



ADB Working Paper Series

**OVERVIEW OF FINANCIAL INCLUSION,
REGULATION, FINANCIAL LITERACY,
AND EDUCATION IN CENTRAL ASIA
AND SOUTH CAUCASUS**

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Abstract

Financial inclusion and financial literacy are receiving increasing attention for their potential to contribute to economic and financial development while fostering more inclusive growth and greater income equality. In general, the progress of financial inclusion and financial development in the economies in Central Asia and the South Caucasus (CASC) has lagged that of other Asian economies, partly due to the disruptions and instabilities following the breakup of the Soviet Union in 1991. The purpose of this study is to survey the experiences of the CASC economies to assess factors affecting the ability of low-income households and small and medium-sized firms to access financial services, including financial literacy, financial education programs, and financial regulatory frameworks, and to identify policies that can improve their financial access while maintaining financial stability. It aims to identify successful experiences and lessons that can be adopted by other emerging economies.

Keywords: financial inclusion, financial literacy, financial regulation, consumer protection, banks, microfinance, insurance, pensions, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan, Central Asia, South Caucasus

JEL Classification: G21, G28, I22, O16, O17

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1. INTRODUCTION

Financial inclusion is receiving increasing attention for its potential to contribute to economic and financial development while fostering more inclusive growth and greater income equality. G20 leaders approved the Financial Inclusion Action Plan and established the Global Partnership for Financial Inclusion¹ in 2010 to promote the financial access agenda. Furthermore, the Asia-Pacific Economic Cooperation (APEC) Finance Ministers' Process has a dedicated forum looking at financial inclusion issues,² and the implementation of the Association of Southeast Asian Nations (ASEAN) Framework on Equitable Economic Development has made the promotion of financial inclusion a key objective (ASEAN 2014). Development organizations have been responsive as well; for example, the Asian Development Bank approved 121 projects (amounting to \$2.59 billion as of 2012) to support microfinance in Asia and the Pacific (ADB 2012). Many individual Asian economies have also adopted financial inclusion strategies as an important part of their overall strategy to achieve inclusive growth.

One key indicator of household access to finance is the percentage of adults who have an individual or joint account at a formal financial institution, such as a bank, credit union, cooperative, post office, or microfinance institution (MFI), or with a mobile money provider. According to the Global Findex database for 2017,³ which is based on survey interviews, the worldwide average for this measure is 69%, and the total number of adults without accounts is about 1.7 billion, down substantially from 2.7 billion in 2011, but still high. Asia's statistics show that there is still much to achieve toward access to finance, as East Asia, the Pacific, and South Asia combined account for over 40% of the world's unbanked adults, mainly in India and the People's Republic of China (Demirgüç-Kunt et al. 2018).

In general, the progress of financial inclusion and financial development in the economies in Central Asia and the South Caucasus (CASC) has lagged that of other Asian economies, partly due to the disruptions and instabilities following the breakup of the Soviet Union in 1991 (Yoshino and Morgan 2017). Since gaining independence from the Soviet Union, many CASC countries have experienced similar economic backgrounds. The populations lacked trust in financial institutions and were not ready to go through difficult procedures to get their services. Moreover, a number of financial crises have challenged CASC countries and their banking sectors. The global financial crisis had a spillover effect on all seven countries. In Tajikistan, the remittances of labor migrants fell from \$3.7 billion in 2013 to \$1.9 billion in 2016, which required major devaluation of the Tajik somoni. The fall of oil prices had negative shocks on the oil-exporting economies, leading to currency devaluations in Kazakhstan and Azerbaijan. Policies aimed at promoting financial inclusion and financial literacy generally have not been pursued as actively as in other Asian regions.

The purpose of this study is to survey the experiences of the CASC economies to assess factors affecting the ability of low-income households and small and medium-sized firms (SMEs) to access financial services, including financial literacy, financial education programs, and financial regulatory frameworks, and to identify policies that can improve their financial access while maintaining financial stability. It aims to identify successful experiences and lessons that can be adopted by other emerging

¹ Global Partnership for Financial Inclusion. <http://www.gpfi.org/>.

² The annual forum was held most recently in Viet Nam in July 2017.

³ See https://globalfindex.worldbank.org/#data_sec_focus

economies. The countries examined in this study are Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

2. DEFINITIONS OF FINANCIAL INCLUSION

Financial inclusion broadly refers to the degree of access of households and firms, especially poorer households and SMEs, to financial services. However, there are important variations in term usage and nuance. The World Bank defined financial inclusion as “the proportion of individuals and firms that use financial services” (2014, 1), while the Asian Development Bank stated that it is “ready access for households and firms to reasonably priced financial services” (2015, 71). Atkinson and Messy defined financial inclusion as:

the process of promoting affordable, timely and adequate access to a wide range of regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches including financial awareness and education with a view to promote financial well-being as well as economic and social inclusion (Atkinson and Messy 2013, 11).

The Alliance for Financial Inclusion (2010, 6) has “four commonly used lenses through which financial inclusion can be defined, in order of complexity: access... quality... usage... welfare”; and the vision of the Consultative Group to Assist the Poor (CGAP 2013, 4) is for “a world where everyone can access and effectively use the financial services they need to improve their lives [which] does not mean developing separate financial markets for the poor”. Finally, Chakraborty (2011) defines financial inclusion as “the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost in a fair and transparent manner by mainstream institutional players”.

The World Bank definition focuses on the actual use of financial services, while the other definitions focus more on the potential ability to use such services. Moreover, ‘access’ does not mean any kind of access, but implies access at a reasonable cost and with accompanying safeguards, such as adequate regulation of firms supplying financial services, and laws and institutions for protecting consumers against inappropriate products, deceptive practices, and aggressive collection practices. Of course, it is difficult to define ‘reasonable cost’ in cases where the amounts involved are small or information asymmetries exist. Therefore, a key question is the extent to which the government should subsidize such services or intervene in the market. This perspective also highlights the need for adequate financial education, as consumers cannot take proper advantage of access to financial services if they do not understand them properly.

The CGAP definition alludes to the issue of ‘mainstreaming’—that is, access to mainstream financial institutions. The positive effects of financial access may be limited if poor households are limited to specialized institutions and financial products, such as MFIs, which have unique aspects such as group responsibility and rigid payment schedules, but do not necessarily provide a stepping stone to more conventional financial access.

Access to financial services has a multitude of dimensions, reflecting the range of possible financial services, from payments and savings accounts to credit, insurance, pensions, and securities markets. Another important dimension is actual usage of such products and services; for example, campaigns to increase the number of bank accounts fail if those accounts end up being rarely or never used.

Finally, the concept of financial inclusion also implies financial exclusion, also known as being 'unbanked'. Financial exclusion is defined as not using any financial services or products of formal financial institutions, including MFIs. However, it is important to distinguish between those who, for whatever reason, do not wish to or need to use such services and products, and those who wish to use them but cannot do so due to insufficient funds, poor access, high costs, ignorance or lack of understanding, lack of trust, or identity requirements.

3. RATIONALE FOR FINANCIAL INCLUSION

There are various arguments in favor of greater financial inclusion. Poor households are often severely cash-constrained, so innovations that increase the efficiency of their cash management and allow them to smooth consumption can have significant impacts on welfare. Relying on cash-based transactions imposes many costs and risks; for example, the bulk of transactions can entail carrying large amounts of cash, possibly over long distances, which raises issues of safety. Also, many studies find that the marginal return to capital in SMEs is large when capital is scarce, which suggests that they could reap sizeable returns from greater financial access (Demirgüç-Kunt and Klapper 2013). This is particularly important in Asia due to the large contribution of SMEs to total employment and output.

Greater financial inclusion can also contribute to reducing income inequality by raising the incomes of the poorest income quintile (Beck, Demirgüç-Kunt and Levine 2007). It may also contribute to financial stability by increasing the diversity of, and thereby decreasing the risk of, bank assets and by increasing the stable funding base of bank deposits (Khan 2011; Morgan and Pontines 2014). Greater financial access can also support shifts by governments toward cash transfer programs rather than wasteful subsidies, and the greater transparency associated with electronic funds transfers can help reduce corruption.

A growing body of evidence suggests that access to financial services can reduce poverty, raise income, and promote economic growth. However, the conclusions are, in some cases, still tenuous, as many earlier studies relied on macro data, which were subject to numerous issues such as endogeneity and missing variables (see Honohan 2004; Beck, Demirgüç-Kunt, and Levine 2007; World Bank 2008). There has also been a large volume of research on the impacts of microfinance (McKernan 2003; Pitt et al. 2003; Kaboski and Townsend 2005), but the reliability of the results of many studies suffers from possible selection bias (Karlan and Morduch 2009). More reliable studies with randomized control trials or natural experiments are rare. Some found evidence that increased numbers of bank branches reduced poverty and raised income and employment levels (Burgess and Pande 2005; Bruhn and Love 2013). In fact, in a recent survey of the literature on the subject, the World Bank concluded that

Considerable evidence indicates that the poor benefit enormously from basic payments, savings, and insurance services. For firms, particularly the small and young ones that are subject to greater constraints, access to finance is associated with innovation, job creation, and growth. But dozens of microcredit experiments paint a mixed picture about the development benefits of microfinance projects targeted at particular groups in the population (World Bank 2014, 3).

Given that so much emphasis in the literature has been placed on microcredit, this assessment suggests caution in this area.

4. STATUS OF FINANCIAL INCLUSION FOR INDIVIDUALS AND SMES IN CASC

Table 1.1 gives an overall picture of the status of financial inclusion in the CASC countries by listing several main indicators from the World Bank and IMF surveys related to financial inclusion. It shows there is great variation in terms of the development of financial inclusion in the region, even though the levels of financial inclusion are generally low. Secondly, financial inclusion levels for individuals and firms are not necessarily similarly developed. For example, the percentage of firms with bank loans is higher in Armenia than in other countries, but the percentage of individual adults with formal accounts is lower than in Georgia and Kazakhstan. Use of digital financial services such as e-money or mobile phones is generally low, although increasing rapidly in a number of countries.

Table 1.1: Main Financial Inclusion Indicators for CASC Countries

	Armenia	Azerbaijan	Georgia	Kazakhstan	Kyrgyz Republic	Tajikistan	Uzbekistan
Branches of commercial banks per 100,000 adults*	23.1	10.7 [^]	32.7	3.0	8.4	5.0 ⁺	36.1
Automated teller machines (per 100,000 adults)*	61.1	32.7	74.3	74.0	31.2	9.1 ⁺	21.6
Share of adults with formal account (% age 15+) [#]	All adults	28.6	61.2	58.7	39.9	47.0	37.1
	Women	27.7	63.6	60.3	38.9	42.1	36.0
	Adults belonging to the poorest 40%	18.1	46.1	48.8	35.7	38.5	29.7
	Young adults (% ages 15–24)	12.6	30.7	36.9	27.0	49.3	20.9
Adults living in rural areas	20.2	55.1	56.7	39.1	46.3	34.4	
Saved at a financial institution in the past year (% age 15+) [#]	10.0	4.5	4.6	13.9	3.0	11.3	2.3
Borrowed from a financial institution in the past year (% age 15+) [#]	28.5	13.1	23.7	20.0	9.4	14.7	2.1
Firms with a bank loan or line of credit (%) ^{\$}	46.2	15.8	35.8	19.2	29.1	14.6	26.4
Small firms with a bank loan or line of credit (%) ^{\$}	30.9	15.6	30.4	15.0	24.6	15.1	26.4
Firms using banks to finance investments (%) ^{\$}	17.4	27.1	22.1	16.3	18.4	13.2	16.1
Firms using banks to finance working capital (%) ^{\$}	39.2	17.6	27.6	13.0	23.3	19.2	13.1
Made digital payments in the past year (% age 15+) [#]	39.8	12.9	29.6	38.2	28.6	40.3	33.6
Mobile phone used to pay utility bills in the past year (% age 15+) [#]	3.3	1.3	2.3	8.6	0.5	2.3	2.5
Mobile phone used to send domestic remittance in the past year (% age 15+) [#]	15.9	9.8	6.9	16.4	17.6	19.5	5.4

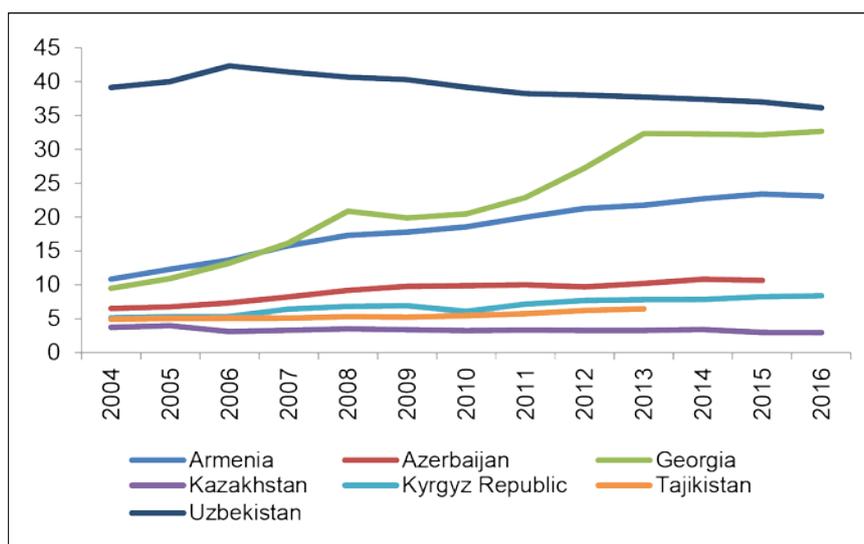
Sources: * IMF, Financial Access Survey, 2016; # World Bank Global Findex Survey, 2017; \$ World Bank Global Financial Development Database, 2013; + National Bank of Tajikistan (2016). [^] 2015; -- not available.

4.1 Banking Services

4.1.1 Banking Network

Figure 1.1 shows the penetration of bank branches in seven CASC economies since 2004. Aside from Uzbekistan and Kazakhstan, the other five countries in this region have seen gradual increases of bank penetration, although the levels in Azerbaijan, the Kyrgyz Republic, and Tajikistan are very low. Especially in Georgia and Armenia, the number of bank branches has increased rapidly since 2004. In 2015, the levels in Armenia, Georgia, and Uzbekistan surpassed the world average, which is 20 branches per 100,000 adults. The declining trend in Kazakhstan and Uzbekistan reflects the very slow rate of increase of branches relative to population growth.

Figure 1.1: Bank branch Penetration per 100,000 Adults



Source: IMF Financial Access Survey, available at (<http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C>), accessed 17 July 2018.

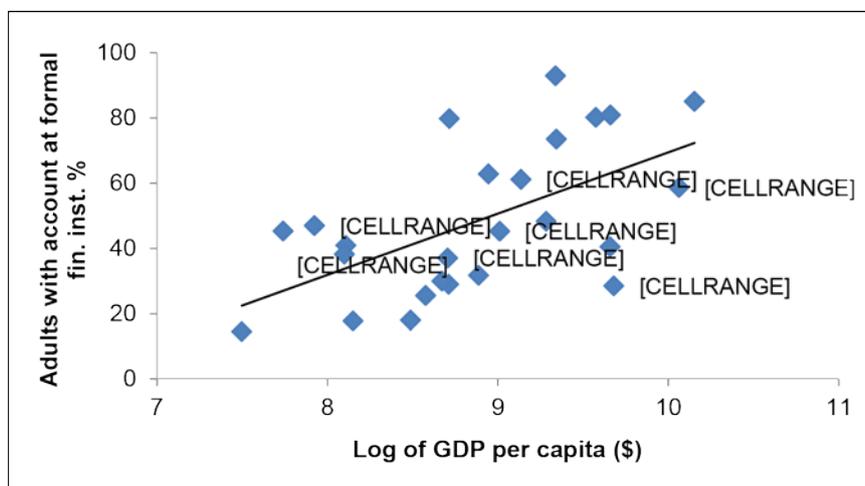
The distribution of automatic teller machines (ATMs) is somewhat different, with Armenia, Georgia, and Kazakhstan having significantly higher penetration than the other three countries (Table 1.1). Moreover, ATM penetration has been growing relatively rapidly in all the CASC economies, although in some cases from a very low base. The main issue is the extent to which the ATMs are concentrated in major cities rather than being distributed more evenly throughout the country. In Armenia, Georgia, and the Kyrgyz Republic, well over half of all ATMS are located in the three largest cities, while there are no breakdowns available for Azerbaijan, Tajikistan, and Uzbekistan (IMF 2018).

4.1.2 Accounts

The financial access of households in terms of the percentage of adults with an account at a formal financial institution tends to rise with per capita gross domestic product (GDP) using all Asian countries as the sample set. Most CASC economies lie relatively close to the trend line, except for Azerbaijan, which is well below it. There is still huge variation across countries in the CASC region (Figure 1.2). The large variation implies that other factors besides income play important roles, including overall financial development and regulatory, institutional, social, and geographic

factors. For example, Georgia has much higher deposit penetration than Uzbekistan or Armenia, even though per capita income levels are similar. Georgia, Tajikistan, and the Kyrgyz Republic lie modestly above the trend line, while other CASC economies lie below it, especially Azerbaijan, Kazakhstan, and Uzbekistan. Moreover, all CASC economies have penetration shares below 60%, except Georgia.

Figure 1.2: Relation of per Capita Gross Domestic Product to Formal Account Penetration for Adults, 2017



Unlabeled observations are for other Asian economies.

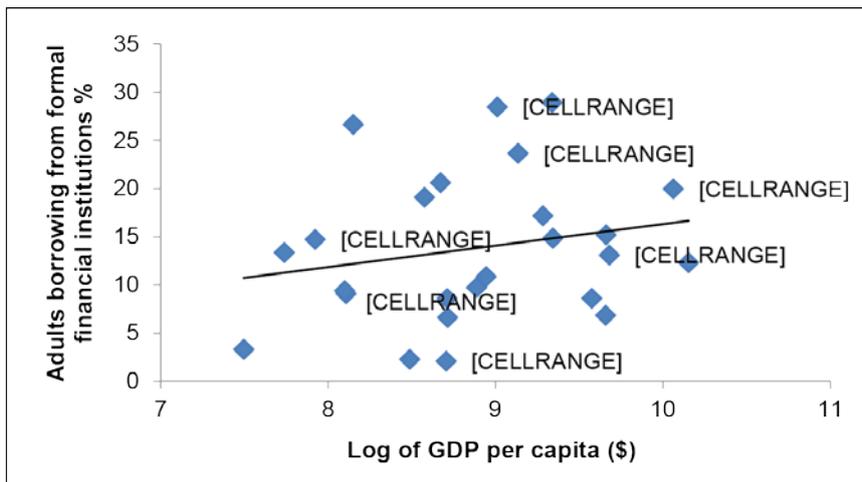
Source: World Bank Global Findex Survey (2018).

The fact that Azerbaijan has the lowest level of account penetration among adults (29%) despite having relatively high per capita income stands out as a puzzle. One explanation is the very low level of bank branch penetration, which, as shown in Figure 1.1, is much lower than in of Armenia, Georgia, and Uzbekistan. However, this cannot be the only explanation, as Kazakhstan, the Kyrgyz Republic, and Tajikistan have even lower levels of bank branch penetration. Table 1.1 shows that Azerbaijan has by far the lowest level of account penetration in the region among the poorest 40% of the population, young adults, and the rural population. This points to a great disparity of account access among the population and suggests that bank penetration in rural areas is very weak. The low level for Kazakhstan may reflect the high share of income from natural resources there.

4.1.3 Credit

Figure 1.3 shows that the relationship between per capita GDP and the share of adults obtaining loans from formal financial institutions is positively sloped based on data from Asian countries, but the relationship is weaker than that for accounts. Again, there is large variation in this region. Borrowing rates for Kazakhstan, Azerbaijan, and the Kyrgyz Republic are fairly close to the trend line, while those for Armenia and Georgia are much higher, and that for Uzbekistan is especially low. The low level for Uzbekistan appears mainly to reflect cultural and religious factors. According to the Global Findex survey in 2017, 30% of adults cite religious reasons for not using financial services.

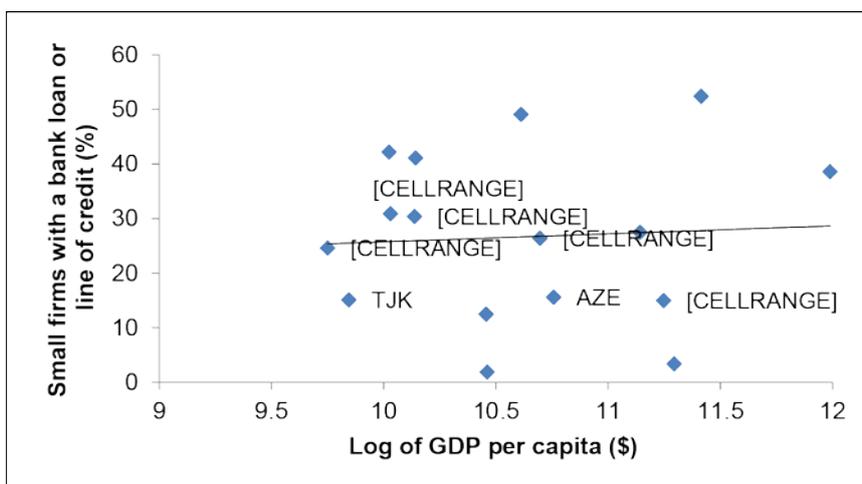
Figure 1.3: Relation of per Capita Gross Domestic Product to Loan Penetration for Adults, 2017



Unlabeled observations are for other Asian economies.
 Source: World Bank. Global Findex Survey (2016).

Figure 1.4 shows a relatively flat but modestly positive overall relationship between per capita GDP and the share of small firms with a line of credit, but, again, the CASC economies show a high degree of variation. Data are available for considerably fewer countries than for household financial access. Borrowing rates for Azerbaijan, Kazakhstan, and Tajikistan are well below average, while levels for the other four economies are close to the average. The low levels for Azerbaijan, Kazakhstan, and Tajikistan appear well correlated with the low levels of bank branch penetration shown in Figure 1.1.

Figure 1.4: Share of Small Firms with a Bank Loan or Credit Line, 2013

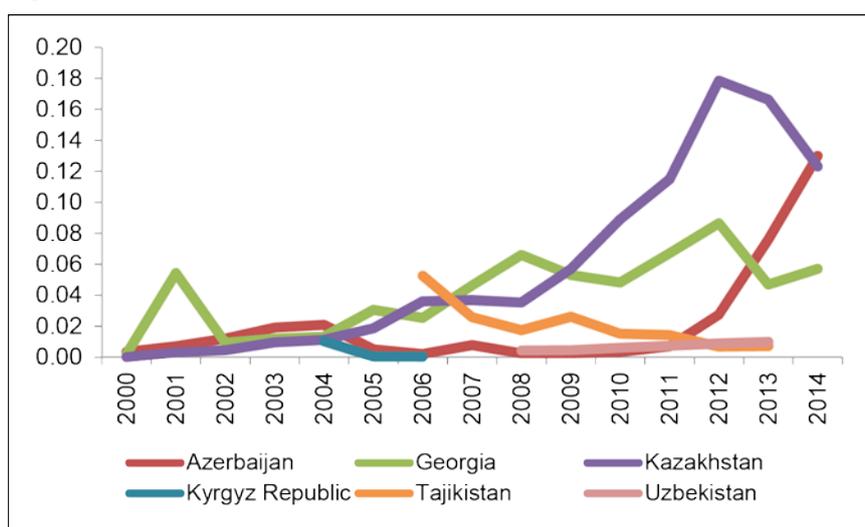


Unlabeled observations are for other Asian economies.
 Source: IMF International Financial Access Survey Database (2018).

4.2 Insurance

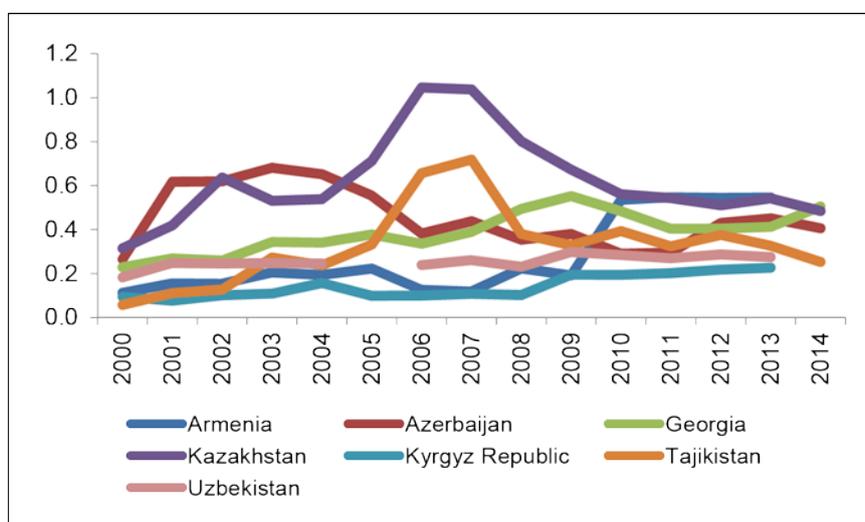
Use of insurance services remains very low in most of the countries in the CASC region. Most of the country studies find that their insurance markets are small and at the beginning stage. This is mainly due to the lack of information about most insurance products, the lack of trust in insurance companies, insufficient types of compulsory insurance, and the lack of control mechanisms for the sale of existing mandatory insurance products (Ibadoghlu, chapter 3). Figures 1.5 and 1.6 respectively show the value of insurance premiums of life and nonlife companies relative to GDP. In the life insurance market, aside from some increases in Azerbaijan, Georgia, and Kazakhstan, the ratio of premiums to GDP is very low. Life insurance premiums are growing rapidly in Azerbaijan, but fell significantly from their near-term peak in Kazakhstan. The ratio in other economies is quite small, lower than 0.06% in all cases.

Figure 1.5: Ratio of Life Insurance Premium Volume to GDP (%)



Source: IMF Financial Access Survey (2015).

Figure 1.6: Ratio of Non-Life Insurance Premium Volume to GDP (%)



Source: IMF Financial Access Survey (2015).

The nonlife insurance market is similarly small. The ratio for all countries is less than 0.6%, although Kazakhstan had ratios over 1% earlier. The non-life premium to GDP ratio in Azerbaijan decreased after 2003, while the ratios for Kazakhstan and Tajikistan decreased after 2007.

4.3 Pensions

In the CASC region, substantial efforts have been made to reform pension systems to secure their long-term adequacy and sustainability. The former defined-benefit pay-as-you-go systems inherited from the Soviet era, which financed retirement benefits with contributions by current workers, have lost sustainability due to increased aging of the populations in the CASC region (Schwarz and Arias 2014). Armenia, Kazakhstan, Tajikistan, and Uzbekistan have changed their systems to defined-contribution, funded pension plans, where mandatory individual accounts are a common requirement (SSA and ISSA 2015). Kazakhstan was earliest, adopting a fully funded, defined-contribution pension scheme in the mid-1990s (Kapparov, chapter 5). Georgia replaced its pay-as-you-go with a universal benefit social assistance program in 2013. Armenia introduced a new multi-pillar pension system in 2014 for people born after 1 January 1974.

The pension system coverage of workers is high in these former Soviet Union transition economies; however, it still covers mainly the formal labor sector, including the public sector. The lack of pension coverage of informal workers is a constraint on the social welfare system (Ahunov, chapter 8). In Armenia, Azerbaijan, and Kazakhstan, state-owned pension funds provide most or all of the pension coverage, and the market size of the private pension schemes is small. There are only three private pension schemes in Armenia as of 2017, and no private pensions in Azerbaijan and Kazakhstan.

4.4 Remittances

Remittances are an important source of income for households in CASC economies as many workers migrated from these countries to Russia and other economies. For example, the size of remittances in terms of GDP is around 30% in the Kyrgyz Republic, 27% in Tajikistan, 13% in Armenia, 10.5% to 12% in Georgia, and 2.7% in Azerbaijan. Due to the rapid growth of remittances, payment facilities and services have developed very fast in this region. For example, remittances to Armenia originating from Russia are mostly transferred through formal channels because of specialized banks providing low-cost money transfer services in Commonwealth of Independent States countries (Nurbekyan and Hovanessian, chapter 2). Informal remittance channels also exist, especially if the migrant workers are doing occasional jobs. According to the WBG Financial Capability Survey of Azerbaijan in 2015 (World Bank 2016), about one person in ten uses money transfer operators (MTO), predominantly from poor and large households in urban areas. While 12% of the population currently has money transfer products, more than one third has used such products in the past, and three out of four persons know about services offered by MTOs (Ibadoghlu, chapter 3).

4.5 Kinds of Financial Institution Involved

Inclusion-oriented financial institutions include MFIs, state-owned banks, post offices offering financial services, credit cooperatives, and international and community organizations. State-owned banks and governments often take the lead in initiating financial inclusion strategies and governing financial inclusion-related institutions. For example, the Azerbaijan government provides three different plans for SME financing. Other examples are the SME State Support Fund in Armenia, and the Nurly Zhol and People IPO programs in Kazakhstan, although the latter are aimed chiefly at retail stock investors only (see Table 1.2).

Table 1.2: Elements of Financial Inclusion Strategies

Country	Inclusive Financial Institutions	Subsidized Funding	Innovative Financial Products and Services	Innovative Delivery Technologies	Innovative Systems to Enhance Credit Access
Armenia	Banks, credit organizations, post offices	Small and Medium Entrepreneurship Development National Center of Armenia; government subsidies		e-Money, internet banking, mobile phone banking	Credit bureau
Azerbaijan	NBCIs, incl. Azerpost, credit unions, MFIs	Subsidized loans provided by National Fund for Support of Entrepreneurship (NFSE); Mortgage Fund; Azerbaijani Investment Company (AIC); State Agency for Agricultural Credits	Various insurance products	Mobile banking, electronic payment through national payment terminals: e-Manat, Million, etc.	Credit Guarantee Fund of Azerbaijan (OJSC); Draft law for a free collateral registry prepared in consultation with IFC
Georgia	Credit unions, MFIs		Supplementary pension saving system, P2P lending, and crowdfunding	Digital banking enabling e-payments, receiving deposits and transfers	Private credit bureau "CreditInfo Georgia"; public credit database
Kazakhstan	MFIs increasing fast in numbers; loan level still small, though	Interest rate subsidies and guaranteed loans	Microfinance	Electronic payments available with fairly wide usage	
Kyrgyz Republic	MFIs, credit unions	State mortgage companies (providing subsidized rates for public employees and farmers)	Micro-loans, collateral-free loans	Internet and mobile banking available yet not widely used	Credit bureau; State Guarantee Fund, new law on warehouse receipts
Tajikistan	MFIs, credit unions			Electronic payments and mobile banking available but not widely used	Credit guarantee fund, private credit guarantee facility
Uzbekistan	Banks, MFIs			Electronic payments, mobile banking, internet banking	Credit registries and public/private credit bureaus

Sources: Chapters in this volume.

Table 1.3 shows the breakdown of loans by type of financial institution as a percentage of GDP in the seven CASC economies. It shows that the lending landscape is clearly dominated by commercial banks and other depository institutions, mainly public sector banks.

Table 1.3: Outstanding Loans by Type of Financial Institution, 2016 (% of GDP)

Type of Institution	Armenia	Azerbaijan	Georgia	Kazakhstan	Kyrgyz Republic	Tajikistan	Uzbekistan
Commercial banks	41.8	44.2	55.1	30.4	20.4	15.1	26.4
Subtotal for SMEs	–	–	7.5	–	–	–	–
Credit unions and financial co-ops	–	–	0.0	–	0.2	–	–
MFIs	–	<1.0	4.4	0.2	2.2	3.1	0.1
Other deposit takers	3.3	–	–	–	–	–	–
Other depository corporations	–	–	55.1	–	20.6	–	26.4
Other financial intermediaries	0.2	0.8	–	3.4	–	–	–
Total	45.3	44.9	114.7	34.0	43.4	18.2	52.9

Note: Tajikistan data from National Bank of Tajikistan; – not available. There is no separate category of MFIs in Armenia.

Sources: Authors' calculations. Data from IFM Financial Access Survey, 2016; GDP data from World Bank WDI Database; Azerbaijan MFI data from Ibadoghlu, chapter 3.

There is great variation in the development of MFIs. MFIs have grown very fast in Kazakhstan, where, as of September 2017, there were 160 microfinance organizations registered, versus 136 at the beginning of 2017. In the first six months of 2017 the MFI loan portfolio increased by 30% and reached \$0.4bn, although this is still a tiny fraction of the total SME and retail bank loans of \$26 billion (Kapparov, chapter 5). In Georgia, the number of registered microfinance organizations increased dramatically from two in 2004 to 81 in 2016, while total assets of MFIs grew from 0.02% of GDP to 8% of GDP between 2006 and 2016, and loans reached 4.4% of GDP in 2016, the highest in the region (Babych, Grigolia, and Keshelava, chapter 4). By 2011, the number of MFIs and credit unions reached a peak of 651 units in the Kyrgyz Republic and the share of loans reached 8% of GDP (Hasanova, chapter 6). However, this share shrank to less than 3% of GDP by 2016 as a result of regulatory tightening and the conversion of some MFIs to bank status. In Tajikistan, MFIs have perhaps the highest share of total loans at 17.7%, partly reflecting the relatively low level of financial development there. In Uzbekistan, loans of MFIs have been rather stable—about 3% of commercial bank loans. On the other hand, as highlighted by the World Bank (2016), the non-bank credit sector is underdeveloped and offers limited credit opportunities for Azerbaijani SMEs, with total loans of less than 1% of GDP (Ibadoghlu, chapter 3). MFIs in Uzbekistan also have very small loans, only 0.1% of GDP (Ahunov, chapter 8). There is no separate legal or regulatory definition of microfinance organizations in Armenia, but the share in GDP of credit by credit organizations performing MFI activities rose from 0.3% in 2004 to 7.8% in 2016.

4.6 Inclusion-related Financial Products and Services

To promote financial inclusion, governments and credit organizations have provided various specialized products and services. Innovative products and services also include various microproducts, such as no-frills bank deposits, microcredit and microinsurance, agent banking, and microbranches. In Azerbaijan, agriculture-related financing products are provided, such as harvest insurance, index-based weather insurance, and index-based livestock mortality insurance. These products and services allow farm households to smooth fluctuations in household income due to seasonality and mitigate external risks associated with farming.

Most MFIs in the Kyrgyz Republic practice group lending. Over half of the credit portfolios of MFIs are group, collateral-free loans (from 53% to 71% of the total loans). Having restricted access to collateral, women became the majority of MFOs borrowers—on average 70% during 2006–2016. The accessibility of loans, simplified procedures of obtaining them, and branches in rural areas have made microfinance attractive for the low-income rural population. Relatively liberal laws inspired the establishment of over 650 MFIs; by 2011, MFIs' loans constituted almost a half of the total credit portfolio (Hasanova, chapter 6).

4.7 Innovative Delivery Technologies

Innovative delivery technologies, such as mobile phones, e-money, and internet banking, can also help bridge distances and save time. Digital banking services are developing very rapidly in the region, but from a very low base (Table 1.2). In Armenia, mobile phone, point-of-sale (POS), and non-cash transactions have been growing exponentially since 2012, albeit from a small base. The number of active mobile money accounts increased seven times from 2012 to 2016 (Nurbekyan and Hovanessian, chapter 2). Azerbaijan has introduced a national electronic payment system, which has led to a large increase in utilization. Mobile phone banking has also experienced an upsurge in Uzbekistan due to recent regulatory changes (Ahunov, chapter 8).

In Georgia, the most commonly used technologies include internet banking, telephone banking, mobile banking, and SMS banking. Georgians actively use electronic payments to pay public utilities and purchase goods (Babych, Grigolia, and Keshelava, chapter 4). According to the survey by the IFC (IFC 2014), in Tajikistan, very few types of banking service are currently available online; the software used by banks and MFIs does not allow some operations to be implemented (Mogilevskii and Asadov, chapter 7). Nonetheless, several Tajikistani MFIs have started using payment service provider (PSP) terminals for loan repayment.

5. BARRIERS TO FINANCIAL INCLUSION

Barriers to financial inclusion can be classified as supply side, demand side, and institutional aspects. Supply-side barriers reflect limitations in the capacity or willingness of the financial sector to extend financial services to poorer households or SMEs. These can be further subdivided into three categories: market-driven factors, regulatory factors, and infrastructure limitations.

Market-driven factors include aspects such as relatively high maintenance costs associated with small deposits or loans, high costs associated with providing financial services in small towns in rural areas, lack of credit data or usable collateral, and lack of convenient access points. The provision of financial services in rural areas can pose particular problems in countries with geographically difficult to reach rural areas, which leads to a high cost of financial services. In Georgia, for example, the cost of providing services outside major cities is high, particularly for MFIs whose clients are mainly lower-income households. Six percentage points of the interest rate for MFIs on household loans can be attributed to operational cost requirements (Babych, Grigolia, and Keshelava, chapter 4).

The lack of credit data and reliable financial records also worsens the problem of information asymmetry that discourages banks from lending to poorer households and SMEs. This leads to the expansion of the informal credit sector. In the Kyrgyz Republic, the shadow economy is estimated at 40% of GDP, and many entrepreneurs operate

in the quasi-formal sector (Hasanova, chapter 6). Not having transparent accounts and activities prevents entrepreneurs from getting sufficient finance, while persons receiving informal wages cannot prove their creditworthiness and must borrow from pawnshops or relatives.

Regulatory factors include capital adequacy and supervisory rules that may limit the attractiveness of small deposits, loans, or other financial products for financial institutions. Strict requirements regarding the opening of branches or ATMs may also restrict the attractiveness of doing so in remote areas. Identification and other documentation requirements are important, both with respect to know-your-client requirements and monitoring of possible money laundering and terrorist-financing activities, but these can pose problems for poor households in countries that do not have universal individual identification systems. Regulatory requirements, such as restrictions on foreign ownership and inspection requirements, can also restrict the entry of MFIs. Regulatory requirements need to be calibrated to be commensurate with the systemic financial risks posed by various financial institutions and the trade-off between financial stability and greater financial inclusion. In Tajikistan, for example, the regulators tend to be slow to understand market evolution, leading to a reluctance to experiment with new technology-based financial products (Mogilevskii and Asadov, chapter 7).

Infrastructure-related barriers include lack of access to secure and reliable payments and settlement systems, the availability of either fixed or mobile telephone communications, and the availability of convenient transport to bank branches or ATMs. Numerous studies have identified the lack of convenient transport as an important barrier to financial access (see, for example, Tambunlertchai 2015). This poses difficulties for reaching people living in rural and low-income areas, particularly in Kazakhstan, Armenia, and Tajikistan, where rural-urban disparities are large.

Demand-side factors include a lack of funds, lack of knowledge of financial products (i.e., financial literacy), and lack of trust. Lack of trust can be a significant problem when countries do not have well-functioning supervision or regulation of financial institutions, or programs of consumer protection that require adequate disclosure, regulation of collection procedures, and systems of dispute resolution. For example, in the Kyrgyz Republic, state institutions regulating the financial sector have the lowest level of trust after police services (Hasanova, chapter 6). The lack of trust is partly associated with the collapse of the Soviet Union which resulted in the loss of households' savings from the Soviet-era banks. The Government of Armenia has started to implement a promised compensation plan; however, the scarring effect of this episode remains (Nurbekyan and Hovanessian, chapter 2).

Lack of knowledge and low financial literacy are a general problem in this region. Low financial awareness, limited knowledge, and lack of financial attitude are serious problems in Georgia, Kazakhstan, Armenia, and Azerbaijan. This is discussed further in section 1.7.

Institutional barriers include the inefficiency of bankruptcy laws and high collateral requirements due to weak credit assessment systems. For example, the bankruptcy law does not function efficiently and is seldom used in Azerbaijan. In Azerbaijan, due to the absence of a collateral registry system for movable collateral (other than vehicles), most lenders require that real estate collateral covers a significant portion of the loan value, and several only accept real estate collateral in practice (Ibadoghlu, chapter 3). Collateral requirements are particularly high in Uzbekistan, and rank as the third important reason for firms not using formal finance.

6. REGULATORY FRAMEWORKS

Table 1.4 summarizes the major features of regulations related to financial inclusion in the subject countries, including regulatory agencies, identification-related measures, regulation of MFIs, regulation of lending (mainly interest rate caps), and consumer protection.

6.1 Institutions Responsible for Regulation

Central banks have major responsibilities in regulating and supervising banks and other financial institutions in all CASC countries except Azerbaijan. In Armenia, the central bank is the single financial regulator. In Azerbaijan, the Financial Markets Supervisory Authority supervises banks and non-bank credit institutions (NBCIs, including MFIs), the Ministry of Finance supervises insurance companies, the Tax and Civil Code Authority supervises leasing companies, and the Financial Market Supervisory Authority takes responsibility for consumer protection. In Georgia, the central bank supervises all depository and lending institutions. In Kazakhstan, the central bank is responsible for the regulation and supervision of banks, insurers, pension funds, investment funds, credit bureaus, and securities markets. In the Kyrgyz Republic, the central bank is the main regulator of financial institutions in the country. In Tajikistan, the central bank oversees licensing, regulation, and supervision and is authorized to issue normative acts for banks and MFIs, establish financial standards, impose sanctions and penalties, and request reports. In Uzbekistan, the central bank regulates both banks and MFIs.

Regulatory frameworks still have room for improvement. For example, in Tajikistan, supervision of financial institutions is still mainly compliance-based, with little focus on good governance and risk management. Regulation and supervision need to be strengthened to better manage credit, market, operation, concentration, interest rate, and liquidity risks, as well as to improve the corporate governance and internal control systems of the financial institutions. Adoption of international financial reporting standards, more advanced risk assessment tools, stress testing, and crisis management tools are among the main measures that need to be introduced (Mogilevskii and Asadov, chapter 7).

6.2 Licensing Status of MFIs

A consistent financial inclusion policy requires a coordinated regulatory approach. Microfinance organizations typically have greater restrictions imposed on them in terms of their activities compared with banks. Therefore, they tend to be regulated separately from the system for banks, which are typically supervised by the central bank or financial regulator, and are usually regulated more lightly than banks. This is particularly the case for Azerbaijan and Armenia. In Azerbaijan, the minimum required charter capital for registering an NBCI is only AZN 300,000, whereas for banks the amount is AZN 50 million. In Armenia, the regulations for banks are much more stringent.

Table 1.4: Regulatory Frameworks for Financial Inclusion in CASC Economies

Country	Regulatory Agencies	ID-related Measures	Regulation of MFIs	Lending Regulations	Consumer Protection
Armenia	Central Bank of Armenia (CBA) is the single financial system regulatory authority	Electronic ID cards and social cards	Credit organizations cannot take deposits; subject to lower capital requirements and fewer restrictions than banks; no legal definition of MFIs	Interest rate caps; only licensed institutions can lend	The Center for Consumer Rights Protection and Financial Education within the CBA; deposit insurance; Financial System Mediator (FSM)
Azerbaijan	Financial Markets Supervisory Authority (FMSA): banks and NBCIs (including MFIs); Ministry of Finance: insurance companies; Tax and Civil Code Authority: leasing companies		Law on non-bank credit organizations (2010); lower capital requirements for NBCOs than for normal banks; no specific law on MFIs	Interest rate cap at 15%	Financial Market Supervisory Authority
Georgia	National Bank of Georgia (NBG): commercial banks and non-bank financial institutions (excluding pawnshops and online loan providers); State Insurance Supervision Service of Georgia: insurance companies and pension schemes		Law on microfinance organizations: MFIs cannot take deposits but can borrow; pawnshops and online loans are regulated by the Civil Code of Georgia	Interest rate cap at 100%; total fee of loan must not exceed 150% of loan amount itself; limits on foreign currency loans	Reflected in lending regulations
Kazakhstan	National Bank of Kazakhstan (NBK): banks, insurers, pension funds, investment funds, credit bureaus, and securities markets. Based on the goals in the Concept for the Financial Sector Development of the Republic of Kazakhstan until 2030 (2030 Concept)		NBK Resolution No. 386 requires registration of MFIs	FinTech Association: voluntary threshold for MFIs of a maximum penalty for debtors of 300% of the principal balance	National law on consumer protection, but nothing specific on financial services; NBK tasked to establish call centers; Committee on Consumer Protection in Financial Services
Kyrgyz Republic	National Bank of the Kyrgyz Republic (NBKR)		Only credit unions and MFIs with license can take deposits; Law on Microfinance Organizations (2002); higher requirements on capital; restrictions on multiple lending; introduction of maximum level of fines	Interest rate cap at 15% over weighted average interest rate; minimal collateral size; maximum ratio of credit payments to borrower's income	Deposit insurance for all banks; a number of legislative acts to protect financial consumers' rights
Tajikistan	National Bank of Tajikistan (NBT)		Law on microfinance organizations (2012); NBT's regulations on three types of microfinance organization; among MFIs, only MDOs can take deposits	Caps on foreign exchange, interest rates, and risks	NBT consumer protection division
Uzbekistan	Central Bank of Uzbekistan (CBU) regulates both banks and MFIs		MFIs regulated by CBU (law on banks and banking)	Liberalized access to foreign exchange for small businesses and private individuals	Law on Protection of Consumer Rights

Sources: Chapters in this volume.

However, having a variety of lenders can spawn a multitude of regulatory frameworks, which can lead to inconsistencies and gaps. For example, in Azerbaijan, the Law on Non-Bank Credit Organizations (2010) defines the rules for the establishment, management, and regulation of non-bank credit institutions, with the aim of better meeting the demands of legal entities and individuals for financial resources and creating suitable conditions for access to financial services. The Law on Credit Unions (2000) determines the economic, legislative, and organizational bases for the establishment and operation of credit unions. Azerbaijan has laws for non-bank credit institutions rather than defined 'microfinance' laws, and allows a greater number of activities, although deposit-taking is expressly forbidden for non-bank credit institutions. In the Kyrgyz Republic, in response to the rapid growth of MFIs, the central bank has strengthened its regulation of MFIs since 2010 by raising capital requirements to reduce the number of non-working and small MFOs, restricting the amount of multiple lending, and introducing fines.

Table 1.4 shows that some countries do not allow some or all MFIs to take deposits. In Armenia, only banks can take deposits from natural and legal persons (Law on Microfinance Organizations 2002). In Azerbaijan, non-bank credit institutions (NBCIs) are divided into two groups: those with the right to accept collateral deposits and those without that right. In Tajikistan, the legislation identifies three types of MFI: microcredit deposit organization (MDO), microcredit organization (MCO), and microcredit fund (MCF). Of these three, only MDOs can offer deposit products. In Kazakhstan, MFIs need to obtain a banking license in order to take deposits. In the Kyrgyz Republic, only credit unions and MFIs with licenses can take deposits. In Tajikistan, MDOs are the only MFIs allowed to offer deposit products based on a license issued by the NBT. MFIs are not allowed to take deposits in Uzbekistan.

6.3 Risks Being Addressed by Regulation

Several types of risk are addressed by regulation on financial inclusion. The first is foreign currency risk. For example, in Georgia, loans of up to 100 thousand GEL for individuals (not legal entities) may be issued only in national currency. Loans that are issued in the national currency but indexed or linked to the foreign currency are not considered as national currency loans. This regulation aims to facilitate the de-dollarization of loans and further reduce foreign currency (FX) risks for borrowers (Babych, Grigolia, and Keshelava, chapter 4). Similarly, in Armenia, consumer credit can be extended only in local currency. In Tajikistan, capital requirements exist to control foreign exchange, interest rate, and other risks.

6.4 Consumer Protection

Consumer protection programs are seen as necessary supports for financial inclusion efforts, together with financial education and effective regulation and supervision of financial institutions. Consumer protection can help address the issue of trust as a demand-side barrier to financial inclusion. Consumer protection programs are at various stages of development in the CASC region.

Most countries in the region have issued laws to protect consumer rights (see Table 1.3). For example, in Uzbekistan, the State Committee on Privatization regulates consumer protection. In Kazakhstan, the national law on consumer protection covers consumer protection and access to safe and high-quality goods, but has nothing specific on financial services. The situations are similar for the Kyrgyz Republic and Georgia.

Other institutions also help consumers protect their rights. In Armenia, the Center for Consumer Rights Protection and Financial Education within the CBA is responsible for consumer protection. Its responsibilities include creating a legal system to assure consumer protection, promoting programs on financial knowledge and education, and operating consumer services websites and hotlines. In Tajikistan, the central bank has a customer compliance department which tracks customer complaints and feedback on financial institutions' activities. In 2017, the Office of the President of Uzbekistan started to directly receive consumer complaints using hotlines and online channels (Ahunov, chapter 8).

However, consumer protection seems less well developed in Azerbaijan, which has no functioning out-of-court dispute resolution system. The Financial Markets Supervisory Authority (FMSA), which has primary responsibility for protecting financial consumer rights, is still under development and has weak capacity (Ibadoghlu, chapter 3).

6.5 Deposit Insurance

Deposit insurance is widely implemented in the CASC region to protect bank depositors. Deposit guarantee funds are established in several countries to provide guarantees up to a certain amount of deposit.

The Deposit Guarantee Fund of Armenia is a non-commercial organization founded by the Central Bank of Armenia in 2005. The maximum amount covered by insurance for local currency deposits is 10 million drams (USD 20,700) and foreign-currency deposits are covered up to 5 million drams (Nurbekyan and Hovanessian, chapter 2). The Azerbaijan Deposit Insurance Fund (ADIF) was founded in 2007. It provides insurance only for depositors, not for investors. A deposit insurance scheme was launched in Georgia in 1 January 2018. According to the scheme, all bank deposits in Georgia are insured for up to GEL 5,000 (USD 2,066 equivalent) (Babych, Grigolia, and Keshelava, chapter 4).

In Kazakhstan, the Kazakhstan Deposit Insurance Fund (KDIF) provide guarantees for all retail deposits denominated in national currency up to 10 million tenge (USD 30,000). This threshold can incentivize big depositors to split their deposits between several banks and accounts to guarantee their safety (Kapparov, chapter 5). The Deposit Protection Agency of the Kyrgyz Republic was established in 2011.

In Tajikistan, the Deposit Insurance Fund (DIF) was established in 2003. Its assets reached TJS 260 million, or 6.3% of total deposits, as of the end of 2016. In Tajikistan, the deposit amount covered by the fund in case of bankruptcy of a credit organization has been increased from an initial TJS 7,000 to TJS 14,000 in 2015 and TJS 17,500 in 2017 (approximately \$2,100).

Uzbekistan has explicit deposit insurance that has covered all banks in the country since 2002. A blanket guarantee on deposits was implemented under a Presidential decree in November 2008 and, since October 2009 the statutory limit of 250 times the minimum wage has been removed (Demirgüç-Kunt et al., 2018).

6.6 Fintech-related Regulation

New delivery technologies, such as mobile phones and e-money, hold promise for promoting financial inclusion but need appropriate regulatory frameworks to achieve their potential while being consistent with financial stability and other regulatory requirements. In many cases, service providers are not banks, which makes a consistent approach more difficult. In Armenia, there are also no regulatory barriers

for innovative technologies, such as telephone banking. In Azerbaijan, according to the Global Innovation Index (GII) survey in 2017, Azerbaijan ranked 82nd among 127 countries. According to the 2016 FinTech Index Report, Azerbaijan is rated as having a relatively unstable political and regulatory environment, but a very supportive infrastructure and ecosystem for fintech (Ibadoghlu, chapter 3).

7. POLICIES TO PROMOTE FINANCIAL INCLUSION

7.1 National Strategy

The notion of financial inclusion is quite new to the CASC countries, but it is becoming a major goal for these governments, and the authorities are beginning to include it in their national strategies along with financial education. Overall, there have been no systematic financial inclusion strategies or policies in CASC countries, and there are few targeted policies now. Most government efforts in this area have only short-term effects.

Strategies are needed to set priorities and coordinate overall approaches to expanding financial inclusion. National-level strategies are most desirable, followed by strategies of the central bank, ministries, and/or financial regulatory bodies. Table 1.5 shows a range of approaches in the CASC region. The Kyrgyz Republic and Azerbaijan have the most well-articulated financial inclusion strategies, which are incorporated into their national economic planning strategies. Kazakhstan, Tajikistan, and Uzbekistan have long-standing policies to support SMEs' support programs, but no articulated national strategies for financial inclusion as such. In Armenia, some elements of a financial inclusion strategy are incorporated in the National Strategy for Financial Education.

Azerbaijan and the Kyrgyz Republic have included their policies for financial inclusion in their national development strategies. The Azerbaijan 2020 Vision highlights the role of entrepreneurship and SMEs in economic development, although it contains no specific strategies for financial inclusion. The microfinance sector/financial inclusion strategy has been developed by the Central Bank of Azerbaijan (CBAR) in consultation with all relevant departments, including Banking and Supervision, Credit Registry, Legal, Payments, Consumer Protection, Strategic Management, and Research. In the Kyrgyz Republic, the National Strategy for Sustainable Development 2013–2017 envisaged measures for SME development, improving access to long-term loans for women entrepreneurs, and a program for women's entrepreneurship development. In Armenia, the government established the Small and Medium Entrepreneurship Development National Center Fund (SME DNC) in 2002 to provide state support to SMEs, including resources allocated from the state budget and technical and financial assistance.

Nevertheless, there are gaps in the development programs and approaches in these countries. An absence of comprehensive and centralized implementation of the financial inclusion promotion programs can leave the strategies without significant results. Apart from common issues affecting the status of financial inclusion, each country has specific problems affecting development, ranging from dependency on remittances to credit excesses in some more advanced countries. In Azerbaijan, overdue credits have become excessive and there is a lack of policy to resolve this issue. There are gaps in legislation, especially related to the protection of financial rights of customers.

Table 1.5: Strategies and Programs for Financial Inclusion

Country	National	Central Bank	Ministries/Regulators	Private Sector
Armenia	SME State Support Programs implemented by SME Development National Center Fund; pension reform in 2014	Various strategies and initiatives targeting different financial inclusion dimensions (financial infrastructure, system mediator, guarantor fund, consumer right protection, etc.)	Moveable Collateral Registry (MoJ); Agriculture insurance pilot program (MoA)	
Azerbaijan	Azerbaijan 2020 Vision and other programs highlight the role of entrepreneurship and SMEs; Strategic Roadmap for Development of Financial Services in the Republic of Azerbaijan' but no specific strategies for financial inclusion	Microfinance sector and financial inclusion strategy	SME subsidy programs under Economy Ministry; also Presidential Decree of 17 September 2017	Azerbaijan Microfinance Association (AMFA)
Georgia	No comprehensive national financial inclusion plan; SME development included in Georgia 2020 Socio-Economic Development Program; SME Development Strategy of Georgia 2016–2020	NBG received major grant from IFC in 2014 to increase access		Several projects to improve financial inclusion with international funding, implemented by Credo Microfinance, FINCA Bank, TBC Bank
Kazakhstan	People's IPO program to increase investments and retail saving ; unification of pension funds; 1 Trillion Tenge and Nurly Zhol programs in 2014–2017 to promote infrastructure and SME lending; DAMU Entrepreneurship Development Fund			
Kyrgyz Republic	Microfinance development strategies (2006–2010, 2011–2015) and other mid-term programs; Law on State Support for SMEs			
Tajikistan		Signatory to Maya Declaration toward engaging 30% of the population in the formal financial sector, particularly through digital services		Several programs aiming at specific groups of beneficiaries
Uzbekistan			Credit Bureau, National Collateral Registry to support lending	Uzbek Association for Microfinance Institutions and Credit Unions

Sources: Chapters in this volume.

7.2 Specific Strategies

Central banks, ministries, and other regulatory authorities have implemented various specific strategies and policies targeting different dimensions of financial inclusion. These include accessibility, electronic ID, innovative products and services, credit databases, credit guarantees, and subsidies. Some examples are described below.

7.2.1 Accessibility

Accessibility refers to all possible ways, including ATMs and remote access channels, that enable a customer to select and use any financial service. Penetration heavily depends on the availability of financial and ICT infrastructures in urban and rural areas, income levels, and education. Kazakhstan and Tajikistan are very active in launching mobile banking, and mobile devices provide convenient product usage in any part of the country. However, in Tajikistan, only a few types of operation are currently available.

7.2.2 Electronic ID

Electronic IDs are not much developed in the CASC region. The main example is electronic ID cards and social cards in Armenia. The voluntary ID cards have a memory chip which contains citizens' data (Nurbekyan and Hovanessian, chapter 2).

7.2.3 Innovative Products and Services

Enhancing financial inclusion requires a diverse range of financial products and services. Countries need to identify and design products and services appropriate for different target groups. Kyrgyzstan implemented several programs, like the Concept for Stock and Bond Market Development until 2018 and the Concept for Insurance Market Development for 2013–2017. However, these programs were not popular because people were not used to investing in stocks and bonds. Tajikistan is one of the most remittance-dependent countries in the world. The Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), and the World Bank provide Tajik commercial banks and micro-finance organizations with low cost financial resources, but they are not enough, considering the high demand in rural areas of Tajikistan. Some international organizations have developed programs aimed at specific groups—for example, the EBRD has supported female entrepreneurs with \$1 million in the Women in Business initiative.

7.2.4 Credit Databases

Information asymmetries, such as the lack of credit data, bankable collateral, and basic accounting information, often discourage financial institutions from lending to SMEs. Innovations to provide more information in this area, such as credit databases, credit guarantee systems, and rules to expand eligible collateral, can ease these asymmetries and increase the willingness of financial institutions to lend. Financial education for SMEs can also encourage them to keep better records. Finally, the development of new investment vehicles, such as venture capital, specialized stock exchanges for SMEs and new firms, and hometown investment trusts, can expand SMEs' financing options.

Most CASC economies have been active in setting up credit bureaus and expanding and consolidating credit databases on households and SMEs, but such efforts in most cases are still at an early stage, while in other economies, such efforts have not yet started.

In Armenia, the ACRA Credit Reporting System was introduced in 2004 to gather and process credit-related data. Uzbekistan created a credit bureau in 2000 as part of its banking association; in 2004, it became an independent unit. In 2012, a private credit bureau was established. It covered 27.8% of the adult population as of 2016 (Ahunov, chapter 8). In Azerbaijan, there is only one credit registry, but it does not meet the normal standards for credit bureaus.

In Georgia, Creditinfo Georgia offers a variety of services to various clients, including commercial banks, microfinance institutions, online lenders, leasing companies, and insurance companies. The information includes past and existing credit of individuals and firms; credit scores and ratings; factors affecting credit scores; changes in credit reports; and credit inquiries. It covers almost 96% of the adult population, which is the highest level in the European Union. According to the World Bank Doing Business Project (2017), the Georgian credit bureau scores eight points out of eight on the depth of consumer data. The bureau generates a credit report, which takes into account the most current information on the individual's (firm's) characteristics (volume of liabilities, length of credit history, frequency of use of bank products, payment history, fulfilling commitments, whether individual/firm has overdue loans, etc.) (Babych, Grigolia and Keshelava, chapter 4).

The Kyrgyz Republic established a credit bureau in 2003. Its main function is to manage a database of borrowers and their credit history. Over 160 banks and non-bank financial institutions (NBFIs) are partners of the credit bureau.

Two credit information bureaus provide services to credit organizations in Tajikistan: the Credit Information Bureau Tajikistan (CIBT) and the Bureau of Credit History Somonion. The CIBT cooperates with 17 banks and 56 microfinance institutions, and holds information on 602 thousand individuals and 25 thousand firms, representing 887 thousand credit transactions. The second bureau covers five banks and 80 small microfinance institutions, and holds information on 120,000 individuals and 8,500 firms, representing 332,000 credit transactions. Both credit bureaus have their own clientele, but they are not sufficient, since the scoring by the CIBT is not reliable and credit organizations do not use it. Secondly, not all financial institutions provide information on all their clients, so there are risks associated with the information gaps. Thirdly the prices for CIBT services are high, which might be related to the operational or technical support costs, as CIBT rents its software. Recently, NBT started collecting full datasets from credit organizations and it is going to establish a national registry where all necessary data from the entire sector will be stored; this registry is expected to provide information to market participants on a fee basis. The Credit Bureau was established in 2017 and has not yet completed state registration (Mogilevskii and Asadov, chapter 7).

7.2.5 Credit Guarantees and Subsidies

Credit guarantees can also ease access to finance for SMEs, although they encounter several problems, mainly issues of moral hazard and high costs due to non-performing loans. Guarantee funds act as mediators between borrowers and commercial banks to provide guarantees when a borrower does not have sufficient collateral.

Financial infrastructure development is also a key focus of the Central Bank of Armenia. The Deposit Guarantee Fund and Moveable Collateral Registry are good examples of the initiatives implemented there recently. Armenia's SME Development National Center provides loan guarantees as one of its financial assistance measures for SMEs. On 15 September 2017, the President of Azerbaijan signed a decree on a number of measures to provide state support to entrepreneurs for the expansion of access to financial resources, including the establishment of the Credit Guarantee

Fund of Azerbaijan (OJSC). The OJSC will provide guarantees for entrepreneurs' manat loans taken out in authorized banks, and in some cases will also provide interest-rate subsidies. Following the 2008 financial crisis, Kazakhstan widened schemes to support firms' access to financing through interest rate subsidies and loan guarantees.

In the Kyrgyz Republic, the Law on Guarantee Funds in the Kyrgyz Republic was passed in 2013. As of 2016, six guarantee funds operated in four regions. During 2011–2015, the amount of loans to SMEs with the support of guarantee funds constituted 190 million soms. In 2017, the government established a public joint stock company Guarantee Fund with capital supplied from the budget (25%) and the Asian Development Bank (75%). The fund has representatives in every region, working with seven commercial banks and the Russian-Kyrgyz Development Fund. As of September 2017, the Guarantee Fund had issued 140 guarantees, of which 114 are SMEs and 51 projects run by women (Hasanova, chapter 6).

The Credit Guarantee Fund of Tajikistan was established in 2014 to address financial institutions' strict collateral requirements. This fund provides credit guarantees to SMEs and technical assistance to Tajik partner financial institutions (PFIs). Credit guarantees can also be offered in the form of investment guarantees rather than loan guarantees. Of the 23 largest microfinance investment funds, three offer investment guarantees on MFI or SME loan portfolios (Mogilevskii and Asadov, chapter 7).

8. FINANCIAL LITERACY AND EDUCATION

In the aftermath of the global financial crisis, financial literacy and financial education have received increasing attention. There were sobering lessons, for example, in how the mis-selling of financial products contributed directly to the severity of the crisis, both in developed economies and in Asia, which can partly be attributed to inadequate financial knowledge on the part of individual borrowers and investors.

Financial literacy has gained an important position on the policy agenda of many countries and the importance of collecting informative, reliable data on the levels of financial literacy across the adult population has been widely recognized. At their summit in Los Cabos in 2012, G20 leaders endorsed the High-Level Principles on National Strategies for Financial Education developed by the Organization for Economic Cooperation and Development International Network on Financial Education (OECD/INFE), thereby acknowledging the importance of coordinated policy approaches to financial education (G20 2012). At the same time, surveys consistently show that the level of financial literacy is relatively low even in advanced economies (OECD/INFE 2016). Given the increasing need for individuals to manage their own retirement savings and pensions, resulting mainly from the trend of switching to defined-contribution from defined-benefit pension plans, this indicates that the need for high levels of financial literacy is rising.

Lusardi and Mitchell (2014, 6) define financial literacy as “peoples’ ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions”. OECD/INFE (2016, 47) defines financial literacy as “[a] combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing”. Thus, this concept of financial literacy is multidimensional, reflecting not only knowledge but also skills, attitudes, and actual behavior.

Financial education can be viewed as a capacity-building process over an individual's lifetime, which results in improved financial literacy and wellbeing. Financial education is also necessary to prepare for old age. Financial education for SMEs is also important. Japan and Thailand have started to collect SME databases; as a result, SMEs have started to keep their books, leading them to become more aware of their daily revenues and expenses, and some SMEs have started to think long term. Therefore, collecting an SME database can be a good source of financial education for SMEs. At the same time, asset management by SMEs has become vital. SMEs have to prepare pension contributions for their employees, which leads to an accumulation of pension assets. Therefore, SMEs need to know how to manage their pension reserve assets.

8.1 Status of Financial Literacy

Mapping the current status of financial literacy (or financial capability) in Asia presents challenges to researchers and policymakers alike. It is a new area with limited data. The coverage of available surveys is relatively spotty, and methodologies and results are not consistent. Only a limited number of Asian economies and target groups within them have been surveyed so far, and their results vary widely. There is some relationship of financial literacy to per capita income, but rankings differ significantly across different studies. Greater coverage of target groups (e.g., students, seniors, SMEs, and the self-employed) is needed. It is desirable that international organizations, such as the Organization for Economic Co-operation and Development, World Bank, and Asian Development Bank, sponsor surveys using the same kind of survey questionnaires and methodologies to establish a meaningful basis for international comparisons.

Surveys of financial literacy have been conducted in some CASC economies. For example, the 2010 OECD International Network for Financial Education (INFE) survey (Atkinson and Messy 2012) and the 2014 Global Financial Literacy survey (Klapper et al. 2015) show that Armenia scored in the lowest group of all countries based on a simple average of the three basic financial literacy dimensions utilized in the survey.⁴ According to the national survey in the Kyrgyz Republic, most of the population is passive and not interested in obtaining information about financial markets, services, and products. According to the OECD/INFE International Survey of Adult Financial Literacy Competencies (OECD/INFE 2016), Georgia is among those countries where the share of families with trouble making ends meet is high. However, its average financial literacy score was slightly above the average for its income level.

8.2 Financial Education Strategy

There are still many policy gaps in CASC economies in the areas of financial literacy and financial education. A variety of programs exist, as summarized in Table 1.6, which shows national strategies, the roles of central banks, regulators, and private programs, and the channels and coverage of such programs.

⁴ Knowledge of interest, compound interest, and risk diversification.

Table 1.6: Financial Education Programs and Strategies

Country	National	Central Bank	Other Regulators
Armenia	National Strategy for Financial Education (NSFE) since 2014	One of the main stakeholders, the NSFE	MoES, MLSA, MoF, MTAD, National Institute of Education, and municipal authorities are stakeholders of the NSFE and its programs
Azerbaijan	National Financial Literacy Strategy (NFLS) since 2016	Financial Literacy Project 2010	Financial Literacy Project of the Ministry of Education
Georgia	National Strategy for Financial Education since 2016	NBG is the leading authority of the National Strategy	
Kazakhstan	State Program for Enhancing the Investment Culture (2007–2011) (only for IPOs)	Program to improve the financial literacy of the population for 2016–2018; KPIs not directly linked to financial inclusion measures	
Kyrgyz Republic	Program to Improve Financial Literacy 2016–2020	Key partner to the government's Financial Literacy Program	
Tajikistan	No comprehensive national financial education program	Expected: Annual international financial literacy weeks; distribution of financial products booklets	Financial infrastructure development program initiated by International Finance Corporation (IFC) 2015; activities by international donors in coordination with national agencies
Uzbekistan	Plan developed in collaboration with Sparkassenstiftung pending ratification.	Financial literacy program jointly held with IFC, Association of Banks, and Chamber of Commerce (2017)	
Country	Private Sector/MDB	Coverage/Targets	Channels
Armenia	Financial System Mediator, Armenian Deposit Guarantee Fund, Union of Banks, Union of Credit Organizations, Insurance Market Association, Consumer Rights Protection NGO, Armenian Motor Insurer's Bureau	Schoolchildren, students, rural population, women, and individuals in teachable moments	School curriculum (Me and the World, Math, Algebra, Social Science), universities, workshops, training, competitions, games, mass and social media
Azerbaijan	Azerbaijan Banks Association partnership with CBAR; joint-training for commercial banks; AMFA programs	Students, broad public, economic journalists, CBAR employees, commercial bank employees	Awareness-raising programs, schools, seminars, training
Georgia	Stakeholders of the National Strategy	Youth, rural population, the unemployed, and others in need	Training, awareness promotion campaigns, incorporation in school curriculum (math and civil education), brochures, videos, mass media
Kazakhstan	Some financial education activities by commercial banks and MFIs	Schoolchildren, students, general population	Mass media, school curriculum, meetings, public lectures, NBK's specialized website for financial inclusion, and other activities
Kyrgyz Republic	Several fragmented consultations, training, and books by financial institutions with limited coverage, financial literacy programs by international organizations	Schoolchildren, youth, adults, and general citizens	New education curriculum, training, consultation, media, specialized website for financial inclusion
Tajikistan	Partnership with IFC in the 2015 program; other small-scale programs by credit organizations for branding purposes	Youth, students, teachers, wider citizens	Workshop, training, mass media, social media, booklet distribution
Uzbekistan	Financial literacy program by National Association of Microfinance Institutions, Microfinance Centre	SME owners, general population, low income groups	Training programs

Note: MoES = Ministry of Education and Science, MoF = Ministry of Finance, MLSA = Ministry of Labor and Social Affairs, MTAD = Ministry of Territorial Administration and Development.

Source: Chapters in this volume.

Armenia has implemented its National Strategy for Financial Education (NSFE) since 2014; this is led by the Central Bank of Armenia and is formally adopted by the government. The Central Bank of Azerbaijan has been leading the National Financial Literacy Strategy (NFLS) since 2016. Georgia implemented its National Strategy for Financial Education in 2016, with the goal of improving consumer wellbeing and consumer protection. In Kazakhstan, the 2014 Concept for the Financial Sector Development of the Republic of Kazakhstan until 2030 (2030 Concept) stated that work on increasing the financial education level should be continuous and include various aspects, but there has been no implementation yet. The Kyrgyz Republic adopted a program to improve financial literacy for 2016–2020, including the first centralized initiatives to provide financial education in the school curriculum. No national strategies for promoting financial literacy have been implemented in Tajikistan or Uzbekistan.

8.2.1 Institutions Involved

Both public and private institutions are involved in organizing financial literacy programs. Public institutions include the central bank, Ministry of Education, Ministry of Finance, international organizations (e.g., World Bank and OECD), and schools. Private institutions include associations of banks and MFIs. In Armenia, the main stakeholders in the financial education program include the central bank, the Ministry of Education and Science, the Ministry of Labor and Social Issues, the Ministry of Territorial Administration, the Ministry of Finance, the National Institute of Education, and the municipality of Yerevan, as well as private and non-governmental organizations.⁵ In Uzbekistan, the central bank, International Finance Corporation (IFC), Association of Banks of Uzbekistan, and the Chamber of Commerce of Uzbekistan implement programs on financial literacy. In Azerbaijan, the banks association established a Financial Literacy Council, which serves as a platform for discussing ideas, information, and experiences in this sector. The Central Bank of Azerbaijan Republic (CBAR) and Azerbaijan Micro Finance Association launched the Financial Literacy Project in 2010. In Kazakhstan, financial education is implemented by the National Bank of Kazakhstan (NBK) and some commercial banks and MFIs. In the Kyrgyz Republic, although the centralized financial education is relatively new, commercial banks and MFIs are also involved in financial education programs.

8.2.2 Target Groups and Programs

The fifth column of Table 1.5 summarizes the targets of financial literacy programs, including school students, general population, youth, central bank and commercial banks employees, economic journalists, SME owners, rural population, unemployed working force, teachers, and low-income groups.

8.2.3 Types of Programs

Financial literacy programs are conducted via different channels. The first is training and workshops. In Armenia, the Rural Financial Education Project was conducted for special regions of Armenia in 2016, including two-day workshops on personal finance management. Training and workshops are also carried out in Azerbaijan, Georgia, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

The second channel is social media. For example, the Financial Football project in Armenia, which is carried out jointly with Visa, is a tool for learning financial concepts. This project aims to strengthen the financial capabilities of the general public. Other

⁵ The list of all the stakeholders can be found in the Armenia country chapter.

examples are found in Georgia, Kazakhstan, the Kyrgyz Republic, and Tajikistan. Mass media tools such as videos are used to raise the awareness of the general population, especially youth and students.

Third is consultations. Consultations are usually provided by private-sector financial institutions to their clients. For example, in the Kyrgyz Republic, commercial banks and MFIs periodically inform their clients about financial products by providing consultations and trainings, disseminating information materials.

8.2.4 General Financial Education

Financial education has not yet been implemented in the general school curriculum, but some CASC countries are now in the process of introducing it. For example, in the Kyrgyz Republic, a new curriculum for school education will be introduced so that responsible financial behavior will be inculcated at a young age. Some related subjects will also be strengthened (Hasanova, chapter 6). For example, from 2018, Armenia is planning to integrate financial education into school subjects, including Me and the World, mathematics, algebra, and social science. Georgia is planning to integrate financial literacy topics into the national school curriculum (in math classes and in civil education classes). The pilot program, School-bank, is already in action, and NBG is delivering training for pupils as well as training for teachers in 11 public schools.

9. CONCLUSIONS AND THE WAY FORWARD

There are numerous arguments in favor of increasing financial inclusion, and a large body of evidence shows that increased financial inclusion can significantly reduce poverty and boost shared prosperity, but efforts must be well designed. Greater access to financial services by households can help smooth consumption, ease cash shortages, and increase savings for retirement and other needs, although the evidence on microfinance is less positive. Greater access by SMEs can allow them to take greater advantage of investment projects with potentially high returns and participate in international trade. Greater financial access may provide side benefits as well, such as greater financial stability and efficacy of monetary policy. Governments can also take advantage of greater financial access to rely more on cash transfer programs and reduce corruption and money laundering.

Nonetheless, there are numerous barriers to financial inclusion on both the supply and demand sides. On the supply side, the high costs of handling small deposits and loans in physically remote areas, together with information asymmetries and a lack of documentation and collateral, deter financial institutions from extending financial services to lower-income households and SMEs. Regulatory restrictions on capital adequacy, identification requirements, and branch openings, as well as inadequate infrastructure for transport and payments systems, work in the same direction. On the demand side, the chief barriers are lack of cash, ignorance of financial products and services, and lack of trust.

Financial inclusion in the CASC economies, according to the most widely used measures, is on the whole slightly below the expected average relative to levels of per capita GDP. In terms of the percentage of adults with a formal account, Azerbaijan, Kazakhstan, and Uzbekistan rank significantly below the expected level, while the other five countries are fairly close to the general Asian trend. The low level of account penetration in Azerbaijan, which has relatively high per capita income, stands out as a puzzle. In terms of adult borrowing from a formal institution, levels are very high for Georgia and Armenia and very low for Uzbekistan. Uzbekistan's low level partly reflects

choices for religious reasons, so the degree of involuntary financial access is probably less than indicated by the overall figure. Azerbaijan, Kazakhstan, and Tajikistan have relatively low levels of SME loans. Moreover, variations in financial access by rural or urban areas, or by income or age group, can be very large. Although remittances play a large role in a number of countries, banks typically are not targeting this market with specific products or services. Access to other financial products such as insurance is quite low.

Lack of trust in the financial sector remains a problem in the region, reflecting the legacy of financial and economic turmoil following the breakup of the former Soviet Union. This is especially the case in Armenia and the Kyrgyz Republic. Inefficiency of bankruptcy laws and high collateral requirements due to weak credit assessment systems also present barriers to financial access. Corruption is also a significant problem in a number of countries. Widespread participation in the informal sector makes it difficult for workers and firms to provide data showing their creditworthiness.

The CASC region economies notably lack strong financial inclusion strategies. The Kyrgyz Republic and Azerbaijan have the most well articulated financial inclusion strategies, which are incorporated into their national economic planning strategies, but concrete impacts are still limited. There are a number of individual policies to encourage SME finance, such as loan guarantee programs, credit databases, and subsidized loans, but no overall financial inclusion strategy. MFIs are growing rapidly in some economies, mainly Georgia and Kazakhstan, but have actually dwindled in the Kyrgyz Republic and are weakening in Azerbaijan in terms of asset quality, while there is no separate category for MFIs in Armenia. There are few specialized products or programs for promoting financial inclusion among poorer households, especially in rural regions, although Azerbaijan is an exception. Most CASC economies have some kind of credit bureau, and that of Georgia is highly rated, while a number of economies also have credit guarantee programs. Mobile phone banking, e-money, internet banking, and other forms of fintech (financial technology) are developing rapidly in the region, except Tajikistan, but from a very low base.

All of the country chapter authors recommend the development and/or strengthening of financial inclusion strategies where they do not currently exist or are insufficient. Such strategies should comprehensively involve public and private stakeholders, including all relevant ministries, the financial sector, and civil society institutions. They should also set clear goals and key performance indicators to measure the progress toward achieving those goals. It is important to link the goal of financial inclusion to other overarching goals such as inclusive and sustainable economic growth and financial and social development.

A comprehensive strategy for SMEs should be developed. Credit guarantee schemes should be introduced in countries where they are not already available, such as Azerbaijan. Credit databases and credit bureaus should be strengthened. Collateral registries should be adopted and expanded beyond physical property to facilitate SMEs' access to credit. Alternative sources of funding such as venture investment funds, business angels, peer-to-peer lending, and crowdfunding platforms should be encouraged. High interest rates remain an obstacle to borrowing in a number of countries, and the factors behind such rates need to be investigated to identify possible policy interventions, without undermining the need to price risk appropriately. For example, insufficient competition in the banking sector can push up interest rates in some countries. Increased competition among financial service providers needs to be encouraged to bring down prices and promote innovation.

For households, state support programs for financial institutions aimed at increasing coverage and the level of access to financial services in remote districts should be provided. An adequate infrastructure to support financial operations and transactions in rural areas could be created in post offices. Importantly, postal services enjoy the trust of the rural population, and post offices can become an important financial access point for households in rural areas. Promotion of the shift from cash to digital payments can also be consistent with a financial inclusion strategy.

Insurance services have been under-utilized in some countries. Where lacking, compulsory third-party motor liability insurance can be a big leap forward, and significant opportunities remain in health and agriculture insurance. Mandatory health insurance provides another potential avenue to provide access to health insurance besides employer health plans, as it can eliminate adverse selection and increase the quality of health services due to increased competition.

Financial inclusion policies need to be supported by adequate information. Countries should increase the frequency of surveys about lending, borrowing, and the savings behavior and practices of households and SMEs. Collecting such information should be a priority goal of national statistical agencies.

Financial regulation in the CASC economies is generally relatively consistent, with the central bank typically having oversight of all lending institutions. However, there are still shortcomings. For example, in Tajikistan, supervision of financial institutions is still mainly compliance-based, with little focus on good governance and risk management. Also, the regulators there tend to be slow to understand market evolution, leading to a reluctance to experiment with new technology-based financial products. Adoption of international financial reporting standards, more advanced risk assessment tools, stress testing, and crisis management tools are among primary measures that need to be introduced.

Governance of regulators also needs to be strengthened, including greater independence and transparency to increase the trust of the population in the financial system. Transparency and proper information disclosure by commercial banks and MFIs need to be improved as well. Regulatory issues related to the participation of mobile network operators in innovative financial services need to be resolved. Regulatory 'sandboxes' should be created to test innovative financial products and services. Finally, improving macroeconomic policy management can also help to increase trust in the financial system by reducing the volatility of inflation, interest rates, and the exchange rate, thereby reducing the incentive for dollarization.

Consumer protection efforts in CASC economies are generally rudimentary, with few specific rules covering consumer finance, mainly interest-rate caps on loans. Armenia is one exception, as the central bank's responsibilities include creating a legal system to assure consumer protection, promote programs on financial knowledge and education, and operate consumer services websites and hotlines. Consumer protection policies should be expanded to cover misleading advertising, excessive collection practices, and dispute handling and resolution processes, and consumer hotlines should be established where they do not exist.

Financial literacy levels in CASC economies are generally low, although actual survey evidence is still spotty. More national surveys of financial literacy are needed in the region, with consistent and internationally comparable methodologies.

Among the CASC economies, Armenia, Azerbaijan, Georgia, and the Kyrgyz Republic are the most advanced in the area of financial education, as they have already established national financial education strategies. The Kyrgyz Republic is notable for developing a financial education program for schools, although it has not been implemented yet. So far, Kazakhstan, Tajikistan, and Uzbekistan do not have such programs.

All country paper authors also recommend strengthening financial education strategies and programs. Effective national strategies for financial education seem to contain four key elements: (i) coordination among major stakeholders, including regulatory authorities, the education ministry, educational institutions, financial institutions, and civil society institutions; (ii) an emphasis on customer orientation and addressing both demand-side and supply-side gaps; (iii) a combination of broad-based functional interventions, such as in school curricula, and targeted programs for vulnerable groups according to the availability of resources; and (iv) adoption of a long-term timeline with flexibility to respond to changing needs.

Programs for financial education should include its introduction into the school curriculum at various levels, as well as programs for specific target groups such as SME entrepreneurs, including separate programs for women entrepreneurs, farmers and migrants, women, poor people, disabled people, pensioners, and other vulnerable groups. Financial education programs can involve financial service providers, industry associations, NGOs, mass media, higher educational institutions, municipalities, and financial consultants. Key issues to be addressed include managing borrowing costs prudently and developing long-term savings goals.

Monitoring and evaluation of national strategies for financial education is vital for experience and program adaptation. With the appropriate incentives, thinktanks and universities can help in monitoring and evaluating efforts. Since government support programs will not be enough to maintain adequate financing, the private sector, such as life insurance firms, must supply long-term financial products suitable for self-protection. Long-term asset allocation by households can support the infrastructure and other investments where long-term finance is required.

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