



بورصة البحرين
BAHRAIN BOURSE



واحة الفرص الإستثمارية
An Oasis of Investment Opportunities



BahrainBourse

www.bahrainbourse.com

Capital Markets

Reforms and innovations aim to attract investment

Digital trading platforms launched in the kingdom

Efforts to expand and diversify bourse debt markets

New rules to strengthen financial technology segment





The kingdom's markets are among the best-performing in the GCC

Competitive edge

Ongoing efforts to expand the debt market, and a commitment to reform and digital innovation, support near-term growth

Besides one tourism company, none of the equities listed on the Bahraini stock market have limits on foreign ownership, whereas exchanges in several GCC countries cap it at less than 50%.

Despite facing challenging macroeconomic headwinds, in addition to illiquidity and limited levels of free-floating shares, Bahrain's capital markets have been among the best-performing in the GCC in recent years. Indeed, the Bahrain All Share Index (BASI) reached a nine-year high in mid-2019, while the initial public offering (IPO) of a port operator in late 2018 was deemed the most successful listing in a decade. Moreover, Bahrain Bourse (BHB) stakeholders have made steady progress on a series of ambitious reforms and innovations aimed at boosting digital trading and attracting new investment. One of the few exchanges in the GCC to have almost no restrictions on foreign equity ownership, the BHB remains one of the most competitive and well developed in the region. The upcoming acquisition of one of the exchange's largest listed companies is set to bolster a recent surge in trading activity and share prices, while ongoing efforts to expand and diversify its debt market are expected to support robust near- and mid-term growth.

STRUCTURE & OVERSIGHT: Originally established as the Bahrain Stock Exchange (BSE) by Decree No. 4 of 1987, the BHB is the national stock exchange. It began operations in 1989 and is a self-regulating organisation licensed by the Central Bank of Bahrain (CBB). The BHB replaced the BSE with the promulgation of Decree No. 60 of 2010, which established the new bourse as a shareholding company.

The BHB comprises an equity market; bond market for conventional and *sukuk* (Islamic bonds); a Treasury bill market; a real estate investment trust market; a mutual fund market; and an alternative equity board for small companies and start-ups, known as the Bahrain Investment Market. The bourse's broad profile is also set to include asset classes such as exchange-traded funds and derivatives.

The BHB is responsible for settlements and ownership transfers of domestic joint stock securities, and

securities listed on the BHB must be traded through registered brokers. One of the primary competitive advantages of the bourse is its foreign ownership regime. Besides the tourism company Bahrain Family Leisure, which caps ownership by non-GCC nationals at 49%, none of the listed equities have limits on foreign ownership, setting the bourse apart from several of its GCC neighbours, where foreign ownership in many sectors is capped at less than 50%. The BHB also permits trading in both the Bahraini dinar and the US dollar, and is one of the few stock exchanges in the Middle East to do so.

CLEAR PROGRESS: One of the most important recent developments at the BHB was the July 2017 launch of Bahrain Clear, an independent entity licensed by the CBB and operating under the BHB. Bahrain Clear is responsible for establishing, managing and operating all systems for deposits, clearing and settlement of securities transactions, as well as for managing shareholder records, undertaking custodian activities, and providing advisory and technical services for depository, clearing and settlement activities. Bahrain Clear is also tasked with pledging and freezing the shares of listed and non-listed companies, registering members with the Central Depository System for trading, and providing companies with a daily corporate actions package, which includes bonus shares, and stock splits and mergers. Bahrain Clear is working to expand the services of the bourse's central registry to include the direct distribution of cash dividends to the bank accounts of shareholders, while managing general assemblies and meetings of listed companies.

Speaking at the launch of Bahrain Clear, Sheikh Khalifa bin Ebrahim Al Khalifa, CEO of the BHB said that the establishment of Bahrain Clear will help the bourse enhance and diversify post-trade services, and to provide services in line with those offered in advanced markets. The agency is also expected to

The Bahrain Bourse is one of the few stock exchanges in the Middle East that permits investors to trade in both the Bahraini dinar and the US dollar.

improve Bahrain's capital market classification on international indices, which would help attract more local and regional investment.

DIGITAL PLATFORMS & IPO: Bahrain Clear is playing an important role in modernising BHB activities, most notably with the development of its eIPO platform, which allows subscriptions to IPOs to be carried out online. The platform was deployed in November 2018, in conjunction with an IPO of local port operator APM Terminals, which put up some 18m shares at BD0.66 (\$1.75) per share. An important player in the kingdom's logistics and supply chain sector, APM Terminals operates the multi-purpose Khalifa bin Salman Port, which handles domestic cargo, cruise ship traffic and trans-shipments. The company's \$31.3m offering was 5.4 times oversubscribed, with total institutional and retail demand reaching 97.4m shares worth a combined BD64.3m (\$170.6m). It was the kingdom's most successful IPO in a decade.

"This indicates market confidence in the kingdom and strong demand from international investors for IPOs, especially for companies that operate in unique sectors such as port operations," Sheikha Sameer Al Zayani, director of listing and disclosure at the BHB, told OBG. "Following the success of the APM Terminals IPO, there are signs that other companies are considering going public over the short term."

According to the BHB, the eIPO system accounted for 55% of total subscription applications and 90% of the IPO's total volume. "We initially expected the eIPO platform to capture about 20% of total subscriptions," Abdulla Abdin, senior director of operations at Bahrain Clear, told OBG.

Digital innovation remains an important priority for the bourse, which inaugurated a new online equity trading platform developed by Mubasher Financial Services in May 2019. The National Bank of Bahrain's Al Watani TRADE platform allows clients to trade securities directly on the BHB with the use of smart devices. Additionally, the launch of the Khaleeji eTrade platform in March 2019 allows Khaleeji Commercial Bank clients to easily open accounts to trade stocks listed on the BHB.

The APM Terminals IPO was the first transport and logistics listing on the BHB, and also the first to be carried out under new listing regulations issued by the CBB. The CBB's Capital Markets Supervision Directorate regulates most primary and secondary market activity; however, the Resolution No. 11 of 2018 mandated the BHB operate as a self-regulating organisation and clarified the bourse's role in approving IPOs. "The resolution specifies a clear timeline for the review and approval of an IPO, which was previously somewhat vague," Sheikha Al Zayani told OBG. "This procedure used to take around one-and-a-half to two years to complete. Under the new rules, however, an IPO will be reviewed within a month. I believe this revised timeline will encourage other companies to submit an application."

As of October 2019 the regulators were finalising new listing rules that will give the BHB greater



Total market capitalisation increased from \$21.8bn at the end of 2018 to \$26.8bn at the end of 2019

control over IPO approvals. "The listing rules will clarify timelines and all the previous mandates. We will be providing guidelines that issuers can use as a reference to ensure transparency," Narjes Jamal, COO of the BHB, told OBG. The new rules are expected to be released in the fourth quarter of 2019.

EQUITY MARKET: As of December 2019 there were 44 companies listed on the BHB. Equities are traded across eight separate categories, including commercial banks, investment, insurance, services, hotels and tourism, industrial, closed companies, and non-Bahraini companies. According to statistics from the BHB, the total volume of shares traded annually grew from 1.1bn in 2017 to 1.4bn in 2018, while the total value of traded shares rose from BD211.3m (\$560.5m) in 2017 to BD323.8m (\$858.9m) in 2018. At the end of the third quarter of 2019 traded volumes stood at 908.7m while the total value of traded shares accounted for BD229.8m (\$609.5m). Meanwhile, total market capitalisation grew from BD8.1bn (\$21.5bn) at end-2017 to BD8.2bn (\$21.8bn) at end-2018 and BD10.1bn (\$26.8bn) at end-2019.

Commercial banks dominate the market, accounting for a combined BD467,007 (\$1.2m) as of October 19, 2019, or roughly 68% of the total. This was largely owing to the market dominance of Ahli United Bank (AUB), whose 657,121 listed shares equate to BD223,333 (\$592,000), or a market share of 32.4%. Following AUB in terms of market share was Al Salam Bank-Bahrain, with BD213,733 (\$567,000); GFH Financial Group, with BD53,363 (\$142,000); and APM Terminals, with BD51,052 (\$135,000).

The bourse remains resilient despite challenging macroeconomic conditions. The BHB was the only exchange in the GCC that recorded growth in trading activity in 2018, according to Kuwait's KAMCO Investment Company. According to the bourse's 2018 annual report, the total value of trades rose by 53%, with average daily trading values standing at BD1.3m

A \$31.3m offering of a local port operator in November 2018 was the most successful initial public offering in a decade, with total institutional and retail demand reaching 97.4m shares worth \$170.6m.

As of October 2019 the regulators were drafting new listing rules that will give the bourse greater control over approvals for initial public offerings.



Between October and December 2019 shares traded by Bahraini investors accounted for 73.2% of total sales

The high concentration of institutional ownership in many Bahraini companies poses a challenge to future initial public offerings, with many institutions unwilling to cede control of their company to shareholders.

(\$3.4m), while total trading volumes increased by 28%. Market capitalisation rose by 0.6% over the year, while the total number of investors expanded by 17% to 42,998. The BASI gained a modest 0.42% to close the year at 1337.26.

While growth continued strongly into the first half of 2019, the market's performance was mixed in the last quarter of the year. While the BASI rose by 20.9% over the year to 1610.2 and the total value of traded shares grew by 53% to BD121.7m (\$322.8m), total trading volumes fell by 39.2% to 409m. Meanwhile, the total number of transactions decreased by 11% over the same period, from 4729 to 4211. Between October and December 2019, BD82.8m (\$219.6m) worth of shares were traded by Bahraini investors, equivalent to some 73.2% of total trades on the exchange, while foreign investors accounted for BD30.4m (\$80.6m) of trades, or 26.8% of the total.

TOP-THREE LISTED COMPANIES: According to UAE-headquartered business intelligence provider Zawya, the top-performing company on the BHB in 2018 was Bahrain's Esterad Investment Company. The company saw its shares increase by 66.7% despite relatively flat income of BD1.7m (\$4.5m) and a 16.8% fall in shareholder profit to BD748,793 (\$2m) over the first nine months of the year. Its positive performance in 2018 is largely attributable to the sale of 29.7m shares in local company Manarat Investment Holding in December 2018, which caused a temporary price surge near the end of the year.

Arab Banking Corporation (Bank ABC) was the second-best performing stock in 2018, with the value of its shares growing by 45.6%. This was supported by the bank's improved liquidity, high dividend payout and robust financial performance. Over the year Bank ABC's net profits rose by 5% to \$202m, while return on equity increased by 5.2%. In third place was Bahrain Telecommunications Company, which recorded a 35.9% gain in share values in 2018, following a

net loss of BD21.7m (\$57.6m) in the last quarter of 2017, which was mainly driven by impairment losses in the company's Yemen and Jordan investments. Meanwhile, full-year net profit attributable to equity holders rose by 1335% to BD50.1m (\$132.9m).

LIQUIDITY CHALLENGES: Despite the success of the APM Terminals IPO – which is seen as a milestone in the bourse's strategy of attracting new issuers from fast-growing economic sectors – trading activity on the BHB remains constrained by low levels of free-floating stock among listed companies. Under current regulations, the mandatory minimum free float for a listed company in Bahrain is set at 10% of the total shares offered; however, some stakeholders report that listed firms often float less than this.

The high concentration of institutional ownership in many Bahraini companies also poses a challenge to future IPOs, with many institutions unwilling to cede control of their companies to shareholders. "We understand there is a liquidity issue, and we have considered increasing the free float to 15%," Sheikha Al Zayani told OBG. "However, there is no plan currently in place to increase the mandatory minimum beyond 10%. The BHB has put other measures in place to help with the liquidity issue, most notably the establishment of the Bahrain Liquidity Fund."

LIQUIDITY FUND: An uptrend in average daily traded volumes recorded in recent years has been supported by the Bahrain Liquidity Fund. Launched in June 2016 by Manama-based investment firm SICO Bank, in partnership with the CBB and the BHB, the BD42.5m (\$112.7m) fund aims to enhance and deepen Bahraini capital markets. The fund acts as a market maker, with the bank providing two-way quotes on most listed securities and a reasonable spread enabling investors to actively trade their stocks. Its seed investors include Osool Asset Management, Bank of Bahrain and Kuwait, Mumtalakat Holding Company, and the National Bank of Bahrain.

According to SICO Bank, the fund has made a significant impact on BHB operations, with average daily traded values reaching BD1.1m (\$2.9m) in 2018, up 75.5% compared to BD626,745 (\$1.7m) in 2017.

In January 2019 SICO Bank announced that the fund intervened in fewer deals in 2018, around 22% of average daily traded volumes less than it did in 2017, when interventions amounted to 39% of the total. While SICO Bank reported that block trades flowing through the market can distort the true effect of the fund, it also noted that the BHB's 30% increase in average daily traded volumes in 2018 is a significant improvement over other GCC markets. While there are plans to introduce additional market makers to the BHB, possibly located outside of Bahrain, no firm timeline has yet been announced.

MERGERS & ACQUISITIONS: Another potential growth driver for the BHB is the planned acquisition of AUB by Kuwait Finance House (KFH). In January 2019 KFH announced that was seeking to acquire AUB in a \$7bn buyout, which would create the first major cross-border tie-up in the GCC. A due diligence

In January 2019 a Kuwaiti company announced that it was seeking to acquire the kingdom's largest commercial bank in a \$7bn buyout, which would create the first major cross-border tie-up in the GCC.

process was completed in September that year. The proposed KFH-AUB merger was approved by Kuwait's Public Institute for Social Security in August 2019, and conditionally approved by the central bank of Kuwait in the following October; meanwhile, it was awaiting approval from the CBB as of late October 2019. Once the acquisition is complete, KFH will be one of the largest banks regionally and globally, with assets of over \$94bn and equities in excess of \$10bn. As of late October 2019 AUB share price stood at \$0.90, up from \$0.68 at the beginning of the year.

Rising competition from other GCC exchanges has put the BHB under pressure in recent years, as companies seek multiple regional listings because of issues of scale and liquidity. Twelve BHB-listed companies are also listed on other GCC exchanges: five – including AUB – are on Bursa Kuwait, five are on the Dubai Financial Market, one on the Muscat Securities Market and one on Nasdaq Dubai. However, some industry experts view the potential cross-listing of KFH as a positive for the BHB.

According to BHB stakeholders, developments in other GCC markets – for example, Saudi Arabia's inclusion in the MSCI and FTSE Russell Emerging Market indices in 2019 – are set to benefit the broader region, including Bahrain. "We have a lot of cross-listed companies in the GCC and often undertake knowledge exchanges to improve regional practices," Sheikha Al Zayani told OBG.

DEBT MARKET: Other measures to improve liquidity have focused on building and diversifying the debt market. Activities on the bourse are dominated by equities; however, the kingdom has made notable inroads in developing and launching new debt products. For example, the Treasury Bills Market, an in-demand platform used by banks to manage short-term liquidity, was launched in January 2016.

The debt market expansion is also supported by ongoing efforts to develop a secondary market for fixed-income instruments, most notably with the launch of a new CBB-supported mechanism in January 2015 that allows retail investors direct access to government debt issuances. The first of its kind in the Middle East, the mechanism allows Bahraini and non-Bahraini individuals and institutions to purchase government debt through registered brokers, and to trade bonds on the secondary market. The minimum subscription rate for these purchases is low, at BD500 (\$1330), or 500 bonds or sukuk issued at a par value of BD1 (\$2.65) each.

Despite efforts to strengthen Bahrain's debt market, there remains room for improvement. In August 2018 Moody's Investors Service downgraded Bahrain's credit rating from "B1" to "B2", maintaining a negative outlook. Moody's reported that the kingdom's ability to issue bonds internationally had become impaired, citing the government's decision in March 2018 to abandon both a conventional and long-dated sukuk issuance to instead issue a \$1bn sukuk at a 7.5-year maturity. Moody's also noted that in late June 2018 Bahrain's sovereign credit default

swap spreads surpassed the 600-basis-point threshold, a level it had previously only reached during the height of the 2007-08 global financial crisis.

Heading into 2019, the outlook for debt issuance in Bahrain was more positive, supported by a \$10bn fiscal injection pledged by its GCC neighbours in late 2018. In February 2019 Bloomberg reported that Bahraini bonds delivered an average return of nearly 5% in the months following the funding programme's launch, this was underpinned by an ongoing fiscal consolidation programme aimed at diversifying the economy and reducing the budget deficit to zero by 2022 (see Economy chapter).

In May 2019 the CBB moved to issue 10 new Treasury bills valued at BD563m (\$1.5bn), offering discount rates of 3.18% to 4.39% for between three and 12 months. The bond market continued on the positive trajectory in August 2019, when the CBB reported that its BD70m (\$185.7m), 91-day Treasury bill issuance was 165% oversubscribed. At the end of September that year there were 18 Treasury bill issuances on the BHB valued at \$1.7bn, as well as 13 listed bonds and sukuk worth approximately \$6bn.

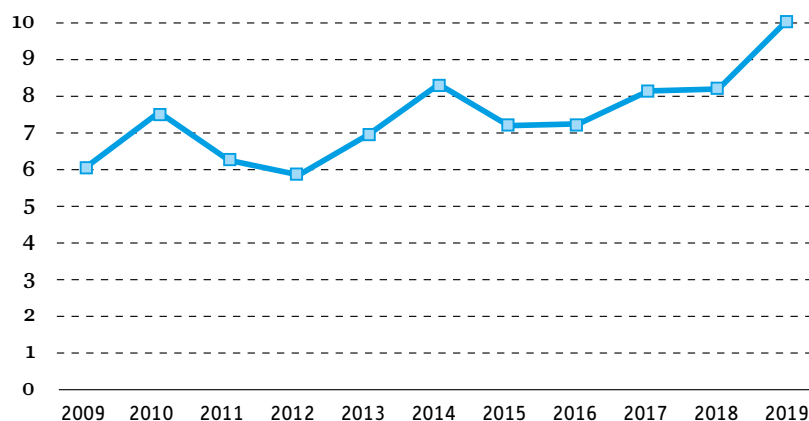
The inclusion of Bahraini sovereign and quasi-sovereign bonds in JP Morgan's emerging market bond index (EMBI) Global Diversified, EMBI Global (EMBIG), and EURO-EMBIG series in January 2019 is also expected to help boost debt market growth.

OUTLOOK: Benefitting from lively trading activity, increasing market capitalisation and an expanding debt market, Bahrain's capital markets are set for a strong performance in 2020. Although illiquidity and sluggish macroeconomic growth continue to pose a challenge, the BHB's proactive and progressive approach to regulatory reform and digital innovation will help the bourse maintain its competitive edge against a backdrop of rising regional competition. Meanwhile, the success of the APM Terminals IPO is expected to encourage new listings in the coming years, demonstrating sustained confidence in Bahrain's economic fundamentals and keeping the bourse on track for steady mid-term expansion.

In August 2019 a \$185.7m, 91-day Treasury bill issuance was

165%
oversubscribed

Bahrain Bourse market capitalisation, 2009-19 (BD bn)



Source: Bahrain Bourse



Sheikh Khalifa bin Ebrahim Al Khalifa, CEO, Bahrain Bourse

Wider view

Sheikh Khalifa bin Ebrahim Al Khalifa, CEO, Bahrain Bourse, on technological disruption and the convergence of regional markets

What macroeconomic scenarios are most likely to impact Bahrain Bourse's performance in the future?

SHEIKH KHALIFA: Soon there will be greater cooperation between exchanges in the GCC. Some of the benefits of closer engagement are better time and resource management, and reducing barriers to entry. We are transforming passporting regulations, which will enable all regional brokers access to regional jurisdictions. Cutting red tape in this way will be positive for exchanges in the region, as more brokers in the regional market space should lead to more investors and therefore greater liquidity. In addition, the Unified Investor Number project complements the pass-porting initiative, because an investor will not need to reapply to receive country-specific credentials.

How can Bahrain Bourse work to encourage more listings by small and medium-sized enterprises?

SHEIKH KHALIFA: Most exchanges try to create a more robust listing pipeline. In fact, this topic is often discussed at meetings of the World Federation of Exchanges. Creative solutions abound to help countries incentivise greater listings; however, there is not a one-size-fits-all approach. Listing in and of itself should not be a goal. To achieve a listing is to serve a purpose, namely growth, but each firm – just as each exchange – has a unique set of traits. Each one must question their strategies and motivations for listing, as there are benefits and drawbacks that come with the process.

Bahrain Bourse fully supports the Bahrain Investment Market (BIM) initiative, which supports companies in taking steps towards a flotation or partial flotation. It is in the third round of funding where we can help firms make the leap, as the capital requirements are that much more serious. We are in talks to move the BIM to a cloud-based system, allowing firms more flexibility in the listing process with regards to disclosing certain data and information. The key is to allow companies the freedom of choice: they decide their own next steps.

In what ways have technological advancements impacted the Bahrain Bourse?

SHEIKH KHALIFA: Bahrain Trade eliminates the duplicate know your customer (KYC) process where profiles were devised by banks and then by us. We have integrated our systems with the banks' by digitally linking them so they can feed us the requisite KYC intelligence, which allows us to create an investor profile that we can share with the bank. The primary benefit of this is the ability to open new market segments. Brokers are now experiencing growth from domestic clients, rather than the traditional foreign investor, and when locals open a retail account, they can opt into a Bahrain Bourse investment account. The impact has been considerable given that all these pieces are coming together with the Bahrain Liquidity Fund, which incentivises the sell side to have more shares readily tradeable, in turn improving market liquidity. On the buy side we have Bahrain Trade, which has brought in new investors. In all our undertakings we analyse both the buy and sell side to make sure solutions are suitable and sustainable.

To what extent has the recent reclassification of the Saudi and Kuwaiti exchanges to emerging market status affected the Bahrain Bourse?

SHEIKH KHALIFA: We have seen a higher rate of foreign investment inflows to the bourse, but this may not be directly correlated to the reclassification of other exchanges. However, a reclassification of any exchange will provide spillover effects to the region; the trickle-down effect will naturally bring greater investor interest in regional money markets. The Bahrain Bourse has the highest foreign-to-domestic investment ratio of all GCC bourses, thus we are currently focusing on the on-boarding of active retail investors. We recently completed an international investors roadshow to Luxembourg, where we received positive feedback from FTSE Russell, with two criteria upgraded and one criterion pending to be upgraded to "emerging" status.



Formal regulations for crypto-assets were unveiled in February 2019

Secure solutions

New financial technology regulations aim to strengthen the market against cybersecurity breaches

In keeping with its aim to transform the kingdom into a regional hub for financial technology (fintech), the Central Bank of Bahrain (CBB) has undertaken several important regulatory reforms aimed at attracting new cryptocurrency and blockchain companies. Cryptocurrency development is expected to keep Bahrain at the forefront of regional fintech development; Bahrain was the first country in the Middle East to establish a central bank-licensed cryptocurrency exchange. However, concerns regarding consumer protection and safeguards – particularly in the wake of dozens of high-profile initial coin offering (ICO) scams reported between 2017 and 2019 – have somewhat dampened the outlook.

COMPETITIVE ADVANTAGE: According to Bloomberg, Bahrain's bid to attract companies focused on blockchain technology and cryptocurrency trading "comes as the sector remains largely unlicensed and unregulated in major global financial hubs. This is forcing adopters to seek clarity from smaller jurisdictions that have been more open to regulating the market, such as Malta, Liechtenstein and Gibraltar". In other words, the kingdom could gain a competitive advantage by becoming an early adopter of well-regulated cryptocurrency technology and exchanges. Opening a cryptocurrency exchange in Bahrain, particularly one offering over-the-counter settlement services enabling fiat withdrawals from cryptocurrency accounts, is expected to support the more widespread adoption of fintech and boost investment in fintech solutions.

REGULATORY SANDBOX: The CBB, which shares regulatory responsibilities for Bahrain's capital markets with Bahrain Bourse (BHB), seeks to transform the kingdom into a regional conventional and sharia-compliant fintech hub. In October 2016 the central bank created the FinTech & Innovation Unit, which was tasked with establishing a fintech-supportive regulatory environment. This included the

establishment of a regulatory sandbox programme, under which new and existing Bahraini companies are given up to two years to trial and test fintech solutions ranging from online payments to open banking systems (see Banking chapter). As of November 2019, 36 companies were approved by the CBB to participate in the regulatory sandbox, with Tarabut Gateway, a subsidiary of local digital infrastructure provider Almoayed Technologies, and Rain, a local sharia-compliant cryptocurrency exchange, having graduated beyond the testing phase.

CRYPTOCURRENCY REGULATIONS: Formal regulations for cryptocurrency and blockchain companies were unveiled in February 2019. According to the Bahrain Economic Development Board (EDB), the central bank previously issued a consultation paper examining draft regulations for cryptocurrency platform operators. Days later the CBB issued the final rules on a range of activities relevant to cryptocurrency, with the creation of the crypto-assets module, under Volume 6 of the CBB Rulebook permitting cryptocurrency usage in the kingdom. The crypto-asset rules cover areas including licensing, governance, minimum capital requirements, control environment, risk management, anti-money-laundering/countering the financing of terrorism requirements, standards for conducting business, conflict of interest regulations, reporting rules and cybersecurity requirements.

However, most banks have not yet been convinced of the benefits of digital currencies and thus do not plan to issue their own digital currency any time soon, despite cryptocurrency and its supporting technology, blockchain, becoming increasingly popular in the Gulf region. Blockchain holds significant potential to make an impact on industries beyond the financial sector; its distributed ledger technology could be deployed in areas such as land registration and securities issuances. The International Data Corporation,

Opening a cryptocurrency exchange is expected to support more widespread adoption of financial technology and boost investment in the segment.

In addition to the financial sector, blockchain and its distributed ledger technology could be deployed in other areas such as land registration.



The volume of initial coin offerings between January and May 2018 were more than double the 2017 total

Total spending on blockchain technology by businesses globally was forecast to rise by 88.7% in 2019 to

\$2.9bn

a market intelligence company, forecast the total amount spent on blockchain technology by businesses globally will rise by 88.7% in 2019 to \$2.9bn.

SPRINKLEXCHANGE & RAIN: One of the most important fintech developments in Bahrain is the initial public offering (IPO) platform SprinkleXchange, which offers companies the chance to list and trade using smart contracts transacted using blockchain technology. The platform, which uses the Ethereum blockchain for settlement and clearing, is expected to list up to 1000 IPOs by 2023, targeting companies with a market capitalisation of between \$20m and \$200m, as well as those with a global customer base and a blockchain-savvy investor base. According to Alexander Wallin, CEO of SprinkleXchange, companies from sectors including real estate, forestry and biotechnology have expressed interest in listing. As of late October 2019, however, no SprinkleXchange listings had yet been announced.

The new exchange has been marketed as a quicker and more efficient traditional stock market, offering automated central clearing systems, repositories, stock certificates, dividends and voting. Prices are set through a Dutch auction method, and the company charges a one-time flat fee of \$19,000 for each listing, in addition to a monthly fee starting at \$1000. A fee of 1% will be charged to on raised capital. As of mid-2019 the company was reportedly considering the establishment of exchange-traded funds to further boost growth and activity.

The other key fintech development in Bahrain, Rain, was the first project and graduate of the CBB's regulatory sandbox programme. At the end of July 2019 Rain successfully closed a \$2.5m round of venture capital funding backed by BitMEX, a major global cryptocurrency exchange incorporated in Seychelles. Speaking at the exchange's launch that same month, Arthur Hayes, CEO and co-founder of BitMEX, said that Rain will bring greater diversification to markets

in the Middle East. However, concerns regarding investor and consumer protection mechanisms are expected to impinge on the platform's potential.

STRONGER REGULATION: Offered via ICOs, often-times without a corresponding product or service, new cryptocurrencies were extremely popular with digital investors in 2017 and 2018. According to a report published jointly by PwC and Switzerland's Crypto Valley Association, the total volume of ICOs between January and May 2018 more than doubled the entire volume of ICOs in 2017, accounting for \$13.7bn of investment over the five-month period.

In the early years the industry was almost completely unregulated, however, and scam ICOs became extremely prevalent. According to a July 2018 study prepared by ICO advisory firm Statis Group, up to 80% of the ICOs conducted in 2017 worth \$1.3bn were later identified as scams. The vast majority of the \$1.3bn was funnelled into three ICOs: Pincoin (\$660m), Arisebank (\$660m) and Savedroid (\$50m).

Cryptocurrency theft also remains a significant risk, with US-based cybersecurity company Carbon Black reporting that \$1.1bn of cryptocurrency was stolen during the first half of 2018 alone. Meanwhile, cryptocurrency intelligence firm CipherTrace estimates that cryptocurrency investors could lose as \$4.3bn to theft and fraud over the course of 2019.

While SprinkleXchange and Rain are not specifically targeting ICOs and new currency issuance, Rain backer BitMEX has faced multiple accusations of financial misconduct from traders and investors. In July 2019 the US Commodity Futures Trading Commission launched a probe into BitMEX to determine whether it broke US law by allowing US traders onto its exchange platform. That month BitMEX recorded over \$500m of capital outflows.

US regulators have increasingly cracked down on ICOs and cryptocurrency companies and exchanges, targeting those that sold what amounted to unregulated securities to investors without holding the broker-dealer licence required by the US Securities and Exchange Commission. This is one of the most significant challenges facing widespread cryptocurrency adoption, as US investors are essentially prohibited from participating in most ICOs.

PROCEED WITH CAUTION: The CBB's regulatory approach is expected to help keep Bahrain's nascent crypto industry secure, with the bank's crypto-asset rules addressing order matching, pre- and post-trade transparency, market manipulation and abuse, and conflicts of interest. The bank's regulations also include requirements that ensure enhanced due diligence when onboarding clients, only encrypted safe custody accounts or wallets that can be retrieved are maintained, key-person risks are adequately managed and investors understand how to use safe custody wallets. These stringent rules offer a more positive outlook for cryptocurrency development and, if effective, could see the kingdom outpace regional competition to become a major global cryptocurrency centre and leader in fintech regulation.

The central bank's crypto-asset rules address order matching, pre- and post-trade transparency, market manipulation and abuse, and conflicts of interest.