e-ISSN: 2279-0837, p-ISSN: 2279-0845.

www.iosrjournals.org

# **How Oil Rich GCC Nations Are Reinventing Their Economies – A Lesson In Diversification by the UAE**

# Abhimanyu Gupta

## Abstract:

The Gulf Cooperation Council (GCC) comprising of predominantly oil driven economies are realising that over-reliance on oil has over the years exhibited macroeconomic volatility. The UAE was the first among them to make deliberate efforts to diversify its economy and park its sovereign wealth funds (SWFs) strategically, setting the tone for the others in the group. Moreover, being witness to the shift to more renewable sources of energy and sustainability, they have understood that it would be more economically prudent to expand their non-oil portfolio too. This paper examines how the UAE diversified its economy and positioned itself as a modern knowledge-based economy; a model that can serve as a fine example of perseverance and planning for the others within the GCC and outside it.

**Keywords**: GCC, oil economies, sustainability, climate change, renewable energy, macroeconomic stability

Date of Submission: 20-09-2024 Date of Acceptance: 30-09-2024

# Date of Submission. 20-09-2024 Date of Acceptance. 30-09-2024

#### I. Introduction:

The protracted oil market instability in the second half of the 2010s caused by the impact of the US Shale Revolution (1) and the subsequent slowdown in 2020-2021 owing to the COVID pandemic (2) substantially slowed down the Gulf states' economic growth. The pandemic triggered an unprecedented global, sector-wide downturn in the Oil and Gas (O&G) industry that left the oil-dependent economies vulnerable in terms of fiscal revenue and possibly made them rethink their overdependence on the oil revenue alone (3).

The geopolitical tensions particularly the Russian invasion of Ukraine that followed also emphasised the volatility of the oil market and also altered the market dynamics and tested political and economic relationships. Although the conflict did set up gains and new opportunities for the Arab monarchies of the Gulf, Russia's confrontation with the West brought in fresh challenges for them alongside.

It is largely believed by the Persian Gulf watchers that the invasion of Ukraine generally benefited GCC countries, primarily due to high oil prices boosted by the fallout from the war (4). The subsequent coordinated actions of OPEC+ members (which includes Russia) to reduce oil production in the fall of 2022 and in the spring of 2023 to keep the oil prices high and the restrained reaction of Saudi Arabia and the UAE to the Russian invasion raised the suspicion that the Arab Gulf monarchies were silently forming a new alliance with Russia. While others saw it as naked pragmatism driven by the fact that the Gulf's perception of the war is different from that of the West and that the majority of the GCC didn't regard this conflict as "their war" (5). It was evident that they were clearly interested in maximizing their profits from hydrocarbon exports and maintaining their influence on the oil market, which is expected to remain volatile for years to come (6). The lack of US interest in intervening during the 2019 attacks on the Abqaiq and Khurais oil facilities also altered the foreign policy dynamics and priorities (7). The US stand adopting the so-called NOPEC (No Oil Producing and Exporting Cartels Act) legislation against OPEC further magnified their insecurities already raw from the Shale effect.

Moreover, while Moscow began to make inroads into the traditional GCC export strongholds, and the US reinforced its search for alternatives to curtail their oil dependency, the demand for EV vehicles and the call for reducing the usage of fossil fuels in light of the unprecedented consequences of climate change grew louder and more urgent. With Governments across the globe forced to create additional incentives and a sustainable ecosystem to speed up the energy transition in the long run, the GCC knew that they had to diversify to successfully integrate into the new "post-oil" economic system (8,9). While there is no panic decline yet and oil remains an extremely important pillar of the global economy, rumblings about an economic slowdown in the near future, cooling Chinese demand growth and considerable progress on the deployment of clean energy transition technologies mean that the oil market is set to enter a new and consequential period of transformation (10). In the light of the above, the GCC economies have been proactive in reinventing their revenue model to diversify and make some key investments to ensure their long-term economic stability. The UAE was the first to

take on a more progressive route for its diversification and made an effort to be counted among the most vibrant centre for investment, commerce, and high-end culture. Their growth saw its fair share of challenges along the way, the most torrid being the 2008 slowdown. However, the government persevered and today the change can be witnessed across the GCC. This paper examines how the UAE made a deliberate effort to make the change and how it could be a good model for diversification for other economies looking for economic solidity.

## II. The UAE – Setting The Pace For Diversification Among The GCC:

The United Arab Emirates (UAE) is regarded as the most diversified economy in the GCC. The UAE primarily focused on becoming one of the largest financial, business, and tourist hubs in the world and has also managed to emerge as the fastest growing investment destination in the Middle East region (11,12). The IMF estimates that the UAE will enjoy 4% real GDP growth in 2024 - largely driven by increased investment and continued Government efforts to enhance the economy's non-oil sectors in line with its UAE Vision2031 (13).

In less than a generation, the city-state has spectacularly transformed itself into a major center for investment, commerce, and high-end culture (14). It did not let the 2008 global financial crisis keep it down and it quickly announced its World Expo 2020 which was branded as a mega event for the world. Dubai often called the Singapore of the Desert, has experienced enormous state-directed economic growth, under a visionary leadership that has turned a small city-state with limited natural resources into an important international entrepôt. It modelled itself on the lines of New York, Shanghai, and Las Vegas, through its gleaming glass and steel cityscape and skyline, which more skyscrapers than any other city except New York and Hong Kong. The monarchy worked to build the Dubai brand as a symbol of political stability, safety, tolerance, cultural diversity, and high standard of living, which drew skilled expatriates from across the world. the tax haven tag with all the elements of security made it an attractive destination for investment not only in business but also in real estate as it worked to be a lifestyle destination in the region.

## Trading and airline hub

The UAE's turned its seaports into international and regional hubs to drive economic growth and facilitate its economic diversification. The UAE has several seaports. According to the World Shipping Council, two of the world's top 50 container ports are in the UAE, with Dubai featuring among the top ten. Zayed Port in Abu Dhabi city is dedicated for cruise liners while the Jebel Ali Port - in Dubai city followed the Singapore model that leveraged its key geographic location on the Strait of Malacca to serve as the premier port and transport destination between the Arabian Gulf and the Indian Ocean. In less than five decades, the Port of Jebel Ali has grown into one of the world's ten busiest ports. It is vital to the infrastructure and economy of the entire Gulf region and the centre of the United Arab Emirates' economy, playing a crucial role in the global oil industry, and is the most frequented port of call for the US Navy outside of the United States. Huge strategic investments in the world's largest human-constructed harbour is an industrial marvel whose port operations use cutting-edge tech like Automatic Identification System (AIS) maritime data, autonomous internal terminal vehicles (AITVs), and BoxBay storage.

Like Singapore, apart from seaports, airports are also key to both Singapore's and the UAE fiscal models. UAE is home to some of the best airlines in the world. From the premium services of Etihad Airways and Emirates Airlines to the budget-friendly options of Air Arabia and Flydubai, all considered top global performers in their category. Matched with modern airports, the combination facilitates tourism, a sector that has grown exponentially in the UAE (15, 16, 17,18).

#### **Tourism and real estate**

The World Travel & Tourism Council's (WTTC) 2024 Economic Impact Research (EIR) has revealed a record-breaking year for Travel & Tourism in the UAE, with new peaks achieved across key metrics including the sector's GDP contribution, jobs and visitor spend. The UAE's Travel & Tourism sector is now soaring past all previous records, testament to the country's commitment to attracting tourists from around the world to destinations such as Dubai, Abu Dhabi, and Ras Al Khaimah (19). This feat didn't happen overnight. It has taken meticulous planning and highlight the success of the UAE's strategy in promoting sustainable tourism, supported by its robust and unique infrastructure, event management, sports promotion and other diverse tourist offerings, and commitment to continuous growth, as outlined in the National Tourism Strategy 2031 (20).

To ensure that it stays competitive with the best cities in the world, UAE invested in Architecture to with an unwritten mission of putting the UAE in headlines around the world. From the Burj Al Arab that instantly put Dubai on everyone's radar in 1999 and has since, laid the blueprint for its dazzling skyline, to the Louvre Abu Dhabi that redrafted the city's image as a hub for culture and arts in the Middle East, buildings in the UAE are setting the gold standard for architecture around the world (21,22,23).

The pursuit for excellence has been relentless with the addition of the Sheikh Zayed Grand Mosque, Abu Dhabi, projected as the nation's inclusive spirit, welcoming people of all faith to explore the marble-clad

wonder, the Emirates Towers, Dubai, the Sharjah Art Foundation, Sharjah, the Burj Khalifa, Dubai currently the tallest skyscraper in the world, Louvre Abu Dhabi, the Museum of The Future, Dubai constructed using cutting-edge robotic technology and parametric design, the Bee'ah HQ, Sharjah, a pioneering example of sustainable architecture that meets LEED Platinum standards and the Atlantis The Royal, a shiny new building located on the Palm Jumeirah island, setting new benchmarks in luxury have ensured that Dubai stays attractive to the aspirational global professionals and businessmen.

Strategically keeping up the intense marketing of Dubai as a lifestyle destination despite the exodus of expatriates and mounting competition from neighbouring business hubs and the pandemic, the government opened up the country's famed 'golden' visas to encourage an influx of investors such as Russians seeking to shield their assets, crypto millionaires and rich Indians setting up second homes as the country offered luxury and safety. Sales of homes with a price tag of \$10 million or more climbed 19% in Dubai during the first quarter as the world's ultra-wealthy continue to flock to the Middle East's business and tourism hub despite mounting geopolitical tension across the region (24). Sales of homes with a price tag of \$10 million or more climbed 19% in Dubai during the first quarter of 2024 according to property consultant Knight Frank LLP. Sales on Palm Jumeirah shows that the strategy worked well. To match supply, the government encouraged the development of the Jumeirah Bay Island, a seahorse-shaped piece of land accessible by bridge from the Dubai mainland which serves as a lesson for planning and execution for other cities across the world attempting to declutter and maintain international standards.

Besides slick marketing of real estate, the UAE government, despite not being a sporting nation itself set up state-of-the-art infrastructure to organise world-class sporting events in popular and lifestyle sports to emerge as a premier destination for sports enthusiasts and travelers alike. From football to motorsports, golf to tennis, the country now hosts some of the most prestigious tournaments and championships, by doing so they have not only elevated their profile in the sporting world but has also drawn thousands of visitors who travel specifically to witness these spectacles and enjoy UAE's luxurious hospitality, breathtaking landscapes, and year-round sunshine. The influx of tourists during sporting events provides a boost to the local economy, benefiting sectors such as hospitality, retail, and transportation. From the awe-inspiring Dubai Cricket Stadium to the futuristic Yas Marina Circuit, these venues provide spectators with world-class facilities and unforgettable experiences. The blend of cutting-edge design and breathtaking surroundings adds to the allure of these venues, attracting sports enthusiasts from all corners of the globe.

They focussed on the Formula 1 racing making the UAE synonymous with the extravagant sport thanks to the glamorous Abu Dhabi Grand Prix. The Yas Marina Circuit, with its twilight race setting and captivating track design, attracts motorsport fans from around the world. The event not only showcases the UAE's ability to host high-profile sporting spectacles but also creates a thrilling atmosphere that keeps spectators and tourists coming back year after year. The UAE's remarkable golf courses have transformed it into a golfer's paradise and added value to the surround real estate. With lush green fairways set against stunning backdrops, the country has become a magnet for golf enthusiasts. The UAE used its coastline to provide for exhilarating water sports. From jet skiing and parasailing to scuba diving and deep-sea fishing, the country offers a diverse range of aquatic adventures. The pristine beaches, crystal-clear waters, and state-of-the-art water sports facilities attract thrill-seekers and water sports enthusiasts in its mild winter, creating a thriving sports tourism segment in the UAE (25,26,27,28,29). The World's Coolest Winter campaign, in its fourth edition, introduces a map of key beaches and beach activities in the UAE, including Al Bateen, Al Saadiyat and Al Hudayriyat beaches in Abu Dhabi, Kite Beach, Al Mamzar and Al Sofouh beaches in Dubai, Ajman beach, Dibba Al Fujairah beach, Khorfakkan, Al Khan and Al Hira beaches in Sharjah, Banan beach in Ras Al Khaimah and Al Bayt Mitwahid walkway and beach Umm Al Quwain (29).

# Strategy to be a progressive financial hub:

The strategy to position the UAE as a financial and investment hub saw the unveiling of the the Dubai International Financial Centre (DIFC) spans across 110 hectares (272 acres) in 2004. DIFC operates under the regulation of the Dubai Financial Services Authority, an autonomous regulatory body exclusive to the zone. Additionally, it boasts its own judicial system, the DIFC Courts, which operates independently from both Dubai's legal framework and the federal government of the UAE to auure the investors that they would not have to adhere to the Shari'a rules. As one of Dubai's autonomous free zones, DIFC allows companies to enjoy complete ownership without the requirement of a local partner. Within its premises, DIFC accommodates financial institutions, wealth funds, as well as retail and hotel spaces designated for free zone activities (30).

To make it more attractive the DIFC offers a 50-year tax-free period on corporate income and profits, further supported by the UAE's extensive network of double taxation treaties. This has led to a 19% annual surge in non-financial firms within DIFC, elevating the total count of international companies, family businesses, and corporate service providers to over 3,000 (31). Financial institutions in certain sectors can apply for licenses that come with attractive benefits: 0% tax on income and profits, 100% foreign ownership,

unrestricted foreign exchange and capital/profit repatriation, operational support, and business continuity facilities. The Dubai International Financial Exchange (DIFX) was astutely rebranded as NASDAQ Dubai in 2008.

Keeping pace with the FinTech space, the UAE set up the DIFC FinTech Hive in 2020 which rolled out a startup accelerator program named the 'FinTech Hive Scale Up Programme' for fintech startups across the Middle East, Africa, and South Asia (MEASA) region. Dubai unveiled its initiative in the digital asset sector – the establishment of the Dubai Virtual Assets Regulatory Authority (VARA), the world's first regulator dedicated exclusively to virtual assets. In 2023, Dubai's Virtual Asset Regulator Authority (VARA) hosted some of the world's most successful digital assets and Web3 companies to discuss Dubai's bold new regulator strategy in line with its Dubai Economic Agenda D33 to position Dubai as a top global financial services and talent hub along with New York, London, Hong Kong, and Singapore. VARA makes Dubai one of a handful of global jurisdictions implementing a mature framework for crypto and virtual assets looking to attract U.S. and foreign firms who see the regulatory clarity and certainly that Dubai offers as a commercial de-risking strategy. By creating a world-class fintech and financial services ecosystem backed by a stable, progressive government and regulatory regime dedicated to strategic technologies like blockchain and artificial intelligence, Dubai is ahead in preparing for the future (31, 32, 33, 34,35).

## Renewable energy and sustainability focus to exhibit commitment to climate change:

With its two principal cities, Dubai and Abu Dhabi finding their way into the Top 10 Most Sustainable Cities in the World, the UAE has lived up to its commitment to the environment and sustainability. The UAE's journey from an oil-dependent economy to a leader in renewable energy is a testament to its foresight and adaptability (36). Under the UAE's Net Zero by 2050 initiative, Abu Dhabi's invested in its state-of-the-art renewable energy projects including the (5.6 GW) Barakah nuclear energy plant and the (2-GW) Al Dhafra Solar PV project). This initiative means 55% of Abu Dhabi's electricity in 2025 will come from clean sources and reduce power generation emissions from 40 million tons of  $CO_2$  emissions in 2020 to about 20 million tons in 2025 (37).

It is apparent that the UAE has deployed extensive efforts in driving sustainability with strategic initiatives like the Technology Innovation Institute, located in Masdar City, is home to the Renewable Energy and Sustainability Research Center (RESRC). In 2023, Abu Dhabi Future Energy Company PJSC signed an agreement with the International Renewable Energy Agency (IRENA) to cooperate on a major international knowledge project setting out the means to triple global renewable energy capacity by 2030 underlying the nation's commitment (38).

UAE has invested a great deal in sustainable water resource management solutions. A 2017 World Bank report listed UAE as the fifth driest country in the world, with just 78 mm of annual rainfall (39). Meanwhile, it's in the top 30 countries for water use per person (40). UAE has taken concrete steps for sustainable water management to avoid its dependence on ground groundwater sources, which constituted 50% of its water supplies where levels are declining and energy intensive desalination programs. The Hassyan seawater desalination plant in Dubai, United Arab Emirates (UAE), which its commissioners claim will be the second largest reverse osmosis plant in the world and the largest powered solely by solar energy is scheduled to open in 2026, before becoming fully operational in 2027. It represents a total investment worth  $\in$ 848 million. The UAE has ambitious plans to produce 100 per cent of Dubai's desalinated water using clean energy and waste heat by 2030 (41,42).

With its two principal cities, Dubai and Abu Dhabi finding their way into the Top 10 Most Sustainable Cities in the World, the UAE has lived up to its commitment to the environment and sustainability (36). The UAE's journey from an oil-dependent economy to a leader in renewable energy is a testament to its foresight and adaptability (37). Under the UAE's Net Zero by 2050 initiative, Abu Dhabi's invested in its state-of-the-art renewable energy projects including the (5.6 GW) Barakah nuclear energy plant and the (2-GW) Al Dhafra Solar PV project). This initiative means 55% of Abu Dhabi's electricity in 2025 will come from clean sources and reduce power generation emissions from 40 million tons of CO<sub>2</sub> emissions in 2020 to about 20 million tons in 2025 (38).

It is apparent that the UAE has deployed extensive efforts in driving sustainability with strategic initiatives like the Technology Innovation Institute, located in Masdar City, is home to the Renewable Energy and Sustainability Research Center (RESRC). In 2023, Abu Dhabi Future Energy Company PJSC signed an agreement with the International Renewable Energy Agency (IRENA) to cooperate on a major international knowledge project setting out the means to triple global renewable energy capacity by 2030 underlying the nation's commitment (39).

UAE has invested a great deal in sustainable water resource management solutions. A 2017 World Bank report listed UAE as the fifth driest country in the world, with just 78 mm of annual rainfall (40). Meanwhile, it's in the top 30 countries for water use per person (41). UAE has taken concrete steps for

sustainable water management to avoid its dependence on ground groundwater sources, which constituted 50% of its water supplies where levels are declining and energy intensive desalination programs. The Hassyan seawater desalination plant in Dubai, United Arab Emirates (UAE), which its commissioners claim will be the second largest reverse osmosis plant in the world and the largest powered solely by solar energy is scheduled to open in 2026, before becoming fully operational in 2027. It represents a total investment worth  $\epsilon$ 848 million. The UAE has ambitious plans to produce 100 per cent of Dubai's desalinated water using clean energy and waste heat by 2030 (42,43).

#### **Technology and Innovation hub:**

In a new report titled 'Turning a Tech Hub into a Talent Magnet', Boston Consulting Group (BCG) studied 11 tech hubs around the world that continue to thrive by attracting digital talent from beyond their borders. In particular, BCG analyzed the strategies and mix of policies Dubai has deployed to attract talent has fostered strong client relationships across the region since 2019, and already has a proven track record in delivering game-changing businesses for leading public and private organizations (44). According to the Global Innovation Index 2023ranked the UAE as the number one environment for innovation in the Arab World for the eighth consecutive year and consistently ranked it among the top countries in the Middle East and North Africa (MENA) region for innovation (45), reflecting its commitment to fostering a conducive environment for creativity and entrepreneurship. Moreover, investments in emerging technologies have enhanced the country's attractiveness to foreign investors, driving foreign direct investment (FDI) inflows and stimulating economic growth.

Central to its endeavour for diversification of its economy has been the UAE's innovation agenda and its substantial investment in research and development. Notably, the establishment of research parks such as Dubai Science Park and Masdar City has catalyzed collaboration between academia and industry, fostering a conducive environment for innovation-driven enterprises. Incubators, accelerators, and co-working spaces in both, Dubai and Abu Dhabi provide aspiring entrepreneurs with the necessary support, mentorship, and infrastructure to transform their ideas into scalable businesses. Government-backed initiatives like the Dubai Future Accelerators and the Abu Dhabi Investment Office's Ghadan 21 program, Hub71, Abu Dhabi's global tech ecosystem offer funding and incentives to startups, further fuelling their growth (46,47). The Technology Innovation Institute (TII of the Abu Dhabi Government's Advanced Technology Research Council (ATRC),) has emerged as a global scientific research center attracting the world's foremost scientists and researchers. TII leads worldwide advances in artificial intelligence, autonomous robotics, quantum computing, cryptography and quantum communications, directed energy, secure communication, smart devices, advanced materials, and propulsion and space technologies, and biotechnology fields (48).

Dubai's ambitious Blockchain Strategy with applications spanning healthcare, real estate, and supply chain management is looking at the future. UAE stakeholders are collaborating with US companies—including Amazon, Cisco, Facebook, Google, IBM and Microsoft—to accelerate innovation and the adoption of next-generation technologies (49).

Edelman Trust Barometer, which surveys 32,000 people in 28 countries focused on innovation, found that while the world grapples with disruptive change and hesitation towards the implementation of innovative solutions to address today's challenges, the UAE instead embraces innovation thanks to the country's long-term focus on the issue.

"For example, the UAE was the first country in the world to appoint a minister of AI in 2017 and also establish the Mohammed bin Zayed University of Artificial Intelligence, the first graduate level, research-based AI University in 2019," (50).

## **Healthcare and Education:**

The United Arab Emirates (UAE) government is committed to extensively expand and upgrade its healthcare system and develop a robust world-class healthcare infrastructure. It is investing in Smarter health care to improve the lives and health of citizens through advanced disease monitoring and surveillance, health risk mitigation, and highly technologically advanced and interconnected, smart health ecosystems. The government is emphasizing on digitizing healthcare enabling high-tech diagnostics tools, telehealth, and robotic surgery. The implementation of the National Unified Medical Record (NUMR) is an important step in this direction to Leverage the opportunity presented by big datasets along with breakthrough medical technologies (in genomics, nanotechnology, IoT and sensors) for developing innovative products and treatments.

The past few years have witnessed the UAE government collaborating with several private healthcare providers. For instance, American Hospital Dubai became the first in the MENA to join the Mayo Clinic Care Network. In similar lines, Meraas, a Dubai-based holding company, has launched an outpatient clinic at its City Walk development that would be a member of Houston Methodist's Global HealthCare

Network. UEMedical, part of United Eastern Group, professes to be a leading healthcare development and investment company in Abu Dhabi.

The UAE has partnered with some of the major US medical device giants such as GE Healthcare, Philips Healthcare, Abbott, 3M, and Medtronic. The UAE government, through these collaborations, aims to become self-dependent in terms of pharmaceutical and medical devices. The proactive move by the government and business-friendly environment invites pharmaceutical giants worldwide to expand their geographical presence in the region. A few years back, the UAE government expressed its dream of invigorating 3D printing in healthcare and exploiting the technology for manufacturing medical devices with the disclosure 'Dubai 3D Printing Strategy'. Earlier this year, the Dubai Health Authority partnered with Sinterex, a startup specializing in medical 3D printing, to manufacture 3D printing labs and facilitate 3D printing to the point-of-care at DHA hospitals – Rashid, Latifa, Dubai, and Hatta Hospital.

The UAE government joined hands with Swiss telemedicine provider, Medgate, to create the Abu Dhabi Telemedicine Centre. The Department of Health, Abu Dhabi, launched a 'Remote Healthcare'app to examine symptoms and diagnose non-emergency cases and booking appointments for and remote consultations with the help of artificial intelligence. The Dubai government has also collaborated with several private healthcare companies to digitize its healthcare. Last year, MOHAP, Dubai, collaborated with Swedish health-tech company Brighter to launch Actiste, the world's first service for monitoring and treating people with diabetes remotely.

Post COVID, the government encouraged health startups leveraging on-demand healthcare apps to manage chronic conditions such as diabetes, cholesterols, etc. Health at Hand, MyMedicNow, DoctorUna, and many others have grown potentially well as a complete disruptive branch in the UAE healthcare market.

Healthcare is the top priority of the UAE today as it looks to be one of the world's largest players in medical tourism. In the process, the UAE healthcare presents lucrative opportunities for global private medical device providers and manufacturers.

UAE Medical Tourism Market size was estimated at USD 628.9 million in 2023. During the forecast period between 2024 and 2030, UAE Medical Tourism Market size is projected to grow at a CAGR of 6.11% reaching a value of USD 1,263.16 million by 2030. Increasing healthcare costs in developed economies, growing advancements in medical technology, and the UAE's strategic location is being used to their advantage. The UAE, particularly Abu Dhabi, has world class institutions and facilities that excel in various and are using AI and Robotics including telemedicine and cloud technology, to their benefit making Abu Dhabi a hub for high-quality, accessible healthcare and a growing medical tourism market in the UAE (51, 52, 53, 54,55, 56,57).

The UAE Government recognises the significance of a robust and industry relevant education system to build a knowledge-driven economy for the post-oil era. Earlier the focus was on providing for the tuition fee of their citizens to seek higher education abroad. However, there has been a shift in their approach as they have worked to lay the foundation of good school education by encouraging top International Baccalaureate and other international boards to set up schools in the UAE. They have set new federation-wide standards and better provision for students with learning difficulties promoting a UAE national identity, encouraging parental input and improving training to create home-grown teachers and education professionals in their own state schools that provide more affordable education.

Dubai has created specialist free zones to attract private and international colleges, universities and training bodies. Dubai Knowledge Village (DKV) and Dubai International Academic City (DIAC) are both managed by government body Tecom Investments. DIAC focuses on higher education, while DKV will focus on non-degree and vocational training. Abu Dhabi offers generous endowments to prestigious foreign schools and colleges. Beneficiaries so far include the AED1.6bn (\$436m) Paris-Sorbonne University Abu Dhabi and the liberal arts school, New York University, which received \$50m this year. There are number of international universities from UK, Australia and the US who have campuses in the UAE and many more are exploring the options of using the hub to recruit students from Asia to make the project viable in the face of limited local population and government subsidies for sending their own to top school abroad. Consequently, the UAE has among the world's highest enrolment rates in tertiary education: an estimated 90 per cent of Emirati secondary school students go on to further studies; a fact that underlines the importance they lay on education as a foundation for progressive development (58,59,60).

In 2023, The Ministry of Education (MoE) of the UAE signed a Memorandum of Understanding (MoU) with the Coursera platform to develop an innovative lifelong learning system in the UAE. The MoU will contribute to boosting cooperation between both parties in establishing local and international partnerships to activate credit-recommended content in the UAE. It will also support UAE-based higher education institutions to develop credit-worthy micro-credentials and pave the way for further future cooperation between both parties to contribute to improving the educational system in the country.

"As the UAE continues to establish itself as a hub for startups and multinational corporations, the job market is poised for significant growth and transformation. To keep pace with this change, it is crucial for the

skills ecosystem to adapt and meet the demands of the new economy. A focus on career-relevant, accessible, and flexible learning opportunities, with a strong emphasis on micro-credentials, is crucial in enabling this transition. We are thrilled to partner with the Ministry of Education and support their vision of an innovative lifelong learning system, further establishing the UAE as a global leader in talent competitiveness." said Jeff Maggioncalda, CEO of Coursera on the agreement (61).

#### III. Conclusion:

Economic diversification is a key element of economic development amid the volatility of the world we live in both in terms of the environmental and geo-political context. A lack of economic diversification is often associated with increased vulnerability to external shocks that can undermine prospects for longer-term economic growth. The world's poorest countries, many of which are dependent on one sector revolving around a natural resource like agriculture or minerals, tend to have the most concentrated economic structures. this makes them vulnerable to sector-specific shocks, such as weather-related events in agriculture or sudden price shocks for minerals (62,63). Diversification reduces the risk of economic shocks.

The UAE Government was the more pioneering GCC member that embraced a more progressive approach to diversification as well as the vision it held for the future, its flexible approach and adaption to the change around the globe helped them reinvent themselves despite a few major setbacks like the one in 2008 where expatriates literally abandoned the country. They have shown openness towards learning and forged critical partnerships and collaborations to grow and learn.

In the last half century, the United Arab Emirates has evolved from a small sparsely populated nation reliant on agriculture and fishing, to a modern trading economy. They used their oil wealth to diversity into various sectors and ensured that they keep up or sometimes even set new benchmarks in the sectors they ventured into. Be it construction, innovation in the latest technologies, green energy, real estate, tourism and many others, UAE has never compromised its standards and have well earned their spot among the top five countries in the Global Competitiveness Index.

The relative political stability of the Emirates, combined with a high quality of life, low tax regime, and support for business and small enterprise, has attracted foreign investment, and both regional and international talent. This, in turn, has helped turn the Emirates – and especially Dubai and Abu Dhabi – into a leading trade and tourism hub for the whole region. The Government was quick to set up specialised departments to look into each vertical of their growth. They strategically offered companies a tax-free environment for 50 years, becoming the first country in the region to extend this to firms under foreign ownership. Incentives like 100% repatriation of capital and 50 years' rent-free space secured Microsoft as a flagship tenant. HP, IBM, Oracle, 3M, SAP, and Google soon followed. The 'cluster effect' here has been very powerful, and DIC now hosts many of the most promising and dynamic tech start-ups in the whole region. A new free zone called the Dubai Silicon Oasis Authority was established in 2005 to host promising innovative tech SMEs. The Dubai Technology Entrepreneurship Center was opened as part of this in 2015 and is now giving space and support to more than 500 tech start-ups. The success of the UAE free zones has been recognized internationally; the country now ranks at number one on the 'State of Cluster Development' indicator of the Global Innovation Index.

Keeping their state-of-the-art financial institutions like the Dubai International Financial Center (DIFC) and the Abu Dhabi Global Market (ADGM) outside the Sharia law, made them win the trust of international investors. Finally, their support for R&D has endured that they attract the best talent and maintain the momentum built with the emergence of incubators, accelerators, and tech support hubs.

Startups like Maktoob.com acquired by Yahoo in 2009, Souq.com – acquired by Amazon for more than US\$600 million, Uber's regional competitor, Careem, which is valued at more than US\$1 billion helped inspire next generation of tech start-ups. The venture capital was virtually non-existent in the UAE till 2009 and sensing that this could be a major impediment to the development of a genuinely innovative economy the government encouraged the VC community. In the last decade the VC sector has grown so rapidly that it is now the largest in the Arab world, with the likes of Wamda Capital, MEVP, Beco Capital, and STC ventures as well as Angel investor networks like Womena and Envestors, being actively engaged. Recently the establishment of the Mohammed Bin Rashid Innovation Fund which provides around US\$540 million in government-backed guarantees to commercial lending for both, Emirati and non-Emirati start-ups, and any other company operating in a free zone or elsewhere in the UAE, with the aim of attracting international innovators to establish their business in the UAE has built a huge momentum. The UAE strategically combined world class physical infrastructure, a supportive tax and stable financial regime, a pool of international and regional talent, substantial private capital available for investment in new ideas and government interventions to support the ecosystem to set a fine example of diversification, that has inspired the others in the GCC too. This has had a cascading impact on not only the diversification of economy but also in a more progressive social structure.

Each one of them is clearly aiming for a vibrant post-oil economy. They have clearly set examples of how governments need to act fast to keep up with the changes, adapt to technology, to learn from failures and move ahead with the learning that came from it, embrace talent and be open to collaborations and partnerships that fuel growth (62-72). Their example has not only transformed the GCC countries but can also be used as an example of other economies over dependent on natural resources.

#### **References:**

- [1] Daniel Yergin, The New Map. Energy, Climate And The Clash Of Nations. (New-York: Penguin Press, 2020).

  Https://Documents1.Worldbank.Org/Curated/En/748461627924058675/Pdf/Gulf-Economic-Update-Covid-19-Pandemic-And-The-Road-To-Diversification.Pdf

  Https://Www.Deloitte.Com/Middle-East/En/Industries/Energy/Perspectives/Impact-Of-The-Oil-Industry-Crisis-On-The-Gcc.Html
- [2] Gulf Times, "Russia-Ukraine Conflict Benefits Gcc Hydrocarbon Companies: Moody's", Gulf Times, 8 June 2022

  Https://Www.Gulf-Times.Com/Story/718820/Russia-Ukraine-Conflict-Benefits-Gcc-Hydrocarbon-Companies-Moodys;
  Chen Sim, "The Gulf States: Beneficiaries Of The Russia-Europe Energy War?", Middle East Institute, 12 January 2023,
  Https://Www.Mei.Edu/Publications/Gulf-States-Beneficiaries-Russia-Europe-Energy-War
- [3] Jason Bordoff, Karen Young, "Opec+ Oil Production Cut Shows Saudi Geopolitical Ambitions", Foreign Policy, April 6, 2023 https://Foreignpolicy.Com/2023/04/06/Saudi-Opec-Oil-Production-Cut-Price-Geopolitics-Biden-China
- [4] Https://Manaramagazine.Org/2023/05/War-Iukraine-Gcc-Hydrocarbon-Producers/
- [5] Ben Cahil, "Opec+ Deepens Producer-Consumer Rift", Csis, 6 October 2022, Https://Www.Csis.Org/Analysis/Opec-Deepens-Producer-Consumer-Rift; Grant Smith, Salma El Wardany, "Opec+ Refuses To Heed Consumers' Call For More Oil", Al Jazeera, 31 March 2022
- [6] Trevor Hunnicutt, Jarrett Renshaw, 'U.S. Asks Japan, China, Others To Consider Tapping Oil Reserves', Reuters, 18 November 2021, Https://Www.Reuters.Com/Business/Energy/Exclusive-Us-Asks-Big-Countries-Coordinate-Releases-Oil-Reserves-Sources-2021-11-17/
- [7] Kazunari Kanawa, "Renewable Energy Transition Speeds Up During Ukraine War, Led By China", Nikkei Asia, 14 March 2023, Https://Asia.Nikkei.Com/Business/Energy/Renewable-Energy-Transition-Speeds-Up-During-Ukraine-War-Led-By-China Https://Www.Iea.Org/Commentaries/Oil-Demand-Growing-At-A-Slower-Pace-As-Post-Covid-Rebound-Runs-Its-Course
- [8] The New Arab Gulf: Evaluating The Success Of Economic Diversification In The Uae Social Change In The Gulf Region, 2023, Volume 8 Isbn: 978-981-19-7795-4 Saima Shadab
- [9] Gulf News Report. (2021). Uae Retains Its Lead As Middle East's Fastest-Growing Investment Destination.
  Https://Gulfnews.Com/Business/Uae-Retains-Its-Lead-As-Middle-Easts-Fastest-Growing-Investment-Destination-1.82093842
  Https://Www.Imf.Org/En/Countries/Are
  Https://Www.Project-Syndicate.Org/Commentary/Dubai-Economic-Development-Plan-By-Yasser-Al-Saleh-2016-11
- [10] Https://Www.Executive-Magazine.Com/Feature/Dubai-Vs-Singapore
- [11] Https://U.Ae/En/Information-And-Services/Infrastructure/Civic-Facilities/Seaports
- [12] Https://Spire.Com/Blog/Maritime/What-Makes-The-Port-Of-Jebel-Ali-A-Wonder/
- [13] Https://Whatson.Ae/2024/05/Emirates-And-Etihad-Airways-Among-Top-10-In-Worlds-Top-Airlines-List-Again-For-2024/
- [14] Https://Wttc.Org/News-Article/Travel-And-Tourism-In-The-Uae-Reaches-New-Heights
- [15] Https://U.Ae/En/About-The-Uae/Strategies-Initiatives-And-Awards/Strategies-Plans-And-Visions/Tourism/Uae-Tourism-Strategy-2031
- [16] Ahmed, Rezwan. (2024). The Synthesis Of Architecture In Dubai: Modernization And Contemporary Representation Between 1950 To 2024.
- [17] (Faisal J. Abbas,2015) Dubai Is The Florence Of The 21st Century Https://Monovisions.Com/Vintage-Pre-Oil-Era-In-Dubai-
- [18] Https://Www.Admiddleeast.Com/Story/Most-Famous-Buildings-In-Dubai-Abu-Dhabi-And-Sharjah-Uae
- [19] Https://Www.Hindustantimes.Com/Real-Estate/Dubai-Mansion-Sales-Soar-As-Wealthy-Flock-To-Palm-Shaped-Island-101713269912553.Html
- [20] Https://Www.Weforum.Org/Agenda/2023/03/Sports-Middle-East/
- [21] Https://Www.Dive-Bomb.Com/Article/F1-Puts-The-Uae-In-The-Fast-Lane-For-Tourism-Growth
- [22] Https://Www.Thenationalnews.Com/Business/Travel-And-Tourism/Formula-One-Has-Proved-To-Be-A-Big-Win-For-Abu-Dhabi-Hospitality-1.194271
- [23] Https://Www.Travelandtourworld.Com/News/Article/United-Arab-Emirates-Attracts-Upscale-Tourists-Golf-Tourism/
- [24] Https://En.Aletihad.Ae/News/Uae/4463956/Water-Sports-Make-A-Splash-In-The-Uae-Amid-World-S-Coolest
- [25] Https://Thefintechtimes.Com/Key-Financial-Centres-In-The-Middle-East-And-Africa-Part-Two/
- [26] Https://Maingate.Ae/Difc-5-Key-Points-For-Success-In-Dubai-International-Financial-Centre/
- [27] Https://Www.Forbes.Com/Sites/Lawrencewintermeyer/2023/06/16/Dubai-On-The-Road-To-Becoming-A-Top-Global-Financial-Services-Hub/
- [28] Dubai Economic Agenda D33 | The Official Portal Of The Uae Government
- [29] Https://Www.Forbes.Com/Sites/Irinaheaver/2024/05/16/Dubais-Vara-Two-Years-As-Worlds-First-Virtual-Asset-Regulator/
- [30] Https://Www.Vara.Ae/En/
- [31] Https://Sustainabilitymag.Com/Top10/Top-10-Most-Sustainable-Cities-World
- [32] U.Ae, Smart Sustainable Cities. (2021). Available At: Https://U.Ae/En/About-The-Uae/Digital-Uae/Smart-Sustainable-Cities [Accessed 21 October 2021]
- [33] Https://Www.Powermag.Com/The-Power-Interview-Abu-Dhabis-Plan-For-Renewable-Energy-In-The-Uae/
- [34] Https://Www.Irena.Org/News/Pressreleases/2023/May/Masdar-And-Irena-Set-A-Roadmap-For-Cop28-To-Triple-Global-Renewable-Energy-Capacity-By-2030
- [35] Average Precipitation In Depth (Mm Per Year) | Data (Worldbank.Org)
- [36] World Water Day: A Chance For The Uae To Re-Think Our Use Of Resources | The National (Thenationalnews.Com)
- [37] Https://Www.Aquatechtrade.Com/News/Desalination/Desalination-Membranes-Dubai-Solar-Powered-Plant
- [38] A. Tayar, P.O. Karlsson, C. Decker Et Al., Energy Efficiency In The Uae Aiming For Sustainability. Https://Www.Strategyand.Pwc.Com/M1/En/Reports/Energy-Efficiency-In-The-Uae.Pdf.

- [39] Https://Www.Bcg.Com/Press/15august2022-Dubai-Ranks-Among-Top-Global-Hubs-For-Talent-Innovation
- [40] Https://Www.Wipo.Int/Edocs/Pubdocs/En/Wipo-Pub-2000-2023/Ae.Pdf
- [41] Https://Economictimes.Indiatimes.Com/News/International/Uae/Artificial-Intelligence-Ignites-Dubais-Transformation-A-Hub-For-Innovation-And-Smart-Cities/
- [42] Https://Www.Hub71.Com/Latest-News/Press-Release/Hub71-Welcomes-21-Startups-In-15th-Cohort-To-Abu-Dhabi-That-Have-Raised-Over-Usd-130-Million-In-Funding
- [43] Technology Innovation Institute | Advanced Technology Research Institute | International Center For Technology Research | Tii
- [44] Https://Www.Uaeusaunited.Com/Stories/Uae-Technology-Innovation-Hub
- [45] Https://Www.Zawya.Com/En/Economy/Gcc/Focus-On-Innovation-Helps-Uae-Rank-As-Worlds-Third-Most-Trusted-Nation-Ke0is0s4
- [46] Https://Duphat.Ae/Uaes-Booming-Investment-In-The-Healthcare-Space/
- [47] Https://Www.Blueweaveconsulting.Com/Report/Uae-Medical-Tourism-Market
- [48] Https://Www.Ey.Com/En\_Sy/Industries/Health/Five-Future-Trends-And-Insights-That-Are-Shaping-Uae-Health-Care-Ecosystem
- [49] Https://Www.Ey.Com/En Sy/Services/Technology/Harnessing-Technology-For-Purpose-Led-Growth
- [50] Https://Www.Investmentmonitor.Ai/Sponsored/Uae-Medical-Tourism/
- [51] Https://Www.Medicaltourism.Com/Wmtc/Home
- [52] Https://Www.Thenationalnews.Com/News/Uae/2024/04/08/How-The-Uae-Has-Become-One-Of-The-Worlds-Fastest-Growing-Medical-Tourism-Destinations/
- [53] Setting Up An Educational Institute In The Uae (Middleeastbriefing.Com)
- [54] Https://Www.Meed.Com/The-Uae-Government-Investing-In-Education-For-The-Next-Generation/
- [55] (60)Nowais, S. A. (2024, May 30). Sarah Al Amiri: Uae Plans Major Overhaul Of Government Schools. Thenational. Https://Www.Thenationalnews.Com/News/Uae/2024/05/30/Sarah-Al-Amiri-Uae-Plans-Major-Overhaul-For-Government-Schools/
- [56] Press Release. (2023, February 20). Ministry Of Education And Coursera Sign An Mou To Develop An Innovative Lifelong Learning System In The Uae. Zawya. Https://Www.Zawya.Com/En/Press-Release/Government-News/Ministry-Of-Education-And-Coursera-Sign-An-Mou-To-Develop-An-Innovative-Lifelong-Learning-System-In-The-Uae-Ezpe1rgp
- [57] Paul Brenton, Ian Gillson And Pierre Sauvé From The World Bank Group's Macroeconomics, Trade And Investment Global Practice. The Authors Are Grateful To Michael Roberts And To Sarah Mohan For Helpful Comments And Suggestions. Corresponding Author: Psauve@Worldbank.Org.
- [58] World Bank (2017), Economic Diversification: Guidance Note, Mimeo, Trade And Competitiveness Global Practice, World Bank Group.
- [59] Saif Alfaqaei, Mahmoud Awad, Ayman Alzaatreh, Innovation Management Systems For Public Organizations In The Uae, Journal Of Innovation And Entrepreneurship, 10.1186/S13731-024-00411-6, 13, 1, (2024).
- [60] Pradeep Dwivedi, Jawaher Ibrahim Alabdooli, Rajeev Dwivedi, Role Of Fintech Adoption For Competitiveness And Performance Of The Bank: A Study Of Banking Industry In Uae, International Journal Of Global Business And Competitiveness, 10.1007/S42943-021-00033-9, 16, 2, (130-138), (2021).
- [61] Victoria Heath, Women And The Fourth Industrial Revolution: An Examination Of The Uae's National Ai Strategy, Artificial Intelligence In The Gulf, 10.1007/978-981-16-0771-4\_10, (203-245), (2021).
- [62] Invest Uae (2017) The Uae's Start-Up Ecosystem And Opportunities For Us Investors [Online]. Available From: Http://Usuaebusiness.Org/Wp-Content/Uploads/2017/03/Invest-Uae. Fe. Digital Pdf [Accessed 2. Investors Investo
- From: Http://Usuaebusiness.Org/Wp-Content/Uploads/2017/03/Invest-Uae\_Ee\_Digital.Pdf [Accessed 2 July 2017].
  [63] Ahmed, Ahmed Zain Elabdin. 2015. "The Role Of Diversification Strategies In The Economic Development For Oil-Depended Countries: The Case Of Uae." International Journal Of Business And Economic Development (Ijbed) 3(1): 47–57.
- [64] Al-Hashemi, Hamed. 2016. "The Role Of Institutions In Economic Diversification: The Case Of The Uae." In Economic Diversification Policies In Natural Resource Rich Economies, Edited By Sami Mahroum And Yasser Al-Saleh, 236–66. London And New York: Routledge.
- [65] D'mello, Sandhya. 2019. Fintech To Drive Uae's Growth In 2020. Https://En.Dubai-Freezone.Ae/Articles-About-Bussines-In-Uae/The-Uae-Banking-System.Html.
- [66] Jouaouine, Hassan. 2019. Uae Economic Outlook 2020–2025. Http://Economicforum.Ae/Wp/Wp-Content/Uploads/2019/12/16-Uae-Economic-Outlook-Dr.-Hassan-Jouaouine-Moe English Rev2 N.N.Pdf.
- [67] Shayah, M. Hazem. 2015. "Economic Diversification By Boosting Non-Oil Exports (Case Of Uae)." Journal Of Economics, Business And Management 3(7): 735–38.

How Oil Rich Gcc Nations Are Reinventing Their Economies