



ADB Working Paper Series

**LEVERAGING SME FINANCE THROUGH
VALUE CHAINS IN THE CAREC
LANDLOCKED ECONOMIES: THE CASE
OF THE KYRGYZ REPUBLIC**

Kanat Tilekeyev

No. 972
June 2019

Asian Development Bank Institute

Kanat Tilekeyev is a senior research fellow at the Institute of Public Policy and Administration of the University of Central Asia.

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.

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

Suggested citation:

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. Available: <https://www.adb.org/publications/leveraging-sme-finance-through-value-chains-carec-landlocked-economies-kyrgyz-republic>

Please contact the authors for information about this paper.

Email: kanat.tilekeyev@ucentralasia.org

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

The paper discusses state, regulative framework, and recent developments in leveraging access to finance for micro, small, and medium-sized enterprises (MSMEs) in the Kyrgyz Republic through global value chain (GVC) examples in the Kyrgyz Republic. Access to finance in the Kyrgyz Republic is growing and demonstrates improvement of financial inclusion of companies SME sector in the Kyrgyz Republic as well as the sector of individual entrepreneurs and peasant farmers. Four selected value chains in agriculture, industry and service sector demonstrate the gaps in the access to finance of the MSME entities in the value chains supply to export markets. Some practical recommendations are proposed, aiming to decrease financial gaps for the SME sector in building resilient global value chain supplies.

Keywords: small and medium-sized enterprises, micro SMEs, global value chains (GVC), financial inclusion, financial institutions, business development, business environment, access to finance, Kyrgyz Republic

JEL Classification: G21, Q14, L26, M21

Contents

1.	INTRODUCTION AND OVERVIEW OF SMES' ROLE IN THE ECONOMY OF THE KYRGYZ REPUBLIC AND SME FINANCE	1
1.1	Economy	1
1.2	SME Definition.....	2
1.3	SME Role in the Economy	4
1.4	Finance to SME	6
1.5	SME State	8
1.6	Access to Finance	11
2.	STATUS OF FINANCIAL INCLUSION FOR SMES IN THE KYRGYZ REPUBLIC...	12
3.	FINANCIAL KNOWLEDGE AND SKILLS OF SME ENTREPRENEURS IN THE KYRGYZ REPUBLIC.....	16
4.	BARRIERS TO SME FINANCE IN THE KYRGYZ REPUBLIC	18
5.	STATUS OF DOMESTIC AND GLOBAL VALUE CHAINS IN THE KYRGYZ REPUBLIC.....	20
5.1	Export-oriented Value Chains in SME	20
5.2	Dairy Sector Value Chain	22
5.3	Kidney Bean Value Chain	24
5.4	Value Chain in Manufacturing—Garment Industry	27
5.5	Value Chains in Services—Tourism	30
6.	VALUE CHAIN FINANCING ANALYSIS	33
7.	POLICIES TO PROMOTE SME FINANCE	39
8.	CONCLUSIONS AND RECOMMENDATIONS	41
8.1	Conclusions.....	41
8.2	Recommendations	41

1. INTRODUCTION AND OVERVIEW OF SMES' ROLE IN THE ECONOMY OF THE KYRGYZ REPUBLIC AND SME FINANCE

1.1 Economy

The Kyrgyz Republic is one of the smallest countries in Central Asia. The population is a multi-ethnic society of 6.2 million people, with a prevalence of ethnic Kyrgyz (70%). The second and third ethnicities are located in two different regions in the country: Uzbeks (15%) are concentrated in the South, while Russians (7%) mainly live in the North in the capital. The Kyrgyz Republic is one of the poorest countries in the Europe and Central Asia region, with gross national income (GNI) per capita of \$1,130 in 2017 (Atlas method).

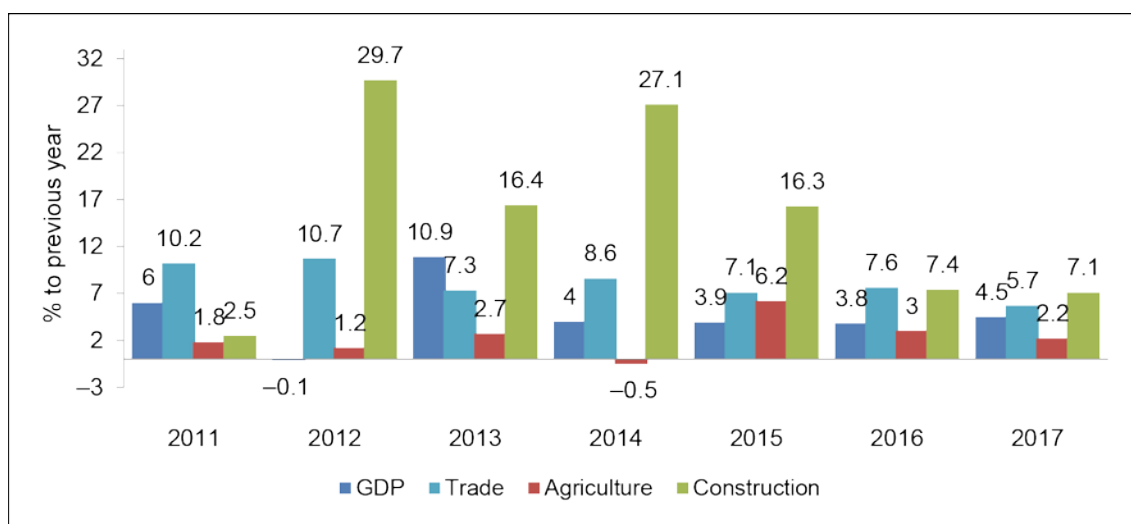
Table 1: The Main Sectors of the Kyrgyz Economy in GDP in 2000–2017 (%)

	2000	2004	2008	2012	2015	2017
Agriculture	34	30	23	17	14	12
Manufacturing	18	15	13	12	16	15
Energy, gas and water	6	3	1	3	2	2
Construction	4	2	5	6	8	8
Trade	12	16	16	16	19	18
Transport	2	3	4	5	4	4
Communication	1	3	4	4	4	4
State, education, and health	9	10	11	15	13	15
Net taxes	7	10	13	13	12	13
Other sectors	5	7	8	9	8	9

Source: National Statistical Committee.

The Kyrgyz economy shows certain recovery from the economic crisis, experiencing economic growth of 4.5% in 2017. Joining the Eurasian Economic Union (EEU) did not bring the expected growth of exports to the Russian Federation and Kazakhstan, but led to keeping labor migration on the high scale. Remittances level have reached one-third of GDP. The Kyrgyz Republic has a declining share of agriculture in GDP, with 34% in 2000 and 13% in 2017 (Table 1). At the same time, employment in the agriculture sector fell from 53 to 29%. While long-term economic growth in the country varies from 4% to 4.5%, agriculture grew 2% on average for the last 15 years. Growing sectors in the economy are construction, trade, transport, and communication. Declining sectors are manufacturing and energy, gas, and water. One should note that the long-term trend of the rate of the growth of the Kyrgyz economy lies in the range of between 4% and 4.5% with the high volatility caused by the different growth rates of such sectors like construction, agriculture, and manufacturing (Figure 1).

Figure 1: Growth of the GDP and Value-Added for Main Sectors in the Kyrgyz Republic in 2011–2015
(% to the previous year)



Source: National Statistical Committee.

1.2 SME Definition

According to the Kyrgyz legislation, there is no unified definition of small and medium-sized enterprises. Therefore, a combined approach is used by the National Statistical Committee of the Kyrgyz Republic (NSC) to fully represent the different types of business activities in the Kyrgyz Republic. The basic classification of types of enterprises is defined by a Government Decree # 78 for the two different types of economic sectors (Table 2).¹

This classification referred to the activity of formally registered legal entities and did not cover individuals' entrepreneurial activity or farmers. NSC use the approach of counting economic activities not only for companies (corporations), but also for households. Normally households are consumers, but some of them also carry out productive activities in the form of unincorporated enterprises created to produce goods and services both for sale and for own use.² This sector includes:

- Private rural household activity on a home plot of land,
- Individual entrepreneurial activity without hired labor,
- Individual peasant farms.

¹ Decree of the Government of the Kyrgyz Republic "On the basic scheme of the classifier of types of enterprises" # 78 of 17 February 1998, in the version of Decree # 590 of 29 August 2002.

² A privately owned business, often owned by one person who has unlimited liability as the business is not legally registered as a company. Accessed October 2018.

Source: <https://www.collinsdictionary.com/dictionary/english/unincorporated-business>

Table 2: Classification of SME by the Number of Persons and Turnover in the Kyrgyz Republic

	Production Agriculture, Construction, Mining, Processing industry, Production and distribution of energy, gas, and water	Service Trade and repair services, Transport and communication, Finance, Education, Healthcare, and other services
By a number of workers:		
Extremely small enterprises	Up to 14 persons	Up to 6 persons
Small enterprises	15 to 50 persons	7 to 15 persons
Medium-sized enterprises	51 to 200 persons	16 to 50 persons
Big enterprises	201 persons and more	51 persons and more
By annual turnover:		
Extremely small enterprises	Up to Som150,000 (\$2,100)	Up to Som230,000 (\$3,300)
Small enterprises	Som150,001 to Som500,000 (\$7,100)	Som230,001 to Som500,000 (\$7,100)
Medium-sized enterprises	Som500,000 to Som2 million (From \$7,100 to \$28,700)	Som500,000 to Som2 million (From \$7,100 to \$28,700)
Big enterprises	Som2 million and more ^a (More than \$28,700)	From Som2 million and more (More than \$28,700)

^a Kyrgyz Som (som) is the national currency of the Kyrgyz Republic. Average exchange rate is Som68.87 for \$1.00 in 2017. Source: NSC.

Source: Decree of the Government of the Kyrgyz Republic "On the basic scheme of the classifier of types of enterprises" # 78 of 17 February 1998, in the version of Decree # 590 on 29 August 2002.

In important growing sectors, such as trade, construction, and services, the share of individual entrepreneurs is significant. Micro-SME businesses use the advantage of the use of simplified taxation based on regular patent payment.³ Working on a patent is easy and does not require providing book-keeping, and rates are flat and low.⁴ Moving from an individual entrepreneur threshold leads to the increase of tax burden, which makes micro operations the most popular form of business operations in the country.

In agriculture, 95% of all output is produced by peasant farms and rural households. Peasant farms pay only land tax and social tax (equal to land tax) and a small fee on the livestock. In total costs, the estimated tax burden on farmers is close to 1% of the output value. Moving from peasant farm status (agricultural cooperative or agro-processing) also increases the tax burden. Thus, the definition of small and medium-sized business enterprises includes **individual entrepreneurs and peasant farms, in addition to small and medium-sized enterprises.**

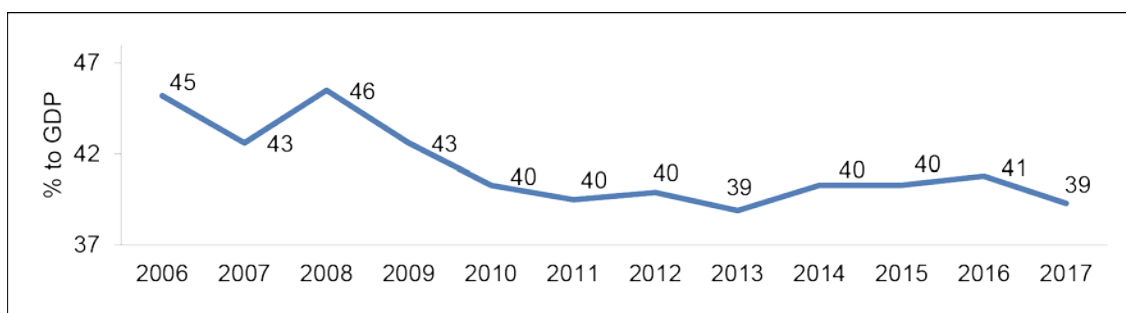
³ Engelschalk et al. (2015) MSME Taxation in Transition Economies, World Bank, Policy Research Working Paper 7449.

⁴ A patent is a form of the special tax regime, when tax obligations paid on the base of the fixed sum for the entrepreneurial activity implemented by individual. Paying the patent means that there is no other tax applied. Limitation for the patent is the annual turnover of Som4 million per year (\$57,000). Excerpts from the Tax Code No. 230 from 17 October 2008.

1.3 SME Role in the Economy

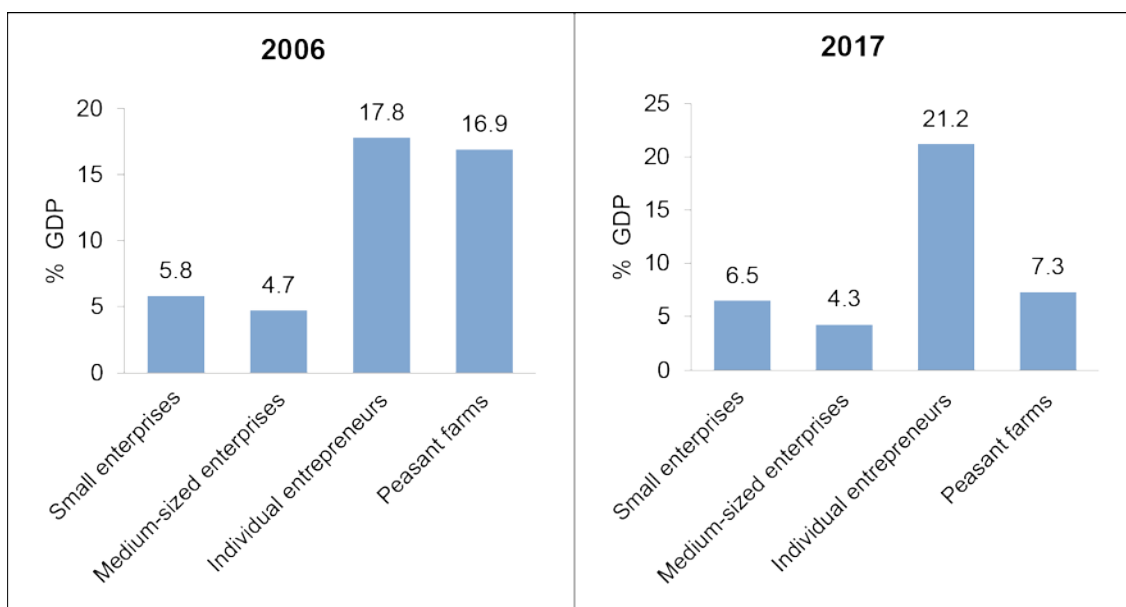
The role of the SME sector in the Kyrgyz Republic is substantial. It reaches 45% of GDP at maximum in 2006 and 2008. Then the share of SME in the national economy declined to the level of around 40% and stabilized at that level after 2010 (Figure 2).

Figure 2: SME Share in the Economy in 2006–2017
(% of GDP)



Source: National Statistical Committee.

Figure 3: SME Sector Contribution by Type of Entrepreneurs in the Kyrgyz Republic in 2006 and in 2017
(% of GDP)



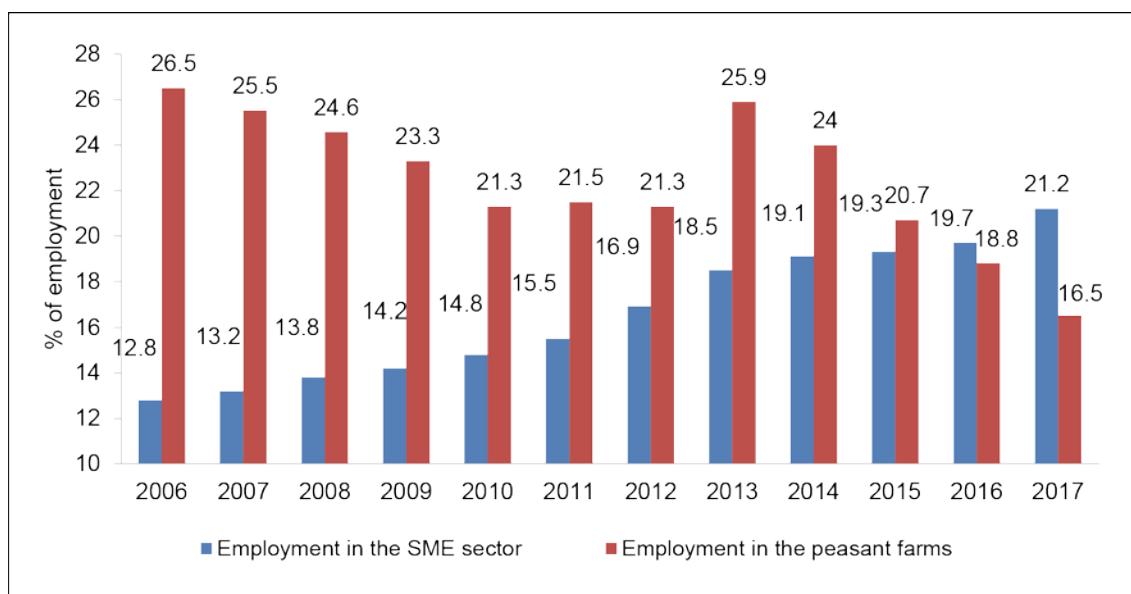
Source: National Statistical Committee.

Four types of entrepreneurs form this contribution to the economy—small and medium-sized enterprises (firms), individual entrepreneurs, and peasant farms. The contribution of different types of SMEs to GDP between changed over time (Figure 3). The share of peasant farmers in GDP declined from 16.9% to 7.3%. The trend explained by the low growth rate of the agricultural sector (Table 1). The individual entrepreneur’s contribution to the SME sector increased (from 17.8% to 21.2%) as well as small enterprises (from 5.8% to 6.5%). The share of medium-sized enterprises declined from 4.7% to 4.3%.

The share of agriculture in SME consist not only of the share of peasant farmers; it also includes as a proportion of agricultural small and medium-sized enterprises (2.2% of total output in 2016). In addition, 29.3% of individual entrepreneurs worked in the agricultural sector in the same period.⁵ Thus, the consolidated share of agriculture in the SME share of GDP consists of 13.5% of the total 39.3% in 2017.

Employment in SME increased from 12.8% to 21.2% of all labor market during 2006–2017 (Figure 4). Most of the growth happened between 2010 and 2013. During the last 3 years, the indicator stabilizes around 20%. The growth of employment in SME, which is mainly the growth of self-employment, consists primarily of the growth of the share of individual entrepreneurs in the SME sector (Figure 3). One should note that employment in agriculture—in peasant farms—is also a significant share of the labor market. Peasant farms are a source of 387.5 thousand jobs (16.5% of employment), mainly farmers themselves and non-paid family workers. The trend of employment in agriculture expectably declined from 26.5 in 2006 on 10 points. The decline is not only demonstrating the outflow of rural population toward alternative employment opportunities in other sectors but mainly reflects increased outflow of labor migration, mainly to the Russian Federation.⁶ Thus, the total combined employment in the SME sector, including farmers, is 37.7%.

Figure 4: Employment in SME Sector in the Kyrgyz Republic in 2006–2017 (%)



Source: National Statistical Committee.

⁵ NSC (2017) Small and medium-sized entrepreneurship in the Kyrgyz Republic in 2012–2016, Bishkek, Kyrgyz Republic.

⁶ According to the information of State Service on Migration under the Government of the Kyrgyz Republic, the number of labor migrants from the Kyrgyz Republic in the Russian Federation reached 640,000 people in 2018. Accessed November 2018, <http://ssm.gov.kg/>.

1.4 Finance to SME

According to the national legislation of the Kyrgyz Republic, there are two main types of financial institutions that can operate on the finance market in the Kyrgyz Republic:

- banks,
- non-banking financial institutions (credit unions and microcredit organizations).

The regulatory framework of the banking sector defined by the Law of the Kyrgyz Republic No. 206 of 16 December 2016, “On the National Bank of the Kyrgyz Republic, banks and banking activity.” It defines the main rules of the banking activity for commercial banks, the requirements, and principles of work with the clients. The law also defines that the major regulatory role in the financial system belongs to the National Bank of the Kyrgyz Republic. The law provides the rules of the work, including currencies, mandatory requirements for limits, licensing, audit roles, and other activity for creating a clear and transparent financial system in the republic.

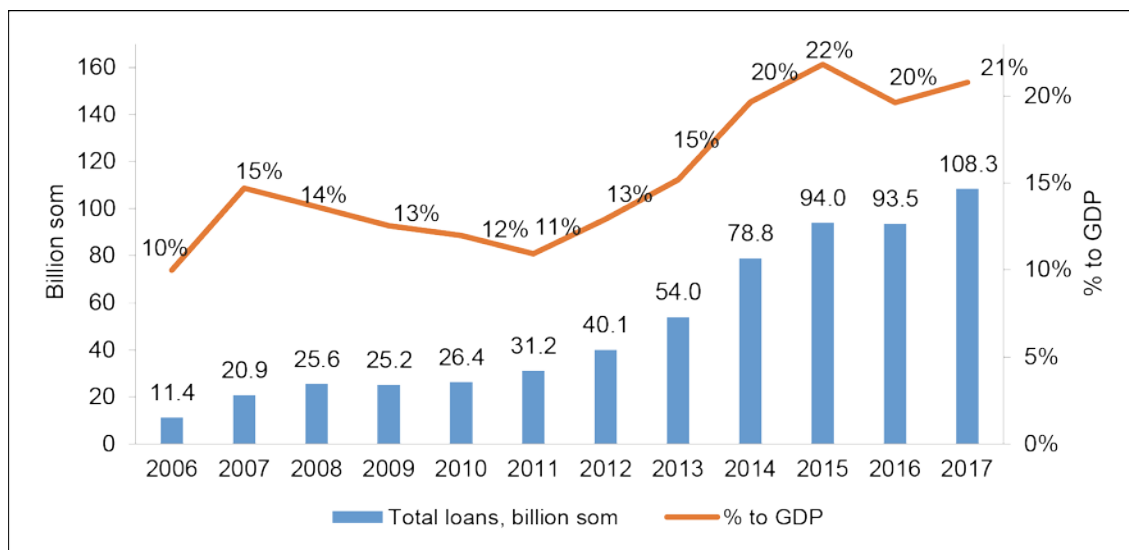
Non-banking financial institutions include credit unions and microfinance organizations. Credit unions operate according to the Law of the Kyrgyz Republic No. 117 of 28 October 1999, “On the credit unions.” It defines the main rules of the activity and provides a regulatory framework for the activity—collecting shares, management, reserves, limitation of the credit, and auditing. The main limitation of the credit union activity is that credit is distributed among union members only.

Microfinance organizations’ work is regulated by the Law of the Kyrgyz Republic No. 124 of 23 July 2002, “On the microcredit organizations in the Kyrgyz Republic.” It provides definitions for the main types of microcredit organizations—microfinance company, microcredit company, and microcredit agency. A microfinance company is a joint stock company which can lend loans and attract deposits. It is a commercial organization which can only lend to clients. A microcredit agency is a non-commercial organization that provides loans to clients with interest rates, but without the right to make a profit. The law regulates the main lending activity and mandatory obligations and rules—lending to clients, licensing criteria, reserves, and modality of main operations. All activities should be done according to the permission of the National Bank described in the license on financial activity.

The regulatory work of the National Bank role in the regulating of the financial system is significant. In general, the legal framework is assessed as satisfactory. It is recommended that efforts be improved for improving the regulatory environment for financial institutions, including risk-based supervision, bringing the regulatory framework to international standards, improving loan management, and equal regulation for all institutions.⁷

⁷ IMF Country Report No. 18/53 (2018) Fourth and Fifth Reviews Under the Three-Year Arrangement Under the Extended Credit Facility and Request for Modification of Performance Criteria. Accessed November 2018, <https://www.imf.org/en/Publications/CR/Issues/2018/02/22/Kyrgyz-Republic-Fourth-and-Fifth-Reviews-under-the-Three-Year-Arrangements-under-the-45651>.

Figure 5: Total Volume of Loans (billion som) and Share to GDP (%) in the Kyrgyz Republic in 2006–2017



Source: National Bank of the Kyrgyz Republic, National Statistical Committee.

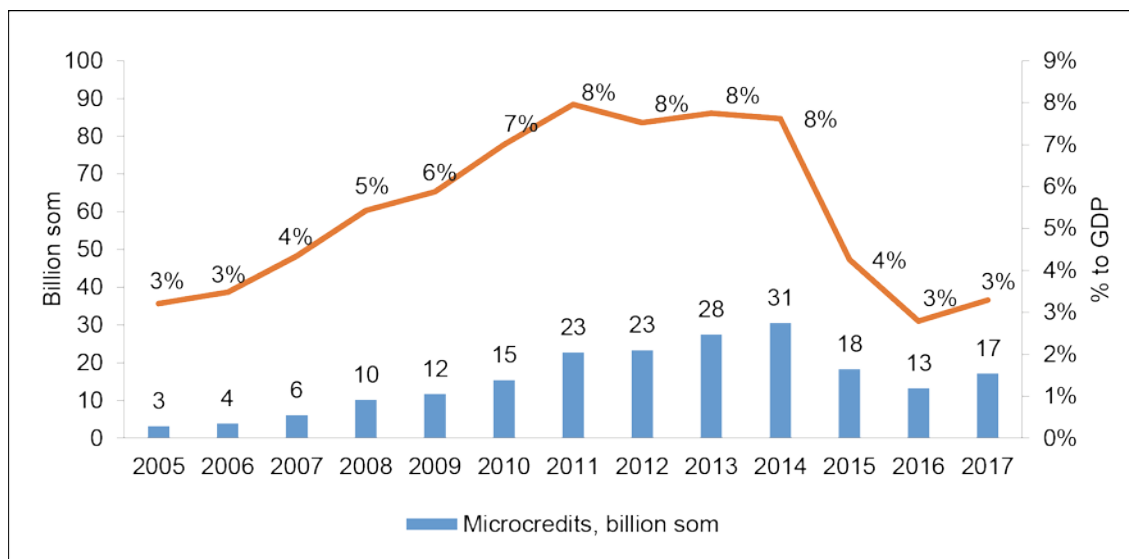
Finance provided by banks and non-banking financial institutions to entrepreneurs and the general population increased over time in the Kyrgyz Republic (Figure 5 and 6). There are no collected separate statistics for the SME finance. It based on the complicated SME definition problem and the prevalence of the individual entrepreneurs. Selected interviewed representatives from financial institutions report that in commercial banks, the share of SME borrowers reaches 60%–70%, while for microfinance institutions, it reaches up to 80%.⁸ However, there are some other problems that constrain the access of entrepreneurs to finance—low deposit base, insufficient financial literacy, and national currency exchange rate stability.

Supply of credit to the economy increased in absolute terms by 9.5 times between 2006 and 2017 (Figure 5). In proportion to GDP, it increased two times—from 10% to 21%.

An alternative source of finance for SMEs, especially for individual entrepreneurs, that has developed is microcredit provided by microcredit organizations. The dynamic of microcredit was controversial during the studied period. During 2005–2014, the volume of microcredit increased by 10 times—from Som3 billion to Som31 billion—almost half of the volume of credit of banks. Then in 2015–2016, the sector of microcredit declined more than two times, and since 2017 it has increased again (Figure 6).

⁸ During report preparation, the author interviewed representatives of commercial banks (Tolubai, FINCA, Capital Bank, Bakai Bank, KICB) and microfinance organizations (FNT Credit and First Microfinance Organization) to cover the gaps in information. This assessment is based on a qualitative approach and is not statistically representative.

Figure 6: The Volume of Microcredit (billion som) in the Kyrgyz Republic in 2006–2017⁹



Source: National Statistical Committee.

One of the reasons for the decline was the sharp depreciation of the Kyrgyz currency. This had a stronger effect on the microcredit organizations than on the banking sector because obligations of microcredit organizations are mostly in foreign currency, while all credit is in the national currency—82% of external debts are from foreign credit organizations and 18% are from international development financial institutions.¹⁰ At the same time, commercial banks demonstrate higher stability due to the more balanced currency structure of the liabilities in the national and foreign currencies. The second reason for the decline of microcredit organizations and the growth of banking credit supply was the transformation of three biggest non-banking microcredit institutions to the banks in 2014–2016.¹¹ The total amount of credit provided by those banks (former microcredit institutions) was equal to Som14.7 billion in 2016.¹² The estimated share of the microcredit organization's credit 'loss' due to the transformation process reached at least half of the volume of the credit. It might be assumed that the share of the microcredit on the market lost by microcredit organizations was afforded by the increased banking sector in 2015–2017.

1.5 SME State

Two main types of SMEs are firms and individual entrepreneurs. The number of small firms increased almost two times during 2001–2017. The number of medium-sized

⁹ Includes credit given by all types of non-banking financial and credit organizations.

¹⁰ National Bank of the Kyrgyz Republic (2018) Report on financial sector stability of the Kyrgyz Republic, Bishkek, Kyrgyz Republic.

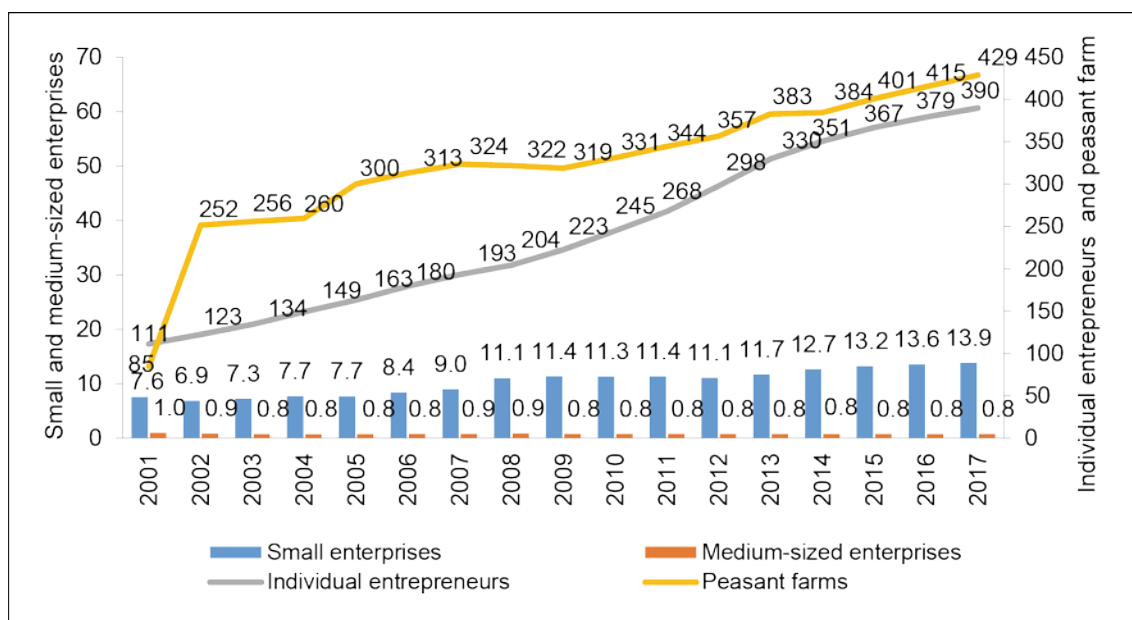
¹¹ In 2014, the Bai-Tushum microcredit company (MCC) transformed into a commercial bank. In 2015, the microcredit company Finca MCC followed the same way, and at the beginning of 2016, the Kompanion MCC finalized this process.

¹² www.finca.kg (Annual report for 2015), Accessed November 2018; <https://www.finca.kg/>.
www.kompanion.kg (Annual report for 2016), Accessed November 2018; <http://www.kompanion.kg/>.
www.baitishum.kg (Annual report for 2016), Accessed November 2018; <http://www.baitishum.kg/>.

enterprises declined between 2001 and 2006 and then stabilized at the level of 800 enterprises.

The number of individual entrepreneurs and peasant farms also increased (Figure 7). The number of farmers increased almost three times between 2001 and 2002 (from 85,000 to 252,000) due to the finalization of the land reform. Then it increased slowly with the average growth rate ranging between 3.5%–4%. The number of individual entrepreneurs increased more uniformly, with an average rate growth of 8%. During the last 5, the growth rate declined to 5%.

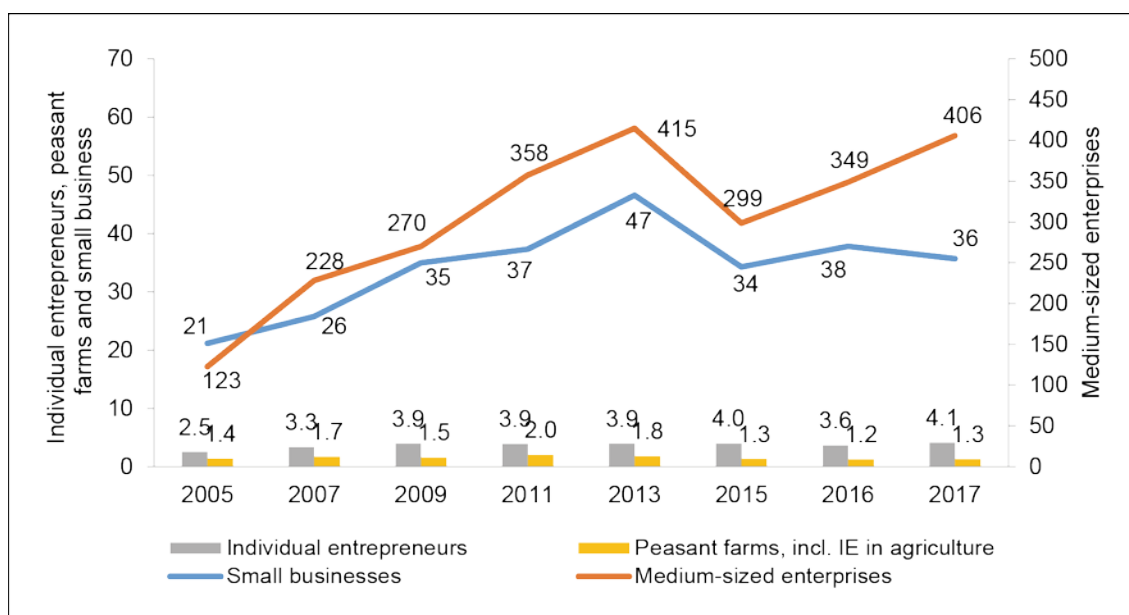
Figure 7: Number of SME entities in the Kyrgyz Republic in 2001–2017
(thousands of units)



Source: National Statistical Committee.

There is no data on turnover for micro-SME entities (individual entrepreneurs and peasant farms) due to the absence of internal accountancy. It makes it problematic to apply a standard productivity analysis. However, household-based estimations for micro-SME and national account data allow for estimation of the level of value-added per one unit of each type of SMEs. Medium-sized enterprises, as well as small enterprises, increase the value-added per one business entity in the period 2005–2013. The fall of turnover for medium-sized enterprises in 2015–2017 coincides with the decline of the value-added in 2015, but quickly recovered in 2016–2017. The value-added for small enterprises also demonstrated a decline in 2015, but recovery was lower. Individual entrepreneurs’ value-added increased until 2015 and then varied on the level of \$3,500 to \$4,000 per 1 entrepreneur. Value-added per one peasant farm, including individual entrepreneurs in agriculture, increased to a maximum of \$2,000 in 2011 and declined to \$1,200–\$1,300 in 2016–2017 (Figure 8).

Figure 8: Average Annual Value-Added for all Types of SMEs in the Kyrgyz Republic in 2005–2017
(\$'000 per 1 business entity)^a



^a IE = individual entrepreneurs.

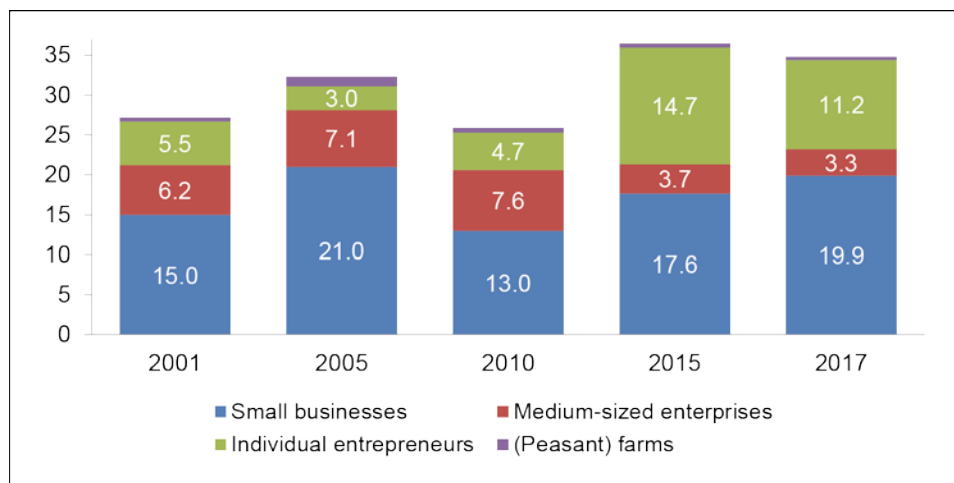
Source: National Statistical Committee, own calculations.

Distribution of SME share within the overall output of the sectors in the economy is different. There are few sectors where the consolidated share of the SME sector is significant (2017):

- Agriculture (62.1% without rural household activity on a home plot of land),
- Retail trade and repairs of automobiles (82.6%),
- Horeca (hotels, restaurants, café) (96.7%),
- Transport and warehouses (62.1%),
- Contract works in construction (77.1%), and
- Manufacturing (21.4%).

The SME sector also plays a significant role in trade, except for peasant farms. SMEs conducted 35% of all export operations in 2017 (Figure 9).

Figure 9: Share of SMEs in Exports in the Kyrgyz Republic in 2001–2017 (%)



Source: National Statistical Committee, own calculations.

1.6 Access to Finance

Access to finance is provided by two types of financial institutions: banks and non-banking financial institutions. The banking sector consists of 25 acting banks with 330 branches in all regions of the country. Non-banking financial institutions consist of 658 organizations, including the specialized financial credit organization, JSC, which is a “Financial Company for support and development of credit unions,” microfinance organizations, credit unions, exchange offices, and the credit bureau.

Credit-providing, non-banking institutions include:¹³

- Microcredit agencies – 42,
- Microcredit companies – 94,
- Microfinance companies – 8,
- Credit unions – 106,
- Credit unions with the right to attract deposits from participants – 7.

The average size of credit in the banks was \$3,900 per borrower at the beginning of 2017; for borrowers of microfinance organizations it was \$907, and for credit unions \$1,800. For the same period, there were 484,400 active credits registered, 66% of which were provided by commercial banks, 33% by microfinance organizations, and 1% by credit unions.¹⁴

The sectoral distribution of the credit demonstrates that access to finance for SMEs in the key sectors is different. Fifty-one percent of total credit in the country were allocated for the SME prevailing sectors—retail trade and services (27%), agriculture (21%), transport (2%), and hotels and restaurants (1%) (Table 3). Other sectors devoted

¹³ According to the register of the National Bank, Accessed November 2018; (<http://www.nbkr.kg/index1.jsp?item=89&lang=RUS>).

¹⁴ Credit Bureau “Ishenim” (2017) Review of the credit market at 1 January 2017 (Note: Only registered participants of the financial market are covered).

to individual consumption are mortgage (9%) and consumer credit (13%), which also support the development of the SME service and production sectors.

Table 3: The Structure of Credit and Microcredit by the Sectors of the Economy in 2016–2017
(%)

#		Total Credit in 2017	Banks	Microcredit Organizations	Total Credit in 2016
1	Agriculture	21	20	25	22
2	Processing production	7	8	1	8
3	Construction	8	8	8	5
4	Trade & repair services	27	29	15	33
5	Transport & warehouses	2	2	2	1
6	Hotels & restaurants	1	1	0	1
7	Mortgage (housing credit)	9	9	1	4
8	Consumer credit	13	10	33	12
9	Other sectors	13	13	14	13

Source: National Statistical Committee, own calculations.

2. STATUS OF FINANCIAL INCLUSION FOR SMES IN THE KYRGYZ REPUBLIC

Access to finance and financial infrastructure is growing in the country. It has reached certain saturation in more developed areas of the country, but still, need more investment is needed in the rural and remote mountainous parts of the country. Indicators of access to financial infrastructure have developed over time—more ATM machines available, more debit and credit cards issued, and more branches of banks were opened (See Table 4 and 5).

Table 4: Financial Access Indicators in the Kyrgyz Republic in 2008–2017

	2008	2010	2012	2014	2016	2017
Automated Teller Machines (ATMs) per 100,000 adults	4.7	7.3	15.6	24.7	31.2	33.4
Borrowers at commercial banks per 1,000 adults	–	29.0	39.8	56.2	95.5	97.7
Borrowers at non-deposit taking microfinance institutions per 1,000 adults	68.3	100.3	109.8	110.3	54.9	64.4
Branches of commercial banks per 100,000 adults	6.8	6.1	7.7	7.8	8.4	8.1
Non-branch retail agent outlets: commercial banks per 100,000 adults	11.2	12.1	17.3	20.2	23.8	–
Debit cards per 1,000 adults	27.2	59.0	104.4	225.0	388.1	469.4

Source: Financial Access Survey: International Monetary Fund, 2017.

**Table 5: Financial Inclusion, Selected Indicators
in the Kyrgyz Republic in 2011–2017**
(%)

	2011	2014	2017
Account (% age 15+)	4	18	40
Debit card ownership (% age 15+)	2	6	19
Credit card ownership (% age 15+)	1	3	4
Borrowed from a financial institution (% age 15+)	11	13	9
Borrowed from family or friends (% age 15+)	26	21	17
Borrowed any money in the past year (% age 15+)		38	32
Saved any money in the past year (% age 15+)		36	24
Mobile money account (% age 15+)			3
Saved to start, operate, or expand a farm or business (% age 15+)		9	9
Borrowed to start, operate, or expand a farm or business (% age 15+)		6	9

Source: World Bank Group. *The Global Findex Database 2017*. Accessed October 2018. https://globalfindex.worldbank.org/#data_sec_focus.

Majority of the installed equipment and branches locates in the capital Bishkek and surrounding Chu Province (34%) (Table 6). Remote provinces (Naryn, Talas, and Batken) are covered poorly by banks due to their low population density and insufficient economic potential. The gap between the more developed areas and other regions is visible and seriously worsen access of financial resources to SME in the remote, rural, mountainous areas.

Table 6: Penetration of Bank Services at the Regional and Country Level in 2018
(per 100,000 adults)

Regions	Bank Cards	ATM	POS Terminals in the Retail Network	POS Terminals in Banks	Payment Terminals
Bishkek + Chui	85,597	61	473	54	50
Issyk-Kul	54,211	48	124	60	56
Naryn	66,488	31	31	58	33
Talas	49,600	31	34	42	43
Jalal-Abad	41,830	25	35	35	27
Osh+ Osh (city)	37,172	23	42	37	27
Batken	41,168	21	9	37	27
National Level	57,314	38	185	45	37

Source: National Bank of the Kyrgyz Republic (2018) Report on the state of payment system at the second quarter of 2018. Accessed October 2018. (<http://www.nbkr.kg/index1.jsp?item=98&lang=RUS>); Author's estimation.

Access to finance improved for individual entrepreneurs and peasant farms. Regarding access to finance for firms, the results of the World Bank Enterprise Survey are one of the useful sources of information for the firms registered as legal entities.¹⁵ These results show that 54% of business entities did not apply for credit in 2013, and 37% of them

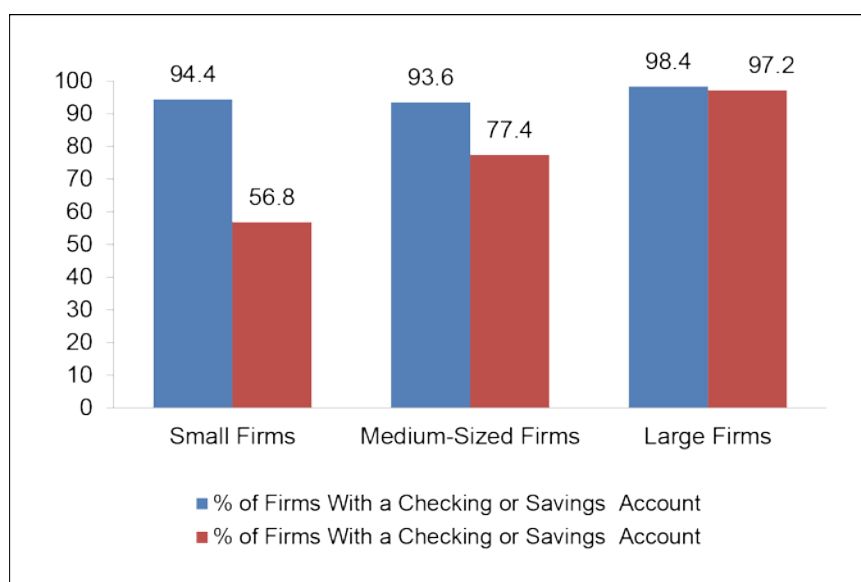
¹⁵ <http://www.enterprisesurveys.org>.

have high interest rates.¹⁶ The responses of the businesses show, however, that the demand for credit is not covered yet. Fifty percent of average size companies claim high interest rates as a reason for not applying for credit, while 16% of small companies select that answer and 31% of big enterprises. According to that data, a significant share of the SME sector (73% in 2017—See Figure 3) is excluded from the analysis of business environment studies.

The share of surveyed enterprises that stated that accessing credit is not a problem increased from 24% in 2008 to 39% in 2013. The share of enterprises reporting that they did not apply for a loan because there was no need also increased from 50% in 2008 to 54% in 2013. The share of enterprises purchasing consumables inputs to be paid on credit increased from 31% in 2008 to 44% in 2013.¹⁷

Enterprise survey data shows that the number of small and medium-sized enterprises with savings or checking accounts in banks for increased in the country.¹⁸ In 2008, 56.8% of small enterprises had an account at the bank, as did 77.4% of the medium-sized enterprises. In 2013, this gap observed in the earlier period diminished. The proportion of enterprises with the bank accounts varies between 94 and 98% (Figure 10). However, the gap in the occurrence of credit between small and medium-sized enterprises compared to large firms declined, but still remains (Figure 11).

Figure 10: Firms with a Bank Account in the Kyrgyz Republic in 2008 and 2013 (%)



Source: Enterprise Survey, The World Bank (2014), SMEs Diagnostic (2012).

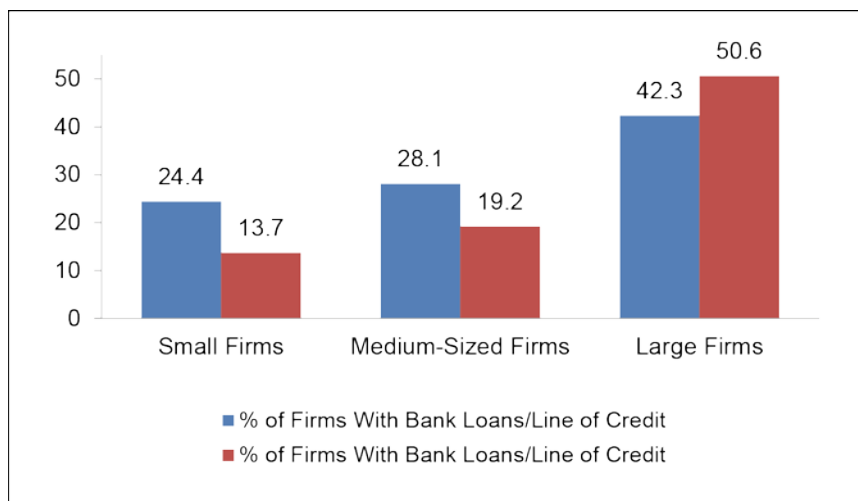
The share of small firms with credit increased from 13.7% to 24.4% between 2008 and 2013, as well as for medium-sized firms—from 19.2% to 28.1%. Large firms' proportion of the credit declined from 50.6% to 42.3%. The difference between Bishkek and other regions also illustrates the existing gap in access to credit (8% minimum). The lowest figures are for the Naryn Province (Figure 12).

¹⁶ World Bank (2014) BEEPS At-A-Glance 2013 Kyrgyz Republic.

¹⁷ World Bank (2014) A brief overview of the business climate and the performance of enterprises for 2013.

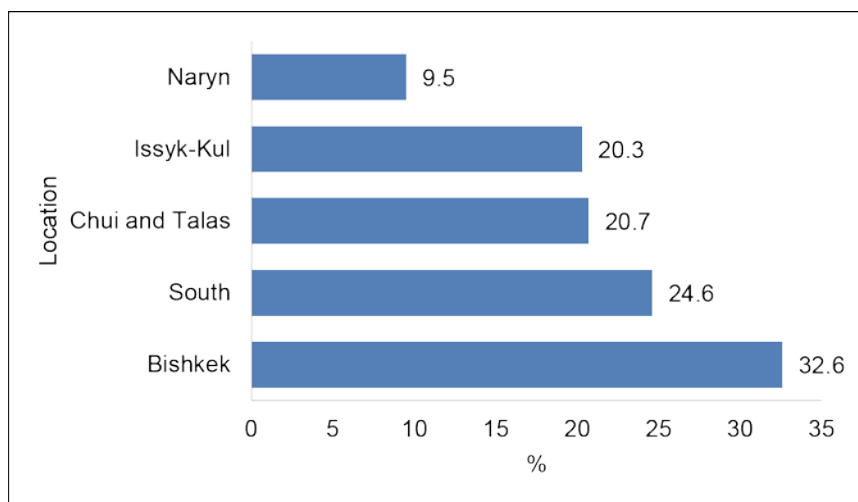
¹⁸ <http://www.enterprisesurveys.org>.

Figure 11: Firms with Credit in the Kyrgyz Republic in 2008 and 2013 (%)



Source: Enterprise Survey, The World Bank (2014), SME Diagnostic (2012).

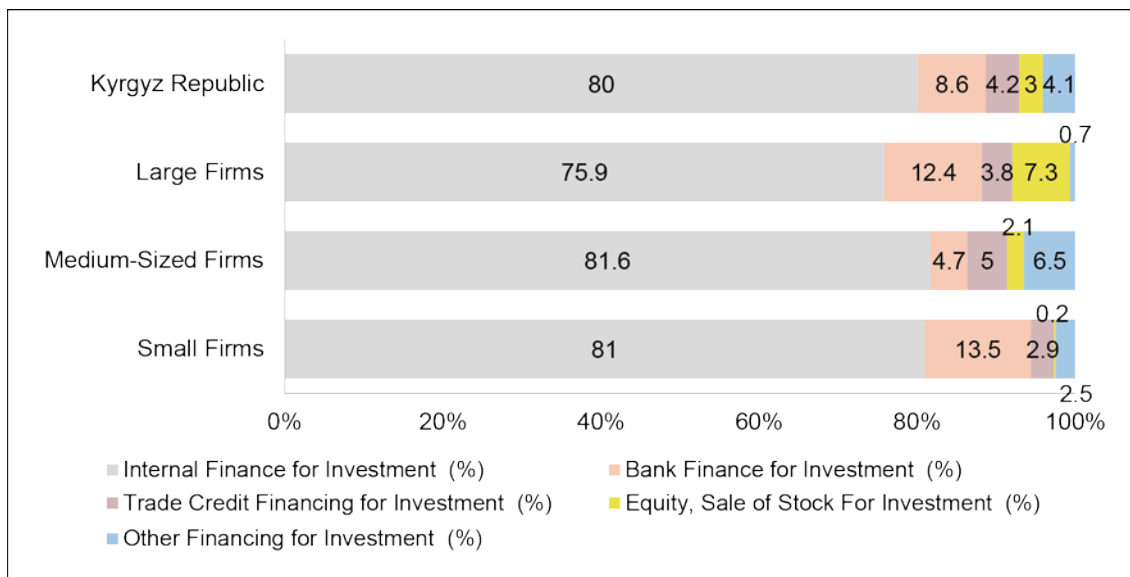
Figure 12: Firms with Credit in the Regions of the Kyrgyz Republic in 2013 (%)



Source: Enterprise Survey, World Bank (2014).

The different sources of investment financing show similarities and differences in financing investment (Figure 13). Bank loans and trade credit financing play a supporting role in investment capital of SMEs. This share is bigger for small firms and for large firms. Medium-sized firms finance investment from credit sources below the country average. Equity financing is found to be more developed among large firms compared to SMEs in the Kyrgyz Republic. The biggest source of finance for investment is internal finances. It caused by the high interest rate in the Kyrgyz Republic.

Figure 13: Financing Sources for Investment in the Kyrgyz Republic in 2013 (%)



Source: Enterprise Survey, World Bank (2014).

3. FINANCIAL KNOWLEDGE AND SKILLS OF SME ENTREPRENEURS IN THE KYRGYZ REPUBLIC

Financial literacy is an important factor in the development of the financial system as well as for SME development. It is necessary to take into account for the micro, small, and medium-sized business (MSMB) sector, especially for the enterprise sector and the micro-business sector based on self-employment in agriculture and service sectors. It should be noted that the activities of both the state and international organizations, as well as financial institutions, for improving financial literacy are aimed primarily at increasing financial literacy of the population (including micro-entrepreneurs), and not at the level of enterprises.

In 2013, IFC conducted a study of the financial literacy of the population. Of the respondents, 60% lack awareness and understanding of the effective interest rate. Around 10% of people have knowledge of compound interest. The understanding of financial concepts of the majority of the people was also insufficient.¹⁹

Assessment of the financial literacy of population was studied in by the National Bank in 2015. It covers all regions, and samples (2,072 persons), aiming for representativeness on the level of income, age, and education. The survey studied different aspects of knowledge of financial markets and included tests of the practical financial knowledge of respondents (assignments on the calculation of interest rates), household cost accounting, strategies for income shortage compensation, and other issues.²⁰

Self- assessment of financial knowledge of the population was stated as insufficient. In the survey, 40.3% of people assessed that their financial knowledge was at a low level, 17% of the participants answered two-thirds of the questions correctly, and only 1% answered correctly on all the questions. The proportion of women answering correctly

¹⁹ World Bank (2014) Kyrgyz Republic: Diagnostic Review of Consumer Protection and Financial Literacy, # 90422 v1.

²⁰ Abakirov et al. (2015) Financial literacy of the population of the Kyrgyz Republic: Facts and Conclusions, National Bank of the Kyrgyz Republic, Bishkek, Kyrgyz Republic.

compared to men was lower. According to the study assessment, 22% of respondents demonstrate unsatisfactory financial knowledge and 12% do not have any knowledge of finance. The study found that financial literacy positively correlates with the income of the respondents and the level of education. Poor and less-educated people demonstrated low financial knowledge and were less motivated to study it. The passive form of savings is prevalent—only 11% have some savings for unpredicted situations. Women have a higher tendency to save money or take credit. Most of the people were not motivated to increase their financial literacy.²¹

The mid-term strategy of the microfinance development in 2006–2010 targets improving the knowledge of financial operators. It stated that knowledge of microfinance specialists needs to be developed further with the support and monitoring of the National Bank.²² The draft of the next strategy of the microfinance development for 2011–2015, which supported the idea of financial literacy improvement was not approved.²³ This idea was later realized in the Program of the Improvement of Financial Literacy of Population for 2016–2020, which was approved in 2015.²⁴

The program emphasizes the priorities: financial literacy of children and youth, financial literacy of adults, and equal access to financial information and financial services for all citizens. The main approach was an attraction of governmental bodies, the private sector, and donors. The program proposes the creation of a new curriculum for the early development of financial literacy. The promotion of knowledge through web-platforms is one of the main areas of low-cost knowledge dissemination approach. The program does not have any specific measures for providing more emphasis on girls or women. The program is not very detailed (no costing and assessment mechanism).

There are a number of activities that have implemented, including the development of the website <http://www.finsabat.kg> and Global Money Week in 2017, which included educational lectures by the National Bank and commercial banks, an IFC panel at higher educational institutions, and training of financial literacy.

In December 2017, the National Bank approved an internal program for the main activities of the development of microfinance sector on 2018–2021, including actions on the distant training of population by microfinance organizations and training of lenders on financial literacy.²⁵

²¹ Ibid.

²² Mid-term Strategy of Microfinance Development in the Kyrgyz Republic on 2006–2010. Approved by the Decision of the Government of the Kyrgyz Republic # 637/37/7 of 30 December 2005.

²³ National Bank of the Kyrgyz Republic – The Strategy of Development of Microfinance on 2011–2015 (Draft). <http://nbkr.kg/searchout.jsp?item=108&material=25495&lang=RUS>. Accessed October 2018.

²⁴ Program of the improvement of the financial literacy of the population of the Kyrgyz Republic for 2016–2020. Approved by the Decision of the Government of the Kyrgyz Republic # 319 of 15 June 2016. <http://cbd.minjust.gov.kg/act/view/ru-ru/98549>. Accessed October 2018.

²⁵ National Bank of the Kyrgyz Republic (2018) Main directions of the development of the microfinance sector in the Kyrgyz Republic in 2018–2021, approved By the Decree of the Board of the National Bank of the Kyrgyz Republic dated 13 December 2017 No. P-11/51-4 (NFKU). <http://www.nbkr.kg/searchout.jsp?item=3206&material=84559&lang=RUS>. Accessed October 2018.

Assessments of financial literacy cover individual entrepreneurs and peasant farmers since they address the needs of the population. The sector of firms (legally registered small and medium-sized enterprises), therefore lies out of sufficient attention. In several sources, financial literacy of the SME sector was specified as insufficient.²⁶ Those statements, however, did not provide any information about evidence base, e.g. survey or assessment.

There have been some efforts on the part of the Kyrgyz government and international organizations to target improvement of financial literacy of the entrepreneurs that have been realized:

- Kyrgyz government and ADB Policy-Based Loan and Grant for Second Investment Climate Improvement Program:²⁷
 - State Program on Financial Literacy to increase bank customer awareness of the benefits, costs, and risks of using electronic payments and financial services.
 - International Bank for Reconstruction and Development – Kyrgyz Audit and Reporting Enhancement Project in 2016, including the promotion of internationally recognized accounting education and capacity building for accountants and business representatives.²⁸

Unfortunately, the evaluation of the efficiency of those projects was not accessible.

4. BARRIERS TO SME FINANCE IN THE KYRGYZ REPUBLIC

One of the potential reasons for the insufficient level of financial inclusion of SMEs can be caused by the collateral requirement of existing banks. The data shows a contradictory trend. The situation was more favorable for the medium-sized and large firms compared to small firms in 2008, which changed in 2013. The requirement for collateral for small firms remained at the same level, but it worsened for the medium-sized and large firms (Figure 14). This change might be explained by the higher political and economic volatility in the Kyrgyz Republic (Global Financial Crisis and Food Crisis;²⁹ the revolution in 2010).

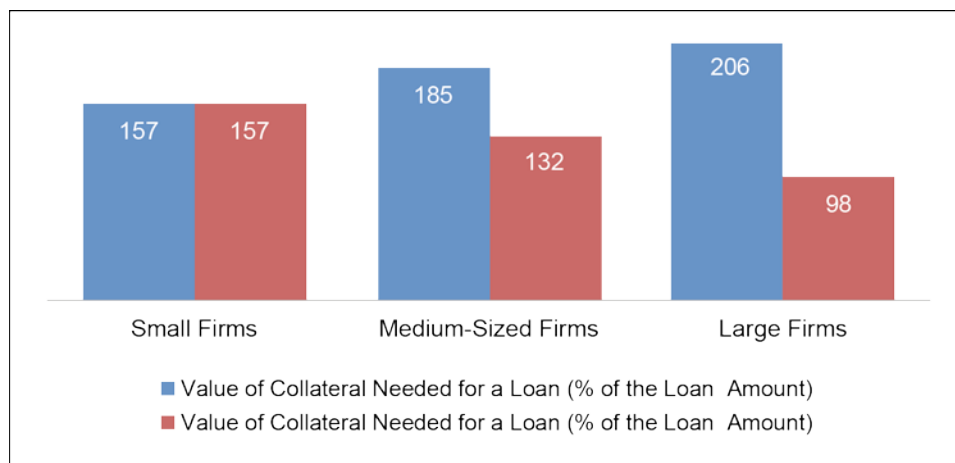
²⁶ ADB (2015) Asia SME finance monitor 2014. Philippines: Asian Development Bank; IMF (2016) Kyrgyz Republic. Selected Issues. IMF Country Report No. 16/56; World Bank (2014) Kyrgyz Republic: Diagnostic Review of Consumer Protection and Financial Literacy, # 90422 v2; OECD (2014) Policy Handbook. Improving Supply Chain Financing in the Kyrgyz Republic: The Case of Agriculture.

²⁷ ADB (2016) Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Loan and Grant for Subprogram 2 Kyrgyz Republic: Second Investment Climate Improvement Program.

²⁸ Supplemental Letter by December, 2016 to the Annex to the Grant Agreement between the Kyrgyz Republic and International Bank for Reconstruction and Development/International Development Association between IBRD and State Service for Regulation and Supervision of Financial Markets.

²⁹ Golay C. (2010) The Food Crisis and Food Security: Towards a New World Food Order? International Development Policy.

Figure 14: Value of Collateral Needed for a Loan in 2008 and 2013 (%)



Sources: Enterprise Survey, The World Bank (2014), SMEs Diagnostic (2012).

The situation regarding the institutional barriers in the country is looking promising. Registering property in the Kyrgyz Republic is relatively easy. The index score for the Kyrgyz Republic is 24 from a maximum of 30 (17 in Kazakhstan and 7.5 in Tajikistan). Land dispute resolution was assessed as 6.5 from a maximum of 8.³⁰ Several credit measurement indicators are presented in Table 7. The strength of the legal right index was assessed at a grade of 9 of 12 (high level). This indicator includes rights of borrowers and lenders through collateral laws (0–10) and protection of secured creditors' rights through bankruptcy laws (0–2). The second indicator measures the depth of the credit information base on the scope and accessibility of credit information distributed by credit bureaus and credit registries (0–8). This indicator is on a satisfactory level of 6 from 8. The credit registry coverage is 0% and credit bureau coverage is 37%. This measures the number of individuals and firms listed in the largest credit bureau as a percentage of the adult population and the number of individuals and firms listed in credit registry as a percentage of the adult population.

Table 7: Assessment of the Getting of Credit in the Kyrgyz Republic in 2018

Indicator	Kyrgyz Republic	Europe and Central Asia	OECD Countries
Strength of legal rights index (0–12)	9	6.6	6.0
Depth of credit information index (0–8)	6	6.3	6.6
Credit registry coverage (% of adults)	0.0	22.2	18.3
Credit bureau coverage (% of adults)	37.0	42.8	63.7

Source: World Bank (2018) Doing Business.

There is uneven access to finance for women entrepreneurs. Even if there are no limitations for women in access to property or getting credit, the data shows that only 29% of immovable property is registered to women, while there is 62% registered to, and 9% to other persons not living at the place of registration.³¹ Most of the assets are

³⁰ World Bank (2018) Doing Business 2018.

³¹ National Statistical Committee and UN Women (2016) Gender in the perception of society. Results of the national survey, Bishkek, Kyrgyz Republic.

registered to the male members of the household, as well as the right to use it. This means that in practical terms, women have limited access to credit due to the general limitation of their rights. Data show that the proportion of women among the managers of small and medium-sized enterprises registered as legal entities is 42% for small enterprises and 39% for medium-sized enterprises. The share of women among individual entrepreneurs is 34.7%, and for heads of peasant farms is 18.8%.³² During the initial stage of development of microfinance organizations, a special focus was given by the development institutions to supporting the creation of microfinance centers in the Kyrgyz Republic, especially for women. At the beginning of the microcredit organization, the share of women in microcredit organizations reached 80%. Even now the majority of borrowers of microfinance organizations are women entrepreneurs, predominantly in rural areas of the Kyrgyz Republic (Table 8).

Table 8: The Share of Female Borrowers among the Borrowers of Microfinance Organizations in the Kyrgyz Republic in 2016–2017

	2016			2017		
	Total Borrowers	Female Borrowers	%	Total Borrowers	Female Borrowers	%
Kyrgyz Republic	239,413	135,981	57	307,997	171,001	56
Batken	16,175	8,468	52	20,847	10,862	52
Jalal-Abad	32,803	19,289	59	42,368	24,715	58
Issyk-Kul	23,384	13,467	58	29,938	17,603	59
Naryn	19,703	12,324	63	26,215	15,984	61
Osh	53,924	27,920	52	72,295	36,969	51
Talas	6,972	4,313	62	8,365	5,139	61
Chui	42,656	25,452	60	49,377	27,855	56
Bishkek (city)	35,393	20,581	58	47,296	26,349	56
Osh (city)	8,403	4,167	50	11,296	5,525	49

Sources: National Statistical Committee.

5. STATUS OF DOMESTIC AND GLOBAL VALUE CHAINS IN THE KYRGYZ REPUBLIC

5.1 Export-oriented Value Chains in SME

Value chain is defined as “the full range of activities which are required to bring a product or service from conception through the different phases of production, delivery to the final consumers and final disposal after use.”³³ The global value chain is the same process occurring in several countries.³⁴ Several selected products illustrate the global and domestic value chains in different sectors of the Kyrgyz Republic. The main criteria for the selection of the value chain were the export potential of the selected product and

³² National Statistical Committee (2017) Men and women of the Kyrgyz Republic 2012–2016, Bishkek, Kyrgyz Republic.

³³ Kaplinsky, R. and Morris, M. (2002) A Handbook for Value Chain Research.

³⁴ Hernandez, R. A., Martinez-Piva, J. M., and Mulder, N. (2013). Global Value Chains and World Trade: Prospects and Challenges for Latin America, Volume 1.

importance for micro, small, and medium-sized business development in the Kyrgyz Republic.

The main selected exported goods are presented in Table 9. Each of these products creates global value chains on export markets. Clothing and clothing accessories include two categories of products: products imported from the People's Republic of China (PRC) and re-exported, and domestically produced and exported textile goods. Unlike many other industrial productions, SMEs prevail in textile production.

Table 9: Export of Main Clothing and Agricultural Products from the Kyrgyz Republic in 2013–2017
(\$ million)

#		2013	2014	2015	2016	2017
1	Export total	1,773	1,640	1,441	1,423	1,757
1	Clothing and clothing accessories	105	100	97	73	119
2	Vegetables	107	85	68	93	75
2a	Kidney beans	73	62	44	55	45
3	Fruits	41	22	31	31	34
4	Cotton yarn	20	24	20	21	25
5	Milk and dairy products	18	25	27	23	24

Sources: UN Comtrade, National Statistical Committee.

Textile goods are exported massively to the EEU, mainly to the Russian Federation.³⁵ The volume of exports of textile decreased in 2015–2016 and recovered strongly in 2017. The export potential of the garment industry is promising. The second potential product is kidney beans, which export to Turkey and Eastern Europe. Kidney beans are one of the key export crop products in the country, for which new export destinations are also being pioneered. Milk products are the only livestock origin value chain that has the potential for growth through targeting EEU markets, as the dairy industry is developing in a more sustainable manner. Thus, export of goods demonstrating the potential to grow and support SMEs include textile (garment) production, kidney beans, and milk products.

Services exports consisted mainly of tourism (52% of all export of services) and transport (26%) in 2017. Other activities—export of communication and financial services—are less important. That tourism is considered potentially important is based not only on its overall share, but also on its higher concentration of SME activity.³⁶

Future potential value chain products that potentially need additional exploration are fresh fruits, nuts, and vegetables for the target markets of the PRC and the Russian Federation.³⁷ These products demonstrate high value and an increasing demand is predicted within the next generation. Selected products include cherries, walnuts, apricots, and plums. Low productivity of land and labor decrease the potential gain of exports of those products. Ineffective agricultural policies, the absence of research and extension services, weak value chains, and market linkages prevent the development of the export potential of the sector. A potential future study for the World Bank may be to explore the idea that the above-mentioned fruits and nuts might be products with a relatively higher comparative advantage in the Russian Federation and the PRC, which

³⁵ <http://www.eurasiancommission.org/>.

³⁶ NSC (2018). Trade in the Kyrgyz Republic 2013–2017. Bishkek, Kyrgyz Republic

³⁷ World Bank (2018) Kyrgyz Republic: Developing agri-food value chains (Policy Note)

may be possible to promote through market expansion, linking processing companies and farmers with the markets, and enabling the business environment.³⁸ That cluster might definitely be developed further with some critical limitation—orchards and forest areas are limited and production cannot be increased easily.³⁹ Therefore, value chain building of these products will require significant investments, not only in logistic infrastructure but also in its gardens.

5.2 Dairy Sector Value Chain

The dairy sector is an important agricultural activity for export promotion, as well as for internal consumption purposes. Cattle increased in the country by 54% over the last 19 years—from 512,000 cows in 1999 to 790,000 in 2017. The growth of cows' herds led to milk production increase. Milk production increased by 48% between 1999 and 2016. At the same time, milk productivity demonstrates a steady decline—in 2016 milk productivity per cow declined by 7.8% in comparison with 1999. More than half of the milk (52%) was produced by rural households, the rest by smallholder peasant farms (2016). Most farms' herd size is 3–4 cows.⁴⁰ Most of the milk produced in the country (70%) is traded by smallholder family farms in the form of fresh milk. Around 1.5 million tons of milk are produced every year, but only a relatively small amount of the milk is processed by milk factories (8%–10%).

Exports of milk products from the Kyrgyz Republic include processed milk and milk products (cheese, butter, yogurts, buttermilk, and ice cream). During the last decade, the volumes of milk products exports fluctuated strongly. Last year demonstrates a significant increase in the export of milk products.

The main destination of the milk exports was Kazakhstan, and in the last couple of years it has also included the Russian Federation—in 2016–2017, Kazakhstan's share of milk exports reached 63%, and the share of exports to the Russian Federation was 36%. On average, for the last decade, the joint share of Kazakhstan and the Russian Federation in the Kyrgyz Republic's milk exports is 95%–99%.

The structure of the milk products exported varies significantly (Figure 15). In the previous period (2006–2010), milk and cream in liquid and concentrated form were the main type of supply of milk products, predominantly on the Kazakh market. Butter and cheese became the main types of exported milk products during 2016–2017.

Value chain-oriented milk exports include farmers, agents (milk collectors), milk factories and exporters (Figure 16). Only processed milk can be exported, therefore milk farmers oriented toward the milk processing factories are included in the milk export-oriented value chain. Milk farmers oriented toward selling their products to milk factories are located in the population points near milk processing factories. The distance from the farmer to milk factory is around 20–30 km and time of supply varies from 4 to 8 hours after milking. The farm gate price of raw milk is Som14–Som15 per liter.⁴¹ The final product at a supermarket in the Kyrgyz Republic cost from Som40 to Som50 per liter. The main value-added element of the value chain is the milk factory, which can provide a sufficient level of quality for the product to be exported. There are 15 factories included on the list of enterprises permitted to supply milk products to the EEU. A milk collecting agent is a keychain of milk consolidation from farmer to the factory. Agents consolidate

³⁸ World Bank (2018) Kyrgyz Republic: Developing agri-food value chains (Policy Note).

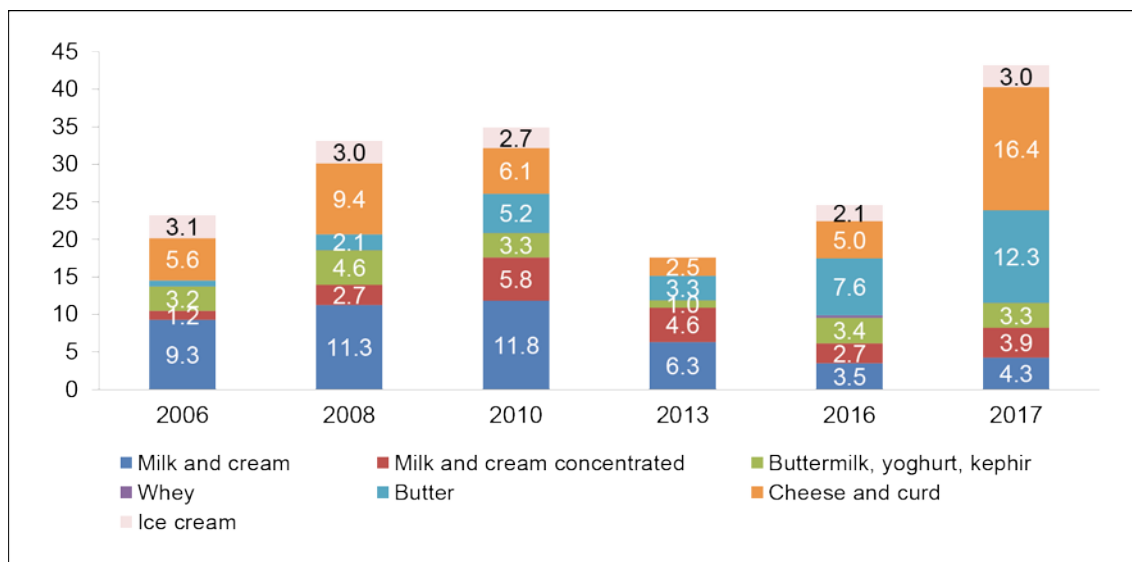
³⁹ Borne W. (2011) Walnut Value Chain Study Findings, Rural Development Fund, Bishkek.

⁴⁰ World Bank (2016) Project Appraisal Document for the Integrated Productivity Improvement Project.

⁴¹ Interviews with milk farmers in Chu Valley.

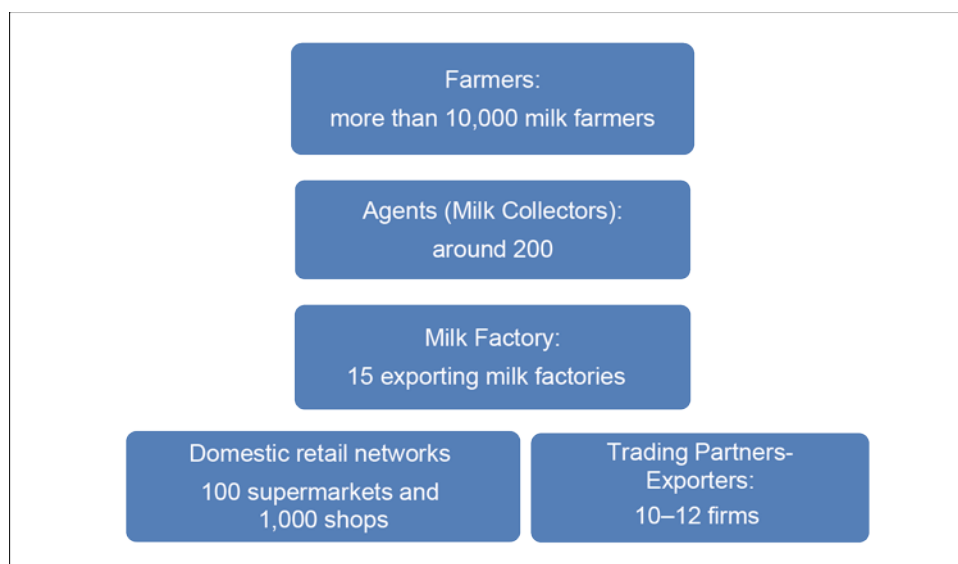
milk, check the quality, and pay for the milk. Agents are responsible for the regularity and the quality of milk.

Figure 15: Structure of the Exports of Milk and Milk Products from the Kyrgyz Republic in 2006–2017⁴²
(\$ million)



Source: UN Comtrade, Eurasian Economic Commission (<http://www.eurasiancommission.org/>).

Figure 16: Milk Export Value Chain Structure



Source: Author's presentation.

There are two value chain participants included as SME businesses—small farmers and milk collectors. Milk farmers and collectors assess the problem of financing current

⁴² Milk products include: milk and cream, not concentrated or containing added sugar (Commodity code – 0401); milk and cream, concentrated or containing added sugar (0402); buttermilk, curdled milk and cream, yoghurt, kephir (0403); whey (0404); butter (0405); cheese and curd (0406); and ice cream (2105).

operations as important, and they complain about the higher interest rates for the borrowing of microcredit. Milk farmers borrow to cover operation costs—70% of operation expenditures are covered by loans.⁴³ Small-scale milk farmers and milk collectors are the weakest elements of the chain due to their small-scale production size, lack of knowledge, and limited access to finance. Milk factories are already out of the SME segment, as are the firms that control the exporting channels of milk products, due to the size of their operations.

Fluctuations observed in the supply of certain types of milk products to the Kazakh and Russian markets may depend not only on consumer preference changes, but might also be caused by the policy application of the technical regulations of the EEU. In 2017, Kazakhstan blocked the border with the Kyrgyz Republic (October–November) and crossing the border became a complicated task.⁴⁴ Those factories that were oriented toward butter and cheese were in the more favorable situation, due to the longer working life of the products.

5.3 Kidney Bean Value Chain

The kidney bean is a newly developed crop in the country.⁴⁵ Other legumes, e.g., peas and soybeans, were historically cultivated in the southern Kyrgyz Republic in low volumes. From the mid-90s, kidney bean production started to develop for commercial purposes in the Talas Province of the Kyrgyz Republic due to the efforts of representatives of the Turkish merchants. Sustainable demand for beans from Turkish exporting firms played a key role in the bean's spread as the main crop of the region. The gross production of legumes increased almost sevenfold over 18 years (1999–2017) (Figure 17).

The yield productivity decreased over time—on average 1.7 tons/ha. In the past decade, the Talas region produced 90%–94% of all leguminous crops in the country. In 2017, the total agricultural land share dedicated to beans reached 52.3% of the total arable land in the region, and 4.9% of all of the cultivated area in the Kyrgyz Republic. Beans have become a monoculture and play a significant role in the region. An indirect impact of the development of the bean sector has been the improvement of the poverty trends and employment opportunity in the area.

In 2009–2016, the Kyrgyz Republic exported 50,000–60,000 tons of kidney beans, on average. The value of exported beans varies significantly from year to year due to bean-price fluctuations on international markets. It brings, on average, \$45 million–\$50 million annually in the observed period (Table 10). The share of bean exports in the total export of the Talas region is 92%–96%. Beans are the region's main export commodity and number one agricultural export product in the country.⁴⁶

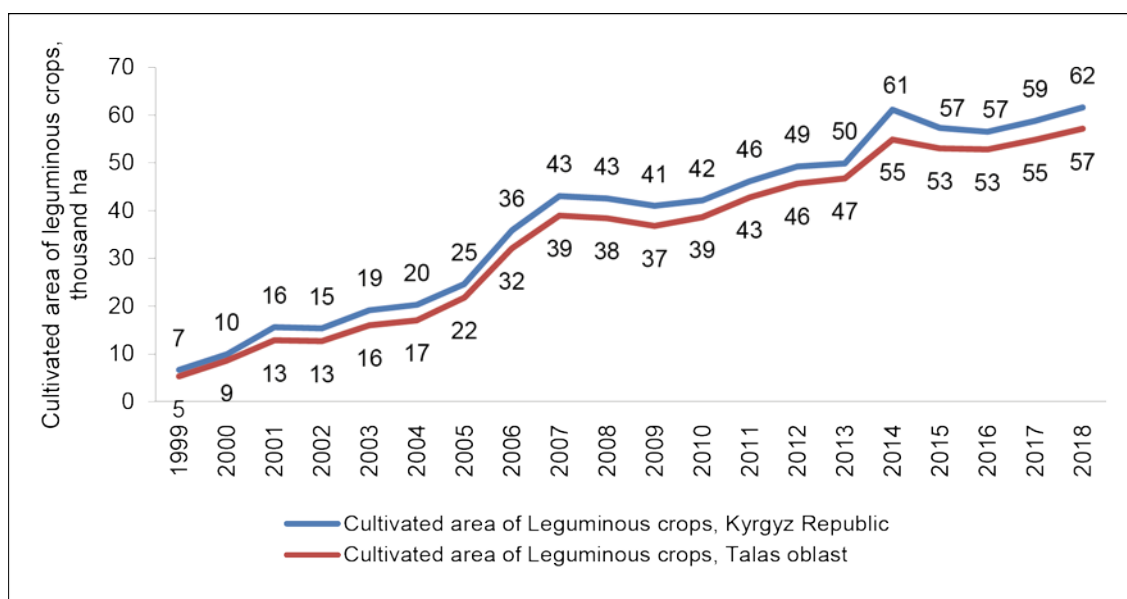
⁴³ Punda, I. and Naizarbekov, B. (2017) Kyrgyzstan: Water along the dairy chain. Working Paper FAO/EBRD Cooperation, FAO UN, Rome, 2017.

⁴⁴ Monitoring of the situation on Kyrgyz–Kazakh border, Ministry of Economy of the Kyrgyz Republic, October 2017. <http://mineconom.gov.kg>.

⁴⁵ The section in the report presents in a condensed form the results of the previous work of the author—Tilekeyev, K. et al. (2018) Production and Exports of Kidney Beans in the Kyrgyz Republic: Value Chain Analysis, University of Central Asia, Working Paper Series # 43, 2018.

⁴⁶ NSC (2015) Foreign Trade of the Kyrgyz Republic 2010–2014.

Figure 17: The Growth of Legume-Cultivated Areas in the Kyrgyz Republic and Talas Province in 1999–2018
(thousand ha)



Source: National Statistical Committee

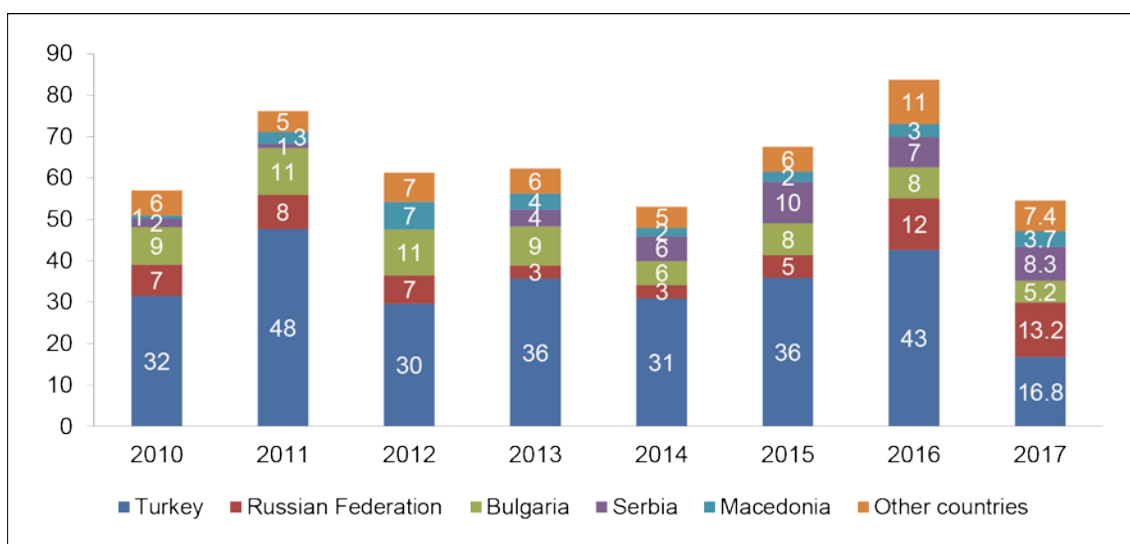
Table 10: Export of Goods and Kidney Beans Share in Exports in 2009–2017

	2009	2010	2011	2012	2013	2014*	2015	2016	2017
Export of goods, \$ million	1,178.3	1,488.4	1,978.9	1,683.2	1,773.2	1,640.6	1,441.5	1,423.0	1,757.5
Export of beans, \$ million	29.6	35.1	51.8	48.2	73	62	43.7	55	45.2
Export of beans, thousand tons	53.3	57	76.4	61.4	61.7	53.1	66.7	83.7	54.6
Share of beans in the export, %	2.5	2.4	2.6	2.9	4.1	3.8	2.6	3.5	2.5

Source: UN COMTRADE, * State Customs Service under the Government of the Kyrgyz Republic.

Most of the harvested beans are exported to Turkey and Balkan countries in Europe (Bulgaria, Macedonia, and Serbia). In 2017, exports to the Russian Federation and Kazakhstan increased due to better currency stability, while in Turkey, the currency fluctuates strongly (Figure 18). Purchased prices for Kyrgyz beans depend on the situation in the global market. The yield in the PRC, Argentina, and Egypt and other major bean exporters, as well as demand in Turkey and the Balkans, and currency fluctuations in Turkey affect purchase price and, consequently, the bean market development in the Kyrgyz Republic.

Figure 18: Export of Beans from the Kyrgyz Republic to Major Markets in 2009–2017
(thousand tons)



Source: UN COMTRADE, * State Customs Service under the Government of the Kyrgyz Republic.

The export-oriented kidney beans value chain is concentrated in a geographically narrow region in Talas Province (Figure 19). It includes farmers, farmers–agents, wholesale agents, exporters, and transport companies. Small farmers are key elements of the value chain of kidney beans due to the specifics of the product. The final quality of the beans depends mainly on the farmers; the next stages of the value chain deal with the distribution, sorting, and packing of the product, which do not add a lot of value to the final product. Therefore, farmers earn most of the value in the chain supply (62%).⁴⁷

Figure 19: Kidney Beans Value Chain Structure



Source: Author presentation.

⁴⁷ Tilekeyev, K. et al. (2018) Production and Exports of Kidney Beans in the Kyrgyz Republic: Value Chain Analysis, University of Central Asia, Working Paper Series # 43.

The export-oriented kidney beans value chain is concentrated in Talas Province. From the bean value chain, it is possible to specify the farmers and wholesale agents as two value chain participants who face limited access to finance. Talas province's share in the credit and microcredit is only 3%. This lack of finance is partially covered by the activity of unregistered private money lending. However, the rates are higher compared to financial institutions and farmers try to not borrow from such sources. One of the solutions is the network scheme of the financing between farmers and wholesale agents, who are the members of the clan (extended family network) (See Box 1 in Chapter 6).

5.4 Value Chain in Manufacturing—Garment Industry

The manufacturing sector has a stagnating share in the economy (See Table 1). The share of industrial production fell from 18% to 12% of GDP between 2000 and 2012. Then it increased and stabilized on the level of 15%–16%. This sector has lower access to finance than other sectors of the economy (Table 3). The reason for this situation is the relatively high interest on borrowing and their low share of long-term credit.

However, some specific clusters of industrial enterprises exist, which developed in such conditions and which create resistant export-oriented value chains. One such cluster is a sector of textile and garments in the Kyrgyz Republic. It based on the development of the trade flows of import of goods from the PRC to the Kyrgyz Republic, local production and export of apparel and goods, in combination with Chinese-origin goods, which move from the Kyrgyz Republic to the Russian Federation and neighbor countries. A number of studies were conducted in 2012–2014 on that matter.⁴⁸ In these studies, garment industry growth and decline was a topic of study and policy discussion. This industry still remains an important source of economic growth, employment opportunities, and export promotion.

The development of the garment sector of the economy was mainly due to the efforts of the private sector, with the support of the government at a later stage. The government creates a preferential regime for taxation based on a patent system for micro-entrepreneurs, mainly in the trade and service sector, expands it to import and export operations, and later also includes the garment sector in it. Such a pattern of trade regime for foreign and domestic trade provided important competitive advantages in regional trade for Kyrgyz traders, including those who control the import of textile inputs and diversified production networks.⁴⁹

The decline of the garment sector took place in 2014 (Figure 20). The decrease of production and export of textile goods was caused by the consumer purchasing power crisis in the final destination market of the Russian Federation and Kazakhstan. The Russian Federation's crisis in turn was determined by the oil crisis crash, and the exchange rate depreciation in 2014–2015 that followed coincided with the decline of remittances. After the recovery in 2016–2017, demand for consumer goods allowed for increasing production and export of goods. The employment figures in the garment

⁴⁸ Birkin et al. (2012) *Textile and Apparel Cluster in Kyrgyzstan*, Cambridge, MA.

OECD (2014) *Private Sector Development Policy Handbook, Expanding the Garment Industry in the Kyrgyz Republic*.

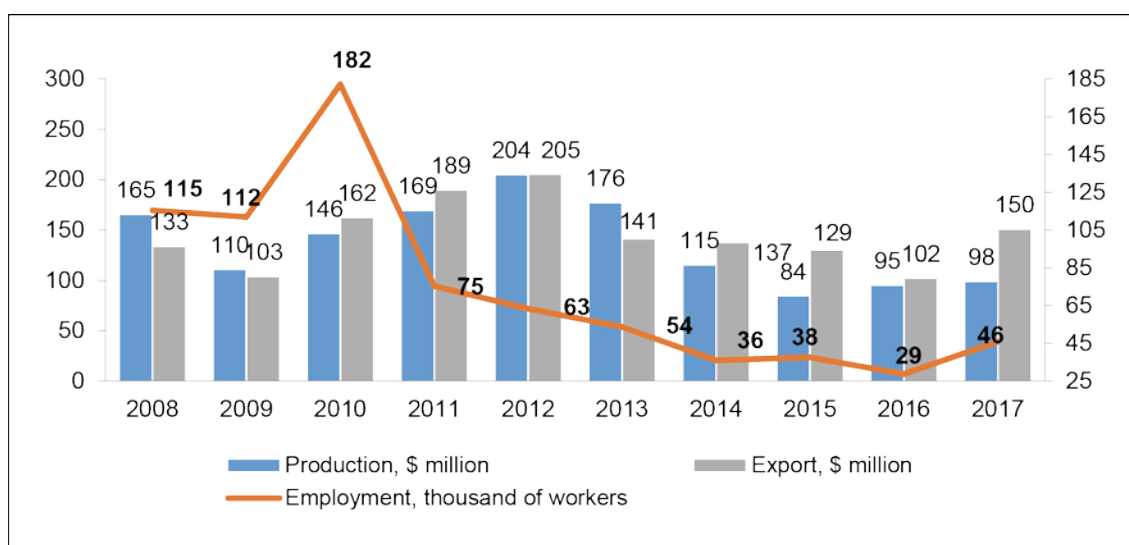
ILO (2012) *Skills for Trade and Economic Diversification in the Kyrgyz garment sector*. Employment Report # 19.

World Bank (2014) *Kyrgyz Republic. The Garment sector: Impact of Joining the Custom Union and Options to Increase Competitiveness*.

⁴⁹ Mogilevskii, R. (2012) *Re-export Activities in Kyrgyzstan: Issues and Prospects*, Working Paper # 9, IPPA, University of Central Asia.

sector (Figure 19) are underestimated in official data. Other sources propose the total employment in the sector to be from 100,000 to 200,000 people; the World Bank assessed total employment in the garment sewing business in the Kyrgyz Republic as 172,500 in 2014.⁵⁰ One of the key peculiarities of the garment sector is the high concentration of the production and employment in Bishkek.

Figure 20: Production, Exports, and Employment in the Textile Sector in 2008–2017 in the Kyrgyz Republic⁵¹



Source: National Statistical Committee, National Bank of the Kyrgyz Republic.

The sector performance indicators are characterized by the high fluctuations during the last years due to a series of factors:

- Volatility in the end markets in the Russian Federation and Kazakhstan affected by currency depreciation caused by oil price decline.
- Dependence on inputs from the imports, and, consequently, from exchange rate fluctuations observed in 2014–2016.
- High mobility of labor force—decline in one sector motivates people to switch quickly to another sector or migrate to the Russian Federation’s labor market due to the improvement of labor residence condition.

The export-oriented garment value chain concentrated geographically in Bishkek and Osh cities and surrounding areas. It includes input suppliers (importers), design and manufacture workshops, CMT (Cutting–Making (Sewing)–Trimming) garment workshops,⁵² equipment suppliers and service providers, distributors, wholesale agents, and retail network in the country and abroad. The most important value chain participant is the CMT garment workshops (Figure 21). It provides the majority of jobs specifically in

⁵⁰ World Bank (2014) Kyrgyz Republic. The Garment Sector: Impact of Joining the Custom Union and Options to Increase Competitiveness.

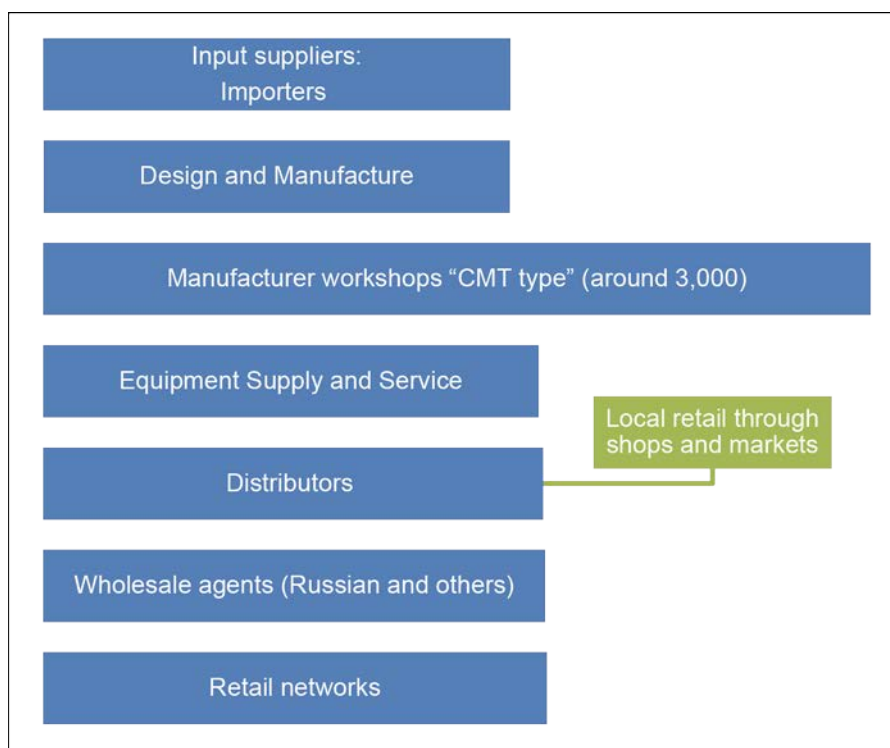
⁵¹ In the production includes production of textile, apparel and footwear. Export of textile only included. Export includes also re-export of textile from the People’s Republic of China. Employment in textile sector didn’t take into account the number of individual entrepreneurs, who work on a patent base.

⁵² CMT or Cutting–Making (Sewing)–Trimming type of production defines type of workshops where operations requires labour intensive operations with the relatively low knowledge intensity. Source: Fukunishi et al. (2013) Aid for trade and value chains in textile and apparel. OECD/WTO/IDE-JETRO

small and medium-sized enterprises. Such businesses also require less capital for the initial startup of the business. Opening a small workshop requires from \$5,000 to \$10,000.⁵³ Value chain participants located previous CMT workshops and modeled themselves after them, specializing in the development of more complicated preliminary works and support of the equipment in working conditions. The decline of the demand in the Russian Federation caused by the downward movement of oil prices and sanctions led to a decrease in consumption. This negatively affected textile exports in 2015–2016 (Table 9). Lack of affordable finance with a low interest rate led to a reduction of production and export in 2013–2015 (Figure 19).

The potential future development of the sector’s sustainability exists due to the combination of several positive determinants:⁵⁴ low taxation rate; a critically big pool of workers in the industry, including engineers, technicians and designers; and better knowledge of tastes and preferences of Russian and Kazakh consumers of apparel. The industry structure also allows for quick diversification. However, dependence on the one end market negatively affects the sector development. Since the Kyrgyz traders control the widespread, but shrinking, segment of the mass market, exports are also volatile.

Figure 21: Garment Value Chain Structure



Source: Author presentation.

⁵³ Jenish, Nurbek (2014) Export-driven SME Development in Kyrgyzstan: The Garment Manufacturing Sector. Working Paper # 26, IPPA, University of Central Asia.
⁵⁴ World Bank (2014) Kyrgyz Republic. The Garment Sector: Impact of Joining the Custom Union and Options to Increase Competitiveness.

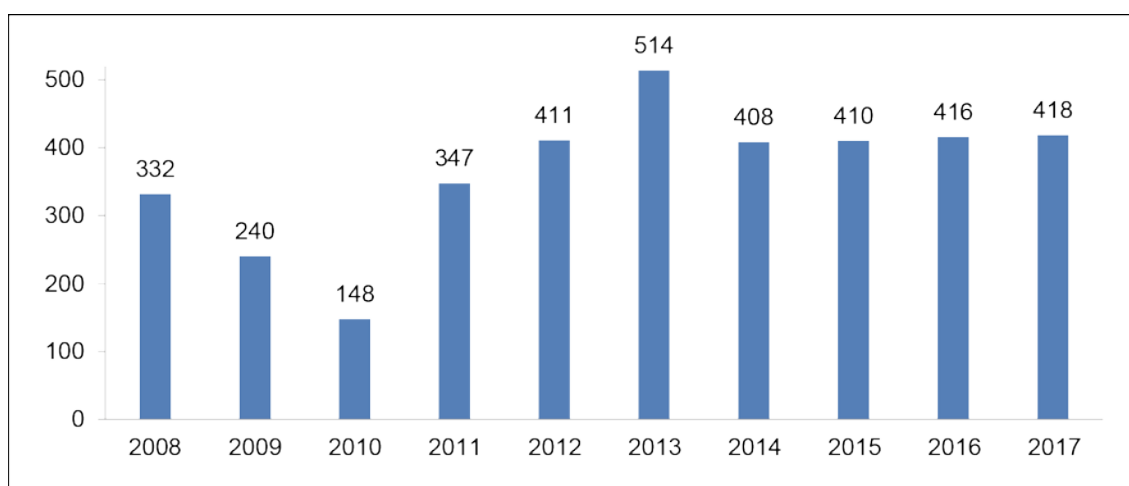
There is no large international supplier involved with the big retail network that allocates some operations to the Kyrgyz Republic and which can outsource sewing operations to the best selected CMT workshops. Development of such a value chain may increase the supply of the garments to the different segments of the well-known markets, e.g., the Russian Federation and Kazakhstan. Even a few examples of such cooperation might be sufficient to promote diversification of supplies to new markets along with the proposed Belt and Road Initiative (BRI) trade flows. Potentially involving large retailers oriented not only to the Russian Federation but to new markets, might be an opportunity to develop new destinations for Kyrgyz textiles.

5.5 Value Chains in Services—Tourism

The service sector is one of the underdeveloped sectors in the economy due to significant dependence on underfinanced infrastructure and institutional arrangement. Tourism development is still based on the recreation facilities created in resort areas around Issyk-Kul Lake and other areas developed during the Soviet period; these areas still attract tourists from the Russian Federation and Kazakhstan.

Tourism is a sector that covers several types of services. In the Kyrgyz Republic, the GDP produced in the tourism sector is equal to 4.8% (2017). It includes businesses providing tourist-excursion services; restaurants; tourist facilities related to accommodation, recreation, and entertainment (reserves, national parks, alpine camps); tourist-accompanied goods; and transport businesses. Approximately 107,500 businesses (legal entities and individuals) are engaged in economic activities related to the tourism industry in the Kyrgyz Republic.⁵⁵

Figure 22: Export of Tourism Services in the Kyrgyz Republic in 2008–2017
(\$ million)



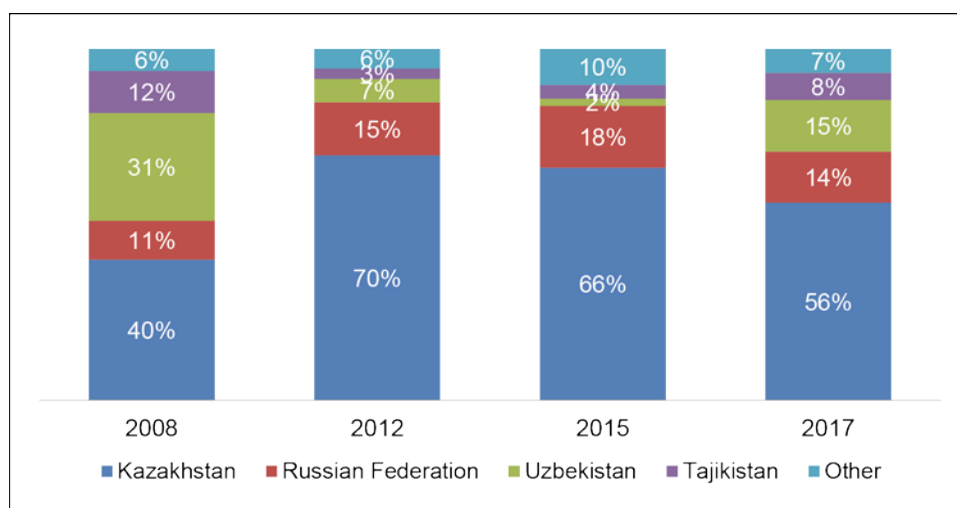
Source: National Statistical Committee.

The flow of foreign tourists has varied significantly during the last decade. One of the negative causes detected was a revolution in 2010 (Figure 22). Since then it has recovered up to 1.1 million visitors and further growth happened relatively slowly. Most of the visitors came to the Kyrgyz Republic from four countries: Kazakhstan, the Russian Federation, Uzbekistan, and Tajikistan (Figure 23). Tourists mainly came from

⁵⁵ NSC (2018) Tourism in Kyrgyzstan 2013–2017, Bishkek, Kyrgyz Republic.

Kazakhstan (57%) and the Russian Federation (14%), while visitors from Tajikistan and Uzbekistan came to their diasporas. The growth of visitors from Uzbekistan was caused by the improvement of the political regime. Other tourists, including those from developed countries, consist of 6% to 10% of inflow. Visitors from developed countries are mainly leisure tourists. Exports of tourism services have varied between \$400 million–\$420 million during the last years (Figure 22). The decline after 2013 is explained by national currency depreciation in the Kyrgyz Republic and the crisis in oil, which affected the economies of Kazakhstan and the Russian Federation.

Figure 23: Number of Foreign Visitors Passing the Borders of the Kyrgyz Republic in 2008–2017 by countries (%)



Source: National Statistical Committee.

The export-oriented tourism cluster is geographically concentrated in Bishkek and Issyk-Kul Province. Other regions also play an important role as part of a bigger tourist route, but they are less significant.

In the tourism value chain, the following participants were defined (Figure 24):

Tour operators – main element of the value chain; create a product and promote it through market channels, organize logistics, translation, and guide services.

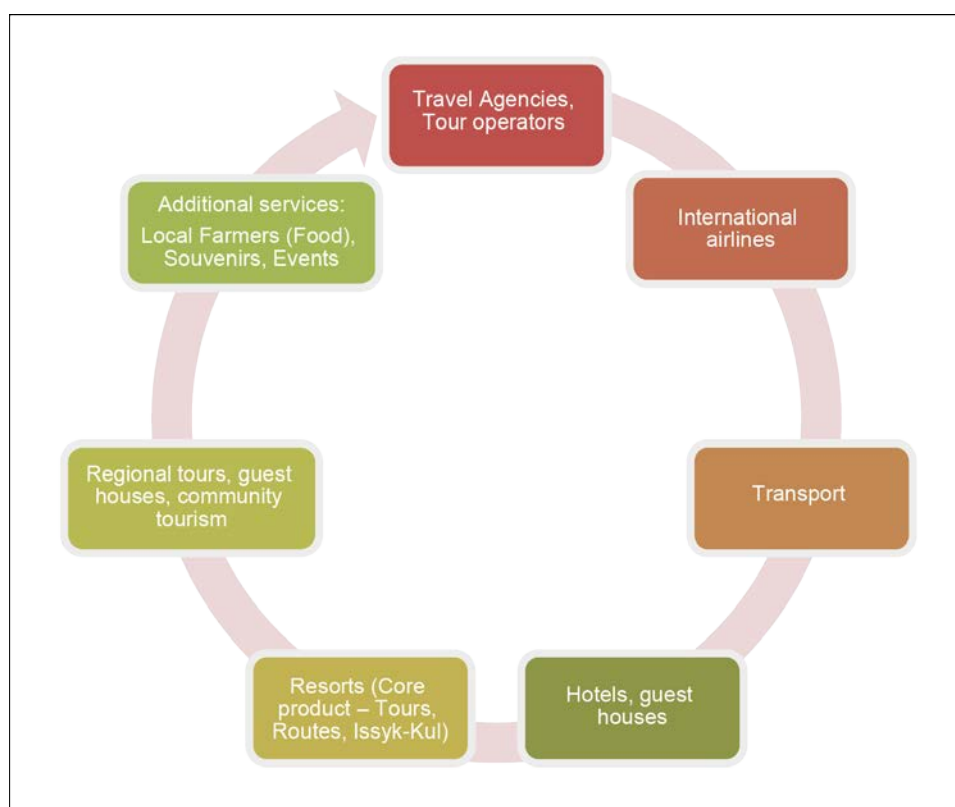
International airlines – international tourists' main transport from developed countries and the Russian Federation. Tourists from Kazakhstan mainly arrive by automobile transport due to their proximity; their route is mainly oriented toward the Issyk-Kul resort zone.

Transport – includes buses and taxi services and provided by local transport companies. The current structure of the economy and taxation allows outsourcing transport services to individuals working on a patent base. Tourism regional bus routes provided may cover the whole of Central Asia, e.g., Kazakhstan–the Kyrgyz Republic–Uzbekistan.

Hotels – the many hotels located in Bishkek and other local towns vary by level of comfort and facilities. Bigger hotels are not SMEs, but there are a lot of medium-sized hotels and small “family-type” hotels, as well as hostels with facilities for a few guests and lower prices.

Resorts – a key element, providing a core product combination or symbiosis of travel agency and resort (special hotel in the Issyk-Kul Lake resort zone or new hotels now established in the mountain zones and special places with the natural landscapes), e.g. Supara or Kaprize.⁵⁶ The travel agency creates logistics, looks after advertising, and manages the program of travel, and the resort provides facilities (infrastructure) and services. Insufficient levels of services quality and skills of the staff are a critical constraint for the sector’s growth.⁵⁷ Efforts of the private and state stakeholders are needed for capacity building of the labor in tourism sector.

Figure 24: Tourism Value Chain Structure in the Kyrgyz Republic



Source: Author’s adaptation of Jenish (2018).

⁵⁶ Jenish, Nazgul (2014) Tourism Sector in Kyrgyzstan: Trends and Challenges. Working Paper # 42, IPPA, University of Central Asia. <https://supara.kg/chunkurchak/en/glavnaya-ang/>. <http://www.kapriz.kg/en/>.

⁵⁷ Jenish, Nazgul (2014) Tourism Sector in Kyrgyzstan: Trends and Challenges. Working Paper # 42, IPPA, University of Central Asia.

On the tourist routes, there are possible additional tourist services that provide regional tours, accommodation in the rural community, ecological tourism, horse riding, guest houses, and tours at the wild mountain countryside nature. Local farmers, special areas for handicrafts, and locally organized events, often supported by development organizations through regional projects, create additional services for the newly developed tourist flows.

Core product packages include larger firms and medium-sized enterprises—resorts, hotels, international airlines. There are many small firms and entrepreneurs in tourism—travel agencies, transport services, small hotels and guest houses, food, and handicrafts.

The potential for the development of the tourism sector is based on the unexplored beauty of Kyrgyz's mountainous nature. The country's wild natural beauty has been saved in the significant parts of the country due to the low density of population. Compare it, for example, to Tajikistan, which has similar natural conditions. The Kyrgyz Republic demonstrates easier access due to investment in the road infrastructure from external borrowing from the PRC, as well as its better situation with security issues.

The SME sector is faced with limited access to finance due to its low share of the long-term credit. High interest rates (~20%) make investment in tourism high-risk. The majority of investment in fixed assets in tourism, as well as in private business in general, is financed mainly through own investment sources or private borrowings. The demand for a long-term, specialized investment program in tourism infrastructure is evident. A private–public partnership might be an option for tourism development concept and potentially create new horizons for foreign investment. One of the sources for financing tourism might be the PRC's BRI. During the last 5 years, loans to the Kyrgyz Republic from the PRC reached \$3.98 billion (41% of all debts of the Kyrgyz Republic).⁵⁸ Current investment projects are mainly oriented to building basic infrastructure, such as roads and energy projects. However, there might be an opportunity to create a special tourism cluster for clients from the PRC by a well-known tourism and leisure operator in the Issyk-Kul Lake area. A special conditional program for SME regional development may include contracting and financing of transport services, excursion service suppliers, food providers, translation services, and handicrafts sales.

6. VALUE CHAIN FINANCING ANALYSIS

Each of the observed value chains are located in different locations and represent different sets of SMEs. The results of the value chain availability analysis are presented in the following tables.

⁵⁸ Laurelle, M. (Editor) (2018) *China's Belt and Road Initiative and its Impact on Central Asia*. Washington, DC: The George Washington University, Central Asia Program, 2018.

Table 11: Availability of Financing of the Milk Value Chain SME Sector

#	Description	
1	Target SME group, characteristics	Small-scale farmers with an average herd of cows being 3–4 heads Agents (milk collectors)—around 20–30 agents per one factory ^a
2	Geographic location	Target area—Chu Province
3	Quantification	10,000 small farmers (around 40,000 heads of cows)
3	Assessment of the needs in finance	Investment needed for the following purposes: <ul style="list-style-type: none"> • Feed the cows during winter • Investment in cattle sheds • Increasing herd size • Equipment—milking machines, refrigerators • Milk transport Farmers borrow up to \$1,000 in the period of 1 year—mostly from microcredit organizations. Milk collectors borrow \$3,000–\$5,000 for repair of transport and working capital for milk purchase.
4	Availability of finance	Microfinance institutions: 25–40% (national currency) Banks: 16%–25% (national currency) 5%–10% (US dollars) Collateral needed Special credit for farmers (no collateral)—group credit of up to Som250,000 (\$3,500) for up to 2 years Subsidized credit for farmers: 7%–10% (national currency)
5	Gap or access to finance	There are several ways for a small farmer to access credit. If a farmer does not have collateral, it is possible to get conditional, no-collateral, group credit. Subsidized credit is hardly accessible (long waiting lists in each locations). There exists a line to getting credit by farmers. Getting credit from microfinance company is easier compared to a commercial bank. Of the covered participants (10 persons), 70% have credit (five from microcredit and two from the bank). Only one respondent has a 3-year credit; others have credit for 1 year. From the farmers who do not have credit, only one person does not want to get it. One person cannot get it due to the absence of collateral (and also group credit). The last person has a bad credit history (overdue loan). Milk collectors are oriented to the farmers–milk suppliers network creation. Credit is available for the milk collectors from the commercial banks. The purpose of the credit is for renovation of equipment and working capital for milk purchases. Immovable property (houses) are used as a pledge. Banks easily finance milk collectors because of the stable supply of milk, which supports a constant cash inflow. Milk collectors demonstrate the low scale of the business. Individual entrepreneur approaches have led to a low capacity for cooperation, constant competition, and the inability to create a network of milk collecting points. The majority of the borrowed money goes to covering the operational costs: milk payment fuel costs and repair costs for transport. Milk collectors need a two-component loan—a long-term leasing scheme with a low interest rate and a short-term working capital loan. A separate gap is the absence of the possibility for startup projects. Bank or microcredit organizations normally do not support starting a new business.
6	Other support needed	Capacity building (training of farmers): <ul style="list-style-type: none"> • Technical standards (HACCP) • How to increase milk productivity • How to improve the quality of milk

^a List of farmers and milk collectors presented in Annex 1.

Source: Author representation.

Table 12: Availability of Financing for the Kidney Beans Value Chain SME Sector

#	Description	
1	Target SME group, characteristics	Small-scale farmers with an average land plot of 2–3 hectares, wholesale market agents ^a
2	Geographic location	Target area—Talas Province
3	Quantification	12,000–13,000 small farmers (around 55,000 ha of arable land)
3	Assessment of the needs in finance	<p>Investment needed for the following purposes:</p> <ul style="list-style-type: none"> • Better inputs—fertilizers and herbicides, better seeds • Land quality improvement • Machinery purchasing for mechanical harvesting of kidney beans instead of manual harvesting • New diversification of products in addition to kidney beans <p>Farmers borrow for the bean production at the beginning of the year. Typical borrowing is from \$1,000 to \$2,000. Wholesale market agents operate with a sum of \$20,000–\$25,000. Credit available is at the lower sum of \$7,000–\$10,000.</p>
4	Availability of finance	<p>Microfinance institutions: 25%–40% (national currency) Banks: 16%–25% (national currency) 5%–10% (US dollars)</p> <p>Collateral needed Special credit for farmers (no collateral)—group credit of up to Som250,000 (\$3,500) of up to 2 years Subsidized credit for farmers: 7%–10% (national currency) Internal financing scheme of clan-based borrowing (See Box 1 on the issue—Case based on the study done in 2017). Additionally, bean farmers and market agents were covered.</p>
5	Gap or Access to finance	<p>There is a situation of regional underfinancing from the finance sector. According to the macro data, Talas Province receives only 3% of the credit in the country, which is lower than expected. The development of the internal financial resources supports the overcoming of this gap (Box 1). The farmer usually gets access to credit from microcredit organizations. At the same time, half of the farmers informed that credit is not taken because available resources are sufficient for bean production on a land plot of 2–3 hectares. Subsidized credit for farmers also not easily available. Again, farmers do not have the opportunity to receive credit at lower interest rates. Wholesale bean collectors cannot get sufficient credit from banks and usually seek private investment. One of the schemes is value chain financing through the relative network (See Box 1). Many market agents seek a private investor with sufficient resources. Private money-lenders use this opportunity to fill the finance gap. Usually they participate by getting a share of the profit—effective interest rate may reach 50% per annum. Wholesale agents need working capital from \$25,000 to \$100,000 to be able to cover the needs of exporters. High interest rates and bean-price fluctuations during the purchasing season (October–February) makes the operation high-risk. Creation of a network of small-scale farmers and a wholesale agent might decrease risk among participants and remove the financial institution from the scheme. Currently used networks among clans of relatives somehow exploit the idea. However, it is limited due to exclusion of minorities—small poor farmers, representatives of smaller clans, ethnic minorities. The demand for collective action on the community level is obvious. Startup projects are also not supported.</p>
6	Other support needed	<p>State services improvement—the quality of inputs needs to be monitored. Capacity building (training of farmers):</p> <ul style="list-style-type: none"> • How to increase land productivity • How to improve the quality of beans • Diversification of agricultural activity

^a Farmers and market agents from two districts were covered—Kara-Buura and Bakai-Ata (Annex 1).

Source: Author representation.

Box 1. Scheme of Mutual Funding – Case of Talas Kidney Bean Wholesale Agents and Small Farmers' Relatives Network Financing**Background:**

The financing of the kidney bean operations in Talas Province demonstrates unusual institutional setting—mutual funding of the kidney bean farmers and wholesale agents through a network of relatives in Talas Province. Lack of finance at the level of farmers during bean vegetation season is covered by wholesale agent. Later, in the fall, when harvesting season starts and a wholesale agent needs working capital, farmers provide it via the beans. The wholesale agent makes a note for each farmer with the amount of kidney beans provided. It is expected that price on the beans will increase during the season. The parties also agree that there will be a certain minimum price that will be provided by wholesale agent. This is done to avoid a situation of where prices will suddenly decline.

The wholesale agent consolidates the bulk of beans (from 20 to 40 tons) and starts to supply beans to an exporter firm. Since he does not return the money immediately, it is possible for him to make several operations before the farmers will come for the money. Typically, this is around two months (September–November). The wholesale agent avoids financial institution costs (interest, services, and monitoring of the loan) and has a chance to increase his working capital.

Farmers expect that prices will increase on the external supply markets and they try to define the biggest peak price period. However, prices may drop suddenly, which may cause the market participants to lose their money. Farmers can come at any time and ask to withdraw the debt. The farmer receives the money based on the weight of the beans multiplied by the kidney bean price on the current market price day. If the market price is lower than the minimum agreed price, then the farmer receives the minimal price.

Impact:

Farmers and intermediate agents use collective capital to support each other and reach a synergy effect through a self-financing system. Both parties win and share the profits and risks and exclude financial institutions from the scheme. Use of the scheme is limited due to limited levels of trust (even to relatives). It also excludes marginalized farmers from participating.

Table 13: Availability of Financing for the Garment Value Chain SME Sector

#		Description
1	Target SME group, characteristics	Small-scale wearing workshops with a number of sewing machines from 20 to 50 units
2	Geographic location	Target area—Bishkek (city)
3	Quantification	2,000–3,000 small workshops (around 80,000 workers)
3	Assessment of the needs in finance	Investment needed for the following purposes: <ul style="list-style-type: none"> • Rehabilitation investment in the machinery—new equipment • Working capital for the business operations • Better facilities—heating, production spaces • Training of staff and technicians for better skills improvement
4	Availability of finance	Microfinance institutions: not able to cover the gap due to the limitation of credit (\$700–\$2,500), in the case of collateral presence, the sum is bigger. Banks: 16%–25% (national currency) 10%–15% (US dollars) Up to 5 years Collateral needed, credit history
5	Gap or access to finance	Current borrowings used by the value chain participants for covering working capital. Often entrepreneurs borrow not for business purposes, but for other personal consumer credit and spend it on their current working needs—equipment repair, rent of spaces, salaries, guarding, and communal services such as electricity, heating, etc. The gap is the absence of the possibility to borrow long-term money cheaply in order to be able to invest in the renovation of equipment—sewing machines, technological lines, upgrade of equipment. Two-component credit is needed: short-term credit for operational needs for 6–12 months and investment credit—equipment for 3–5 years. Startup projects rarely supported. The businessman needs to invest in a new project with his own money first and demonstrate positive results.
6	Other support needed	Capacity building (training of managers): <ul style="list-style-type: none"> • Financial literacy, business planning, debt management • New technologies

Source: Author representation.

Table 14: Availability of Financing for the Tourism Value Chain SME Sector

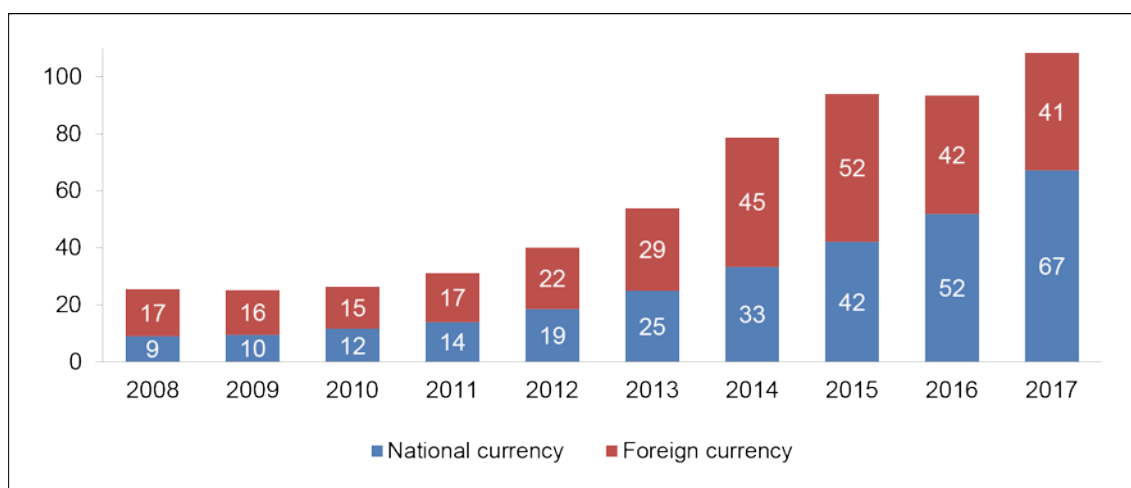
#		Description
1	Target SME group, characteristics	Small travel agencies, individual entrepreneurs (transport), small family hotels and guest houses
2	Geographic location	Target area—Bishkek (city), Issyk-Kul, Jalal-Abad, Naryn, Osh, Talas, and Batken Provinces
3	Quantification	Around 200 travel agencies, 20,000 drivers, 100–150 guest houses and small family hotels
3	Assessment of the needs in finance	Investment needed for the following purposes: <ul style="list-style-type: none"> • Travel agencies—establishment of the international travel agencies network, equipment, office, launch of the business • Drivers—new more safe and economic cars, ability to speak English • Hotels and guest houses—renovation of infrastructure, good sanitation systems, water, electricity, better conditions, and broadband internet access • Training of staff—English, internet communications, business correspondence, hospitality management, cultural diversity specifics
4	Availability of finance	Microfinance institutions: not able to cover the gap due to the limitation of credit (\$7,000–\$2,500) Banks: 16%–25% (national currency) 10%–15% (US dollars) Up to 5 years Collateral needed, credit history Credit is available in Bishkek and Chui Province, and also in Issyk-Kul Province. In other provinces limitation on the size and length of the credit is bigger.
5	Gap or access to finance	There is a gap in access to credit in Osh, Jalal-Abad, Talas, and Batken Provinces. There are few banks that provide credit to SMEs. In the tourism cluster segment, the following participants need a loan for: Transport services —credit for car renovation—buses, mini-buses, off-road vehicles (mountains), or to purchase it by leasing for 5–7 years with annual or seasonal payments. Other possible requirements of the leasing company—insurance on the car and for the driver, medical commission, English courses, excursion skills, training for the client’s security rules. Hotels and guesthouses (small and medium-sized—up to 50–6 clients)—credit for hotels renovation for the regional tourism development—sanitary system installation, modern heating, and air conditioning systems, building insulation. Credit for renovation need to be long-term (up to 10 years) and with low interest rate. Two-component credit needed: operational credit for tourist season with higher interest rate and a short period of time and investment credit. Startup projects are not supported in the tourism sector, except for donor projects.
6	Other support needed	Capacity building (training of managers, staff, drivers): <ul style="list-style-type: none"> • Financial literacy, business planning, debt management • Hospitality management, office works • English

Source: Author representation.

7. POLICIES TO PROMOTE SME FINANCE

The main efforts of the government targeted macroeconomic stability (currency stability, lowering interest rates) and improving balanced finance supply on the market. During 2008–2015, the share of credit in national currency was low (Figure 25). During the last 2 years, it has started to prevail (62% in 2017) due to efforts of the Kyrgyz government and the National Bank of the Kyrgyz Republic.

Figure 25: The Dynamics of Bank Credit in the Kyrgyz Republic in National and Foreign Currencies in 2008–2017
(Som billion)



Source: National Bank of the Kyrgyz Republic, own calculations.

A subsidized agriculture program called “Easy credit to farmers” was established in 2011. The program subsidizes the market interest rate (25%–27%) and decreases it for farmers to 10% (up to 7% for some activities, e.g. agri-food processing). Annually, 10,000 to 13,000 farmers receive support (~3%–4%). In 2018, 10,300 farmers received subsidized credit of Som4.6 billion.⁵⁹

The Russian–Kyrgyz Development Fund (RKDF) also provides support to increase credit resources for the financing business in the Kyrgyz Republic. The implementation of the program “Lending to small and medium-sized businesses through commercial banks” contributed to the expansion of the range of banking products for entrepreneurs in the country. There is also a realized program for microfinance organizations and leasing of equipment and transport vehicles. During 2015–2017, the total value of the projects supported reached \$261 million. Another \$116 million was approved for SME sector support.⁶⁰

⁵⁹ Interview of the Deputy minister of Ministry of Agriculture, Food Industry and Amelioration, Kerimaliev J.K.; Accessed November 2018; https://24.kg/ekonomika/90206_snachala_2018_goda_fermeram_vyidali_lgotnyie_kredityi_na45_milliarda_somov/.

⁶⁰ Russian Kyrgyz Development Fund. Report for 2017. Bishkek, Kyrgyz Republic; Accessed November 2018; <http://www.rkdf.org/en>.

Since 2016, the Guarantee Fund of the Kyrgyz Republic (GF) has been in operation. Since 2010, under United States Agency for International Development (USAID) support, the problems of the SME sector were analyzed and pilot projects were implemented in four locations—Chui, Issyk-Kul, Osh, and Jalal-Abad Provinces. In 2016, the government and ADB invested \$4 million—the Kyrgyz side provided 25%, the rest was invested by ADB. Currently, there are six branches operating in four provinces. The maximum guarantee is limited to 10% of the GF and must not exceed more than 50% of the credit. Estimations show that at least 100,000 entrepreneurs are seeking a guarantee. At the moment, the GF provides 237 clients with Som248 million. The partners of the GF commercial banks approve credit under guarantees of Som972 million (\$14 million) or 0.9% from the credit portfolio of banks.⁶¹ All described programs implemented through commercial banks and counted in the total volume of credit in the Kyrgyz Republic.

Since 2013, an OECD initiative has been realized to support schemes of financing farmers through warehouse receipt financing (WRF). The program aimed to provide a new guarantee instrument valid for the banks in cases of absence of collateral. Recommendations include the creation of a regulatory framework, piloting of the scheme, and development of new storage facilities. Assessment of the program in 2016 shows that the regulatory framework was created. The pilot covered 32 warehouses in Chui and Issyk-Kul Provinces. Three banks participated in a pilot project, covering only a few clients (9 clients for \$55,000), but a lack of high-standard warehouses and the absence of a registry for warehouses prevent further development of the WRF scheme.⁶²

There are two programmatic documents in existence, one is a long-term strategy and the other a 5-year program developed by the Kyrgyz government in 2017–2018. The National Development Strategy for 2018–2040 declares newly formulated areas of prospective development for the country.⁶³ In it, SME development priorities are described as being an important task (Task 7.1). The government plans to increase SME to 50% of GDP in 2023 through improved credit supply for the SME sector and a better business environment.

The Kyrgyz government developed and passed approval by Parliament of the new country development program for 2019–2023, “Unity, Trust, Creation” on 20 April 2018 # 2377-VI.⁶⁴ In the new mid-term program, the main chapter is related to the SME sector—chapter 4.4: “Small and medium-sized entrepreneurship development.” It declares the creation of a comprehensive state program for the development of SME. It plans to improve mechanisms for the financial support of small and medium-sized entrepreneurs. Long-term lending to small and medium-sized businesses and new types of bank lending to SMEs will be promoted. Special attention will be paid to the availability of concessional funds to representatives of SMEs allocated for various types of state programs.

⁶¹ Guarantee Fund of the Kyrgyz Republic (2018) Annual Report on 2017; Accessed November 2018; <http://gf.kg/about/godovoj-otchet/>.

⁶² OECD (2018) Enhancing Competitiveness in Central Asia, Competitiveness Development, OECD Publishing, Paris.

⁶³ Approved by the Decision # 1 of 13 August 2018 of the National Council on Sustainable Development under the Chair of the President of the Kyrgyz Republic, S. Jeenbekov. http://www.president.kg/ru/sobytiya/12774_utverghdena_nacionalnaya_strategiya_razvitiya_kirgizskoy_respubliki_na_2018_2040_godi. Accessed November 2018.

⁶⁴ Ministry of Justice of the Kyrgyz Republic website <http://minjust.gov.kg/ru/content/952>. Accessed December 2018.

However, the program is very ambitious and needs elaboration and operationalization. All listed measures will require enormous funding and restructuring of the activity of state bureaucracy. Another gap is the absence of the assessment of the planned actions, as well as the costing of the programs. Budget reallocations will be required and cost-benefit analysis may help in prioritizing the actions to be done.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

There are several thoughts regarding the overall state of the general picture of the situation of financing in the SME sector in the Kyrgyz Republic:

Access to finance in general and to the SME sector in particular improved in the Kyrgyz Republic during the last decade. Credit (% to GDP) supply doubled during 2006–2017—from 10% to 21% (Figure 6). An important positive change is the growth of credit in the national currency, which reached 62% in 2017 (Figure 24).

Regional disparity is significant in financial markets. SME access and financial infrastructure in Bishkek and Chui Province are better compared to other provinces.

Access to finance is also different for different sectors (Table 3). Better access is provided for agriculture and trade.

Financial literacy of the population is low and requires more effort. The current program of financial literacy improvement is not very detailed and does not include actions to decrease the gap in knowledge between women and men.

The difference between legally registered large firms and SMEs declined over time, according to the WB enterprise survey (2013). Barriers to SME declined over time (Figures 10, 11, and 13).

The gap in access of women to resources has partially improved thanks to the efforts of microfinance organizations (Table 8).

The strategy and program developed by the Kyrgyz government are very ambitious and need further details and operationalization.

The subsidy program for farmers needs transparency and efficiency evaluation.

Definition of SME needs to be rethought for a better analysis and to further target all sectors of the economy.

8.2 Recommendations

General policy recommendations are formulated in the form of conclusive remarks. However, there are a few practical recommendations that may improve the state of the SME sector and access to finance across the value chains gaps defined:

- a. **Dairy supply chain**—small farmers and market agents need to be financed as a **group client**.⁶⁵ The combined financial product and a specified approach needs to be applied here:

⁶⁵ Within the group, the client is the group of milk producing farms and market agent, who can receive credit on conditional requirements.

- (i) Investment credit for milk collectors—renovation of equipment, transport, express analysis equipment.
 - (ii) Operational loan for milk collectors—current transport expenses, payment for milk, other costs.
 - (iii) Micro-loans for milk farmers—forage for cattle, cooling equipment, milking equipment, medical treatment, artificial insemination.
 - (iv) Training component needs to accompany the value chain—technical standards, financial management, business planning, optimal forage to animals, medical treatment.
 - (v) Milk collectors need to be responsible for the credit for farmers—collecting the payment in the form of the milk and repaying it to the bank.
 - (vi) The pilot project needs to be applied based on the selected cluster (Chui Province).
- b. **Kidney beans**—small farmers and wholesale agents also need to be financed as a group. The difference from milk and clan-based mutual finance scheme is in the level of group forming, i.e., in both cases it is a group of farmers formed base on certain principle. It is suggested that projects be realized **through the local community** in a way that covers all farmers. A trust fund might be created to finance the scheme for the local community. The local authority might play the role of selecting committee and facilitator of the process—it is important to arrange dialog between farmers and middlemen at the local level to increase trust and transparency of the finance scheme. The following approach is needed:
- (i) Operational loan for a wholesale agent—current transport expenses, payment for beans, other costs.
 - (ii) Micro-loans for bean farmers—mechanized works, improved inputs—seeds, fertilizers, herbicides.
 - (iii) Training component needs to accompany the value chain—financial management, business planning, optimal agronomic practices for soil productivity.
 - (iv) Bean wholesaler needs to be the responsible manager for the credit for farmers. He may collect the payment in the form of the beans and repay it to the bank.
 - (v) Community leaders need to be trained in the institutional arrangement facilitation. A series of consultation between the wholesalers and market agents is needed to clarify the rules of agreement and profit share distribution between the parties.
 - (vi) The pilot project needs to be located in the center of the bean cluster (Kara-Buura district).

- c. **Textile CMT workshops clusters** need to be promoted in Bishkek and Osh cities. In each city, a group of 20–30 workshops needs to be supported/created (startup production). For managing the finance of the project, a large international firm (textile retail network) needs to be invited by the government under ADB support—guarantee of the credit, subsidized interest rate credit. The international buyer will introduce standards of the quality of products and development agenda, e.g. equal salaries and conditions for women and men, the absence of child labor, etc. The CMT workshop will include a technical upgrading skills program and also a two-component finance scheme:
 - (i) Long-term investment credit for equipment and production site renovation—heating, sanitary norms, working environment standards.
 - (ii) Short-term credit for operational purposes—salaries, renting of space, repair, supporting inputs.
- d. **Tourism development** approaches:
 - (i) Regional tourism SME development—support through association of the tourist operators financing of the small hotels and transport service:
 1. Hotels/guesthouses—long-term investment credit for renovation and new hotels construction (startup projects) in the regions of the Kyrgyz Republic to develop local tourism potential, with linking to local farmer supply and training programs. Short-term credit for operational purposes, such as for the launching of the current activities for a tourist season.
 2. Transport service individuals—support for leasing of the transport vehicles with a focus on training of hospitality management skills.
 - (ii) BRI offered the chance to realize investment projects on Issyk-Kul Lake under the management of an established international tourist operator. The project might bring infrastructural and technological decisions with conditional requirements from the Kyrgyz side regarding local supplies of products, services, labor (including training), and taxes. ADB can support such project through a number of instruments (finance, technical expertise, regulative framework support, and research).