

Infrastructure Developing and Economic Growth in United Arab Emirates

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Abstract

In the past thirty years, the United Arab Emirates non oil sector's contribution to GDP has been rising, the rise of a number of advantages of the industry, such as real estate, trade, tourism, construction, finance, shipping, processing industries. This led to the prosperity of the UAE economic market. UAE has a stable political environment and security community, and keep a good relationship with the major countries. Although the UAE is involved in some areas of conflict, but it has no impact on the overall situation. It has a wealth of oil and gas resources, is one of the most affluent countries in the region and the world, of which the government develop a comprehensive development strategy and efforts to develop non oil and gas industry.

Although UAE has the most diversified economy in the GCC, the UAE's economy remains extremely reliant on petroleum(oil). With the exception of Dubai, most of the UAE is dependent on oil revenues. Petroleum and natural gas continue to play a central role in the economy, especially in Abu Dhabi. More than 85% of the UAE's economy was based on the oil exports in 2009. While Abu Dhabi and other UAE emirates have remained relatively conservative in their approach to diversification, Dubai, which has far smaller oil reserves, was bolder in its diversification policy. In 2011, oil exports accounted for 77% of the UAE's

state budget.

The United Arab Emirates attaches great importance to infrastructure construction, and regard it as the basis of economic and social development. Since 70s, the UAE government has invested heavily in the construction of infrastructures, so as to create a favorable environment for foreign capital to enter Dubai. The United Arab Emirates as the most important financial and traffic center of the area, perfect legal system, has clean government and a good investment environment. Although affected by the 2009 Dubai debt crisis and the 2014 international oil prices and other unfavorable factors, but the overall economy is still maintained growth momentum. As an important hub in the Middle East, and the ancient maritime Silk Road of the important station, United Arab Emirates has "The Belt and Road" strategic prospects. In the context of oil prices, the United Arab Emirates non oil economic development is still strong, the development of infrastructure gets maintain stable growth, and investment risk is low.

Keywords: The United Arab Emirates, Infrastructure Developing, Economic Growth

1. Introduction

1.1 Basic situation of UAE

The Arabia peninsula is located in the southeast end, sea transport hub, located in the Gulf into India ocean oil and natural gas resources, proven reserves of about 97 billion 800 million barrels of oil and natural gas reserves of 6 trillion and 90 billion cubic meters, ranking seventh in the world. The oil industry is a pillar industry of the United Arab Emirates, huge stable oil revenue is the main source of Finance in UAE income, making it one of the second largest economy and the richest countries in the world to the bay area. At the same time, in order to reduce the dependence on the oil industry, reduce oil price volatility on economic growth, to achieve the sustainable development of the United Arab Emirates, is committed to the implementation of economic diversification policy, encourage innovation and development, has gradually become a financial, trade, the Middle East logistics, tourism and commodity distribution centers.

The World Bank estimates that the infrastructure projects for which they have provided financing have annually earned on average 17% of the cost of the project for the period 1974-92 (World Bank, 1994).The infrastructure is exposed to damage loss, either from natural disasters, civil disruption, or lack of proper maintenance. Returns were seen to be lowest and declining for irrigation and drainage, airports, railways, power, water supply and sewerage: reasons given were overestimation of the rate of growth in demand for new production capacity, inadequate procedures for assessing demand and network bottlenecks.

At present, more than 2000 enterprises in the United Arab Emirates China business development in local and regional, more than 200 thousand Chinese in work and life, the UAE has become China in the Arabia area's largest export destination and the second largest trading partner. China Arab Economic and trade cooperation achievement is reflected the two economies complement each other, but also the economic interests of the two countries more closely reflected.

1.2 Economic Environment

The UAE is rich in natural resources, long-term political stability, location, infrastructure, social security is good business, relaxed environment, economic openness, the Gulf and the Middle East is one of the most attractive investment in the country. Its investment attraction is: the first is the low tax rate, general goods received only 5% tariff; two port logistics facilities, supporting facilities; three is a one-stop service, network management, service efficient. Especially the turmoil in the international financial crisis and the area since the outbreak, the UAE has become a regional capital flow, logistics port, the area of trade, finance, logistics hub further strengthened. According to the Arabia investment and exports a credit Guarantee Corporation data show that during 2003-2013, the United Arab Emirates to attract foreign investment projects 3437, Arabia accounted for 35.6% of the total country to attract foreign investment projects, the United Arab Emirates has established 3 foreign companies 246, accounting for the total number of foreign companies established in Arabia 36%.

1.3 Infrastructure Projects

With the surging power hitherto unknown in the United Arab Emirates prosperous economy infrastructure development. Residential, tourism, industrial and commercial facilities, education and health care, electricity, communications and ports and airports are carrying changes. Turn the world upside down many emerging infrastructure projects to combine public and private as the foundation, the construction and development of the private sector was awarded more power to participate in infrastructure.

1.3.1 Highway Facilities

United Arab Emirates transportation network is developed whose land transportation is very convenient. All the Emirates are connected by a modern highway, which is one of the best cities in the Gulf of Abu Dhabi. In recent years, the United Arab Emirates has invested heavily in the construction of transportation infrastructure, and efforts to build Dubai, Abu Dhabi an air, water and tourism hub. Driven by the huge investment, the United Arab Emirates infrastructure competitiveness ranked third in the world. Due to the strong dependence on the car, with the city's population growing over the expectation of city, the problem of traffic congestion is serious in Abu Dhabi. The government attaches great importance to congestion management, hoping to develop a suitable transportation system like Dubai. Other emirates in the United Arab Emirates also want to take advantage of Abu Dhabi and Dubai's international appeal, to establish connectivity with the transportation infrastructure. Therefore, the UAE investment opportunities in the field of transport infrastructure is still great.

The United Arab Emirates developed road network, road traffic is very convenient for.2003 years, the national highway network project of the UAE Ministry of public works began to implement an investment of 150 million dirhams, all Emirates Expressway connected into a network, and Saudi Arabia, Oman highway. Between the various Emirates have modern expressways. The UAE highway with a total length of 4030 km, the road of good quality.

There are about 792 thousand vehicles. United Arab Emirates is one of the fastest growing country in the world and one of the determining factors of UAE's growth has been infrastructure investment. UAE's sustained high growth has been supported by large infrastructure investment. In this context, we investigate the impact of infrastructure investment on economic growth in United Arab Emirates for the period 1975-2008. Overall, the results indicate positive and statistically significant impact of public/private capital, telephone line (both fixed and mobiles) and total length of roads on economic growth in UAE. Further, the results reveal that telephone line and total length of roads are the most important infrastructure indices affecting economic growth in UAE. The experience from UAE suggests that it is crucial to apply an economic policy that improves physical infrastructure in order to sustain high growth.

1.3.2 Railway Facilities

The United Arab Emirates railway to the main cargo. The UAE has launched a total investment of about \$11 billion, about more than 1 thousand and 200 km of the Federal Railway project, scheduled for completion in 2018, the railway will accept the Gulf railway network people a total length of more than 2 thousand and 200 km, will Unicom six GCC countries. In 2013, Abu Dhabi launched the city rail project, planning a total length of 131 kilometers, including the subway. Light rail and bus rapid transit.

1.3.3 Air Transport Facilities

The existing international airport 7, helicopter airport 10. In 2013, Emirates airline passenger over 85 million passengers. The Dubai International Airport passenger volume of 66 million 430 thousand passengers, ranked second in the world. There are many China Abu Dhabi flights to the United Arab Emirates and Dubai and other regions.

Abu Dhabi is the largest city in the United Arab Emirates, Dubai, is also the second largest in the area of the Emirates. As the economic transport hub of Europe, Africa and Asia and other places, Dubai will host a hundred times a year international large-scale exhibitions, fairs, investment inviting meeting, and successfully bid for the 2020 World Expo. With the construction and development of many industries, Dubai attract the attention of the world with its active events, talks and other activities.

Since the early 1970s the oil producing countries of the Gulf have become a focus of intense interest worldwide. Most of this interest has centred on the oil giants, Saudi Arabia, Iran, even Iraq and Kuwait. Yet the United Arab Emirates is also among the largest producers, on a par with Kuwait, Nigeria and Libya, with reserves greater than the USA. Given its high economic growth rate, the UAE is an excellent laboratory in which to test and evaluate policies and programmes to effect rapid economic development. The international stature of the UAE far exceeds what its physical size, population and breadth of resources would seem to indicate. As a member of OPEC, the UAE has played a vital role within that body's 'price moderates'. With one of the world's highest per capita incomes and with ambitious development efforts under way, the UAE, not surprisingly, has become a major market for capital and consumer goods, involving substantial foreign services, banking, business and

industry. Based on more than a decade of study, on-site research and interviews with key figures, this book - which mixes the practical with the academic approach - will prove of great value to Middle Eastern and development specialists, students and to the international business and financial communities.

In the process of development in Dubai, the role of Dubai International Airport connecting the world can not be neglected. Over the past 10 years, the rapid growth of Dubai's aviation industry led to the rapid economic growth in Dubai. Dubai Airport connects the world, the spillover effect of the aviation industry and the role of catalytic efficiency is huge, which promote the prosperity and development of other industries, including tourism, logistics, financial services and other professional services.

1.3.4 Water Transport Facilities

The UAE has a total of 16 modern port, which has 9 port container terminal, warehousing and other advanced facilities. The port berths of more than 200, of which 80% berths in the emirate of Abu Dhabi and the emirate of Dubai port. 1971 of the founding of the United Arab Emirates port handling capacity of 2 million tons, has increased to 40 million tons right. The main ports along the Gulf of Arabia: the emirate of Abu Dhabi port Khalifa, port Zayed, port Rachid and port Jeb Ali free zone of the emirate of Dubai, the emirate of Sharjah Harold port, port of Ras Al Khaimah emirate Sagar angle. There are Sharjah Emirates Oman coast Cole fouquin in Hong Kong, the emirate of Fujairah the port of Fujairah. The 50 former port Rachid and Cole fouquin in Hong Kong is the world a large container terminal.

1.3.5 Communication Facility

At present, the per capita Internet usage ratio is high, ranking first in the country in the Middle East in the United Arab Emirates, 51% of consumers have had online shopping behavior, ranked first in the region. There are various types of Middle East. About 8713, 1347 of them have been shielding can browse the Internet mainly by the United Arab Emirates. United Arab Emirates Emirates integrated Telecommunications Company and the two communications company supervision, other companies currently only renting the cable, to provide services.

1.3.6 Power Facility

The United Arab Emirates in 2013 the installed capacity of 27374 MW. Nearly 97% of the electricity production using natural gas as fuel, the remaining 3% is the use of oil, coal and renewable energy grid, completed in 2011 the GCC unified transmission system between members in an emergency when sending electricity power.

2. Drivers of Infrastructure

The main factors that determining the appropriate supply of infrastructure are the size and the age structure of the population. Hundreds of millions individuals are expected to reach working age (14 years) in the UAE region in the next two decades (270mn of whom are in India). In the demographic transition with declining overall dependency rates, we could observe a growing labor force, making particularly critical that economic-focused.

Infrastructure is provided to foster job creation.

Across cities in emerging countries a boom is underway in power generation, aqueducts, water and sewage systems, commercial property, office space, ports and airports. Often governments and private sector are acting in tandem deploying unprecedented amounts of capital. The Boston Consulting Group (BCG) estimated that between \$35-40bn annually would be required to meet the rising demand for infrastructure development at a global level. BCG also estimates that governments would be able to fund almost half this requirement.

The UAE is rich in natural resources, long-term political stability, location, infrastructure, social security is good business, relaxed environment, economic openness, the Gulf and the Middle East is one of the most attractive investment in the country. Its investment attraction is: the first is the low tax rate, general goods received only 5% tariff; two port logistics facilities, supporting facilities; three is a one-stop service, network management, service efficient. Especially the turmoil in the international financial crisis and the area since the outbreak, the UAE has become a regional capital flow, logistics port, the area of trade, finance, logistics hub further strengthened. According to the Arabia investment and exports a credit Guarantee Corporation data show that during 2003-2013, the United Arab Emirates to attract foreign investment projects 3437, Arabia accounted for 35.6% of the total country to attract foreign investment projects, the United Arab Emirates has established 3 foreign companies 246, accounting for the total number of foreign companies established in Arabia 36%.

The UAE has rich resources of oil, which has proven reserves of 97 billion 800 million barrels (about 133 tons), ranking seventh in the world. Oil and gas production occupies a very important position in the UAE economy. Oil production mainly in the UAE emirate of Abu Dhabi. Abu Dhabi oil industry is in the mature period, according to the current production and the calculation of reserves, but also the production of more than 120 years. The emirate of Dubai's oil industry in the depletion period, Limited reserves, according to the current production and reserves calculation, most can be mined for 20 years. The other emirates in the development, exploration for oil phase. The UAE current oil production of about 2 million 800 thousand barrels per day, plans to 2017 Nissan amount.2011 increased to 3 million 500 thousand barrels to 2015, the United Arab Emirates energy total investment will reach \$14 billion.

3. Role of Infrastructure Investment in Economic Growth & Development

3.1 The role of Infrastructure Related to the Investment in UAE

The United Arab Emirates has been significantly effective in reducing its dependence on oil and turning it into a strategy of diversifying its economy. This has done a good cushion for the recent decline in oil prices, the UAE's economy has not been affected too much, which also let the United Arab Emirates in the international economic status can keep a foothold. Over the past ten years, the United Arab Emirates has made great progress in infrastructure development.

Health and education are the most important sectors for the people. In recent years, the

United Arab Emirates' investment for health almost doubled, rising from 11.8 billion UAE dirhams to 38.2 billion UAE dirhams. The United Arab Emirates has the world's highest global kindergarten enrollment rate (93%), and the high school graduation rate also rose to 93%. In the past ten years, the United Arab Emirates for public education investment increased by 57%, and it will invest 9 billion 750 million UAE dirhams on public education every year. The United Arab Emirates in the world's competitiveness is growing. Although the United Arab Emirates in many areas are ahead of many countries in the Middle East, but in some areas the development of international is particularly evident. For example, the quality of public infrastructure, roads, shipping and air facilities, public safety, female university enrollment rate and government efficiency. For ten years, the United Arab Emirates has also become more secure and convenient.

The economy of the United Arab Emirates is the second largest in the Arab world (after Economy of Saudi Arabia), with a gross domestic product (GDP) of \$570 billion (AED2.1 trillion) in 2014. The United Arab Emirates has been successfully diversifying its economy.

Although UAE has the most diversified economy in the GCC, the UAE's economy remains extremely reliant on petroleum (oil). With the exception of Dubai, most of the UAE is dependent on oil revenues. Petroleum and natural gas continue to play a central role in the economy, especially in Abu Dhabi. More than 85% of the UAE's economy was based on the oil exports in 2009. While Abu Dhabi and other UAE emirates have remained relatively conservative in their approach to diversification, Dubai, which has far smaller oil reserves, was bolder in its diversification policy. In 2011, oil exports accounted for 77% of the UAE's state budget.

Tourism is one of the bigger non-oil sources of revenue in the UAE, with some of the world's most luxurious hotels being based in the UAE. A massive construction boom, an expanding manufacturing base, and a thriving services sector are helping the UAE diversify its economy. Nationwide, there is currently \$350 billion worth of active construction projects

The government has committed to reduce dependence on oil resources, and other departments through the increase in GDP proportion to diversify the economy, in order to protect the economic growth in the world oil price shocks. At the same time the government also encourages the private sector to increase in economy development, and provide new opportunities for national the United Arab Emirates. Economic development of three main goals: to achieve long-term stable economic development; economic diversification; direct investment to attract foreign and local.

The United Arab Emirates become committed to the development of a number of areas of the area distribution and transfer station. Through the development of railway network, the UAE hopes to establish itself as an important transportation hub of goods import Bay area. Founded in 2010, the UAE federal railroad is gradually implementing a total investment of \$8 billion 200 million, a total length of 1100 km of railway projects. In addition to the main town connection, the UAE's airport, commercial center and tourist attractions, the long-term goal of the project is the connection between the UAE and other Gulf countries, the Gulf countries to promote regional trade and the bay area and the emerging economies of Africa's

trade. The first phase of the project mainly for the transportation of goods, transport 30 million tons of cargo annually, at present all the contract has been completed, the construction work is expected to commence soon. The two phase of the project plans to connect the UAE and Saudi Arabia and Oman two Border, is expected to be related to the end of 2013 to start.

The UAE's oil and gas production mainly rely on Abu Dhabi's national oil company (adn0c) subsidiary of ADCO, ADMA, zadc0 and other companies. Abu Dhabi's oil production accounts for more than 96% of the total oil the United Arab Emirates. Abu Dhabi will be the next five years to invest 25 billion US dollars in support of Sea Oilfield. The total output of Abu Dhabi currently onshore oil and the offshore oil nearly 3 million barrels / day, plans to 2017-2018 years, the proportion of the total production and other sectors in GDP to diversify the economy, in order to protect the economic growth in the world oil price shocks. At the same time the government also encourages the private sector to increase in economy development, and provide new jobs for the national economic development. The UAE three main goals: to achieve long-term stable economic development; economic diversification; attract foreign and local straight Then invest.

The UAE is China important economic and trade partner in West Asia and North Africa. The UAE is Chinese in West Asia North Africa's largest export market and transit center, the second largest trading partner. Over the years, Chinese and the United Arab Emirates to play their respective comparative advantages, continue to expand and deepen mutually beneficial cooperation, expand bilateral trade, encourage mutual investment, promote financial cooperation and development the market continued stable development of bilateral economic and trade relations, and fruitful and productive. Chinese enterprises in the United Arab Emirates business is from the commodity, the project contract to finance, logistics, new energy, tourism and other areas continue to expand, cooperation has been developed from a simple trade and contracting to investment, joint ventures and other changes.

3.2 Investment Environment

Many of the new investments (such as gas pipelines) seem viable on commercial terms and often suitable for partnership with private investors. For many other infrastructure investments, PPP is emerging as the preferred instrument 11, where the private sector gets its normal financial rates of return while the public sector partner provides concessional funding based on the long-term direct and indirect benefits to the economy.

The implementation of open monetary policy, currency convertibility, Dirham, although the two countries have signed a currency swap agreement, but in the actual transaction are still in U.S. dollars for the settlement of intermediary, international banks and domestic banks in Afghanistan are promoting the use of RMB. Dubai hopes to become the middle second RMB clearing center. According to the UAE National. Daily reported recently, after Doha became the first RMB clearing center in the Middle East, the Dubai international financial center (DIFC) also hope that the establishment of the RMB center, to support the growing Arab bilateral trade. The UAE foreign exchange restrictions, can be remitted freely, but shall comply with the provisions of the anti money laundering of the UAE government. Under the condition of foreign investment capital and profit return is not restricted; foreign banks in its

profits remitted abroad before, must be obtained prior to the Central Bank of the United Arab Emirates Agree, and the net profit of 20% as a tax paid to the government of the United Arab Emirates. The UAE for foreigners to carry cash exit regulations. No foreign companies in the UAE to open a foreign exchange account without special provisions, but must be submitted in the United Arab Emirates registered company parent company business license, business license, financial statements, the parent company signed by the authorized person information and other materials.

Although UAE has the most diversified economy in the GCC, the UAE's economy remains extremely reliant on oil. With the exception of Dubai, most of the UAE is dependent on oil revenues. Petroleum and natural gas continue to play a central role in the economy, especially in Abu Dhabi. More than 85% of the UAE's economy was based on the oil exports in 2009. While Abu Dhabi and other UAE emirates have remained relatively conservative in their approach to diversification, Dubai, which has far smaller oil reserves, was bolder in its diversification policy. In 2011, oil exports accounted for 77% of the UAE's state budget.

Dubai suffered from a significant economic crisis in 2007-2010 and was bailed out by Abu Dhabi's oil wealth. Dubai's current prosperity has been attributed to Abu Dhabi's petrodollars. Dubai is currently in extreme debt. The UAE government has worked towards reducing the economy's dependence on oil exports by 2030. Various projects are underway to help achieve this, the most recent being the Khalifa Port, opened in the Emirate of Abu Dhabi at the end of 2012. The UAE has also won the right to host the World Expo 2020, which is believed to have a positive effect on future growth, although there are some skeptics which mention the opposite.

Over the decades, the Emirate of Dubai has started to look for additional sources of revenue. High-class tourism and international finance continue to be developed. In line with this initiative, the Dubai International Financial Centre was announced, offering 55.5% foreign ownership, no withholding tax, freehold land and office space and a tailor-made financial regulatory system with laws taken from best practice in other leading financial centres like New York, London, Zürich and Singapore. A new stock market for regional companies and other initiatives were announced in DIFC. Dubai has also developed Internet and Media free zones, offering 100% foreign ownership, no tax office space for the world's leading ICT and media companies, with the latest communications infrastructure to service them. Many of the world's leading companies have now set up branch offices, and even changed headquarters to, there. Recent liberalisation in the property market allowing non citizens to buy freehold land has resulted in a major boom in the construction and real estate sectors, with several signature developments such as the 2 Palm Islands, the World (archipelago), Dubai Marina, Jumeirah Lake Towers, and a number of other developments, offering villas and high rise apartments and office space. Emirates (part of the Emirates Group) was formed by the Dubai Government in the 1980s and is presently one of the few airlines to witness strong levels of growth. Emirates is also the largest operator of the Airbus A380 aircraft. As of 2001, budgeted government revenues were about AED 29.7 billion, and expenditures were about AED 22.9 billion. ADE progress in installing new, sustainable methods of generating electricity. This is evidenced by various solar energy initiatives at Masdar City and by other renewable energy

developments in parts of the country

Natural conditions and a single resource situation formed the United Arab Emirates and other Gulf countries a single oil economy structure. In recent years, in order to change this single economic model, the United Arab Emirates invested heavily in infrastructure construction, development of agriculture, improve the investment environment, aiming to attract foreign investment. At the same time, the United Arab Emirates actively encourage the development of processing industry and finance, insurance, tourism and other services, thus, Gulf countries have made some progress in the diversification of economic sources. Under the impetus of the rich oil resources and government investment, the infrastructure construction industry is becoming more and more prosperous. The UAE's economic development strategy in general is basically in line with its own situation and the situation in the region. On the whole, the United Arab Emirates is still one of the most important international investment markets in the world today.

4. Financing Infrastructure in UAE & Role of Developing

Convenient infrastructure is the cornerstone of a country's economic development. Dubai, the chief of the Dubai, for example. As early as 1970s, the government will put infrastructure in an important position in the field of investment. Huge sums of money for foreign capital to enter the Dubai has created a good condition. In terms of air transport, Dubai International. The airport is the largest airport in the Middle East, and continues to expand. The title is expected in 2015 Malaysia. The largest airport's International Airport will become the United Arab Emirates routes to Dubai as the node. The government of Dubai Airlines. The construction of attention, not only let Dubai become an important transport hub of the region, but also become the world's three A large sailing line hub. Even after the crisis in Dubai, the city is still the rapid development of aviation. Aviation accessibility change index. 2009 to Dubai in 2013 13.3, ranked second in the world. According to News media reports, to the 2015 Dubai plans to receive 15 million foreign visitors.

The airport service industry in Dubai has become another important new industry. According to one estimate, Mark Thum. The International Airport fully completed when the jobs will reach 750 thousand.

In addition, the United Arab Emirates free trade zone is equipped with a modern port and container station, coupled with its link to Europe. Location in the three continents of Asia and Africa, the United Arab Emirates import goods can be distributed easily to the ground. Countries in the region. The UAE also plans to invest \$10 billion 900 million in 2014 to 2015 years to build a connecting base (Shah) and Ruvis (Ruweis) railway, linking the natural gas field and petrochemical plants.

4.1 Macroeconomic Situation in UAE

In recent years, the economy has maintained sustained and rapid growth. In 2006, the UAE gross domestic product (GDP) for 599 billion 200 million dirhams, or about \$164 billion, and an increase of 10%. According to the calculation of the total population, the per capita GDP of \$36 thousand. Petroleum, manufacturing, trade, construction and real estate is the highest

share of the top five industry accounted for GDP in the United Arab Emirates. The implementation of the strategy of economic diversification results. According to the statistics data show that in 2006 the UAE Ministry of economy, the non oil sector of the economy value is 376 billion Dirham (21 billion 200 million dirhams), compared to 2005 growth of 77.3%, the contribution rate of GDP reached 63%., the non oil sectors of Dubai's economy reached 94.9%.

With the increase of economic strength, national competitiveness in the United Arab Emirates gradually emerge. The UAE in the world's 40 most developed economies of scope ranked 29. According to a report in Britain "EIU" recently released forecast, affected by the oil boom in recent years, in 2007 the UAE economy will continue to maintain strong growth, growth rate this year is expected to GDP growth in the first 10 countries the fastest ranked ninth, reaching 8.2%. Launched in April this year, the world economic forum "in 2007 Arabia National Competitiveness Report", the 13 Arabia state was named selected in the most competitive countries, followed by Qatar and Kuwait with radiation effects on the surrounding market. Increasingly, the UAE foreign trade continued growth in 2006, the United Arab Emirates import and export amounted to \$224 billion, of which exports \$140 billion 400 million, an increase of 21%; imports \$83 billion 600 million, an increase of 3%, a surplus of \$56 billion 800 million. Among them, the total exports of non oil commodities amounted to \$100 billion 800 million, compared to 2005 (\$81 billion 800 million) growth of the main export products are: 23%. oil and refined products, natural gas, aluminum and basic metals, mineral products, rubber plastic products are mainly exported to China; India, Iran, China, Saudi Arabia, Bahrain, Iraq, the United States, Kuwait, Japan, Pakistan, Yemen. The main imported products are: mechanical, electrical and electronic equipment, automotive, aircraft and other transportation tools, precious stones, jewelry, textiles, basic metals, chemicals; major importing countries as India, Japan, Germany, France, and China. The United States, Britain, Italy, Switzerland, Saudi Arabia, the United Arab Emirates. Foreign direct investment (FDI) has become a strong growth momentum, the Middle East and West Asia to absorb FDI in most countries. According to the joint meeting (China World Trade Center UNCTAD, United Nations Conference on Trade and Development) statistics, in 2005, the United Arab Emirates to absorb FDI amounted to \$12 billion, more than Saudi Turkey and the Middle East to become the absorption of FDI. Most of the UAE has absorbed more than 1/3 of foreign investment in the West Asia region, 2005 FDI absorption increase of up to 85%, becoming the world's highest FDI growth in the country the United Arab Emirates. High growth of GDP and increasing demand for oil to promote the United Arab Emirates FDI absorption process.

Theoretical Framework Infrastructure Index and Data Sources:

$$Y = f(K, K_{pub}, LF, I).$$

Where Y is gross output produced in an economy using inputs such as private (K) and public capital (K_{pub}), labour force (LF) and supporting infrastructure stock (I) Countries in the UAE region that have gone through years of war (e.g. Iraq, Sudan, Lebanon etc.) are in urgent need of reconstruction including the rebuilding of basic infrastructure, with the recent Middle East turmoil only adding to this burden. For example, poor existing infrastructure conditions and

estimating the potential demand in coming years led the Iraqi government to increase its capital budget by 22% this year, allocating close to USD 25bn to spend on capital projects. Additionally, separate plans by the Ministry of Planning and the National Investment Commission estimate an investment of USD 186bn and USD 150bn over the next five and fifteen years respectively, to be spent on large-scale infrastructure projects (Source: EIU). The need of the hour is to address the demographic and socioeconomic factors which are the root cause of the protests: income and wealth disparities across and within countries of the region; to reconstruct the countries that have collapsed in the past months; and to develop programs that address small and medium enterprises and infrastructure development among others, while leading towards greater economic diversification, employment generation and bridging the wide income gap. There exists a gap in the region of a Reconstruction and Development Bank that could provide the funds and encourage greater private sector participation in this regard.

Economic Analysis

In recent years, the UAE has been implementing fiscal policy for 1994 years, the deficit GDP 7.9% of GDP, 17% in 1998 (the main reason is that oil revenues in 1998 34% less than the previous fiscal year). 2000 year deficit of \$664 million. The main reason of the high deficit is a senior government official's salary increase again, the staff training costs also increased. The deficit is the main source of funds through government controlled bank overdrafts, sell overseas property or business overseas property income.

Foreign workers account for the UAE labor market 90%, some in the private sector, 99% of employees are foreigners. To curb illegal immigration and "heigong" problem, better management of the labor market, improve the efficiency of management, the United Arab Emirates issued a new "labor law" in October 1, 1996, for violating immigration regulations increase the penalties. 10% of the population of the United Arab Emirates (accounting for about 20% of the labor market) in the month of 1996 8-10 departure.

"Emirates" is the goal of the government's efforts to increase employment of citizens of the United Arab Emirates, in addition to taking measures to persuade and encourage, the UAE government has also adopted legislation. Promote the UAE citizens to achieve employment (from the beginning of January 1999, the UAE banks must increase at an annual rate of 4% in the United Arab Emirates employees, by 2009, the United Arab Emirates employees accounted for the proportion of employees in the banking industry to reach 40%). Among other measures, prohibited from certain countries enter non technical workers.

Along with the economic openness, market liberalization, and promote the free flow of goods and capital policy implementation, the private sector occupies an important position in the UAE economy. In order to increase employment, accelerate economic diversification, enhance the vitality of enterprises, improve economic efficiency, reduce enterprise subsidies on government financial burden, The UAE federal and emirate is gradually to hydro power, health care, transportation and other public projects to private. The proportion of private economy in the national economy is rising year by year. According to the Federal Chamber of Commerce reported that private sector output has now accounted for UAE GDP 40%.

The private sector also has foreign investment, such as the United Arab Emirates in the private sector in Sultan's oil and agricultural investment has reached 1 billion 400 million Dirhams and will also and Sultan government signed 1 billion 700 million dirhams a joint venture agreement.

Private sector investment in the United Arab Emirates from 8 billion 200 million in 1975 Dirham, increased to 16 billion 900 million in 1985 to 2000 dirhams, increased to nearly 20 billion in 1999 years, they in the field of industrial investment reached 7 billion dirhams, while in service and the field of real estate investment reached 9 billion 200 million dirhams. The private joint-stock company reached 112. They complement the public sector to achieve the goal of economic development in the United Arab Emirates.

4.2 Financing Infrastructure in UAE

Responsible for the management of the federal government of the United Arab Emirates investment foreign trade department is mainly the Ministry of economic affairs. The Ministry of economic functions mainly include: the development of economic and trade policies; laws and regulations to standardize trade and economic activities; economic operation detection, to protect the interests of consumers; management of domestic investment, attract foreign investment; coordinate the relationship between government departments and enterprises in addition to economic. Department, 7 Emirates are equipped with the chamber of Commerce, chamber of commerce is a semi official institutions, the main functions include: the implementation of the Emirates closed trade policy; management of the Emirates Private Companies and enterprises, and the company responsible for the business registration, business license and business will be issued a certificate of membership and other matters; for the Emirates China Chamber of Commerce and industry members to provide relevant economic and trade and other aspects of the market information, the customer.7 Emirates Business Federation United Federation The chamber of Commerce (FCCI), headquartered in Abu Dhabi, is mainly responsible for coordinating the relationship between the Emirates chamber of Commerce and industry, organizations to participate in the Emirates commercial activities, promote foreign exchanges and cooperation. The UAE entrepreneurs in the UAE is loose federal state, in addition to defense, foreign relative unity, economy, trade, investment and other aspects of the self-contained Emirates, some of the federal government to strictly enforce the law in the Emirates. The UAE has not been implemented free economic policies, foreign trade import and export free. In addition to military equipment and weapons by the government unified import, no restrictions like consumer goods and machinery and equipment. Large government procurement unified bidding by the government. The current imports of the United Arab Emirates trade law are mainly commercial agency law, trademark law, insurance law, audit law and commercial law. In recent years, in order to adapt to the new economic situation, A lead amendment to the Ministry of economic law, including corporate law, investment law, bankruptcy law, the law of intellectual property rights, including the 10 law, which the new federal law of commercial companies have been issued in April 2015

In recent years, the UAE economy maintained a sustained and rapid growth of 2006 years,

the United Arab Emirates Gross domestic product (GDP) for 599 billion 200 million dirhams, or about \$164 billion, an increase of 10%. According to the national population, the average per capita GDP reached US \$36 thousand,

Construction and real estate is the highest share of the top five industries in GDP.

Economic diversification strategy has achieved remarkable results in the UAE. Data show that: in 2006, the non oil sector of the economy value is 376 billion Indira Tim,

Than in 2005 (21 billion 200 million dirhams) growth of 77.3%, the contribution rate of GDP reached 63%. Among them, the proportion of Dubai's non oil economy reached 94.9%.

Industry	value	ratio
Non-financial sector	5312	88.65153538
Agriculture, animal husbandry and Fisheries	122	2.036048064
Mining industry	2246	37.48331108
Processing industry	724	12.08277704
Electricity, water, gas	95	1.585447263
Building	451	7.52670227
Wholesale, retail and maintenance services	625	10.4305741
Catering and hotel	104	1.73564753
transport Transportation, storage and communication	385	6.425233645
Real estate and business services	461	7.693591455
Social and private services	87	1.451935915
Finance	357	5.957943925
Government	390	6.508678238
Housekeeping service	26	0.433911883
A total of	5992	100

Source: UAE is the Sixth internationally in Infrastructure Quality, 2010

The United Arab Emirates ranks 29 in the world's 40 most developed economies, according to the British economist intelligence Library recently released a report predicted by the impact of the oil economy in recent years, the impact of the boom, 2007 .The UAE economy will continue to maintain strong growth in the year, the growth rate is expected to be the fastest growing GDP this year .Ranked ninth in the top 10 countries, reaching 8.2%. In April this year, the world economic forum launched. In 2007 Arabia national competitiveness report, the United Arab Emirates was named the 13 selected 2006 United Arab Emirates GDP situation in all sectors of the economy Arabia is the most competitive country in the world, followed by Qatar and Kuwait.

Empirical Results

2006, the United Arab Emirates import and export volume reached 224 billion U.S. dollars, of which exports 140 billion 400 million U.S. dollars, an increase of 21%; imports \$83 billion 600 million, an increase of 3%, the surplus of 56 billion 800 million U.S. Yuan. Among them, the total exports of non oil commodities amounted to 1,00 \$800 million, compared to 2005

(81 billion 800 million U.S. dollars) an increase of 23%. major export products are: oil and refined products, natural gas, aluminum and Basic metal, mineral products, rubber and plastic products

Mathematical Statement

On the other hand, the model also admits the possibility of constant or increasing returns to capital—in this case dis-aggregated into private and public capital—as suggested by some endogenous growth theorists (Romer, 1987). The possibility of a long-run impact of infrastructure on income depends on whether the data are generated by a neoclassical growth model or an endogenous growth model. In the exogenous growth model wherein technical progress drives long-run growth, shocks to the infrastructure stock can only have transitory effects. However, shocks to infrastructure can raise the steady-state income per capital in an endogenous growth model. Besides, social capital and human capital are also important for economic growth (Lucass, 1988; Barro, 1991) 14. Higher public expenditure on social infrastructure induces more literacy, better health and manpower skill, which leads to higher productivity and growth.

$$\ln \text{GDP}_t = \alpha + \beta_1 \ln \text{Kpvt}_t + \beta_2 \ln \text{Kpub}_t + \beta_3 \ln \text{LF}_t + \beta_4$$

$\beta_5 \ln \text{Index}_t + \beta_6 \ln \text{HEexp}_t + e_t$ where GDP is real gross domestic product, Kpvt_t is domestic private investment; Kpub is domestic public investment, LF is total labour force, Index is infrastructure index and HEexp is per capita real public expenditure on health and education.

The expected sign of (1,2,3,and 4) is > 0.

where the lagged ECM term (Y-X)_{t-1} are the lagged residuals from the co integrating relation between Y and X. As Engle and Granger (1987) have argued, failure to include the ECM term will lead to mis-specified models which can lead to erroneous conclusions about the direction of causality. Thus, if Y_t and X_t are I(1) and co-integrated, Granger causality tests can be carried out .

4.3 Trade Law System in UAE

UAE nationals must play a significant role in the management of the infrastructure projects in the region. It is important to note that there are noticeable gaps between market demand and supply as it pertains to management. It is unreasonable to expect that UAE nationals are fully capable to fill the immediate demand needed to carry forward the tremendous developments in the infrastructure sector in the coming years. In addition to being few in number, many UAE nationals still lack adequate management education or field experience. Current practice depends on the continuous interaction with foreign management personnel, and enrollment in management development programs to reduce the managerial gaps is lacking. Proper in-depth systematic training programs are needed and enforced before any managerial post is given to nationals (Elewa, 2007). This will certainly have implications in terms of enhancing project quality, reducing the risks associated with infrastructure project development, and enhancing its success indicators measured by time and cost overruns as well as stakeholders' satisfaction.

Developed economies have been progressively supplanted as an engine of growth over the

last decade in one of the most remarkable shifts of economic prominence since the emergence of the United States before World War I. A central chapter in this transition process is being written after the sub-prime mortgages insolvencies in the US ignited the most devastating global financial crisis in living memory. Until the Lehman bankruptcy, a lively argument took place on whether the emerging markets would decouple from developed economies. After the Lehman Brothers bankruptcy the contagion shock proved too powerful to be averted: financial markets and growth tumbled everywhere. However, EME have recovered more quickly and there is a clear two-speed growth process with advanced economies living an anemic recovery, while EME are growing at pre-crisis levels.

5. Financial Markets: Financial Capital and Institutional Capital

5.1 Financial Markets in the UAE

The implementation of open monetary policy, currency convertibility, Dirham, although the two countries have signed a currency swap agreement, but in the actual transaction are still in U.S. dollars for the settlement of intermediary. According to the UAE National. Daily reported recently, after Doha became the first RMB clearing center in the Middle East, the Dubai international financial center (DIFC) also hope that the establishment of the RMB center, to support the growing Arab bilateral trade. The UAE foreign exchange restrictions, can be remitted freely, but shall comply with the provisions of the anti money laundering of the UAE government. Under the condition of foreign investment capital and profit return is not restricted; foreign banks in its profits remitted abroad before, must be obtained prior to the Central Bank of the United Arab Emirates Agree, and the net profit of 20% as a tax paid to the government of the United Arab Emirates. The UAE for foreigners to carry cash exit regulations. No foreign companies in the UAE to open a foreign exchange account without special provisions, but must be submitted in the United Arab Emirates registered company parent company business license, business license, financial statements, the parent company signed by the authorized person information and other materials.

Infrastructure investment is capital intensive, requires long gestation, with revenue generation subject to policy uncertainty. As a consequence infrastructure investments are perceived as more risky by most investors. For this reason the bulk of financing has traditionally come from the government or government owned companies such as public utilities. Private funding has been scarce until very recently and is still far from abundant, requiring a clear and transparent framework for private sector provision of infrastructure services or participation (PPP). Nevertheless coming out of the financial crisis, where the excesses of leveraged credit almost destroyed the international capital markets, asset backed loans might appeal to conservative long-term oriented wealth managers in the form of conventional project finance, but also as innovative dedicated infrastructure funds. A surge in market listings of owners, operators and contractors to build infrastructure assets in emerging countries is underway.

5.2 Risk of the Economic Investment in the UAE

In the context of the current international oil price downturn, the United Arab Emirates try to speed up economic diversification, to get rid of excessive dependence on oil, and take chance

of the Belt and Road , and strengthen the investment cooperation with China to realize the upgrading of domestic infrastructure construction. 2020 World Expo will be held in Dubai, the total public and private investment of infrastructure and urban construction in 2020World Expo is about \$18.3 billion. Considering that, the future of World Expo Dubai traffic, communications, construction projects will be a substantial increase. From the comprehensive evaluation of economic risk, political risk, social risk, and the great power game risk, the United Arab Emirates investment risk is lowest.

The tax system is simple, the implementation of free trade policy, more preferential measures for foreign direct investment, abundant labor and low cost, improve infrastructure, is one of the best countries business environment. The government to increase investment in infrastructure investment, continue to implement preferential policies, government officials honest, high working efficiency, is one of the best investment environment in the middle east the good prospects for the development of its economy, business environment risk outlook is positive.

The UAE national enterprise and foreign enterprise joint venture investment generally used in two ways: one is to use cash as capital direct investment in cooperation projects; two is to land, buildings, vehicles and other real investment. UAE to new foreign investment law will be introduced in some sectors of the foreign shareholding ratio adjustment, hope Chinese Enterprises focus on new regulations the promulgation and implementation, and according to the new regulations to make a corresponding adjustment to equity. With the ever-growing demand for infrastructure development and the potential high returns as highlighted by the empirical evidence, in the UAE region the private sector involvement is entering the equation. Especially sovereign wealth funds have both the capital and resources to play a greater role in this field. In fact nearly half of all SWFs inside and outside UAE are actively investing in the infrastructure sector and this is likely to increase as demand continues to grow.

6. Conclusion

It is argued that this research program is the first of its kind in the region and one that offers many insights into the unique cultural environment that exists in the United Arab Emirates. This is a rapidly growing society with many urgent transportation challenges. It is a fruitful area for improved transportation practices and research to provide greater appreciation of infrastructure construction methods and processes in the UAE. In particular, there is an ongoing need for the information contained here to be widely disseminated among the TIP community. The establishment of guidelines and software packages, based on these research findings, will greatly enhance the transfer of this knowledge to the benefit of the UAE and other Middle-East societies.

In the process of development in Dubai, the role of Dubai International Airport connecting the world can not be neglected. Over the past 10 years, the rapid growth of Dubai's aviation industry led to the rapid economic growth in Dubai. Dubai Airport connects the world, the spillover effect of the aviation industry and the role of catalytic efficiency is huge, which promote the prosperity and development of other industries, including tourism, logistics, financial services and other professional services.

References

- Cleland, D. I., & Gareis, R. (1994). *Global Project Management Handbook*, McGraw-Hill Education ISBN: 0-07-011329-7
- Cleland, D. I. (1995). *Project Management Strategic Design and Implementation*, Singapore: McGraw Hill.
- Davies, A., Gann, D., & Douglas, T. (2009). Innovation in Megaprojects: Systems Integration at London Heathrow Terminal 5. *California Management Review*, 51(2).
<https://doi.org/10.2307/41166482>
- Emarat Elyoum. (2010). UAE is the Sixth internationally in Infrastructure Quality, Emarat Elyoum (Editorial), Tuesday, 6th of July
- Flyvbjerg, B., Holm, M. S., & Buhl, S. (2002). Underestimating Costs in Public Works Projects: Error or lie?. *Journal of the American Planning Association*, 68(3), 279-295.
<https://doi.org/10.1080/01944360208976273>
- Jenpanitsub, A. (2011). *Cost Overruns in Transport Projects - Experiences from Sweden*. Master of Science Thesis, Stockholm, Sweden 2011.
- James Gavin. Gulf Islamic Banks Gear Up For A Change[J]. *The Banker*, 2010(2).
- Lehmann, R. J., Reiche, R., Fritz, M., & Schiefer, G. (2009). Information Modelling for Quality and Sustainability, Proceedings of the 3rd International European Forum on System Dynamics and Innovation in Food Networks, International Center for Food Chain and Network Research, University of Bonn, Germany, February 16-20, 2009.
- Nasrin Shahinpoor. The Link Between Islamic Banking and Micro Financing[J]. *International Journal of Social Economics*, 2009(10).
- Stanley Reed. Why Dubai Matters[J]. *Business Week*, 2009(12).
- Ragaei El Mallakh, *The Economic Development of the United Arab Emirates*, U. K. Billing and Sons Limited, pp.132, 1981.
- United Arab Emirates Year Book (2009). London, UK, Trident Press Ltd. pp209, 210.
- Food and Agriculture Organization of the United Nations, 2003 FISHERY COUNTRY PROFILE [EB/OL].
- Professor Klaus Schwab. *The global competitiveness report 2014-2015* [R]. Switzerland: the World Economic Forum, 2014.
<http://alreports.weforum.org/global-competitiveness-re-port-2014-2015>.
- Satah al-Razboot (SARB) Offshore Oilfield, Abu Dhabi, U-nited Arab Emirates [EB/OL].[2015-03-16]. <http://www.off-shore-technology.com/projects/satah-al-razboot-sarb-off-shore-oilfield-abu-dhabi/>.
- World's five largest offshore oil fields [EB/OL]. [2015-03-06].

<http://www.forties.com/sites/williampentland/2013/09/07/worlds-Gve-largest-offshore-oil-fields}2/>

Peter & Paula Vine, United Arab Emirates Yearbook 2013[R], David Taylor-Evans and Daniel Coyne, Elite Media and The National Media Council, Dubai, United Arab Emirates.

Upper Zakum Offshore Oil Field Development, Abu Dhabi, United Arab Emirates [EB/OL]2015-03-16].

<http://www.off-shore-technology.com/projects/upper-zakum-offshore-uae/>

United Arab Emirates: Torture and Flogging. Fanack. Archived from the original on 6 October 2014.

Country Reports on Human Rights Practices for 2008. Jeffrey T. Bergner. p. 2203.

Laipson, Ellen (3 September 2014). The UAE and Egypt's New Frontier in Libya. The National Interest. Retrieved 26 October 2014.

Evans, Gareth (29 June 2011). Middle Power Diplomacy. Retrieved 26 October 2014.

Pennington, Roberta (5 February 2014). UAE archaeologist discovers the Swiss Army knife from 130,000 years ago. The National. Retrieved 19 February 2017.

Abu Dhabi Islands Archaeological Survey (ADIAS). Adias-uae.com. Retrieved 12 February 2016.

Ibrahim Abed; Peter Hellyer (2001). United Arab Emirates, a New Perspective. Trident Ltd. pp. 83-84. ISBN 978-1-900724-47-0.

Bey, Frauke (1996). From Trucial States to United Arab Emirates. Longman. UK. pp. 22-23. ISBN 0582277280.

Thomas, Jen (12 December 2012). Ancient secrets of Sir Bani Yas unveiled. The National. Retrieved 19 February 2017.

Hawley, Donald (1971). The Trucial States. Allen & Unwin. UK. pp. 48-51. ISBN 9780049530058.

Bey, Frauke (1996). From Trucial States to United Arab Emirates. Longman. UK. p.127. ISBN 0582277280.

Bey, Frauke (1996). From Trucial States to United Arab Emirates. Longman. UK. pp. 127-128. ISBN 0582277280.

Lorimer, John (1908). The Gazetteer of the Persian Gulf, Oman and Central Arabia. Government of India. Bombay. 1432-1436.

Anscombe, Frederick F. (1997). The Ottoman Gulf: The Creation of Kuwait, Saudi Arabia, and Qatar. Columbia University Press. New York.

Çetinsaya, Gökhan (2003). The Ottoman View of British Presence in Iraq and the Gulf: The Era of Abdulhamid II. Frank Cass. London. <https://doi.org/10.1080/714004505>

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