

THE IMPACT OF CAPITAL MARKETS ON VISION 2030

A NTSAL - AFCM STUDY OCTOBER 2023

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INTRODUCTION



Rami El Dokany
Secretary General
Arab Federation of Capital Markets



In recent years, the MENA region has witnessed a significant transformation in its economic landscape, driven by ambitious national development plans such as Vision 2030. This vision aims to diversify the region's economies, reduce dependence on oil revenues, and foster sustainable growth. One crucial aspect of achieving these goals lies in the role of capital markets.

This working paper explores the pivotal role that capital markets play in supporting the MENA region's journey towards Vision 2030. You will find some fascinating findings that shed light on the crucial role that capital markets play in driving economic growth and development in the region. By exploring the various mechanisms through which capital markets facilitate investment, foster innovation, and promote financial inclusion, this paper offers valuable insights for policymakers, investors, and researchers alike.

Last but not least, we would like to express our heartfelt gratitude to Ntsal and AFCM teams for their diligent research and insightful analysis. Their dedication and expertise have made this paper a valuable resource for anyone interested in understanding the potential of capital markets in shaping the future of the MENA region. In addition, a special gratitude for the valuable contribution of AFCM members. Their insights and feedback have been instrumental in shaping our research and helping us gain a deeper understanding of the subject matter. We truly appreciate the time and effort they have dedicated to this endeavor.

We hope that you will find this working paper informative and thought-provoking, and that it will inspire further discussions and actions towards achieving Vision 2030.



INTRODUCTION



Martin Janzen

Managing Partner

Consultancy Chamber, Ntsal



2030 is the year that leaders around the world marked as a milestone in achieving ambitious visions with detailed economic, social, and environmental goals for their countries.

To reach those goals, the role of capital markets cannot be overstated. Capital markets can enable authorities and stakeholders, connect local and international ecosystems and drive innovation and wealth creation in a nation. In the Arab region, we see great potential for capital markets to be a catalyst for achieving vision 2030.

This study highlights a strategic perspective on capital markets and their role for vision 2030 and provides practical applications and insights.

The findings and recommendations are built on our international experience, holistic market research as well as expert interviews with stakeholders from central banks, stock exchanges, and clearing houses across the Arab region. We would like to thank the Arab Federation of Capital Markets for facilitating these fruitful discussions, as well as all participants for their time and valuable insights. We look forward to observing and witnessing Arab countries' achievements of the numerous initiatives and ambitions discussed during the study.



LIST OF ABBREVIATIONS

ADX Abu Dhabi Securities Exchange

AGM Annual General Meeting

ASE Amman Stock Exchange

CBE Central Bank of Egypt

DFM Dubai Financial Market

EGX The Egyptian Exchange

ESG Environmental, Social, and Governance

FSB Financial Stability Board

GDP Gross Domestic Product

ICE The Intercontinental Exchange

IPO Initial Product Offering

KCC Kuwait Clearing Co.

SFDR Sustainable Finance Disclosure Regulations

SSE Sustainable Stock Exchanges initiative

TCFD Taskforce on Climate-related Financial Disclosures

TPI Transformation Pathway Initiative

TSE Tunis Stock Exchange

EXECUTIVE SUMMARY

Many countries in the Arab region have embarked on ambitious journeys to transform their economies and achieve social and economic prosperity through the 2030 Agenda for Sustainable Development. Integrating the UN Sustainable Development Goals (SDGs) as the anchor for their strategies, these national visions are considered bold and forward-thinking blueprints that guide economies' paths towards a more prosperous, diversified, and sustainable future.

Because Vision 2030 is a holistic strategy that encompasses the economy, the environment, people, peace, and beyond, it requires the collaboration and active engagement of state institutions, private sector players, NGOs, and many other stakeholders. Therefore, capital markets are considered a cornerstone of the implementation and success of this Vision. The efficient and effective allocation of capital is crucial to leverage innovative and sustainable local and international investments. Therefore, the maturity of capital markets is expected to have a strong impact on the viability and success of Vision 2030 for individual countries as well as the Arab region.

Policymakers and regulators in the Arab region are aware of the important role that capital markets play in achieving the goals of Vision 2030. According to stakeholders in the region, the most prominent of these roles is attracting foreign investments into the private sector, which enhances investor trust in the financial system, boosts liquidity, and supports economic growth. Particularly in the Gulf, capital markets are seen as an instrument to diversify the economy away from oil-dependence and finance the mega projects signed in this regard.

Amidst the vast policies enacted by policymakers to achieve their national visions are 7 key themes or trends that are becoming integral in supporting their transformational journeys. These 7 themes, listed below, not only have a significant and direct impact on capital markets, but also have various spillover effects on the economic and social fronts.

CAPITAL MARKET KEY THEMES:

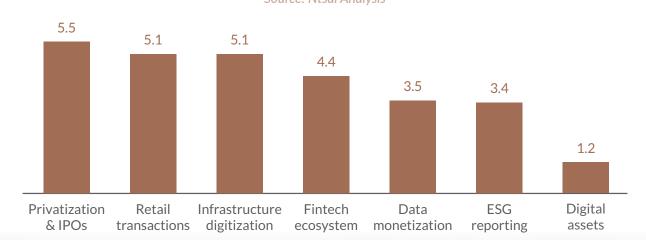
- 1. Establishing ESG and TCFD reporting
- 2. Increasing youth retail transactions
- 3. Enhancing investment opportunities through IPOs
- 4. Establishing a strong FinTech ecosystem
- 5. Introducing digital assets as investment opportunities
- 6. Leveraging data monetization
- 7. Digitization and automation of infrastructure

Because each market is unique in its maturity and characteristics, the status of these themes and their priorities vary between countries. This study assesses the impact of capital markets on achieving Vision 2030 vis-a-vis the 7 identified themes. The study is built on the views of key stakeholders in the capital market ecosystem including stock exchanges, clearing houses, regulators, and private sector players from the respective markets in the Arab region.

Results of the study show that out of the 7 themes, enhancing investment opportunities through privatization and IPOs was identified as the most critical theme by stakeholders, followed by increasing retail transactions and the digitization of infrastructure. On the other end of the spectrum lies digital assets, in which an overwhelming majority of participants ranked last in importance. Figure 1 shows the ranking of the 7 key themes by the interviewed stakeholders:

Figure 1: Score of Market Themes (Scale of 1 to 7, where 7 is the highest)

Source: Ntsal Analysis





ARAB CAPITAL MARKETS OVERVIEW

The Arab world is home to countries with varying levels of economic development, market sophistication, and financial market depths. Accordingly, each country has a unique capital market that operates under its own regulatory framework and oversight by relevant authorities to ensure transparency, investor protection, and the achievement of its vision and goals. The region encompasses more than 17 exchanges, a number of clearing houses, and dozens of large financial services companies. In addition to stocks, Arab capital markets offer various financial instruments, including government and corporate bonds, Islamic finance instruments (e.g., Sukuk), and derivatives to a mix of domestic and foreign investors, institutional investors, individual traders, corporations, and governments.

The Arab region has a total of 1,638 listed companies at a combined market capitalization of US\$ 4.6 trillion (as at end-September 2023). Saudi Arabia's stock exchange Tadawul is by far the largest in the region with a total of 297 listed companies and a market capitalization of US\$ 3.0 trillion. In terms of the number of listed companies, Egypt's EGX and Amman's ASE come in the second and third places, comprising 14% and 10% of the region's exchanges respectively (Figure 2). The number of listed companies has grown in Egypt and is expected to continue growing considering the Government's Privatization Program. As for the market capitalization, Abu Dhabi's stock exchange (ADX) comes in second with US\$ 777 billion and a 17% share of the market, followed by the Dubai Financial Market (DFM) at 4% of the region's market capitalization.

Figure 2: Top Five Exchanges by Number of Listed Companies
Source: AFCM Monthly Report

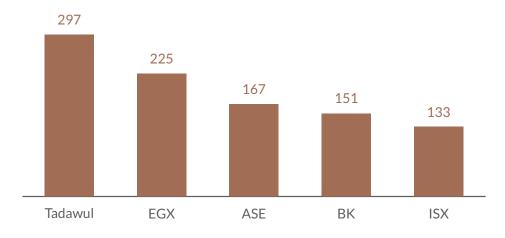
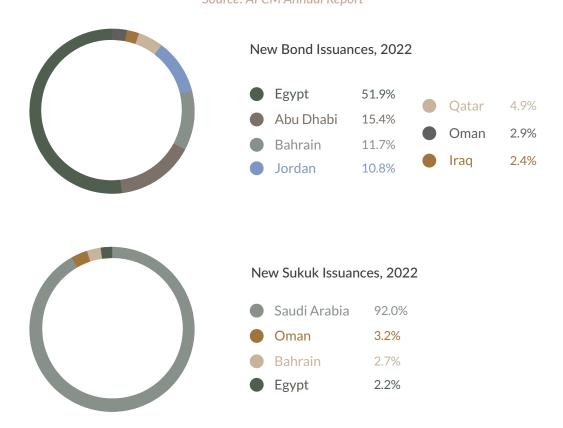


Figure 3: Breakdown of Market Capitalization by Exchange Source: AFCM Monthly Report



The region's debt market is highly active with large bond and sukuk issuances. In 2022 alone, a total of US\$ 67.7 billion bonds and sukuks were issued, of which 42% were from Egypt. The region's debt issuances reflect a variety of instruments, including government bonds, corporate bonds, treasury bills, and government sukuks.

Figure 4: Breakdown of Bond and Sukuk Issuances by Country, 2022 Source: AFCM Annual Report





ENHANCING INVESTMENT OPPORTUNITIES THROUGH PRIVATIZATION AND IPOS

IPOs: A Catalyst for Growth

Initial Public Offerings (IPOs) have long been used as a tool by companies to expand their operations, raise capital, and tap into the public market for growth opportunities. In recent years, the MENA region's IPO activity has risen to foster vibrant capital markets and attract foreign direct investment in a diverse range of sectors including technology, oil and gas, healthcare, real estate, and consumer goods.

An active and robust IPO market can reflect and impact various aspects of economic health that support the overall goal of economic development in all national visions. According to the interviewed stakeholders, IPOs are an excellent channel to fund development projects listed in their countries' national visions, such as investment in infrastructure, research and development, health, tourism, and more. In fact, boosting IPO activity was ranked as the first and foremost theme relevant to achieving vision 2030 by stakeholders in the region, who stated that thriving IPO activity increases market liquidity, reduces cost of capital, and attracts foreign investors and hard currency inflow.

While Arab stakeholders view IPOs as a vital policy tool, they believe some challenges inhibit their markets from achieving their full potential. Falling global investor appetite and economic conditions were cited by several exchanges as having negatively impacted their exchange's performance last year. Such is the case with Egypt that has been facing a currency crunch since early 2022, with global investors' speculation of devaluation causing a market slowdown and weighing in on the government's privatization program efforts. Some markets, on the other hand, suffer from the opposite problem: The capacity of capital markets to absorb IPOs. In the UAE, the rapid and intense IPO wave makes it challenging for the market to keep up pace with IPOs due to the increased cost of funding and higher



valuations. Additionally, the regulatory environment was reported by multiple stakeholders as another challenge they face. In Iraq and Kuwait, slow progress is being made in issuing a comprehensive law regulating privatization. Other countries, such as Oman and Jordan, reported the need for incentives in their regulations, including tax breaks, relaxed requirements, and other incentives to fuel IPO activity.

MENA IPO Market Performance at a Glance

Rising interest and inflation rates, global banking turbulence and geopolitical uncertainties have suppressed global IPO activity during the past one and a half years (2022 – 2023). Despite this negative global sentiment, the MENA region was able to retain strong momentum and proved its buoyancy, with plenty of companies assessing their readiness for future transactions. The energy, financial, consumer products and technology sectors are considered the most promising sectors in the region and have been high on the charts in recent years.

UAE and Saudi Arabia have been the region's most active markets in the past few years. Out of the 23 IPOs issued in the first half of 2023 in the MENA region, 13 came from Saudi Arabia, with proceeds exceeding US\$ 1.6 billion. This activity comes in light of Saudi Arabia's efforts to diversify its economy and reduce its reliance on the oil sector as part of Vision 2030. According to Saudi Arabia's Securities Depository Center (Edaa), Saudi Arabia has fully achieved its 2021 and 2022 listing targets, and, if it continues at the same pace, it is expected to exceed its 2030 growth target.

The Abu Dhabi Securities Exchange (ADX) is also considered a key player in the MENA region's stock market activity. Supported by Abu Dhabi National Oil Company's (ADNOC) listings, UAE maintained its position as the country with the largest IPO for the second quarter this year.

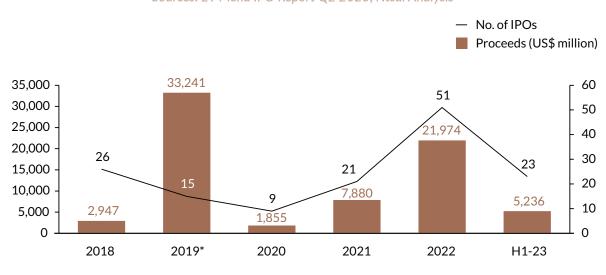


Figure 5: MENA IPO Activity
Sources: EY Mena IPO Report Q2 2023, Ntsal Analysis

*Includes Saudi Aramco listing

The value that Arab stakeholders place for IPOs as a catalyst to their growth is not surprising. While Gulf countries are performing exceptionally well in their IPO markets, other non-GCC countries still have a long way to go. Their journey should therefore start with regulatory efforts: Clear and investor-friendly regulations are critical to instill confidence by ensuring transparency, fairness, and protection of rights for foreign investors. Additionally, a stable local macroeconomic environment is vital to attracting foreign investors. Policymakers need to be transparent and consistent in their policy announcements and actions. This is specifically relevant to monetary policy instruments, where Central Bankers must ensure that their policies support stock market objectives. For example, raising interest rates to contain inflation adversely affects stock market activity, so Central Bankers should cautiously calculate their interest rate policies and consider their impact on other economic objectives beyond inflation and consumer spending. Without a stable macroeconomic environment that is supported by transparent policymaking, achieving a thriving stock market would remain difficult.

RETAIL TRANSACTIONS & NEXT GENERATION INVESTORS

Empowering Youth: Unleashing Potential in the MENA Region

The MENA region is characterized by its large and active youth population that constitutes more than half of its total inhabitants. This population was born into an era of technological advancements, a fast-paced life, and constant innovations and has therefore developed a natural interest in financial markets. With their tech-savvy mindset, the young generation is best suited for capital markets' innovations and new products.

Several governments in the MENA region recognize the importance of youth in their societies and have thus incorporated them in their national visions, initiatives, and policies. For instance, the Egyptian Financial Regulatory Authority issued a decree in 2020 allowing those from the age of 16 to 21 to invest in the Egyptian Stock Exchange (EGX). The UAE also amended its Commercial Transaction Law in January 2023 and reduced the minimum legal age to start a business from 21 to 18 years.

Despite these efforts, stakeholders in the region have listed several challenges that impede their progress towards achieving an active youth population. Most stakeholders cited "lack of awareness" as the foremost challenge with youth. This is why officials in Jordan, Bahrain, and Oman, among others, are investing in university awareness programs and simulation competition sessions. Oman has even gone as far as developing a gaming application to educate youth in a dynamic way about the risks and gains of capital market investing, with the hopes of materializing these efforts into real world investing by youth.

One of our most significant assets is our lively and vibrant youth. We will take advantage of this demographic dividend by harnessing our youth's energy and by expanding entrepreneurship and enterprise opportunities

Saudi Vision 2030

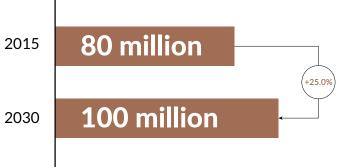


Another challenge that stakeholders face is accessibility to youth. Young generations are flexible, mobile, and require quick access to investments. This calls for seamless digital mediums to encourage their participation in the stock market. For example, Egypt's digital investment platform Thndr allows users to invest in stocks and mutual funds by setting up an account in 10 minutes only. According to Rami El-Dokany, Secretary General of AFCM and ex-Chairman of EGX, "the ease of doing business and the easy onboarding process of Thndr is disrupting the market". However, EGX is working with regulators to enable digital mediums to feed users' Thndr accounts,



indicating regulators' interest in increasing youth's access to the capital markets. Accessibility does not only mean using mobile applications to invest. According to Saudi Arabia's Edaa, other considerations could be made to increase youth's participation, such as changing trading hours to accommodate for evening trading when investors are more available. However, such a decision would have a large domino effect and hence requires the approval of the whole financial ecosystem, not just the exchange itself. Therefore, Edaa describes this as a dilemma between the older and younger generations, as making the right decisions for the future means compromising on today's existing stakeholders. In his words, "The youth of today is the future of tomorrow" (Raed Al Humaid, CEO of Edaa)

Figure 6: MENA Youth Population Sources: UNICEF, Ntsal Analysis



In the MENA region **youth (19-24)** will **increase** by 20million, reaching **100 million** in **2030**

LARGEST IN REGIONS HISTORY! MOST EDUCATED!

Despite the overall large awareness levels by Arab stakeholders on the importance of youth in driving their economies forward, no clear strategies are in place to support their individual efforts. Officials should therefore formulate strategies that target youth specifically, highlighting their economic potential and the necessary policies to increase their economic participation, and governance to protect consumers. The first pillar of such a strategy would be increasing general financial education and literacy. This would increase the ratio of retail transactions to institutional transactions and support the economy's overall financial ecosystem. Second, aggressive awareness programs need to target youth to attract them to the stock market. This could be done through school and university campaigns

and university curriculums and competitions. Additionally, policymakers must ensure low barriers to entry into the stock market for youth who could be driven away by the slightest inconvenience. This means that proper digital investment platforms need to be in place to provide a seamless investment experience to maximize investor retention. These efforts could be empowered by Public-Private-Partnerships (PPP), where the private sector's collaboration could provide financing, expertise, and more resources to support such initiatives.

FINTECH ECOSYSTEMS

FinTechs: The Region's Rising Stars

Financial technology (FinTech) companies have been gaining traction in the MENA region throughout the past few years through a wide range of innovative solutions and services, from mobile payments and digital banking to peer-to-peer lending and blockchain-based solutions. The region's young and tech savvy population is thirsty for innovative solutions and so serves as an excellent base to propel the growth of the FinTech industry.

FinTech companies' economic impact cannot be overlooked: they have significantly improved access to financial services, particularly in underserved and unbanked populations, by providing affordable and convenient solutions through mobile devices and digital platforms. This, in turn, increases individuals' and businesses' access to credit, payment systems, and investment opportunities, stimulating economic growth.

With this in mind, MENA region governments have recognized the financial sector as a pillar for achieving their national visions. For example, Saudi Arabia launched its Financial Sector Development Program with 6 key commitments to achieve by 2025. This includes a 70% increase in the share of cashless operations and having 30 FinTech companies driving innovation and competition in the market. The Central Bank of Egypt (CBE) also launched a Financial Inclusion Strategy with the aim of "achieving economic empowerments for all segments of society through an inclusive and formal financial system that provides fair, quality, and affordable products and services, thus contributing to achieving sustainable growth". Such strategies and programs therefore develop the FinTech ecosystem by encouraging policy reforms and entrepreneurial activities.

Stakeholders believe two factors are critical for enabling the FinTech ecosystem: The regulatory environment and the technological infrastructure. Several Arab countries are investing in modernizing their infrastructure with a particular focus on the compatibility of their operating systems to deepen their integration with other markets. On the regulatory front, the trick is about "striking the balance between a strict regulatory environment and embracing the developments without being too loose" (Talal Touqan, CIO of BHM Capital, UAE). To support this effort, several countries in the region have created their regulatory sandboxes to support FinTechs and provide them with regulatory guidance and the necessary infrastructure to develop and test their ideas.

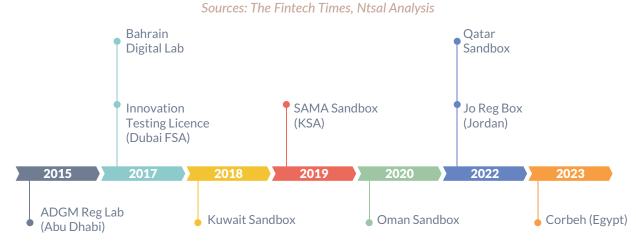
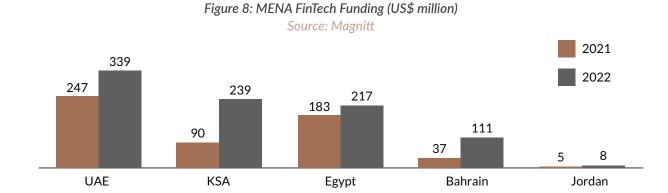


Figure 7: Sandbox Creation in the Arab Region

FinTech Activity by the Numbers

The rise in FinTech activity has catalyzed entrepreneurship and job creation in the region with the increased funding channeled to FinTech startups. The MENA region has raised a total of US\$ 925 million in funding across 131 deals in 2022 alone despite the overall unstable macroeconomic conditions. The increase in funding was supported by both US\$ 100 million+deals which rose 75% year-on-year and non-MEGA deals whose values rose by 53%.

The UAE has continued to lead FinTech funding both in terms of value, capturing 37% of the region's FinTech funding, and number of deals, with a share of 34% of total deals. In terms of sub-industries, Payment Solutions was the highest funded and most transacted sub industry in the region in 2022 representing a third of total deals. Neobanking came in second with a share of 24% of deals. These two subindustries, together with Cryptocurrency, represented 80% of total FinTech funding in the region.





DIGITIZATION OF INFRASTRUCTURE

Digital Infrastructure: the Bedrock of Economic Success

Globally, prosperous economies often have a solid layer of digitization as a foundation behind their success. A study by the World Bank Group shows the socioeconomic impact of digitalizing an economy: GDP per capita could rise by more than 40%; employment in manufacturing by 7%; and tourist arrivals could rise by 70%. Long term unemployment rates could fall, and female labor participation rates could double. In other words, digital transformation efforts would directly address SDG goals of "No Poverty", "Gender equality", "Decent work and economic growth", "Industry, innovation, and infrastructure", "Reduced inequalities", and ultimately have spillover effects on the remainder of goals.

Not only are digitized economies more prosperous, but they are also more resilient to shocks. This was clearly seen during the pandemic when more digitally advanced economies and industries were better able to withstand the shock and respond more proactively to the rapidly changing new reality.

Digital Infrastructure in the MENA Region

Businesses and manufacturers in the MENA region are increasing their adoption of new technologies such as AI and 5G to tap into the new wave of digitization, and governments have set ambitious targets and strategies to reap its social and economic benefits. For instance, the UAE aims to double the contribution of the digital economy to over 20% of non-oil GDP by 2031. This trend drives the need for a more solid infrastructure to accommodate the increased demand for data and network bandwidth.

Stakeholders reported a number of challenges that hinder their efforts in the digitization of infrastructure, with the most common of those being the financial cost. One of the most significant aspects of digitization is the financial commitment required. This includes purchasing new technologies, software licenses, hardware upgrades, and skilled personnel. The complexity of digitizing infrastructure adds to the challenge. It is not just about purchasing new tools; it often involves a complete overhaul of existing processes and systems, leading to additional costs for training employees, managing change, and dealing with unexpected integration issues. This leads to the second challenge: resistance to change. For instance, in the banking sector, banks are tied to their legacy systems that have been used for decades. "Adopting new technologies would require change management and workforce transformation" (Fadhel Makhlooq, CIO of SICO Bank Bahrain). Therefore, integrating the new reality with legacy systems is very challenging. The third challenge pertains to technological vendors. Often times institutions have long-term contracts with vendors and so they represent a commitment by institutions towards them. In other cases, the lack of service providers and technology vendors could pose a challenge to institutions.

To overcome these challenges, policymakers can consider a number of solutions. Since the financial cost of digitization is one of the biggest challenges, PPPs could serve as a channel to enable large projects by alleviating the financial burden from the government while leveraging the expertise and resources of the private sector. Private sector consultants can also be involved in the implementation processes of digitization to ease the onboarding process gradually and act as intermediaries between top management and employees in firms, hence reducing resistance to change. Additionally, Arab policymakers need to unify and automate their messaging linkages to harmonize the region's communications. Such was the proposition suggested by Edaa that expressed that Abu Dhabi is the only city that Saudi Arabia is able to connect with through ISO messaging. If more countries adopt ISO messaging, institutions would be able to connect and communicate enhanced data in less time and in a richer, more structured format.

Digitization Best Practices

According to Kuwait Clearing Co. (KCC), the pandemic has fast-tracked their digitization efforts. Today, KCC offers a number of e-services to investors. It has stopped issuing dividend payment cheques to shareholders since 2019 and instead issues electronic dividend transfers. Additionally, KCC holds its AGM meetings virtually for the convenience of its board members. The company has also launched the IPO Kuwait Mobile Application and Website, allowing users to request an initial public offering for a newly established company or request a capital increment of an existing company. Overall, these initiatives exemplify Kuwait's digitization efforts and how it is responding to market demands of convenience, efficiency, and seamless user experiences.

Another prominent example of a governmental digitalization effort is Egypt's state-owned tech company e-finance. The platform labels itself as "The digital partner of choice for Egypt's digital revolution" and provides ePayment services, financial cloud hosting services, and other professional technical services. eFinance's flagship Government Financial Network processes an annual aggregate of 500 million transactions for EGP 1.6 trillion between government payments and collections, positioning it as an essential driver for Egypt's digital transformation.

Saudi Arabia's Wamid serves as an example of a data solution company serving the capital market specifically. It is Tadawul's technology and innovation arm that supports the development of the Saudi Capital market in line with Vision 2030. Wamid leverages the data available with the different participants of Saudi Arabia's capital market, including the stock exchange, the securities depository center (Edaa), and the securities clearing house (Muqassa). Through its innovative solutions and services, Wamid strengthens the infrastructure of Saudi Arabia's capital market, enabling investors to make more informed decisions.

DATA MONETIZATION

The Untapped Potential of Data Monetization

Data monetization is an umbrella term that encompasses additional revenue an organization generates from the data it holds. It facilitates and incentivizes data sharing between firms, resulting in more accurate consumer insights and hence more enhanced and tailored product offerings. Therefore, monetizing data provides opportunities for businesses to innovate and improve their operational efficiency. Data monetization could also be leveraged as a powerful tool in the public sector to support evidence-based policy making, optimize public services, and enhance economic research and planning that is necessary to support countries' national visions.

Around one third of stock exchanges' revenues are generated by data and information services globally. Top exchanges reach up to 45% of revenue share, particularly in more mature capital markets, and this number is expected to grow by around 20% per annum (p.a.).

Although stock exchanges in the Arab region are aware of the potential benefits of data monetization, only a few have formulated a holistic monetization strategy. Data monetization generally represents only 6%, on average, of total revenues of stock exchanges in the MENA region. Tadawul is the top performing exchange on this front, generating roughly 17% of its revenue from data services. Several stock exchanges and clearing houses have expressed that data monetization projects are in their pipeline, including Muscat Stock Exchange (MSX), Edaa, Kuwait Clearing Co., and Amman Stock Exchange (ASX).

The main challenge with data monetization in the Arab region is the ambiguity in the regulatory environment. Stakeholders cannot identify which data could be legally sold versus which would be considered a legal breach of data privacy. Fear of falling into compliance issues is a sufficient inhibitor as this could lead to significant financial penalties and reputational damage. Cross-



border data transfers also create complexity as different jurisdictions have different data protection laws. The lack of clear data protection laws therefore slows down the potential of cross-border transfers. Another challenge with data monetization is the limited market acceptance and awareness of being big-data-friendly. Market participants must be aware of the vast benefits of leveraging large volumes of data. Only then would sufficient demand be created and call for the formation of a complete ecosystem of data providers, data users, third-party providers, and so on. Banks are shy of opening up because they want to protect their data and do not have complete realization of the full benefits of data monetization.

These challenges require concentrated efforts by policymakers and regulators to tackle. First, crafting clear and adaptable regulations is essential to balance data-driven innovation with privacy and security concerns. Regulators should collaborate with industry experts to establish clear regulations and frameworks that safeguard user rights while enabling responsible data sharing. This would support companies' abilities and appetite for crafting their own monetization frameworks. Case in point: The Intercontinental Exchange (ICE). ICE operates regulated exchanges, listing venues, and clearing houses for commodity, financial, fixed income and equity markets. While ICE has historically been trading commissions, the company has also been able to monetize the data generated by its exchanges to the extent that the revenue generated by data and subscription-based software now accounts for around half of the company's business.

Another critical step to encourage data monetization is by starting at the micro level. Officials should allocate resources to raise organizations' awareness of the value of their data and the opportunities for monetization. Companies should have proper data governance systems to allow for internal data usage benefits in the first place, such as enhancing customer experience, creating performance dashboards, and improving sales and products. Companies using their data internally to enhance their performance would then ultimately have the ambition to create monetization strategies and monetize their data. If proper awareness and regulatory clarity are achieved in the market, the potential of data monetization in the Arab region would be unlocked.

Crafting a Holistic Monetization Strategy

Capital market data that could be monetized by stock exchanges can be classified under 3 main categories: Market data, reference data, and fundamental data. Market data refers to the relevant streamed data by stock exchanges. This can be real-time or historic and include data points such as prices, quotes, volatilities, and frequencies. Reference data includes static entity identifiers, timestamps, and locations. This can be utilized for transaction-specific processing and could be leveraged while differentiating between customer groups to further understand customer group dynamics. Third, fundamental data refers to corporate information, macroeconomic data, investor relations news and other relevant data which allow investors to determine a company's underlying value and potential for future growth.

A holistic data monetization framework that covers all products and services is key for institutions to reach their full potential. When building the monetization framework, it is necessary to consider different perspectives, such as who will pay, how will they pay, when will they pay and what will be charged, to be able cover all interlinked angles. Figure 9 below shows the four pillars of Ntsal's Data Monetization Framework

Figure 9: Pillars of Data Monetization, Ntsal Framework

	odice. Nesdi
Monetization Governance	Customer Typology
Define rules on how to play	Define who is going to pay

Data Commercial Evolution Model

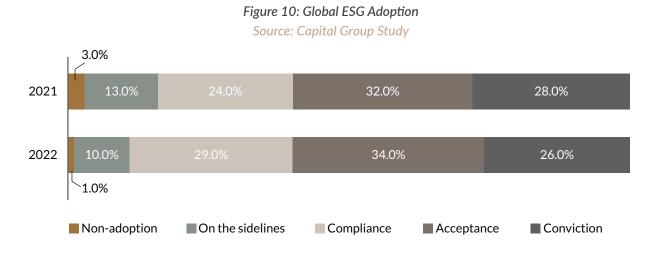
ESG AND SUSTAINABILITY INVESTING IN THE MENA REGION

ESG in the MENA Region: Status Quo

Economic, Social, and Governance issues (ESG) have become increasingly important in recent years as investors, consumers, and regulators' awareness of the impact that companies have on society and the environment is rising. These considerations are now commonly integrated into investors' decision-making processes, and companies are increasingly reporting on their ESG performance to demonstrate their commitment to sustainability and responsible business practices.

ESG is perhaps the most evidently linked theme to the SDG goals and the national visions of 2030. In fact, ESG could be considered the umbrella under which SDG goals fall under, for each of the 17 goals could be labeled as environmental, social, and/or governance related. For instance, SDG goals 1 to 5 could be given the social tag, while 11 to 15 are environment focused. SDG goals 16 and 17, pertaining to partnerships, peace, and strong institutions, are direct examples of the governance aspect of ESG.

Globally, investors' adoption of ESG considerations is on the rise. A study conducted by Capital Group with over 1,130 investors from 19 markets around the globe reveals that ESG adopters have increased from 84% to 89%. More than a quarter of global investors say ESG is central to their investment approach, while 34% apply ESG investing into their approach as shown in Figure 10 below. Environmental issues dominate investor interest, followed by governance and then social issues.



In the MENA region, several governments have promised to achieve net zero carbon emissions in line with their national Vision 2030. The UAE has committed to net zero by 2050 with the aim of reducing carbon dioxide emissions by 70%, while Saudi Arabia has committed to a net zero target by 2060, with the aim of achieving 50% of renewable energy in its energy mix by 2030.

Accordingly, many MENA governments and regulators are enacting a wave of reforms and policies to support their sustainability promises. Examples include Jordan's Green Growth National Action Plan 2025-2021, UAE's Water Security Strategy 2036, and Egypt's support for electric vehicle manufacturing through incentives and partnerships with local startups. Additionally, stock exchanges in the region are doing their part in supporting ESG reporting and adoption. The Egyptian Stock Exchange, Amman Stock Exchange, Casablanca Stock Exchange, Abu Dhabi Securities Exchange, and Dubai Financial Market have all mandated their listed companies to report on their ESG performance as a listing requirement. In addition to several other exchanges, they have also published written guidance on ESG reporting to guide companies on how to collect ESG data and report on it.

Figure 11: Arab stock exchanges with ESG reporting as a listing requirement Source: Arab Federation of Capital Markets (AFCM)



^{*}Required by the Securities and Commodities Authority (SCA), UAE

Figure 12: Arab Stock Exchanges with Written Guidance on ESG Reporting Source: Arab Federation of Capital Markets (AFCM)



ESG Reporting Challenges

The current ESG landscape is fragmented with no unified global standard. Several regulations and frameworks co-exist, many times within the same region, creating confusion for companies as to which to abide by. The only framework to date that exists on a global level is the TCFD, or the Task force on Climate – related financial disclosures. This framework was created in 2015 by the Financial Stability Board (FSB) based on a set of consistent disclosure recommendations for use by companies as a means of providing transparency about their climate-related risk exposures to investors. The TCFD has 11 recommendations under 4 main pillars, namely: Governance, strategy, risk management, metrics and targets. In the MENA region, Egypt is the only country with TCFD – aligned official reporting requirements.

ESG reporting challenges could be classified under two categories: Contextualization and Quantification. Contextualization challenges pertain to the pre-data collection phase. The first of these is the evolving landscape of multiple ESG frameworks that creates confusion for where to start for companies. Second, ambiguity still surrounds many of the ESG regulations. For example, the definition of an "Article 8" product under the SFDR is: "A fund which promotes environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices." However, the

The lack of unified standards and benchmarks coupled with pressure to adopt ESG at the same time is creating lots of pressure

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definition of "good governance practices" is unspecific and open to interpretation, making it difficult to accurately designate a product with complete confidence. Ambiguity leads to the third challenge, which is compliance risk. With unclear terminology and blurred lines, companies could be accused of mis-selling or greenwashing.

As for quantification challenges, these refer to all data challenges, from collection to integration. These include lack of data availability, difficulty with data management, documentation, processing, and finally, the integration of ESG data into the budgeting and planning processes of companies.

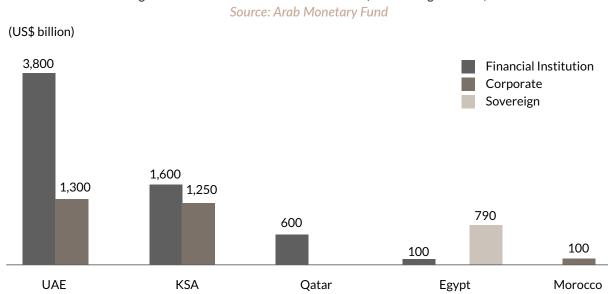


Sustainability Investing and Reporting in the Arab Region

Not only have stock exchanges taken action and continue to drive ESG adoption, but MENA governments and private sector companies have also increased their issuance of sustainable debt instruments amid their commitments to the SDG targets and their national sustainable finance frameworks. As such, sustainable bonds and sukuk present a valuable avenue for governments to attract investments and promote sustainable development.

Between 2020 and 2021 alone, sustainable debt volumes have more than doubled, surpassing US\$ 2.9 trillion, with this expansion expected to continue. Issuances of sustainable instruments have mostly occurred within the private sector. The first green corporate bond within the Arab region was issued in the United Arab Emirates in 2017 by the National Bank of Abu Dhabi. It was listed on the London Stock Exchange and valued at US\$ 587 million. In May 2019, the first corporate green sukuk was issued in the Arab region by Majid Al Futtaim to finance green projects such as renewable energy, sustainable water management and energy efficiency. The first and only sovereign green bond issuance in the Arab region to date was launched in 2020 by Egypt. Figure 13 shows the amounts of sustainable instruments issued by country and type of institution.

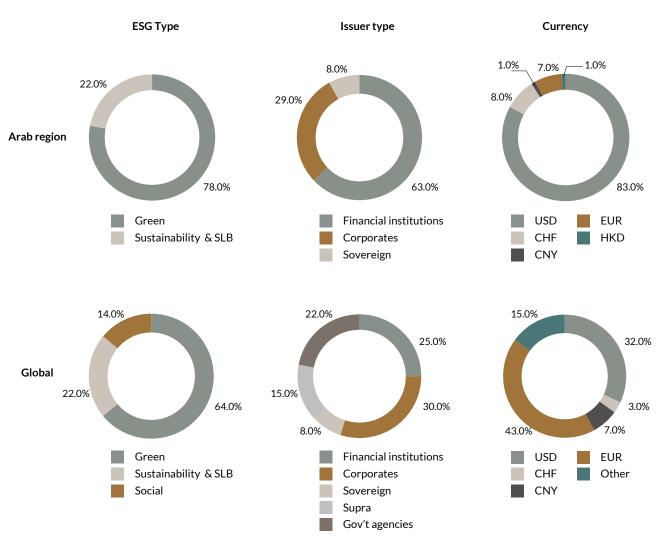
Figure 13: Sustainable Finance Instruments (2017 - August 2022)





As most capital markets in the region lack depth and investors are in the early stages of their ESG journeys, the greatest opportunity for issuers is issuing a Sovereign Sustainable Instrument in EUR or USD. Nevertheless, there has been some progress across the region in developing both local and foreign currency yield curves. Currently, 83% of all sustainable and sustainability-linked instruments in the region are USD denominated. Investor interest overwhelmingly supports green matters (78%) and by financial institutions (63%) as shown in figure 14. Global ESG issuance, on the other hand, is more diverse, where Euro-denominated instruments dominate and are issued by a range of investors including government agencies and Supranational organizations (e.g.: EU).





Stock Exchanges Role in Supporting ESG Reporting

With the multiple challenges that institutions face with ESG reporting, stock exchanges can play a crucial role in driving ESG adoption in capital markets through four main pillars:

- Thought leadership: Setting the scene for corporates to follow in ESG compliance; becoming the go-to-place for strategy and support defining the stock exchange's strategic positioning; and determining the roles of other players in the ecosystem
- Setting standards: Defining the standards that corporates should follow using international bodies (SSE guidance; TPI's TCFD alignment, etc.); setting the framework that supports the defined standards; differentiating the standards based on corporate type, size, industry, etc.; crafting the reporting style (E.g.: templates vs. incorporating into financial statements vs. publishing separate ESG reports
- Providing guidance: Publishing a model guidance for corporates to follow; hosting webinars; establishing academies and data hubs; answering FAQs
- Expert networking: Connecting corporates to ESG value consultants, industry experts,
 SME experts, data hubs, and regulators



DIGITAL ASSETS

With the advent of blockchain technology and the rise of cryptocurrencies, digital assets have gained traction as a means of transacting, storing value, and raising capital worldwide. While the MENA region hosts one of the smallest crypto markets, it has witnessed exceptional growth as the volume of transactions increased by 48% between 2021 and 2022. The MENA digital asset market is in fact expected to grow by a CAGR of 33% through to 2027 to reach US\$ 102.7 billion.

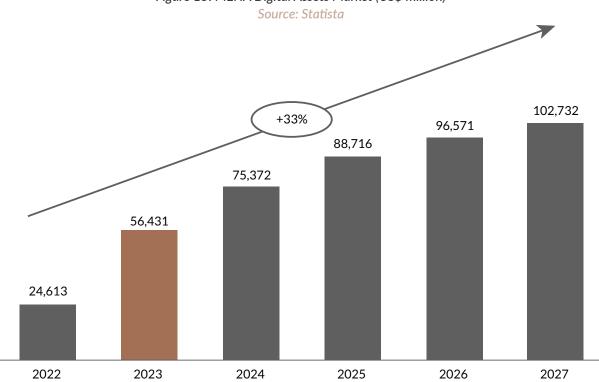


Figure 15: MENA Digital Assets Market (US\$ million)

Included: Cryptocurrencies, Decentralized Finance, Non-fungible Tokens

Digital assets have the potential to accelerate the achievement of several goals of countries' national visions. As innovative products in nature, they attract investments and enhance the provision of financial services. Digital assets also play a large role in achieving financial inclusion by providing access to services such as payments, remittances, and insurance to those previously unbanked. The MENA region's large expatriate population can especially make use of digital cross-border remittances which are much cheaper and faster than traditional remittance mediums.



Stakeholders have expressed opposing views about their interest in adopting digital assets. On one hand, some believe in the importance of tapping in on this global trend and embracing it rather than resisting it. The UAE comes at the forefront of such countries, as Dubai established the Virtual Asset Regulatory Authority and the DMCC Crypto Center in June 2021 to regulate virtual assets such as bitcoin and non-fungible tokens (NFFTs) and create a complete ecosystem for businesses operating in the cryptographic and blockchain sectors. Similarly, Virtual Asset Service Providers (VASPs) frameworks are being launched in the region, with Bahrain and the Abu Dhabi Global Market being the first to do so.

On the other hand, the majority of stakeholders expressed that digital assets are not a national priority at the moment, and that other initiatives require more attention and investments. Such was the opinion expressed by Iraq Stock Exchange (ISX), Damascus Stock Exchange (DSE), NI Capital, Edaa, and Kuwait Clearing Co. (KCC). Therefore, policymakers should keep an eye out on international developments in the digital assets space and continuously assess their markets' readiness for embracing the digital asset wave.





CONCLUSION

Arab capital markets have evolved and developed significantly over the past decade. Regardless of the level of development of each individual country, stakeholders from across the region have agreed and shed light on the pivotal role that capital markets play in achieving Vision 2030. As articulated in the interviews, the dynamic interplay between capital markets and the goals of vision 2030 reflects a symbiotic relationship that propels economic growth, deepens financial markets, and fosters sustainable development.

Despite this common ambition, Arab countries have different priorities regarding the 7 themes discussed in the study. The majority of stakeholders viewed IPOs as the cornerstone for financing their countries' development projects. However, votes were more fragmented when it came to adopting ESG reporting and digitizing infrastructure. The different priorities reflect the markets' varying development and maturity levels, their status quo vis-a-vis the mentioned themes, and their different financial market depths.

The findings of the stakeholder interviews revealed a number of common challenges that stakeholders in the region are facing. Regulatory frameworks, lack of awareness, and lack of financial resources emerged as recurring themes across the board. The collective voices of stakeholders signal a need for addressing these challenges to fully harness the potential of capital markets. Governments should increase their collaboration with the private sector through Public Private Partnerships to leverage their expertise and financial resources. They should also focus their efforts on the regulatory frameworks to ensure absolute clarity and transparency for local and foreign investors alike. Finally, these objectives require the collective efforts of different state entities, regulators, policymakers, and stakeholders. Therefore, crafting specific strategies with actionable implementation plans highlighting the responsibilities of the different state entities is crucial to achieving progress.

To conclude, the findings of the study demonstrate the pivotal role that capital markets play as agents of change in the journey towards realizing Vision 2030. As the region advances into a new era of sustainable growth, it is imperative for policymakers, regulators, and government officials throughout the region to work collectively towards a shared vision that addresses their challenges and embodies economic prosperity, social well-being, and sustainable development for all.

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