STORED VALUE FACILITIES

A guide to payments in MENA

AUGUST 2022

Volume 4

FOREWORD

Payments have been the heart of fintech and they still continue to hold its position as a key accelerator in the global world of Fintech. Middle East and North Africa collectively as a region have demonstrated the tremendous opportunity it holds, but with these opportunities come the regional dynamics which makes this part of the world more unique and demand a curated approach. This vibrant region with rich cultural diversity not just benefits from a young population and high adoption rates of newer customer experiences and technologies, but also with a progressive infrastructure and governments that have shown resilience and their trust in a connected future. This 5-report series on Payments is a product of the Payments Working Group of the MENA FinTech Association called "SHIFT". The report series has profited from the insights of many regional and international experts. This year the focus is on landscaping, cross-border, issuance, stored value and digital KYC. Our aim was to establish a payments guidebook for the industry, by the industry to understand the market not just with macro indicators but with an on-ground understanding of how this unique market full of opportunities should be approached.

We would like to extend our thanks to SHIFT members for their contributions:

Abu Dhabi Global Market (ADGM)

Dubai International Financial Center (DIFC)

The London Institute of Banking and Finance (LIBF)

Arthur D. Little

NAMEER KHAN
CHAIRMAN-**MENA FINTECH ASSOCIATION (MFTA)**

GAURAV DHAR
CEO- **MARSHAL**
BOARD MEMBER- **MFTA**

NADIA BENAISSA
MARKETING DIRECTOR- **BPC**
CO-CHAIR PAYMENTS- **MFTA**

VAANATHI MOHANAKRISHNAN
BUSINESS HEAD MENA REGION- **M2P SOLUTION**
CO-CHAIR PAYMENTS- **MFTA**

Table of Content

INTRODUCTION

This section of the report intends to give the readers an insight into different regulatory aspects of becoming and functioning of an entity engaged in the business of Stored Value Facility (SVF). "SVF" is used as a concept and refers to analogous concepts in each of the MENA countries. The following analysis compares steps and regulatory requirements along the licensing process including aspects related to testing (sandbox), if any, licensing, operating and administrative requirements of a SVF licensed entity. This analysis intends to identify key areas of a SVF regulation and compare the status/ maturity of the comparative areas in the MENA countries in scope (UAE, Saudi Arabia, Oman, Bahrain, Kuwait, Egypt, Jordan, and Lebanon).

A brief study of the regulatory environment of countries with tested regulations and advanced payment landscape helps us to benchmark the performance of MENA countries and understand the areas of overall improvement.

While we undertook a high-level analysis of the maturity of the fintech ecosystem in the world, few countries were identified with more mature and adopted ecosystems, diversified service providers, and more clear and flexible central bank guidelines. These countries were also found to have various platforms to innovate the offerings with a more accepting customer audience.

Few notable and successful examples in this regard are India and the UK, where the ecosystem is developing at a fast pace. In both these countries, there is support from the central bank for a market driven economy. The respective Central Bank regulations provide missing links, mandates, and are flexible at the same time to respond to market requirements. These two countries are proactive towards the customer and market needs. The government of India played a pivotal role in this journey through nationwide projects such as Unified Identity, Digital Payments through NPCI (National Payments Corporation in India) and UPI (Unified Payment Interface). The Central Government of India created rails for fintech to use and in turn built on each other's capabilities to benefit all. This was also escalated and fast tracked through other external drivers such as demonetization and financial inclusion, which encouraged cashlessness in India. Similarly, the government of the UK has been pioneers in open banking through their PSD2 mandates and this has developed in diversification of services and power across various stakeholders in the payments industry. These examples can serve as North Star for any country to progress towards more openness and learn from their expertise and experience.

1 UNDERSTANDING SVF

Useful Definitions as per “Stored Value Facilities (SVF) Regulation” by CBUAE:

"

The term 'stored value facilities' (SVF) covers any non-cash facility through which a customer pre-pays money (or 'money's worth') so that they may subsequently use that payment method to pay for goods or services.

"

For the benefit of this analysis and as a benchmark on SVF concept, UAE Central Bank definitions are used. These are listed below:

Single-purpose Stored Value Facility:

A facility that in respect of which the issuer gives an undertaking that, if the facility is used as a means of making payments for goods or services (not being money or Money's Worth) provided by the issuer, the issuer will provide the goods or services under the rules of the facility. A Closed Loop Payment Scheme is a typical Single-purpose Stored Value Facility.

Stored Value Facility (SVF):

A facility (other than cash) for or in relation to which a customer, or another person on the customer's behalf, pays a sum of money (including Money's Worth such as values, reward points, Crypto-Assets or Virtual Assets) to the issuer, whether directly or indirectly, in exchange for: (a) the storage of the value of that money (including Money's Worth such as values, reward points, Crypto-Assets or Virtual Assets), whether in whole or in part, on the facility; and (b) the "Relevant Undertaking". SVF includes Device based Stored Value Facility and Non device based Stored Value Facility.

Relevant Undertaking:

In relation to an SVF, Relevant Undertaking means an undertaking by the licensee that, upon the use of SVF by the customer as a means for payment for goods and services (which may be or include money or Money's Worth) or payment to another person, and whether or not some other action is also required, the Licensee, or a third party that the SVF Issuer has procured to do so, will, in accordance with the Operating Rules: (a) supply the goods or services; (b) make payment for the goods or services; or (c) make payment to the other person, or as the case requires.

Customer: a natural or legal person who contracts with a Licensee in order to establish and use an SVF in accordance with this Regulation.

SVF Issuer:

A company which carries out the business of the provision of SVF and is responsible and accountable for the safekeeping of the Float. SVF issuer is required to be licensed by the CBUAE.

Float:

The customers' funds / money / Money's Worth paid to the Licensee in exchange for the value of the money/Money's Worth (including Money's Worth such as values, points, Crypto-Assets or Virtual Assets) on the facility.

Virtual Assets:

Virtual assets include digital tokens (such as digital currencies, utility tokens or asset-backed tokens) and any other virtual commodities, Crypto Assets and other assets of essentially the same nature.

2 | COMPARATIVE STUDY OF SVF REGULATIONS IN THE MENA REGION

Regulations in the respective jurisdiction play a vital role in the set up and growth of a SVF business. Following is a comparative study of the various Regulations that compares the key factors in the Regulation, which will help businesses to take appropriate decisions from a regulatory standpoint.

1

What is the policy stance towards regulation of Stored Value Facility by authorities? Is it a soft law approach or licensing/approval approach?

This section deals with the overall intent and preferred direction of the country through it's SVF regulatory scenario.

UAE

The CBUAE shows interest and intent to regulate the SVF providers, while providing a well-built clear path for them. However, on the other hand there still exists some uncertainty around it, as the Regulation is very nascent and it lacks precedence. In today's financial ecosystem scenario, banks still hold major power in the market. Exchange houses and fintechs are bank dependent and need their support in getting their stored value facility products to the customers. The regulatory environment is supportive, but slow. It is interesting to note that the UAE economy is showing high potential for fast growth in the payments sector. Regulatory enablement of the fintech sector will further enhance the growth of payments sector in the UAE.

Saudi Arabia

Regulators in Saudi Arabia are fast and adaptive towards the need of the market and therefore seem to be responding quicker. The instructions provided in the Regulations are more clear and easier to follow. Since the Regulations have been in effect for some time, there is more clarity on the procedural requirements for licensing as well as the compliance requirements. As time progresses, it will be an area of close interest to watch if this pace results into faster development of the fintech ecosystem pertaining to SVF players in Saudi Arabia.

Oman

The SVF regulations in Oman are ambiguous. It can be refined more to showcase more clarity on the subject to the potential applicants.

Bahrain

Bahrain is one of the countries with the most advanced and clear visions on becoming a fintech hub for upcoming potential businesses. It supports them through a clear set of regulations and a forward-looking approach (for example it leads the MENA region in developing Open Banking mandates). Overall, there are high expectations from Bahrain. and issuance of Stored Value Facility is a regulated business in the country. Even for processing of Stored Value Cards, an Ancillary Service Provider Licensor from the Central Bank of Bahrain is required. Bahrain has not made any changes to its regulatory landscape in the recent past.

Kuwait

The government and the central bank are taking steps to boost digital payments in Kuwait. To promote card payments, in February 2020 the Ministry of Finance enabled payment of government fees via cards at approximately 40 government agencies across the country. Meanwhile, to develop an integrated payment system, in January 2020, the Central Bank of Kuwait (CBK) announced plans to introduce a new payment system. This will be compatible with various electronic payment systems, including the automatic clearing system, the wage protection system, the national clearing system for payments through smart devices, and the real-time system for total settlements. The central bank plans to launch the new system in two phases in 2020 and 2021. In light of the above, we need to wait and see on how the regulatory landscape is progressing.

Egypt

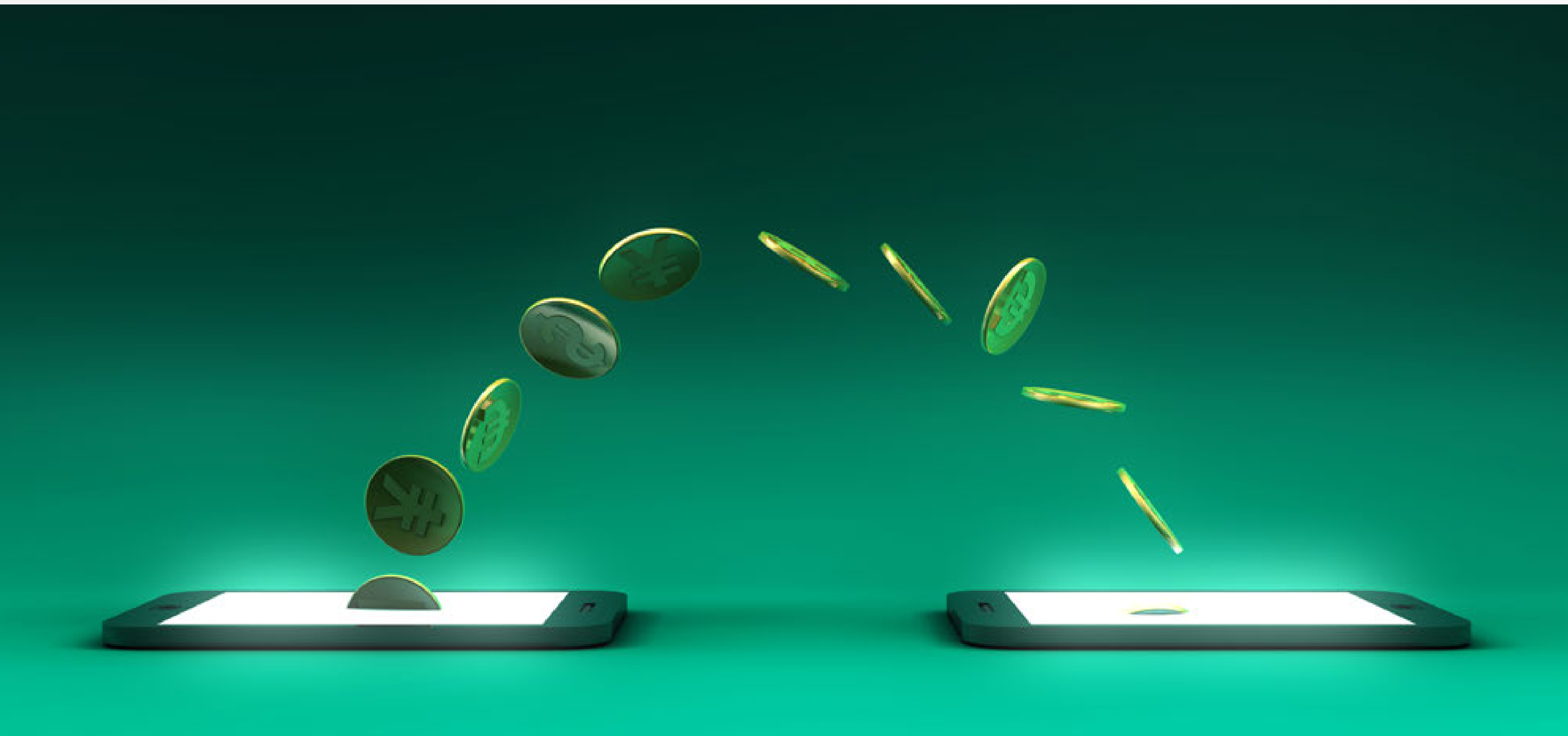
Although a bit late in starting off, Egypt seems to be showing a lot of momentum and activity around the SVF regulations recently. The new banking law 194/2020 published on 15 September 2020 (“New Banking Law”) is set to achieve several key goals, in particular, to ensure that Egypt’s banking system keeps pace with international standards of best practice and to ensure that the required legal framework is in place so as to allow for and facilitate the development and modernization of the payments system. This is an essential pillar in achieving the Government’s economic expansion plan driven by increased financial inclusion and digital transformation. Payment System Operators (“PSOs”) and Payment Service Providers (“PSPs”) will have to comply with various requirements set out in the New Banking Law.

Jordan

Payment cards are used in the Kingdom and vary between prepaid, debit, and credit cards. For debit cards, including prepaid cards, issuance is limited to banks operating in the Kingdom of Jordan only, while it is allowed for financial institutions to issue credit cards. The Central Bank of Jordan believes in the necessity of keeping up with rapid developments in financial technology (Fintech) to serve the banking and financial sector in a manner that ensures safety, resiliency, and stability.

Lebanon

Lebanon's regulatory framework does not have a legal definition for peer-to-peer EMTs (electronic money transfers) made from one person to another, typically through a payment application. When a market lacks this kind of clarity, it keeps companies like PayPal and TransferWise away from any home-grown fintech. Market trends are showing that there has been pressure from the banking sector not to open up easy access to cheaper, more secure, and more efficient payments—in order to preserve their market power in Lebanon. That may be a reason why BDL is not updating the standards/regulations, even after seeing neighboring countries enact regulations that protect consumers, apply international compliance standards, and facilitate access to modern EMT services. In order to be allowed to conduct EMTs in Lebanon, a bank or financial institution must be licensed by BDL. As of April 2019, the BDL has only issued such licenses to traditional banks, a handful of international financial institutions, and one local mobile EMT company.



2 What is the regulatory nomenclature used? Does the regulation make distinction between digital wallets, pre-paid cards, and closed loop facilities? If yes, are there separate legislations for the same?

This section deals with studying the different nomenclatures used in the Regulation to denote SVF. While studying this, we also consider how detailed and specific to SVF are the regulations around it. This gives an idea of the maturity within the regulatory environment standpoint and highlights where a more tailored approach exists versus a more generic/umbrella approach.

UAE

UAE introduced the 'Stored Value Facility Regulation 2020' dealing specifically with the in depth guidelines covering the concept of a firm being able to issue money instruments and be able to store customer's balances. The regulation specifically mentions the regulatory guidelines around digital wallets and prepaid cards. It is pertinent to note that closed loop facilities with specific parameters are outside the purview of the SVF Regulation.

Saudi Arabia

The nomenclature in Saudi Arabia is not specific to stored value but caters to a larger set of similar offerings. Stored value facility is primarily referred to as Payment Instrument and comes under the scope of 'Payment Services'. Furthermore, the definition of Payment Services includes the concept of electronic money (E-wallets) which would cater to offering virtual accounts to store and transact digital transactions. Firms undertaking the business of closed loop facilities are not regulated.

Oman

The regulation governing the Stored Value Facility concept in Oman is called 'Mobile Payment Clearing and Switching System Operating Rules'. Under these rules, a payment service provider is defined as a Bank licensed by CBO under the extant law in force, or any other entity licensed to provide mobile payment services through the Mobile Payment Clearing and Switching system to the banked and unbanked customers. The PSPs (Payment Service providers) can issue e-wallets defined as Virtual account opened to hold electronic money with a payment service provider to banked and un-banked customers to enable them to perform mobile payment transfers. The nearest available definition to Stored Value Facility in Oman regulations is the availability of an e-wallet.

Bahrain

The 'CBB Rule Book Volume 5' is the governing regulation for regulating the Stored Value facility segment. Issuance of Cards comes under the category of Payment Services. A Payment Service provider by getting an ancillary service provider license can provide digital wallet and Card issuance and processing.

Kuwait

The Central Bank of Kuwait governs the 'Instructions for regulation of the electronic payment of funds. The nearest equivalent to Stored Value Facility in Kuwait regulations is 'Electronic Money'. The 'Electronic Money' within this regulation is defined as a value that has cash equivalent stored in an electronic device or a plastic card or automated system.

Egypt

The Central Bank of Egypt is the governing authority and The Egyptian Central Bank Law, No. 194/2020 with effect from 16th September 2020 governs this area of regulations. According to this law, Payment services are further defined as "all services related to the account information, issuing, or sending requests for payment and payment operations or receiving such or implementing such whether in local or foreign currency, it [payment services] includes issuing and managing payment instruments and electronic money."

Jordan

The Central Bank of Jordan (CBJ) governs the area through the Bylaw of Electronic Payment and Money Transfer upon Articles (21) and (22) of the Electronic Transactions Law No. (15) for 2015. The relevant nomenclature used in it is Electronic Money and is defined as the cash amounts saved using electronic methods and commit their issuer to receive their value in cash.

Lebanon

The Basic Circular 69 by the Banque De Liban (BDL) is the relevant regulation. The closest nomenclature and definition used is "electronic financial and banking operations" which is defined as all operations or activities concluded, executed, or promoted through electronic or photoelectronic means (telephone, computer, internet, ATM, etc.) by banks or financial institutions or any other institution. This definition shall also include the operations executed by the issuers or promoters of all types of electronic charge, debit, or credit cards; the institutions engaged in the electronic transfer of cash; and the websites specialized in offers, purchases, sales, and all other electronic banking services.

3 Are there any flexibilities available to fintech businesses offering SVF solutions from regulatory requirements (e.g. light touch capital rules & compliance)?

This section analyzes if the regulatory regime in the respective MENA countries offer any incentives or relaxations to fintech participants offering stored value facility to the customers. The intent is to analyze this section using the 2 most integral pillars of a SVF business capital and compliance.

UAE

Capital:

Paid up capital of AED 15 millionv. Aggregate capital funds (Paid-up capital +reserves +retained earnings- accumulated losses-goodwill) must be atleast 5% of the total float received from customers

Bank guarantee:

Equivalent to the minimum paid up capital.

Compliance:

SVF licensee to be based in the UAE; Mandatory positions to be based in UAE are head of operations, compliance officer and head of technology.

Saudi Arabia

Capital:

1.Micro PI- Initial: SAR 1M; Ongoing: Equivalent to Initial

2.Major PI- Initial: SAR 3M; Ongoing: higher of initial capital requirement or 1% of Major PI's Average Monthly Payment Transaction Value

3.Micro EMI- Initial: SAR 2M; Ongoing: Equivalent to Initial

4. Major EMI- SAR 10M; Ongoing: higher of initial capital requirement or 2% of Total Average Outstanding Electronic Money

Bank guarantee:

Equivalent to atleast 5% of capital required on an ongoing basis or obtain and hold in secure and liquid assets that are of value equal to atleast 5% of the capital required on an ongoing basis.

Compliance:

Licensed entity should be incorporated in Saudi as joint stock company. The key control functions have to be based in Saudi.

Oman

Capital and Bank Guarantee:

The regulations are silent.

Compliance:

The Manager of the licensed entity has to be an Omani national.

Bahrain

Capital:

Minimum paid up capital required is BD 50, 0000.

Bank Guarantee:

BD 100,000

Compliance:

Fit and Proper test for all the key control functions has to be passed by the Central Bank of Bahrain. The head office of the licensed entity should be based in Bahrain.

Kuwait

Bank Guarantee:

Unconditional bank guarantee of KWD 100,000 to be provided.

Egypt

Capital:

Paid up capital and bank guarantee requirements of PSP's are still to be issued. (Article 188)

Jordan

Capital:

1-3 Million Dinars

Lebanon

Capital:

LBP 05 Billion

4

What licensing requirements apply and whether they differ from conventional financial services?

This section compares the licensing requirements (from a capital and shareholding requirement standpoint) involved in a conventional financial services entity versus a SVF licensed entity. This section is interesting and significant as it shows the openness of banking services to participants other than conventional financial services entities (banks)

UAE

The banking regulations in the UAE requires a bank to maintain a fully paid-up capital of atleast 2 Billion AED. It is possible that the Central Bank may impose higher capital requirements also, based on the bank's business plan. There is also a requirement for maintaining capital adequacy requirements for banks in line with Basel III conventions to ensure the financial soundness of banks and enhancing financial stability. Also pertinent to note is that the branches of foreign banks must maintain:

- Fully paid-up capital of at least One Hundred Million Dirham (AED 100,000,000) at the level of the branch; and,
- Eligible capital of at least Two Billion Dirham (AED 2,000,000,000) (or equivalent) at the entity level.

Further local banks in UAE need to have 60% local ownership and can have only upto 40% foreign ownership.

In light of the above, comparatively, the SVF regulation allows companies to provide stored value facility with a lesser capital and more flexible shareholder requirements. Further, it is also to be noted that the erstwhile payment service provider regulation issued by the Central Bank mandated a capital requirement of AED 50 million and mandatory partnership with a bank. It is interesting to note that the SVF regulation mandates a capital of AED 15 mil which is considerably lower than the earlier mandate. However, for fintechs, this is still seen as a barrier too high to be able to enter the markets. From a regulatory standpoint, the reduction of the minimum capital requirement and doing away with the bank partnership can be perceived as a positive change by the Central Bank in favor of new fintech participation in the UAE.

Saudi Arabia

The SAMA banking licensing guidelines, December 2018, specify that the adequacy of capital for a banking license applicant shall be determined by SAMA on a case-by-case basis depending on the scale nature and complexity of the operations as proposed. Also, the Banking Control Law of Saudi stipulates the paid-up capital to be at least 2.5 mil Saudi Riyals.

Foreign bank branches are not required to maintain capital in KSA, although capital requirements maybe set on a case-by-case basis, for example, those intending to conduct high risk businesses and/or wanting to specialize in particular business lines that require specific level of capacity or competence. The license applicants must merely satisfy SAMA that they are able to comply with SAMA adequacy capital requirements from the commencement of their banking operations. However, all the banks are required to maintain at all times, a minimum capital ratio as set by SAMA. This regulation also doesn't specify a local ownership requirement for banks in Saudi. SAMA has also issued additional licensing guidelines and criteria for digital only banks in Saudi Arabia in February 2020. Here again, there are no minimum capital requirements and no shareholder ownership mandates mentioned in the regulation. However, the applicant is required to submit an internal capital adequacy assessment plan (ICAAP) and an internal liquidity adequacy assessment plan. SAMA will assess the adequacy of capital of applicants on a case-by-case basis considering the scale, nature, and complexity of the operations. 2 new digital-banks have been issued licenses in Q 2- 2021 with capital in the range of USD 440 – 700 million.

It is interesting to note that the capital requirement for PSPs range from 1 M to 10 M Saudi Riyal while it is set at minimum of 2.5 million Saudi Riyals for a bank in KSA. The paid-up capital requirement set by SAMA for both these types of entities can be interpreted as their perception around the risks associated with the type of entity in doing this type of business/offering.

Oman

In Oman, a domestic bank shall have at all times maintained a paid-up capital not less than 20 million Omani Riyals for domestic bank and 3 million Omani Riyals for foreign bank branches, or such higher amount as determined by the Central Bank of Oman.

Egypt

The minimum capital requirement for banks is 5 Billion Egyptian pounds and $150 mil for foreign banks.

Bahrain	All Bahrain retail branches of foreign overseas conventional retail banks must maintain a minimum capital of BD 20 mil, including general reserves and retained earnings. Licensees must inject capital in the amount of BD30,000 in respect of any additional branch. SVF requirements in terms of paid-up capital are lower and therefore easier.
Kuwait	The paid-up capital of any bank in Kuwait shall not be less than 75 mil Kuwaiti Dirhams. For a single foreign bank branch, a paid-up capital of 15 mil Kuwaiti Dirhams is required per branch.
Jordan	The Central Bank shall determine the minimum amount for both authorized and subscribed capital of the bank. The Central Bank may from time to time amend these limits for all or some banks in view of the requirements of banking safety and development. A foreign bank branch shall not launch any of its banking activities until it has transferred to the Kingdom in one lump sum the equivalent of half of the capital stipulated for a Jordanian Bank. The Central Bank may from time to time increase such amount up to the amount of capital stipulated for a Jordanian Bank. A bank shall at all times maintain the minimum regulatory capital as determined from time to time by the Central Bank.
Lebanon	**Commercial bank:** LBP 10 bil for the head office of a commercial bank and LBP 500 mil for each additional branch. **Islamic bank:** The minimum capital of Islamic banks in Lebanon or the minimum capital which must be appropriated to branches of foreign Islamic banks licensed to operate in Lebanon is set at LBP 150,000,000,000 (one hundred and fifty billion Lebanese pounds), to be fully paid up in cash at the Banque du Liban. **Specialized/Investment bank:** The minimum capital of Lebanese specialized banks (investment banks and medium and long- term credit banks) and the capital which must be allocated to branches of specialized foreign banks authorized to operate in Lebanon, is set at thirty billion Lebanese pounds, of which an amount, determined by the Central Council, shall be put in escrow in the bank's

name with the Lebanese Treasury, and shall be returned with no interest in case of liquidation.

5

How onerous or easy are the compliance requirements of a licensed firm dealing with Stored Value Facility? What is the level of risk assessment conducted prior to granting of license?

This section deals with compliance requirements of a SVF licensed entity, at the time of license application and thereafter.

UAE

The CBUAE has guidelines pertaining to compliance, risk, audit, finance, and IT among other segments. The UAE CBUAE is also involved in regular reporting and periodic regular interventions after processing the license for the firms. The process is relatively ambiguous The SVF Application Form is not available on the website, No/less feedback or status update received by the applying firms from CBUAE on a timely basis and the follow up is bit difficult. Moreover, with date of compliance of the first set ending in Nov 2021, curiosity amongst the first movers remain.

Saudi Arabia

SAMA has relatively clearer guidelines and covers operational risk, fraud risk, money laundering, terrorism financing and financial crime risk, cyber security risk, reputational and legal risks, liquidity risks, credit risks, counterparty risk, market risk, foreign exchange risk, business continuity risk, data protection and privacy risk any other risk. Annual reporting is required to SAMA. The process is quite easy and quick to follow as the license application available on the website, prompt response on queries is given and the regulator is very procedural and adopts a tick mark approach.

Bahrain

The CBB has made the licensing process easy to follow and gives an indication that they encourage the firms to provide innovative offerings. The online forms are available in the E-services section on the CBB website, and the licensing forms are well classified and provided in the website.

Oman	The CBO supports the mobile payment transactions in Omani Riyal only. The thresholds and amount's limits are defined for each payment and customer type according to CBO operating rules and instructions, and the proposed Manager of the Licensee needs to be an Omani. Overall, the Oman compliance requirements dealing in the Stored Value Facility seems to be where the majority bargaining power exists of the CBO and the firms can be a bit confused on the scope and requirements until into the process. The licensing fees and timeline are also not mentioned in the regulatory guidelines and therefore gives an indication of the CBO following a more risk averse and careful approach in letting firms do business in this segment.
Kuwait	Not much information on the central bank website indicating not so upfront regulations for newcomers into the ecosystem
Egypt	Not much information on the central bank website indicating not so upfront regulations for newcomers into the ecosystem
Jordan	Not much information on the central bank website indicating not so upfront regulations for newcomers into the ecosystem
Lebanon	Not much information on the central bank website indicating not so upfront regulations for newcomers into the ecosystem

6 What is the cost of a Stored Value Facility license?

The licensing fee plays a role in understanding the cost of entry as well as operations of a fintech. This might turn out to be a barrier to entry in case the fees is high and could also be used as an indicator by the central bank on their openness to new SVF entities. To evaluate this, the below section deals with the fees to be paid to the regulator in obtaining and maintaining the SVF license.

There are two types of licensing fees involved in the process – first is the application fees (to be able to submit the application to the regulator) and second is the regular fees to be paid to the regulator for maintenance/holding the license.

UAE	Nil fees. Since the regulations are quite recent, there is a possibility that the CBUAE would introduce a licensing fee in the future.
Saudi Arabia	SAR 50k is the highest licensing fees any entity needs to pay (and at a frequency of once every three years only). The Payment Service Providers (PSPs) in Saudi Arabia are categorized into 4. The licensing fees is the initial fees which needs to be paid once the license is approved. Further, this payment needs to be made every 3 years. The licensing fee for the 4 types of PSPs are as below - (i) twenty thousand Saudi Riyals (SAR20,000) for a Micro PI licence; (ii) fifty thousand Saudi Riyals (SAR50,000) for a Major PI licence; (iii) twenty thousand Saudi Riyals (SAR20,000) for a Micro EMI licence; and (iv) fifty thousand Saudi Riyals (SAR50,000) for a Major EMI licence.
Oman	Fees to be paid to CBO. However, the amount is not specified in the Regulation.
Bahrain	The fees to be paid to the regulator as the license application fees is BD 100. This is a one-time cost only. Once the license in obtained, a fee of BD 2,000 needs to be paid to the regulator annually, as a fees/cost of holding the license.

Kuwait	Not mentioned in the regulation.
Egypt	The fees are EPG 100,000 for PSPs.
Jordan	» Application Fee: JD 1000 (one thousand Jordanian Dinars)A lump sum fee of JD 5000 (five thousand Jordanian Dinars) for granting the final license for each E-payment system managed by the Company. » An annual fee of JD 3000 (three thousand Jordanian Dinars) for each E-payment » System managed by the Company.
Lebanon	Not mentioned in the regulation.

7 Does the Regulation have stringent policies on data localization, data protection and privacy standards?

The business of Stored value facility involves personally identifiable information to a very large extent and therefore it is pertinent to understand if the Central Bank corresponding regulations discuss about the same or if there are alternate regulations available which governs data protection and privacy. Also, one of the most important criteria for all payment companies is to determine where the data is hosted, which gives comfort to both, regulators, and clients. This section understands the data localization, data protection and privacy requirements within the respective regulations.

UAE

Data Localization:

The SVF regulation mandates that the customer transaction data to be hosted in UAE.

Data protection and privacy:

Currently, the consumer protection regulations issued by the Central Bank of UAE requires a Data Protection Officer to be nominated and there are limited Data Protection principles mentioned in the regulation. Having said that, a full-fledged legislation on Data protection and privacy (based on GDPR standards) is expected very soon in the UAE which will be applicable for all entities based in the UAE.

Saudi Arabia

Data Localization:

Customer transaction data to be hosted in Saudi Arabia

Data protection and privacy:

Yes, SAMA takes adequate care around data protection and privacy standards. In addition, it also has specialized regulations around cyber security. This is in addition to the data protection and privacy guidelines which revolves around safety, privacy, awareness, anti-fraud, and data confidentiality. Recently, Saudi Arabia has also issued an independent legislation on Data protection and Privacy.

Oman

Data Localization:

The regulation is silent on data localization.

Data protection and privacy:

CBO lays down the rules with emphasis on customer's rights of privacy and mandates the licensees to maintain required policies on the same.

Bahrain

Data Localization:

The regulation is silent on data localization.

Data protection and privacy:

Yes, there exists a relevant legislation in Bahrain. The Personal Data Protection ("PDPL") was enacted on July 12, 2018 in Bahrain. The PDPL is the main data protection regulation in Bahrain. It provides guidelines on Data Controller, Data Protection Officer, Collection, Processing, Security and Transfer of personal and sensitive data.

Kuwait

Data Localization:

The regulation is silent on data localization.

Data protection and privacy:

Kuwait does not have a specific personal data protection law. However, it emphasizes on ensuring the requirements of information security and strict confidentiality of all transactions related to customers. The companies are prohibited from providing any data, directly or indirectly, or disclosing it or allowing third parties to access the same. This prohibition shall remain in effect even if the relationship between them and the customer is terminated for any reason.

Egypt

Data Localization:

The regulation is silent on data localization.

Data protection and privacy:

Yes, Egypt is governed by Data Protection Law, 2020. The Law aims to safeguard the rights of individuals in Egypt in respect of their personal data and to place responsibilities on businesses in how they process personal data.

Jordan

Data Localization:

The regulation is silent on this.

Data protection and privacy:

Articles (73), (74), and (75) of the Banking Law (no.28/2000) provides for data protection and privacy. Jordan does not currently have a specific data protection law in place. It observes full confidentiality of all transactions related to the Company's customers and the members of its Board of Directors or any of its present or former employees or any third party contracted therewith or insider to give any data about it whether directly or indirectly. Disclosure of the same or enabling others to have access thereto will be prohibited and this prohibition will remain to be effective even if the relation between the customer and the Company has ended for any reason whatsoever.

Jordan

Data Localization:

The regulation is silent on this.

Data protection and privacy:

New e-transactions and data protection law issued on 10 October 2018 (Law No.81/2018) governs data protection. The Law determines the conditions that need to be satisfied for the collection, processing, retention and use of personal data to be legal, which conditions mainly revolve around obtaining each concerned individual data subject's consent. Under the Law, a prior declaration to the Ministry of Economy and Trade is required in order to collect, process and use personal data, save where the Law requires a license or where it provides that neither a declaration nor a license is required. A relatively long list providing for the latter exceptions can be found in the Law. With respect to the model provided by the European General Data Protection Regulation, the Law by comparison is not as detailed or comprehensive, primarily as it fails to provide for the establishment of an independent regulatory body in charge of monitoring personal data protection. This pitfall is the main reason why the Law has attracted criticism, since in practice this will create a limit to the protection afforded to individuals, notably on the internet.

8

How are the regulations positioned in terms of the rights of the ultimate customer using a Stored Value Facility?

This section deals with understanding if the country regulations have the necessary safeguards in place in terms of customer protection while ensuring business viability. The digital landscape is evolving rapidly, accompanied by the increased usage of advanced technologies to process consumer data. This has emphasized the need for consumer protection and associated rights.

UAE

The Central Bank of the UAE (CBUAE) has issued the Consumer Protection Regulation (the Regulation), acting as an overarching regulatory framework for licensed financial institutions (LFIs). The Regulation ensures consumers' interests are protected when using any financial product and/or service or when a relationship with an LFI exists. As per the Consumer Protection Regulation issued by the CBUAE, customer complaints need to be acknowledged in 5 working days and resolved in 30 days. There also exists a centralized organization named 'Customer Happiness Centre' which pays full focus on identifying the customer pain points and ensuring customer satisfaction in all aspects of business run in UAE. Through these measures and independent assessments of customer feedback, UAE is careful and conscious on keeping its customers happy.

Saudi Arabia

Yes, the SAMA provides guidelines on protecting the consumer rights. It specifies to supply to customers a document detailing the terms and conditions of the Payment Services it provides. Once a complaint is received, it needs to be acknowledged in 7 working days and resolved in 5 business days.

Oman

The CBO is one of the most careful authorities in terms of customer complaints. In addition to informing to the customer of the result within 3 business days, it also entails rules around registering the complaints in the special file (with a reference number) and recording the calls through the customer call center and maintaining until the closure of the complaint.

Bahrain

The CBB allows the firms 5 business days to acknowledge the complaint and provide an explanation on the next steps, and 20 business days to fully resolve the complaint.

Kuwait

The customer complaint is handled in two stages in Kuwait. The two are elaborated below and define the process of addressing the concern and the escalation of the concern (in case of dissatisfaction on the initial resolution.

First Stage:

The individual customer of a banking or financial institution may file his/her complaint to the CBK regulated entities (banks, investment companies and finance companies) on the designated form available at all branches of those entities. Once the complaint has been received by the entity, the latter should act in accordance with the relevant instructions by responding to the complaint in writing within 15 business days from the date of submission and explaining whether the response includes corrective actions taken to resolve the complaint, or a confirmation by that entity of the validity of the procedures taken to process the transaction complained about.

Second Stage:

If the customer is not satisfied with the entity's response, he/she may file an appeal to CBK along with a copy of the entity’s response and the other necessary documentation to assess the validity of the action taken by the entity.

Jordan

There is no general legislation relating to consumer protection in Jordan and no specific financial consumer protection regulations. Customers who hold bank accounts are covered by the 2012 Instructions on Dealing with Customers Fairly and Transparently (no.56/2012), which mandates activities such as transparency of fees and interest rates, disclosure of terms and agreements before the client enters into a relationship with the bank, and the establishment of a consumer complaints procedure.

The 2012 Instructions states that the company providing SVF to the customer contains minimum standards for ensuring customers are aware of the complaints procedure in place and the handling of the procedure itself. This includes announcing the complaint center's address, email, and phone numbers; recording the complaint/ suggestion when it is received; and addressing the complaint or looking into the suggestion within three days and informing the customer of the result. If the complaint is not settled, CBJ has the right to form a committee to look into the situation and make a decision on the complaint.

Egypt

No specific regulations in this context. The customer complaints are eligible for escalation to Central Bank of Egypt if a customer is not satisfied with the resolution/answer on his/her raised concern post 15 working days of raising the concern.

Lebanon

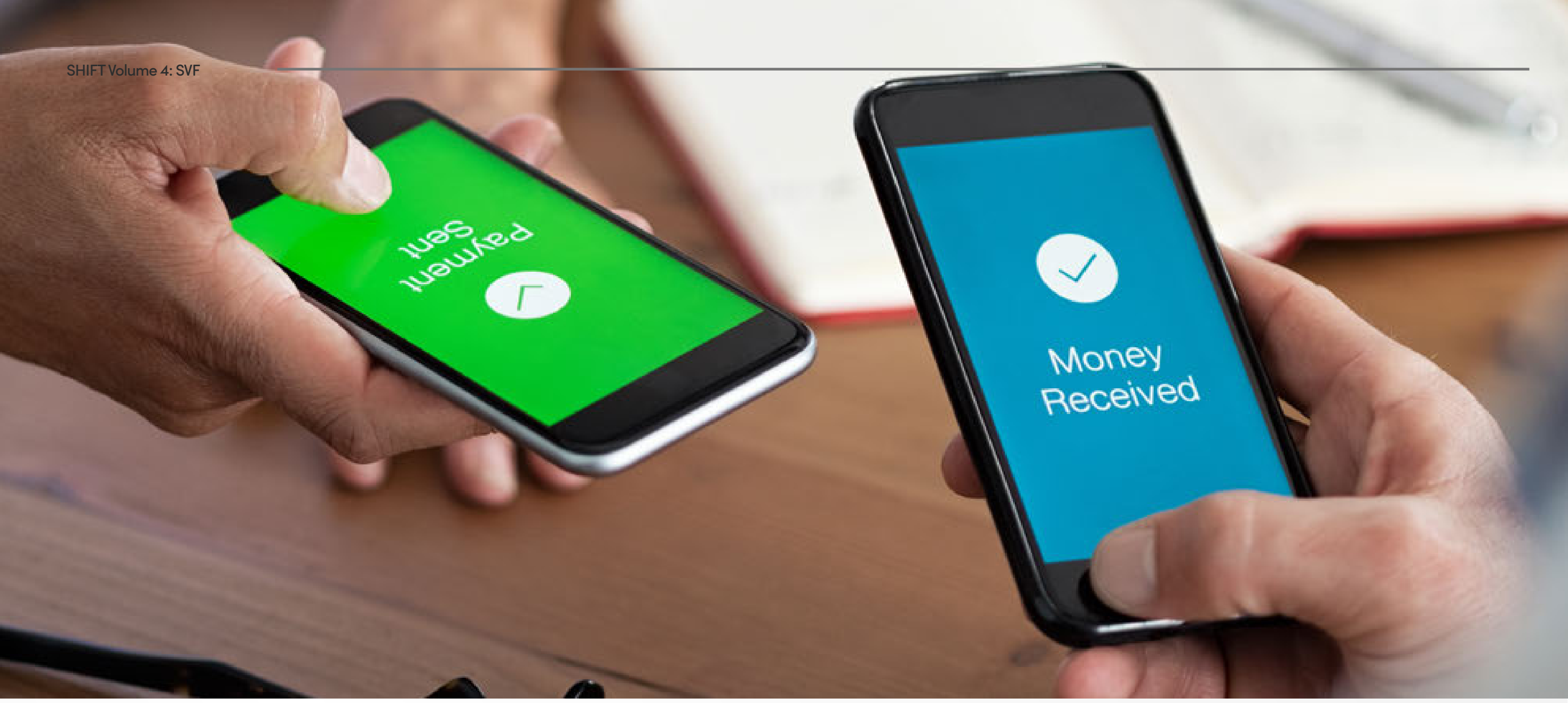
The Customer protection in Lebanon entails the below laws and guidelines on addressing them:

1. The Company shall be committed to designate a unit to receive complaints from customers and avail constantly and in a facilitated manner procedures to submit complaints in addition to a resolution mechanism and inform the customer of its results according to the instructions issued by the Central Bank in this respect.

2. The Customer shall have the right to submit his/her complaint to the competent department at the Central Bank in case the Company failed to resolve his/her complaints or if resolved in a way that the customer considers as irrelevant or unjust to him/her on condition that all documents and data supporting his/her point of view are enclosed with the complaint including the Company's response to the complaint.

3. The competent department at the Central Bank shall have the right to obtain the details of the dispute the way it shall deem as relevant. In case an amicable solution could not be reached, the department can recommend to the Governor to create an ad hoc committee to consider the dispute and put an end to it upon a resolution that shall be considered as mandatory for the Company and not binding for the customer.

However, there is no specification on the maximum number of days allowed to respond to the customer queries and complaints.



9 How onerous are the reporting and monitoring of transaction requirements as stipulated by the Regulations?

This section studies the limits on the transactions and balances on SVF Facility. If the Regulator imposes restrictions on the amount and number of transactions on SVF facility, it may not be a very conducive environment for a fintech to grow as well as the customers comfort for the product is also likely to go down. Therefore, it is important to evaluate how each regulator views transactions limits on SVF Facility.

UAE

Whilst the Central Bank has not established a hard limit on the maximum amount of the value stored in each type of customer accounts under an SVF scheme, a reasonable limit, supported by business justifications and control measures must be set for the maximum amount that can be stored in each type of customer accounts under an SVF scheme. Different storage limits can be set for different types of customer accounts according to their respective features. All limits must be set out in the operating rules of the SVF entity. The Central Bank may request a licensee to change the limits on a case-by-case basis if the Central Bank considers it appropriate to apply such limits or the business justifications and control measures put up by the Licensee are considered unsatisfactory. A Licensee should define the per transaction limit(s) and the aggregate rolling limit(s), having regard to factors such as its fraud monitoring capability, maximum stored value per SVF (if applicable), maximum daily top up limit (if applicable) and other fraud protection mechanism implemented. Such limits should be clearly communicated to customers.

Saudi Arabia

A Payment Service Provider must have a policy for setting risk-based customer transaction limits and, where applicable, limits on its Total Outstanding Electronic Money.

If a Payment Service Provider changes its policy for setting risk-based customer transaction limits (or, where applicable, limits on its Total Outstanding Electronic Money), it shall notify SAMA in accordance with Article 6.17 and, if required by SAMA, provide details of the updated policy. The SAMA may direct a Payment Service Provider to set customer transaction limits at levels specified by SAMA (for example, where specific regulatory criteria related to risk management and governance are not complied with, up to the satisfaction of SAMA)

Oman

Thresholds and amounts' limits are defined for each payment and customer type according to CBO operating rules and instructions. PSPs have to comply with amount limits defined for their customers and monitor their payment transactions as per the following:

» Amount limit according to the transaction type and its PSPs.
» Daily limits according to the customer category (Banked Customer, UnBanked Customer).
» Daily limits according to the customer type (Person, Entity and Government).
» Agent Limits should not exceed the limits set by the PSP.

CBO shall define the upper limits for handling mobile payment transactions as: Amount limit per transaction based on transaction type and customer type.

Transaction Type	Description	Maximum Transaction Limit
P2P	Person-to-Person Transfer Banked Customer Un-Banked Customer	 **500** **200**
P2B	Person-to-Business Banked Customer Un-Banked Customer	 **500** **200**

Transaction Type	Description	Maximum Transaction Limit
B2P	Business-to-Person Banked Customer Un-Banked Customer	**300** **200**
P2G	Person-to-Government Sending payment transactions from a person to Government entities	**500**
G2P	Government-to-Person Banked Customer Un-Banked Customer	**300** **400**
B2B	Business-to-Business Sending payment transactions from a corporate to another corporate Utility bills payment	**500**
Cash In/Out	Cash Deposit Cash Withdrawal for Un-Banked Customers	**300** **100**

Bahrain

When issuing any multi-purpose, electronic or otherwise, pre-paid cards, payment service providers must comply with the following requirements

(a) The maximum balance limit under each natural person must not exceed BD1,000 and the maximum single transaction value limit must not exceed BD500;

(b) The maximum balance limit for each legal person must not exceed BD10,000 (Loading and transaction size).

(c) Payment service providers must maintain a daily value limit of BD1,000 for the total Fawri+ and Fawateer transactions (with assured immediate finality, i.e. within 30 seconds) for each STV card/IBAN account per day.

Kuwait	As per the Regulations, The PSP are required to impose limits on the card transactions based on the risks associated with the customer and its risk policies.
Bahrain	Based on the licensee's assessment of the risks associated with the service, the licensee shall consider to what extent it should be considered a high risk service or not and shall apply strict due diligence measures over the cardholder and his transactions. When a customer's identity is verified according to the Customers Due Diligence Procedures: » Ceiling of the card balance shall be EGP 20,000. » Daily ceiling for withdrawing, transferring and purchasing shall be EGP 12,000 for each customer. » Monthly ceiling for withdrawing, transferring and purchasing for each customer, who is a natural person, shall be EGP 100,000 and, for companies and micro-enterprises, shall be EGP 200,000. » The maximum No. of prepaid cards that may be issued by one licensee to a person shall be one card.
Jordan	The Central Bank will determine the volume of e-money that the Company is allowed to issue pursuant to the Company's capital, type, and business turnover as well as the level of its risks and other criteria as deemed by the Central Bank and in line with the instructions issued for this purpose
Lebanon	The total amount of funds sent by each customer does not exceed: **a)** A daily amount of LBP 1,000,000 and a monthly amount of LBP 10,000,000 for the operations executed in Lebanese pound. **b)** A daily amount of USD 300 and a monthly amount of USD 3,000 or their equivalent in other foreign currencies for the operations executed in US dollar or in any of these foreign currencies. The total amount of funds received by each customer does not exceed: **a)** A daily amount of LBP 2,000,000 and a monthly amount of LBP 20,000,000 for the operations executed in Lebanese pound.

b) A daily amount of USD 600 and a monthly amount of USD 6,000 or their equivalent in other foreign currencies for the operations executed in US dollar or in any of these foreign currencies.

BDL can exceptionally approve a higher ceiling for the total amount of funds received by a customer in case the latter is a merchant or a professional.

The commission collected on these operations does not exceed 0.5% (half a percent) of the value of each operation.

A ceiling is set for the funds available in each E-Wallet, provided their total amount does not exceed, at any time, LBP 10,000,000 or USD 1,000.

10 Whether there exists a sandbox and accelerator programs encouraging the participants in the category of stored value facility. If yes, how friendly is the sandbox program?

A regulatory sandbox is a framework set up by a regulator that allows fintech startups and other innovators to conduct live experiments in a safe, pragmatic, and controlled environment under a regulator's supervision.
The rising sophistication of fintech solutions is leading to increasing levels of risks. In circumstances where it is unclear whether a new financial product or service complies with existing banking standards, some financial institutions may err on the side of caution, thereby hindering innovation. Furthermore, every organization is trying to do pilots with dozens of fintechs and managing the process is becoming very complex. A fintech sandbox can help innovators overcome these challenges and therefore serves as a critical piece of support in the respective jurisdiction. Therefore, this section analyses the existence of regulatory sandbox program and its features.

UAE

No direct sandbox program directly by CBUAE. There exists a sandbox with association with ADGM and one with DFSA. DFSA's version of a regulatory sandbox is known as the Innovation Testing Licence (ITL) Programme. Very recently, in Oct 2021, CBUAE announced its close partnership with the DIFC and ADGM sandbox to further enhance the collaboration under their co-sandbox programme that will enable fintech companies to test their innovative solutions under the existing digital sandbox programme. It stipulates collaboration on fintech initiatives and activities between the parties, including accelerator programmes, competitions, workshops, seminars, conferences and projects and aims to enable greater proliferation of fintech solutions across the UAE.

Saudi Arabia

Yes, there exists a sandbox program (since 2020) with allowance of 6 months to test the offering. Sandbox Lifecycle consists of:

» Application (30 days)
» Evaluation (60 days)
» Testing` (6 months)
» Exit

The eligible applicants for the sandbox programme includes:

1. SAMA licensed Innovators
2. non-licensed local fintechs/start ups
3. non-licensed international fintech

`

Oman

The CBO requires submission of application form along with required supplementary company related documents. The minimum duration of the testing period is six months for all fintech solutions. Fintech Regulatory Sandbox (FRS) participants may apply for an extension, which will be subject to approval by the CBO. However, there is no specified maximum duration, as this will be agreed upon between the applicant/participant and the FRS taskforce at CBO.

A company is eligible for the program only if registered in the Sultanate of Oman through the Ministry of Commerce, Industry and Investment Promotion with a valid Commercial Registration. A foreign company that is not based in Oman and does not have any activities in Oman must therefore obtain a Commercial Registration in order to apply to the fintech Regulatory Sandbox. The cost of participating in the sandbox program is OMR 200.

Bahrain

Yes, a sandbox program is available in Bahrain. The sandbox program by Bahrain requires an application submission followed by approval/rejection within 15 days. CBB website clearly mentions guidelines on eligibility, requirements, exit method, reporting and monitoring standards. The program allows 9 months with maximum extension of 3 months to test the fintech offering. It is open to wide set of applicants including existing CBB licensees (financial institutions with fintech initiatives) and other companies (local + foreign). An application fee of BD 100 needs to be paid to enter the Sandbox program.

Kuwait

Yes, a sandbox program exists in Kuwait. The Regulatory Sandbox Framework includes four stages to be completed within one year at the most. The Regulatory Sandbox starts with the application stage of the proposed product or service, then the evaluation stage where thorough evaluation, which covers technical, security, and regulatory aspects, of the application will take place, followed by the experimentation stage of the proposed product or service in a testing environment, and finally the accreditation stage, where

CBK grants its approval (or rejection) to deploy the proposed product or service in Kuwait.

The maximum duration of the regulatory sandbox is one year, with the possibility of an extension based on the Central Bank of Kuwait discretion. There are currently no participation fees to participate in the Regulatory Sandbox.

The participation is open to both companies and individuals looking to provide innovative fintech products and services that are built on or associated with electronic payment of funds, using new technologies or existing technologies in an innovative way.

Egypt

Yes, a sandbox program exists in Egypt, and is managed by the Central bank of Egypt. The details are as below:

» **Evaluation Stage**: 21 working days
» **Preparation Stage**: 21 working days
» **Experimentation Stage**: 6 months to 1 year
» **Exit Stage:`** Normal Exit, Premature exit

The CBE provides the Regulator Sandbox services for free, however applicant must own its requited resources for testing under the Regulatory Sandbox.

The eligibility of the sandbox is open to local, regional, and international fintech companies and financial institutions who are intending to deploy their proposed solutions in the Egyptian market.

Jordan

Yes, a full-fledged sandbox program exists in Jordan. The details are as below:

Application Stage: Complete the application, provide information requested and fee to CBJ

» **Evaluation Stage:** This takes no more than 21 working days
» **Experimentation Stage:** It lasts for 9 months
» **Exit stage**

The application fee is 50 JOD (nonrefundable).

The program participation is open to:

1. All banks operating in the kingdom
2. All financial institutions licensed by the Central Bank of Jordan

unlicensed by CBJ

4. Fintech solutions providers' either entrepreneurs or already established in the market

5. Individuals with innovative and pioneer fintech ideas

6. Fintech companies and/or individuals in partnership with fintech and software solutions' providers.

7. International entities in collaboration with entrepreneurs in the kingdom

Lebanon

Does not have a fintech sandbox yet

Conclusion & Future Outlook

The MENA region is advancing towards a more developed regulatory scenario in terms of SVF licensing and operations. Every country and in turn its Central Bank (governing authority) bears the responsibility of creating a healthy balance between **customer protection, customer ease, ease of business,** and having the **right set of safeguards** in place to create a seamless and well protected payment ecosystem. This can be an iterative process as the learnings will be incorporated into newer versions of the regulations on the go. Every country is different in the above-mentioned four aspects to be optimized and therefore there does not exist a one rule fits all approach. Therefore, this is an area which is keenly observed and the changes are closely monitored by many other countries, fintechs and banks.

Specifically in the UAE, the Central Bank of the UAE (CBUAE), the Dubai International Financial Centre (DIFC), and Abu Dhabi Global Market (ADGM) will be partnering to promote fintech development in the UAE. The three financial authorities have signed an agreement to collaborate over joint fintech initiatives and activities. The agreement was signed at CBUAE's Future of Finance conference during Expo 2020. This is a recent example of the willingness of the regulators in the UAE to promote innovation and develop the fintech community. In the said event, Ahmed Ali Al Sayegh, Minister of State and Chairman of ADGM, said: "The Fintech sector is fast shaping the face of the global financial system, requiring coordinated attention by regulators to ensure its robust development and integration." Further, Khaled Mohamed Balama, Governor of CBUAE noted as follows "We strongly believe that one of the foremost ways to ensure a robust financial system is to develop a regulatory environment that is conducive to innovation and digitization." These are clear indications of the regulators in the UAE towards building a regulatory landscape for fintechs operating in UAE and working on strategies to enhance the competitiveness and digital transformation of the financial sector in the UAE.

The conditions for fintech growth in the GCC region are ripe. Smartphone penetration is at 96 per cent, well above the global average of 58 per cent. However, fintech has not developed at a similar pace. The global share of mobile payments in the GCC is growing, but still far behind other regions (such as Asia Pacific). Although most fintech investment is currently in the U.S., which captures about 80 percent of this spending, meaningful innovation is also occurring in the European Union, particularly in the U.K. Although relatively little fintech investment has occurred in the GCC to date, that could and should change. Many of the necessary elements exist in the GCC to develop fintech ecosystems. There are good reasons to believe the region has the collective will to give rise to these ecosystems and reap their broader economic benefits. We hope and believe that regulatory blessings are granted to these initiatives, which would pave the way for sustained growth and development in the fintech space in the MENA region.

REFERENCES

Below is the list of regulations/circulars referred to during our country wise research on regulations.

UAE

1. Stored Value Facilities (SVF) Regulation AR & EN
2. Circular Number 8/2020, dated 25/11/2020, Consumer Protection Regulations
3. Central Bank of UAE Law of 1980 and the Islamic Bank Law

Saudi

1. Payments Service Providers Regulations, 2020
2. Regulatory Sandbox Framework (Saudi Central Bank, November 2019)

Oman

1. Mobile Payment Clearing and Switching System Operating Rules
2. Sultanate of Oman, THe Banking Law Royal Decree, 114/2000, Central Bank of Oman
3. Central Bank of Oman Fintech Regulatory Sandbox Framework

Bahrain

1. CBB Rule Book Volume 5

Kuwait

1. Instructions for regulation of the electronic payment of funds
2. Article on Regulations of Islamic Banking Institutions in Kuwait by Lulwa Mubarak Al Ben Ali
3. Regulatory Sandbox Framework Document by Central Bank of Kuwait

Egypt

1. Egyptian Central Bank Law, No. 194/2020 with effect from 16th September, 2020
2. CBE's Regulatory Sandbox Framework, May 2019
3. Payment Services using Prepaid Cards Regulating in the Arab Republic of Egypt
4. Consumer Protection REgulations dated Feb 19, 2019

Jordan

1. Bylaw of Electronic Payment and Money Transfer upon Articles (21) and (22) of the Electronic Transactions Law No. (15) for 2015
2. Fintech Regulatory Sandbox by Central Bank of Jordan
3. Bylaw No. (111) for 2017
4. Electronic Transactions Law, Law No. 15 of 2015

Lebanon

1. Basic circular No 79 to Banks
2. Basic Decision No. 7739
3. Policy Paper on Catch up Time performing Electronic Money Transfers in Lebanon by Justine Stievenard, and Gina Barghouti

Authors

Vaanathi Mohanakrishnan – Business Head | **M2P**

Chandan Gupta – Head of Strategic Partnerships | **M2P**

Akshata Namjoshi - Associate | **KARM Legal Consultants**

Masood Khan - Founder and CEO | **YAP**

SHIFT

PAYMENTS WORKING GROUP

MENA FINTECH ASSOCIATION

www.mena-fintech.org