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China's Role in Transferring Technology to the United Arab Emirates

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ABSTRACT

This article delves into the ramifications of Chinese investment in the United Arab Emirates (UAE) on technology transfer and economic advancement. The UAE has emerged as a pivotal destination for Chinese investment, particularly in sectors such as infrastructure, energy, and telecommunications. The article scrutinizes the motives driving Chinese investment in the UAE, encompassing strategic considerations, market access, and resource acquisition. It assesses the impact of Chinese investment on technology transfer, innovation, and industrial progress in the UAE, underscoring the opportunities and challenges inherent in these investments. Additionally, the article explores the role of government policies, regulatory frameworks, and institutional arrangements in facilitating or impeding technology transfer from Chinese firms to local industries. By examining the experiences of Chinese investors and their counterparts in the UAE, the article offers insights into the dynamics of technology transfer and economic collaboration between China and the UAE, while also providing recommendations for augmenting mutual benefits and fostering sustainable development.

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Introduction

In contemporary times, foreign policy has become intricately intertwined with economic integration, cultural exchanges, and military cooperation. The diplomatic relations between China and the Gulf Cooperation Council (PGCC) states, namely Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE), have experienced significant growth over the past five decades. These diplomatic ties have been shaped and influenced by both international and regional power dynamics and China's strategic policies (Liu, 2016: 1).

When China embarked on its radical economic reforms with a shift towards capitalism in 1978, the subsequent economic boom led to a surge in energy consumption, particularly in terms of crude oil. The PGCC states were well-positioned to meet China's escalating energy demands, thus initiating strategic, multilateral, and economic relations between the two parties (Saddodin, 2015: 151). Presently, China's foreign policy towards the Middle East is primarily driven by robust economic interests, which are anticipated to further expand. This is evidenced by China's involvement in oil-related infrastructure projects, non-oil investments in initiatives such as the Belt and Road Initiative (BRI), and its engagement in other emerging sectors of the Middle East's economy.

1. Theoretical Framework

China's emergence as a global technology powerhouse and its expanding economic footprint have positioned it as a key player in technology transfer initiatives worldwide. The United Arab Emirates (UAE), on the other hand, has actively sought to diversify its economy and foster innovation-led growth through strategic partnerships with international actors. This theoretical framework aims to provide a conceptual basis for understanding the dynamics of China's technology transfer and its implications for the economic development of the UAE.

1-1. Technology Transfer Theories

In the Oxford dictionary, the definition of technology transfer is emphasized on its international description. But in the intra-border area, this transfer takes place from one industry to another or from one organization to another (Oxford Dictionary).

From the perspective of international technology management, technology transfer means the transfer of basic research from a developed country to a developing country. Technology transfer in the United Nations labor regulations is defined in a general statement as the systematic transfer of knowledge in order to produce products and provide services. (Li_Hua, 2004:22)

1-2. China's Technology Transfer Strategies

By passing the anti-monopoly law in 2008, China has adopted a unified approach of the American and European Union laws. Article 5 of this law, which is a turning point in China's competitive system, allows the competent authorities to declare the technology transfer agreement containing restrictions as valid in case of certain cases:

- The contract will help to improve technology and improve research and development of new products.
- In case of improving the quality of products or helping to reduce costs or improving efficiency or improving product standards or helping to divide work based on expertise
- The agreement will increase operational efficiency and the power of competition with small and medium economic units.

Also, if the contract allows consumers to share in the benefits and does not seriously limit competition, it will be considered legitimate. Of course, the party that included the restriction in the agreement must prove these things. That is, these regulations have been established in

line with the policy of encouraging foreign investment and facilitating the transfer and development of technology (Tian, 2009: 359)

Government-led Initiatives: China's government plays a central role in promoting technology transfer through policies, incentives, and investments in research and development (R&D) and innovation (Li and Meng, 2010).

International Collaboration: Chinese companies engage in technology transfer through partnerships, joint ventures, and acquisitions with foreign counterparts, facilitating the exchange of knowledge and expertise (Wu and Zhao, 2017).

1-3. Economic Development Implications

Knowledge-Based Economy: Technology transfer from China contributes to the UAE's transition towards a knowledge-based economy by enhancing its technological capabilities and innovation ecosystem (AlAbed et al., 2019).

Industrial Upgrading: Chinese investments in technology transfer stimulate industrial upgrading and diversification in the UAE, particularly in sectors such as telecommunications, renewable energy, and artificial intelligence (Liu and AlZarooni, 2020).

1-4. Institutional Framework

Intellectual Property Rights (IPR) Regime: A robust IPR regime is essential for protecting transferred technologies and incentivizing innovation in the UAE-China context (Branstetter et al., 2006).

Government Policies: The UAE government's policies and regulations regarding foreign investment, technology licensing, and knowledge transfer influence the effectiveness and sustainability of technology transfer initiatives (Santangelo and Meyer, 2018).

The theoretical framework outlined above provides a basis for analyzing the complex interactions between China's technology transfer strategies and the economic development of the UAE. By drawing on theories of technology transfer, economic development, and institutional frameworks, researchers can explore the dynamics, challenges, and opportunities associated with China's role in shaping the UAE's technological landscape and its implications for sustainable growth.

2. Development Strategy of the United Arab Emirates

The United Arab Emirates (UAE) has implemented various strategies to drive technological development and innovation as part of its broader vision for economic diversification and sustainable growth. Here's an overview of the UAE's technological development strategy, along with references and documents:

2-1. UAE Vision 2021

UAE Vision 2021 is a national agenda launched by the UAE government in 2010, aimed at transforming the country into a knowledge-based economy and a global hub for innovation by the year 2021 (UAE Government, 2010).

The vision emphasizes the importance of technology and innovation in driving economic growth, enhancing competitiveness, and improving the quality of life for citizens and residents.

2-2. National Innovation Strategy

The UAE launched its National Innovation Strategy in 2014, to foster a culture of innovation, promoting entrepreneurship, and driving economic diversification. The strategy focuses on key pillars such as education, research and development, infrastructure, funding, and legislation to support innovation-led growth (Ministry of Economy UAE, 2014).

3. Science, Technology, and Innovation Policy

The UAE has formulated a Science, Technology, and Innovation (STI) Policy to provide a strategic framework for promoting research, development, and innovation across various sectors.

The STI Policy outlines priorities, goals, and action plans to enhance the country's scientific and technological capabilities, foster collaboration between academia and industry, and attract talent and investment in R&D. The UAE has developed sector-specific strategies and initiatives to promote technological development and innovation in key sectors such as renewable energy, artificial intelligence, aerospace, and healthcare. These strategies include the UAE Energy Strategy 2050, UAE Artificial Intelligence Strategy, and UAE Space Strategy, among others. Documents related to sector-specific strategies can be found on the websites of relevant government entities and ministries, such as the Ministry of Energy and Infrastructure, the Ministry of Artificial Intelligence, and the UAE Space Agency.

3-1. The National Strategy for Innovation

Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, launched a National Innovation Strategy on October 2014 with the aim of making the UAE one of the most innovative nations in the world within seven years.

The strategy will stimulate innovation in seven sectors where innovation is key to excellence: renewable energy, transport, education, health, technology, water and space. Its first phase includes 30 national initiatives to be completed within three years. These include new legislation, innovation incubators, investment in specialized skills, private sector incentives, international research partnerships and an innovation drive within government.

3-2. The Strategy Tracks

1. The first track will establish a stimulating environment for innovation in the form of supportive institutions and laws. It will shape specialized entities such as innovation incubators as well as technological infrastructure to fuel innovation in all sectors. It will also focus on research and development in various innovation fields.
2. The second track will develop government innovation by institutionalizing innovative practices with the support of an integrated system of modern tools. The strategy requires all government entities to reduce spending by one percent and dedicate the savings to research and innovation projects. National training and education programs on innovation will also be launched.
3. The third track will encourage private sector innovation by stimulating companies to establish innovation and scientific research centers, adopt new technologies, and develop innovative products and services. The UAE will attract pioneering international firms in key innovation sectors, establish innovation communities and zones, and support applied research in areas of national priority. It will also enhance the UAE's position as an international center to test innovations.
4. The fourth track will prepare individuals with highly innovative skills by concentrating on science, technology, engineering, and mathematics, including the creation of educational material for schools and universities. The aim is to establish a national culture that encourages innovation and entrepreneurship through partnerships between the public, private, and media sectors.

3-3. The Strategy Sectors

The strategy contains practical initiatives in each of its seven priority sectors:

1. Renewable energy: The strategy will establish a new organization to facilitate decentralized power generation projects such as small-scale solar installations. The

strategy will also encourage innovation in the renewables industry while also supporting applied research in clean technology.

2. Transportation: The strategy will stimulate innovation in air and sea travel as well as logistics. The aim is to provide new products and services, make procedures more effective, and save time. The strategy will also focus on innovation in the field of unmanned drones.
3. Education: The strategy will establish innovation labs in schools and universities as part of a drive to equip students with targeted skills such as critical thinking, problem-solving, creativity, perseverance, and adaptability.
4. Health: The strategy will promote advanced technologies in healthcare services. It will stimulate the growth of the biotechnology and pharmaceutical industries while also working with strategic partners to support medical research.
5. Water: The strategy will seek innovative solutions to the challenge of water scarcity.
6. Technology: Innovation in research and technology.
7. Space: The strategy will support space technology for the purpose of exploration as well as satellite communications and specialized research on terrestrial applications. (uaecabinet.ae)

5. UAE Vision 2021

"UAE Vision 2021" is a national agenda launched by the UAE government in 2010, aimed at transforming the country into a knowledge-based economy and a global hub for innovation, sustainability, and happiness by the year 2021. The vision is built on four key pillars: a competitive knowledge economy, a cohesive society and preserved identity, a safe and sustainable environment, and a world-class healthcare system. It includes specific goals and targets across various sectors, including education, healthcare, economy, infrastructure, and governance, with the aim of achieving sustainable development and improving the quality of life for citizens and residents. "UAE Vision 2071" is a long-term strategic framework unveiled by the UAE government in 2017, outlining the country's aspirations for the next 50 years and beyond. The vision aims to position the UAE as the best country in the world by 2071 across various domains, including education, economy, healthcare, environment, and governance.

It emphasizes the importance of innovation, technology, and advanced sciences in driving sustainable development and ensuring the well-being and prosperity of future generations. "UAE Vision 2071" also underscores the need for proactive planning, collaboration, and global partnerships to address emerging challenges and seize opportunities in an increasingly interconnected and dynamic world. Together, these visions reflect the UAE's commitment to fostering innovation, economic diversification, and sustainable development to achieve its long-term goals and aspirations.

6. United Arab Emirates' Approach to Intellectual Property Rights and Technology

There has always been a significant relationship between the business sector, the law, and the legal protection system. The connection is based on the safeguards that the business world needs to provide a safe environment for products/goods in a certain market. Direct investment is a key instrument in the transfer of technology from one country to another. Attracting foreign investment in support of these transfers, however, is related to the strength of intellectual property rights (IPR) protection. For this reason, this study will also analyze the role of intellectual property (IP) in fostering investments in the United Arab Emirates (UAE).

The UAE seeks to provide a favorable environment for investment, to act as a driving force within the business sector in general and foreign investments per se. The UAE is a member of all the major international treaties, conventions, and agreements concerned with the protection

of IPRs, such as the World Intellectual Property Organization (WIPO), the World Trade Organization (WTO), the Trade Related Intellectual Property Rights Agreement (TRIPs), and the WIPO Copyright Treaty (WCT). The role of IP laws and treaties lies in creating a friendly business legal environment and how a haven is provided for IP holders/owners and their related investments, is an important business consideration. This approach indicates the political and legal will to incentivize investors by providing the requisite legal and judicial safeguards. This legal/judicial framework creates a safety net, facilitating which facilitates a positive business/investment sector.

The UAE's membership in the major IP trade organizations in respect of its obligations is only the starting point for investment interests, as there are also related national IP laws. Moreover, the State accurately and fairly acts against IP infringements, such as copyright piracy and trademark counterfeiting, and this has been a further step in enhancing legal safeguards for foreign investments. IPRs, together with other elements related to ownership, locational issues, and internalization motivation (hereinafter OLI), are all essential elements leading to economic globalization via multinational enterprises.

These enterprises strive to make use of their intellectual property-related assets beyond national borders as a means to spread their boundaries globally; this requires an intellectual property legal/judicial framework that provides sufficient safeguards,³ since IPR protection and foreign direct investment (FDI) are connected. Policymakers should be aware that sufficient IPR protection may be taken for granted by FDI integration in a particular national business sector. (Abdel-Mahdi Massadeh, 2020:429)

In the 2020 edition of the Global Innovation Index, the UAE was ranked 36th out of 131 economies worldwide. The report highlighted the UAE's progress in innovation inputs such as human capital and research infrastructure, as well as innovation outputs such as knowledge and technology outputs (WIPO, 2020).

In the 2021 edition of the Global Innovation Index, the UAE was ranked 34th out of 132 economies worldwide. The country's strong performance was attributed to its efforts in fostering innovation-led growth through investments in research and development, education, and technology infrastructure (WIPO, 2021).

7. China's Foreign Policy Goals

1978 was a profound year in China's history, as it marked the implementation of the so-called "Socialism with Chinese Characteristic" that launched China into the international limelight, which is the term Deng Xiaoping,⁵ the country's leader at the time, instituted economic reforms that aimed to replace the domineering communist ideologies with capitalistic policies required to drive economic growth. Before the Deng Xiaoping era (1978–1990), Chinese foreign policy sought primarily to defend the independence of the countries in which China had its interests. It was important to China that these countries were able to maintain their independence since this promoted good relations with China and, thus, encouraged those countries to welcome Chinese activities within their territory. Today, China's strategy and objectives remain broadly similar. The act of building strong relationships with those countries in which it had economic interests was perceived as a means for China to expand its global influence. In the context of the Middle East, for example, Chinese relationships with several countries were initially based on the pursuit of mutual political interests. In, almost, the two-decade period that preceded Deng Xiaoping's (1978–1990) ascent to power, Chinese foreign policy underwent significant adjustments to eventually reflect the country's political objectives to later achieve and enhance its economic goal afterward (Haghirian and Zaccara, 2023:75).

The economic reforms engineered by Deng Xiaoping also opened a new front in China's foreign policy, where political objectives were relegated behind multilateral economic

engagements. As a result, the Chinese economy grew rapidly, and, consequently, it became a net importer of energy resources. With the Persian Gulf being a key strategic region forthwith, China became increasingly dependent upon the PGCC states to supply its demands. In return, the PGCC states and Iran also became increasingly reliant upon this vital customer. There was an establishment of comprehensive economic cooperation between the PGCC states and China in what was an insurance energy security pillar, or a key to sustaining and to safeguarding Chinese economic growth.

8. China's Middle East Foreign Policy

Many strategic changes have been made to China's Middle East foreign policy ever since the start of informal relations after the Bandung Conference in 1955. China's establishment of formal diplomatic relations in the region started in 1971 with Iran and Kuwait and continued with Oman in 1981, the United Arab Emirates (UAE) in 1984, followed by Qatar in 1988, Bahrain in 1989, and finally with Saudi Arabia in 1990 (Karasik,216:2).

China has significantly deeper ties with the PGCC states as a bloc in the Middle East. This was evidenced by the 2004 commencement of negotiations of the China-PGCC Free Trade Agreement, which sought to provide a much-needed framework for trade and investment between the two partners. Even without a comprehensive trade deal in place, transactions between China and the PGCC has accounted for close to 70% of the trade volume between China and all member states of the Arab League. (Saddodin, 2015: 164) Putting this value in context, the significance of the China-PGCC trade has rapidly grown from under \$10 billion in 2000 to around \$115 billion in 2016, and hit \$160 billion in 2020. (Yumul,2021:43) Beijing has undoubtedly become the PGCC's topmost trading partner. (Gao,2018) Further, both parties are in the process of economic cooperation and transformation.

China and the PGCC states have shifted forward on a transformational course that attempts to define the composition of their prospective economies. However, China has concentrated on a consumer and service-based economy while the PGCC states implement more resilient measures to move beyond oil. One key policy of the PGCC states is to diversify their economies to reduce their dependence on oil and to secure their future prosperity through a wider range of industrial activity (Kliman,2018).

China can be of vital assistance in providing the kind of foreign direct investment, which can help the PGCC states achieve their aims. Moreover, China's strategy involves engaging with the Middle East as part of its "Belt and Road Initiative" policy, under which China has created a cooperative framework known as the 1+2+3strategy. "One" refers to the need for enhanced cooperation in the sphere of energy, encompassing oil and natural gas supplies, and ensuring the safe transit of those resources as part of a mutually beneficial relationship over the long term. "Two" describes the infrastructural components of construction and investment, while "Three" refers to the need for ground-breaking innovations and technological advances in the energy, aerospace, and nuclear sectors through improved cooperation between China and countries in the Middle East. While China explores to intensify advanced manufacturing further, there is an ever-widening possibility for technology transfer and knowledge when conducting projects with the PGCC states.

Further noteworthy is that the PGCC states seek economic diversification and upgrade their position in the global value chain. Thus, there is leeway for further high-skill cooperation and investments in technologically intensive sectors. (Haghirian and Zaccara, 2023: 86).

For example, it was reported by Cheng (2016) that Chinese non-financial investment in the Arab world is set to rise from the 2013 level of \$10 billion to more than \$600 billion in the coming decades. (Cheng,2016:51) The Persian Gulf has geo-strategically displayed a global hub connecting the world. Therefore, the PGCC states and China manage to profit reciprocally from

their non-oil investment and trade in the manufacturing products imported from China and re-export from the region. In 2018, for example, Beijing was Dubai's largest non-oil trading partner, with a \$37.8 billion value of total trade. Accordingly, under a roadmap of the UAE– China century of prosperity, there are advanced drawing methods comprising the plan for the Chinese warehouse of a 5.7 million square meters ensemble with Jebel Ali being a re-export hub for the trans-shipments and the billion-dollar program for the UAE on the project of Vegetable Basket is designated on the new Silk Road initiatives (Gazette, 2019). The projects will be a center pith for importing, and processing from China to the Persian Gulf and exporting, and distributing various goods, including marine, agricultural, and animal products from the region to the world. Moreover, as part of the Digital Silk Road, the development of 5G or other telecommunication networks and Chinese expertise in logistical value chains can be seen as attractive opportunities for partnership. Most of the blueprints for National Visions of the PGCC states classify the importance of 5G technology advancement as a robust digital economy, which the famous Chinese brand, Huawei, has developed (Soliman, 2020:58). By the antagonism between Beijing and Washington surrounding Huawei's advancement of the 5G network globally, the PGCC states will have to navigate this complicated situation without hampering their relations with both regional powers.

9. An Overview of the Relations between China and the United Arab Emirates

Bilateral cooperation between China and the United Arab Emirates diplomatic relations commenced in 1971, when the UAE's first President informed China of the UAE's independence, prompting a series of visits to the UAE by Chinese officials. Sheikh Zayed bin Sultan al-Nahyan, the first President of the UAE, notified Zhou Enlai, the first Chinese Prime Minister, of the UAE's independence on December 3, 1971. Both parties indicated a desire to strengthen their friendship. Following that, China immediately hosted an export product display in Dubai and constructed the Changcheng Trading Center, and the Chinese civil aviation authority opened an office in Sharjah, United Arab Emirates, to commemorate the two countries' strong ties (The National Development and Reform Commission, Ministry of Foreign Affairs and China, 2015).

From 1971 to 2015, the Chinese leader's travels to the UAE sent a clear message that the UAE is a country that plays a crucial role in China's economic development. Significant progress was made at the third session of strategic dialogue, which took place on January 17, 2014, in Beijing. The conversation was co-led by Chinese Foreign Minister Wang Yi and Kuwait's Vice Premier Sabah Al-Khalid Al-Sabah. Wang Yi noted that China and the PGCC nations would undertake mutually beneficial cooperation that has huge potential and is in both sides' basic interests. China is prepared to collaborate with the PGCC to strengthen bilateral political ties with the goal of developing strategic alliances and increasing practical cooperation in all sectors through the establishment of a free trade area (FTA) as a first step (Embassy of the People's Republic of China in Arab Republic of Egypt, 2014).

The PGCC side stated that the PGCC places a high value on the development of friendly ties with China and is eager to further mutually beneficial collaboration, increase friendly exchanges, and push bilateral relations for relentless new advances. With the conclusion of this strategic discussion, the two parties signed the People's Republic of China and the PGCC Member States Strategic Dialogue Plan for 2014-2017 and released the Third Round Press Communication of the PRC-PGCC Strategic Dialogue. The two sides also agreed to back China's plans on the Silk Road Economic Belt and the 21st Century Maritime Silk Road (Ministry of Foreign Affairs of the People's Republic of China, 2010).

The UAE-China Economic Forum, which began in July 2015 in Beijing and was attended by over 500 persons from the public and business sectors, saw the signing of 16 Memorandums

of Understanding (MoU) between the UAE and China in various industries. The forum, organized by the Ministry of Economy in collaboration with the District Court, various economic departments, and the Federation of Economic Chambers, is a key component of His Highness Sheikh Mohamed Bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces' visit to China. The slogan "Sustainable Partnership, Sustainable Investment" aims to strengthen cooperation between corporate representatives, investors, and the leadership of the two countries, under the framework of their partnership that has developed into a partnership strategy that includes 13 main pillars of trade, investment, oil, clean energy, tourism, health, environment, space, construction, and innovative industries, which has been held for three decades (Bafadal, 2018).

On November 1, 1984, the leaders of China and the UAE took the historic decision to establish diplomatic ties between the two nations, particularly by establishing an embassy in Beijing and a consulate general in Hong Kong, while China has an embassy in Abu Dhabi and a consulate general in Dubai (Hua, 2015). Sheikh Zayed and other key officials greeted Yang Shangkun, the then-President of China, at Abu Dhabi airport in December 1989. To revenge the Chinese president's arrival last year, Sheikh Zayed visited China in May 1990 and met with Yang Shangkun at the Great Hall of People located at the western end of Beijing's Tiananmen Square. Aside from political relations, the Sheikh Zayed bin Sultan Al Nahyan Center for Islamic and Arabic Studies was created in Beijing in 1994 with a donation from Sheikh Zayed bin Sultan Al Nahyan during his historic visit to China in 1990.

On July 4-7, 2004, a combined delegation of six finance ministers from the Gulf Cooperation Council (PGCC) and the PGCC Secretary General visited China. At the conclusion of the visit, China and the PGCC published a joint statement stating that the visit was made at the request of the People's Republic of China's government, the PGCC delegation was led by Kuwait's Minister of State Finance, H.E. Mahmoud Abdelkhalik Al-Nouri and included the Minister of Finance and Industry of the State Affairs of the United Arab Emirates, H.E. Mohammed Khalfan bin Kharbash, Minister of Finance and National Economy of the Kingdom of Bahrain, H.E. Abdullah Hassan Saif, Minister of Finance of the Kingdom of Saudi Arabia, H.E. Ibrahim Bin Abdul-Aziz Al-Assaf, Minister of National Economy and Vice Chairman of the State Council of Financial Affairs and Energy Resources, Sultan Amin H.E. Ahmed bin Abdalnabi Macki, Minister of State Finance of Qatar, H.E. Youssef Hussein Kamal, and PGCC Secretary General, H.E. Abdulrahman bin Hamad Al-Attiyah visited the People's Republic of China on July 4-7, 2004, in order to establish and strengthen healthy cooperative ties between the People's Republic of China and the Gulf Arab States Cooperative Council (Yang Sheng, 2022).

During the visit, H.E. Prime Minister Wen Jiabao of the People's Republic of China met with six finance ministers from PGCC member states and H.E. PGCC Secretary General, and official talks were led by Chinese State Councilor H.E. Tang Jiaxuan and Kuwaiti State Finance Minister H.E. Mahmoud Abdelkhalik Al-Nouri on behalf of the Chinese and PGCC sides, respectively. Chinese Trade Minister H.E. Bo Xilai, Finance Minister H.E. Jin Renqing, and State Development and Reform Commission Director H.E. Ma Kai met with PGCC delegation counterparts (CGTN China, 2022). During their consultations, the two sides discussed exploring areas of collaboration between the People's Republic of China and PGCC member nations, as well as expanding bilateral ties. The Framework Agreement on Economic, Trade, Investment, and Technology Cooperation between the People's Republic of China and the Member States of the Cooperation Council for Gulf Arab States was signed by the two parties (PGCC) (Cleric, 2022)

Through various steps, the agreement intends to boost cooperation and technological exchanges in the aforementioned fields, expand bilateral trade exchanges, foster exchanges between the two sides' business groups, and promote joint investment (Devonshire-Ellis, 2022).

To encourage and facilitate the flow of commodities and services between the two sides, they agreed to begin negotiations in the China-PGCC free trade zone to develop and strengthen relations between China and PGCC member states and to lay the groundwork for mutual investment between the two sides in a variety of economic areas. The first round of such talks will take place as soon as feasible in China (Ministry of Foreign Affairs, 2004). After the visit, both parties expressed satisfaction with the outcomes and decided to continue similar exchanges in the future in 2022. (Agencies, 2022).

Hu Jintao, China's sixth President, visited Dubai in 2007 and was greeted cordially by Sheikh Mohammad bin Rashid al-Maktoum, Vice President and Prime Minister of the UAE (Ministry of Foreign Affairs of the People's Republic of China, 2011). Hu Jintao's 2007 visit paid off, as ties between China and the Gulf Cooperation Council (PGCC) have progressively strengthened through three strategic dialogues since 2010. These discussions took place following President Xi Jinping's announcement of the strategic plan in 2013. In 2010, Beijing hosted the first strategic meeting, which led to an agreement on the future of China-PGCC ties. They decided to continue the conversation in order to promote mutually beneficial collaboration and to deepen cooperation in many sectors. In 2011, Abu Dhabi hosted a second strategic dialogue. In this second round of talks, the two sides agreed to enhance and extend cooperation in tourism and finance (People's Republic of China Ministry of Foreign Affairs, 2011). In addition, following the Wenchuan earthquake in May 2008, the UAE government gave more than \$50 million to China, making it one of the world's largest contributions to the disaster-stricken region. The Chinese Prime Minister, Wen Jiabao, attended the opening ceremony of the 5th Summit in January 2012. During the visit, the two sides inked a joint statement on the formation of a strategic alliance (Hua, 2015). Xi Jinping, China's then-Vice President, invited Mohammed bin Zayed al-Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Army, to visit China in 2009 and 2012.

China and the United Arab Emirates (UAE) established bilateral cooperation in 1971, and the two countries' political, economic, and commercial connections have grown since then. China and the United Arab Emirates are key economic partners, and bilateral ties have grown to this day. Since the signing of the People's Republic of China and PGCC Member States' 2014-2017 Strategic Dialogue Plan, the release of the Third Round Press Communication of the PRC-PGCC Strategic Dialogue, and the signing of the 16 China-UAE Memorandum of Understanding (MoU) in 2015 at the China-UAE Economic Forum held in Beijing, the two countries' relationship has grown even closer. The authors seek to explain how China leverages its long-standing partnership with the UAE into diplomatic relations to strengthen economic connections and commercial cooperation between the two countries. This form of study employs qualitative research methodologies as well as primary and secondary data sources (Damayanti and Suharyanto, 2022:2).

10. Partnership Formation

The formation of strategic partnerships is, according to Wilkins, shaped by environmental uncertainty, mutual interests, some shared values, system principles, and leadership involvement. With regard to the China-UAE strategic partnership, we can argue that the formation of this partnership resulted from the two parties' concern over the security of both the Gulf region and China; indeed, the uncertain security environment looms over their strategic partnership. In the 2012 joint statement on establishing a strategic partnership, China and the UAE voiced their support for each other's national sovereignty and territorial integrity and agreed to cooperate in such areas as law enforcement, security, and anti-terrorism.⁴⁴ Moreover, in the 2018 joint statement to establish a comprehensive strategic partnership, the two countries emphasized that the current international and regional situation is experiencing changes and

complicated, accelerating developments, which requires more coordination and cooperation between them in the international and regional affairs to reach a joint understanding”(Bin Huwaidin,2022:300).

Both statements commit the partners to cooperate in facing the uncertain security environment, including combating various threats to state sovereignty. The most significant security issues of concern to the two partners are: (1) the rise of Jihadi Islamic movements such as al-Qaida and The Islamic State (ISIS); (2) the democratization sentiment sweeping the Arab World with the so-called Arab Spring; and (3) the erosion of leadership stability in the Arab countries and its impact on Chinese economic interests and financial investments (Zhu, 2011:12).

It is obvious from the discussion above that the China–UAE partnership is built on a solid foundation of common interests and some shared values. However, the future of the partnership will depend on the following two important factors: the U.S. and Iran. Concerning the first factor, the UAE has been relying on U.S. support for its security. The UAE and the U.S. established a strategic partnership right after the Gulf War of 1991 against Iraqi forces in Kuwait. That was when the U.S. started to consider the UAE as a key partner in the Middle East (U.S. Department of State,2021). while the UAE identifies the U.S. as

an ally. (Embassy of the United Arab Emirates,2021) The incentive to develop a strategic partnership between the two countries stems from their common interest in maintaining the security and stability of the Gulf region against domination by a hostile power. Both countries share the same security concerns over the rise of Iran’s regional hegemonic ambitions and the continuing activities of terrorist groups in the Middle East. They signed a defense framework agreement, the text of which is classified, in July 1994, under which the U.S. uses UAE ports and air bases for its military operations in the region. The agreement allows for the deployment of U.S. forces in UAE. It includes U.S. training of the UAE’s armed forces.⁸⁹ Such an agreement has solidified the strategic relationship between the two

countries and made the UAE rely heavily on the U.S. to provide for its security. The UAE military Forces have participated in many military exercises with the U.S. forces regularly. UAE troops supported the U.S. operations in Somalia, the Balkans, Afghanistan, Libya, and against ISIS.⁹⁰ Their already strong relationship was enhanced by signing the nuclear agreement in 2009, which is set to be a model for U.S. peaceful nuclear cooperation agreements with other states in the Middle East.⁹¹ Their strong relationship has managed also to bring the UAE and Israel together and normalize their relationship, in a historic moment in 2020.⁹² The cornerstone of the U.S.–UAE partnership has been defense sales. Sophisticated weapons including F-16 fighter jets,

the Patriot air defense missile system, and the Terminal High Altitudes Area Defense Missile System (THAAD) have been provided by the U.S. to the UAE. In 2021, the U.S. approved the sale of the F-35, the world’s most dominant multi-role stealth fighter, to the UAE (Bin Huwaidin, 2022:306) placing the UAE among the few countries in the world to have such a fighter.

Conclusion

In conclusion, the ramifications of Chinese investment in the United Arab Emirates (UAE) extend far beyond mere economic transactions. This influx of capital carries significant implications for technology transfer and the broader landscape of economic development within the UAE. While it undoubtedly presents myriad opportunities for fostering innovation, facilitating industrial upgrading, and enhancing global competitiveness, it also introduces a host of challenges and risks that necessitate prudent deliberation and strategic planning from policymakers and stakeholders alike.

By synthesizing and analyzing the key findings gleaned from existing research, this comprehensive literature review has shed light on the multifaceted dynamics underpinning Chinese investment in the UAE. Through a nuanced examination of various dimensions, including economic, technological, and socio-political factors, this review has provided invaluable insights into the complex interplay between Chinese investment, technology transfer, and economic transformation within the UAE context.

Moving forward, it is imperative for policymakers, business leaders, and other relevant stakeholders to adopt a proactive and forward-thinking approach in navigating the opportunities and challenges posed by Chinese investment. This entails devising robust strategies and mechanisms to maximize the benefits of technology transfer while mitigating potential risks, such as intellectual property concerns, labor market distortions, and environmental impacts.

Furthermore, fostering greater transparency, accountability, and collaboration between Chinese investors and local entities will be essential in ensuring the sustainability and mutual prosperity of bilateral partnerships. By leveraging the strengths and expertise of both parties, synergistic collaborations can be forged to drive innovation, foster knowledge exchange, and spur inclusive economic growth in the UAE and beyond.

In essence, this literature review serves as a valuable resource for policymakers, academics, and practitioners seeking to gain a deeper understanding of the intricate dynamics at play in the realm of Chinese investment, technology transfer, and economic development in the UAE. By heeding the insights gleaned from this review and adopting a holistic and collaborative approach, stakeholders can harness the full potential of Chinese investment to propel the UAE towards a more prosperous and sustainable future.

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