

Morgan, Peter J.; Nurgaliyeva, Akerke; Kydyrbayev, Dossym

Working Paper

Leveraging SME finance through value chains in landlocked CAREC countries: Overview

ADB Working Paper Series, No. 989

Provided in Cooperation with:

Asian Development Bank Institute (ADBI), Tokyo

Suggested Citation: Morgan, Peter J.; Nurgaliyeva, Akerke; Kydyrbayev, Dossym (2019) : Leveraging SME finance through value chains in landlocked CAREC countries: Overview, ADB Working Paper Series, No. 989, Asian Development Bank Institute (ADBI), Tokyo

This Version is available at:

<https://hdl.handle.net/10419/222756>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/3.0/igo/>



ADB Working Paper Series

**LEVERAGING SME FINANCE THROUGH
VALUE CHAINS IN LANDLOCKED CAREC
COUNTRIES: OVERVIEW**

Peter J. Morgan, Akerke Nurgaliyeva,
and Dossym Kydyrbayev

No. 989
August 2019

Asian Development Bank Institute

Peter J. Morgan is senior consulting economist and vice chair of research at the Asian Development Bank Institute. Akerke Nurgaliyeva is an economist and Dossym Kydyrbayev is a managing partner, both at Rakurs Consulting.

The views expressed in this paper are the views of the author and do not necessarily reflect the views or policies of ADBI, ADB, its Board of Directors, or the governments they represent. ADBI does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

Working papers are subject to formal revision and correction before they are finalized and considered published.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. Some working papers may develop into other forms of publication.

The Asian Development Bank refers to "China" as the People's Republic of China.

In this report, "\$" refers to United States dollars.

Suggested citation:

Morgan, P. J., A. Nurgaliyeva, and D. Kydyrbayev. 2019. Leveraging SME Finance Through Value Chains in Landlocked CAREC Countries: Overview. ADBI Working Paper 989. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/leveraging-sme-finance-through-value-chains-landlocked-carec-countries>

Please contact the authors for information about this paper.

Email: pmorgan@adbi.org, anurgaliyeva@rakurs-consulting.kz,
dkydyrbayev@rakurs-consulting.kz

The country studies referenced in this paper were initially presented at a conference on "Leveraging SME Finance through Value Chains in the CAREC Landlocked Economies" at Nazarbayev University, Astana, Kazakhstan, on 29 November 2018. We thank Russell Reed, Liam Thomas and Saloni Lahkhia for able research assistance. We also thank the CAREC Institute, especially Saeed Qadir and Yergali Dosmagambet, and Giovanni Capannelli and Dai Chang Song of the Asian Development Bank, for their valuable support and insights. All errors are our own.

Asian Development Bank Institute
Kasumigaseki Building, 8th Floor
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

© 2019 Asian Development Bank Institute

Abstract

This study takes stock of the challenges faced by small and medium-sized enterprises (SMEs) in the CAREC landlocked economies in terms of their access to finance resulting from demand-side, supply-side and institutional constraints. This includes identifying cultural, procedural, institutional and regulatory incentives, disincentives and barriers faced by SMEs to access finance, and the reasons for the lack of such access. It also assesses opportunities of SMEs to link with both domestic and global value chains and the potential impact of this on their access to finance. Finally, it proposes policy recommendations to improve the access of the SMEs to finance and trade finance, especially in the agri-business sector, in light of best global practices including PRC's program to nurture and support SMEs with regards to effective regulatory frameworks, access to finance (banks, capital markets, start-up finance and non-traditional micro-lending or community lending, risk capital), special programs funded by foreign donor institutions, guarantee schemes, improving skills (entrepreneurial training), encouraging networking among SMEs, and use of information and communication technology.

Keywords: Financial inclusion, SMEs, banks, micro-finance institutions (MFIs), financial literacy, financial education, global value chains (GVCs)

JEL Classification: F1, G2, G21, G28, H25, O16, O19, Q14

Contents

1.	INTRODUCTION AND PURPOSE OF THE STUDY.....	1
2.	DEFINITIONS OF SMEs, GLOBAL VALUE CHAINS, AND VALUE CHAIN FINANCE	3
2.1	Definition of SMEs	3
2.2	Definition of GVCs	4
2.3	Definition of Supply Chain Finance	5
3.	RATIONALE FOR SME PARTICIPATION IN GVCs	5
4.	ROLE OF SMEs IN LANDLOCKED CAREC COUNTRIES.....	6
5.	STATUS OF FINANCIAL INCLUSION FOR INDIVIDUALS AND SMALL AND MEDIUM-SIZED ENTERPRISES IN LANDLOCKED CAREC COUNTRIES.....	7
5.1	Banking Services	9
5.2	Insurance.....	12
5.3	Kinds of Financial Institution Involved	12
5.4	Inclusion-Related Financial Products and Services.....	15
5.5	Innovative Delivery Technologies.....	16
6.	FINANCIAL KNOWLEDGE AND SKILLS OF SME ENTREPRENEURS	16
6.1	Status of Financial Literacy	17
6.2	Financial Education Strategy	18
7.	BARRIERS TO FINANCIAL INCLUSION.....	22
7.1	Business Environment	22
7.2	Supply-Side Factors.....	24
7.3	Demand-Side Factors	25
7.4	Institutional and Environmental Barriers.....	26
7.5	Cultural Factors	26
8.	STATUS OF DOMESTIC AND GLOBAL VALUE CHAINS	27
8.1	Agriculture.....	27
8.2	Manufacturing.....	28
8.3	Services.....	28
8.4	Regional Cooperation	29
9.	VALUE CHAIN FINANCING ANALYSIS	29
10.	REGULATORY FRAMEWORKS	30
10.1	Institutions Responsible for Regulation	32
10.2	Licensing Status of Microfinance Institutions.....	32
10.3	Consumer Protection	33
10.4	Deposit Insurance	33
10.5	Fintech-Related Regulation.....	34

11.	POLICIES TO PROMOTE SME FINANCE	34
11.1	National Strategy	34
11.2	Specific Strategies	36
12.	CONCLUSIONS AND RECOMMENDATIONS	40
12.1	Pervasive Barriers to SME Finance	40
12.2	Need for a Comprehensive SME Finance Strategy	41
	REFERENCES	45

1. INTRODUCTION AND PURPOSE OF THE STUDY

Small and medium-sized enterprises (SMEs) are the backbone of economic activity in Asia and the Pacific, and are critical to sustain inclusive economic growth and social development. More than 96% of total enterprises in the region are SMEs, which together account for about 42% of total gross domestic product (GDP) and employ 62% of the workforce (ADB, 2015b). However, SMEs typically find it difficult to access finance for growth due to the well-known problems they face of information asymmetry and lack of collateral. Even when SMEs can access finance, they typically face more severe constraints than larger businesses and, even when financing is secured, it often is under more stringent conditions, including higher interest rates and greater collateral requirements. Moreover, SMEs in the Central Asia Regional Economic Cooperation (CAREC) countries, especially in those states that were formerly in the Soviet Union, face particular challenges where the private sector is still in an early stage of development and market-related institutions are still weak.

Participation in international trade can be a powerful engine for growth through mechanisms such as technology transfer, training, and quality control, but SMEs typically face greater challenges than large firms in entering export markets due to lack of scale, capital, technology, and managerial capacity. SMEs in landlocked CAREC countries face additional constraints due to lack of direct access to seaports, generally inadequate transportation and logistics infrastructure, high trading costs, and underdeveloped financial systems which often do not provide a diverse range of financial products at an affordable rate to support the risky ventures required to promote the growth of SMEs.

The development of global value chains (GVCs) in the region of Asia and the Pacific has expanded the potential for SMEs' participation in international trade, including the participation of those in landlocked CAREC countries. The maxim that the "...countries that embrace [GVCs] grow faster, import skills and technology, and boost employment" (World Bank Group (WBG) 2019b: 1) is a fundamental motivation for exploring ways that SMEs in the landlocked economies of the CAREC region can participate in GVCs. Linking SMEs with domestic and global value chains can improve their business portfolio and opportunities for access to finance. In order to raise SMEs' share in economic activity, contribution to trade, and linkages to global value chains, SMEs need more resources, skill sets, market access, access to finance, and regulatory support to thrive and be competitive.

In turn, stronger SMEs can foster private enterprise, innovation, market development, employment, and economic diversification, and induce efficient allocation of scarce resources. By joining GVCs, SMEs can contribute to economic development in the CAREC landlocked economies by helping to diversify their production base, create employment opportunities, alleviate poverty, and ensure regional food security. In particular, linking regional agriculture value chains in sparsely populated cities to distant markets can not only raise the output and profitability of SMEs, but also offer better opportunities for access to finance.

The objective of this study is to take stock of the challenges faced by SMEs in the CAREC landlocked economies in terms of their access to finance in view of the above-mentioned constraints. This includes identifying cultural, procedural, institutional, and regulatory incentives, disincentives, and barriers faced by SMEs to access finance, and the reasons for the lack of such access. The study also assesses opportunities for SMEs to link with both domestic and global value chains and the potential impact of this on their access to finance. Finally, the study proposes policy recommendations to improve SMEs' access

to finance and trade finance, especially in the agri-business sector, in light of best global practices, including the People's Republic of China's program to nurture and support SMEs. The recommendations address effective regulatory frameworks, access to finance (banks, capital markets, start-up finance, non-traditional micro-lending or community lending, risk capital), special programs funded by foreign donor institutions, guarantee schemes, improving skills (entrepreneurial training), encouraging networking among SMEs, and use of information and communication technology.

In terms of financial inclusion and development, the economies in the CAREC area—Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan¹—have generally lagged behind other Asian economies, partly due to the disruptions and instabilities that followed the breakup of the Soviet Union in 1991 (Yoshino and Morgan 2017). Since gaining independence from the Soviet Union, many CAREC countries have experienced similar economic events. Their populations distrusted financial institutions, and they were unprepared to go through difficult procedures to avail themselves of the services offered by such institutions. Moreover, a number of financial crises have challenged the CAREC countries and their banking sectors. The global financial crisis had a spillover effect on all of these economies. In Tajikistan, the remittances of labor migrants fell from \$3.7 billion in 2013 to \$1.9 billion in 2016, leading to a major devaluation of the Tajik somoni. The fall in oil prices inflicted negative shocks on oil-exporting economies, leading to currency devaluations in Kazakhstan and Azerbaijan, and indirectly affected other economies dependent on remittance flows from those countries. Policies aimed at promoting financial inclusion and financial literacy, especially for SMEs, have not generally been pursued as actively in this region as elsewhere in Asia.

Table 1: Major Macroeconomic Characteristics of CAREC Countries in Study, 2017

Country	GDP (USD billion)*	Population*	Land area (sq km)*	GDP per capita (USD)*	Domestic currency per US dollar#	CPI inflation rate (%)\$	Domestic credit to the private sector, % of GDP*
Azerbaijan	40.7	9,862,429	82,670	4,131.6	1.70	13.0	22.2
Georgia	15.1	3,717,100	69,490	4,057.3	2.53	6.0	62.5
Kazakhstan	162.9	18,037,646	2,699,700	9,030.4	344.7	7.4	29.9
Kyrgyz Republic	7.6	6,201,500	191,800	1,219.8	68.8	0.4	21.8
Mongolia	11.4	3,075,647	1,553,560	3,717.5	2,472.5	0.5	53.0
Tajikistan	7.1	8,921,343	138,790	801.1	9.15	7.3	13.7
Uzbekistan	49.7	32,387,200	425,400	1,533.9	8,069.6	12.5	–

Note: – indicates not available.

Sources: * indicates data from World Bank World Development Indicators Database, 2017; # indicates data from International Monetary Fund International Financial Statistics Database <http://data.imf.org/regular.aspx?key=61545850> (accessed 21 February 2019), 2018 average; \$ indicates data from International Monetary Fund World Economic Outlook October 2018, 2017, but 2016 for Kyrgyz Republic and Mongolia.

¹ Afghanistan is not included in this study. Georgia is not landlocked, but is included because it is also a CAREC member and formerly a part of the Soviet Union.

Table 1 briefly summarizes the major macroeconomic data of these countries. Clearly, they vary widely in various dimensions. Per capita GDP ranges from only \$801 in Tajikistan to \$9,030 in Kazakhstan, as of 2017. This largely reflects differences in resource endowments, especially fossil fuels. The level of financial development also varies substantially, with the ratio of credit to the domestic private sector ranging from 14% in Tajikistan to 63% in Georgia. However, all of them share the legacy of Soviet-style economic systems and the vicissitudes associated with transition to a market economy.

2. DEFINITIONS OF SMEs, GLOBAL VALUE CHAINS, AND VALUE CHAIN FINANCE

This section reviews the definitions of SMEs, GVCs, and supply chain finance which underlie the analysis in this book.

2.1 Definition of SMEs

During the last decade, the development of small and medium-sized businesses became a priority for the governments of CAREC countries, as well as an important factor for economic growth. However, as shown in Table 2, there is no standard definition of SMEs across the region, which greatly complicates comparative analysis. The maximum size of small enterprises varies from 30 employees in Tajikistan to 100 employees in Kazakhstan and Uzbekistan (depending on the sector), while the maximum size of medium-sized firms varies from 50 employees in the Kyrgyz Republic to 250 employees in Georgia, Kazakhstan, and Uzbekistan (depending on the sector). In addition to SMEs, only the Kyrgyz Republic and Uzbekistan have definitions of micro enterprises.

Table 2: SME Definitions in the CAREC Landlocked Countries

Countries	Micro	Small	Medium
Azerbaijan	<11 employees	11–50 employees	51–250 employees
Georgia	N/A	<50 employees	50–250 employees
Kazakhstan	<11 employees	15 - 100 employees	101–250 employees
Kyrgyz Republic	<7 employees (trade, transport, communication, education, healthcare, finance) <15 (agriculture, energy, construction, mining, processing)	7–15 employees (trade, transport, communication, education, healthcare, finance) 15–50 employees (agriculture, energy, construction, mining, processing)	16–50 employees (trade, transport, communication, education, healthcare, finance) 51–200 (agriculture, energy, construction, mining, processing)
Mongolia	N/A	<20 employees (all sectors) <50 employees (services)	20 – 149 employees (wholesale) 50 – 199 employees (retail, manufacturing)
Tajikistan	N/A	<31 employees	31–200 employees
Uzbekistan	<26 employees	26–100 employees	101–250 employees

N/A = not available. The figures for Uzbekistan are draft proposals.

Sources: Aliyev (2019); Boojoo (2019); Kapparov (2019); Khishtovani, Saghareishvili, and Basilidze (2019); Mirzoev and Sobirzoda (2019); Tadjibaeva (2019); and Tilekeyev (2019).

A key issue is that the definition of SMEs in these countries typically only applies to registered firms, and hence does not cover most individual entrepreneurs or peasant farmers. As a result, the share of SMEs in agriculture in these countries is typically small, 5% or less. Moreover, it means that entities not classified as SMEs typically do not qualify for special programs available to SMEs.

2.2 Definition of GVCs

The definition of value chains also varies. The United Nations Economic and Social Commission for Asia-Pacific (UNESCAP) defines a GVC as follows:

A global value chain refers to the full range of cross-border, value-added business activities that are required to bring a product or service from the conception, design, sourcing raw materials, and intermediate inputs stages to production, marketing, distribution, and supplying the final consumer (UNESCAP 2007).

GVCs are another way of describing global production networks or supply chains:

The phenomenon of production networks or value chains is also known as cross-border production sharing or fragmentation of production (ADB 2015c: 6).

GVCs have grown rapidly in the last two decades, aided by developments in communications, the internet, and transportation. However, GVCs vary significantly according to the degree of value-added involved. Gereffi, Humphrey, and Sturgeon (2005) and UNESCAP (2007) identify three major types of GVC:

- (i) International supply markets, where transactions are made based on arm's length relationships between buyers and sellers across borders, requiring minimal coordination and cooperation (e.g., commodity markets).
- (ii) Producer-driven networks, where the lead firm has a central role in controlling the activities of the international network of subsidiaries, affiliates, and suppliers.
- (iii) Buyer-driven networks, where large retailers, marketers, and brand manufacturers obtain finished goods from an international network of suppliers.

Perhaps the key issue in terms of economic development is whether GVCs contribute to the development of production quality and expertise in developing-country firms belonging to the GVC. In the case of commodity markets (type i), there seems to be little scope for the transmission of such expertise to upstream firms in the value chain, since they produce for commoditized markets with little or no direct interaction with downstream buyers. On the other hand, types ii and iii provide much more scope for the transfer of quality standards and know-how, since the downstream firms depend on the quality, consistency, and cost-efficiency of the products involved in order to preserve their brand identities and product differentiation benefits. Therefore, the lead firms have a strong incentive to have a more direct influence on the production activities of upstream suppliers. This situation is described by the World Bank as follows:

Through GVCs, countries trade more than products; they trade know-how, and make things together. Imports of goods and services matter as much as exports to successful GVCs.

GVCs integrate the know-how of lead firms and suppliers of key components along stages of production and in multiple offshore locations. The international, inter-firm flow of know-how is the key distinguishing feature of GVCs (World Bank Group 2019b: 1).

However, as will be described in this book, there are relatively few examples of types ii and iii in CAREC countries, especially in agriculture. This is a major potential barrier in terms of the potential for SMEs to upgrade themselves by participating in GVCs.

2.3 Definition of Supply Chain Finance

A firm's participation in GVCs can enhance its ability to obtain finance by various means. This is generally referred to as supply chain finance, although there is not yet a standardized definition of this:

... supply chain finance can be expressed as a combination of trade finance and a technological platform that connects trading partners and financial institutions, and provides various services related to supply chain events, as defined by the International Factors Group (IFG). Various combinations of financing instruments and services can be arranged under supply chain finance (ADB 2015c: 70).

The key question for the purpose of this study is the extent to which participation in value chains (global or otherwise) can improve the ability of SMEs to access finance. As suggested by the above definition, supply chain finance can include a number of different types of financing mechanism, including trade finance and financing support from the lead firm in the supply chain. It also requires expertise on the part of banks and other financial institutions to evaluate the risk-reduction and growth-enhancing effects of an SME belonging to a supply chain and its needs for investment to upgrade its product quality to a level that qualifies that firm to belong to a supply chain.

3. RATIONALE FOR SME PARTICIPATION IN GVCs

SMEs can benefit directly from participation in GVCs, and such participation can also have indirect benefits for the economy as a whole. Yuhua and Bayhaqi (2013) argue that, at the micro level, the benefits of SME participation in GVCs include:

- (i) increased technical capacity;
- (ii) increased demand for existing products and services, greater utilization of operational capacity, and an improvement in production efficiency;
- (iii) cooperating with enterprises, both upstream and downstream, in global production networks can create prestige and credibility for SMEs, making it easier to access finance, and attract foreign investors and human resources;
- (iv) providing SMEs with a gradual and sustainable direction toward internationalization (ADB 2015c: 12).

As mentioned in the previous subsection, the degree of value-added involved in the GVC will determine the extent to which the above factors apply, especially (i) and (iii), and particularly the latter, which relates directly to financial access. This underlines the importance of emphasizing GVCs with higher value-added—e.g., types ii and iii mentioned in section 1.2.

At the macro level, SME participation in global production networks can bring a number of benefits (Yuhua and Bayhaqi 2013):

- (i) A stronger SME sector is positively associated with economic growth.
- (ii) SME participation in global production networks can increase employment in local economies.
- (iii) Global production networks can allow domestic SMEs to expand their exports and thereby facilitate the country's accumulation of foreign reserves, which can be critical for the stable and sustainable growth of developing economies.
- (iv) Participation in GVCs can provide a vehicle for the transformation and upgrading of local economies and businesses, thereby providing another channel to promote sustainable economic growth and development (ADB 2015c: 12).

In light of these benefits, what factors can help to promote SME participation in GVCs? Yuhua (2014) found that the potential factors supporting SMEs' participation in GVCs include: (i) product quality, (ii) product delivery, (iii) financial stability, (iv) production capacity, (v) flexibility and adaptability, (vi) standards and certificates, (vii) the ICT level of business operation, (viii) innovation capacity, (ix) the business environment, and (x) physical and informational infrastructure. Yuhua (2014) also identified several additional key factors enabling SMEs in developing countries to enter GVCs, including: (i) product price, (ii) geographic location, and (iii) innovative capacity. SMEs need to have a good understanding of global markets and the business needs of GVCs in order to produce goods with the appropriate quality, competitive price, and capacity for delivery (Yuhua 2014; Yuhua and Bayhaqi 2013). Similarly, the United Nations Conference on Trade and Development (UNCTAD 2010) identified productive capability, labor productivity, technology, human capital, and business practices as important factors influencing SME participation in GVCs (ADB 2015c: 13).

4. ROLE OF SMEs IN LANDLOCKED CAREC COUNTRIES

The SME sectors in the landlocked CAREC countries have been developing at different paces. In some countries, SMEs' role is critical in sectors like agriculture, trade, and construction, while in others—resource-rich countries, like Kazakhstan—SMEs are also present in services and manufacturing related to extraction industries. Table 3 summarizes the share of SMEs in GDP, the number of firms, and total employment. SMEs typically account for more than 90% of registered firms, but the shares of GDP and employment are much lower. This is because small farmers and self-employed workers are typically excluded from the definition of SMEs. This creates considerable difficulties for this study, since a key focus is agricultural value chains, but most entities involved in agriculture are not included in the SME definition. In all countries except the Kyrgyz Republic, the share of GDP is lower than that of employment, reflecting relatively low productivity in the SME sector. This is particularly the case in resource-rich countries such as Azerbaijan, Kazakhstan, and Mongolia.

Table 3: Role of SMEs in CAREC Economies

Country	% of GDP	% of Firms	% of Employment
Azerbaijan	6.4	95.0	18.5
Georgia	61.6*	–	67.0
Kazakhstan	26.0	96.0	33.0
Kyrgyz Republic	39.0	–	21.2
Mongolia	17.8	86.0	70.0
Tajikistan	30.0	–	35.0
Uzbekistan	54.9	90.0	78.0

Sources: National Statistics Offices; Aliyev (2019); Boojoo (2019); Kapparov (2019); Khishtovani, Saghareishvili, and Basilidze (2019); Mirzoev and Sobirzoda (2019); Tadjibaeva (2019); and Tilekeyev (2019).

In Azerbaijan, SMEs account for only 18.5% of employment. One reason is that agriculture comprises only 1.1% of total SMEs, due to the Law on Family Farming which excludes family farms from the SME definition because they are not considered as entrepreneurs (Aliyev 2019). Georgian SMEs play a significant role in job creation, with a 67% share of total private sector employment (Khishtovani, Saghareishvili, and Basilidze 2019). In Kazakhstan, SMEs contributed 26% of GDP in 2017. In Tajikistan, SMEs account for 35% of total employment and 30% of GDP. However, SMEs play a relatively important role in job creation. In 2017, 78% of jobs were provided by SMEs, compared to 50% in 2000 (Mirzoev and Sobirzoda 2019). SMEs' contribution to GDP in Uzbekistan increased to 54.9% in 2017 from 38.2% in 2005. They are mostly active in services (retail and catering) and the agricultural sector. In Uzbekistan, SME development is driven by micro-enterprises, which employ eight people on average, rather than small enterprises. This is explained by the underdeveloped business environment. Almost 80% of agriculture's contribution to GDP is accounted for by small entrepreneurs (Tadjibaeva 2019).

5. STATUS OF FINANCIAL INCLUSION FOR INDIVIDUALS AND SMALL AND MEDIUM-SIZED ENTERPRISES IN LANDLOCKED CAREC COUNTRIES

Table 4 provides an overall picture of the status of financial inclusion in landlocked CAREC countries by listing several main indicators from the World Bank and International Monetary Fund (IMF) surveys related to financial inclusion. This shows that there is great variation in terms of the development of financial inclusion in the region, even though levels of financial inclusion are generally low. Secondly, levels of financial inclusion for individuals and firms are not necessarily at similar stages of development. For example, compared with the other CAREC countries, Mongolia scores highest in all but one of the categories in the table. Kazakhstan has a relatively high share of adults with formal accounts, but a relatively low share of firms with a line of credit from banks, especially SMEs. Overall, the share of SMEs with a bank loan or line of credit is 30% or less in all countries except Mongolia. Use of digital financial services (fintech) such as e-money or mobile phones is generally low, but is increasing rapidly in several countries.

Table 4: Main Financial Inclusion Indicators for CAREC Countries

	Azerbaijan	Georgia	Kazakhstan	Kyrgyz Republic
Commercial bank Branches of per 100,000 adults ^a	6.6 ^d	32.7	3.0	8.4
Automated teller machines (ATMs) per 100,000 adults ^a	32.7	74.3	74.0	31.2
Share of adults with formal account (% age 15+) ^b	All adults	28.6	61.2	58.7
	Women	27.7	63.6	60.3
	Adults belonging to the poorest 40%	18.1	46.1	48.8
	Young adults (% aged 15–24)	12.6	30.7	36.9
Adults living in rural areas	20.2	55.1	56.7	39.1
Saved at a financial institution (% age 15+) ^b	4.5	4.6	13.9	3.0
Loan from a financial institution in the past year (% age 15+) ^b	13.1	23.7	20.0	9.4
Firms with a bank loan or line of credit (%) ^c	15.8	35.8	19.2	29.1
Small firms with a bank loan or line of credit (%) ^c	15.6	30.4	15.0	24.6
Firms using banks to finance investments (%) ^c	27.1	22.1	16.3	18.4
Firms using banks to finance working capital (%) ^c	17.6	27.6	13.0	23.3
Electronic payments used to make payments (% age 15+) ^b	12.9	29.6	38.2	28.6
Mobile phone used to pay bills (% age 15+) ^b	1.3	2.3	8.6	0.5
Mobile phone used to send money (% age 15+) ^b	9.8	6.9	16.4	17.6
	Mongolia	Tajikistan	Uzbekistan	
Commercial bank Branches of per 100,000 adults ^a	70.4	–	36.1	
Automated teller machines (ATMs) per 100,000 adults ^a	88.6	–	21.6	
Share of adults with formal account (% age 15+) ^b	All adults	47.0	37.1	58.7
	Women	42.1	36.0	60.3
	Adults belonging to the poorest 40%	38.5	29.7	48.8
	Young adults (% aged 15–24)	49.3	20.9	36.9
Adults living in rural areas	46.3	34.4	56.7	
Saved at a financial institution (% age 15+) ^b	19.3	11.3	2.3	
Loan from a financial institution in the past year (% age 15+) ^b	28.9	14.7	2.1	
Firms with a bank loan or line of credit (%) ^c	48.1	14.6	26.4	
Small firms with a bank loan or line of credit (%) ^c	42.2	15.1	26.4	
Firms using banks to finance investments (%) ^c	22.7	13.2	16.1	
Firms using banks to finance working capital (%) ^c	44.4	19.2	13.1	
Electronic payments used to make payments (% age 15+) ^b	79.4	40.3	33.6	
Mobile phone used to pay bills (% age 15+) ^b	10.7	2.3	2.5	
Mobile phone used to send money (% age 15+) ^b	35.6	19.5	5.4	

Notes: – indicates not available.

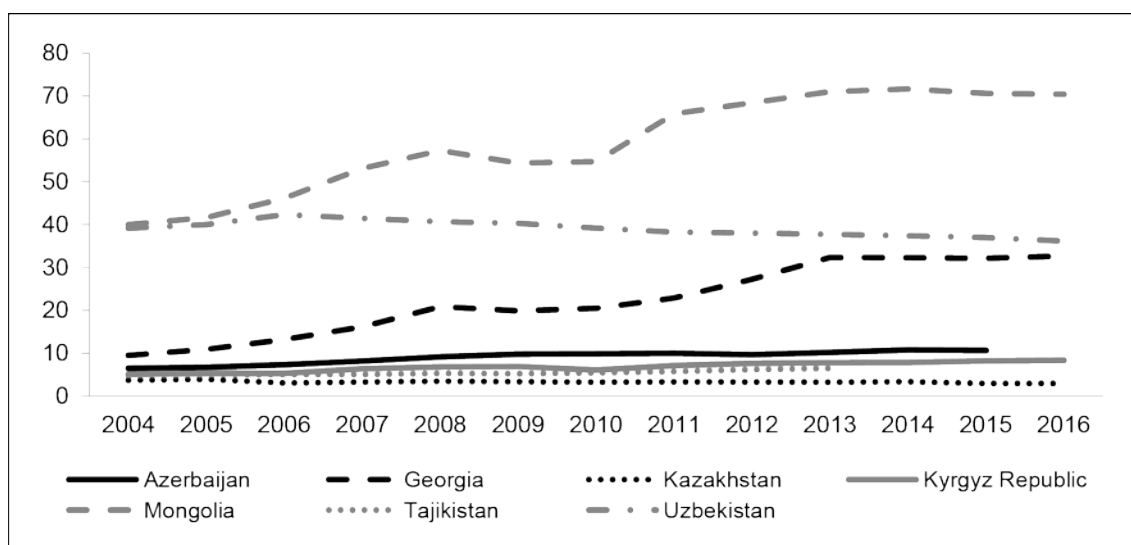
Sources: ^a International Monetary Fund, Financial Access Survey 2017 (2013 Tajikistan data); ^b World Bank Global Findex Survey 2017; ^c World Bank Global Financial Development Database 2018 (2013 data); and ^d Azerbaijan Financial Market Supervisory Authority (FIMSA) and Azerbaijan State Statistics Committee.

5.1 Banking Services

Banking Network

Figure 1 shows the penetration of bank branches in the seven landlocked CAREC economies since 2004. Aside from Uzbekistan and Kazakhstan, the other five countries in this region have seen gradual increases in the level of bank penetration, although this remains very low in Azerbaijan, the Kyrgyz Republic, and Tajikistan. Overall, the number of bank branches has increased since 2004, especially in Georgia and Mongolia, and in 2015 Georgia, Mongolia, and Uzbekistan surpassed the world average of 12 branches per 100,000 adults. The declining trend in Kazakhstan and Uzbekistan reflects the very slow rate of increase in the number of branches relative to population growth.

Figure 1: Bank Branch Penetration per 100,000 Adults



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

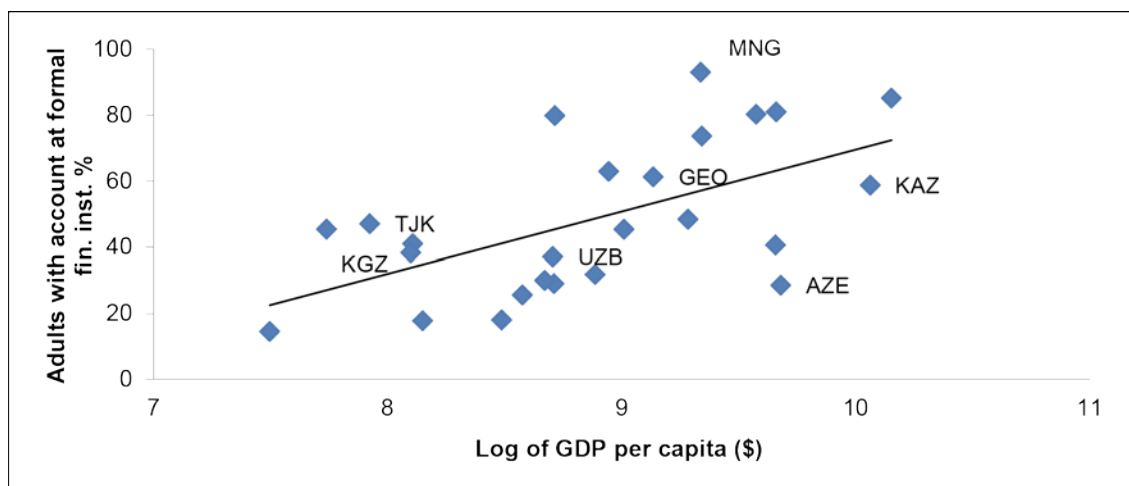
The situation with the distribution of ATMs is somewhat different, with Georgia, Kazakhstan, and Mongolia having significantly higher levels of penetration than the other four countries (Table 4). ATM penetration has been growing relatively rapidly in all of the landlocked CAREC economies, although from a very low base in some cases. The main issue is the extent to which the ATMs are concentrated in major cities instead of being distributed more evenly throughout the country. In Georgia and the Kyrgyz Republic, well over half of all ATMs are located in the three largest cities, while the share for Kazakhstan is about 30% (IMF 2018).

Accounts

Figure 2 shows that households' financial access in Asia in terms of the percentage of adults with an account at a formal financial institution tends to rise in line with per capita GDP. Most landlocked CAREC economies lie relatively close to the trend line, except Mongolia, which is well above the line, and Azerbaijan, which falls far below the trend.

However, there is still huge variation across countries in the CAREC region, implying that other factors besides income (including overall financial development and regulatory, institutional, social, and geographic factors) play important roles. For example, Georgia has much higher deposit penetration than Uzbekistan, even though the per capita income levels of these two countries are similar. Moreover, all the CAREC economies except Georgia and Mongolia have penetration shares below 60%.

Figure 2: Relation of per Capita Gross Domestic Product to Formal Account Penetration for Adults, 2017



AZE = Azerbaijan, GDP = gross domestic product, GEO = Georgia, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MNG = Mongolia, TJK = Tajikistan, UZB = Uzbekistan.

Note: Unlabeled observations are for other Asian economies.

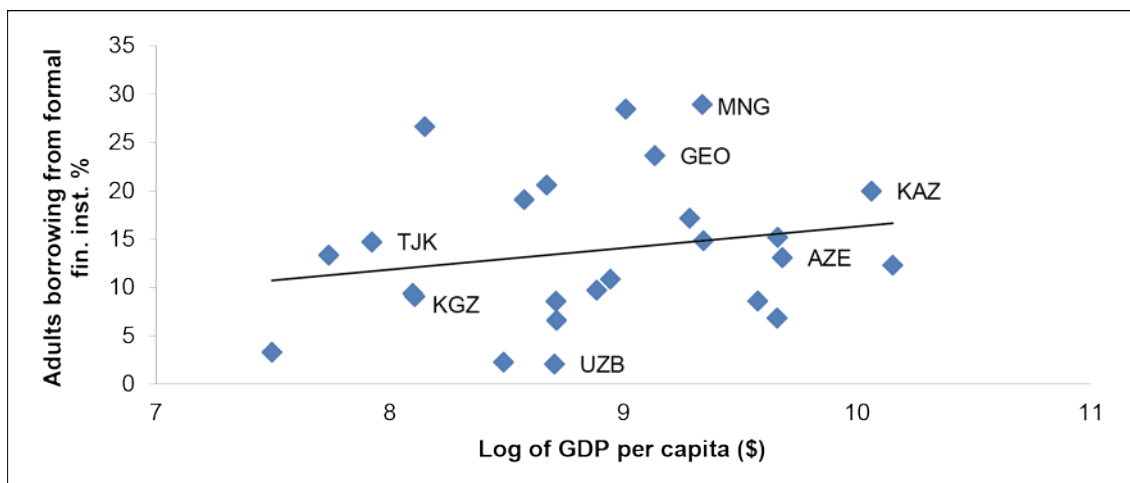
Source: World Bank (2018); and World Bank. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators> (accessed 17 January 2019).

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 possible reason for this is the country's very low level of bank branch penetration, which is much lower than in Georgia, Mongolia, and Uzbekistan (see Figure 1). However, this cannot be the only explanation, as Kazakhstan, the Kyrgyz Republic, and Tajikistan have even lower levels of bank branch penetration. Table 3 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 in account access among the population, suggesting that bank penetration in rural areas is very weak. Kazakhstan's low level of account penetration relative to income may reflect the high share of national income from natural resource production there.

Credit

Based on data from Asian countries, Figure 3 shows that the relationship between per capita GDP and the share of adults obtaining loans from formal financial institutions is positively sloped; however, this relationship is weaker than that observed with accounts. Once again, large variations can be seen in the CAREC region. In terms of borrowing rates, Kazakhstan, Azerbaijan, and the Kyrgyz Republic fall fairly close to the trend line; Mongolia and Georgia are ranked much higher; and Uzbekistan falls well below the trend. Uzbekistan's ranking appears mainly to reflect cultural and religious factors: the 2017 Global Findex survey found that 30% of adults cite religious reasons for not using financial services (World Bank 2018).

Figure 3: Relationship between per Capita Gross Domestic Product and Loan Penetration for Adults, 2017



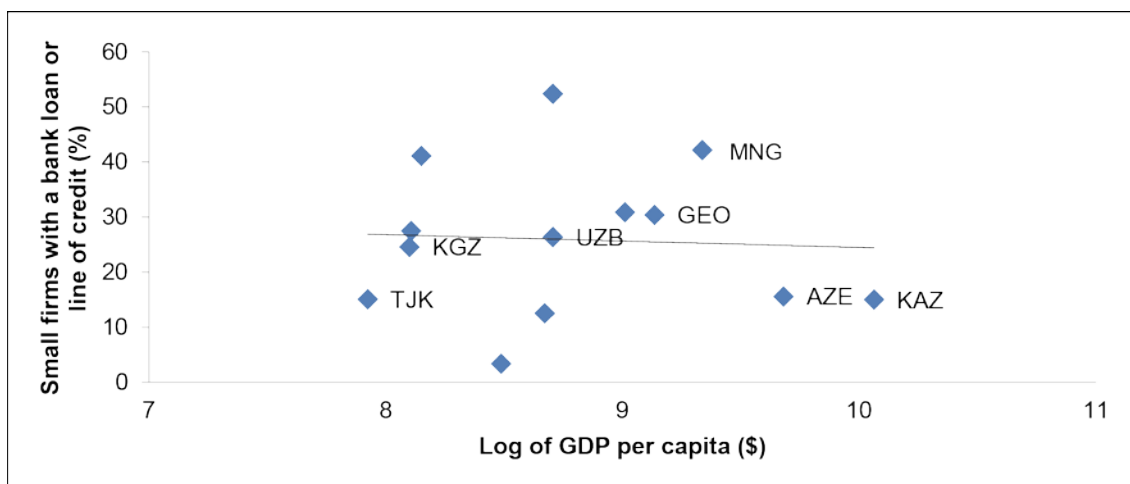
AZE = Azerbaijan, GDP = gross domestic product, GEO = Georgia, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MNG = Mongolia, TJK = Tajikistan, UZB = Uzbekistan.

Note: Unlabeled observations are for other Asian economies.

Sources: World Bank (2018); World Bank. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators> (accessed 17 January 2019).

Figure 4 shows a relatively flat but negative overall relationship between per capita GDP and the share of small firms with a line of credit. Once again, the CAREC 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; that of Mongolia is above average; and those for the other three 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.

Figure 4: Share of Small Firms with a Bank Loan or Credit Line, 2013



AZE = Azerbaijan, GDP = gross domestic product, GEO = Georgia, KAZ = Kazakhstan, KGZ = Kyrgyz Republic, MNG = Mongolia, TJK = Tajikistan, UZB = Uzbekistan.

Note: Unlabeled observations are for other Asian economies.

Sources: International Monetary Fund (2018); World Bank. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators> (accessed 17 January 2019).

5.2 Insurance

Use of insurance services remains very low in most of the countries in the CAREC region. Most of the country studies find that their insurance markets are small and at a nascent stage. This is mainly due to a lack of information about most insurance products, a lack of trust in insurance companies, insufficient types of compulsory insurance, and a lack of control mechanisms for the sale of existing mandatory insurance products. In the life insurance market, apart 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 have fallen significantly from their earlier peak in Kazakhstan. The ratio in other economies is quite small, lower than 0.06% in all cases. Tajikistan's insurance sector is one of the least developed in Central Asia. Insurance claims by SMEs are rare and usually unattended, which significantly undermines trust in the insurance sector (Mirzoev and Sobirzoda 2019).

The non-life insurance market is similarly small. The ratio for all countries is less than 0.6%, although Kazakhstan previously had ratios of more than 1%. The recent trend in non-life insurance premiums in most countries is low and flat, except for the Kyrgyz Republic, which shows a big drop.

5.3 Kinds of Financial Institution Involved

Commercial banks are still the workhorse of SME financing, but their role is supplemented by various non-bank financial institutions. Inclusion-oriented financial institutions include microfinance institutions (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 Government of Azerbaijan provides three different plans for SME financing (see Table 5, first column).

Table 6 shows the breakdown of loans by type of financial institution as a percentage of GDP in the seven CAREC economies. It shows that the lending landscape is clearly dominated by commercial banks and other depository institutions, mainly public sector banks.

Commercial Banks

The banking sector has faced difficult operating conditions in a number of countries, which has squeezed SMEs' financial access opportunities. In Azerbaijan, total bank assets fell from 64% of GDP in 2015 to 40% of GDP in 2017, reflecting nonperforming loan (NPL) write-offs and bank closures (Aliyev 2019). In Tajikistan, the NPL ratio rose to more than 50% of total assets by early 2017, while the capital adequacy ratio declined to 11.5% in March 2016, driven by the largest banks (Mirzoev and Sobirzoda 2019). This greatly constrained the ability of banks to lend to SMEs. In Kazakhstan, SMEs are the main borrowers from banks and account for over 80% of their business loans portfolio. This reflects the ability of large companies to borrow more cheaply elsewhere. Nonetheless, SMEs still face many difficulties getting access to credit from banks (Kapparov 2019).

Banking in Uzbekistan continues to be dominated by a handful of state-owned banks (86% of total assets) and lacks competition and transparency. Government-controlled banks still support the government's economic priorities through subsidized loans offered to specific sectors and for specific investment purposes. Small business loans amount to only about 17.7% of total loans and 8% of GDP (Tadjibaeva 2019).

Table 5: 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
Azerbaijan	NBCIs, including Azerpost, credit unions, MFIs	Subsidized loans provided by National Fund for Support of Entrepreneurship, Azerbaijan Mortgage and Credit Guarantee Fund, Azerbaijani Investment Company, State Agency for Agricultural Credits	Various insurance products	Mobile banking; electronic payments through national payment terminals such as e-Manat and Million	Azerbaijan Mortgage and Credit Guarantee Fund; 2017 Law on Encumbrance of Movable Property allowed movable property to be used as collateral
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, Credit Guarantee Mechanism
Kazakhstan	The number of MFIs is increasing rapidly, but the level of loans remains small.	Interest rate subsidies and guaranteed loans	Microfinance	Electronic payments available with fairly wide usage	
Kyrgyz Republic	MFIs, credit unions, microcredit unions	State mortgage companies providing subsidized rates for public employees and farmers	Microloans, collateral-free loans	Internet and mobile banking available but not widely used	Credit bureau, State Guarantee Fund, new law on warehouse receipts
Mongolia	Credit unions (does not mention MFIs specifically)	Tax exemptions, credit guarantees, subsidies for leasing and insurance		Internet and mobile banking	Credit Guarantee Fund, Integrated Mineral Resources Initiative
Tajikistan	MFIs, credit unions	Entrepreneurship Support Fund		Electronic payments and mobile banking available but not widely used; increasing payment card usage with POS terminals	Credit guarantee fund, private credit guarantee facility
Uzbekistan	Microkreditbank, MFIs	Subsidized loans offered by government-controlled banks for specific sectors and investment purposes		Electronic payments, mobile banking, internet banking	Credit registries and public and private credit bureaus

IFC = International Finance Corporation, MFI = microfinance institution, NBCI = non-bank credit institution, P2P = peer-to-peer.

Sources: Aliyev (2019); Boojo (2019); Kapparov (2019); Khishtovani, Saghareishvili, and Basilidze (2019); Mirzoev and Sobirzoda (2019); Tadjibaeva (2019); and Tilekeyev (2019).

Table 6: Outstanding Loans by Type of Financial Institution, 2017
(% of Gross Domestic Product)

Type of Institution	Azerbaijan	Georgia	Kazakhstan	Kyrgyz Republic
Commercial banks	16.2	57.7	26.4	20.8
Subtotal for SMEs	–	8.3	9.7	–
Credit unions and financial cooperatives	–	0.0	–	0.2
MFIs	<1.0	4.4	0.2	2.2
Other financial intermediaries	0.6	–	3.3	–
Total	16.8	62.1	29.9	23.2
Type of Institution	Mongolia	Tajikistan	Uzbekistan	
Commercial banks	51.7	15.2	44.4	
Subtotal for SMEs	8.9	–	8.0	
Credit unions and financial cooperatives	0.3	–	–	
MFIs	–	3.1	1.7	
Other financial intermediaries	1.8	–	–	
Total	53.8	18.2	46.1	

– = not available, MFI = microfinance institution, SMEs = small and medium-sized enterprises.

Sources: Authors' calculations; Data from the International Monetary Fund (2017), except Mongolia (2016) and Tajikistan (2013); gross domestic product data from the World Bank. World Development Indicators Database; SME data for Kazakhstan from Kapparov (2019); Mongolia data for SMEs from Boojoo (2019); Tajikistan data from the National Bank of Tajikistan; and Uzbekistan data for SMEs from Tadjibaeva (2019).

Microfinance Institutions

Levels of development with respect to MFIs vary greatly. In Kazakhstan, the number of registered MFIs has grown very fast, from 136 at the beginning of 2017 to 160 in September 2017. In the first six months of 2017, the MFI loan portfolio increased by 30% to reach \$0.4 billion, although this is still a tiny fraction of the total amount of SME and retail bank loans (\$26 billion). One reason for their remarkable loan growth is that the MFI regulations are not as stringent as those for commercial banks. For example, licensing is not required for those MFIs that do not take deposits (Kapparov 2018). In Georgia, the number of registered microfinance organizations has increased dramatically, from two in 2004 to 81 in 2016, while MFIs' total assets as a share of GDP grew from 0.02% in 2006 to 8% in 2016. Similarly, MFI loans reached 4.4% of GDP in 2016, the highest in the region (Babych, Grigolia, and Keshelava 2018). In the Kyrgyz Republic, the number of MFIs and credit unions reached a peak of 651 units, and loans amounted to 8% of GDP by 2011 (Hasanova 2018). 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' loans have grown rapidly, accounting for 17.7% of all loans (the highest relative share in the region), reflecting in part the country's relatively low level of financial development. However, MFI credit growth may be limited by the borrowing capacity of their clients (Mirzoev and Sobirzoda 2019). On the other hand, as highlighted by the World Bank Group (2016), the nonbank credit sector in Azerbaijan is underdeveloped and offers limited credit opportunities for SMEs, with total loans accounting for less than 1% of GDP (Ibadoghlu 2018).

In Uzbekistan, MFI loans are limited, only accounting for 3.6% of total loans and 1.6% of GDP, although they make up 20% of all loans to SMEs and have been growing rapidly. Mikroreditbank, established in 2006, provides preferential loans to SMEs at interest rates of only 5%, well below the inflation rate of 14.4% in 2017. The losses are covered by the state (Tadjibaeva 2019).

Multilateral Banks and International Donor Organizations

Multilateral banks and international donor organizations also provide funding for SMEs through a wide variety of programs. There are significant programs in Georgia, where international financial institutions (IFIs) such as the ADB, the European Bank for Reconstruction and Development (EBRD), World Bank, IFC, and KfW have been actively supporting the provision of credit lines to SMEs, as well as more targeted business groups such as women's businesses and horticultural farms in Uzbekistan. The ADB has been actively involved in governments' efforts for SME development. In particular, the ADB in 2011 provided a \$500 million loan to the Damu Fund under the Kazakhstan's government guarantees. Given the high interest rate environment, significant unmet demand for SME finance, and limited government subsidy programs, funding from international financial institutions plays a very important role in Uzbekistan (Tadjibaeva 2019).

Leasing

Leasing is another source of finance for SMEs. Costs are higher than bank lending, but fewer guarantees are required. In Uzbekistan, it is rather limited, accounting for only 0.6% of GDP. One problem is lack of understanding of the service among potential customers (Tadjibaeva 2019).

Private Equity Funds

The first public venture fund in Kazakhstan was created in 2004 and is now named the National Agency on Technological Development. Another equity management fund is Kazyna Capital Management (KCM), which invests as a limited partner in different equity funds in various sectors (Kapparov 2019).

5.4 Inclusion-Related Financial Products and Services

To promote financial inclusion, governments and credit organizations provide various specialized and innovative products and services, including 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 (53%–71%) of MFIs' credit portfolios consist of group, collateral-free loans. Since women have restricted access to collateral, they have become the majority of MFI borrowers (70% during 2006–2016, on average). The accessibility of loans, simplified procedures for obtaining them, and branches in rural areas have made microfinance attractive to the low-income rural population. Relatively liberal laws have inspired the establishment of over 650 MFIs, and MFI loans accounted for almost half of the country's total credit portfolio in 2011 (Hasanova 2018). In Uzbekistan, MFIs can offer three products: microcredit, microloans, and microleasing.

5.5 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, albeit from a very low base (Table 4). A national electronic payment system introduced in Azerbaijan has led to a large increase in utilization, and recent regulatory changes in Uzbekistan have created an upsurge in mobile phone banking (Ahunov 2018).

In Georgia, the most commonly used technologies include internet banking, telephone banking, mobile banking, and text message banking. Georgians actively use electronic payments to pay public utilities and purchase goods (Babych, Grigolia, and Keshelava 2018). In Mongolia, the number of mobile phone users is growing fast, which is driving steady growth of internet banking, especially mobile banking users. The number of internet banking users almost tripled and the number of mobile banking users doubled from 2015 to 2017 (Boojoo 2019). According to a 2014 survey by the International Finance Corporation in Tajikistan, very few banking services are currently available online, as the software used by banks and MFIs does not allow some operations to be implemented (see Mogilevskii and Asadov 2018). Several large banks and MFIs provide mobile banking services, but penetration rates are still low. The national payment system Korti Milli, as well as international payment systems such as Visa, Mastercard, and UnionPay, are widely used in the financial system. Several MFIs in Tajikistan have started using payment service provider terminals for loan repayment (Mirzoev and Sobirzoda 2019).

Peer-to-peer lending and crowdfunding are not yet available in Kazakhstan. They play only a very limited role in Azerbaijan and Uzbekistan, since the regulatory environments are not supportive.

6. FINANCIAL KNOWLEDGE AND SKILLS OF SME ENTREPRENEURS

In the aftermath of the global financial crisis, financial literacy and financial education have received increasing attention. The crisis yielded sobering lessons, such as how the mis-selling of financial products directly contributed to the severity of the crisis, both in developed economies and in Asia. To a certain extent, this can 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 financial literacy levels across the adult population has been widely recognized. At the Los Cabos Summit in 2012, G20 leaders endorsed the High-Level Principles on National Strategies for Financial Education developed by the Organization for Economic Cooperation and Development (OECD) and International Network on Financial Education (INFE), thereby acknowledging the importance of coordinated policy approaches to financial education (G20 2012). At the same time, surveys consistently show that financial literacy is relatively low, even in advanced economies (OECD/INFE 2016). As individuals are increasingly required to manage their own retirement savings and pensions, mainly due to the trend of switching from defined-benefit to defined-contribution pension plans, 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.

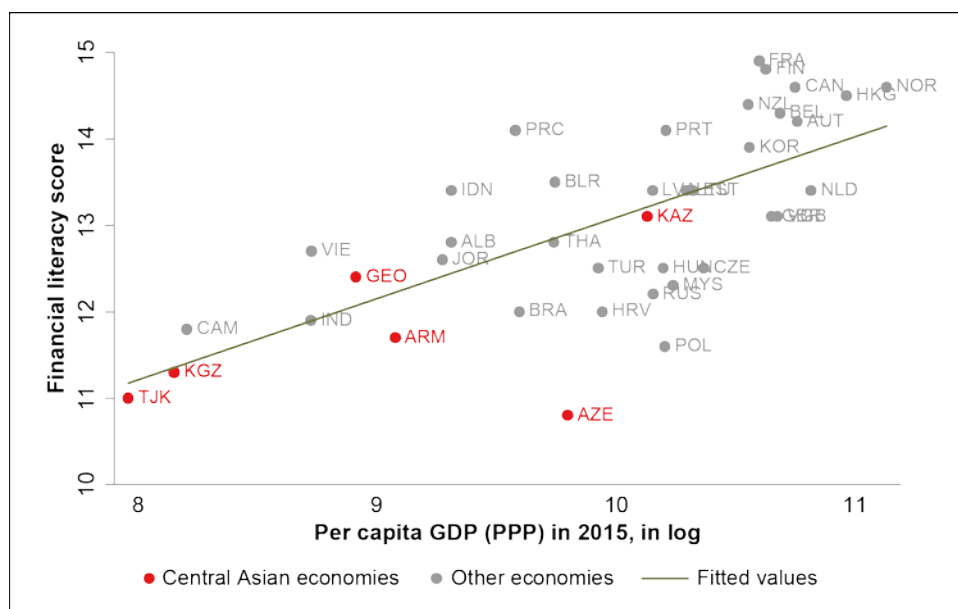
Financial education for SMEs is also important. Japan and Thailand have begun to collect SME databases; as a result, SMEs have started keeping their books, becoming more aware of their daily revenues and expenses in the process. Some SMEs have also started to think long-term. Therefore, collecting an SME database can be a good source of financial education for SMEs. At the same time, asset management has become vital for SMEs. SMEs must prepare pension contributions for their employees, leading to an accumulation of pension assets. Therefore, SMEs need to know how to manage their pension reserve assets.

6.1 Status of Financial Literacy

Mapping the current status of financial literacy (or financial capability) in Asia presents challenges to researchers and policymakers alike: this is a new area with limited data, the coverage of available surveys is relatively uneven, and methodologies and results are inconsistent. Only a limited number of Asian economies and target groups within them have been surveyed so far, and their results vary widely. Although there is some relationship between financial literacy and per capita income, 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 OECD, World Bank, and ADB, sponsor surveys using similar survey questionnaires and methodologies to establish a meaningful basis for international comparisons.

The OECD/INFE survey of adult financial literacy has been conducted in five CAREC economies—Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, and Tajikistan. Figure 5 shows that there is a significant correlation between the average financial literacy score and average per capita GDP, although there is also significant dispersion around the trend line. The survey does not specifically address SMEs, but probably gives a good indication of the relative status of financial literacy in each country. Four of the five CAREC countries lie close to the trend line, but Azerbaijan lies well below it, and in fact has the lowest score of any country. It is not clear what the reasons for this are. Azerbaijan has the lowest or very low scores for both the financial knowledge and financial behavior subcomponents of the financial literacy score. According to the results of Standard & Poor’s 2014 Global Financial Literacy Survey, 41% of adults in Mongolia were found to be financially literate, slightly above the global average, but in Uzbekistan only 21% of adults were financially literate, putting it in the lower quintile of countries (Klapper, Lusardi, and van Oudheusden 2015).

Figure 5: Financial Literacy Score and per Capita GDP



Source: OECD (2018); OECD/INFE (2016); World Bank World Development Indicators, <https://databank.worldbank.org/source/world-development-indicators> (accessed 17 July 2019).

6.2 Financial Education Strategy

There are still many policy gaps in CAREC economies in the areas of financial literacy and financial education. A variety of programs exist, as summarized in Table 7, which shows national strategies; the roles of central banks, regulators, and private programs; and the channels and coverage of such programs.

In 2014, the Central Bank of Azerbaijan implemented its National Financial Literacy Strategy. The Strategic Road Map for Production of Consumer Goods at the Level of Small and Medium Entrepreneurship in the Republic of Azerbaijan shows the Ministry of Economy, the Ministry of Education, the Financial Market Supervisory Authority (FIMSA), and the Small and Medium Business Development Agency as the main implementers of the financial literacy of SMEs in 2017–2020. However, currently, there are no special programs to promote financial literacy among SMEs (Aliyev 2019). In 2016, Georgia implemented its National Strategy for Financial Education with the goal of improving consumer wellbeing and consumer protection. There is no specific national financial education strategy for SMEs, but the National Bank of Georgia has implemented two programs to increase SMEs’ level of financial literacy (Khishtovani, Saghareishvili, and Basilidze 2019).

Table 7: Financial Education Programs and Strategies

Country	National	Central Bank	Other Regulators
Azerbaijan	National Financial Literacy Strategy (since 2016)	Financial Literacy Project 2010	Financial Literacy Project of the Ministry of Education; Financial Market Supervisory Authority; Ministry of Economy; Small and Medium Business Development Agency
Georgia	National Strategy for Financial Education (since 2016); SME Development Strategy of Georgia 2016–2020	The National Bank of Georgia is the leading authority in the National Strategy	Ministry of Economy and Sustainable Development; Entrepreneurship Development Agency (Enterprise Georgia); Innovation and Technology Agency (GITA)
Kazakhstan	State Program for Enhancing the Investment Culture (2007–2011) (only for initial public offerings)	Program to improve the population's financial literacy for 2016–2018; key performance indicators 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; program for training of population by MFIs	
Mongolia	National mid-term program 2016-2021	Participating in national mid-term program	Ministry of Finance; Ministry of Education; Culture and Sport and Financial Regulatory Commission
Tajikistan	No comprehensive national financial education program The "Strategic Priorities of NBT on Development of Mechanisms on Protection of the Rights of Consumers of Financial Services in the Republic of Tajikistan for 2017–2019" has a goal to enhance financial literacy	Expected: annual international financial literacy weeks; distribution of financial products booklets	Financial infrastructure development program initiated by the IFC 2015; activities by international donors in coordination with national agencies
Uzbekistan	Financial literacy addressed in Strategy for Action 2017–2021	Financial literacy program jointly held with the IFC; Association of Banks; Chamber of Commerce (2017); support from AFI and World Bank to draft financial literacy strategy	

continued on next page

Table 7 *continued*

Country	Private Sector/MDB	Coverage/Targets	Channels
Azerbaijan	Azerbaijan Banks Association partnership with the CBAR; joint training for commercial banks; Azerbaijan Microfinance Association programs	Students; broad public; economic journalists; CBAR employees; commercial bank employees	Awareness-raising programs; schools; seminars; training
Georgia	Stakeholders of the National Strategy	Youth; the rural population; the unemployed; others in need	Training; awareness promotion campaigns; incorporation in school curricula (math and civil education); brochures, videos; mass media
Kazakhstan	Some financial education activities by commercial banks and microfinance institutions	Schoolchildren; students; the general population	Mass media; school curricula; meetings; public lectures; the National Bank of Kazakhstan's specialized website for financial inclusion; 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; entrepreneurs; general citizens	New education curricula; training; consultation; media; a specialized website for financial inclusion
Mongolia	Mongolian Banks Association; Mongolian Insurers Association; Savings Insurance Corporation, etc.	Schoolchildren; youth; rural residents; adults	Cooperate with school/university curricula and modules; initiatives with private sector institutions and NGOs; targeted training for rural residents
Tajikistan	Partnership with the IFC in the 2015 program; National Association of Medium and Small Business; National Association of Business Women in Tajikistan; Association of Innovative Technology in Entrepreneurship; Association of Banks of Tajikistan; Trade and Commerce Chamber	Youth; students; teachers; the wider citizenry	Workshop; training; mass media; social media; booklet distribution
Uzbekistan	Financial literacy program by the National Association of Microfinance Institutions; the Microfinance Centre; ADB project to increase MSME loans to women; Norma Center capacity building programs; Chamber of Commerce	Students and youths; SME owners; women; migrant workers; small farmers; low-income groups; remote communities	Training programs

AFI = Alliance for Financial Inclusion, CBAR = Central Bank of Azerbaijan Republic, IFC = International Finance Corporation, MDB = multilateral development bank, NSFE = National Strategy for Financial Education.

Sources: Aliyev (2019); Boojoo (2019); Kapparov (2019); Khishtovani, Saghareishvili, and Basilidze (2019); Mirzoev and Sobirzoda (2019); Tadjibaeva (2019); and Tilekeyev (2019).

In Kazakhstan, the 2014 Concept for the Financial Sector Development of the Republic of Kazakhstan until 2030 (2030 Concept) states that work to increase the level of financial education should be continuous; however, this has not yet been implemented. There is no strategy that focuses on the financial literacy of SMEs and entrepreneurs. Financial education of SMEs is conducted mainly by financial institutions (banks, insurance companies, the Damu Fund, etc.) (Kapparov 2019). 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, but there are no specific programs for SMEs, although there are programs targeting bank customers. Mongolia, with the technical support of the World Bank, initiated a National Program on Financial Literacy for 2016–2021.² No national strategies for promoting financial literacy have yet been implemented in Tajikistan or Uzbekistan. In Tajikistan, however, since 2010, the IFC, the German Enterprise for International Cooperation (GIZ), the Agha Khan Foundation (AKF), and other multilaterals have piloted financial counseling services to consumers: they have demonstrated that counseling significantly improves financial planning, savings, and even incomes of entrepreneurs in rural areas (although it had a negligible impact on arrears). However, training by SMEs in the area of capacity-building has been limited (Mirzoev and Sobirzoda 2019). In Uzbekistan, several initiatives were supported by international organizations jointly with non-governmental organizations and commercial banks to enhance the financial literacy of various groups, including students and youth, women, migrant families, small farm holders, communities in remote areas, and vulnerable groups. The AFI and the World Bank are supporting the Central Bank of Uzbekistan to draft a financial inclusion strategy, including a strategy for financial literacy (Tadjibaeva 2019).

Institutions Involved

Both public and private institutions are involved in organizing financial literacy programs. Public institutions include the central banks, ministries of education, ministries of finance, international organizations (e.g., the World Bank and OECD), and schools. Private institutions include associations of banks and MFIs. In Azerbaijan, the banks' association established a Financial Literacy Council as a platform for discussing ideas, information, and experiences in this sector. In 2010, the Central Bank of Azerbaijan Republic (CBAR) and Azerbaijan Microfinance Association launched the Financial Literacy Project. In Kazakhstan, financial education is implemented by the National Bank of Kazakhstan and some commercial banks and MFIs. In the Kyrgyz Republic, although centralized financial education is relatively new, commercial banks and MFIs are also involved in financial education programs. In Mongolia, the Ministry of Finance; the Bank of Mongolia; the Ministry of Education, Culture, and Sport, the Financial Regulatory Commission; the Mongolian Banks Association; the Mongolian Insurers Association; the Savings Insurance Corporation; non-state organizations operating in the financial sector; relevant associations; and universities developed a program with the technical support of the World Bank's National Mid-Term Program 2016–2021 for financial literacy. In Tajikistan, the IFC, GIZ, AKF, and other multilaterals are involved. In the past decade, the Aga Khan Development Network (AKDN) and 55 Group have separately set up their own enterprise growth accelerators and an enterprise investment fund. In Uzbekistan, the central bank, IFC, Association of Banks of Uzbekistan, and Chamber of Commerce of Uzbekistan have implemented programs on financial literacy.

² National Program for Financial Literacy. https://www.mongolbank.mn/documents/regulation/2016-2020_sanhuu_eng.pdf

Target Groups and Programs

The sixth column of Table 7 summarizes the targets of financial literacy programs, including school students, the general population, youth, central bank and commercial bank employees, economic journalists, SME owners, the rural population, the unemployed working force, teachers, and low-income groups. Countries with programs focusing on SMEs and entrepreneurs include the Kyrgyz Republic and Uzbekistan.

Types of Program

Financial literacy programs are conducted via several different channels. The first is training and workshops, which are being carried out in Azerbaijan, Georgia, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

The second channel is social media. 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.

The third channel is consultations, which private financial institutions usually provide 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, and disseminating informational materials. In Mongolia, the Bank of Mongolia recently concluded a three-month campaign on financial literacy with an emphasis on improving personal and household financial habits.³

General Financial Education

Financial education has not yet been implemented in general school curricula, but some CAREC countries are now in the process of introducing it. For example, in the Kyrgyz Republic, a new curriculum for school education will be introduced to inculcate responsible financial behavior from a young age. Some related subjects will also be strengthened (see Tilekeyev 2019). Georgia is planning to integrate financial literacy topics into the national school curriculum (in mathematics and civil education classes). The pilot program, School-bank, is already in action, and the National Bank of Georgia is delivering training for pupils as well as training for teachers in 11 public schools.

7. BARRIERS TO FINANCIAL INCLUSION

Barriers to financial inclusion can be classified as supply-side, demand-side, institutional and environmental, and cultural 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.

7.1 Business Environment

Table 8 summarizes a variety of measures of the business environment and situation of competitiveness in CAREC landlocked countries that may affect the performance of SMEs. The first part of the table shows the Doing Business scores from the World Bank survey. There is considerable variation in the overall Doing Business rankings, ranging from 6th for Georgia to 126th for Tajikistan. Interestingly, the rankings for obtaining credit are generally higher than the overall rankings, except for Georgia and Kazakhstan.

³ <https://montsame.mn/en/read/133041>.

Rankings are generally poorer for trading across borders and resolving insolvency: the former is a problem for developing GVCs, while the latter is likely to weigh on banks' decisions on lending to SMEs. The second and third parts show rankings from the World Bank Enterprise Survey and the World Economic Forum Global Competitiveness Report, respectively. Both surveys rank problems with obtaining finance, although the results are only moderately consistent. Azerbaijan has the highest share of respondents citing finance as a problem in both surveys and Mongolia the lowest, but the results for other countries are less consistent. Overall global competitiveness rankings range from 35th for Azerbaijan to 102nd for the Kyrgyz Republic, with Mongolia just ahead of that. The rankings for financial market development are lower than for the overall index in most, but not all, cases.

Table 8: Indicators of Business Climate and Competitiveness in CAREC Countries

Country	Azerbaijan	Georgia	Kazakhstan	Kyrgyz Republic
Doing Business score (rank)				
Overall	78.6 (25)	83.3 (6)	77.9 (28)	68.3 (70)
Getting credit	80.0 (22)	85.0 (12)	65.0 (60)	75.0 (32)
Trading across borders	77.0 (84)	90.0 (43)	70.3 (102)	80.7 (70)
Resolving insolvency	63.8 (40)	56.0 (60)	67.8 (37)	47.6 (82)
Business Environment				
Firms choosing access to finance as biggest obstacle (rank)	31.3 (1)	20.9 (2)	10.6 (5)	4.6 (6)
Value of collateral needed (% of loan)	247.0	223.0	196.0	188.0
Female participation in ownership (%)	4.5	33.9	28.3	49.4
Global Competitiveness ranking				
Overall	35	67	57	102
Financial market development	79	63	114	86
Access to financing (ranking as problem)	16.5 (1)	12.0 (2)	14.5 (1)	8.0 (4)
Country	Mongolia	Tajikistan	Uzbekistan	
Doing Business score (rank)				
Overall	67.7 (74)	57.1 (126)	67.4 (76)	
Getting credit	80.0 (22)	40.0 (124)	65.0 (60)	
Trading across borders	66.9 (117)	59.1 (148)	49.8 (165)	
Resolving insolvency	29.4 (152)	30.9 (146)	45.2 (91)	
Business Environment				
Firms choosing access to finance as biggest obstacle (rank)	20.6 (1)	19.2 (1)	6.7 (4)	
Value of collateral needed (% of loan)	225.0	165.0	176.0	
Female participation in ownership (%)	37.8	32.7	29.2	
Global Competitiveness ranking				
Overall	101	79	N/A	
Financial market development	129	105	N/A	
Access to financing (ranking as problem)	7.7 (7)	14.4 (4)	N/A	

Source: World Bank Group (2019a); World Bank Enterprise Surveys 2013 data; World Economic Forum Global Competitiveness Index 2017–2019.

7.2 Supply-Side Factors

Market-driven factors. 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, a lack of credit data or usable collateral, and a lack of convenient access points. Interest rates for SMEs are typically high, and government interest subsidy programs often create distortions and do not reach those firms most in need of support. The provision of financial services in rural areas in particular can pose problems in countries with geographically difficult-to-reach rural areas, leading 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. In Kazakhstan, financing of the SME sector is limited due to the inactivity of the banking sector in the wake of tightened regulation after the financial crisis of 2007. Nonetheless, only about 10% of firms report it to be their major problem, focusing more on corruption, workforce quality, and taxes (Kapparov 2019). In Uzbekistan, lack of ICT infrastructure for banking services and associated high transportation costs are cited as key obstacles, especially for women entrepreneurs (Tadjibaeva 2019).

Collateral requirements are generally high, and collateral is typically restricted to land and immovable assets. This is cited as an issue in all countries in the region. In Uzbekistan, firms cite collateral requirements as the third most important reason for avoiding formal finance (Tadjibaeva 2019). Table 8 shows that collateral requirements are high in Azerbaijan, Georgia, and Mongolia, but the requirements for the other countries are actually below the global average of 208.

In Georgia, lack of competition in the banking sector, which is dominated by two banks, also tends to raise borrowing costs. According to the World Bank Enterprise Survey, interest rates are one of the main factors leading Georgian SMEs not to apply for loans (Khishtovani, Saghareishvili, and Basilidze 2019). Lack of competition among banks is also cited as a problem in Mongolia. In Tajikistan, virtually no credit is available to start-ups because default and currency risks are far too high. In Uzbekistan, the banking sector's high share of state-owned banks and limited capacity for financial intermediation remains a key barrier to development of the private sector, and in particular their provision of finance to SMEs. The Central Bank of Uzbekistan actively regulates interest rates on loans and "recommends" interest rates on deposits, which often leaves bank interest rates below the inflation rate. Nonetheless, 80% of entrepreneurs interviewed indicated high loan rates as a main problem for SME development (Tadjibaeva 2019).

The lack of credit data and reliable financial records also worsens the problem of information asymmetry, which 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 2018). The absence of transparent accounts and activities prevents entrepreneurs from accessing a sufficient level of finance, while persons receiving informal wages cannot prove their creditworthiness and must borrow from pawnshops or relatives.

Regulatory factors. Regulatory factors include capital adequacy and supervisory rules that may limit the attractiveness of small deposits, loans, or other financial products for financial institutions. For instance, in Mongolia, investors report that the business registration process is efficient and clear, but the main issue is the non-transparent, legal, regulatory, and accounting practices (see Boojoo 2019). Strict requirements regarding the opening of branches or ATMs may also restrict the attractiveness of doing so in

remote areas. Although identification and other documentation requirements are important, both with respect to know-your-client requirements and the monitoring of possible money laundering and terrorist-financing activities, 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 should 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, regulators tend to be slow to understand market evolution and are therefore reluctant to experiment with new technology-based financial products (see Mogilevskii and Asadov 2018). In Uzbekistan, a major constraint on developing innovative banking services is excessive government intervention in banks' activities and an overregulated banking system (Tadjibaeva 2019).

Regulatory barriers also include inadequate systems for collateral and insolvency procedures. In Azerbaijan, the complexity of the collateral mechanisms leads banks to apply harsh conditions to their customers to insure themselves against losses. Recently, measures to extend collateral to movable assets have been adopted, but not yet implemented (Aliyev 2019). In Georgia, land fragmentation is a problematic issue for SMEs who apply for government programs, because some programs have minimum requirements for the size of the area. Also, unregistered land cannot be taken as collateral; therefore, ongoing problems in land registration also hinder SMEs' access to finance. According to the new state constitution, foreigners cannot own agricultural land in Georgia, which is expected to have a negative effect on agricultural development, foreign direct investment in agriculture, and the price of agricultural land, thereby reducing collateral values (Khishtovani, Saghareishvili, and Basilidze 2019).

In Georgia, in the agricultural sector, the majority of farmers are not registered as legal entities and, when demanding finance, they apply for retail loans. As their businesses are not registered, they are not able to declare their income, making it difficult for them to get financing. Lack of information on the part of SME managers about government finance programs has also been cited as a barrier in Georgia.

There is no credit registry in the Kyrgyz Republic, although there are credit bureaus (Tilekeyev 2019). In Mongolia, only land with immovable property can be used as collateral at commercial banks, since it is the only asset that is properly registered in the credit registry managed by the Bank of Mongolia (Boojoo 2019).

Infrastructure limitations. Infrastructure-related barriers include a lack of access to secure and reliable payments and settlement systems, limited availability of either fixed or mobile telephone communications, and limited availability of convenient transport to bank branches or ATMs. Numerous studies have identified a lack of convenient transport as an important barrier to financial access (see, for example, Tambunlertchai 2017). This makes it difficult to reach people living in rural and low-income areas, particularly in Kazakhstan and Tajikistan, where rural–urban disparities are large.

7.3 Demand-Side Factors

Demand-side factors across all of the subject countries include a lack of funds, lack of knowledge of financial products (i.e., financial literacy), low management skills, 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 are widely distrusted, second only to police services (see

Hasanova 2018). This lack of trust is partly associated with the collapse of the Soviet Union, which resulted in a widescale loss of household savings in Soviet-era banks. Confidence in Tajikistan's banking sector remains low following the recent financial crisis, not least due to liquidity problems, insolvency of several large banks, and deposit withdrawal issues from these banks (Mirzoev and Sobirzoda 2019). In Uzbekistan, surveys showed SMEs lacked awareness of business development services, NGOs, and business associations, and had low trust of banks.

7.4 Institutional and Environmental Barriers

Institutional and environmental barriers include inefficient bankruptcy laws and weak credit assessment systems, which contribute to high interest rates and collateral requirements, as well as more general factors that contribute to the overall business environment. For example, Azerbaijan's bankruptcy law does not function efficiently and is seldom used. Moreover, due to the absence of a collateral registry system for movable collateral (other than vehicles), most lenders require real estate as collateral for a significant portion of the loan value, and several only accept real estate collateral in practice (Ibadoghlu 2018). The Bankruptcy Law of Mongolia defines bankruptcy as a civil matter. The bankruptcy process is too vague, onerous, and time-consuming. According to the World Bank's Doing Business Report, it takes four years to become bankrupt (Boojoo 2019). Other negative factors include obsolete provision of primary legislation for property rights, inadequate regulatory frameworks for commercial activity, high corruption, weak rule of law, and low regulatory quality (Tadjibaeva 2019). As shown in Table 8, the Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan have low scores for insolvency resolution.

General competitiveness issues are also important. While Azerbaijan was ranked 15th out of 183 countries in 2010, this figure had fallen to 122nd place among 190 countries in 2018 (Aliyev 2019). The World Economic Forum's Global Competitiveness Index lists access to finance as the second most problematic factor with regard to doing business in Georgia (Khishtovani, Saghareishvili, and Basilidze 2019). In Kazakhstan, state-owned enterprises (SOEs) in many sectors are competing with private companies, thereby introducing distortions to the market economy.

Mandatory social payments in Mongolia are relatively high. The basic corporate income tax (CIT) rate is 10% for income up to \$1.14 million, and the portion of income exceeding that amount is subject to 25% CIT (Boojoo 2019).

7.5 Cultural Factors

Cultural factors include religious and gender-related issues. Although Azerbaijan is a Moslem country, the existing banking legislation does not support Islamic banking, which means that entrepreneurs susceptible to religious demands cannot obtain bank loans. Another cultural aspect is a negative attitude of the society toward women's engagement in entrepreneurship (Aliyev 2019). In Kazakhstan, gender barriers are most prevalent in rural areas, where women lack access to financial services because they do not have regular employment, pension accounts, bank accounts, credit history, financial education, or business knowledge and skills (Kapparov 2019).

In the Kyrgyz Republic and Uzbekistan, most household assets are registered under the names of the male members, which means that effectively women have limited access to credit due to their limited asset holdings (Tadjibaeva 2019; Tilekeyev 2019). Related obstacles in Uzbekistan include negative prejudice from lenders and lack of access to business networks. Table 8 shows that there is considerable variation in the

share of firms with partial ownership by women, with a share of only 4.5% for Azerbaijan, much lower than for the other countries.

8. STATUS OF DOMESTIC AND GLOBAL VALUE CHAINS

Value chains in the countries in this study are present only in traditional sectors, primarily agriculture and resources, not in new economy ones. Each of the countries in this study has its own strategy for value chain development. However, the current stage does not allow them to integrate significantly into global markets. CAREC landlocked countries face similar obstacles to value chain participation, such as low productivity in agriculture and low quality of services, logistics, and access to markets for producers in rural areas. The very low level of equipment technology, labor intensity, and integration to GVCs greatly hinders the increase in productivity and profitability in these sectors. For example, ADB's research on SMEs in Kazakhstan (ADB 2015c) identified the following obstacles to SMEs' participation in GVCs:

- Inability to meet international product or quality standards
- Difficulties in the business environment
- Difficulties in finding skilled workers and professionals in service sectors
- Weak institutional support
- Disadvantages faced by younger firms

8.1 Agriculture

Agriculture comprises a large share of GDP in the Kyrgyz Republic, Tajikistan, and Uzbekistan. The Kyrgyz Republic mainly exports dairy products, fruits, and vegetables. In the case of dairy products, value chains include farmers, agents, factories, and exporters. Although there are more than 10,000 milk farmers in the Kyrgyz Republic, they are the weakest part in this chain due to limited access to finance and the lack of financial literacy, while factories provide high quality final products. The value chain for kidney beans consists of farmers, agents, exporters, and transport companies (Tilekeyev 2019).

Due to good environmental factors, Uzbekistan is the main producer and supplier of horticultural products in the region, placing it among the world's top ten exporters in several categories of fruits, vegetables, and nuts. However, key problems for the development of horticultural and other agricultural value chains include the very slow progress of changes in policies for the sector, such as the lack of market mechanisms and the absence of efficient reforms of the sanitary-phytosanitary system (Tadjibaeva 2019). In Azerbaijan, the main producers of agricultural products are small firms, including family businesses. In 2017, over 54% of the aggregate output came from cattle breeding and around 45% from plant growing. However, the export capacity of the food industry is very low, implying that there is little potential to create value chains there. The role of SMEs in processing industries is insignificant.

Tajikistan faces the challenge of putting in place basic pre-conditions for integration into GVCs, including diversification of production and trade; increased private investment; skills development; financial system development; transport and communications infrastructure; and business regulation. Agriculture has been identified as the most promising sector for GVC development, especially the meat/beef and dairy value chains.

However, lack of access to machinery, know-how, financial resources, skilled labor, and non-labor inputs explains why agribusiness in Tajikistan is lagging behind its neighbors (Mirzoev and Sobirzoda 2019).

Agricultural exports in Georgia are focused on hazelnuts, wine, and water, and these products have the biggest shares in agricultural value chains. Georgian SMEs participate in the global hazelnut GVC, one of the best examples of such participation in the region. However, due to the low level of local suppliers, farmers have to sell their products at the local market while they are still fresh because of the lack of storage services. Value chain participants are connected mainly informally. Other agricultural products, such as fruits and vegetables, have the potential to enter the global market, but value chain development requires strengthening processing facilities, improving the quality of the workforce, better coordination between the VC participants, and improved motivation of farmers (Khishtovani, Saghareishvili, and Basilidze 2019).

In Kazakhstan, SMEs mainly act as intermediaries in the commodity trade; hence SME exports are mainly concentrated in oil- and grain-producing regions. The Kazakhstan government aims to attract transnational corporations to increase the competitiveness of intermediate product exports, especially in the agricultural sector. In addition, successful companies involved in the processing sector receive support in promoting their products in domestic and global markets. The results of these strategies can be assessed in three to five years. However, it is not clear how much SMEs will benefit from these developments in agriculture.

8.2 Manufacturing

Kazakhstan's government highlights the importance of diversifying the economy. The state program of industrial-innovative development for the years 2015–2019 was focused on stimulating the competitiveness of the manufacturing industry, aimed at increasing labor productivity and exporting processed goods. The new program for 2020–2024 aims to create conditions for encouraging the manufacturing sector to enter both the regional and domestic markets.

The Kyrgyz Republic's manufacturing sector has significant potential to join global value chains, especially in apparel manufacturing, where the final product is exported to the Russian Federation and other neighboring countries. Positive factors include low tax rates; a large pool of workers in the industry, including engineers, technicians, and designers; good knowledge of tastes and preferences of Russian and Kazak consumers; and the industry structure allows fast diversification (Tilekeyev 2019).

Mongolia is the second largest producer of cashmere in the world, producing about 6,000 tons of cashmere per year, which makes up 28% of the world's production and over a third of domestic employment. The cashmere industry has received extensive funds, incentives, and technical assistance from the government and international donor organizations. The cashmere industry is dominated by one large company, which makes it a good candidate for GVC finance, although it weakens the competitive position of SMEs in the industry.

8.3 Services

In the service sector, tourism in Azerbaijan has the capacity for further development at both the domestic and international levels. However, for SMEs in Azerbaijan to compete internationally in tourism, in an environment where natural conditions are better in other countries, the government should create a supportive infrastructure and introduce

simplified visa procedures (Aliyev 2019). The tourism sector in the Kyrgyz Republic has potential due to the natural beauty of the mountainous areas, but the insufficient levels of service quality and staff skills are a critical constraint for growth (Tilekeyev 2019). In Mongolia, tourism also has the potential for GVC development, although it faces many challenges (Boojoo 2019).

8.4 Regional Cooperation

Regional cooperation between CAREC countries, partnerships with the Russian Federation and the PRC, and integration in GVCs with transnational corporations will benefit all countries involved, and develop other markets. Such regional cooperation can be achieved with better infrastructure and logistics conditions, and a win-win market environment. For example, introducing mutual visa recognition and product standardization systems will promote increased demand.

In 2015, the PRC announced its transfer of 51 industrial production sites to Kazakhstan. As of 2017, 12 sites, mainly in the processing industry, have been transferred. In addition, five agreements were signed, aimed at creating cluster cooperation zones in transport infrastructure, trade, processing industries, construction, agriculture, and other areas (Vakulchuk and Overland 2019: 119). However, most of the progress so far has been in transport infrastructure, with agriculture being the sector with the highest potential for development. Direct involvement of SMEs in these projects is likely to be slight, but they can benefit from improvements in transport infrastructure that promote regional connectivity (Kapparov 2019).

9. VALUE CHAIN FINANCING ANALYSIS

In some CAREC countries, value chain participants receive financial support through the programs implemented by the government, donor organizations, and financial institutions. The Georgian government provides financial and technical assistance to small farmers and agro-cooperatives through programs such as Plant the Future, Program of Agro-production Promotion and “Co-financing of Agro Processing and Storage Enterprises. The government program Produce in Georgia supports new entrepreneurs, providing credits up to GEL 5 million (approximately \$1.8 million). Other programs entail co-financing SMEs in agro-processing and storage. Through the Agroinsurance program, beneficiaries can insure agricultural land of up to 5 hectares, and up to 30 hectares in the case of cereals. There is also substantial participation in finance at various stages of value chains by international donor organizations. However, internal value chain financing is not yet developed in Georgia, as SMEs involved in value chains mainly have informal relationships with their partners (Khishtovani, Saghareishvili, and Basilidze 2019).

Azerbaijani SMEs have very limited access to finance. In 2017, bank loans allocated to them amounted to 10.2% of banks' aggregate loan portfolio. The high levels of collateral requirements and interest rates are the main factors that discourage SMEs from borrowing: 40.4% of farmers self-finance their businesses, establishing credit unions, and 59 credit unions are operating in Azerbaijan today. In addition, SMEs get support from international institutions through joint projects such as the Agricultural Competitiveness Improvement Project (ACIP) and the Azerbaijan Agricultural Finance Facility. Qualified banks can finance agribusiness value chains at any stage. However commercial banks prefer to allocate loans to the final stages, such as wholesale, retail, and export (Aliyev 2019).

Access to finance in Kazakhstan is largely driven by non-banking financial SOEs such as Damu and Kazagro, which are mostly financed from the government budget and provide direct loans to companies at subsidized interest rates. Kazakhstan also has credit co-operatives in selected sectors, such as agriculture, but they have limited financial impact compared to bank finance and government-supported programs. MFIs provide finance to small farms not reached by other sources (Kapparov 2019). There are no value chain financing mechanisms available in Mongolia.

In Tajikistan, most households which control cattle and meat-dairy production usually secure financing through informal networks from friends and extended relatives who work abroad. Financing schemes are available from local financial institutions, but the obstacles are limited awareness of opportunities and SMEs' difficulty meeting lender requirements. Some agricultural sector programs are supported by the EBRD, GIZ, IFC, and ADB. The government has pledged to provide preferential lending amounting to USD 100 million to support Tajik entrepreneurs doing business with Uzbekistan (Mirzoev and Sobirzoda 2019).

Uzbekistani financial institutions negatively perceive the profitability and creditworthiness of the agricultural sector. Hence, horticultural SMEs cannot access preferred financing under government programs. Entrepreneurs from rural areas are also constrained by bank branches' underdeveloped networks. The low level of financial literacy of farmers keeps them from learning new information about the market and business opportunities. More than 80% of businesses get financial support from family and friends. Due to commercial banks' lack of expertise in value chain financing and existing regulatory limitations, the ability of SMEs to access financing via GVCs is limited.

The continuous increase in trade volumes between CAREC countries and the growing demand in the PRC imply that not only intra-regional integration should be considered. By increasing the modernization and integration of value chains, they can attract investments for renewing their assets. Attracting investments from the Russian Federation and the PRC in the processing sector with the aim of increasing exports to these countries should be considered.

10. REGULATORY FRAMEWORKS

Table 9 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.

Table 9: Regulatory Frameworks for Financial Inclusion in Central Asia and the South Caucasus Economies

Country	Regulatory Agencies	Regulation of MFIs	Lending Regulations	Consumer Protection
Azerbaijan	Financial Market Supervisory Authority: banks, NBCIs (including MFIs, insurance, and investment funds)	Law on non-bank credit organizations (2010); lower capital requirements for NBCIs than for normal banks; no specific law on MFIs	Some limitations on consumer loans	Financial Market Supervisory Authority
Georgia	National Bank of Georgia (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 loan fee must not exceed 150% of loan amount itself; limits on foreign currency loans	Reflected in lending regulations
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; the NBK is tasked with establishing call centers; Committee on Consumer Protection in Financial Services
Kyrgyz Republic	National Bank of the Kyrgyz Republic	Only credit unions and MFIs with a 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
Mongolia	Bank of Mongolia; Financial Regulatory Commission	Registration required for SMEs to be identified and acquire funding		
Tajikistan	NBT	Law on microfinance organizations (2012); the NBT's regulations on three types of microfinance organization; among MFIs, only microcredit deposit organizations can take deposits	Caps on foreign exchange, interest rates, and risks	NBT consumer protection division
Uzbekistan	The CBU regulates both banks and MFIs	MFIs regulated by the CBU (law on banks and banking)	Liberalized access to foreign exchange for small businesses and private individuals	Law on protection of consumer rights

CBU = Central Bank of Uzbekistan, MFI = microfinance institution, NBCI = non-bank credit institution, NBK = National Bank of Kazakhstan, NBT = National Bank of Tajikistan.

Sources: Aliyev (2019); Boojoov (2019); Kapparov (2019); Khishtovani, Saghareishvili, and Basilidze (2019); Mirzoev and Sobirzoda (2019); Tadjibaeva (2019); and Tilekeyev (2019).

10.1 Institutions Responsible for Regulation

In all countries in this study except Azerbaijan, central banks have major responsibilities for regulating and supervising banks and other financial institutions. In Azerbaijan, the Financial Market Supervisory Authority supervises banks, non-bank credit institutions (NBCIs, including MFIs), and insurance companies, and 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 Mongolia, the central bank implements monetary policy and supervises the activities of commercial banks, whereas the Financial Regulatory Commission monitors non-bank financial institutions, securities companies, the insurance sector, and savings and credits cooperatives. In Tajikistan, the central bank oversees licensing, regulation, and supervision; it 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 manage credit, market, operation, concentration, interest rate, and liquidity risks better, as well as to improve the corporate governance and internal control systems of financial institutions. The 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 2018). Recognizing this, the Prime Minister's Office and the State Committee on Investment and State Property Management have taken measures to improve licensing, permits, and inspections systems, thereby enabling SMEs to spend less time on compliance with regulatory requirements (Mirzoev and Sobirzoda 2019).

In Uzbekistan, more than 75% of total banking sector loans come from state-owned banks, focusing on state-owned large corporates and strategically important industries. These banks are controlled and regulated by the state, mainly through the Ministry of Finance, the Central Bank of Uzbekistan (CBU), and the Uzbekistan Fund for Reconstruction and Development (UFRD) (Tadjibaeva 2019).

10.2 Licensing Status of Microfinance Institutions

A consistent financial inclusion policy requires a coordinated regulatory approach. Compared with banks, MFIs typically have greater restrictions imposed on their activities. Therefore, they tend to be regulated separately from 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. 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.

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 NBCIs, 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. Instead of defined 'microfinance' laws, Azerbaijan has laws for NBCIs that permits them a greater number of activities, although expressly forbidding them from deposit-taking. In the Kyrgyz Republic, in response to the rapid growth of MFIs, the central bank has since 2010 strengthened its regulation of MFIs by raising capital requirements to reduce the number of non-working and small MFIs, restricting the amount permitted for multiple lending, and introducing fines.

Some countries bar some or all MFIs from taking deposits (Table 5). In Azerbaijan, NBCIs are divided into two groups: those with the right to accept collateral deposits and those without that right. 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, the legislation identifies three types of MFI: microcredit deposit organizations (MDOs), microcredit organizations, and microcredit funds. Of these three, only MDOs can offer deposit products. MFIs are not allowed to take deposits in Uzbekistan.

10.3 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 CAREC region.

Most countries in the region have issued laws to protect consumer rights (see Table 4). 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 does not specifically address financial services. The situations in the Kyrgyz Republic and Georgia are similar.

In Tajikistan, the central bank in 2015 established a customer compliance department that tracks customer complaints and feedback on financial institutions' activities. In 2017, the Office of the President of Uzbekistan began receiving consumer complaints directly using hotlines and online channels (Ahunov 2018).

In Azerbaijan, consumer protection seems less well developed, and the country has no functioning out-of-court dispute resolution system. The Financial Market Supervisory Authority, which has primary responsibility for protecting financial consumer rights, is still under development and has weak capacity (Ibadoghlu 2018).

10.4 Deposit Insurance

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

The Azerbaijan Deposit Insurance Fund founded in 2007 provides insurance for depositors (physical persons) only, not investors (juridical entities). All deposits are guaranteed if the annual interest rate in national currency is not above 10% and the foreign currency rate is not above 2.5%. Under these conditions, the government guarantees to compensate 100% until 2020. After this date, if the government does not extend the law's force, it will compensate up to only AZN 30,000 for all types of deposit. In Georgia, the deposit insurance scheme launched on 1 January 2018 insures all bank deposits up to GEL 5,000 (\$2,066) (Babych, Grigolia, and Keshelava 2018). In

Kazakhstan, the Kazakhstan Deposit Insurance Fund provide guarantees for all retail deposits denominated in national currency up to T10 million (\$30,000). This threshold incentivizes big depositors to split their deposits between several banks and accounts to guarantee their safety (Kapparov 2018). The Deposit Protection Agency of the Kyrgyz Republic was established in 2011. In Tajikistan, the Deposit Insurance Fund was established in 2003; its assets had reached TJS 260 million (6.3% of total deposits) by the end of 2016. The deposit amount covered by the fund in case of bankruptcy of a credit organization increased from TJS 7,000 in 2003 to TJS 14,000 in 2015 and TJS 17,500 in 2017 (approximately \$2,100). In Uzbekistan, all banks have been covered by explicit deposit insurance since 2002. A blanket guarantee on deposits was implemented under a presidential decree in November 2008, and the statutory limit of 250 times the minimum wage was removed in October 2009 (Demirgüç-Kunt, Kane, and Laeven 2014).

10.5 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 remaining consistent with financial stability and other regulatory requirements. In many cases, service providers are not banks, making it difficult to implement a consistent approach. Azerbaijan is rated as having a relatively unstable political and regulatory environment, but a very supportive infrastructure and ecosystem for financial technology (Ibadoghlu 2018). In Azerbaijan, the government has created an appropriate legislative framework for the expansion of non-cash operations, and has taken steps to create an appropriate infrastructure. However, its effect has been hampered by various legal restrictions on non-cash transactions. The regulatory sandbox mechanism is not used in Azerbaijan, which significantly limits the potential development of fintech companies in the market (Aliyev 2019).

11. POLICIES TO PROMOTE SME FINANCE

11.1 National Strategy

Although the notion of financial inclusion is relatively new to the CAREC countries, it is becoming a major goal for their governments, which are beginning to include it along with financial education in their national strategies. Overall, the CAREC countries have not implemented any systematic financial inclusion strategies or policies, and few targeted policies have been advanced. Most government efforts in this area have had 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 those of the central bank, ministries, and/or financial regulatory bodies. Table 10 shows the range of approaches being taken in the CAREC region. Of these countries, the Kyrgyz Republic and Azerbaijan have the most well-articulated financial inclusion strategies, and have incorporated them in their national economic planning strategies. Georgia has a specific national strategy for SMEs, which includes substantial emphases on raising financial literacy and promoting exports. Kazakhstan, Tajikistan, and Uzbekistan have long-standing policies backing their SME support programs, but no articulated national strategies for financial inclusion as such. In Kazakhstan, the Business Road Map 2020 program for SMEs has been winding down in recent years. In Mongolia, the SME program does not explicitly mention financial inclusion; rather, it aims to create a more holistic environment that includes legal and technological innovations (Boojoo 2019). In

Uzbekistan, survey participants reported that they encountered situations of legal collisions, where one legislative act contradicts another, thereby reducing the effectiveness of state support measures. Duplication of functions and overlapping initiatives are very frequent (Tadjibaeva 2019).

Table 10: Strategies and Programs for SME Finance

Country	National	Central Bank	Ministries/Regulators	Private Sector
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; Strategic Roadmap for the production of consumer goods by SMEs	Microfinance sector and financial inclusion strategy	SME subsidy programs under the Economy Ministry; presidential decree of 17 September 2017	Azerbaijan Microfinance Association
Georgia	No comprehensive national financial inclusion plan; SME development included in the Georgia 2020 Socio-Economic Development Program; SME Development Strategy of Georgia 2016–2020	National Bank of Georgia received a major grant from the IFC in 2014 to increase access	Ministry of Economy and Sustainable Development; Entrepreneurship Development Agency (Enterprise Georgia); Innovation and Technology Agency (GITA)	Georgian Chamber of Commerce and Industry (GCCCI); Georgian Employers' Association (GEA); Georgian Small and Medium Enterprises Association
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; Business Road Map 2020 for SMEs		Supporting Resilience of Micro, Small and Medium-Sized Enterprise Finance Project	
Kyrgyz Republic	National Development Strategy for 2018–2040; Microfinance development strategies (2006–2010, 2011–2015) and other programs; Law on State Support for SMEs; Business Service Centers; Easy Credits to Farmers program; Russian–Kyrgyz Development Fund			
Mongolia	SME Program (2018–2020); SME Development Fund	Credit information service	SME Program under Ministry of Light Industry and Agriculture; trade facilitation project under the Ministry for Foreign Affairs; Credit Guarantee Fund	
Tajikistan	National Development Strategy 2016–2030 to include greater complexity and diversification of the economy through SMEs	Signatory to Maya Declaration toward engaging 30% of the population in the formal financial sector, particularly through digital services		Several programs aimed at specific groups of beneficiaries
Uzbekistan	State Fund for Support of Entrepreneurship Development; Public Credit Guarantee; Mandatory lending for SMEs; Every Family is an Entrepreneur program	SME financing targets for Every Family is an Entrepreneur program	Credit Bureau; National Collateral Registry to support lending	Uzbek Association for Microfinance Institutions and Credit Unions

IFC = International Finance Corporation, IPO = initial public offering, SMEs = small and medium-sized enterprises.

Sources: Aliyev (2019); Boojoo (2019); Kapparov (2019); Khishtovani, Saghareishvili, and Basilidze (2019); Mirzoev and Sobirzoda (2019); Tadjibaeva (2019); and Tilekeyev (2019).

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 CBAR developed the microfinance sector and financial inclusion strategy 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 the development of women's entrepreneurship.

Nevertheless, there are gaps in the development programs and approaches in these countries. If the financial inclusion promotion programs are not implemented in a comprehensive and centralized way, the strategies may not yield significant results. In addition to common issues affecting the status of financial inclusion, each country faces specific problems affecting development, ranging from dependency on remittances to credit excesses in some of the more advanced countries. In Azerbaijan, overdue credit has become excessive, and there is a lack of policy to resolve this issue. There are also gaps in legislation, especially related to the protection of customers' financial rights.

11.2 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 identification, innovative products and services, credit databases, credit guarantees, and subsidies. Some examples are described below.

Tax Preferences

Many countries grant taxation advantages or exemptions to SMEs. In Azerbaijan, SMEs as legal entities pay a simplified tax and do not need to pay value-added tax (VAT), profit tax, or property tax, while agricultural producers and industrial agricultural producers are exempt from all taxes except for land tax (Aliyev 2019). In Georgia, there is a preferential tax regime for micro and small businesses. Micro businesses do not pay income tax (except in excluded sectors). For small businesses, the income tax rate is 1%, but where income exceeds GEL 500,000 (\$200,000), the rate is 3%. In the agricultural sector, there is a preferential VAT regime (Khishtovani, Saghareishvili, and Basilidze 2019). In Kazakhstan, current tax policy favors small enterprises and does not stimulate the consolidation of business. This, in turn, leads to a lack of credit history and audited reporting among potential borrowers among local businesses (Kapparov 2019). In Mongolia, one key challenge is the high informal work sector, which inhibits measures to increase financial access; a response to this could be to provide tax incentives for registered businesses.

Bank Resolution Frameworks

In Tajikistan, in order to address the NPL problem and other issues, a greatly improved bank resolution framework was passed in September 2016, preceded by agreement with key partners such as the IMF, WBG, and EBRD over the need to undertake asset quality reviews of the four systemic banks, improve corporate governance of state-owned banks, and lend liquidity support to the two largest banks (Mirzoev and Sobirzoda 2019).

Credit Databases

Information asymmetries, such as a 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 financial institutions' willingness to lend.

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

In Azerbaijan, the first credit bureau, Azerbaijan Credit Bureau LLC, was established in 2017; since May 2018, it has been exchanging information with 120 organizations, including the central bank, 30 banks and 14 banks under liquidation, 47 non-bank credit organizations, 22 insurance companies, three mobile operators, and three communal service operators. However, it is not yet operating (Aliyev 2019) and does not meet the normal standards for credit bureaus. In Georgia, Creditinfo Georgia offers a variety of services to various clients, including commercial banks, MFIs, online lenders, leasing companies, and insurance companies. The information gathered includes the 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, higher than any country in the European Union. According to the World Bank Doing Business Project (2017), the Georgian credit bureau scores eight points out of eight on depth of consumer data. The bureau generates a credit report taking into account the most current information on the individual's (or firm's) characteristics, such as volume of liabilities, length of credit history, frequency of use of bank products, payment history, fulfilling commitments, and whether the individual or firm has overdue loans (see Babych, Grigolia, and Keshelava 2018).

In Kazakhstan, there is a credit registry for credit history on which 14% of SMEs are registered. However, SMEs are not forced to have their reports audited, and there are no additional incentives to do so—e.g., participation in public procurement (Kapparov 2019). 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 are partners of the credit bureau. In Mongolia, a credit information service is available at the Bank of Mongolia, which holds information only about the amount of credit, which can be accessed by only financial institutions. For collateral, there is a separate registration system (Boojoo 2019).

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 MFIs, and holds information on 602,000 individuals and 25,000 firms, representing 887,000 credit transactions. The Bureau of Credit History Somonion covers five banks and 80 small MFIs, and holds information on 120,000 individuals and 8,500 firms, representing 332,000 credit transactions. Although both credit bureaus have their own clientele, they are not adequate, since the CIBT's scoring is unreliable and credit organizations do not use it. Secondly, not all financial institutions provide information on all their clients, and there are risks associated with these information gaps. Thirdly, the prices for CIBT services are high, possibly due to operational or technical support costs, as the CIBT rents its software. The National Bank of Tajikistan recently began collecting full datasets from credit organizations: it plans to establish a national registry wherein 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, but has not yet completed state registration (Mogilevskii and Asadov 2018).

In Uzbekistan, the credit bureau is licensed and supervised by the Central Bank of Uzbekistan, and currently includes information from 28 banks, 76 non-bank financial institutions, and one leasing company. Reporting is mandatory, and requires prior consent of the borrower. There is no limit on the size of loans reported. The bureau covers 8.1 million natural persons and 647,000 legal entities. A publicly accessible, unified, online registry was launched in 2015 under the Central Bank of Uzbekistan (Tadjibaeva 2019).

Credit Guarantees and Subsidies

Credit guarantees can also ease access to finance for SMEs, although they encounter several problems, mainly moral hazard and high costs due to nonperforming loans. Guarantee funds act as mediators between borrowers and commercial banks to provide guarantees when a borrower lacks sufficient collateral.

In September 2017, a presidential decree established the Credit Guarantee Fund of Azerbaijan, which provides entrepreneurs with guarantees for manat loans taken out in authorized banks, and in some cases will also provide interest rate subsidies. Since its launch, entrepreneurs have received a total of AZN 17.5 million in loans thanks to the guarantees issued by the Fund. In addition, a number of institutions in Azerbaijan provide state-supported funding for SMEs, including the Entrepreneurship Development Fund of the Republic of Azerbaijan, the State Agency for Agricultural Credits, the State Fund for Development of Information Technology, and the Azerbaijan Mortgage and Credit Guarantee Fund. Such funds are provided at rates much lower than market rates (Aliyev 2019). Georgia launched a credit guarantee fund in the first quarter of 2019.

Following the 2008 financial crisis, Kazakhstan widened its schemes to help firms access financing through interest rate subsidies and loan guarantees. Currently, the Damu Fund supports around 5% of the total number of existing SMEs. However, the government plans to consolidate the budget expenses in the near future and even cut them in relative terms (Kapparov 2019). Loan guarantees have become popular in Kazakhstan and are growing rapidly, although the absolute number is still small.

In 2017, the Government of the Kyrgyz Republic established a public joint-stock company guarantee fund with capital supplied from the national budget (25%) and ADB (75%). The fund has representatives in every region, working with seven commercial banks and the Russian–Kyrgyz Development Fund. As of the end of 2018, the guarantee fund had issued 237 guarantees, worth 238 million som (see Tilekeyev 2019).

In Mongolia, the SME Development Fund was established to support financing for SMEs by providing long-term concessional loans for SME operations. However, the government structure supporting SMEs, including SME Development Fund, was not sustainable. For instance, the SME fund has been operating under different ministries; also, SMEs cannot apply to the SME fund when they need funding, but have to wait until the SME fund's announcements. From 2013 to 2018, MNT 76.8 billion for 646 guaranteed credits worth MNT 164.4 billion were granted by the Credit Guarantee Fund (Boojoo 2019).

The Credit Guarantee Fund of Tajikistan was established in 2014 and provides credit guarantees to SMEs and technical assistance to Tajik partner financial institutions. 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 (see Mogilevskii and Asadov 2018). The Entrepreneurship Support Fund (ESF) offers credit lines to firms, but investors in the past have been reluctant to pool funding through the ESF due to a lack of transparency in the screening and funding of SMEs, and inflexible governance arrangements (Mirzoev and Sobirzoda 2019).

Uzbekistan has several programs to subsidize interest rates for SMEs, including banking micro-credits. However, there is no evidence that subsidized loan programs have been effective in targeting low-income households, and there is the possibility that, in some cases, subsidized loans are being allocated to those who need the loans less. In 2017, the government launched the program Every Family is an Entrepreneur, which aims to expand low-cost credit to households to spur economic activity. In 2018, the government set up the Entrepreneurship Development Support Fund, which established the framework of the credit guarantee system for SMEs (Tadjibaeva 2019).

Support for Startups and Entrepreneurs

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. Georgia's Innovation and Technology Agency (GITA) provides products and services to entrepreneurs and startups oriented toward innovation and technology, aiming to develop a strong startup ecosystem. As of October 2018, GITA had assisted 125 startups. The state-owned investment fund, the Partnership Fund, supports the energy, real estate, agriculture, and manufacturing sectors (Khishtovani, Saghareishvili, and Basilidze 2019).

Gender Support

In Kazakhstan, there is no national state program to support women-led businesses. Some multilateral banks have programs to promote lending to women, including the EBRD and ADB (Kapparov 2019). In Tajikistan, some international organizations have developed programs aimed at specific groups—for example, the EBRD provided \$1 million to support female entrepreneurs through the Women in Business initiative.

Support for Exports

In Mongolia, the Ministry of Foreign Affairs has a program to promote exports, although no assessment of this is available. In an effort to boost SME exports, the government of Uzbekistan created the Export Promotion Fund for Small Business and Private Entrepreneurship (EPF) under the National Bank of Uzbekistan (NBU) in 2013. The EPF provides the following services: export marketing, support for the registration of export contracts with Uzbekistan's authorities, research on standards in target markets, legal services, and loans and financial services (Tadjibaeva 2019).

Competition Policy

From 2020, foreign banks will be allowed to establish branches in Kazakhstan. This was a World Trade Organization accession requirement for the country. This could increase the supply of financial products available for SMEs and foster competition in the local market (Kapparov 2019).

12. CONCLUSIONS AND RECOMMENDATIONS

Greater access to finance for SMEs can allow them to take greater advantage of investment projects with potentially high returns and participate in international trade. This, in turn, can enhance their prospects for growth, investment, technological upgrading, profitability, and employment. Greater financial access may thereby provide side benefits to the economy as well, such as higher and more inclusive growth, greater financial stability, and improved 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.

Azerbaijan, Kazakhstan, and Tajikistan have relatively low levels of SME loans. Moreover, financial access can vary significantly between rural and urban areas, and between income or age groups. Although remittances play a large role in several CAREC economies, banks do not typically target this market with specific products or services. Access to other financial products, such as insurance, is quite low.

12.1 Pervasive Barriers to SME Finance

There are numerous barriers to financial inclusion of SMEs in the CAREC economies on both the supply and demand sides, as well as institutional/environmental and cultural barriers. 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 SMEs. Regulatory restrictions on capital adequacy, identification requirements, and branch openings, as well as inadequate infrastructure for transport and payment systems, and inadequate legal frameworks for insolvency and collateral registration, compound these problems. Lack of competition in the banking sector can push up interest rates in some countries. Corruption is also a significant problem in several countries, while widespread participation in the informal sector makes it difficult for workers and firms to provide data showing their creditworthiness. Consumer protection efforts in CAREC economies are generally rudimentary, with few specific rules covering consumer finance, and mainly consist of interest rate caps on loans, which may be counterproductive in some cases.

On the demand side, the chief barriers are a lack of cash, ignorance of financial products and services, lack of management expertise, and lack of trust in the financial system. Even when financing is available, high interest rates and collateral requirements discourage borrowing. 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 true in the Kyrgyz Republic. Weak consumer protection regimes and corruption can also discourage demand for finance.

Institutional factors include inefficient bankruptcy laws and weak credit assessment systems, which encourage high interest rates and collateral requirements. Cultural factors also tend to limit women entrepreneurs' financial access in some countries. Despite the predominant role of Islam in the region, a number of countries, such as Azerbaijan and Uzbekistan, do not have legislation to support Islamic banking. This hinders both the demand and supply of credit in these countries.

12.2 Need for a Comprehensive SME Finance Strategy

The CAREC 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 results remain limited. A number of individual policies encourage SME finance, such as loan guarantee programs, credit databases, and subsidized loans; in most countries, however, there is 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. Most CAREC economies have some kind of credit bureau (Georgia's in particular is highly rated), and a number of economies also have credit guarantee programs. Mobile phone banking, e-money, internet banking, and other forms of financial technology are generally developing rapidly in the region (except in Tajikistan), albeit from a very low base in most cases.

The barriers to SME finance, especially in agriculture, are pervasive, and a multi-pronged approach is therefore needed to tackle them. A comprehensive strategy for promoting SME finance and participation in GVCs should include the following elements: (i) rationalization of SME definitions; (ii) general measures to promote SME finance; (iii) measures to promote and formalize SME participation in GVCs; (iv) measures to promote value chain finance; and (v) measures to promote the financial literacy of SME managers and entrepreneurs.

In most CAREC countries, most farms and many self-employed entrepreneurs are excluded from the definition of SMEs, and hence excluded from programs to promote financial access for SMEs. This naturally makes it difficult to develop an SME-finance and GVC-participation strategy for the agricultural sector. The definition of SMEs should be broadened to cover more entities in the agricultural sector.

A comprehensive strategy for supporting SME finance should be developed, including the following elements:

- Credit guarantee schemes should be introduced in countries where they are not already available.
- Credit databases and credit bureaus should be strengthened and integrated.
- Banking sector regulation should be eased in situations where it stifles innovative products for SMEs and distorts competitive advantages between large firms and SMEs. Reforms could include addressing cashflow-based lending, expanded collateral definitions and alternatives, lending in cash, and better use of credit histories.
- Policies to increase competition in the banking sector should be promoted in cases where lack of competition tends to raise interest rates.
- Regulation of MFIs should be eased where it is currently too strict (e.g., Uzbekistan).
- Collateral registries should be adopted and expanded beyond immovable physical property to facilitate SMEs' access to credit.
- Insolvency resolution regimes should to be streamlined and standardized. Support is needed for the development of a sound legal environment and institutional strengthening.

- Consumer protection regimes should be strengthened, including requirements for financial institutions to provide transparent and timely information.
- Local credit unions should be introduced where they currently do not exist.
- Alternative sources of funding such as venture investment funds, business angels, peer-to-peer lending, and crowdfunding platforms should be encouraged through the promotion of fintech and other financial innovations.
- SME startups should be promoted by developing incubation and acceleration facilities which offer business advisory and mentoring services, including in relation to finance. Private equity funds should also be encouraged.
- Access to government programs should be made easier. For example, microfinance organizations in Georgia are not eligible to participate in government-initiated programs.
- Legislation for establishing Islamic banking should be introduced in countries where it can contribute to financial access for SMEs.
- An adequate infrastructure to support financial operations and transactions in rural areas could be created in post offices. Since postal services enjoy the trust of the rural population, post offices could be an important financial access point for households in rural areas.
- Promoting a shift from cash to digital payments can also be consistent with a financial inclusion strategy.

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

In most CAREC countries, the agricultural sector shows the potential to develop value chains, but this is frequently hindered by inadequate logistics and storage facilities. The second main thrust of strategy should be to promote the efficiency of value chains and encourage participation by SMEs.

- Investment in efficient transport infrastructure and storage facilities should be encouraged.
- In order to increase SMEs' involvement in value chains and to promote formal relationships between chain participants, government programs should require or consider contracts as an advantage for granting benefits.
- In cases where value chains have a minimal level of support in government programs, further research should be carried out on the current state of SME involvement in existing value chains.
- Land-related regulations need to be reformed to promote efficient use. In Georgia, the restriction on foreign ownership and management of agricultural land should be abandoned, the land registration process should be finalized, and the process of privatization of state agricultural land should be accelerated.

In addition to agriculture and manufacturing, the service sector also has the potential to attract value chains. One example is the large potential for tourism development in Azerbaijan and the Kyrgyz Republic, where a strategy could be to offer transport services to tourism enterprises with conditional requirements for training.

The development of value chain financing is still limited, partly due to perceived high risks in the agricultural sector. In Azerbaijan, surveys show that the banks are most interested in financing the trade or food services that are the end stage in the value chain. Therefore, the third prong of the strategy should aim to increase the attractiveness of value chain financing to domestic financial institutions.

- A strong framework should be developed for value chain financing with banks, financial institutions, and IFIs. Financial programs in CAREC countries should be expanded to cover financing within value chains, which can increase SME value chain involvement and provide further incentives and support for engagement with international companies.
- Trade finance for SMEs should be encouraged.
- Innovative schemes for value chain finance should be introduced, such as group finance and local investment funds in the case of the Kyrgyz Republic.

Financial literacy levels in CAREC economies are generally low, although survey evidence remains limited. A fourth leg of the strategy should aim to carry out more detailed and consistent assessments of the situation of financial literacy of SME managers and entrepreneurs, and develop comprehensive financial education strategies for them.

- More national financial literacy surveys using consistent and internationally comparable methodologies should be carried out in the region.
- Among the CAREC economies, 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 having developed a financial education program for schools, although it has not yet been implemented. Mongolia has undertaken a national program on financial literacy 2016–2021. So far, Kazakhstan, Tajikistan, and Uzbekistan do not have such programs.
- Effective national strategies for financial education 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- 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) the adoption of a long-term timeline with flexibility to respond to changing needs.
- Financial education programs can involve financial service providers, industry associations, nongovernment organizations, mass media, higher education institutions, municipalities, and financial consultants. Key issues to be addressed include managing borrowing costs prudently and developing long-term savings goals. Governments could support SMEs by conducting training aiming to increase SMEs' awareness of market requirements, government programs, and financial products and services.

- Monitoring and evaluating national financial education strategies is vital to build experience and encourage program adaptation. If appropriate incentives are provided, think tanks and universities can help with monitoring and evaluating efforts. Since government support programs will be insufficient 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 necessary infrastructure and other investments where long-term finance is required.

REFERENCES

- Ahunov, Muzaffarjon. 2018. Uzbekistan. In *Financial Inclusion, Regulation, Literacy and Education in Central Asia and South Caucasus*, edited by P. Morgan and Y. Zhang, eds. 257–286. Tokyo: Asian Development Bank Institute.
- Aliyev, S. 2019. Problems and Opportunities for Leveraging SME Finance through Value Chains in Azerbaijan. *ADBI Working Paper 973*. Tokyo: Asian Development Bank Institute. <https://www.adb.org/publications/problems-opportunities-leveraging-sme-financevalue-chains-azerbaijan> (accessed 5 May 2019).
- Asian Development Bank (ADB). 2015a. *Asian Development Outlook 2015: Financing Asia's Future Growth*. Manila: ADB.
- _____. 2015b. *Asia SME Finance Monitor 2014*. Manila: ADB.
- _____. 2015c. *Integrating SMEs into Global Value Chains: Challenges and Policy Actions in Asia*. Manila: ADB.
- Babych, Yaroslava, Maya Grigolia, and Davit Keshelava. 2018. Georgia. In *Financial Inclusion, Regulation, Literacy and Education in Central Asia and South Caucasus*, edited by P. Morgan and Y. Zhang, 126–165. Tokyo: Asian Development Bank Institute.
- Boojoo, L. 2019. Leveraging SME Finance through Value Chains in Mongolia. *ADBI Working Paper*. Tokyo: Asian Development Bank Institute. (Forthcoming).
- Demirgüç-Kunt, Asli, Edward Kane, and Luc Laeven. 2014. *Deposit Insurance Database*. International Monetary Fund Working Paper WP/14/118.
- Gereffi, G., J. Humphrey, and T. Sturgeon. 2005. The Governance of Global Value Chains. *Review of International Political Economy* 12: 78–104.
- Group of Twenty (G20). 2012. G20 Leaders Declaration. Toronto, Canada: G20 Information Centre. Available at: <http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html> (accessed 17 June 2019).
- Hasanova, Savia. 2018. Kyrgyz Republic. In *Financial Inclusion, Regulation, Literacy and Education in Central Asia and South Caucasus*, edited by P. Morgan and Y. Zhang, 187–224. Tokyo: Asian Development Bank Institute.
- Ibadoghlu, Gubad. 2018. Azerbaijan. In *Financial Inclusion, Regulation, Literacy and Education in Central Asia and South Caucasus*, edited by P. Morgan and Y. Zhang, 85–125. Tokyo: Asian Development Bank Institute.
- International Monetary Fund (IMF). 2018. *International Financial Access Survey (FAS)*. Washington, DC: International Monetary Fund. <http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C> (accessed 29 May 2018).
- Kapparov, Kassymkhan. 2018. Kazakhstan. In *Financial Inclusion, Regulation, Literacy and Education in Central Asia and South Caucasus*, edited by P. Morgan and Y. Zhang, 166–186. Tokyo: Asian Development Bank Institute.
- _____. 2019. Leveraging SME Finance through Value Chains in Kazakhstan. *ADBI Working Paper*. Tokyo: Asian Development Bank Institute. (Forthcoming).

- Khishtovani, G., M. Saghareishvili, and S. Basilidze. 2019. Leveraging Small and Medium Sized Enterprise Finance through Value Chains in Georgia. *ADBI Working Paper 968*. Tokyo: Asian Development Bank Institute. <https://www.adb.org/publications/leveragingsme-finance-through-value-chains-georgia> (accessed 8 May 2019).
- Klapper, L., A. Lusardi, and P. van Oudheusden. 2015. *Financial Literacy Around the World: Findings from the Standard and Poor's Rating Services Global Financial Literacy Survey*. Washington, DC: George Washington University.
- Lusardi, A., and O. Mitchell. 2014. The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature* 52 (1): 5–44. <http://dx.doi.org/10.1257/jel.52.1.5> (accessed 12 December 2016).
- Mirzoev, S., and R. Sobirzoda. 2019. Leveraging SME Finance through Value Chains in Tajikistan. *ADBI Working Paper*. Tokyo: Asian Development Bank Institute. (Forthcoming).
- Mogilevskii, Roman, and Shokhboz Asadov. 2018. Tajikistan. In *Financial Inclusion, Regulation, Literacy and Education in Central Asia and South Caucasus*, edited by P. Morgan and Y. Zhang, 225–256. Tokyo: Asian Development Bank Institute.
- Organization for Economic Cooperation and Development (OECD). 2018. *Levels of Financial Literacy in Eurasia*. Paris: OECD.
- Organization for Economic Cooperation and Development/International Network on Financial Education. 2016. *OECD/INFE International Survey of Adult Financial Literacy Competencies*. Paris: OECD.
- Tadjibaeva, D. 2019. Leveraging SME Finance through Value Chains in Uzbekistan. *ADBI Working Paper*. Tokyo: Asian Development Bank Institute. (Forthcoming).
- Tambunlertchai, Kanittha. 2017. Thailand. In *Financial Inclusion, Regulation and Education: Asian Perspectives*, edited by N. Yoshino and P. Morgan. 269-312 Tokyo, Japan: Asian Development Bank Institute.
- Tilekeyev, K. 2019. Leveraging SME Finance through Value Chains in the CAREC Landlocked Economies: The Case of the Kyrgyz Republic. *ADBI Working Paper 972*. Tokyo: Asian Development Bank Institute. <https://www.adb.org/publications/leveraging-smefinance-through-value-chains-carec-landlocked-economies-kyrgyz-republic> (accessed 4 April 2019).
- United Nations Conference on Trade and Development (UNCTAD). 2010. *Integrating Developing Countries' SMEs into Global Value Chains*. New York and Geneva: United Nations.
- United Nations Economic and Social Commission for Asia-Pacific (UNESCAP). 2007. Linking Greater Mekong Subregion Enterprises to International Markets: The Role of Global Value Chains, International Production Networks and Enterprise Clusters. *Studies in Trade and Investment No. 59*. Bangkok: United Nations.
- Vakulchuk, R., and I. Overland. 2019. China's Belt and Road Initiative through the Lens of Central Asia. In *Regional Connection under the Belt and Road Initiative. The Prospects for Economic and Financial Cooperation*, edited by F. Cheung and Y. Hong. 115-133. London: Routledge.

- World Bank Group. 2016. *Enhancing Financial Capability and Inclusion in Azerbaijan*. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/880631470853969754/pdf/107748-WP-P125462-PUBLIC-10-8-2016-12-5-10-AzerbaijanEnhancingFinancialCapabilityandInclusionFINAL.pdf> (accessed 10 May 2019).
- _____. 2017. *Doing Business Project*. Washington, DC: World Bank. <http://www.doingbusiness.org/data/exploretopics/getting-credit> (accessed 4 April 2017).
- _____. 2018. *Global Findex Survey*. Washington, DC: World Bank. https://globalfindex.worldbank.org/#data_sec_focus (accessed 3 July 2018).
- _____. 2019a. *Doing Business 2019*. Washington, DC: World Bank.
- _____. 2019b. *Global Value Chains*. Washington, DC: World Bank. <https://www.worldbank.org/en/topic/global-value-chains> (accessed 15 May 2019).
- World Economic Forum. 2017. *Global Competitiveness Report 2017–2018*. Geneva: World Economic Forum.
- Yoshino, N., and P. Morgan, eds. 2017. *Financial Inclusion, Regulation and Education: Asian Perspectives*. Tokyo: Asian Development Bank Institute.
- Yuhua, Z. 2014. *Integrating SMEs into Global Value Chains: Policy Principles and Best Practices*. Singapore: APEC Policy Support Unit, Issues Paper No.3.
- Yuhua, Z., and A. Bayhaqi. 2013. *SMEs' Participation in Global Production Chains*. Singapore: APEC Policy Support Unit, Issues Paper No. 3.