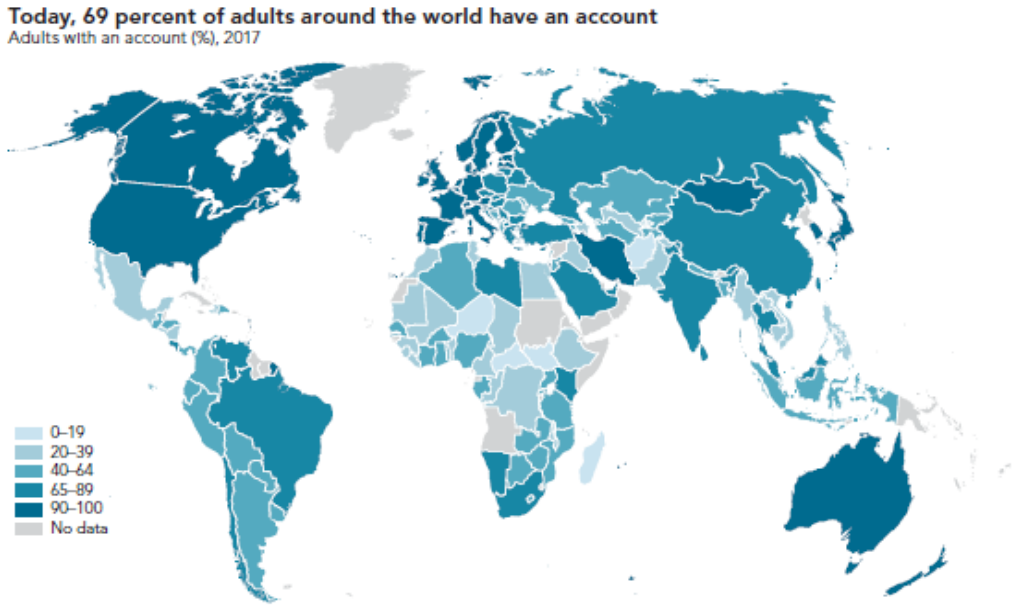
For governments, switching from cash to digital payments can reduce corruption and improve efficiency. In India the leakage of funds for pension payments declined by 47 percent when the payments were made through biometric smart cards rather than cash (Muralidharan, Niehaus, and Sukhtankar 2016). In Niger, distributing social transfers through mobile phones rather than in cash reduced the variable cost of administering the benefits by 20 percent (Aker and others 2016).

### Growth in Account Ownership Is Uneven in Europe and Central Asia

Account ownership 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. Having an account is therefore often used as a marker of financial inclusion.

The Global Findex database – which provides systematic indicators of the use of different financial services (see the Annex on Survey Methodology) - shows that 515 million adults across the world opened an account at a financial institution or through a mobile money provider between 2014 and 2017. The share of adults with an account increased from 51 percent in 2011 to 62 percent in 2014 and 69 percent in 2017. In developing economies, the share increased from 42 percent in 2011 to 55 percent in 2014 and 63 percent in 2017. Despite overall growth in account ownership around the world, however, wide variation remains across economies (map 1).

**Map 1. Account ownership varies significantly across the world**

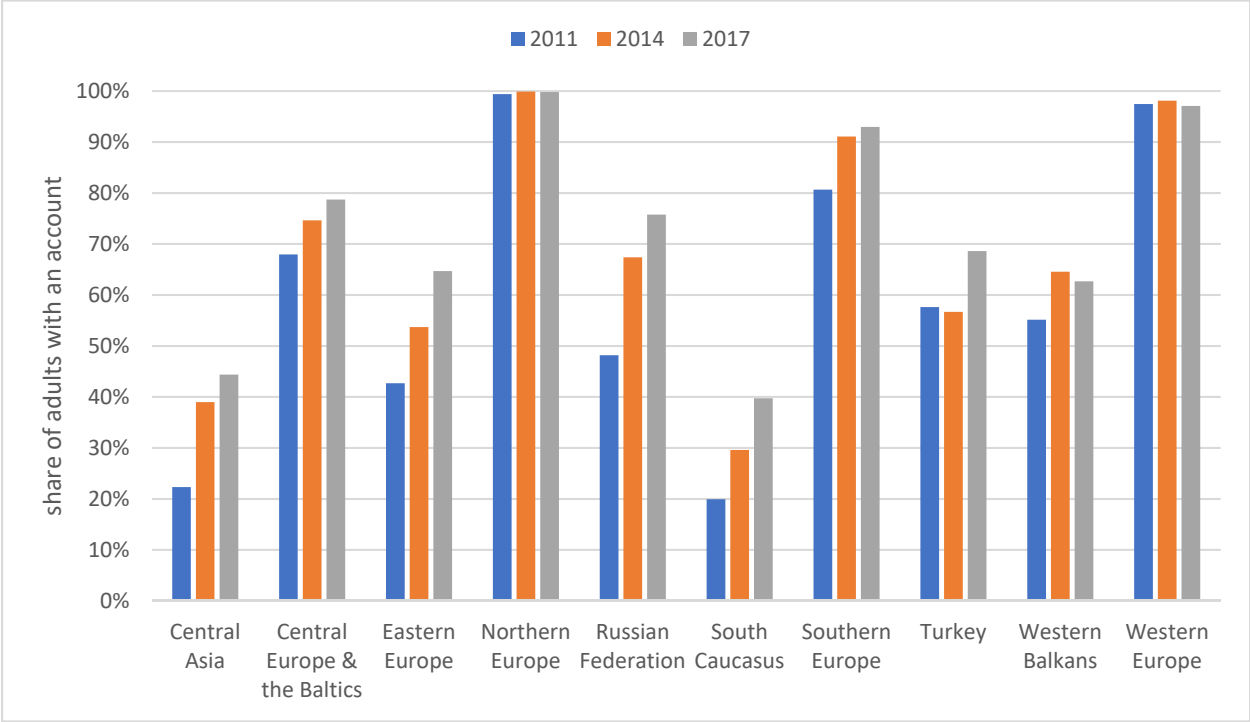


Source: Global Findex database.

In developing economies in Europe and Central Asia (ECA), the share of adults with an account at a financial institution increased from 45 percent in 2011 to 65 percent in 2017. Compared with the rest of the world, developing economies in ECA had relatively high levels of account ownership as of 2011 and experienced moderate growth over time.

Within ECA there is considerable variation across countries in the growth of account ownership (figure 1). In the euro area, 90 percent of adults already owned an account by 2011. The share increased marginally to 95 percent in 2017.

**Figure 1. Account ownership in Europe and Central Asia varies widely by subregion**



Source: Global Findex database. The bars represent the share of adults aged 15 and above who have an account at a financial institution or with a mobile money provider.

The pattern differs in the rest of the region. All three developing economies in Eastern Europe—Belarus, Moldova, and Ukraine—witnessed an increase in account ownership of more than 20 percentage points between 2011 and 2017 (table 1). The Baltic economies experienced an increase in account ownership from a high base level. In 2017 almost all adults in Estonia and Latvia had an account.

Financial inclusion levels are lower in Central Europe. A few Central European economies, such as Croatia and Czech Republic, had stagnant levels of account ownership in the past decade. In Romania, account ownership grew from 45 percent in 2011 but remained at around 60 percent since 2014. Countries in the Western Balkans experienced moderate growth in account ownership, from 55 percent in 2011 to 63 percent in 2017. In Central Asia and the South Caucasus, account ownership doubled from about 20 percent in 2011 to roughly 40 percent in 2017. Armenia, Georgia, the Kyrgyz Republic, and Tajikistan saw significant increases in account ownership of 15 to more than 20 percentage points between 2014 and 2017.

**Table 1. Account ownership in Europe and Central Asia grew between 2011 and 2017**

<i>Subregion/country</i>	<i>2011</i>	<i>2014</i>	<i>2017</i>
<i>Central Asia</i>	22	39	44
Kazakhstan	42	54	59
Kyrgyz Republic	04	18	40
Tajikistan	03	11	47
Turkmenistan	0	..	41
Uzbekistan	23	41	37
<i>Central Europe and the Baltics</i>	68	75	79
Bulgaria	53	63	72
Croatia	88	86	86
Czech Republic	81	82	81
Estonia	97	98	98
Hungary	73	72	75
Latvia	90	90	93
Lithuania	74	78	83
Poland	70	78	87
Romania	45	61	58
Slovak Republic	80	77	84
Slovenia	97	97	98
<i>Eastern Europe</i>	43	54	65
Belarus	59	72	81
Moldova	18	18	44
Ukraine	41	53	63
<i>Northern Europe</i>	99	100	100
Denmark	100	100	100
Finland	100	100	100
Sweden	99	100	100
<i>Russian Federation</i>	48	67	76
<i>South Caucasus</i>	20	30	40
Armenia	17	18	48
Azerbaijan	15	29	29
Georgia	33	40	61
<i>Southern Europe</i>	81	91	93
Cyprus	85	90	89
Greece	78	88	85
Italy	71	87	94
Malta	95	96	97
Portugal	81	87	92
Spain	93	98	94
Turkey	58	57	69

<i>Western Balkans</i>	55	65	63
Albania	28	38	40
Bosnia and Herzegovina	56	53	59
Kosovo	44	48	52
Republic of North Macedonia	74	72	77
Montenegro	50	60	68
Serbia	62	83	71
<i>Western Europe</i>	97	98	97
Austria	97	97	98
Belgium	96	98	99
France	97	97	94
Germany	98	99	99
Ireland	94	95	95
Luxembourg	95	96	99
Netherlands	99	99	100
United Kingdom	97	99	96
<b>Total</b>	<b>69</b>	<b>77</b>	<b>81</b>

*Source:* Global Findex database.

*Note:* Table shows percentage of adults 15 and older who own an account at a financial institution or through a mobile money provider.

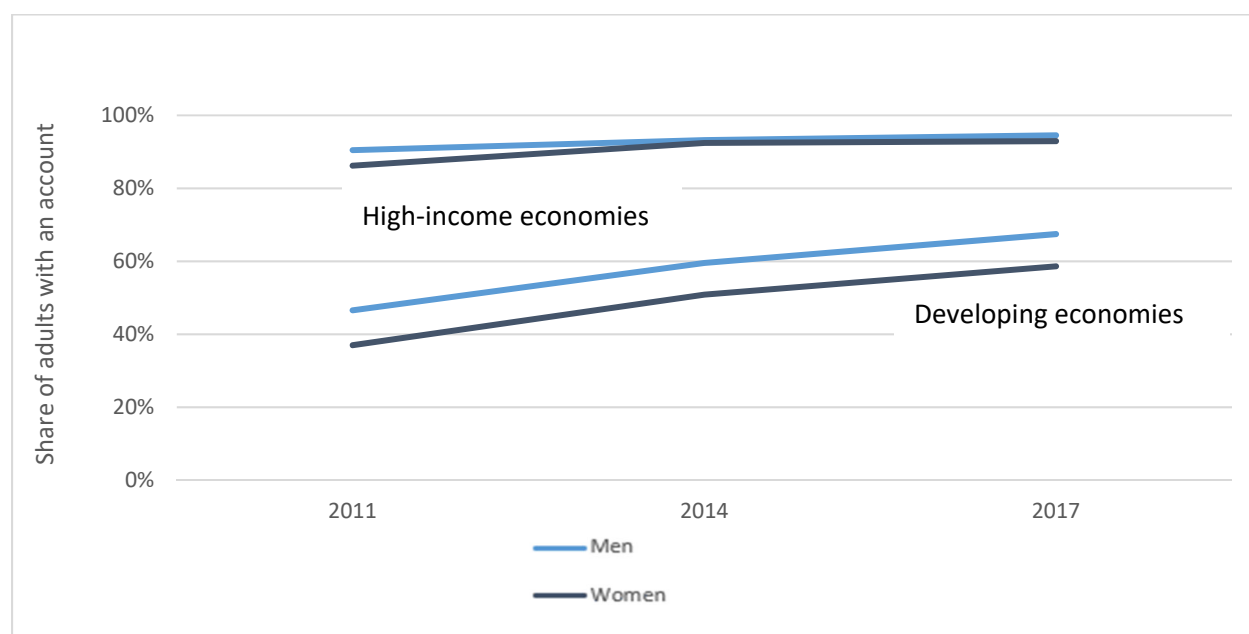
## Inequality in Account Ownership Is High in Parts of the Region

Globally, inequality in account ownership along gender, income, and other dimensions persists, despite continued growth in account ownership. Gender inequality is especially persistent. While 72 percent of men around the world have an account, just 65 percent of women do. The gender gap of 7 percentage points was also present in 2014 and 2011. In developing economies, the gender gap remained constant at 9 percentage points (figure 2).

The gap between richer and poorer households also failed to narrow. Among adults in the richest 60 percent of households within economies, 74 percent have an account. Among the poorest 40 percent, only 61 percent have an account. The global average gap between richer and poorer households stood at 13 percentage points in 2014 and 2017. Account ownership is also lower among young adults, the less educated, and people who are out of the labor force.



**Figure 2. The gender gap in account ownership persists**



Source: Global Findex database. The lines represent the share of male and female adults aged 15 and above who own an account at a financial institution or through a mobile money provider.

In some ECA countries, the gender gap is much larger than the developing country average of 9 percentage points (table 2 and figure 3). The largest gap is in Turkey, where 83 percent of men but just 54 percent of women have accounts (figure 4). The gender gap is about three times as large as the average gap in developing countries. The income gap in account ownership is about 21 percentage points in Turkey, much higher than the global average. Younger adults are also less likely to own an account than older adults (see box 1). Such countries include Armenia (15 percentage points), Kosovo (17 percentage points), Tajikistan (10 percentage points), and Turkmenistan (10 percentage points).

**Table 2. Gender gap in account ownership varies by country**

Country	2011		2014		2017	
	Men	Women	Men	Women	Men	Women
<i>Central Asia</i>	22	22	39	39	46	43
Kazakhstan	40	44	52	56	57	60
Kyrgyz Republic	4	4	18	19	41	39
Tajikistan	3	2	14	09	52	42
Turkmenistan	0	1	..	..	46	36
Uzbekistan	24	21	42	39	38	36
<i>Central Europe and the Baltics</i>	69	67	77	72	80	78
Bulgaria	50	55	63	63	71	74
Croatia	90	87	84	88	90	83
Czech Republic	81	81	85	79	84	79
Estonia	96	97	98	97	98	98
Hungary	72	73	72	72	78	72

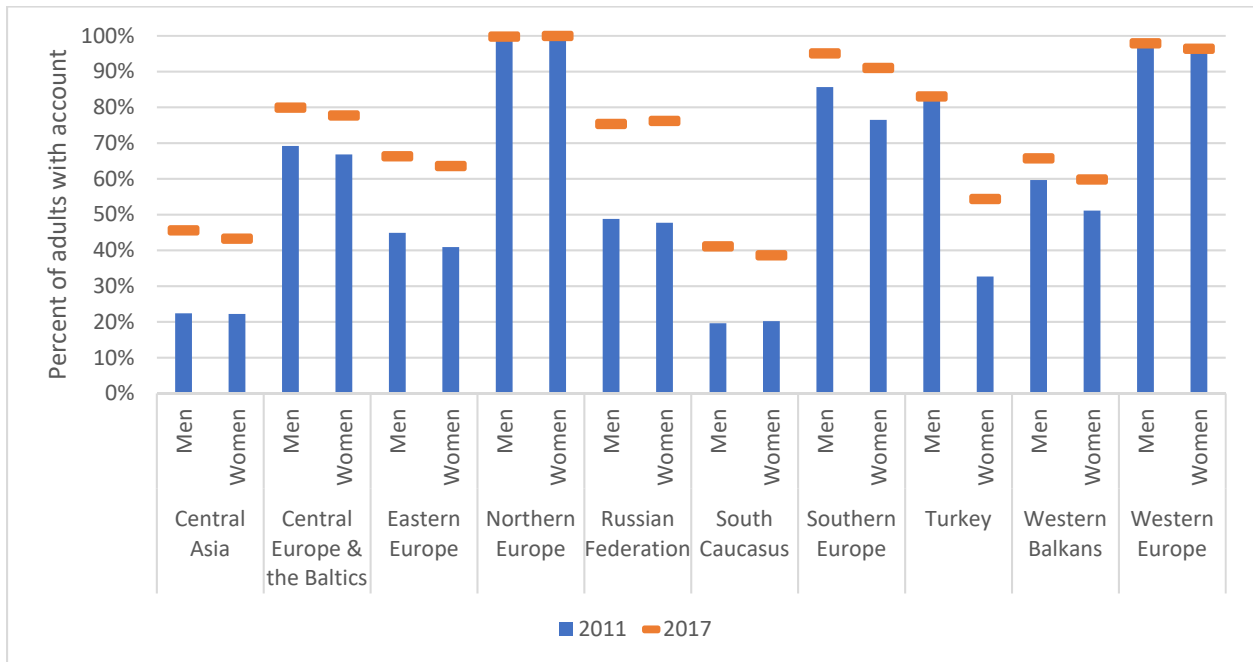
Latvia	87	92	90	90	94	93
Lithuania	71	76	78	78	85	81
Poland	72	68	83	73	85	88
Romania	49	41	65	57	62	54
Slovak Republic	80	79	74	80	85	83
Slovenia	96	98	98	97	98	97
<i>Eastern Europe</i>	45	41	55	53	66	64
Belarus	59	58	72	72	81	81
Moldova	19	17	16	19	43	45
Ukraine	44	39	54	52	65	61
<i>Northern Europe</i>	99	99	100	100	100	100
Denmark	100	99	100	100	100	100
Finland	99	100	100	100	100	100
Sweden	99	99	100	100	99	100
<i>Russian Federation</i>	49	48	64	70	75	76
<i>South Caucasus</i>	20	20	32	27	41	39
Armenia	17	18	21	15	56	41
Azerbaijan	16	14	33	26	29	28
Georgia	31	35	40	40	58	64
<i>Southern Europe</i>	86	77	93	89	95	91
Cyprus	88	83	90	90	87	90
Greece	80	76	88	87	86	85
Italy	79	64	92	83	96	92
Malta	97	94	97	96	98	97
Portugal	85	78	89	86	94	91
Spain	95	92	98	98	96	92
<i>Turkey</i>	82	33	69	44	83	54
<i>Western Balkans</i>	60	51	69	61	66	60
Albania	34	23	43	34	42	38
Bosnia and Herzegovina	67	48	59	47	63	55
Kosovo	57	31	59	36	61	44
Republic of North Macedonia	76	72	80	64	80	73
Montenegro	52	49	62	58	69	68
Serbia	62	62	83	83	73	70
<i>Western Europe</i>	97	98	98	98	98	96
Austria	98	97	96	97	98	98
Belgium	95	97	97	100	98	99
France	97	97	98	95	97	91
Germany	98	99	98	99	99	99
Ireland	96	92	95	95	95	95
Luxembourg	94	95	96	97	99	98
Netherlands	99	98	99	99	99	100
United Kingdom	97	98	99	99	97	96

Total 72 66 79 76 83 79

Source: Global Findex database.

Note: Figures show percent of male or female population aged 15 and older with an account at a financial institution or through a mobile money provider.

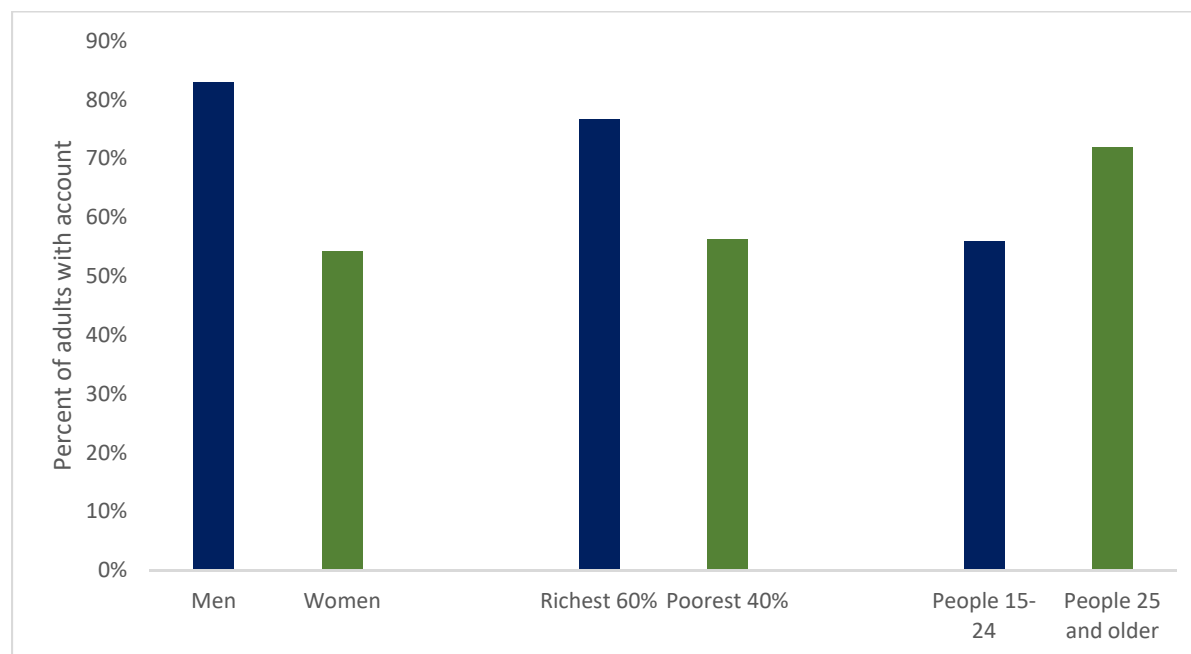
**Figure 3. The gender gap in account ownership varies widely within Europe and Central Asia**



Source: Global Findex database.

Note: Figures show percent of population 15 and older with an account at a financial institution or through a mobile money provider.

**Figure 4. Inequality in account ownership remains high in Turkey**



*Source:* Global Findex database. The height of the bars shows the percentage of adults with an account at a financial institution or through a mobile money provider.

### Who Remains Unbanked in Europe and Central Asia?

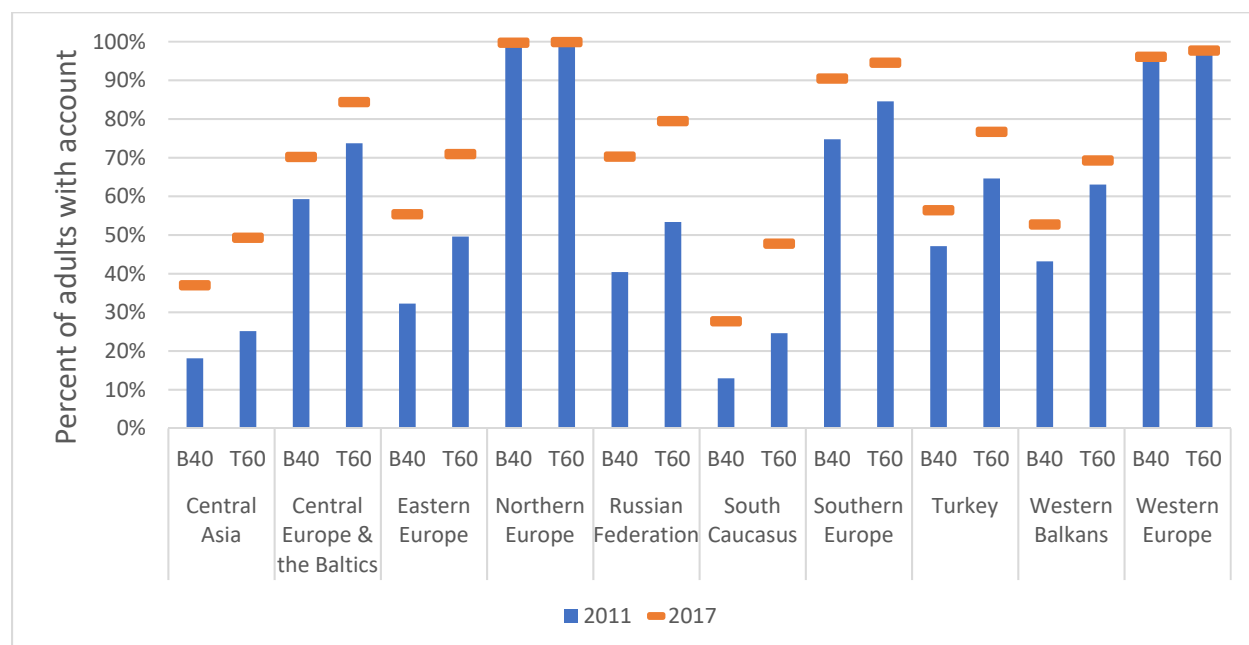
Globally, about 1.7 billion adults remain unbanked. Account ownership is almost universal in high-income economies; nearly all unbanked adults live in the developing world. Nearly half of them live in populous developing countries such as Bangladesh, China, India, Indonesia, Mexico, Nigeria, and Pakistan.

In 2017 there were 116 million unbanked adults in ECA. The majority live in Romania, the Russian Federation, Turkey, Uzbekistan, and Ukraine.

These people share various characteristics. First, women represent 58 percent of all unbanked adults in ECA. In some economies, such as Armenia, Kosovo, and Turkey, their share is even higher.

Second, poor people account for a disproportionate share of the unbanked in ECA (figure 5). Half of all unbanked adults are from the poorest 40 percent of households in the region. In Romania, for instance, nearly 60 percent of the unbanked are from the poorest 40 percent of households. Seventy-one percent of the richest 60 percent of adults in Romania have an account, while only 38 percent of the bottom 40 percent do. Such income gaps in account ownership are prevalent in ECA countries, with a handful of exceptions, including Croatia, the Kyrgyz Republic, Turkmenistan, and Russia, in all of which the gap is less than 10 percentage points.

**Figure 5. The income gap in account ownership remains large in some countries in Europe and Central Asia**



Source: Global Findex database.

Note: The gap is between adults living in the wealthiest 60 percent (T60) and poorest 40 percent of households (B40) within economies.

Unbanked adults are more likely than people with accounts to have low levels of education. In the developing world, about half of all adults have no more than a primary school education; among unbanked adults, the share is close to two-thirds. In developing economies in ECA, 34 percent of unbanked adults have no more than a primary school education. However, there is wide variation. In Albania and Kosovo, 67 percent of the unbanked have no more than a primary school education. By contrast, in Armenia this share was only 12 percent in 2017, thanks to the huge increase in account ownership among low-education adults, which rose from 7 percent in 2011 to 50 percent in 2017.

Being unbanked in ECA is also associated with lack of labor force participation. About 60 percent of unbanked adults in developing ECA are out of the labor force. The share of account ownership among people out of the labor force was 12–16 percentage points lower than the average for ECA in 2011, 2014, and 2017. There are a few exceptions. In Azerbaijan and Uzbekistan, where overall account ownership is low (30–40 percent), the share of unbanked adults who are out of the labor force was lower than the ECA average.

### Lack of Trust in Banks Is a Major Barrier to Account Ownership

To help understand why people may remain unbanked, the 2017 Global Findex survey asked adults without a financial institution account why they did not have one. Globally, the most common reason offered was having too little money to use an account. Two-thirds of unbanked adults across the world cited this as a reason for not having an account, and about one-fifth cited it as the only reason. About a

quarter of respondents cited cost and distance; a similar share said that they did not have an account because a family member already had one. About 20 percent of respondents cited lack of documentation and trust in the financial system, and 6 percent cited religious concerns as the reason they did not have an account.

In ECA only 7 percent of unbanked adults reported insufficient funds as the sole reason for not having an account. Thirty percent cited lack of trust in financial institutions. These figures were particularly high in Azerbaijan (42 percent) and Ukraine (50 percent).

Other factors underlying the lack of account ownership include cost, lack of documentation, and distance. For the region as a whole, 27 percent of unbanked adults reported cost as a barrier. This figure was higher in Albania (40 percent), Azerbaijan (39 percent), Bulgaria (39 percent), Kosovo (42 percent), Moldova (35 percent), Russia (34 percent), and Ukraine (40 percent).

On average, only 14 percent of unbanked adults in ECA cited lack of documentation as a barrier. The figure was about 40 percent in Azerbaijan, Georgia, and Turkmenistan.

In the Republic of North Macedonia and Turkey, more than half of unbanked adults (54 and 65 percent, respectively) reported that they did not have an account because a member of the family already had one. This pattern may be associated with the fact that male household members are more likely to own an account than their spouses.

## Use of Accounts for Payments Is Increasing in the Region's Developing Economies

Most people in ECA make or receive payments, pay bills, send money to relatives, or receive wages or government transfers. The 2017 Global Findex survey asked people what kinds of payments they made and received and whether they did so via an account or in cash.

### *Government Transfer Payments*

Except in the poorest economies in the world, most people who get government payments receive them into an account. In the developing economies of ECA, more than 70 percent of government transfer recipients receive the payments into an account. This share remained stable in 2014 and 2017. It is larger than in developing countries in other regions. In the euro area, 86 percent of adults getting government transfers received the money via an account in 2014. This share declined to 75 percent in 2017.

### *Wage Payments*

Globally, 28 percent of adults receive private sector wages—46 percent of adults in high-income economies and 24 percent in developing ones. In high-income economies, most people receive wage payments into an account. Only half of wage recipients do so in developing economies. In ECA more than 80 percent of private sector wage recipients and more than 90 percent of public sector wage recipients receive payments via an account. These shares increased moderately between 2014 and 2017.

### *Payments for Agricultural Product Sales*

About 15 percent of adults in developing economies receive payments for agricultural product sales. Almost all receive them in cash. In some African countries, such as Ghana, Kenya, and Zambia, about 40

percent of people getting agricultural payments receive them into an account, in most cases a mobile money account.

In the developing economies of ECA, only about 10 percent of adults received payments for agricultural sales the year before the 2014 and 2017 Findex surveys. In 2014 only 5 percent of the agricultural product sellers reported having received payments via an account, and none reported receiving payment through a mobile phone. In 2017 these figures rose to 20 percent and 8 percent, respectively.

### *Domestic Remittance Payments*

Domestic remittances play an important role in many developing economies. In the developing economies of ECA, the share of adults sending or receiving domestic remittances increased from 22 percent in 2014 to 29 percent in 2017. Forty-eight percent of these senders or recipients used a financial institution account in 2017, up from 33 percent in 2014. The share of senders or recipients using mobile phones increased from 4 percent in 2014 to 24 percent in 2017, and the share using cash or making transfers in person declined from 51 percent to 26 percent.

A few countries stood out in this trend. In Russia, for example, the share of domestic remittance senders or recipients using mobile phones soared from 8 percent in 2014 to 38 percent in 2017. The share using financial institution accounts increased by 10 percentage points, to 48 percent, over the same period. The proportion using cash fell from 36 percent to 14 percent.

In Turkey the increase in the use of accounts and mobile phones for remittances has been remarkable, rising from 35 percent in 2014 to 56 percent in 2017. Over the same period, the share of remittance senders or recipients using mobile phones skyrocketed, from 2 percent to 24 percent, and the share sending or receiving cash in person dropped from 60 percent to 23 percent.

### *Use of Digitalized Accounts Is Also Rising*

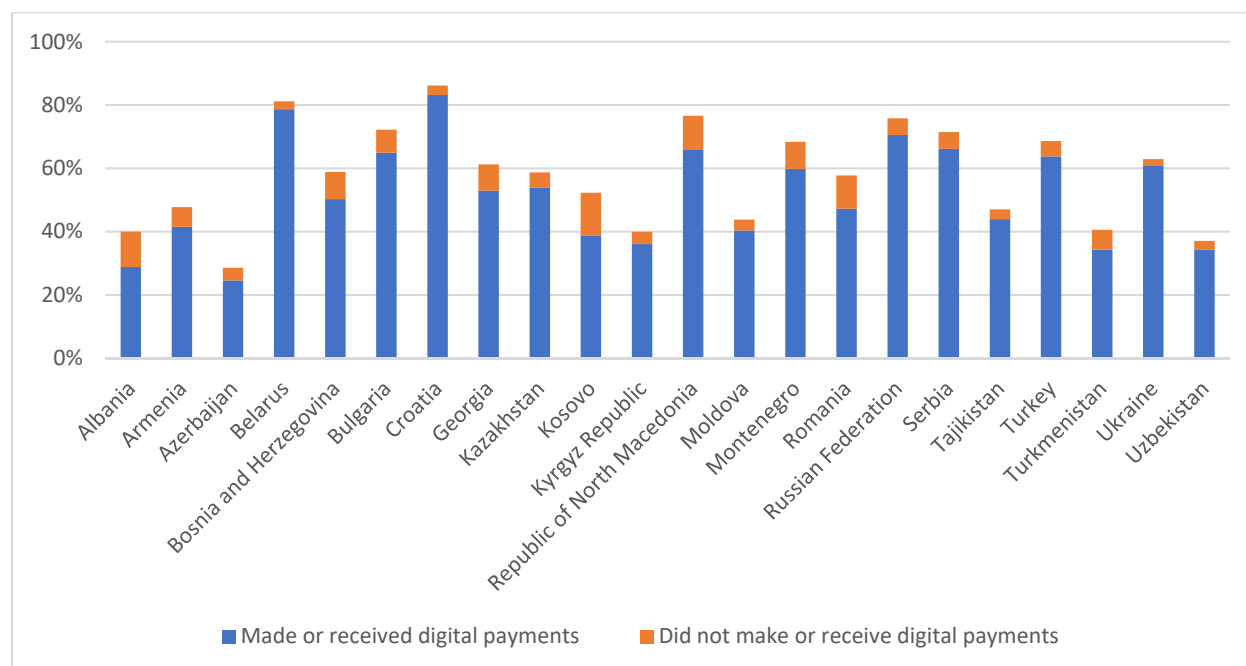
Account ownership is key to financial inclusion. But secure and convenient ways to use accounts are essential if users are to reap the full benefits of account ownership. The Global Findex database also sheds light on whether and how people use their accounts for payments.

### *Digital Payments*

Globally, 52 percent of adults (more than three-quarters of account owners) reported having made or received at least one digital payment using their account the previous year. In high-income economies, the share of account owners using their accounts for digital payments was 97 percent. In the euro area the share of adults who made or received digital payments increased from 87 percent in 2014 to 92 percent in 2017, and the share making digital payments increased from 92 percent to 97 percent. In developing ECA economies, the share of adults making or receiving digital payments rose from 46 percent to 60 percent between 2014 and 2017, suggesting that the share of account owners doing so increased from 80 percent to 92 percent.

ECA countries with significant growth in the use digital payments include Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Kazakhstan, the Republic of North Macedonia, Montenegro, Russia, Turkey, and Ukraine (figure 6). Several countries witnessed an increase of more than 15 percentage points in the share of adults using digital payments during 2014–17. Uzbekistan, where fewer people used digital payments in 2017 than in 2014, seems to be an outlier (table 3).

**Figure 6. The share of adults making digital payments ranges from 25 percent to 83 percent in Europe and Central Asia**



Source: Global Findex database.

Note: The height of the bars represents the share of adults (aged 15 and above) who have an account.

**Table 3. The share of adults who made or received a digital payment the previous year rose in most countries in Europe and Central Asia**

Subregion/country	2014	2017
<i>Central Asia</i>	33	41
Kazakhstan	40	54
Kyrgyz Republic	14	36
Tajikistan	8	44
Turkmenistan	..	34
Uzbekistan	38	34
<i>Central Europe and the Baltics</i>	61	73
Bulgaria	48	65
Croatia	72	83
Czech Republic	78	80
Estonia	95	97
Hungary	64	71
Latvia	84	91



Lithuania	66	78
Poland	63	82
Romania	41	47
Slovak Republic	72	82
Slovenia	86	96
<i>Eastern Europe</i>	45	62
Belarus	61	79
Moldova	15	40
Ukraine	44	61
<i>Northern Europe</i>	99	99
Denmark	99	99
Finland	98	98
Sweden	99	98
<i>Russian Federation</i>	53	71
<i>South Caucasus</i>	17	34
Armenia	12	42
Azerbaijan	18	25
Georgia	21	53
<i>Southern Europe</i>	77	88
Cyprus	67	80
Greece	39	74
Italy	73	90
Malta	74	89
Portugal	73	86
Spain	93	90
<i>Turkey</i>	48	64
<i>Western Balkans</i>	44	54
Albania	20	29
Bosnia and Herzegovina	32	50
Kosovo	28	39
Republic of North Macedonia	52	66
Montenegro	40	60
Serbia	60	66
<i>Western Europe</i>	95	96
Austria	92	96
Belgium	96	97
France	92	92
Germany	96	98
Ireland	87	94
Luxembourg	93	98
Netherlands	98	98
United Kingdom	97	96

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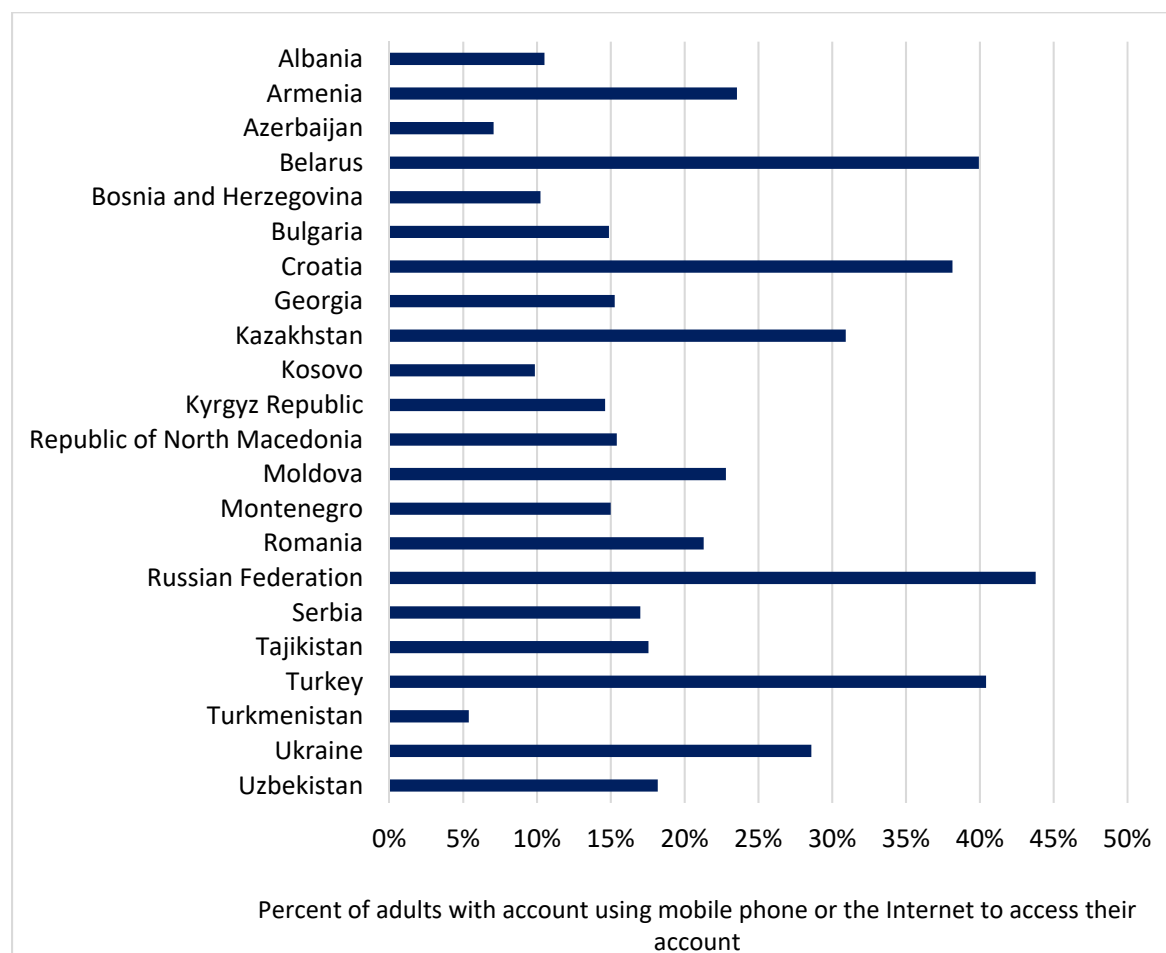
Source: Global Findex database.

### *Use of Mobile Phones or the Internet for Financial Services*

Along with advancements in digital technologies, mobile phones and the Internet increasingly offer an alternative to debit and credit cards for making direct payments from an account. Globally, in high-income economies, 51 percent of adults (55 percent of account owners) reported making at least one financial transaction the previous year using a mobile phone or the Internet. In developing economies, the average share was much lower, at 19 percent of adults (30 percent of account owners).

There is wide variation among the developing economies in ECA in the use of mobile phones or the Internet to access accounts (figure 7). In the South Caucasus, more than 20 percent of adults in Armenia reported having used a mobile phone or the Internet to make payments; the share is much lower in Azerbaijan and Georgia. In Central Asia, more than 30 percent of adults reported doing so in Kazakhstan; the share is much lower in other Central Asian countries. In Eastern Europe, 40 percent of adults in Belarus use mobile or online payments, a larger share than in Moldova or Ukraine. In Central Europe, Croatia stands at with 38 percent. The use of mobile and online payment is also high in Turkey (40 percent) and Russia (44 percent).

**Figure 7. Use of a mobile phone or the Internet to access an account varies widely within Europe and Central Asia**



Source: Global Findex database.

Note: Length of the bars represents percentage of adults with a financial account who used mobile phone or internet to access their account.

### *Use of mobile phones for financial services*

In some regions of the world – such as Sub-Saharan Africa – use of mobile money is widespread and a significant share of adults have a mobile money account only rather than a financial institution account. In the ECA region, where ownership of financial institution accounts is higher than in other developing regions, using mobile phones only instead of bank accounts is not common. Account owners are more likely to use online payments from their bank accounts than mobile accounts only.

Mobile phones can be used for financial services in at least two ways (Demirgüç-Kunt and others 2018), for which China and Kenya serve as examples. In China mobile financial services are provided mainly through third-party payment service providers, such as Alipay and WeChat, using smartphone apps linked to a bank account or other type of financial institution account. By contrast, in some African countries, such as Kenya, mobile financial services are offered primarily by mobile network operators, and mobile money accounts do not need to be linked to an account at a financial institution. In ECA,

despite the increasing use of mobile phones for financial services, the share of adults with mobile money accounts is very low, having risen from zero in 2014 to 3 percent in 2017.

*Use of the Internet for financial services*

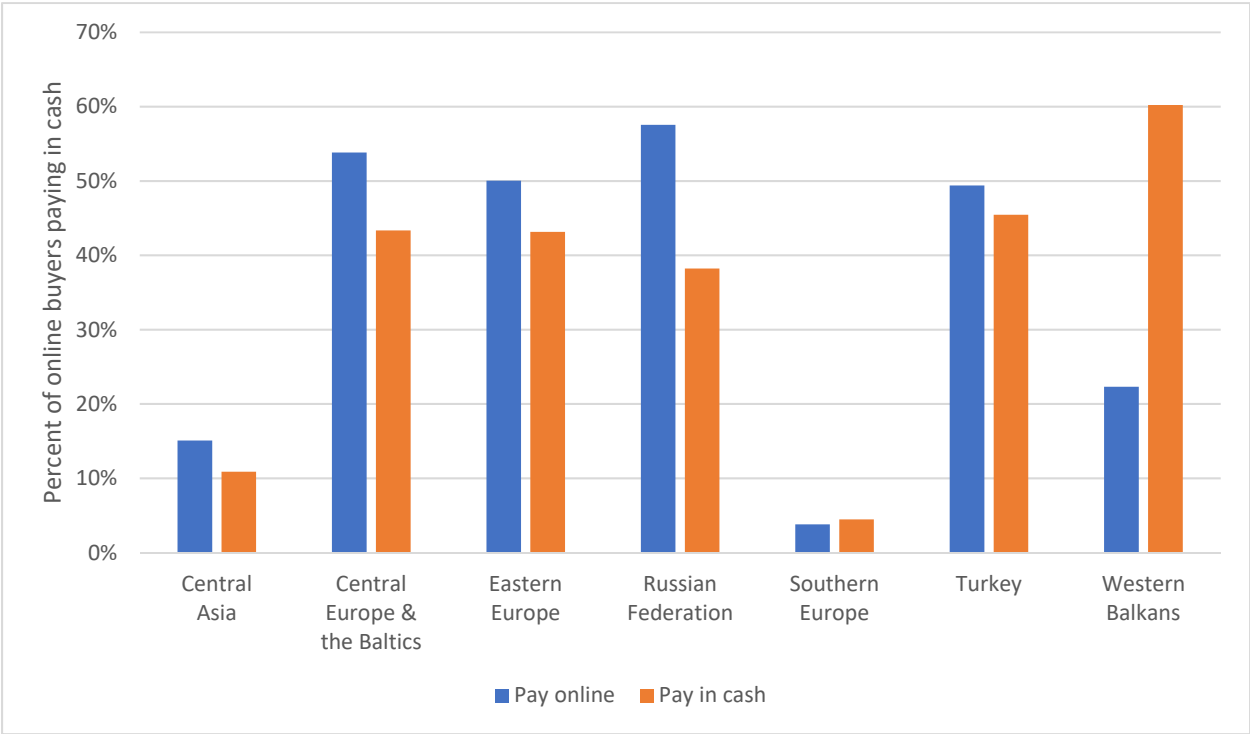
Globally, 29 percent of adults use the Internet to pay bills or make purchases online. The share ranges from 68 percent of adults in high-income economies to 49 percent in China and an average of 11 percent in developing economies excluding China. In the developing economies of ECA, the share grew from 14 percent in 2014 to 31 percent in 2017. In the euro area, the percentage increased from 48 percent to 69 percent.

Buying something online does not necessarily mean making the payment online. In all developing economies except China, 53 percent of adults who made a purchase online paid for it in cash on delivery. In China, by contrast, 85 percent of adults who made a purchase on the Internet paid for it online.

Within the ECA region, many people in Central Europe and the Baltic countries, Eastern Europe, Russia, Turkey, and the Western Balkans pay cash on delivery for online purchases (figure 8, panel a). For the region, 44 percent of Internet purchasers made their payment in cash on delivery in 2017. In some economies, such as Bosnia and Herzegovina, Bulgaria, Kosovo, and Serbia, more than two-thirds of online buyers paid in cash on delivery (figure 8, panel b). Countries in which relatively few people make their payment online when shopping on the Internet might learn from China’s experience expanding the coverage of online payment services and benefit from greater efficiency and convenience.

**Figure 8. Many online buyers in Europe and Central Asia paid for their purchases in cash in 2017**

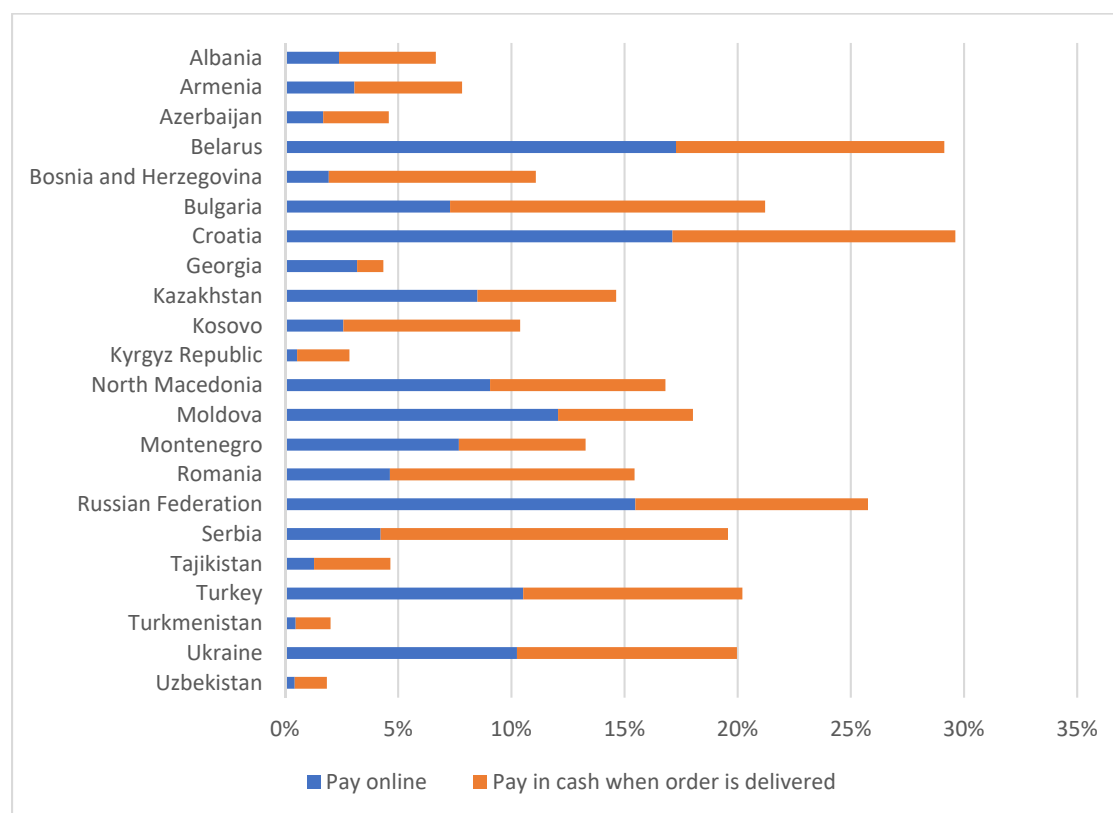
a. By subregion



Source: Global Findex database.

Note: Data for Northern Europe, the South Caucasus, and Western Europe are not available.

### b. By country



Source: Global Findex database.

Note: The length of the bars represents the percentage of adults aged 15 and above who report buying online.

## Informal Saving and Borrowing Is Prevalent in Developing Economies of ECA

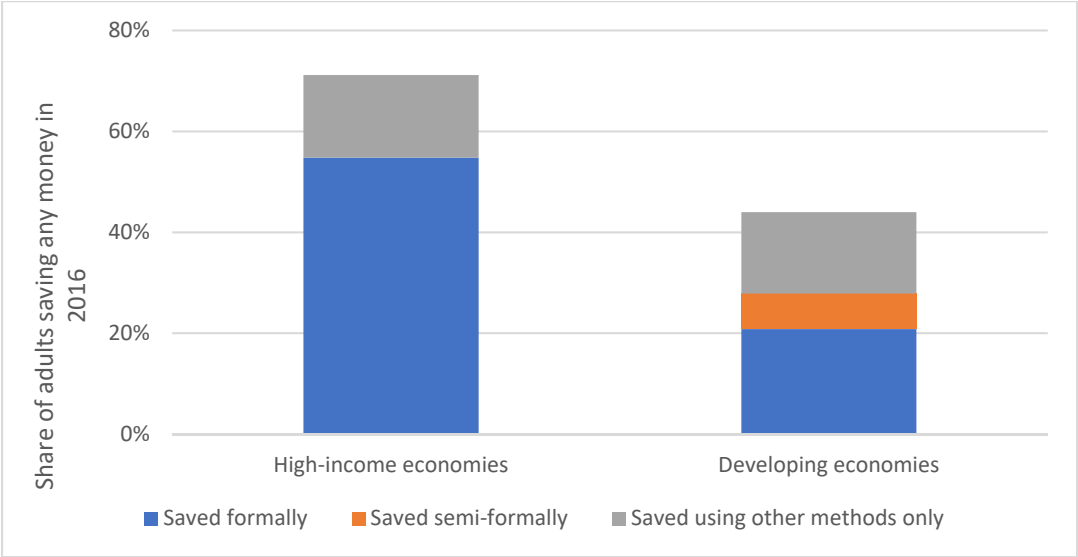
### Formal Saving

People save for future expenses and to be prepared to respond to uncertainties. They may save for a large purchase, investment in education or a business, financial needs in old age, or emergency expenses. To meet immediate expenses, they may borrow. Global Findex data show how and why people save and borrow and shed light on their financial resilience to unexpected expenses.

Formal saving is more common in high-income economies than in developing economies (figure 9). In 2017, 48 percent of the world's adults reported having saved or set aside money in the previous 12 months. The figure was 72 percent in high-income economies and 43 percent in developing economies. In high-income economies, more than 75 percent of savers (55 percent of all adults) save formally at a financial institution. In developing economies, slightly less than half of savers (21 percent of all adults) save formally. By contrast, in the developing economies of ECA, less than 40 percent of adults report having saved the previous year. Only 38 percent of savers (14 percent of all adults) saved formally at a financial institution. The share of adults who saved formally was only 7 percent in 2011 and 11 percent

in 2014. Low rates of formal saving are prevalent in most developing economies in ECA. Exceptions include Bulgaria, Croatia, and Turkey, where most savers save formally (figure 10).

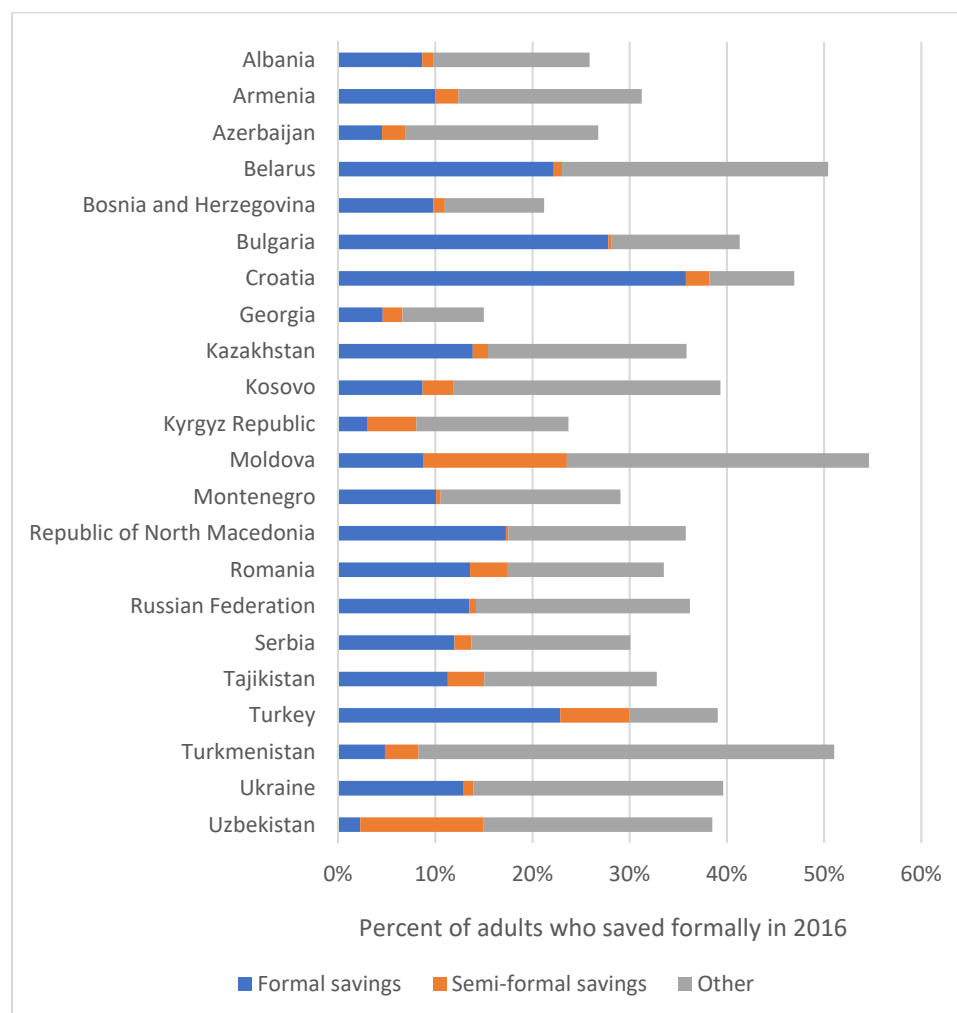
**Figure 9. Formal saving is more common in high-income economies than in developing economies**



Source: Global Findex database.

Note: People may save in multiple ways, but the categories here are constructed to be mutually exclusive. “Saved formally” includes all adults who saved any money formally. “Saved semi-formally” includes all adults who saved any money semi-formally but not formally. Data on semi-formal saving are not collected in most high-income economies. Semi-formal methods may include saving money with a savings club or a person outside the family.

**Figure 10. The share of adults who saved formally was low in most developing economies in Europe and Central Asia**



Source: Global Index database.

Note: The length of the bars represents the percentage of adults (aged 15 and above) who reported saving in any way in the previous 12 months.

In the euro area, 67 percent of all adults reported having saved in the past year. Seventy-three percent of savers (about half of all adults) saved formally. These shares are slightly lower than in an average high-income economy.

Globally, saving patterns vary by gender and income level. In developing economies, men are more likely than women to save formally. The average gender gap in the share of adults who saved formally was 6 percentage points in 2017. In the developing economies of ECA, the gender gap widened slightly, from 2 percentage points in 2014 to 3 percentage points in 2017. In the euro area, it remained stable, at about 6–9 percentage points, between 2011 and 2017.

Wealthier adults are more likely than poorer adults to save formally. Globally, the income gap between the top 60 percent and the bottom 40 percent was 23 percentage points in high-income economies and 15 percentage points in developing economies in 2017. In the developing economies of ECA, the income

gap widened, from 7 percentage points in 2014 to 9 percentage points in 2017. In the euro area, the gap stayed at about 20 percentage points between 2011 and 2017.

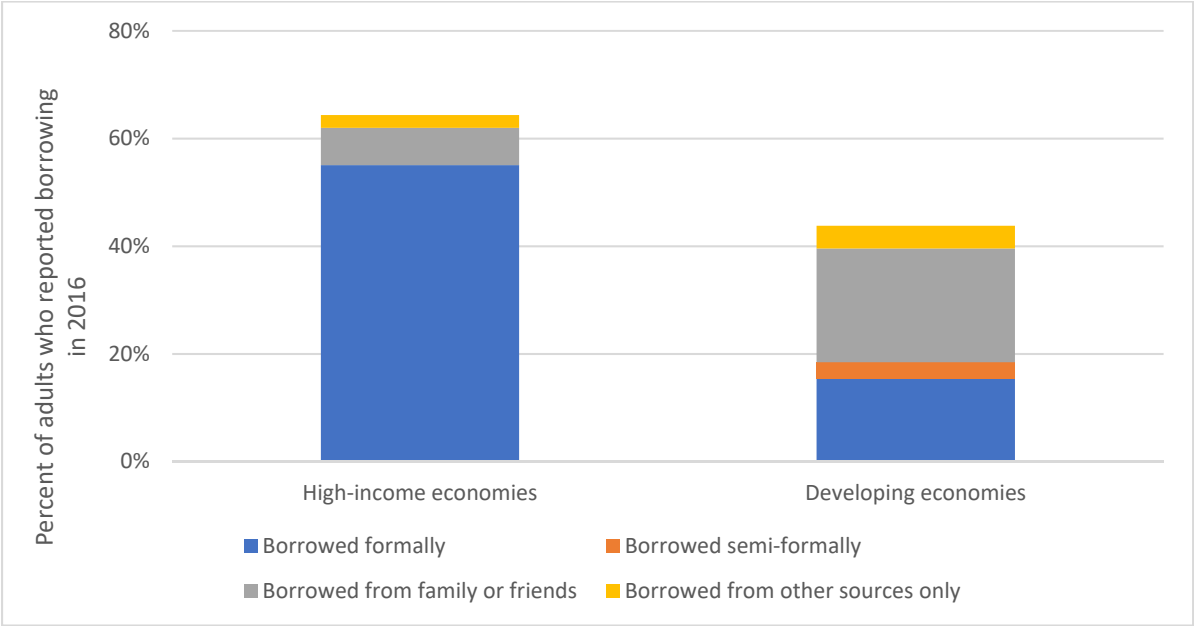
People save for different purposes. Nearly half of adults in high-income economies report saving for old age. In 2017, 16 percent of adults in developing economies and 38 percent of adults in the euro area reported doing so. In developing ECA, only 15 percent of adults reported saving for old age.

In 2014 only 4 percent of adults in the developing economies of ECA reported saving to start, operate, or expand a farm or business. The share rose to 8 percent in 2017, still lower than the global average of 14 percent.

*Informal Borrowing*

In 2017 about half of the world’s adults reported borrowing money the previous year. A larger share (64 percent) did so in high-income economies, where most borrowers rely on formal credit from financial institutions or credit cards. In developing economies, most borrowers rely on family and friends (figure 11).

**Figure 11. People in high-income countries rely on formal sources for borrowing, whereas people in developing countries tend to rely on family or friends**



Source: Global Findex database.

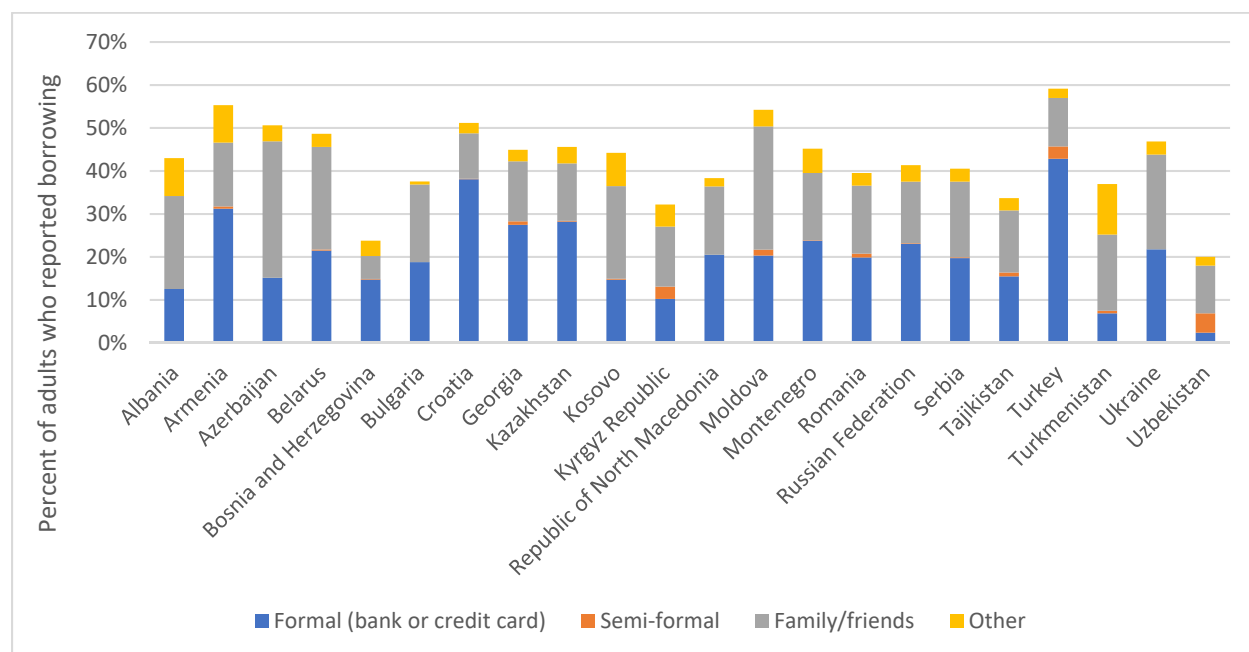
Note: People may borrow from multiple sources, but the categories here are constructed to be mutually exclusive. “Borrowed formally” includes all adults who borrowed any money from a financial institution or by using a credit card. “Borrowed semi-formally” includes all adults who borrowed any money semi-formally (from a savings club) but not formally. “Borrowed from family or friends” excludes adults who borrowed formally or semi-formally.

The borrowing pattern in ECA looks different from that in the rest of the world. In 2017, 55 percent of adults in the euro area reported having borrowed money the previous year. Forty-six percent reported that they borrowed money from a financial institution or by using a credit card; only 12 percent reported borrowing from friends or family. In contrast, in the developing economies of ECA, 44 percent of adults reported borrowing the previous year, with 24 percent reporting borrowing from friends or



family and about 24 percent reporting obtaining credit from a financial institution or using a credit card. The share of formal borrowing increased slightly (by 2 percentage points between 2014 and 2017), while the share of informal borrowing declined by 3 percentage points, though these changes are not statistically significant. Informal borrowing is common in the developing economies of ECA, except in Armenia, Croatia, and Turkey, where most borrowing is from a financial institution or credit card (figure 12).

**Figure 12. Informal borrowing is prevalent in most developing economies in the region**



Source: Global Findex database.

Note: The height of the bars represents the percentage of adults aged 15 and above who indicated borrowing in any way in the previous 12 months.

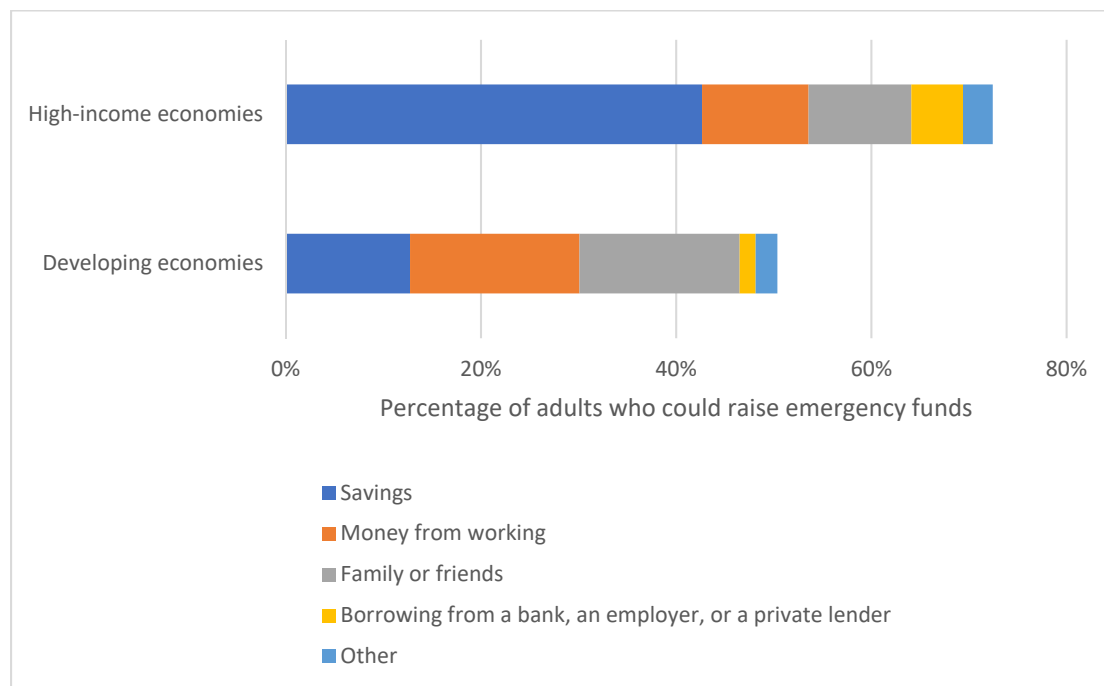
One common purpose of borrowing is to buy land or a home, the largest financial investment many people make. In 2017, 27 percent of adults in high-income economies reported having an outstanding housing loan from a bank or other type of financial institution. The share was less than 10 percent in developing economies. In the developing economies of ECA, the proportions were 13 percent in 2014 and 12 percent in 2017. In the euro area, the figures were 23 and 25 percent, respectively.

### Financial Resilience

The 2017 Global Findex survey provides information on financial resilience by asking respondents whether they would be able to come up with an amount equal to 1/20th of gross national income per capita in local currency within the next month. It also asks what their main source of funding would be.

The results show that adults in high-income economies are far more likely (73 percent) to say that they could raise emergency funds than are adults in developing economies (50 percent) (figure 13). Most respondents in high-income economies who report that they could come up with the emergency funds say that they would rely on savings, whereas most respondents in developing economies say that they would turn to family or friends or use money from working.

**Figure 13. Financial resilience is much higher in high-income countries than in developing economies**



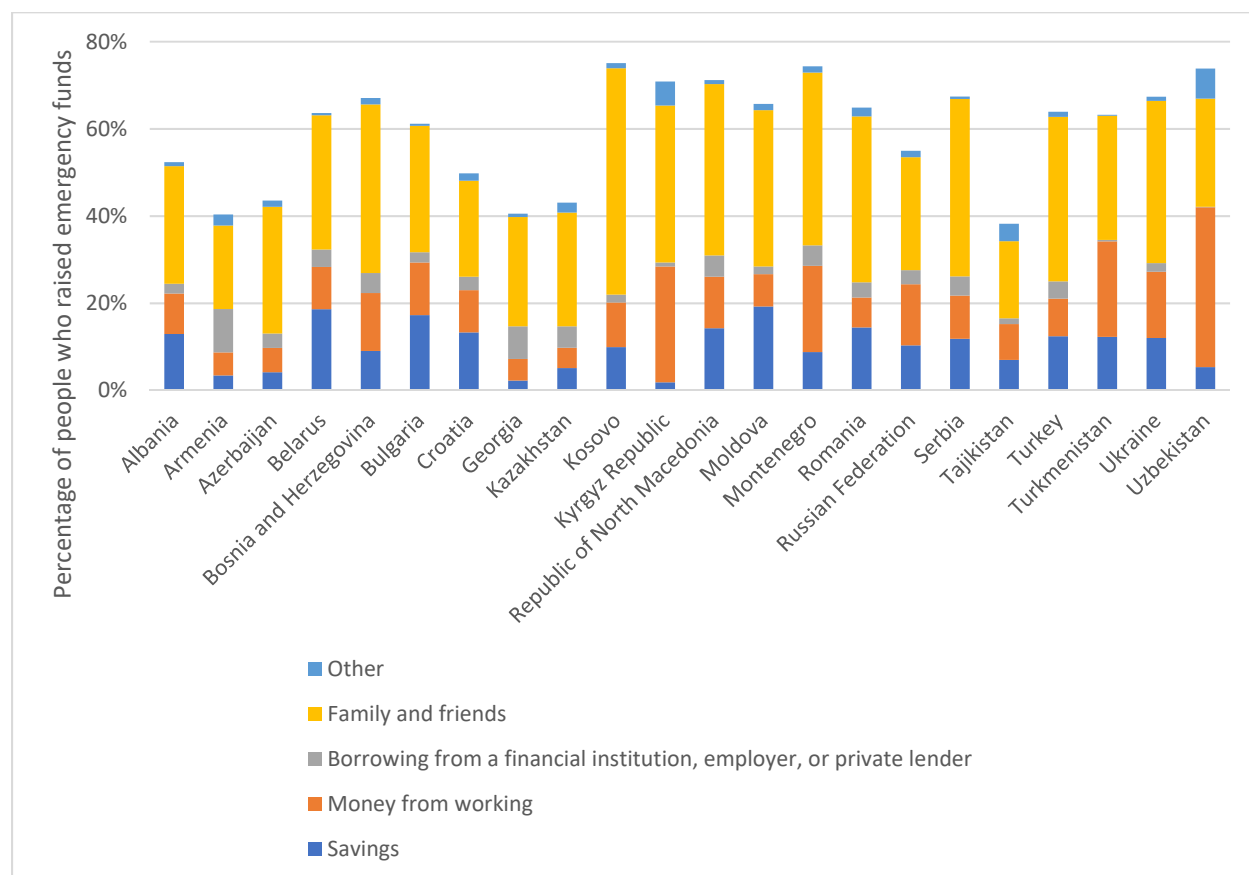
Source: Global Findex database.

Note: "Other" includes all respondents who chose "selling assets," "other sources," "don't know," or "refuse" as their response.

About two-thirds of adults in ECA reported that they would be able to come up with emergency funds. In the euro area, the share rose from 70 percent in 2014 to 76 percent in 2017. In the developing economies of the region, the share declined from 64 percent to 61 percent, though the decline is not significant. The gender gap in the share is about 6 percentage points, with men more likely to report that they could come up with emergency funds than women. This gap remained constant between 2014 and 2017.

When asked about their source of emergency funds, 52 percent of respondents in the euro area who reported that they were able to come up with the funds stated that the main source was their savings. In the developing economies of the region, the share was 18 percent. More than half of the adults in developing ECA who said they could come up with the funds reported that the main source of funding would be family or friends (figure 14).

**Figure 14. People in developing economies of Europe and Central Asia tend to rely on family and friends for emergency funds**



Source: Global Findex database.

Note: The height of the bars represents the percentage of adults aged 15 and above that report being able to come up with the equivalent of 5 percent of Gross National Income per capita in a month.

## Digital Technology Provides Opportunities to Enhance Financial Inclusion

Remarkable progress has been made in expanding financial inclusion in ECA. Account ownership has grown significantly in many countries, and the use of digital payments has picked up. There may be opportunities to enhance financial inclusion and encourage more account owners to use financial services (see box 2, on financial inclusion in the European Union). However, the behavior of account owners in ECA differs from that in other economies, because of issues related to culture, history, and trust.

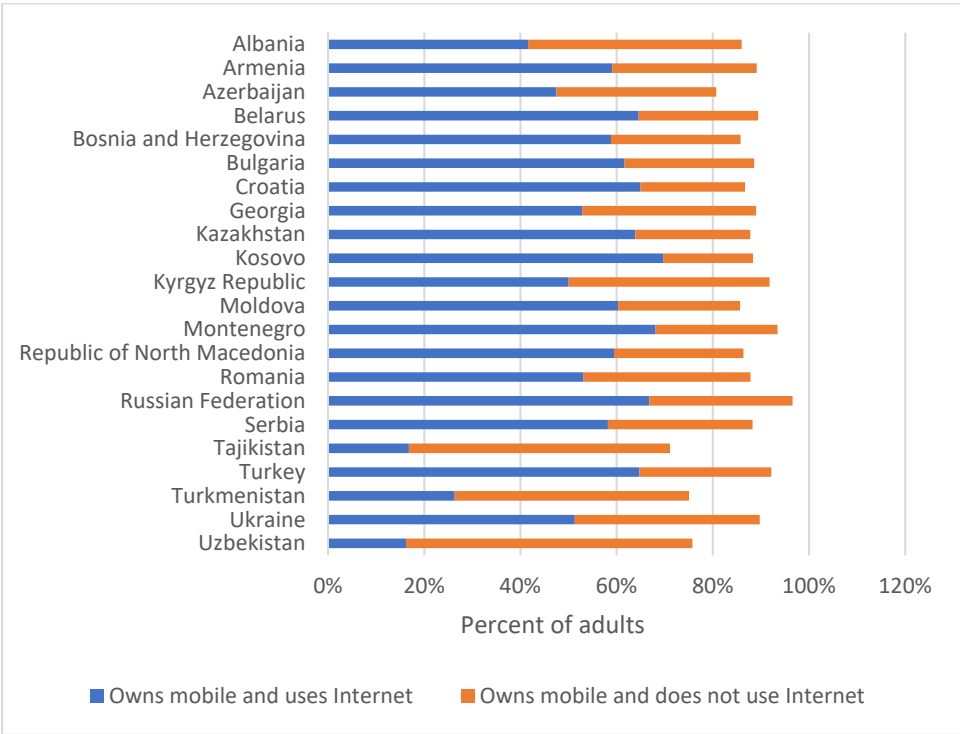
In some ECA countries, such as Russia and Turkey, the application of digital technologies in financial services has increased. In other countries, such application remains limited. There may be room for growth in the use of digital financial services, such as electronic payments and services associated with e-commerce.

Digital technology alone is not sufficient to increase financial inclusion, however. A well-developed payment system, good physical infrastructure, appropriate regulations, and strong consumer protection safeguards must be in place. And financial services need to be tailored to the needs of disadvantaged groups, such as women, low-income families, and first-timer users of financial services, who may lack literacy and numeracy skills.

Lessons from advanced economies and other emerging and developing economies may be useful for ECA economies. In China, for example, third-party online payment systems, such as Alipay or WeChat, linked to bank accounts have enabled consumers to access their accounts efficiently using a mobile device. Mobile money accounts are widely used in Africa. Mobile phone carriers can provide financial services. Digital technologies may lower the cost of financial services and make them more affordable.

Globally, about 1.1 billion—or about two-thirds of all unbanked adults—have a mobile phone. In India and Mexico, more than half of the unbanked have one; in China 82 percent do. In the developing economies of ECA, 83 percent of the unbanked—some 95 million adults—have a mobile phone. Providing unbanked mobile phone users with Internet access and digital financial services could be key to expanding financial inclusion. In Central Asia and Albania, about half of mobile phone owners do not use the Internet (figure 15). Allowing them online access to financial services could significantly improve financial inclusion.

**Figure 15. More than 80 percent of the unbanked in Europe and Central Asia owned mobile phones in 2017, creating opportunities for financial inclusion**



Source: Global Findex database.

Note: The length of the bars represents the percentage of adults aged 15 and above who report owning a personal mobile phone.

## Policy Makers Can Increase Account Ownership and Use in Various Ways

Governments and businesses could help dramatically reduce the number of unbanked adults by moving routine cash payments into accounts. Such payments could include public sector wages, public pensions, and government transfers of social benefits. Globally, digitizing such payments could reduce the number of unbanked adults by up to 100 million (Demirgüç-Kunt and others 2018). Many unbanked adults have the basic technology to receive payments digitally. Of the 60 million unbanked adults worldwide who receive government transfers in cash, two-thirds have a mobile phone.

Digital payments have played an important role in boosting financial inclusion in ECA. About 1 in 6 account owners opened their first account with a financial institution to receive digital government payments. The share of adults in the region receiving government wages, pensions, or social benefits is twice the developing world average—and two-thirds of recipients receive their payments digitally.

More can be done. Nearly 25 million unbanked adults in ECA receive government payments in cash—and 75 percent of them have a mobile phone. Moving public sector pension payments into accounts would reduce the number of unbanked adults in the region by up to 20 million, including 8 million in Russia alone. In the private sector, about 19 million unbanked adults receive their wages in cash—and more than 90 percent of them have a mobile phone. About 15 million unbanked adults receive agricultural payments in cash—and more than 90 percent of them have a mobile phone.

Although financial inclusion starts with providing the unbanked with an account, the benefits come from actively using the account for saving, managing risk, borrowing, and making or receiving payments. The Global Findex database reveals many opportunities to help account owners make better use of their accounts. These benefits are considerable in ECA, given the ample room for promoting account use. For example, 80 million adults in ECA are banked but still pay utility bills in cash—and 95 percent of them own mobile phones. Digitizing these payments would improve usage.

## Future Directions of Our Work

Our analysis of financial inclusion across the region reveals many interesting issues deserving of future research.

First, how can the trust issue—which impedes financial inclusion, particularly the low levels of formal savings—be addressed?

Second, what explains the differences across ECA countries in recent advances in financial inclusion? Why, for example, have Armenia, Georgia, the Kyrgyz Republic, Moldova, and Tajikistan shown significant increases in account ownership over the past three years while their neighbors, Azerbaijan and Uzbekistan, have not? What role do digitalization and technology play in explaining the different experiences?

Third, how can we explain and address the observed disparities in financial inclusion across subregions within countries, such as Romania? Could credit unions and cooperative banks play a role in reaching remote rural areas? Again, what role can technology play?

Fourth, how does financial inclusion and the spread of financial technology affect the development of entrepreneurship and the resilience of micro-, small, and medium-size enterprises to financial shocks? How do fintech regulations influence these developments?

Fifth, what can be done to reduce the gender gaps in account ownership in some of the region's countries, particularly Turkey, where the difference is 29 percentage points? How can we promote greater inclusion of Turkish women in the financial sector?

Finally, what role do financial literacy and consumer protection play in addressing these issues? Can we generalize the lessons from our successful engagement in countries in the region, for example Russia?

This is an exciting agenda and we will continue to address these and other questions and more in the coming years in the Europe and Central Asia region.

### **Box 1. Financial inclusion in Turkey: Insights from the 2017 Global Findex Survey**

- 69 percent of adults in Turkey have an account, up from 57 percent in 2014.
- 83 percent of men but only 54 percent of women have an account, a gender gap that is roughly three times the average in developing economies.
- 64 percent of adults make or receive digital payments, up from 48 percent in 2014. Part of the increase may reflect the increased use of debit cards, which 39 percent of adults use, up from 24 percent in 2014.
- 23 percent of adults save at a formal financial institution, up from 9 percent in 2014. On average, men are 9 percentage points more likely than women to save.
- 19 percent of unbanked adults cite religious concerns as a reason for not having an account—the same percentage that cites high costs. Just 1 percent of adults report religious concerns as their sole reason for not having an account.
- 72 percent of unbanked women (and 51 percent of unbanked men) indicate that one reason they do not have an account is that one of their family members already has one. In the developing world overall, a quarter of the unbanked cite this reason, with no difference between men and women.
- 89 percent of unbanked women (and 65 percent of unbanked men) are out of the labor force.
- 5 percent of unbanked women are wage-employed and 6 percent are self-employed.
- Roughly 15 million unbanked adults in Turkey have mobile phones—including 88 percent of unbanked women—suggesting possible opportunities to increase financial inclusion by moving routine cash payments into accounts.
- About 1 in 10 unbanked women in Turkey—1.3 million women—send or receive domestic remittances in cash or through an over-the-counter service. Expanding the reach of mobile remittances could have benefits that go beyond convenience. Research shows that mobile transfers help people survive financial shocks by making it easier to collect money from faraway relatives when times are tough.
- Roughly one in six unbanked women in Turkey saves using semi-formal methods. If those savings were moved into accounts, up to 2 million unbanked women could join the formal financial system.
- 30 percent of women who have an account still pay utility bills in cash, including 5 million women who have mobile phones. Getting these financially included adults to use their accounts more often would help expand access to financial services.

## Box 2. Financial inclusion in the European Union: Insights from the 2017 Global Findex Survey

- Account ownership varies across EU member states. In Western European countries, such as France, Germany, and the Netherlands, account ownership is virtually universal. Account ownership is lower in some Eastern and Central European economies. The share is roughly 80 percent in the Czech Republic and the Slovak Republic and about 75 percent in Bulgaria and Hungary. In Romania just 58 percent of adults have an account, the lowest share in the European Union.
- Gender gaps are rare in the European Union. In the Czech Republic, Hungary, and Romania, men are roughly 6 percentage points more likely than women to have an account, a gap similar to the average global gender gap.
- Income gaps are evident in some EU countries with relatively low account ownership. Among adults in Bulgaria from the poorest 40 percent of households, 55 percent have an account; for adults in the richest 60 percent of households, the share is 84 percent. In Romania 71 percent of wealthier adults have an account—nearly twice the share among poorer adults.
- Use of digital payments varies widely within the European Union. In Denmark and the Netherlands, virtually all adults make or receive digital payments. The share is about 80 percent in Croatia, Cyprus, and the Czech Republic; about 70 percent in Greece and Hungary; about two-thirds in Bulgaria; and about half in Romania. Use of mobile phones and the Internet to make digital financial transactions is highest in Denmark, Finland, and Sweden (80 percent) and lowest in Greece (18 percent) and in Bulgaria and Romania (about 10 percent), among ECA countries with available data.
- With the European Union, the share of adults formally saving is highest in Sweden, at 75 percent. About 60 percent of adults formally save in Denmark, Luxembourg, and the Netherlands. In contrast, only about half of adults in France and Italy and a quarter of adults in Bulgaria and Hungary save formally, and the share in Romania is only 14 percent.
- Digitizing payments could increase account ownership. Many unbanked adults have mobile phones, making it easy to adopt digital financial products. In Romania roughly 1 million unbanked adults work in the private sector, get paid in cash, and have a mobile phone. Increasingly, these workers are employed by multinationals or in global value chains. In Bulgaria and Hungary, more than 40 percent of unbanked adults receive government payments—wages, social benefits, or pensions—in cash. In Romania about 3 million unbanked adults fall into this category.
- There is also room to increase the use of accounts among adults who are already financially included. In Italy about 9 million adults pay utility bills in cash despite having an account and owning a mobile phone. The number is about 3 million in Greece and in Germany.



## Annex Survey Methodology

In 2011 the World Bank – with funding from the Bill & Melinda Gates Foundation – launched the Global Findex database, the world’s most comprehensive data set on how adults save, borrow, make payments, and manage risk. Drawing on survey data collected in collaboration with Gallup, Inc., the Global Findex database covers almost 150,000 people in 144 economies—representing more than 97 percent of the world’s population.<sup>2</sup> The initial survey round was followed by a second one in 2014 and by a third in 2017.

The 2017 survey was carried out over the 2017 calendar year by Gallup, Inc., as part of its Gallup World Poll, which since 2005 has conducted annual surveys of approximately 1,000 people in each of more than 160 economies, in more than 150 languages, using randomly selected, nationally representative samples. The target population is the entire civilian, noninstitutionalized population age 15 and older.

### *Interview Procedure*

Surveys are conducted face to face in economies where telephone coverage represents less than 80 percent of the population or where doing so is the customary methodology. In most economies, 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 the primary sampling units. These units are stratified by population size, geography, or both; 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. Each eligible household member is listed, and the handheld survey device randomly selects the household member to be interviewed. For paper surveys, the Kish grid method is used to select the respondent.<sup>3</sup> In economies where cultural restrictions dictate gender matching, respondents are randomly selected 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

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<sup>2</sup> For a list of the economies included, see table A.1 in the 2017 Global Findex Database, “Measuring Financial Inclusion and the Fintech Revolution” (Demirgüç-Kunt and others 2018). It shows the data collection period, the number of interviews, the approximate design effect, and the margin of error for each economy as well as sampling details, where relevant.

<sup>3</sup> The Kish grid is a table of numbers used to select an interviewee. First, the interviewer lists the name, gender, and age of all permanent household members age 15 and older, whether or not they are present, in order by age. Second, the interviewer finds the column number of the Kish grid that corresponds to the last digit of the questionnaire 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.

birthday or household enumeration method. At least three attempts are made to reach a person in each household, spread over different days and times of day.

#### *Data Preparation*

Data weighting is used to ensure a nationally representative sample for each economy. Final weights consist of the base sampling weight, which corrects for the 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.

Additional information about the Global Findex data, including the complete database, can be found at <http://www.worldbank.org/globalindex>.

Additional information about the methodology used in the Gallup World Poll can be found at <http://www.gallup.com/178667/gallup-world-poll-work.aspx>.

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