FinTech Indicator System

FinTech for Regional Cooperation in CAREC Region

Presentation Agenda

1. Report outline

2. Update on Indicators & Scores on Four Pillars:

   - Pillar 1 – Finance

   - Pillar 2 – Technology / Infrastructure

   - Pillar 3 – Capability

   - Pillar 4 – Regional Cooperation

3. Unpacking findings in CAREC and regional benchmarking

4. Key recommendations

FinTech Indicator System

Objective and Purpose

To provide an in-depth understanding of progress made on FinTech by CAREC member countries through an indicator system based on four major areas:

- o Finance
- o Technology
- o Capability (involving regulation and ecosystem)
- o Regional cooperation

Report Overview

1. Overview
- Scene-setting, objectives, summary of key results and recommendations

2. Measuring FinTech Progress: Key Pillars, Indicators, and Analysis
- Outlining overall framework and methodology

3. Landscape Review: How CAREC Members Fare
- Development of scores for each pillar and provide qualitative analysis, identifying priority areas for engagement/development
- Correlation analyses between indicators if relevant

4. Benchmarking CAREC with Other Regions/Countries
- Development of scores for each pillar and provide benchmarking and analysis

5. Unpacking findings and lessons
- Highlight key findings and provide recommendations for policymakers to track and identify policy priorities to advance FinTech growth and innovation in the CAREC region

6. Appendix: Country Overviews + Detailed Methodology

Pillar 1: Finance – Overview of Indicators

Pillar 1	
Finance	• Individuals who hold an account at a financial institution • Individuals who hold a mobile money account • Individuals who have made or received a digital payment • Individuals who received wages into a financial institution account • Individuals who own a debit or credit card • Individuals who made a utility payment using a financial or mobile money account
	Capital market • Percentage of firms using banks for investment capital • Percentage of firms using banks for working capital • Proportion of investments financed by banks • Proportion of working capital financed by banks • Percentage of MSMEs reporting financial gap • Percentage of firms reporting finance as major constraint

Pillar 1: Finance – Indicators & Scores

Measuring the (i) availability, (ii) access, (iii) adoption, and (iv) use of digital financial services

Country/ Region	Financial Institution Account (% 15+) - *2021*	Mobile Money Account (% 15+) - *2021*	Made or received a digital payment (% 15+) - *2021*	Received wages: into a financial institution account (% age 15+) - *2021*	Own a debit or credit card (% age 15+) - *2021*	Made a utility payment using an account (% age 15+) - *2021*
Azerbaijan	29	-	25	9	27	9
People's Republic of China	89	-	86	35	78	22
Georgia	70	8	62	20	46	28
Kazakhstan	81	-	78	31	63	32
Kyrgyz Republic	41	11	39	11	28	11
Mongolia	98	59	97	49	87	44
Pakistan	16	9	18	3	8	7
Tajikistan	39	2	33	9	16	14
Turkmenistan	41	-	34	25	38	0
Uzbekistan	44	-	42	13	36	16
CAREC	50.7	14.8	47.5	18.1	39.1	17

Pillar 1: Finance – Indicators & Scores

Measuring (i) access to capital and (ii) the financing gaps of firms including MSMEs

Country/Region	Firms using banks for investment capital (%)	Firms using banks for working capital (%)	Investments financed by banks (%)	Working capital financed by banks (%)	MSMEs reporting financial gap (%)	Firms reporting finance as major constraint (%)
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Azerbaijan	24	19	19	7	99	41
People's Republic of China	15	22	5	7	32	41
Georgia	35	32	20	15	60	20
Kazakhstan	14	13	6	5	87	48
Kyrgyzstan	17	19	7	6	83	48
Mongolia	48	38	26	14	39	55
Pakistan	8	9	2	3	91	53
Tajikistan	8	13	3	4	95	30
Turkmenistan	-	-	-	-	-	-
Uzbekistan	27	24	18	8	92	13
CAREC	**19.8**	**19.3**	**10.8**	**7**	**77.5**	**40.3**

Pillar 2: Technology/Infrastructure – Overview of Indicators

Pillar 2	
Technology/Infrastructure	• Internet users in the country, as a key enabler of the FinTech sector • Mobile broadband subscriptions (per 100 inhabitants), enabling greater take-up of FinTech solutions • Fixed broadband speed, to drive FinTech innovations and enhance delivery of financial literacy programs etc. • Existence of fast retail payment systems, as a key feature of payment system infrastructure to drive interoperability in payments • Presence of national digital identity system, to enable digital transactions with government and private sector • Adoption and investment in future technologies including AI, robotics, big data analytics, cloud computing.

Pillar 2: Technology/Infrastructure – Indicators & Scores

Measuring the (i) readiness of digital infrastructure, (ii) implementation of digital identities system, (iii) development of Real-Time Fast Payments systems, and (iv) adoption and investment of emerging digital technologies that drive innovative FinTech services

Countries/ Region	Internet User (%) - 2020	Mobile broadband subscription (per 100 inhabitants) – 2020	Fixed broadband speed (download mbps) – May 2022	Fast Payment systems (0-3)	National Digital Identities (0-3)	Adoption and Investment of Emerging Technologies
Azerbaijan	84.6	69.57	21.01	2	3	45.35
People's Republic of China	70.4	94.83	181.9	2	3	45.99
Georgia	72.5	81.6	19.82	1	2	18.59
Kazakhstan	85.9	94.9	35.61	2	2	25.6
Kyrgyz Republic	80.0	119.33	46.38	0	1	14.01
Mongolia	62.5	109.2	48.88	3	2	23.72
Pakistan	25.0	41.33	9.5	3	1	40.77
Tajikistan	32.0	24.86	20.44	2	0	26.6
Turkmenistan	52.0	14.61	2.21	0	0	-
Uzbekistan	71.1	93.71	40.16	2	1	-
CAREC	**61.3**	**69.4**	**38.9**	**1.5**	**1.4**	**30.1**

Pillar 3: Capability – Overview of Indicators

Pillar 3	
Capability	• Foundational frameworks such as data protection and privacy, and cybersecurity, as well as IP protection and consumer protection that are fundamental for FinTech development. • FinTech specific regulations such as payments, e-money, P2P, e-KYC that enable FinTech innovation and growth. • Level of digital skills in the country, including digital financial knowledge, that positively impact on FinTech usage. • Presence of initiatives driving and supporting FinTech such as sandboxes, grants, FinTech festivals, and FinTech innovation hubs.

Pillar 3: Capability – Indicators & Scores

Measuring (i) the digital literacy of the population, (ii) capacity and adaptability of the regulatory ecosystem and (iii) key initiatives to enable growth of FinTech services through innovation promotion and financial inclusion

Countries/ Region	Laws Relating to ICTs (1-7) - *2016*	Legal Framework's Adaptability to Digital Business Models (1-7) - *2019*	Fintech-focused Regulations (0-6) *2021*	Fintech Innovation Initiatives (0-6) - *2021*	Digital Skills Among Population (1-7) - *2021*
Azerbaijan	4.95	4.60	6	6	5.09
People's Republic of China	4.24	4.57	6	6	4.65
Georgia	3.76	4.09	4	4	3.65
Kazakhstan	4.55	4.03	4	6	4.69
Kyrgyz Republic	3.00	3.02	4	4	3.85
Mongolia	3.01	2.96	4	4	3.78
Pakistan	2.96	4.06	4	4	4.15
Tajikistan	3.62	3.63	4	2	4.44
Turkmenistan	-	-	4	2	-
Uzbekistan	-	-	4	4	-
CAREC	**3.8**	**3.9**	**4.4**	**3.8**	**4.3**

Pillar 4: Regional Cooperation – Overview of Indicators

Pillar 4	
Regional Cooperation	• International commitments to FinTech cooperation by the country or through financial regulators including the central bank. • Cross-border initiatives and policy alignments to enhance payments interoperability, harmonization of international standards, and B2B payments to advance FinTech. • Participation in international or regional multilateral platforms to support financial innovation

Measuring the level of FinTech regional cooperation through (i) binding agreements, (ii) participation in multilateral fintech platforms and (iii) cross-border initiatives

Countries/ Region	International commitments (0-6) - *2022*	Cross-border initiatives e.g., interoperability, e-invoicing, standards (0-6) - *2022*	Participation in regional and international platforms (0-6) - *2022*
Azerbaijan	4	2	0
People's Republic of China	6	6	6
Georgia	0	4	4
Kazakhstan	4	4	4
Kyrgyz Republic	4	4	4
Mongolia	0	4	4
Pakistan	0	4	4
Tajikistan	4	4	4
Turkmenistan	2	0	0
Uzbekistan	0	0	4
CAREC	**2.2**	**2.9**	**3.1**

Unpacking findings – CAREC

Finance (including FinTech)

- **Significant variation in terms of financial institution account, credit and debit cards ownership across the region**

- **Large regional disparity in the use of digital payments and receiving wages into financial accounts**

- **Dominance of digital payments segment in regional FinTech market as compared to alternative financing, digital investment, and neobanking**

Unpacking findings – CAREC

Technology / Infrastructure

- **Significant gaps in Internet access, broadband subscriptions in some CAREC countries such as Afghanistan, Pakistan, and Tajikistan**

- **Obstacles remain in increasing access to mobile broadband and delivering high-speed Internet**

- **Diffusion of emerging technologies remains limited which hampers the development of Fintech**

- **Development of Fast Payment Systems picking up steam**

- **Growing interest in the implementation of national digital identities systems**

- **Accelerated adoption and investment in emerging technologies**

Unpacking findings – CAREC

Capacity

- **Leading CAREC governments proactive in implementing foundational policies and regulations (e.g., consumer protection, eKYC) to facilitate access and adoption of digital financial services**

- **Minimal emphasis on the development of consumer protection mechanisms**

- **Growing number of initiatives that encourage MSME innovation capacity**

Regional Cooperation

- **Potential opportunities for information sharing and cooperation on FinTech but lack of mechanisms to foster**

- **Greater participation in international platforms should be encouraged**

Unpacking findings – Regional benchmarking

Finance (including FinTech)

- **ASEAN countries shows higher ownership of financial institution and mobile money accounts while level of digital payments usage are comparable**

- **Firms in CAREC region, especially MSMEs, face more capital and financing constraints**

Technology / Infrastructure

- **Disparity in Internet penetration is less in ASEAN with significantly higher and broadband subscription rate**

- **Quality of access measured in terms of fixed broadband download speed is much lower in CAREC**

- **CAREC countries show lower rate of adoption of new technologies and lag behind in terms of investment into emerging technologies**

- **Stage of digital ID implementation varies widely in both CAREC and ASEAN regions**

- **Majority of AMS have real-time faster payment systems in place to drive the development of digital payments**

Unpacking findings – Regional benchmarking

Capacity

- On foundational ICT laws and regulatory framework, CAREC as a region fares similarly to ASEAN but lags behind developed countries like Japan and South Korea

- Innovation hub, and accelerator programmes, and grants are commonly deployed in the benchmarking countries to support FinTech startups

- ASEAN countries are making steady progress in the development of regulatory sandbox with full implementation in five AMS, lessons from which can be leveraged by CAREC

- Overall level of digital skills is higher in ASEAN as compared to CAREC countries despite both regions exhibiting great disparity

Regional Cooperation

- Asian economies in particular Japan, South Korea, Singapore have been proactive in forging partnership and formulating cooperative agreements to promote innovation, cross-border digital transactions, and financial services

- ASEAN economies stand out in their collaborative efforts to advance payment systems interoperability

Key recommendations

1. **Policymakers and financial regulators to adopt <u>coordinated approach</u> towards fostering FinTech development and financial inclusion**
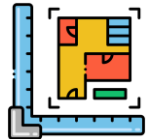
2. **Track fintech progress through <u>consistent and coherent measurement and evaluation</u>**

3. **Create <u>enabling and harmonised regulatory environment</u> for fintech growth**

4. **Adopt responsible digital financial practices to <u>protect consumers and safeguard data privacy</u>**

5. **Develop and enable <u>secure and interoperable Digital ID adoption</u> across the region**

Q & A