

Understanding the Dynamics of Financial Constraints and Business Viability among Bahrain's SME Sector

Alya Alhaddad



Abstract: With a strategic role in realizing national ambition and strategy, Small and Medium Enterprises (SMEs) have been referred to as the backbone of Bahrain's economy due to their drive forward in corporate innovation and investment, making them pivotal to the Kingdom's 2030 Vision. However, SMEs face persistent financial constraints that hinder their ability to thrive in an increasingly competitive market. This study examines the dynamics that influence the financial viability of Bahrain's SME sector, addressing the potential challenges that hinder access to essential funding sources and evaluating innovative solutions for overcoming these barriers beyond traditional financing methods. The research employs a mixed-method approach, incorporating qualitative and quantitative data to assess the extent of financial obstacles within Bahrain's SME ecosystem. It analyzes various financing channels, including local bank funding, public initiatives, and alternative sources such as asset-based financing and crowdfunding. Findings reveal that while Bahrain's banking sector plays a role in SME financing, stringent lending requirements and high collateral demands often prevent smaller enterprises from accessing these resources. Additionally, the study examines government policies and alternative financial instruments, providing recommendations to diversify and enhance access to financing through measures such as improving credit ratings, developing innovative regulatory frameworks, and implementing educational programs to increase financial literacy among SME owners. The findings of this research highlight the crucial need for customised financial solutions to support small and medium-sized enterprises (SMEs), positioning them as key drivers of competitiveness within Bahrain's economy. By addressing these financial constraints, Bahrain can stimulate the growth of SMEs, ensuring the sector's sustainability and resilience. This study aims to guide policy development that fosters a more inclusive financial ecosystem, empowering SMEs to contribute effectively to Bahrain's economic transformation and long-term prosperity.

Keywords: SMEs (Small and Medium Enterprises), Financial Constraints, Business Viability, Bahrain, Capital Markets, SME Funding.

I. INTRODUCTION

With the momentum of revolutionizing the world's financial landscape, entrepreneurship has spawned innovations in the service industry, stimulating economic growth among emerging economies.

Manuscript received on 21 October 2024 | Revised Manuscript received on 02 November 2024 | Manuscript Accepted on 15 November 2024 | Manuscript published on 30 November 2024.

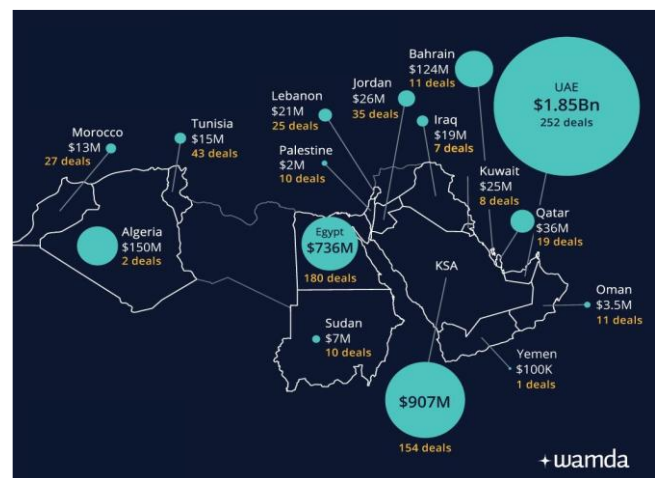
*Correspondence Author(s)

Alya Alhaddad*, Department of School of Economics, Shanghai University, Shanghai, China. E-mail: Alya0Alhaddad@gmail.com, ORCID ID: 0009-0006-2348-6316

© The Authors. Published by Lattice Science Publication (LSP). This is an open access article under the CC-BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)

The significance of Small and Medium Enterprises (SMEs) stems from being a source of creativity through the productivity of functional and competitive resources that have transformed the view of financing services within the country [1] [2].

Against the backdrop of rising petroleum prices, emerging oil-producing economies have increased their prosperity through innovation and economic development, driven by entrepreneurial investments. This led to the distinguished position of nations, such as the Gulf Cooperation Council (GCC), in terms of individual development and income. Nonetheless, Bahrain's strides towards transitioning to a digital economy through the diversification scheme are a glaring consequence of the regression in income compared to the growth of other Asian nations and the current decline of the oil industry. The transformation of the financial services sector through extensive innovation has had a significant impact on SMEs, improving investment efficiency and facilitating sustainable development in the region.



[Fig.1 Investments in the MENA Region By Country in 2022 (Wamda, 2023)] [1]

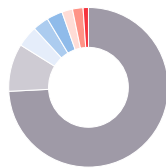
According to Bahrain's Economic Development Board (EDB), the aggregate scale of SMEs' contribution to diversification and its consequential impact on economic growth cannot be underestimated. Previous studies have indicated that equitable and dynamic SMEs are regarded as a buffer against unstable economic conditions, enabling them to maintain a sustainable position among emerging economies [3]. Furthermore, entrepreneurship has proven to be a sustained driver of employment creation and a source of competitiveness in regional markets. [4] Underline that knowledge and innovation are key determinants of SME



transactions, with a prodigious potential for sustainable and economic development to strengthen the pillars of the economy. [5] supported ideas, arguing that innovation is a crucial driver of sustainable economic growth to secure economic prosperity. The author stated that the disruption of innovative SMEs plays a pivotal role in the economic diversification and employment opportunities for oil-producing economies, particularly the GCC nations.

A. Research Background

Since SMEs account for 93.3% of the registered establishments in Bahrain's economy, the country has established the Bahrain Development Bank (BDB) as a targeted financial institution to support its national diversification strategy. With over 6,000 enterprises generating up to 70% of the country's workforce, the government's core interest in SMEs ranges from capability development to providing access to finance and sustainability.



Insurance Ancillary Providers	138	(74%)	Payment Service Providers	6	(3%)
Currency Exchange Services	18	(10%)	Fund Administrators	4	(2%)
Financing Companies	8	(4%)	Trust Service Providers	4	(2%)
Card Processing Service Providers	6	(3%)	Micro-finance Institutions	2	(1%)

[Fig.2 Financial & Insurance Services Sector, by Enterprise Type (Adapted From CBB, 2023)]

Although the SME sector contributes to almost 30% of the Gross Domestic Product (GDP), the Bahrain 2030 Economic Vision predicts that the growth of SMEs will strengthen the non-oil GDP growth by 70% by 2030 [6]. 58% of Bahrain SMEs are operating in the retail and wholesale sector, followed by 28% in the finance service sector and 14% in the industry sector. With the development of SMEs in the country, they constitute 64% of the private sector employment opportunities. The growth of SMEs in Bahrain's economy has been at the forefront of economic diversification and resilience, with a 14% Compound Annual Growth Rate (CAGR), positioning the country as a premier destination for start-ups. According to the Ministry of Industry and Commerce (MOIC) Commercial Registration, SMEs focus on services, accounting for 48%, followed by 42% trading and 10% manufacturing [7].

Aligning the guiding principles of Bahrain's Economic Vision 2030 with the development of SME sector performance and productivity drives the economy forward. The crux of the government's strategy is to implement policies that empower SMEs and promote the country's entrepreneurial and innovation ecosystems (Appendix I). As the country's premier SME bank, the BDB, along with the government, are bridging the current technological gap by developing vocational training options to improve the capacity of SMEs' innovation outcomes.

Entrepreneurial investment faces restrictions and operational roadblocks, including disproportionately high tax burdens, credit and trade barriers, and constraints on funds and cash flows [8]. Therefore, financial backing from appropriate sources eradicates complications by creating

sovereign growth and wealth funds for SMEs as a commercial incentive to foster economic growth [9]. Despite the initiatives of Bahrain's government in establishing funding sources, SMEs are still confronted with obstacles to accessing financing, as the Middle East and North Africa (MENA) region needs to be equipped with sustainable services. Moreover, as [10] argue, the trend of financial barriers along with regulatory complexities inhibits the SMEs development in the economy. The authors mentioned that the aim of actual SME policies is ambiguous from an economic viewpoint.

B. Research Scope

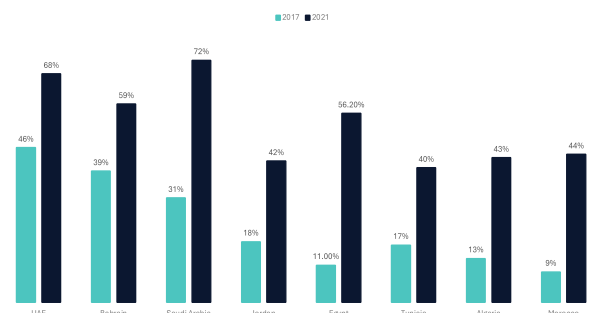
Against this backdrop, the research paper examines the extent of the relationship between local banks and digital financing inclusion in Bahrain, particularly regarding the constraints SMEs face in accessing financial credit. Based on the change of capital stock requirements, it identifies the internal and external determinants to evaluate the potential sources of start-up financing and funding implications. The scope of the research is based on qualitative and quantitative data to develop the dimensions of SMEs in Bahrain. Limited to the objectives, the study places particular emphasis on the approach by which SMEs overcome foreign liabilities and enhance legitimacy, with possible recommendations.

C. Research Objectives

The study paper presents an initial assessment of the relationship between the economy, banks, and the government in the allocation of credit to small and medium-sized enterprises (SMEs). By elucidating multiple streams of SMEs, the study contributes to an analysis of the domestic economic performance of SMEs in Bahrain based on credit reporting, secured lending, and insolvency regulation indicators. The paper builds on the moderating effects of the target market on SMEs and their scope of internationalism.

II. LITERATURE REVIEW

With the notion of global transformation of the finance landscape, previous studies have identified the drivers of the low financial inclusion rate for the MENA region to be recorded at only 20% [11]. Despite the country's efforts to promote financial sustainability and efficiency, Bahrain's financial inclusion rate ranks third among MENA nations at 59%, followed by the United Arab Emirates (UAE) at 68% and Saudi Arabia at 72%.

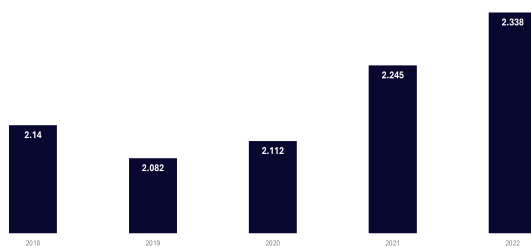


[Fig.3 Financial Inclusion rates in Arab Countries, 2017-2021 (Adapted from the World Bank, 2022)]

FinTech is considered one of the critical drivers built as a financial service based on the disruptive nature of ground-breaking Information and Communication Technologies (ICT) that impact traditional systems and business models by innovatively expanding mobile platforms [2].

Since Bahrain is regarded as the leading regional FinTech hub, transforming the financial sector reforms, consumer expectations, ecosystems, and regulations into a new paradigm [1]. The emergence of such firms among SMEs improves the investment efficiency of algorithm-based digital solutions [9].

The Bahrain Economic Development Board (EDB) has stated that over the last decade, Bahrain has firmly established itself in the region as a hub for FinTechs, financial institutions, asset wealth management for insurance, and Islamic finance firms. With over 500 domestic and international corporations contributing to innovation, regulation, and investment, Bahrain's financial service industry plays a crucial role in the country's sustainable economic growth. It contributes 18.6% to the real GDP in 2022, making it the second-largest non-oil sector, with a total Gross Value Added (GVA) of \$6.1 trillion (BHD2.3 billion) [12]. The sector, which includes consumer finance, banking, insurance, and a broad spectrum of investment funding, has seen significant growth in recent years, with a 4.9% Year-on-Year (YoY) growth, ranking first among the MENA region in terms of finance and trade freedom in the 2023 Economic Freedom Index [11].



[Fig.4: Financial Corporation Sector, GVA (BHD, Billion) (Adapted from Tamkeen, 2023)] [12]

Bahrain's financial industry comprises over 365 financial institutions, establishing the country as an international financial centre with a high concentration of licensed institutions and a proactive approach to skills and knowledge, supervised by the Central Bank of Bahrain (CBB). The forward-thinking regulatory body, along with the agile ecosystem, led to the financial service sector contribution of \$1.1 billion (BHD414.6 million) to Foreign Direct Investments (FDI), equal to 13% [13].

According to the EDB's annual report for 2022, Bahrain has long been a regional pioneer in FinTech, owing to its history as a hub for ancillary financial services. The sector employs 3% of the private sector workforce and has seen more than 60% of financial services employment accounts held by Bahraini nationals. Bahrain's high productivity in the finance sector, after the mining and quarrying sector, has led to the creation of high-value jobs [14], further solidifying its role as a regional pioneer for FinTech.

With the concentration of the transition to the digital economy, Bahrain's competitive operating costs and entrepreneurial talent pool enable FinTech to attract

international players into the market compared to neighbouring countries. Bahrain FinTech's innovative initiatives with Trust Law, Open Banking, and e-KYC (Electronic Know Your Customer) in 2019 led to the rise of the financial service industry contribution to \$99.87 million at 12% FDI, creating new 575 jobs and over 20 companies [12]. The industry has witnessed notable technological growth, ranking first among the Top Islamic Finance Destinations in the MENA region, as well as in the Cryptocurrency Asset Platform in the Gulf. Furthermore, the country's financial services sector ranked second in the MENA region in terms of economic freedom, regulatory environment, and overall competitiveness. S&P awarded Bahrain second place in the Most Advanced FinTech Ecosystems in MENA.

Bahrain is among the fastest-growing financial centres in the world. It remains a magnet for investors, offering a dynamic and supportive environment for entrepreneurs, as well as a multicultural and highly skilled talent pool that helps start-ups attract funding. Tamkeen's collaboration with Export Bahrain empowers SMEs to gain market power by expanding their reach into international markets and contributing to the country's economic development. As reported in 2022, the export value of \$ 1.75 billion across 60 markets worldwide indicates the extension of Bahraini local entrepreneurial talent as future competitors among global businesses and the success of the diversification objective in the national development strategy.

III. METHODOLOGY

Although Bahrain has made significant strides in the entrepreneurial market, emerging as a global employment hub leads to persisting complexities that must be addressed for sustainable economic growth. It includes competition from other regional hubs, the need for continuous infrastructure development, and uncertainty in the global economy. Nonetheless, Bahrain's adoption of proactive measures positions the country for sustained economic growth and increased influence in the worldwide start-up and entrepreneurship landscape.

A. Government Policies

Since Bahrain is committed to fostering innovation and entrepreneurship, the government seeks to support local start-ups through the SME Program resolution amendments set by the cabinet (depending upon the employment levels and annual turnover). Establishing the SME Development Board (SDB) enhances the capacity and competitiveness of Bahrain's enterprises in both the domestic and global markets. Under the Cabinet resolution, the allocation of at least 20% of the value of government procurements and tenders, as well as the 10% auction advantage for public utilities, aims to improve SME financing within government departments and tenders.

Nonetheless, the availability of finance is the most controversial issue in analyzing SME funding obstacles. Some authors maintain that insufficient finance is not considered a fundamental obstacle to SME growth [15]. Others emphasise that the interaction between financial

and institutional systems creates barriers to the development of new firms.

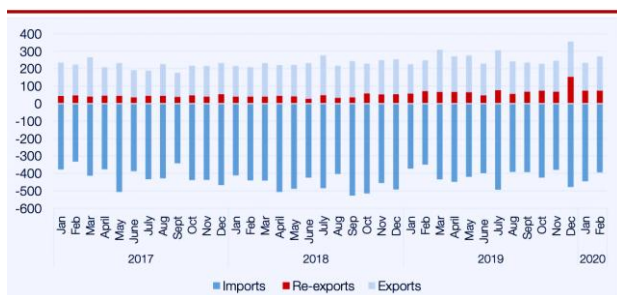
In Bahrain, numerous international and national organizations have allocated funds to support the development of SMEs; however, in many cases, the funds have yet to be entirely borrowed by the emerging private sector [14]. Banks and financial institutions had to learn how to evaluate loan applications from SMEs with limited track records. The inability to deal with the economic needs of start-ups may explain the pattern to some extent. However, the entrepreneur's behaviour of asking for funds plays a crucial role in denying credit requests. As proposed by the European Commission, providing appropriate financial feedback for SME credit applications encourages competition in the financial sector, leading to innovative services for enterprises.

Furthermore, Bahrain's introduction of an established regulatory framework, including bankruptcy law along with credit reports under Article 68 of the CBB Law, led to the launch of the credit scoring system report. Bahrain Credit Reference Bureau, a public joint stock company, acts as a central data warehouse between financial and non-financial institutions by aggregating and analyzing comprehensive credit information for corporates and individuals. Despite the access to the open finance system, the absence of a credit scoring system for SMEs influences the growth and establishment of new firms in Bahrain [15].

By reiterating the support for the SME sector in growing the national economy, Bahrain's government issued Legislative Decree No. 23 of 2020 on securing the interest in movable property regardless of their form and denomination [16]. It expands the scope of previous legislation and laws by enabling companies operating in various sectors to secure bank and commercial loans through "tangible or intangible" movable properties [17].

B. Impact of Post-Pandemic Policy Responses

The spread of COVID-19 across the globe had a distorting effect on small and medium-sized firms in the country. Numerous challenges stem from the pandemic, forcing several firms to suspend operations due to their higher vulnerability and fragility in response to international restrictions. The MENA region felt the impact of the virus, with the proportion of firms in the market reporting an 11% drop in revenue during the early stages of the pandemic. Bahrain's aggregate trade revenue fell by 10.9% (BHD5 billion), leading to a trade deficit with a static aggregate value of national exports [16].

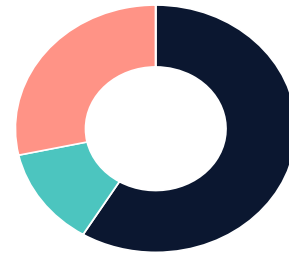


[Fig.5: Non-oil Trade in Bahrain (BHD, Million) (EDB, 2018)]

In the wake of COVID-19, studies have shown that the implications for SMEs are more pronounced in the economy

as private capital markets obstruct the access of such enterprises. This is due to the lack of scale and knowledge to move toward alternative finance sources and the difficulty of financial institutions in monitoring regulatory compliance [17].

Since SMEs play a critical role in Bahrain's economic growth, credit extension remained idle between June and December 2020, while start-up loans accounted for 1.9% of the total loans. The Non-Performing Loans (NPLs) recorded a slight decrease from 12.6% to 11% in the same periods, while the provisioning levels reported a decline of 35.1% in June to 43.1% in December due to the lack of financial support.



Conventional Retail	58.6%
Conventional Wholesale	12.9%
Islamic Retail	28.4%
Islamic Wholesale	0%

[Fig.6: SME Lending by Banking Segment in Q4 of 2020 (Adapted from CBB, 2021)]

Indicator	Q2 2020	Q4 2020	Change
SME Loans (% of total loans)	1.9	1.9	0.0
SME NPLs (% of total SME loans)	12.6	11.0	-1.6
SME Provisioning (% of total SME NPLs)	35.1	43.1	8.0

[Fig.7: SME Lending in Bahrain (Adapted from CBB, 2021)]

As part of its efforts to support SMEs during the economic recovery following the COVID-19 pandemic, the Bahrain Chamber of Commerce and Industry (BCCI) played a prominent role in shaping the economy by reporting on the financial challenges that led to the implementation of fiscal stimulus measures [18]. Bahrain's government promptly activated a \$11.38 billion economic stimulus measure to mitigate the consequences of the outbreak on SMEs. Equivalent to 29.6% of the annual GDP, the financial package focuses on the bank's low lending levels to soften the repercussions of the economic crises on SMEs. Extending support during the economic downturn helps the enterprises pivot rather than fail while increasing future employment opportunities.

In March 2020, Tamkeen announced the launch of the Business Continuity Support Program to support small and micro firms in maintaining national sustainable economic development efforts [19]. The initiative aims to provide liquidity to enterprises that have been adversely affected, helping them sustain their operations and employment. Tamkeen initiated \$148.56 million (BHD 56 million) in financial grants to private sector enterprises to address current market challenges through creativity, innovation, and sustainability [20].

Similarly, the National Bank of Bahrain (NBB) introduced a 'Tamweel Al



Watani' scheme in 2021. Limited to SMEs operated and owned by Bahraini nationals, the incentive aims to improve the cash flow positions across the country by reviving and developing the local market through low-interest loans. Following the directives on funding solutions, NBB partnered with BDB to expand trade finance solutions for SMEs, further stimulating Bahrain's national ecosystem. The program bridges the gap between buyers and suppliers by optimizing the working capital through a range of financing and risk mitigation solutions.

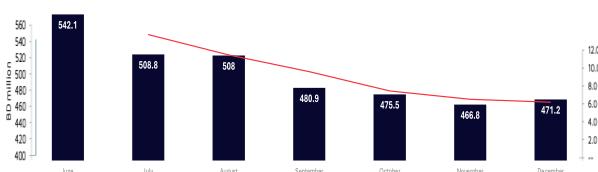
With the unprecedented move reiterating national efforts, Bahrain's top leaders and government are taking the proper steps, providing financing coupled with capability development for SMEs. Therefore, government-supported developments, financial institutions, and banks must maintain and revise the Credit Guarantee Schemes (CGS) extended to SMEs to facilitate access to trade finance and promote capital adequacy in the market, thereby supporting sustainable development.

C. SME's Public Funding

Direct government investments through funds or co-investment funds are considered an effective means of addressing supply-side gaps in capital availability on a scale relevant to small and medium-sized enterprises (SMEs). Despite limited funding options, the BDB launched a digital banking platform, "Tijara," targeting SMEs applying for loans in 2021. The initiative aims to drive digital transformation through simplified banking solutions, supporting economic growth in the SME sector.

i. Bank Funding

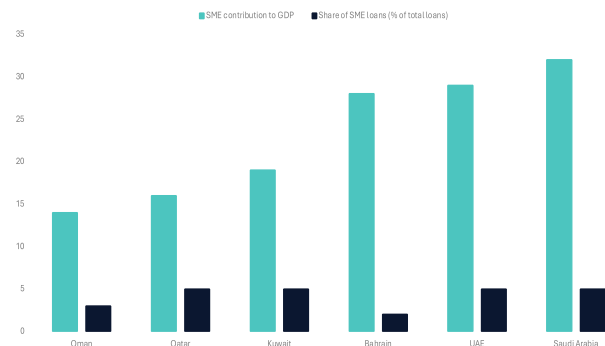
According to the CBB, the total number of banks operating in the state reached 86, comprising 13 national banks, 17 foreign banks, and 56 wholesale banks. Since the banking system is a primary source of funding for the SME sector, institutions have a crucial responsibility to offer a range of credit facilities tailored to various business purposes, collateral types, terms, amounts, and other key characteristics. Such products range from working capital and investment loans to receivables, asset-backed and real estate loans, and overdraft facilities [19]. Statistics released by the CBB show that credit extension from banks to SMEs grew by 4.1% during the first quarter of 2022 compared to the fourth quarter of the same year, with data of BHD 542.1 million and BHD 471.2 million, respectively. This suggests that the country is working to create an environment that fosters the growth of small and medium-sized enterprises (SMEs). The loans represent 9.4% of the total cumulative balance of credit facilities provided to private sector commercial and economic enterprises, reported as BHD5.5 billion in 2022 [12].



[Fig.8: SME Loans, 2020 (Q3-Q4) (Adapted from CBB, 2021)]

Despite the government's motivation to develop SMEs, Bahrain has showcased a relatively inadequate track record of credit extension for such firms to meet regional and global norms in recent years [19]. According to a study conducted by [20], the structural constraints of entrepreneurship revealed that 11% of SMEs utilized the banking systems funding, with only half of the companies accepting credit extensions. Based on a survey of over 500 SMEs and more than 15 banks, the research findings provided insights that three-quarters of SMEs utilise the financial services of more than two banks, which creates a barrier to the country's economic development.

Furthermore, it is revealed that the lending requirements of commercial banks are quite strict, including a minimum collateral asset worth BHD 250,000, audited financial statements, and high interest rates on business loans. Tailored finance solutions are insignificant, ranging from credit letters to secured and unsecured loans and overdrafts [21]. Approximately 50-70% of SME financing applications submitted to conventional banks in Bahrain are rejected. SME bank funding is negligible, with about 3% of system-wide bank loans within the country allocated towards small to medium corporations [22]. Despite the economic stimulus package leading to a 29.6% SME contribution to the annual GDP, the imbalance between the cost and complication of servicing SMEs compared to the bank's potential return reveals that the SME sector is not at the top of the financial institution's agenda.



[Fig.9: Share of SME Loans, 2019 (Adapted from Deloitte, 2021)]

Recent studies have highlighted the role banks play in the intricacies and hurdles of SME finance in Bahrain, particularly in terms of funding [21]. Furthermore, the country's underdeveloped leasing and factoring of credit products limit entrepreneurs' access to credit support. Moreover, the unwillingness of banks may be due to the limited assets, lack of collateral, and poor operational record, which makes it challenging to fund such enterprises, given how expensive and inflexible they may be [21]. An early study by [6] noted that the limited tendency of banks to finance SMEs is attributed to the inadequate financial discipline of such firms, as well as the improper planning of feasibility studies. According to [23], the conventional banks' small contribution is primarily derived from the reluctance of state banks to lend money to SMEs and start-ups' reluctance to apply for loans. In this area, SMEs' insufficient information on funding

sources plays a role in their refusal of credit extension or bank funding.

ii. Non-Bank Funding

Several multifaceted micro-leaders provide financial support to the SME segment, such as Tamkeen, which offers financial support (up to BHD 10,000) through various programs for start-ups and entrepreneurs. Hope Fund and Bambucron are crowdfunding platforms that bridge the gap between entrepreneurs and investors. Crowdfunding is a financing option for raising capital by connecting entrepreneurs with a pool of potential investors on an electric platform. It increases market access and career mentorship to entrepreneurs from industry experts by offering an opportunity for start-ups to secure required funding [24]. Building on the discussion, two crowdfunding forms prevail: reward-based and equity-based [22]. Bahrain started as the first GCC nation to construct crowdfunding governmental regulations in pursuit of a knowledge economy, with the CBB launching the regulatory and legal framework for loan and investment-based crowdfunding platforms [13].

Global efforts in loan-based crowdfunding are expected to be worth \$300 billion, while equity-based efforts are estimated to exceed \$100 billion by 2025. Forms of crowdfunding were exposed to stricter principles governing the conduct of platform operations in the first quarter of 2022, with the introduction of a new regime controlling the licensing and regulations. The revised version of the consolidated Crowdfunding Platform Operators (CPO) module replaces the existing financing-based crowdfunding rules stipulated in the framework.

CBB recognizes the rules of Issuing a Crowdfunding License as a form of raising funds in the country or abroad. For the module, equity crowdfunding excludes financial instruments such as Simple Agreements for Future Equity (SAFE) or similar products [23]. Reward-based or donation-based crowdfunding platforms are excluded from the scope of the regulation. Unlike traditional funding sources, crowdfunding has gained traction from start-ups in providing private benefits ranging from rapid access to capital with minimal collateral requirements imposed on SMEs [13].

Beban platform is one of Bahrain's first licensed, financing-based investment platforms, offering funding opportunities to support small and medium-sized enterprises (SMEs) in the region. It builds partnerships to facilitate and solve the implications for investors in Bahrain and the Middle East. Through accumulated experience in investment, finance, and digital solutions, Beban helps established SME businesses overcome their cash flow hurdles with experts who have extensive experience.

Beban crowdfunding connects entrepreneurs with investors by bridging the funding gap and providing a secure platform to empower investing in equity-based opportunities. SMEs can seek funds through the platform, starting from \$100,000, for a share value of up to 3 years. SMEs can lose invoices payable within 90 days and receive finance within 24 hours at a rate of 5%. Invoice Trading enables investors to invest in equity and debt opportunities by supporting SMEs' cash flow and increasing revenue for scalable business growth.

Launched in 2011, Bahrain established an Angels Investment Company called Tenmou, which facilitates funding opportunities for innovative Bahrain-based

entrepreneurs. Business Angels are successful entrepreneurs who provide investments in SMEs despite the high risk involved, in exchange for equity. Furthermore, Venture Capital (VC) and Private Equity (PE) are gaining momentum in the country as alternative funding sources for small and medium-sized enterprises (SMEs). However, the source can be challenging due to the offshore location and the encompassing privilege requirements.

Bahrain faces a myriad of implications in terms of vulnerabilities in the licensing process, legal and regulatory restrictions, and challenges in structuring investment systems. According to [25], the limited market demand for alternative financial instruments is found to be due to the lack of SME financial knowledge on innovative funding sources along with their inadequate approach to building a strategic vision and resources to attract other means of finances apart from debt. In 2021, KPMG took the initiative to support the expansion of SMEs in the country by raising capital via an Initial Public Offering (IPO).

Additionally, the development of FinTech in Bahrain's ecosystem is considered an additional source of financing for SMEs that are seeking to acquire business capital. Through the FinTech platform, start-ups and entrepreneurs can cater to their needs with a comprehensive suite of financial services. For instance, the Tijara platform is a digital business initiative that provides banking services to start-ups in the Kingdom. It is designed to offer efficient and accessible lending products that support the growth and development of small and medium-sized enterprises (SMEs). BDB has partnered with FinTech to foster a supportive, prosperous future for Bahrain's financial sector, built on innovation and economic inclusivity.

Arab Financial Service (AFS) became the first acquirer of Spotii, a Dubai-based technological provider, to enable the Buy Now Pay Later (BNPL) solutions in Bahrain. It provides a transparent alternative to traditional higher-value payments through four cost-free instalment plans. BNPL empowers businesses to cut through legacy systems by driving higher sales from every transaction, while enhancing the customer experience with greater control over their spending behaviour. MyMoneySouq facilitates SME bank loans by comparing them and helping SMEs enter international markets. Additionally, the Bahrain Investment Market (BIM) contributes significantly to the liquidity and vibrancy of Bahrain's capital market. It is considered a dedicated platform that facilitates and enhances the access of growing companies, including start-ups, to attract investment and expand their operations.

IV. RECOMMENDATION

Based on the overview of existing financing sources available for small and medium-sized enterprises, improving the financial ecosystem structure would induce real change in sustainable economic development. Therefore, the research focuses on possible measures to improve SMEs' access to finance by comparing various practices adopted by multiple countries worldwide that would avert any opposing outcomes for the country's entrepreneurial future.





[Fig.10: Measures to Support Bahrain's Financial Service Market Development (Adapted from FinTech, 2021)]

A. Enhancing Access to Existing Financing Instruments

i. Bank Referral Scheme

Since SMEs primarily depend on the traditional banking system, launching a financial platform with policy initiatives would assist in the regional growth of the service industry. The bank referral scheme is a designated platform intended to induce competition in the lending market; under the scheme, the incumbent bank must share information about SMEs seeking external funding through a finance platform. The initiative was implemented in the United Kingdom (UK) in 2016 to connect start-ups with alternative funding sources after failure to secure bank loans [26]. It is intended to foster an environment of funding that encourages experimentation and adaptability.

Facilitating the SME landscape through the proposition of technological finance platforms would assist the search for external finance sources [27]. The visibility of alternative lenders on the start-up application would improve the scheme's credibility and facilitate knowledge migration business flow by deepening global ecosystem ties. Implementing such a scheme in the country through the SMEs Database created by the Ministry of Industry and Commerce (MOIC) would foster the growth of promising start-ups, contributing to the dynamism of Bahrain's entrepreneurial market. However, the main obstacle to achieving platform banking is the legacy systems that cannot support technology-based collaboration. Nonetheless, this is expected to be adjusted in the upcoming years, albeit at a slower pace in the country.

ii. Credit Rating

With the exacerbation of information asymmetry between SMEs and external investors, financial constraints prevent start-ups and entrepreneurs from accessing the credit market due to a lack of relevant information. Meanwhile, the inefficiency of resource allocation hinders investor's evaluation of the potential risks and benefits of SMEs, leading to adverse selection that aggravates the financial difficulties for SMEs [15]. Risk assessment and credit classification infrastructure play a significant role in enhancing the transparency of indicating the creditworthiness of start-ups and addressing deficiencies within the financial services sector.

Therefore, integrating the assessment infrastructure within the SME Database would enable the predictive analysis of the degree of risk associated with financing particular firms and provide comprehensive reports for potential investors. For instance, Thailand's National Credit Bureau launched the FICO SME scores for financial and non-financial institutions to assess the creditworthiness of start-ups and entrepreneurs. The analytical service serves as an effective tool for predicting a firm's profitability and facilitating financial funding decisions for external investors.

Setting off a digital SME Rating helps reduce information asymmetry between parties, enabling robust SME growth in the industry while attracting investments and venture capitalists to Bahrain. By leveraging enterprise credit reporting services, the classification system would boost the country's competitive business advantage. Bahrain's SME Development Board implemented the initiative in 2017 to enhance data quality and promote the development of the SME sector. However, the classification certificate uses little information to generate the score [24].



[Fig.11: FICO Credit Score (FICO, 2023)]

Given the significance of SMEs in Bahrain's economy, introducing a database of credit risk assessments enhances the efficiency of providing funds to small and medium-sized enterprises (SMEs). It reduces borrowing costs by lowering interest rates and enhances social trading through investment portfolios. The initiative has been implemented in Japan, where the Credit Risk Database (CRD) accumulates extensive information on SMEs to deliver statistical data and credit scoring services to facilitate the financing access of such firms in the market with the securitization of claims [28].

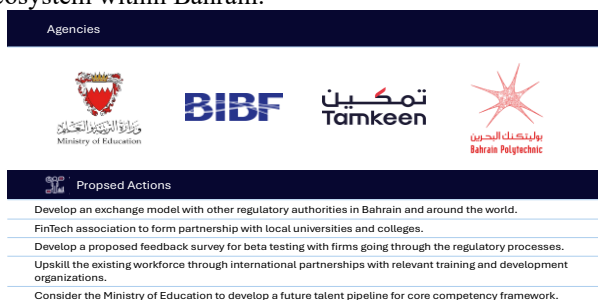
Under competitive financial service market conditions, the irregularity of the accounting system, driven by technological development, generates asymmetric information between suppliers and potential beneficiaries [25]. Accounting data normalisation would reconstruct financial statements in a standardised format, as well as achieve high financial control over SME development in the country. The disclosure of data improves the economic performance of start-ups and entrepreneurs in the market. Further, the reflection of SMEs minimizes the information deficiencies between external funding sources and enterprises.

iii. Education and Financial Awareness

From a theoretical perspective, the role of supply and demand has implications that obstruct SMEs' financing. Studies have shown that evidence of demand failure relates to resource limitation and financial network complications that prevent start-ups from attracting finance and the investor's discouragement [29]. The chain of causes and consequences of hesitance to invest in SMEs may be attributed to the scarcity of transparent credit data and regulatory barriers. Therefore, the prevalence of risk aversion in the market creates a mismatch between SMEs' perceptions and those of finance providers, which drives down demand from entrepreneurs and discourages potential investors, leading to a lag in adjustment.

Although the entrepreneurship mindset in Bahrain is considerably present, the lack of ideas within the financial space hinders the productivity of relevant, innovative FinTech solutions. Building the drive for entrepreneurship through hackathons and accelerators fosters a creative mindset that embraces technological advancements. Adopting a similar measure to the European Investment Hub (EIH) in Bahrain would facilitate the SME's access to financial support and implement technological innovation. Acting as a single point of contact for regional multi-partners strengthens the start-ups and entrepreneurs' linkages to regional service providers [30]. Similarly, Banque de France, along with Banque Public d'Investissement (BpiFrance), has coordinated a network of regional correspondents that promote the equity of SMEs by offering financial advisory support.

With the integration of network programs to address the specific challenges of SMEs, the creation of targeted financial education programs through Tamkeen enhances talent retention and strengthens entrepreneur's skills and knowledge. Enhancing understanding of the financial and economic landscape would underscore the importance of developing a long-term strategic plan for SME funding and recognising the financial risks associated with various economic instruments. Portugal's national strategy plan aims to foster the digital financial literacy of SMEs, enabling them to understand the global economic context and enhance their understanding of the financial transmission of credit. Alternatively, Tamkeen's partnership with ELITE Business Support would facilitate access to capital markets and alternative funding sources by providing dynamic support to SMEs. Through an international network of private SMEs, the initiative would enhance the productivity of the financial ecosystem within Bahrain.



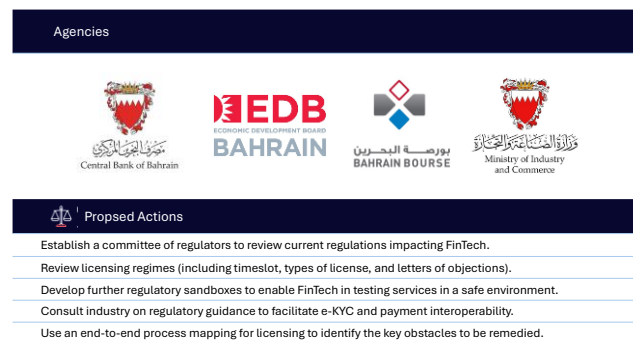
[Fig.12: Proposed Measures for the Development of SME Ecosystem – Education Pillar (Alhaddad, 2024)]

iv. Insolvency Regulation

The sustainable growth of SMEs within the economy is multidimensional and requires policymakers to support and

retain economic agents for the country's economic development. Studies have reported that insolvency practices alleviate the rigid and intense compliance requirements associated with informal negotiation with financial creditors. Through access to effective insolvency systems, Bahrain's creation of a supportive regulatory framework would increase the value of assets to SMEs by revising certain business transactions.

Furthermore, implementing the regulatory framework would influence the decisions of external investors when evaluating the risk associated with start-ups and entrepreneurs. Under the Italian Bankruptcy Law, the insolvency regime ensures the continuation of productivity levels and the preservation of micro-enterprise operations [31]. Addressing the insolvency procedures in Bahrain's targeted SME practices is crucial for market transparency, as the transformation of the fragmented regulatory environment would facilitate funding and result in greater flexibility for entrepreneurs in the country.



[Fig.13: Proposed Measures for the Development of SME Ecosystem – Policy and Legislation Pillar (Alhaddad, 2024)]

B. Implementing Alternative Financing Instruments

With technological advancements in the financial services sphere, the increasing number of innovations creates opportunities for the development of financing models for SMEs. Exploring financial instruments beyond traditional loans is critical for SMEs to thrive in the competitive business environment. Access to capital through alternative financing instruments is crucial for maturing the industry and achieving long-term success in Bahrain.



[Fig.14: Proposed Measures for the Development of SME Ecosystem – Funding Pillar (Alhaddad, 2024)]

i. Private Asset-Based Finance

Diversification of financial instruments and sources of funding for SMEs is an emerging trend in mitigating the risks associated with accessing capital and international commerce. Despite the repercussions of the economic crisis, the asset-based financing model has experienced significant growth over the past decade, reflecting the support it provides to entrepreneurs across diverse market conditions. The Organization for Economic Cooperation and Development (OECD) revealed that the global asset-based finance sector has gained momentum in emerging economies despite the inadequate banking infrastructure [25].

As the Bahraini economy begins to slow with the decline in oil prices, the banking system's liquidity is creeping into a level of caution, impacting the flow of deposits. Asset-based financing instructions would encourage the country to maintain its credit rating and capital by securing ambitious investment infrastructure through property, accounts receivable, inventory, or equipment. Financial techniques, such as factoring, intended to optimise start-ups' cash flow, have grown steadily in developing nations, particularly in the UK. To bridge the gap within the market, factoring is considered short-term commercial finance based on collecting creditworthy account receivables at a discount from a third party [32].

Nacional Financiera (NAFIN), a Mexican development bank, has designed a network of reverse factoring practices to finance small and medium-sized enterprises (SMEs) through a productive chain of programs. Implementing the form under NAFIN's technological platform identifies the market barriers for start-ups by transferring the credit risk of the loan to the supplier [33]. Furthermore, the launch of the regulatory development framework for virtual asset trading platforms by Hong Kong's Securities and Futures Commission (SFC) would enhance the environment in Bahrain by examining global best practices for security on FinTech platforms.

Implementing reverse factoring creates instant liquidity by providing opportunities for SMEs to secure loans and generate cash flows, thereby establishing a competitive payment infrastructure. Despite the lack of transparency in normalised credit data, asset-based financing instruments embed low risk for external investors while providing access to working capital through the liquidation value of backed assets.

ii. Capital Market Fund Raising

By bridging the funding gap within the financial market, Bahrain's ecosystem reform with the SMEs Online Registration System aligns with SDB's five-year plan and the government's 2030 Vision to build a knowledge-driven economy supported by non-oil markets. Further, China's support for the growth of research and development (R&D) SMEs led to the establishment of unified national financing registration systems. People's Bank of China, the central bank, improved the country's business environment by providing loans for Micro-Small Medium Enterprises (MSMEs) based on credit information.

Formulating an adequate framework of appropriate regulation and legislation is conducive to the development and growth of entrepreneurship and small and medium-sized enterprises (SMEs) in the country. Implementing incentive

measures and policies promotes and supports firms in accessing the capital market, fostering an ecosystem where innovation thrives while ensuring market compliance. BIM promotion of the SME sector has gained momentum amid government support. Therefore, the adoption of direct financing would aggregate the country's economic performance and develop this niche market in Bahrain. Although BIM provides financing means for SMEs before they list on the Bahrain Bourse (BHB), coordination between BHB and SDB with local banks and BIM through online public listing applications would attract external investors and inject capital into the market.

iii. Micro-finance Institutions

Credit provision is a critical element of the modern economy, as it is a key driver of enterprise growth within the country. Since SMEs play a prominent role in developing economies, Micro-Finance Institutions (MFIs) have become instrumental funding sources for entrepreneurs. The micro-credit loan provision, which offers collateral security through group guarantees, bridges the financing gap in the financial services market. Building an international network of investors provides valuable insights and opportunities for economic development. The Women's Microfinance Initiative (WMI) is an East African organisation dedicated to providing credit and financial services to rural businesswomen, offering loans without collateral or interest to improve their living standards.

Similarly, the BDB Women's Business Finance Scheme, "Riyadat," was implemented to support the growth and development of female entrepreneurs in Bahrain. The initiative aims to drive the country's economic growth and have a transformative impact on the SME sector. However, the government must continuously evolve and motivate women entrepreneurs by implementing awareness programs on a mass scale across the country.

V. CONCLUSION

The spectrum of SMEs' financial sources has evolved in response to technological advances and innovation within the ecosystem. Entrepreneurs' and start-ups' development stages in Bahrain have grown dramatically against a backdrop of turbulence and uncertainty, with the main hurdle being access to favourable financing conditions. SMEs' characterisation of deep uncertainty, lower fixed investment opportunities, and static financing structures poses a threat to the country's economic growth and employment.

The development of a sustainable FinTech ecosystem is a matter of time before the roadmap is built on Key Performance Indicators (KPIs), which are a phased approach to maintaining momentum. Stakeholders must take several immediate measures to establish an internationally recognised digital financing ecosystem. Although the sector plays a prominent role in Bahrain's economic development, the risks of negative cash flows and untested business models are due to technological advancements and the financial gap. Therefore, Bahrain must evaluate the additional financing limitation by diversifying its funding resources to innovative solutions,



enabling intense competition and driving sustainable economic development.

DECLARATION STATEMENT

I must verify the accuracy of the following information as the article's author.

- **Conflicts of Interest/ Competing Interests:** Based on my understanding, this article has no conflicts of interest.
- **Funding Support:** This article has not been sponsored or funded by any organization or agency. The independence of this research is a crucial factor in affirming its impartiality, as it was conducted without any external influence.
- **Ethical Approval and Consent to Participate:** The data provided in this article is exempt from the requirement for ethical approval or participant consent.
- **Data Access Statement and Material Availability:** The adequate resources of this article are publicly accessible.
- **Author's Contributions:** The authorship of this article is contributed solely.

REFERENCE

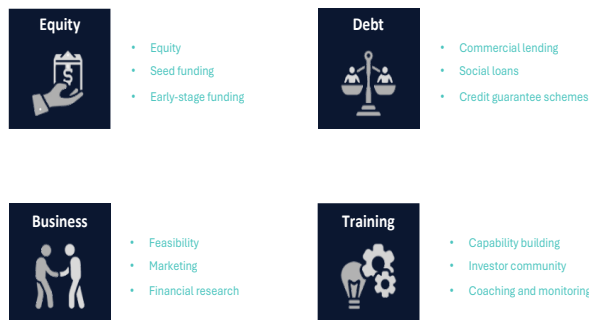
1. Arner, D. W., Barberis, J., & Buckley, R. P. (2015). "The Evolution of FinTech: A New Post-Crisis Paradigm". *SSRN Electronic Journal*, Vol. 47, No. 4, pp. 1271–1319. Doi: <http://doi.org/10.2139/ssrn.2676553>
2. Schueffel, P. (2016). "Taming the Beast: A Scientific Definition of Fintech". *Journal of Innovation Management*, Vol. 4 No. 4, pp. 32–54. Doi: <https://doi.org/10.2139/ssrn.3097312>
3. Yusuf, N., & Albanawi, N. I. (2016). "The Role of Entrepreneurship in Economic Development in Saudi Arabia". *International Journal of Business and Economic Development*, Vol. 4 No. 1, pp. 47–55. Doi: <https://doi.org/10.4172/2151-6219.1000204>
4. Amoah, J., Belas, J., Dziwornu, R., & Khan, K. A. (2022). "Enhancing SME Contribution to Economic Development: A Perspective from an Emerging Economy". *Journal of International Studies*, Vol. 15 No. 2, pp. 63–76. Doi: <https://doi.org/10.14254/2071-8330.2022/15-2/5>
5. Aljawareen, A. F. (2017). "Innovation in the GCC Countries: An Economic Analysis". *Journal of Economics and Development Studies*, Vol. 5 No. 4, pp. 51–62. Doi: <https://doi.org/10.15640/jeds.v5n4a4>
6. Alzayani, M. Y., Baher, M., Beeshi, S. A., Alajmi, H. A., & Alaghbari, M. (2023). "The Reality of SMEs and Sustainable Development from the Perspective of Innovative Economic Vision of the Kingdom of Bahrain 2030". *International Journal of Technology Innovation and Management (IJTIM)*, Vol. 3 No. 1, pp. 28–33. Doi: <https://doi.org/10.54489/ijtim.v3i1.194>
7. Shaikh, Z., Irfan, M., Sarea, A., & Panigrahi, R. R. (2024). "The Emergence of Islamic Fintech and Bahrain: Prospect for Global Financial Sectors". Initial Intelligence-Augmented Digital Twins: Transforming Industrial Operations for Innovation and Sustainability, pp. 669–683. Springer Nature Switzerland. Doi: https://doi.org/10.1007/978-3-031-43490-7_52
8. Prasanna, R., Jayasundara, J., Gamage, S. K., Ekanayake, E., Rajapakse, P., & Abeyrathne, G. (2019). "Sustainability of SMEs in the Competition: A Systemic Review on Technological Challenges and SME Performance". *Journal of Open Innovation: Technology, Market, and Complexity*, Vol. 5, pp. 1–18. Doi: <https://doi.org/10.3390/joitmc5040100>
9. Reim, W., Yli-Viitala, P., Arrasvuori, J., & Parida, V. (2022). "Tackling Business Model Challenges in SME Internationalization through Digitalization". *Journal of Innovation and Knowledge*, Vol. 7 No. 3, pp. 1–9. Doi: <https://doi.org/10.1016/j.jik.2022.100199>
10. Graña-Alvarez, R., Lopez-Valeiras, E., Gonzalez-Loureiro, M., & Coronado, F. (2024). "Financial literacy in SMEs: A systematic literature review and a framework for further inquiry". *Journal of Small Business Management*, Vol. 62, No. 1, pp. 331–380. Doi: <https://doi.org/10.1080/00472778.2022.2051176>
11. Alhassan, A., Li, L., Reddy, K., & Duppati, G. (2021). "The relationship between political instability and financial inclusion: Evidence from the Middle East and North Africa". *International Journal of Finance & Economics*, Vol. 26, No. 1, pp. 353–374. Doi: <https://doi.org/10.1002/ijfe.1793>
12. Naser, H., Sultanova, G., & Nahar, S. (2024). "The Impact of Fintech Innovation on Banks' Performance: Evidence from the Kingdom of Bahrain". *International Journal of Economics and Financial Issues*, Vol. 14, No. 1, pp. 136–143. Doi: <https://doi.org/10.32479/ijefi.15512>
13. Thottoli, M. (2022). "The starring role of crowdfunding in GCC: a structured literature review". *Asian Journal of Economics and Banking*, Vol. 6, No. 2, pp. 155–177. Doi: <https://doi.org/10.1108/AJEB-02-2022-0022>
14. Shaikh, Z., Wadi, R. A., & Al Mahari, E. (2022). "The impact of the Fintech phenomenon on economic development: the case of Bahrain". In *Artificial Intelligence for Sustainable Finance and Sustainable Technology: Proceedings of ICGER 2021*, pp. 129–138. Springer International Publishing. Doi: https://doi.org/10.1007/978-3-030-93464-4_14
15. Bratkowski, A., Grosfeld, I., & Rostowski, J. (2003). "Investment and Finance in De Novo Private Firms: Empirical Results from the Czech Republic, Hungary and Poland". *Barriers to Entry and Growth of New Firms in Early Transition: A Comparative Study of Poland, Hungary, Czech Republic, Albania and Lithuania*, pp. 83–98. Doi: https://doi.org/10.1007/978-1-4419-9234-5_3
16. Alramadan, N. S. (2022). "Global Crises Reflections on the Gulf Cooperation Council Countries". *International Journal of Social Science and Human Research*, Vol. 5, No. 7, pp. 3323–3335. Doi: <https://doi.org/10.47191/ijsshr/v5-i7-74>
17. Motta, V. (2020). "Lack of Access to External Finance and SME Labor Productivity: Does Project Quality Matter?". *Small Business Economics*, Vol. 54 No. 1, pp. 119–134. Doi: <https://doi.org/10.1007/s11187-018-0082-9>
18. Al-Rawi, O., Al-Dayyeni, W., & Redha, I. (2021). "COVID-19 Impact on Education and Work in the Kingdom of Bahrain: Survey Study". *Information Sciences Letters*, Vol. 10, No. 3, pp. 427–433. Doi: <http://dx.doi.org/10.18576/isl/100305>
19. Blancher, M. N. R., Appendino, M., Bibolov, A., Fouejieu, M. A., Li, M. J., Ndoye, A., ... & Sydorenko, T. (2019). "Financial inclusion of small and medium-sized enterprises in the Middle East and Central Asia". *International Monetary Fund*. Doi: <https://doi.org/10.5089/9781484396896.087>
20. Alrabeei, H., & Kasi, H. R. (2014). "Barriers to Growth: Key Challenges Facing Bahrain Small and Medium Enterprises". *Arabian Journal of Business and Management Review*, Vol. 4 No. 3, pp. 45–62. Doi: <https://doi.org/10.12816/0019051>
21. Elseoud, M. S., Kreishan, F. M., & Ali, M. A. (2019). "The Reality of SMEs in Arab Nations: Experience of Egypt, Jordan and Bahrain". *Journal of Islamic Financial Studies*, Vol. 5 No. 2, pp. 110–126. Doi: <http://dx.doi.org/10.12785/jifs/050204>
22. Alsammari, A. H. (2024). "The Dialectical Relationship Between SMEs' Financial Support and Funding Determinants". In *American University in the Emirates International Research*, pp. 45–52, Technology & Innovation. Springer, Cham. Doi: https://doi.org/10.1007/978-3-031-49302-7_5
23. Shekar, M., Hasan, M., & Al Mubarak, M. (2021). "Revisiting the Challenges Affecting SMEs Through Behavioral Approach". *International Journal of Academic Research in Business and Social Sciences*, Vol. 11, No. 9, pp. 2340258. Doi: <http://dx.doi.org/10.6007/IJARBS/v11-i9/10753>
24. Belleflamme, P., Lambert, T., & Schwienbacher, A. (2016). "Crowdfunding: Tapping the Right Crowd". *Journal of Business Venturing*, Vol. 29, No. 5, pp. 585–609. Doi: <https://doi.org/10.1016/j.jbusvent.2013.07.003>
25. Onileowo, T. T., Muharam, F. M., Ramily, M. K., & Khatib, S. F. (2021). "The Nexus between innovation and business competitive advantage: A conceptual study". *Universal Journal of Accounting and Finance*, Vol. 9, No. 3, pp. 352–361. Doi: <https://doi.org/10.13189/ujaf.2021.090309>
26. North, D., Baldock, R., & Ekanem, I. (2010). "Is There A Debt Finance Gap Relating to Scottish SMEs? A Demand-side Perspective". *Venture Capital*, Vol. 12 No. 3, pp. 173–192. Doi: <https://doi.org/10.1080/13691061003658670>
27. Schammo, P. (2019). "Undisruption" in the SME Funding Market: Information Sharing, Finance Platforms and the UK Bank Referral Scheme". *European Business Organization Law Review*, Vol. 20, pp. 29–53. Doi: <https://doi.org/10.1007/s40804-019-00139-x>
28. Yoshino, N., & Taghizadeh Hesary, F. (2016). Significant Challenges Facing Small and Medium-Sized Enterprises in Asia and Solutions for Mitigating Them. *SSRN Electronic Journal*, ADBI Working Paper, 564.

- Doi: <https://doi.org/10.2139/ssrn.2766242>
29. Hervás-Oliver, J., Parrilli, M., Rodríguez-Pose, A., & Sempere-Ripoll, F. (2021). "The Drivers of SME Innovation in the Regions of the EU". *Research Policy*, Vol. 50 No. 9, 104316. Doi: <https://doi.org/10.1016/j.respol.2021.104316>
 30. Peyrano, L. (2019). "Catalysing the SME Growth Ecosystem in the New Information Age". *New Models of Financing and Financial Reporting for European SMEs*, pp. 39–54. Doi: https://doi.org/10.1007/978-3-030-02831-2_3
 31. Zorzi, A. (2021). "The Italian Insolvency Law Reform". *European Business Law Review*, Vol. 35, No. 5, pp. 935-964. Doi: <https://doi.org/10.54648/eulr2021033>
 32. Tsai, C. H., & Kuan-Jung, P. (2017). "The FinTech revolution and financial regulation: The case of online supply-chain financing". *Asian Journal of Law and Society*, Vol. 4, No. 1, pp. 109–132. Doi: <https://doi.org/10.1017/als.2016.65>
 33. Klapper, L. (2006). "Role of 'Reverse Factoring' in Supplier Financing of Small and Medium-Sized Enterprises". *Journal of Banking & Finance*, Vol. 30 No. 11, pp. 3111–3130. Doi: <https://doi.org/10.1016/j.jbankfin.2006.05.001>

Appendices

Indicator	Micro	Small	Medium
Number of Employees	Up to 5	6 – 50	51 – 100
Annual Turnover (BHD)	1 – 50,000	50,001 – 1,000,000	1,000,000 – 3,000,000

Fig.15: SME Definition in Bahrain (SME Development Board, 2023)



[Fig.16: Core Activity of Bahrain Development Board (Adapted from Wamda, 2023)]

Appendix I: Bahrain's Financial Ecosystem

Analysis of the complex network of interactions is crucial for understanding the technological innovation and growth of the symbiotic FinTech industry. Based on the intersection between entrepreneurs, governments, and financial institutions, Bahrain's FinTech system has created a conducive environment to scale up innovation within the financial services sector.

FinTech Start-ups

Despite the upward trajectory of FinTech in combining innovative models with technology and automating existing services, it cascades a disruption across the service industry due to a significant power shift, unbundled by an increasing set of start-ups and entrepreneurs. The diversity of such firms, focusing on areas ranging from payment solutions and blockchain technology to digital banking, significantly contributes to the ecosystem's innovation and growth. Although the exact number of FinTech start-ups in Bahrain is unknown, the country has supported over 120 start-ups since launching its regulatory sandbox in 2021.



[Fig.17: FinTech Start-ups in Bahrain by Service (Arcapita, 2023)]

The gradual development of Bahrain in the FinTech space is driven by the supportive regulatory framework and the sector's drive for innovations, which aligns with the Bahrain Vision 2030. Since the service industry is highly competitive, traditional institution-backed start-ups, such as Bwallet and Beyon Money (sponsored by Batelco, Bahrain's telecommunications company), along with FinTech start-ups, like Benefit, increase the accessibility of technological and innovative applications.

Government

The discrepancy in views on FinTech is reflected in differences in regulation, capital, and reporting requirements among governments, stemming from the 2008 financial crisis. In support of the industry, the Bahraini government plays a crucial role in shaping the FinTech landscape. The CBB regulatory sandbox promotes sustainable economic growth by enabling start-ups to test and develop innovative products in a controlled environment. Bahrain FinTech is a scalable initiative that aims to encourage innovation labs, acceleration programs, curated activities, and educational opportunities by increasing public awareness. As facilitators for the industry's development, Tamkeen and BDB contributed to the growth of the SME sector by sponsoring optimal global practices and linking FinTech to SMEs for indirect funding opportunities, innovation, and entrepreneurship. Bahrain's government's supportive policies and investments in digital infrastructure are significant drivers of the FinTech ecosystem's growth.

Technology Developers

Integral to Bahrain's FinTech ecosystem, technology developers provide the necessary infrastructure and solutions to create a favorable environment and enable innovation. It includes blockchain data analytics and cloud computing developers to launch web-based applications at a fraction of the expense of in-house infrastructure. Entrepreneurs' integration of Artificial Intelligence and big data is pivotal in advancing the technological capabilities of the FinTech sector within the country. While the capacity remained constrained, the demand for technology developers vastly outpaces the available supply, resulting in a surging gap within Bahrain's ecosystem.

Financial Consumer

Since FinTech start-ups are targeted at the end user to some extent, the primary source of revenue, evolving preferences and behaviours, influences Bahrain's ecosystem. According to the World Bank, the country's GDP per capita was \$30,152 in 2022, representing a

12.26% increase from 2021, which qualifies Bahrain as a high-income economy. Based on the Bahrain Open Data Portal (BODP), the population in the country was recorded at 1.47 million in 2022, with over 20% between the ages of 15 and 30. Bahrain's literacy rate was reported at 97.46% in 2018. As the country strives for a digital economy, it had over 2.1 million subscribers with a high mobile penetration rate of 137% in 2023. It indicates the growing demand for digital financial services, with over 90% of Bahrainis active users of online banking, digital wallets, and investment platforms. Furthermore, statistics show that social media penetration is recorded at 78%, indicating that financial consumers are open to tailored and efficient financial solutions.

Traditional Financial Institution

Bahrain's financial system maintains stability through sufficient governmental reserves and a low debt-to-GDP ratio, which indicates sustainable fiscal space for budget financing. Since Bahrain has maintained an increasing credit rating for the banking sector, it has failed to meet the SME credit supply requirements.

Although traditional financial institutions play a significant role in the market, the disruption of FinTech firms requires re-designing the business model to integrate digital solutions. Bahrain's banking system has transitioned into a more integrated and advanced financial ecosystem, with several banks competing to offer FinTech solutions and collaborate with start-ups. For instance, Al Salam Bank's partnership with FlexxPay extends the bank's leading role, among others, by integrating digital solutions to enhance consumer retention and employee productivity. Outsourcing the Point of Sale (POS) enables traditional financial institutions to optimise and alleviate financial pressure on employees and consumers. Furthermore, the launch of the Open Banking Policy in 2019 reinstates Bahrain's leadership in the Middle East as the first country to adopt the policy in its FinTech Hub.

Appendix II: Bahrain's Financial Inclusion

Bahrain's active promotion of financial inclusion efforts is set to enhance the accessibility and efficiency of financial services for daily transactions. Both the government and the public sector have demonstrated considerable effort and interest in improving the country's economic and social development through the promotion of financial literacy and the launch of the national digitalisation strategy. By introducing the concept of digital banks in Bahrain, the initiatives aim to enhance the consumer experience and break down the barriers to financial inclusion.



[Fig.18: Bahrain Financial Inclusion Rate (Adapted from Bahrain FinTech Bay, 2021)]

Despite the significant reduction in the number of banks, the expansion of physical access to financial services in Bahrain showed notable development, as evidenced by a steady increase in branches (26%) and ATMs (6%) between 2011 and 2017. Nonetheless, Bahrain has actively promoted the transition towards a digital cashless economy by encouraging the use of digital platforms and payment channels. This approach was reflected in a 74% increase in POS transactions executed through debit and credit cards, as well as an 87% increase in online payments.

Therefore, the country's government has supported the BDB and Tamkeen Labour Fund initiatives by providing financial services to micro and small-sized enterprises (MSMEs). Furthermore, Bahrain has encouraged innovation in the FinTech ecosystem through crowdfunding initiatives, aiming to bridge the gap in investment opportunities for product and solution development among start-ups and entrepreneurs. In line with its move towards a cashless economy, Bahrain has introduced the Wage Protection System (WPS), which formalises the direct distribution of employees' wages into their bank accounts in the private sector. This regime aligns with neighbouring GCC countries to ensure the timely payment of wages to employees and to monitor employers who breach their obligations to employees. Under the WPS, this development ensures that each employee has access to the country's financial services. The availability of several financial literacy programs targeting diverse groups on economic education, investment, and entrepreneurship is a positive outlook for financial inclusion in Bahrain. Additionally, numerous training programs, such as those offered by INJAZ Bahrain, support young individuals in learning about informed financial planning, including earning, spending, sharing, and saving money. However, the country lacks private institutions and universities that offer financial literacy courses specifically targeting SMEs in managing their finances through personal finance management.

AUTHOR PROFILE



Alya Alhaddad holds a B.Sc. in International Logistics Management and is an International Trade master's student at Shanghai University. A high-performance individual with diligence to make an impact in the supply chain industry. Certified in International Logistics and Transport Management from the Chartered Institute of Logistics and Transportation (UK) with substantial theoretical knowledge to be maintained in operational practices. With experience in procurement and logistics, the author strives to maintain extremely high standards and works hard to uphold that level of competence, making methodical decisions to achieve strategic objectives. By demonstrating a critical understanding of the range of techniques available to analyse international trade, the author is intrigued by the econometrics behind international supply chains and the implications they face in dealing with the complexity of globalisation and the impact of advanced technologies on both global and national levels.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the Lattice Science Publication (LSP)/ journal and/ or the editor(s). The Lattice Science Publication (LSP)/ journal and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.