Vision

Achieve Dubai’s economic development goals of competitiveness & sustainability
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**Dubai Economic Report 2017**

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“We have moved from foreseeing the future to the stage of making the future. The eyes of the whole world are set on our country as we forge ahead of others in the world in the use of technology to improve key sectors related to human life, and adapt innovation and new technologies in various areas of work and life.”

HIS HIGHNESS SHEIKH MOHAMMED BIN RASHID AL MAKTOUN
VICE PRESIDENT AND PRIME MINISTER
OF THE UAE AND RULER OF DUBAI
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Acknowledgements
Foreword

Dubai Economy is pleased to present to distinguished readers “Dubai Economic Report 2017” which reviews the main developments in the Dubai economy during the year 2016 on the macro and sectoral levels. The report contains robust analyses of the main developments using economic indicators and official information. The report also compares the economic performance of Dubai and that of countries with similar economies, and it also reviews one of the most important economic initiatives launched by the Government of Dubai which is the “Dubai Industrial Strategy” that aims to diversify the local economy and achieve sustainable economic growth.

This report concludes that the Dubai Economy continued its ambitious development journey towards excellence and establishing Dubai as a hub for finance and business in the region and worldwide. Dubai’s economy’s ability to attain such achievement is due to its robust foundations and the government’s ability to adopt successful economic policies to stimulate various economic activities. This was also supported by Dubai’s openness to the world and its network of relationships and partnerships with many countries in the region and worldwide which lead to significant inflows of investment and record-high tourism and foreign trade. Such remarkable achievements by Dubai in the economic field could not have been possible without the clear vision of His Excellency Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates and Ruler of Dubai – may God save and bless him. He continued to provide decision-making departments with his creative ideas and initiatives which aim to achieve high levels of welfare for members of the society and to promote the emirate’s position on the global competitiveness map. This vision was practically translated into directives from His Excellency Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, and President of the Executive Council of Dubai, to all economic players in the emirate to transform such goals into a clear work plan; the “Dubai Plan 2021” which aims to mobilize all energies, resources and capabilities to ensure sustainable development.

Despite the slow recovery of the global economy and the continuous changes in its advanced centers and its effects on countries of the region, all indicators mentioned in this report indicate that Dubai is capable of continuing its growth journey, supported by a series of strategic initiatives which were launched by the Government of Dubai in the last two years such as Dubai The Capital of Islamic economy, Dubai Smart City, Dubai Innovation Strategy and others, in addition to the momentum which Dubai gained after winning the right to host “Expo 2020”.

Finally, it must be noted that this report is the fruit of institutional cooperation between Dubai Economy and its strategic partners within the Government of Dubai, at the forefront of which are: Dubai Statistics Center, Dubai Customs, Department of Tourism and Commercial Marketing, Dubai Department of Finance, Dubai Land and Property Department and other local departments. This cooperation embodies the vision of the excellent leadership of the Government of Dubai in promoting institutional integration among all government departments.

We hope that this annual report will be an important reference for decision makers in both private and public sectors to support the process of public decision making and drawing plans and strategies to achieve sustainable growth and development goals in Dubai.

Dubai Economy
About The Dubai Economic Report
The new Dubai Economic Report presents the main economic developments in the Emirate of Dubai during 2016 at both macro and sectoral levels.

At the macro level, the report reviews developments in the Emirate’s economy in terms of real gross domestic product, inflation, local financial liquidity, the Arab Emirates Dirham (AED) exchange rate, interest rates and public finance developments (Chapter One). This is followed by an analysis of the performance of the foreign trade sector which plays a pivotal role in Dubai’s economy reflecting the high level of openness it has reached (Chapter Two).

At the sectoral level, the report addresses (Chapters Three to Ten) the performance of Dubai’s primary economic sectors and activities. First the report considers the state of the industrial sector with its main components: manufacturing, mining, quarrying, electricity and gas. Next, the report addresses the services sectors comprising wholesale and retail trade, transport and communications, financial services, real estate and construction activities, energy production and consumption and tourism. In addition the report analyses a number of social indicators such as population, education and health.

The report also contains a special chapter addressing essential economic subject areas particular to Dubai’s Plan for 2021: the “Dubai Industrial Strategy: Resources, Opportunities and Challenges.”
Dubai’s Economy During 2016

In 2016, Dubai’s economy continued its strong macroeconomic performance. The real GDP growth rate reached almost 2.9 per cent despite the drop in oil prices which fell from around US$116 per barrel in June 2014 to approximately US$30 per barrel in the first quarter of 2016. This means that during this period Dubai’s economic growth rate exceeded that of many other economies: the advanced countries and the GCC economies both achieved average GDP growth rates of 2 per cent. Furthermore, macroeconomic indicators in Dubai show that growth was accompanied by low inflation rates promoting financial stability in the economy.

This positive performance in 2016 was supported by economic diversification, improvements in the ease of doing business, and economic openness policies adopted by the Dubai Government over past decades. The Emirate of Dubai has clearly succeeded in diversifying economic activities. The economic growth achieved in 2016 was supported by growth in the main economic sectors (manufacturing, transport, logistics, real estate and retail trade, and tourism) apart from construction. Sectoral growth rates ranged from a maximum of 10.6 per cent in tourism and a minimum of -0.7 per cent in construction where activity suffered a slight drop. In terms of importance, the transport and storage sector contributed to around 19 per cent of GDP, followed by tourism (17.5 per cent) and real estate (about 15 per cent).

The inflation rate in Dubai dropped from 3.7 per cent per annum in 2015 to 2.9 per cent in 2016. Inflation peaked in 2008 at an annual rate of 10.8 per cent, but it dropped subsequently, as a result of the economic deflation following the global financial crisis in 2009, to 0.5 per cent in 2011. Thereafter the general price level dropped by about 1.7 per cent in 2012, but it rose again in 2013. The primary expenditure groups, notably restaurants, hotels, food and non-alcoholic beverages, health and cost of housing, witnessed higher inflation rates in 2016 compared to 2015.

Financial liquidity, measured by the growth in the money supply (M2), continued to drop in 2016 down to 3.3 per cent. This was due to a drop in rates of government and private sector credit growth between 2015 and 2016. Moreover, changes in the domestic liquidity growth rate moved in parallel with economic growth rates in the UAE and, specifically, in Dubai.

The Dubai Government continued to strengthen its financial accounts by lowering the budget deficit to under 3 per cent of GDP (the percentage used by many economies as a condition for the stability of public finances) in the period between 2008 and 2016. The only exception was 2009 when the economy needed a public sector fiscal spending boost. It is noteworthy that the success of the Emirate’s financial authorities in subsequently lowering the budget deficit in the years following 2008-2009 contributed to macroeconomic stabilization and to the resumption of growth across many sectors and activities, especially banking and the stock exchange in addition to trade, tourism, and real estate.

In terms of Dubai’s foreign commodity trade, the total value of foreign non-oil commodity trade totaled over AED 1.28 trillion in 2016. This value is slightly lower than in 2015 (by around 0.5 per cent) and 4.1 per cent lower than in 2014, the year in which Dubai’s trade reached a record value of AED 1.33 trillion. The fall-off was due to weak external demand for re-exports whose value registered a 7 per cent drop in 2016 while the value of imports registered a slight increase of 0.7 per cent in the same year.

Foreign trade via free zones, experienced a fall in the value of both imports and total exports (exports and re-exports) in 2016 following a decline in external demand due to weak global growth and an increase in the value of the US Dollar exchange rate against other main currencies. Free zones’ share of total foreign trade amounted to around 32 per cent while the top five trade partners (China, India, United States, Saudi Arabia and Germany) accounted for more than 41 per cent of total Dubai trade. China was Dubai’s biggest trade partner for the second consecutive year replacing India which was Dubai’s biggest traditional trade partner for many years. In addition, Dubai’s trade with GCC countries witnessed a steady growth in recent years, especially in the re-exportation trade.

The industrial sector occupies an advanced position in the Dubai economy. This sector consists of manufacturing, mining and quarrying, and electricity generation. In 2016, industry was the fourth largest sector in Dubai’s economy following wholesale and retail trade, transport and storage, and finance and insurance.
Manufacturing contributed around 10 per cent of GDP in 2016 and registered 3.4 per cent growth in value added compared to 2015. The Dubai Government is adopting policies to boost the contribution of the industrial sector so that it equals or exceeds its share of GDP in emerging and advanced countries. This objective has been supported by the Industrial Strategy 2030 launched by the Government of Dubai in 2016. This aims at restructuring the local economy to keep up with developments in the global economy, especially regarding accessing sectors with high added value and high competitiveness.

The report addresses in a separate thematic chapter “Dubai’s Industrial Strategy” which sheds light on the constituents of this strategy, its implementation mechanisms, and the strategic industries targeted to transform Dubai into a global platform for knowledge-based, sustainable innovative industries. The chapter concludes with some lessons learnt from distinctive and successful international experiences in industrial transformation.

One of the most important lessons is the need to intensify efforts in human development. In particular this involves developing curricula and specializations related to industrial innovation and taking care of technical and vocational education, in addition to developing research and development processes in those industries which have the competitive capabilities to access global markets and to encourage production through participation in global value chains.

Turning to the services economy, the report, first addresses recent developments in the wholesale and retail trade sector. It is considered one of the leading sectors of Dubai’s economy. It contributes 27.5 per cent of GDP and it employs around 22.4 per cent of Dubai’s workforce. Furthermore, the sector plays a vital role in driving Dubai’s economy through forward and backward linkages with many of the activities of other sectors such as tourism, logistic services, transport, and others.

Nevertheless, wholesale and retail trade activities experienced a drop in per-capita worker’s share in the sector’s value added (a proxy for labour productivity) during the years which followed the global crisis of 2008-2009. This decline can be attributed to many factors, one of which is that despite the drop in their activities during the crisis, businesses kept the majority of their workforce employed anticipating that the situation would improve in the future. In general, worker productivity in this sector is considered relatively low, since the retail and wholesale trades are labour-intensive service activities and not capital intensive businesses. This is especially the case for small and medium enterprises which still lag behind in their use of modern technology and in their commercial transactions.

Dubai has paid great attention to developing the transport and storage and the communications and information sectors which collectively represented around 16 per cent of GDP in 2016. These two sectors achieved high growth rates reaching around 4.7 per cent for transport and 3.6 per cent for communications. It is noteworthy that the UAE, including Dubai, was ranked first in the region and fourth worldwide on the quality of its transport infrastructure, according to the World Economic Forum's 2016 Global Competitiveness Report. The transport sector, and especially aviation and air transport, is considered one of the most important economic sectors in Dubai as it has witnessed tremendous growth in previous years and enjoys a particular significance in Dubai’s development strategy.

In the energy sector, the Government of Dubai seeks to secure the Emirate’s needs for diverse sources of energy and to achieve consumption efficiency in order to achieve sustainable economic growth, especially given that average per capita consumption is considered one of the highest in the world. In order to achieve that, the Supreme Council of Energy launched the “Dubai Integrated Energy Strategy 2030” which aims to diversify energy resources and to improve the efficiency of producing and consuming electricity, energy and gas. In order to diversify energy sources, the Dubai Electricity and Water Authority (DEWA) has launched the first phase of the Mohammed bin Rashid Al Maktoum Solar Park and has intensified its media campaigns to raise consumer awareness about the importance of rationalizing energy consumption.

The banking and financial services sector in Dubai maintained its remarkable vibrancy in 2016 and contributed to around 11 per cent of Dubai’s GDP. Furthermore, it was able to recover at an impressive speed from the effects of the financial crisis that had led to a decrease in its activity in 2010.

Dubai’s banks witnessed a growth in loans and deposits at varying percentages and the loan-to-deposit ratio amounted to around 91.7 per cent in 2016. Also, the percentage of non-performing loans to total loans in Dubai’s banks dropped slightly from 6.9 per cent in 2015 to 6.4 per cent in 2016. As result of a continued conservative lending policy, banks’ profitability decreased in 2016. This
is shown in the drop in the return on assets from 2 per cent in 2015 in both Dubai and Abu Dhabi's banks to 1.8 per cent in 2016. This drop came despite a relative improvement in banks' liquidity and in the quality of their assets.

The Dubai Financial Market strengthened with an index rise of 12 per cent in 2016 driven by the rise of indices of service sector activities followed by the food sector and then by communications.

There was also strength in the performance of the real estate sector in 2016, whose value added grew by 6.5 per cent over its level in 2015, but real estate transactions dropped in number and value in 2016 compared to 2015. Furthermore, real estate investments dropped from around AED 135 billion in 2015 to AED 91 billion in 2016. In addition the value added of the construction sector fell and its contribution to GDP dropped from 6.7 per cent in 2015 to 6.4 per cent in 2016. The number of buildings under construction also dropped by around 23 per cent in 2016. In this context, it is noteworthy that the construction force in 2016.

The tourism sector (represented by hotels and restaurants) experienced one of highest sectoral growth rates in the economy rising by around 11 per cent in 2016 compared to 15 per cent in 2015. This sector contributed 5 per cent of Dubai's GDP in 2016.

Dubai succeeded in achieving a leading position on the world's tourism map being ranked fourth among the most popular tourist destinations worldwide in MasterCard's ranking for the most visited cities in the world. It attracted more than 14.9 million visitors in 2016, 11.6 of which stayed in the city's hotels, and their total spending amounted to around US$31.3 billion.

The sector is expected to continue growing during the years preceding Expo 2020 and also during the six months-period during which the Expo will be held, from October 2020 until April 2021. It is also expected that more than 270 thousand new jobs will be added in various economic sectors as result of hosting the Expo along with its accompanying activities. The hotels and restaurants sector will gain a significant share of the benefits from the Expo during that period.

Concerning social developments in Dubai, the Emirate witnessed increased growth in the number of residents in recent years. The emirate's population was estimated at the end of 2016 at 2.7 million with an approximate 5 per cent increase from 2015. The gender demographics of Dubai is broken down into 70 per cent male and 30 per cent female. The difference between the number of male and female residents reflects the nature of the labour market in the Emirate. The remarkable increase in Dubai's population is attributed to various economic and social factors, including the dynamism and vitality of its economy, which enhances its attractiveness to a workforce from over 200 countries, its modern infrastructure, high-end services and also its political stability. The growth of Dubai's population is linked to the volume of jobs offered in the labour market as the population significantly increases in times of economic recovery which requires a larger workforce from abroad.

The growth in population was paralleled by a steady increase in the number of schools and universities. The supply of education, which started to accelerate in the mid-eighties, represented in the number of schools, universities, and of students enrolled in educational institutions in Dubai, continued to grow. Private education played an essential role in this expansion. The number of students enrolled in primary and secondary education in the academic year 2015-2016 rose to 265 thousand with a growth of 5.6 per cent on the previous year. In addition, the number of students enrolled in private higher education amounted to 26 thousand with a growth rate of 7.8 per cent for the same period.

Health services in Dubai witnessed remarkable development leading to an improvement in the condition of residents' health. The UAE, in general, have achieved a qualitative leap in this field; life expectancy at birth rose from 67 years in 1980 to 77 years in 2015. The UAE government and local governments seek to continue improving the provision of health services which may contribute to increasing life expectancy at birth to reach the levels of advanced countries.

The Dubai Health Authority, which was founded in 2007, manages and supervises health services in the Emirate, and it also has an organisational role in monitoring the adherence of private and public healthcare centres to the quality standards set by the Federal Ministry of Health. At the same time, the Authority also has the mission to build and finance healthcare facilities. Dubai also seeks to be a centre of therapeutic tourism, mainly after it was awarded the hosting of Expo 2020.
The Dubai economy’s growth prospects for 2017 are promising as GDP (in constant prices) is expected to grow by around 3.2 per cent in comparison with 2.9 per cent in 2016. The sectors of construction, finance and insurance, and wholesale and retail trade are expected to grow at a faster pace in 2017 than in 2016, which will contribute significantly to achieve the expected growth. Overall the expected growth will come as a result of positive external and domestic factors. It is worth noting that among the favourable external factors is the continued recovery of the global economy in 2017 and the improvement of growth rates in advanced, emerging and developing economies. Also, global oil prices are expected to rise by 18 per cent (from US$42.96 to US$50.64 per barrel) in 2017 and global trade is expected to regain its growth at rates higher than the growth of global GDP. In addition, other positive external factors in 2017 are rising worldwide demand and the decline in the US Dollar exchange rate against the Euro and other main currencies. Nevertheless, these favourable factors in the global economy will be accompanied by risks resulting from uncertainty concerning the financial and commercial policies adopted by major economies, especially in light of the emergence of trade protectionism in some of these economies along with the unfavourable political developments in the Arabian Gulf region.

On the other hand, local factors are expected to contribute significantly to the expected improvement in the Dubai economy’s growth in 2017 and after. These come as a result of the expected positive impact on the economy from the many important strategic initiatives launched by the Government of Dubai under the Dubai Plan 2021. At the forefront of these initiatives is Dubai’s hosting of Expo 2020 and the ongoing preparations for this event by the Dubai Government launching large projects in roads and transport infrastructure with an estimated funding of expenditure of AED 15 billion.

In addition, Dubai’s launching of “Dubai’s Industrial Strategy” will have a positive impact on the economy, both in the medium and longer-term, since it is considered as an integrated strategy for the development of the industrial sector through targeted industrial subsectors such as Aerospace, Maritime ship-building and maintenance, food industries, Fabricated Metals and aluminum in particular.

In conclusion, these initiatives reflect the Dubai government’s approach to adopting and implementing effective policies to enable the private sector to develop new economic activities while protecting the domestic economy from the effects of unfavourable regional and international circumstances.

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1 Studies and Policies Administration forecast, Dubai Department of Economic Development.
2 International Monetary Fund, World Economic Outlook April 2017, table 9A.
Introduction

In 2016, Dubai’s economy achieved a real GDP growth rate of 2.85 per cent. This growth was in line with the slight drop in world economic activity which affects Dubai because of its economy’s openness and integration with the global economy. The economy was also, affected by difficult regional circumstances such as the decline in oil prices, shrinking oil revenues and the rise in the US Dollar exchange rate against other main currencies.

Dubai’s diversified economic base helps it to contain the effects of adverse developments while using global and regional positive events to support growth and development. Specifically, Dubai’s economy overcame the adverse effects of the global economic crisis which lead to a decline in real GDP in advanced countries of around 3.4 per cent. It is worth noting that production and commercial exchange activities in Dubai are conducted within Dubai and within the free zones which provide facilities with international standards. The relatively good performance of Dubai’s economy followed the implementation of a counter-cyclical expansionary fiscal policy adopted by the Government of Dubai in 2009 in addition to that taken by the Federal Government. Available data shows that seven sectors: wholesale and retail trade/motor vehicles and motor cycles repair (wholesale and retail trade hereafter), manufacturing, transport and logistics, real estate activities, financial and insurance activities, and the activities of the construction and tourism sector activities have contributed collectively to around 77.24 per cent of GDP in 2016.

In the following sections of this chapter, we will provide an overview of global economic growth performance followed by a brief look at the economy of the countries of the GCC, Middle East and North Africa, and then we will review the performance of Dubai’s economy.
CHAPTER 1 | Recent Developments in Dubai’s Economy

Growth of the Global Economy

Global real GDP growth continued to slow down for the second consecutive year as it grew by 3.2 per cent in 2016. This percentage is less than that achieved in 2015 and 2014. Slower growth in the global economy in 2016 came as a result of a lower and weak growth rates in advanced economies despite relatively strong growth in emerging and developing economies. However, in 2017, emerging and developing economies are expected to grow by 4.6 per cent and advanced economies by 2 per cent. (Figure 1.1).

Growth of the Economies of GCC, Middle East and North Africa (MENA) Countries

The drop in the global real GDP growth rate in 2016, compared with growth in 2015, was accompanied by a drop in the real GDP growth rate in the GCC countries from 3.8 per cent to 2.0 per cent. The drop in economic activity in the GCC countries is attributed to the drop in oil prices which fell to less than US$ 30 per barrel in the first quarter of 2016. The annual economic growth rate across the GCC countries is expected to drop to 0.9 per cent in 2017. In the Middle East and North Africa (MENA hereafter) region, the economic growth rate rose from 2.6 per cent in 2015 to 3.8 in 2016, and that percentage is expected to drop to 2.3 in 2017. In the UAE, the real GDP growth rate decreased from 3.8 per cent in 2015 to 2.7 per cent in 2016. (Figure 1.2).

Economic Performance of Dubai in 2016

In the light of the brief presentation about the global and regional economic performance, the report will now review the economic performance of Dubai according to the main macroeconomic indicators; total growth rate, development of average per capita GDP, inflation, liquidity, the AED exchange rate, interest rates, and government finances.

The decline in the growth of global economy in 2016 can be attributed to the slowdown of growth in advanced economies.

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1 In 2016, the real GDP growth rate in Algeria, Bahrain, Iraq, Kuwait and Mauritania was higher than in 2015. However, in the remaining MENA countries, the growth rate in 2016 was less than in 2015. It is noteworthy that the countries which achieved higher growth in 2016 also achieved higher growth in the percentage of commodities exports, services and investments.
Dubai’s economy is open and integrated with the global economy, therefore, its performance is affected by global and regional economic and non-economic developments. Hence, when the global economic crisis erupted in 2008, Dubai’s economy was adversely affected, especially the key sectors, such as foreign trade and tourism, which rely on the global market. Perhaps the most important indicator of such influence is the GDP growth rate which shrank by 2.6 per cent in 2009. When the global economy returned to positive growth in the beginning of 2010, so did the economy of Dubai, which continued to achieve positive growth in the following years. In fact, its growth rate exceeded what was achieved by the global economy between 2012 and 2014, although in the latter year economic growth in Dubai decreased due to the drop in oil prices from US$115 per barrel in June 2014 to around US$70 in August 2014. In 2016, the real GDP growth rate was 2.9 per cent as opposed to 4.1 per cent in 2015. (Figure 1.3).

Stimulant policies applied by the Federal Government and the Government of Dubai contributed in boosting the economy, and hence, the continuation of growth in all sectors, including those sectors affected by the global crisis such as real estate. Therefore, Dubai’s economic performance is expected to improve in 2017 due to the improvement of the global economic performance and the relative recovery of the oil market.

In comparison with the economies of some cities similar to Dubai in terms of size and the nature of economic activities on which they depend, Dubai’s economic performance is distinctive. In Hong Kong and Singapore for example, GDP increased by 1.9 per cent and 2.0 per cent respectively in 2016. The 2016 economic growth rate in Dubai was attributable to the growth of all main economic sectors, apart from construction. In this context, it must be noted that the mining and quarrying sector shrank by 2.6 per cent amid the drop in oil prices. The growth of other main sectors ranged between a maximum of 10.6 per cent in the tourism sector and a minimum of (-0.7 per cent) in the construction sector. (Figure 1.4).

The main sectors of the economy contributed 77.3 per cent of Dubai’s GDP in 2016, the same percentage as in 2015. The retail and wholesale sectors contributed 27.5 per cent of the GDP, followed by the transport sector with 11.6 per cent, financial activities and insurance with 10.6 per cent, while real estate and construction added 6.6 per cent and 6.4 per cent respectively. (Figure 1.5).
The contribution of economic sectors to total growth may not necessarily reflect the share of each sector in GDP. For example, the share of manufacturing is less than 10 per cent of GDP while its growth rate was 3.4 per cent in 2016 and its contribution to the overall growth rate was 11.2 per cent. The contributions of other sectors to overall growth in 2016 are shown in Table 1.1.

Average real GDP per capita amounted to US$50 thousand in 2008, declining to around US$38 thousand in 2016. (Figure 1.6).

The trend Dubai’s real GDP per capita followed in the period 2008-2016 resulted from the interaction between the real GDP growth rate and population growth. In the period 2008-2016, the real GDP growth rate was less than the population growth rate which led to a drop in GDP per capita. (Figure 1.7).

Comparing GDP per capita in Dubai with that of some emerging economies shows that it is higher than the per capita figures in Russia and Brazil, and close to the per capita figure in Hong Kong, but less than the per capita level of Singapore. (Figure 1.8).

1 Sector contribution in GDP growth rate is calculated as follows: (growth rate in sector x sector share of GDP in the previous year = percentage points). Then (percentage points = GDP growth rate x 100 = percentage of sector contribution in GDP growth rate).
Inflation

1.13 Inflation in Dubai dropped from an annual rate of 3.6 per cent in 2015 to 2.9 per cent in 2016. It is noteworthy that this rate reached its peak in 2008 at 10.8 per cent. However, the inflation rate started dropping following the economic deflation of 2009 and prices fell by an average of (-1.7 per cent) in 2012. (Figure 1.9).

1.14 Dubai’s inflation rate increased in 2013 reaching 3.6 per cent in 2015, before dropping to 2.9 per cent in 2016. The drop in inflation in 2016 can be attributed to the drop in the inflation rates in the housing, water, electricity, fuel and health sectors. Other main expenditure groups such as restaurants and hotels, food and non-alcoholic beverages, education and entertainment witnessed higher inflation rates in 2016 than in 2015. (Figure 1.10).
Domestic Liquidity

A downward trend in local financial liquidity began in 2014 and continued until 2016. This occurred after the growth rate of domestic liquidity measured by (M2)\(^4\) contracted dropping from a peak of around 21 per cent in 2013 to 3.3 per cent in 2016\(^5\). This development in liquidity’s growth rate resulted from a drop in credit growth in both the government and the private sectors between 2015 and 2016. Furthermore, changes in the local liquidity growth rate were in line with the economic growth of the UAE, and Dubai specifically. (Figure 1.12).

AED Exchange Rate

The exchange rate of AED is linked to the US Dollar. The fixed exchange rate set by the UAE Central Bank is AED 3.6725 per US$ 1. In the context of free flows of capital, monetary policy in this system lacks independence compared to countries which use floating rates\(^6\). For example, when the US$ was dropping against the Euro during the three years between 2006-2008, the AED was dropping too against the Euro as it tracked the US$. This lead to an increase in imported inflation (through imports from European Union countries) in the UAE and in other GCC countries whose currencies are also pegged to the US$. Inflationary pressures increased with the increase in oil price which reached US$ 148 per barrel by mid-2008. Moreover, at a later stage, speculative funds which flowed into the country due to expectations of an AED revaluation, and consequently to a rise in its price, led to increasing inflationary pressure. Nevertheless, the second half of 2008 was characterised with what is known as a “re-pairing” phase in the global economic crisis when a key correction occurred in the US$ /EUR rate, global oil prices dropped and economic activity in emerging markets slowed down significantly. Since then, the AED has started to rise against the Euro, and local inflation dropped significantly. (Figure 1.13).

Interest Rates

The primary factor behind the strong link between US$ and local inflation in Dubai/UAE (and other GCC countries) is that currency pegging to the US$ requires that the UAE sets an official interest rate

\(^4\) M2 = Currency + Current Deposits (All short-term deposits which bank clients can withdraw without prior notice) + Quasi-cash deposits (Resident’s deposits and savings in AED + Commercial prepayment in AED + Fixed deposits in foreign currencies).

\(^5\) Credit to government grew by 8.5% in 2015 and 3.5% in 2016; credit to private sector grew by 8.5% in 2015 and by 5.6% in 2016.

\(^6\) There is a known theory in economics which concludes that it is impossible for free flows of capital, fixed exchange rates and independence of the monetary policy to exist at the same time:
  - Fixed exchange rate.
  - Free capital movement (absence of capital controls).
  - Independent monetary policy.

AED PEGGING TO USD

close to the interest rate set by the Federal Reserve (US Central Bank). Nevertheless, despite the fact that the market interest rate, set by EIBOR rate between banks in the country\(^1\), mainly followed the Central Bank’s REPO rate, there was a significant difference between the two rates from the second half of 2008 before they met together in August 2011. This difference is linked to the cautious lending practices of Dubai/UAE banks in addition to their need to meet Basel (3) capital requirements in light of the new necessities which the Central Bank imposed on banks. (Figure 1.14).

### Public Finance

#### The Budget of Dubai Government

1.18 The Government of Dubai continued to strengthen its financial accounts by reducing its budget deficit as a percentage of GDP from 2 per cent in 2010 to 1.2 per cent in 2011 and to 0.5 per cent and 0.4 per cent in 2012 and 2013 respectively. This approach in tightening the budget of the Government of Dubai and achieving balance continued in 2015 and 2016. It is noteworthy that the Government of Dubai succeeded in maintaining a budget deficit as a percentage of GDP under the critical 3 per cent level during the period between 2009-2016, except for 2009\(^6\). (Figure 1.15).

1.19 In fact, the Government of Dubai reacted to the effects of the global economic crisis of 2008 by raising expenditure from an annual average of AED 27.3 billion during the period between 2006 and 2008 to AED 41.4 billion during 2009 with an increase of around 52 per cent while revenue dropped in 2009 by 13 per cent. This expansionary fiscal policy was consistent with the actions of many advanced and emerging countries to contain the adverse effects of the global financial crisis through fiscal and monetary stimulatory programs. As was the case in many countries, the expansionary economic policy in Dubai achieved great success in addressing the effects of that crisis. Therefore, the success achieved by the financial authorities in the Emirate in reducing budget deficit in the past few years is considered a significant achievement which has contributed to macroeconomic stability and to the resumption of growth in many sectors and activities, especially banks, financial market, trade, tourism and real estate in Dubai. (Figure 1.16).

\(^1\) Emirates Inter Bank Offered Rate (EIBOR) is an interest rate on interbank loans in the UAE, and REPO is the interest rate imposed by the Central Bank on its loans to banks.

\(^6\) The 3% percentage is used as a public finance standard of the European Stability and the Euro Zone Growth Pact, and this percentage became a standard of success for countries in keeping budget deficits within safe levels.
Public Revenues

Government revenues are derived from two main categories: 1- Tax revenues 2- Non-tax revenues. Tax revenues sources include customs fees and taxes on banks in Dubai while non-tax revenues include a number of fees and fines, oil revenues and investment returns.

The ratio of non-tax revenues to total revenues fluctuated between a maximum of 79.3 per cent in 2014 to a minimum of 64.4 per cent in 2012, while tax revenues varied between 21 per cent and 36 per cent during the same period. Customs revenues are considered the main source of tax revenues. (Figure 1.17).

Fees and fines revenues rose during the years 2010-2016 and peaked at 94 per cent of non-tax revenues in 2015. On the other hand, the ratio of oil revenues dropped after peaking at 34 per cent in 2008 to 10.9 per cent in 2011, after which they rose to 15.6 per cent in 2013. The ratio of investment revenues fluctuated in the period 2010-2016 between a minimum of 1.3 per cent in 2016 and a maximum of 9.3 per cent in 2010. (Figure 1.18).

Public Expenditures

The ratio of current public expenditures to total government expenditures in Dubai rose from around 64 per cent in 2010 to 82 per cent in 2016 passing a peak of 89 per cent in 2014. On the other hand, the ratio of investment expenditures dropped from a peak of 36 per cent in 2010 to around 17 per cent in 2016 passing a low ratio of 11 per cent in 2014. Such drop in investment expenditure is attributed to the completion of most of the major projects. However, investment expenditures are expected to rise during the coming period to finance a package of strategic initiatives and key development projects which were recently launched by the Government of Dubai. These projects will include various sectors, especially real estate and tourism, in addition to the Islamic economy initiative and infrastructure projects in preparation for hosting Expo 2020. (Figure 1.19).
The structure of the spending of the Government of Dubai by function indicates that the infrastructure, transport, and social development sectors accounted for around 73 per cent of total expenditure in 2016. The structure also shows that the share of the social development sector of total expenditure rose from around 21 per cent in 2010 to about 37 per cent by 2016, while the share of the infrastructure and transport sector dropped from around 49 per cent in 2010 to 36 per cent over the same period. (Figure 1.20).

Outlook on the Performance of Dubai’s Economy in 2017

The growth prospects for Dubai’s economy for 2017 are promising as Dubai’s real GDP is expected to grow by around 3.2 per cent\(^9\) compared to 2.9 per cent in 2016. The construction, finance and insurance and wholesale and retail trade sectors are expected to grow in 2017 by percentages higher than those achieved in 2016 which will contribute significantly to achieving the expected growth rate. (Figure 1.21).

This expected growth comes as a result of external and local positive factors. It is worth noting that among the favorable external factors is the continued recovery of the global economy in 2017 and the improvement of growth rates in advanced, emerging, and developing economies. In addition, global oil prices are expected to rise by 18 per cent (from US$ 42.96 to US$ 50.64 per barrel) in 2017,\(^{10}\) global trade is expected to regain its trend growth at rates higher than the growth of global GDP while growth will be stimulated by rising global demand and the decline in the US$exchange rate against the Euro and other leading currencies. Nevertheless, such favorable factors in the global economy are still accompanied by risks resulting from uncertainty about the financial and commercial policies followed by the major economies, especially in light of the emergence of protectionism impacting on global trade in some of these economies. Another risk stems from the hostile political developments in the Arabian Gulf region.

On the other hand, local factors are expected to contribute significantly to the anticipated improvement in the Dubai economy’s growth rate in 2017. These come from the expected positive impact on the economy from the many important strategic initiatives launched by the Government of Dubai under Dubai Plan 2021. At the forefront of these initiatives is Dubai winning the right to host Expo 2020, and the Dubai Government preparations for the Expo by launching large roads and transport infrastructure projects for the of with an estimated value of AED 15 billion.

In addition, the launching of “Dubai’s Industrial Strategy” will have a positive medium and long term impact on the economy, as this is considered an integrated strategy for the development of the industrial sector. It is based on pivotal industries such as aviation, ship construction and maintenance, food industries and the minerals industry, particularly aluminum.

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\(^9\) Studies and Policies Administration forecast, Dubai Department of Economic Development.

\(^{10}\) International Monetary Fund, World Economic Outlook April 2017, lable 9A.
CHAPTER 2  Dubai’s Foreign Trade
Dubai’s Foreign Trade

CHAPTER 2

HIGHLIGHTS

Introduction

Foreign trade is of great importance to Dubai’s economy and it played a pivotal role in reviving the Emirate’s economy in recent years. Dubai’s commercial relationships with the world helped overcome the consequences of the shocks the global economy has suffered, including the global crisis of 2008 and 2009 and the sharp drop in global oil prices since mid-2014.

Three main ports currently serve Dubai’s foreign trade activities: Port Rashid, Al Hamriya Port, Jebel Ali Free Zone Port in addition to traditional piers along the Dubai Creek. Foreign trade has developed through free zones as a result of the massive infrastructure built in Jebel Ali Port. The port became the ninth largest container port in the world, and it consists of three stations for containers, oil materials and general shipments. A fourth station for containers will be added on its completion in 2018. The increasing traffic in Dubai International Airport, Al Maktoum International Airport, and the Free zones in both airports contribute to enhancing the role of Dubai’s foreign trade in the economy.

Free zones play a pivotal role in increasing commercial exchange between Dubai and the world. In 1985, Dubai built the largest free zone in the Middle East and North Africa: “Jebel Ali Free Zone”. After that more than 22 free zones were built for various purposes and functions.

Dubai’s economy currently has a dual structure as foreign trade transactions are conducted in two different economic zones: Dubai’s main zone and the group of free zones. Free zones are governed by a set of rules, procedures, and regulations different from those governing business conduct in Dubai’s main zones as regulations in free zones are highly flexible. Hence, the classification of foreign trade distinguishes between transactions conducted through Dubai main zones (“Direct Trade”), and those conducted through free zones (“Indirect Trade”).

THE TOP FIVE COUNTRIES ACCOUNT FOR 41% OF DUBAI’S FOREIGN TRADE

IN 2016, THE VALUE OF EXPORTS ROSE BY AROUND 9%

WHILE THE VALUE OF RE-EXPORTS DROPPED BY 7%
Dubai’s Foreign Trade Performance

2.1 The importance of foreign trade (imports, exports, and re-exports) as a percentage of GDP, reflects the level of Dubai’s trade openness to the world.

In 2016, the value of Dubai’s foreign trade (imports, exports and re-exports) amounted to more than three times its GDP. When comparing Dubai to other economies such as Hong Kong, Singapore and other Gulf countries, the openness indicator shows that Dubai’s level of openness is higher than that of Singapore and Malaysia and that Dubai ranks third worldwide after Hong Kong and Luxembourg. (Figure 2.1).

Dubai’s Trade Values

2.2 The total value of Dubai foreign non-oil commodity trade amounted to AED 1.28 trillion at the end of 2016, slightly dropping by 0.5 per cent from 2015 and by 4.1 per cent from 2014 when the value of foreign trade registered a record number of AED 1.33 trillion. This decline can be attributed to several factors. The most important factors was the slowing growth of global demand and the decline in the value of imports as a result of the rise in the AED exchange rate (in which imports are valued) against the currencies of Dubai’s chief trading partners. (Figure 2.2).

2.3 The importance of direct trade (i.e. trade conducted through Dubai’s main zones) increased in 2016, and its share of the total value of Dubai’s foreign trade amounted to around 68 per cent compared to 62.5 per cent in 2015. The share of foreign trade through free zones amounted to around 32 per cent in 2016 down from 35 per cent the previous year. (Figure 2.3).
2.4 In reference to direct foreign trade, the value of both imports and exports rose by 9 per cent and 0.8 per cent respectively in 2016 while re-exports dropped by 7 per cent.

Overall, the total value of direct trade dropped slightly by 0.6 per cent. (Figure 2.4).

2.5 The drop in re-exports may be attributed to weak foreign demand, especially in neighbouring countries, in the light of the continuous decline in global energy prices and in their oil revenues. Moreover, it may also be attributed to the process of the valuation of goods valuation in (AED) whose relative value rose in 2016 against the currencies of Dubai’s main trading partners. (Figure 2.5).

2.6 With respect to foreign trade through free zones, the value of both imports and total exports (exports plus re-exports) dropped during 2016 by 6 per cent and 10 per cent respectively. This drop can be attributed to the decline in foreign demand due to the continued slowdown in global economic growth in addition to the rise in the US$ exchange rate against the leading currencies during that period. (Figure 2.6).

Dubai’s Foreign Trade Balance

2.7 The total trade balance for Dubai, which is the difference between imports and total exports, has been characterized by a permanent deficit because Dubai is a hub for global and regional trade. The imports of the Emirates are largely greater than its total exports since the majority of imports are transported to other emirates and neighbouring countries without them being registered as re-exports. Dubai’s commodity trade balance in 2016 indicated that imports exceeded total exports.

2.8 The trade balance dropped in 2016 due to the drop in re-exports. The growth in Dubai’s imports decreased in 2016, with imports rising by 9 per cent and total exports by 0.8 per cent, while re-exports fell by 7 per cent. This drop may be attributed to weak foreign demand, especially in the context of the continuous decline in global energy prices and the rise in their oil revenues. Moreover, the drop in re-exports can also be attributed to the process of the valuation of goods in (AED). The relative value rose in 2016 against the currencies of Dubai’s main trading partners.

2.9 With respect to foreign trade through free zones, the value of both imports and total exports dropped during 2016 by 6 per cent and 10 per cent, respectively. This drop can be attributed to the decline in foreign demand due to the continued slowdown in global economic growth in addition to the rise in the US$ exchange rate against the leading currencies during that period. Dubai’s commodity trade balance in 2016 indicated that imports exceeded total exports.
exports with a deficit of AED 297 billion or 24 per cent of total trade. It is noteworthy that the deficit between imports and exports expands as the importance of Dubai’s ports increase as an import hub with final destinations to the other emirates and to neighbouring countries. (Figure 2.7).

2.8 The trade deficit resulting from direct trade transactions in Dubai is larger than that in free zones and customs warehouses. This is attributable to several factors.

First, Dubai Custom’s data does not determine the final destinations of goods registered through Dubai ports. This, in turn, leads to registering goods passing to other emirates and neighboring countries as Dubai imports. They are not even registered as re-exports.

Second, compared to Dubai’s direct trade, a significant part of imports to free zones are used in manufacturing and logistics activities and then exported or re-exported abroad. Such imports are registered as exports or re-exports, and therefore, they lead to an increase in the share of imports and re-exports in the trade components in such zones.

Third, Dubai has a narrow manufacturing and agricultural base in which leads to a significant increase in importation of most of such commodities that are required for final consumption.

This increase in imports is aggravated due to the weak economic links between direct trade in Dubai and the free zone and the low share of high value added content in Dubai’s imports.

Fourth, the large number of high-income residents (citizens and expats) living in Dubai also fuel the continuous increase in the demand for foreign consumer goods.

Finally, it must be noted that the value of foreign trade in financial and logistics services in which Dubai has a relative advantage over similar economies (open and small), such as Hong Kong and Singapore, is not included in Dubai’s foreign trade statistics.

Therefore, recording the volume and value of trade in services (and increasing the focus on expanding the services sectors) can help in reducing Dubai’s significant trade deficit and might even turn it into surplus.

Dubai’s foreign trade is characterized by high concentration in terms of geography and types of commodities.

Dubai’s Foreign Trade Structure and Patterns

2.9 Dubai’s foreign trade is highly concentrated in terms of commodities and geography.

With respect to the commodity structure of trade, three groups of commodities accounted for more than 66 per cent of Dubai’s total foreign trade in 2015. These groups included: “Machinery, tools, equipment, electronic, and electric appliances” (at 33 per cent); followed by “Precious and semi-precious gemstones, minerals and imitation jewelry” (at 22 per cent); and then “Equipment and means of transportation” (at 11 per cent). The impact of a high commodity concentration becomes obvious at times of global price changes in such commodities. This affects the value of foreign trade, and at the same time, it limits Dubai foreign trade sectors’ ability to adapt as needed to the changes in the prices of such commodities. This in turn may have adverse effects on the Emirate’s terms of trade. (Figure 2.8).

2.10 With regards to exports, the “Machinery, tools, equipment and electronic and electric appliances” group followed by the “Precious and semi-precious gemstones, minerals and imitation jewelry” group, and finally the “Equipment and means of transportation” group accounted for 34%, 17% and 8% of exports respectively with a total of 59% of the total value of exported commodities in 2015. (Figure 2.9).

2.11 A high commodity concentration is also found in Dubai’s imports where a limited group of products account for the majority of its foreign trade purchases. Three commodities: “Machinery, tools, equipment and electronic and electric appliances”; “Precious and semi-precious stones, minerals and imitation jewelry”; and “Equipment and transportation vehicles” accounted for 33 per cent, 19 per cent and 12 per cent of all imports respectively totalling 64 per cent of total value in 2015, (Figure 2.10).

2.12 The concentration by commodity in the structure of re-exports is similar to that of imports. A large part of the commodities which are imported is passed on as re-exports outside Dubai. It is notable that the top three re-exported commodities also account for around 73 per cent of Dubai’s total re-exports. It is also worth mentioning that the majority of re-exported commodities are passed on to other GCC countries, Iran, Iraq, and India. (Figure 2.11).
The geographical distribution of Dubai's foreign trade is also characterised by geographic concentration. The reason is that a large percentage of trade is conducted between Dubai and a small number of trade partners. In 2015, five countries only (China, India, United States, Saudi Arabia and Germany) accounted for more than 41 per cent of Dubai's total trade. China came in the first position as Dubai's largest trade partner for the second consecutive year replacing India which has remained Dubai's largest traditional trade partner for many years. India was ranked second followed by the United States, Saudi Arabia and Germany in the fifth position.
2.14 In terms of Dubai’s exports in 2015, five main trading partners (India, Oman, Turkey, Iraq and Saudi Arabia) accounted for 45 per cent of the total value. The five main recipient countries varied from the previous year. Iraq replaced Saudi Arabia as the fourth largest destination for Dubai’s exports, while the latter replaced Kuwait in the fifth position. Kuwait was ranked in the seventh position, and Singapore came in the sixth position after being in tenth position in 2014. (Figure 2.13).

2.15 Inspecting the provenance of Dubai’s imports in 2015, China, the United States of America, India, Germany and Japan represented the main sources collectively accounting for 34 per cent of the total. China, the United States and India maintained the first three positions respectively while Japan held the fourth position which Germany had held the previous year (2014). Germany dropped to fifth position in the year under consideration. In 2015, the remaining ten importing partners of Dubai maintained the same positions they had held in 2014. (Figure 2.14).

2.16 Dubai’s re-exports represent Dubai’s major international trade activities. In 2015, around 32 per cent of Dubai’s commodity imports were re-exported both to neighbouring countries and worldwide. Five countries (Iran, Saudi Arabia, Iraq, India and Belgium) received more than 42 per cent of re-exported commodities from Dubai. Saudi Arabia replaced Iran as the top receiver of re-exported commodities from Dubai. Hong Kong and Belgium exchanged their fifth and sixth positions while Switzerland dropped from the tenth position to the twelfth and was replaced by the United States. (Figure 2.15).

Around 32% of Dubai’s commodity imports are re-exported to neighbouring countries
Intra Trade between Dubai and GCC Countries

Trade between Dubai and the other GCC countries witnessed steady growth in recent years. In 2015, Dubai’s trade with Saudi Arabia, Oman, Qatar, Kuwait and Bahrain accounted for 10 per cent of Dubai’s total foreign trade, up from 8.8 per cent the previous year.

The majority of this growth took place in the re-exportation field as Saudi Arabia became, as explained above, the top trading partner and the top re-exports destination from Dubai, worldwide, in 2015.

Exports and imports between Dubai and GCC countries started growing again as of 2012 after declining in 2011. It is also noteworthy that despite the re-exportation trade multiplying by 8 times between 2010 and 2015, the average increase in the value of imports and intra-GCC exports amounted to 11 per cent and 17 per cent per year, respectively, during the same period. (Figure 2.16)
CHAPTER 3 | Industry
The global financial crisis had adverse effects on the manufacturing industries sector for many years, but the sector recovered quickly and its value added has increased in recent years.

There is a need to create two institutions on the federal and local level to deal with industry affairs – reducing the reliance on low-tech industries. Creating more medium and high-tech industries.

**Introduction**

Dubai’s industrial sector consists mainly of the following three sectors: “Manufacturing Industries”; “Mining and Quarrying”; and “Electricity and Gas.” It is one of the primary pillars of the economy thanks to its numerous and outstanding contributions in achieving economic and social development. In addition it is the fourth largest sector in the economy of Dubai.

Dubai’s total industrial output “in constant prices” amounted to AED 50.5 billion in 2016 up by 2.7 per cent from AED 50.1 billion in 2015. Manufacturing contributed the highest percentage share of GDP (9.5 per cent) followed by electricity and gas (2.5 per cent) and mining and quarrying (1.7 per cent). There were no changes to the total industrial output structure as the three industries have almost maintained their current shares of GDP in the past five years except for the mining and quarrying sector whose contribution to GDP slightly decreased from 2 per cent in 2015 to 1.7 per cent in 2016. (Figure 3.1).

**FIGURE 3.1** Industrial Sector Contribution to GDP in Dubai (in constant prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing</th>
<th>Mining and Quarrying</th>
<th>Electricity and Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>9.6%</td>
<td>2.3%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2013</td>
<td>9.9%</td>
<td>2.3%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2014</td>
<td>9.8%</td>
<td>2.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2015</td>
<td>9.4%</td>
<td>1.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2016</td>
<td>9.5%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Source: Dubai Statistics Center

**Manufacturing Industries**

The value added of manufacturing (in constant prices) rose to AED 35.7 billion in 2016 compared to AED 34.3 and 34.5 billion in 2014 and 2015 respectively.

This industry sector witnessed fluctuating growth rates during the period 2007-2016. However, annual growth remained positive throughout this period except for 2009, the period following the global crisis of 2008. That year the value added of manufacturing registered a sharp drop of around 7.0 per cent. Nevertheless, the sector recovered and registered its highest rate of increase at 8.2 per cent in 2010 before the sector’s value added began to drop again due to the secondary impact of the global financial crisis.
on the local economy. The rate of growth in manufacturing reached its lowest positive levels at 2.4 per cent and 0.6 per cent in 2014 and 2015 respectively. This represents a reasonable growth rate especially when compared with other sectors whose growth decreased during that period. Recently, the manufacturing sector has bounced back in 2016 achieving an increase of 3.4 per cent. (Figure 3.2).

### 3.2 Data for various manufacturing industries activities in 2015 shows the main sectors dominating the manufacturing sector in Dubai, whether on the production level or on the level of contribution to manufacturing sector value added. These were iron products and their derivatives (25 per cent), machinery and equipment (16 per cent), food, foodstuffs, beverages, and tobacco (12 per cent), wood and paper products (12 per cent) and chemical products and pharmaceuticals (11 per cent). These five sectors alone amount to 76 per cent of the total value added of manufacturing and also of the total output of the same sector. (Figure 3.3).

### The Manufacturing Workforce

Manufacturing is considered one of the main sectors for employment of the workforce in Dubai both in direct manufacturing operations and industry-related operations.

Manufacturing employed around 251 thousand workers or 9.7 per cent of the total Dubai workforce estimated at around 2.6 million workers. Despite this importance, the contribution of manufacturing in employing the workforce decreased in the three years 2012-2015, although the numbers of workers in the sector remained steady. This is attributable partly to an increase in the number of workers employed in other sectors, and also to machines and digital equipment replacing humans in manufacturing industries. (Figure 3.4).
3.4 There are 42,000 workers employed in the manufacturing of fabricated metal products, except machinery and equipment, or 17 per cent of total workers in the manufacturing sector. The machinery and equipment activities employ around 37,000 workers (15 per cent), wood and paper products around 30,000 workers (12 per cent) and metal and rubber products 35,000 workers (14 per cent). (Figure 3.5).

### Direct Foreign Investment in Manufacturing

3.5 Direct foreign investment is one of the main drivers of economic growth. It is also considered to be an important indicator determining future growth and sustainable development in every country. A large level of direct foreign investment has numerous benefits as it allows the manufacturing sector to make technological and advanced achievements.

Foreign capital plays a vital role in the modern production system since it is hard to predict the success of production without capital and advanced foreign knowhow. It is not enough that nature provides the commodities and materials needed by manufacturing industries if the sector lacks the required funds, tools and machinery for mining and manufacturing activities etc.

3.6 Despite the importance of the role played by the manufacturing sector in Dubai’s economy, it has been one of the least successful economic sectors in attracting direct foreign investment. In 2015, direct foreign investment in manufacturing ranked fifth and accounted for a small part of total foreign investment which amounted to around AED 11 billion, i.e. with a share of only 4.2 per cent of total foreign investment, lagging behind other sectors such as the wholesale and retail trade, financial services and real estate. Nevertheless, it outperformed other sectors such as construction, and scientific, professional and technical activities. (Figure 3.6).

3.7 The value of foreign investments in the manufacturing sector continued to rise in recent years, but at a slow growth rate. The weak growth of the foreign investments share in this sector in Dubai may be due to investors’ preferences for other sectors due to the ease of doing business and to the fact that they entail fewer risks. It is noteworthy that the law which regulates the industry in the UAE is considered outdated as it goes back to 1981, and should be reconsidered to include improved incentives for investors. (Figure 3.7).
CHAPTER 3 | Industry

Mining and Quarrying:

3.8 Extractive industries rely on materials extracted by mining and drilling including oil, natural gas and mineral and non-mineral ores. The extractive sector is not considered to be a major part of Dubai’s economy, but makes an important contribution to employment while it covers the market needs of the primary, intermediate and final products related to the sector. The value of the output of the extractive industries sector in constant prices amounted to around AED 6.5 billion in 2016 compared to AED 6.9 billion in 2015, registering a drop by 2.6 per cent. The sector has continued to decline over the past four years. In addition, its contribution to GDP dropped from 1.8 per cent in 2016 to 1.7 per cent in 2014, which can be attributable to the decline in the international prices of primary commodities. Falling demand in turn had adverse effects on the local prices of primary commodities and energy. (Figure 3.8).

Electricity and Gas

3.9 The electricity and gas sector has made much progress in recent years, reaching an output (in constant prices) of AED 9.3 billion in 2016, and a growth rate of 4.6 per cent compared to 2015. The sector’s output doubled during the period 2009-2016, and the ratio of its contribution to GDP rose to around 2.5 per cent in 2016 up from 1.5 per cent in 2009. The sector’s value added in 2015 amounted to around AED 12.8 billion up from AED 7.4 billion in 2010. The workforce increased from 8,499 in 2010 to 10,092 in 2015. The workforce in the sector was estimated at around 0.4 per cent of the total workforce in 2015. Employment in the electricity sector increased by around 19 per cent between 2010-2015 as a result of the increasing demand for electricity and gas due to population growth and from rising demand from the industrial, real estate and tourism sectors. (Figure 3.9).

3.10 The statistical data reviewed above shows that the performance and significance of the industrial sector in Dubai and the UAE is still below the required general level. Therefore, there is a need to create two institutions on the federal and local level to deal with industry affairs. The purpose of these institutions would be structuring, organising, and designing industrial policies and plans leading to reducing the reliance on low-tech (labour-intensive) industries and creating more medium and high-tech industries (capital intensive with a low workforce). The Government has realized the importance of this sector, at both the federal and local levels. At the federal level, the government adopted an economic diversification approach which aims at reducing the dependency on oil as a main source of income while expanding into a wide range of other sectors, the most important of which is manufacturing. This reflects the fact that industrial progress is important for sustainable development, for attaining a higher contribution of manufacturing to GDP, for producing higher growth and a higher GDP per capita. On the local level, the government of Dubai has shown an increased interest in the industrial sector. This interest is evidenced by the launch of the Dubai Strategy for Industrial Development within the Dubai Plan 2021, which will be discussed in the Thematic Chapter (Chapter 4) of this report.
THE EMIRATE OF DUBAI ATTACHES PARTICULAR IMPORTANCE TO THE BENEFITS OF SUSTAINABLE DEVELOPMENT AND TARGETS ENERGY PRODUCED FROM NUCLEAR AND ALTERNATIVE ENERGY SOURCES.

EMPLOYMENT IN THE ELECTRICITY SECTOR INCREASED BY AROUND 19% BETWEEN 2010-2015 AS A RESULT OF THE INCREASING DEMAND FOR ELECTRICITY AND GAS.
CHAPTER 4

Dubai Industrial Strategy

Resources, Opportunities and Challenges
Introduction

The Emirate of Dubai has launched “Dubai Industrial Strategy 2030” to develop its industrial sector. The aim is for industry to become one of the new strategic sectors to enable the achievement of the economic growth targeted by the “Dubai Plan 2021”. The strategy sets out Dubai’s Industrial Vision to become a global platform for knowledge-based, sustainable and innovative industries. Five strategic objectives were laid down to build the base of Dubai’s industrial future, and these are: to be a growth engine; to be innovation based; to be a home for global businesses; to be environmentally sustainable supporting the green economy; and to adopt Islamic standards to manufacture “Halal” products which will contribute to achieving Dubai’s vision as the capital of the Islamic economy.

The Dubai Industrial Strategy has also identified six industrial sectors to lead the economic transformation to an advanced industrial. These sectors are: Aviation; Ships; Pharmaceuticals & Medical Equipment; Fabricated Metals; Machinery & Equipment; and, Consumable Goods.

The “Dubai Industrial Strategy” is being launched at a critical phase in Dubai’s economy, both locally and internationally. Locally, the “Dubai Plan 2021” emphasises the importance of industry as a strategic sector in order to build a strong and sustainable economy with diversified national income sources and to prepare for the post-oil economy. The main components and axes of the strategy are derived from the “UAE Vision 2021” and the “National Agenda 2021” which aim for the UAE to be a global hub for innovative industries and the favorite destination for global companies looking for a complete environment suitable for growth and sustainability.

On the international level, it is noted that competition is intensifying between countries to obtain greater advantages in terms of regional integration and globalization. In this context, Dubai seeks to consolidate its position in the regional and the international economy as a business hub through developing its institutional capabilities and working to raise the competitiveness of local products globally.

It is hoped that the industrial strategy will contribute to make structural changes in Dubai’s economy that will strengthen its diversification efforts, and consequently, achieve long-term economic growth. In this regard, the strategy has identified 75 initiatives to transform Dubai into an international hub for knowledge-based, innovative and sustainable industrial activities. The strategy is expected to have a positive impact on Dubai’s economic performance towards 2030 as follows:

1) A projected increase of AED 160 billion in Dubai’s total GDP, especially through increasing the value of industrial output by around an additional AED 18 billion (the value of current industrial output is estimated at...
Overview of recent trends in Dubai’s industrial sector

Chapter 3 of this report reviewed recent developments in the industrial sector showing the dominance of manufacturing which plays a vitally important role in Dubai’s economy accounting for 9.5 per cent of GDP. The average annual contribution of manufacturing output in the last ten years (2007-2016) has been 9.7 per cent of GDP (in constant prices) while the sector’s workforce amounts to quarter a million workers, accounting for about 10 per cent of the total workforce in Dubai.

Trends in Dubai’s Manufacturing Value Added

Manufacturing value added (MVA), defined as industry’s net output after deducting production inputs or intermediate consumption, during the past ten years (2006-2015) has recorded an average annual growth rate of 2.8 per cent. The industrial sector recovered successfully after the recession caused by the global financial crisis, and it achieved steady growth during the period 2010-2014. However, the sector was affected again by the huge drop in global energy prices at the beginning of the second half of 2014, but manufacturing recovered achieving an increase of 3.4 per cent in value added value by the end of 2016. This rise exceeded the GDP growth rate in that year (at 2.9 per cent).

These trends indicate that manufacturing industries played a growing role in Dubai’s economy and were resilient to external shocks caused by the global financial crisis and later the large drop in global energy prices. However, the share of manufacturing value added (MVA) in Dubai’s GDP did not exceed 10 per cent and was still lower than the average share of MVA in world GDP amounting to 16.2 per cent in 2014 (according to the Global Industrial Development Report 2016 of the United Nations Industrial Development Organization – UNIDO).

Dubai’s manufacturing structure is characterized by a predomination of resource-based low-tech and labour-intensive industries. Available data from Dubai Statistics Center show that the manufacture of basic metals and fabricated metal products together account for 25 per cent of total manufacturing value added, followed by the manufacture of machinery and equipment, repair and installation (16 per cent), the manufacture of foodstuffs and beverages (12 per cent), the manufacture of wood and paper products (12 per cent) and the manufacture of chemical materials and products (11 per cent). These five industry groups collectively account for 76 per cent of the total value added of manufacturing and employ more than two-thirds of the total workforce in the sector.

In contrast, high tech (skill-intensive) industries, such as the manufacture of computers, electronic and optical products and pharmaceutical and medical equipment, account for less than 5 per cent of the total value added of Dubai’s manufacturing sector.

The significant importance of the manufacture of basic metals and metal products in the Emirate’s manufacturing base is primarily attributed to Dubai’s urban development especially in the construction sector and to the huge investments in infrastructure. (Figure 4.1).

An interesting contrast can be seen by comparing manufacturing value added by industry group according to technological content. In this case, while the share of high and medium-technology products in manufacturing accounted for 47 per cent globally in 2013, the share was only 24 per cent of Dubai’s manufacturing value added. Furthermore, while the share of resource based and low-
technology industries contributed to around 25 per cent of global manufacturing value added, the same share accounted for 61 per cent of Dubai’s manufacturing value added. (Figure 4.2).

A similar picture is seen in Dubai’s manufacturing value added in its exports which, in turn, reflect on the sector’s competitiveness in producing products that can keep up with technological development and global demand. For example, Dubai’s exports of manufactured products, classified by technological composition, show that low-technology and resource-dependent products account for 85 per cent of the total. In contrast, medium and high tech-content products constitute only 15 per cent of Dubai’s manufactured exports. (Figure 4.3).

**FIGURE 4.2 | Comparison of Dubai’s Manufacturing Structure by Technological Contents with the World**

**FIGURE 4.3 | Development in Dubai’s Manufactured Exports Structure**


THESE FIVE INDUSTRY GROUPS COLLECTIVELY ACCOUNT FOR 76% OF THE TOTAL VALUE ADDED OF MANUFACTURING AND EMPLOY MORE THAN TWO-THIRDS OF THE TOTAL WORKFORCE IN THE SECTOR.
The technological content of Dubai’s manufactured exports have not changed when 2016 is compared to 2008. The share of medium, and high technological content manufactures remained almost the same, while the share of Dubai’s manufactured exports in low technological content rose from 69 per cent in 2008 to 74 per cent in 2016. (Figure 4.4).

Manufacturing Linkages with other Economic Sectors

Despite the modest contribution of the sector to GDP manufacturing activities play an important role in driving growth in the domestic demand for other domestic production services through linkages and the integration of Dubai’s manufacturing with other economic activities in the Emirate. This can be shown by examining the composition of manufacturing’s intermediate consumption. Among the most important services connected to manufacturing are financial and insurance services, machinery and equipment rental, transport, trade, real estate, communications and others. Interdependence between manufacturing activities and other economic activities can be measured by using the share of intermediate consumption (i.e. production inputs) in the final output of manufacturing industries. The intermediate inputs of manufacturing is estimated at 71 per cent of manufacturing output according to the 2013 Input-Output Table issued by the Dubai Statistics Center (DSC).

The linkages between manufacturing and the other economic sectors estimated by the pattern of intermediate consumption in manufacturing from the I/O Table, show that around 50 per cent of the inputs used in manufacturing output originates from inter-manufacturing industries (between industries), while inputs originating from other sectors are estimated as follows: the mining sector 24.5 per cent, the services sector 23 per cent and lastly, inputs originating from the agricultural sector are estimated to account for 2 per cent of output. These indicators show that there are close links between the industrial sector and other strategic sectors in Dubai’s economy. This will provide strong supporting pillars for the success of the industrial strategy of pushing current industries towards higher levels of technology, founding new industries based on knowledge, innovation and environmental sustainability, in addition to the adoption of the best international standards in modern industries. Figure (4.5).

An Analysis of Dubai Industrial Strategy’s Main Objectives

The Dubai Industrial Strategy was launched in a significant phase of the economic development journey outlined in the “Dubai Plan 2021”. It entrusted the industrial sector with a new strategic role to accelerate economic diversification by achieving success in three areas: by transforming Dubai into a global hub for industries based on knowledge and innovation; by becoming a preferred destination for global companies looking for a compatible environment suitable for growth and sustainability; and, by becoming a global center for Sharia-compliant products. The following sections will analyze the main five objectives which the Dubai Industrial Strategy seeks to reach in order to achieve the desired vision, and then we will review the selected industries which will lead the sought-after industrial transformation.

(1). Industry as a growth Engine for increasing GDP

The industrial strategy has set among its objectives that of increasing the share of manufacturing industries value
Indicators have shown that manufacturing’s value added did not increase notably in the past ten years. The contribution of the sector to the Emirate’s GDP did not exceed 10 per cent, on average, which is lower than the global average (16.2 per cent). Nevertheless, the growth of industrial value added at 3.4 per cent in 2016 was higher than the global value added growth rate of 2.3 per cent in 2013 according to a UNIDO report. This indicates that manufacturing is continuing to recover from the effects of the instability in global financial markets and from fluctuations in the global prices of primary commodities.

An analysis of the relation between manufacturing and development, places it as a leading sector which contributes greatly to the development of many other activities due to its forward and backward linkages as described in Figure (4.5). It also plays an important role in diversifying and developing other economic sectors, in increasing total factor productivity and employment rates. Manufacturing is one of the main means of decreasing poverty in developing and newly industrialized countries through the creation of new jobs and by increasing per capita income.
Evidence from the growth in manufacturing value added and the growth rates in GDP in newly industrialized countries show there is a positive and close relation between the two in such countries. When manufacturing’s value added grows by relatively high rates and its share of GDP also increases, this is accompanied by accelerated economic growth, and consequently, higher per capita income. Figure (4.6).

From the literature1, we can also conclude that growth and industrial development in developing countries does not necessarily require the use of latest technology (at the technology frontier), but rather by effecting change in the production structure towards relatively high productivity activities. This structural transformation can be achieved by absorbing available technology, by producing manufactures and services capable of competing in global markets and by accelerating the accumulation of financial and human capital. Furthermore, manufacturing is generally considered less vulnerable to external shocks compared to other economic sectors, such as extractive industries and mining, which are more exposed to fluctuations in global prices, economic crises, geopolitical factors and others factors. Moreover, manufacturing is more capable than other sectors of providing many opportunities for production diversification, for establishing new and permanent industries far from labour-intensive/low-tech industries, and stimulating industries which employ skills and generate high value added in general.

(2) Enhancing knowledge and innovation content to improve the productivity of the industrial sector

The second objective of the Dubai Industrial Strategy is to increase the knowledge and innovation content in manufacturing. This will lead to an improvement in the productivity of industrial labour increasing overall sector growth, which will give the sector a permanent competitive edge. This effect is attributed to the fact that innovation leads to improved production in industrial activities with high value added. Innovation also helps to build and develop local capacities to exploit the opportunities provided by technological advancement. The productivity of the industrial workforce can also be increased by attracting direct foreign investment in the industries which require skills and modern technology, and which are integrated and interdependent with global production networks. Consequently, this leads to higher level manufacturing.

With respect to labour productivity in manufacturing, the indicators used in one of the studies of the Dubai Department of Economic Development indicate it did not record any notable growth in two decades. In fact, the economic growth model followed by the Emirate of Dubai in the past was based on growth in business and capital through the use of a low-wage workforce, especially in the real estate, construction and trade sectors. Taking into account globalization and the scientific and technological revolution in the world today, and in light of Dubai’s efforts to achieve a qualitative leap in its growth path to catch up with the economic advancement achieved by industrial countries and newly industrialized economies, an alternative approach is to depend on the growth in the total productivity of factors of production. This approach is based on intensifying the use of technology

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in manufacturing at the expense of labour, and especially non-skilled labour, which will help in transforming the economy into a knowledge-based economy. Figure (4.7).

Innovation is considered a real measure of the performance of world economies and one of the critical factors in the economic development process. Innovation can produce qualitative shifts in production methods and it can increase productivity, and hence, enhance the competitiveness of local products in global markets. Moreover, innovation leads to the development of the quality of life and increases economic well-being.

Accordingly, many world economies have adopted the concept of innovation and succeeded in making tangible achievements in local production, exports, scientific and research based products and consequently they have improved the quality of life for their citizens. Reports on global competitiveness show that highly innovative countries, like Switzerland, Singapore, Finland, Germany and the United States of America, which have strong institutions and seek to introduce innovative products and services to the markets, are the ones that continuously take the lead in the world’s competitiveness ladder. Moreover, those reports also emphasize the importance of partnerships between the business sector, governments and civil society to form a complete educational system and to enable appropriate environments to promote innovation.

In connection to what has been discussed above, research and development are considered the main driver of industrial development. Many industrial countries have created science and technology complexes (parks) to promote innovation and training. In addition, they have created educational and technological entities and set up mechanisms to protect intellectual property. Furthermore, they continuously seek to provide resources to finance applied research, and to help in transferring technology and business skills to the industrial sector. In the past two decades, technological incubators have spread all over the world, and they are designed to innovate approaches and programs to confront the challenges facing new technology companies in addition to obtaining the necessary capital and experience to transform ideas into successful business models. In consequence, entrepreneurship in the United States of America became heavily dependent on technology incubators. In this context, one study indicated that for every US$10,000 spent on incubators, 45 jobs are created. In contrast, building a new road creates only 5 jobs for the same amount of expenditure.

The Dubai Industrial Strategy calls for increasing expenditure on research and development over current levels. Average expenditure on research and development on the federal (UAE) level was estimated at around 0.7 per cent of GDP in 2013 and while this average ratio exceeds the expenditure ratio in other Gulf countries (0.26 per cent), it is less than that of many advanced countries. For example, The Organization for Economic Co-operation and Development (OECD) estimates average expenditure on research and development in manufacturing industries in G7 countries at 2.8 per cent of GDP compared to 0.3 per cent on average in the services sector. The electrical and optical devices industry receives the highest rate of R&D expenditure in such countries. In contrast, the data indicates that the number of registered innovations in the UAE amounted to 60 in the period 2012-2013.

The above analysis demonstrates the motives for which the Dubai Industrial Strategy targets innovation and knowledge to improve industrial productivity and to transform the Emirate into a knowledge-based economy.

(3) The industrial sector as a favourite destination for global companies

The third objective of the Dubai Industrial Strategy consists of two sub-objectives: (A) to make Dubai an industrial hub and a favorite destination for global companies; and (B) to support the expansion of local companies into global markets, and to increase industrial exports.

(A) Dubai as an industrial platform and a favorite destination for global companies

There are many enablers that could strongly support achieving this objective, and they include:

1. Dubai’s strategic location as an intersection point for business and trade networks between east and west.
2. Dubai’s modern infrastructure with high international standards and specifications. Furthermore, the government is still investing in infrastructure to keep up with development in various sectors. According to the Roads and Transport Authority (RTA), the cost of major projects for the development of roads and transport infrastructure is estimated at AED 20 billion; they include roads and transport projects for Expo 2020 with an estimated cost of around AED 15 billion.
3. The Emirate has many free zones, the most important of which is the “Jebel Ali Free Zone” (“Jafza”) which is considered one of the biggest free zones in the world. These zones contribute today to around 30 per cent of Dubai’s economy. Most factories are concentrated in “Jafza” which hosts more than 765 industrial companies from 73 countries. These companies employ around 73 thousand employees and occupy an area of 14 million square meters consisting of various industrial facilities and buildings.

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Dubai Industrial Strategy

4. The interest taken by Dubai’s Government in developing human resources, especially through investing in education and training, which will provide industry in the future with qualified professionals.

5. The appropriate investment environment in Dubai compared with many of the region’s countries, in addition to the provision of advanced and innovative services which support investors’ success and the growth and expansion of their businesses.

6. The remarkable progress in the performance and efforts of local and federal government departments, and especially the role of the “Department of Economic Development” to provide the best services to investors to facilitate business and promote the sustainability and competitiveness of Dubai’s economy.

7. The political, economic and monetary stability in the UAE, and the existence of effective macroeconomic policies which have succeeded in dealing with the variations and trends in the global economy.

8. The development of economic and commercial relations between Dubai/UAE and many other countries which involve numerous import, export, and re-export operations all contributing to the development and growth of the industrial sector.

It is clear from the list of enablers above that Dubai has many resources which can turn it into an industrial hub and a preferred destination for global companies.

(B) Supporting the expansion of local companies in global markets and increasing industrial exports

The Emirate of Dubai succeeded in building a diversified industrial base based on world-class technology in a record time. At the forefront of the global advanced industries which have been launched in previous years are the aviation, semiconductors and metals, in addition to the remarkable progress achieved in the renewable energy sector. These achievements were facilitated by the Emirate’s logistic network and its excellent air, sea, and land transport capabilities, in addition to its strategic location between East Asia and Western Europe. All of these factors can contribute in strengthening local industrial companies so that they can access global markets.

The access of small and medium industrial companies to global markets can be achieved through active participation in Global Value Chains (GVCs) as this will help them to gain competitiveness in global markets. It is now possible for many companies in many geographical locations worldwide to cooperate with each other to manufacture one product. They benefit from the cost and value added advantages provided by each company’s contribution to such chain and then compete later on with other chains of companies which are active in the same industry. Today, we find that many of the commodities used on a daily basis, such as cars, mobile phones, electronic devices etc., are produced and marketed within GVCs and not only in their countries of origin.

However, active participation in such GVCs requires larger investments in acquiring technology and skills. In addition, the success of such products in global markets is highly dependent on importing high-quality inputs. It is also equally dependent on the ability to export.

(4) Promoting environmental-friendly and energy-efficient manufacturing industries

This strategic objective aims at moving towards green and environmental-friendly industries to reduce pollution resulting from manufacturing. International experience shows that the first phases of industrial development cause pollution and waste fossil fuel energy. These phases of manufacturing are medium or low-tech industries such as manufacturing iron, metals, chemicals etc.

Building industrial activities which use renewable energy and industries which depend on recycling economy applications – i.e. those which aim to reuse most of the components used in manufacturing a specific product in manufacturing a new product - all require very large investments to transfer modern technology. In the beginning, this may require launching joint projects with some global companies which are mainly oriented for export purposes. This approach helps in attracting foreign capital on the one hand, and in gaining productivity, administrative and marketing experience on the other, in addition to increasing the volume of industrial exports.

(5) The industrial sector as a global centre for Islamic products

This strategic objective is part of Dubai’s initiative to be the favorite destination for Halal industries. This industry is no longer limited to food but also to many other industries which have emerged in the light of the increasing number of Islamic communities around the world and their improved well-being. Halal industries also include pharmaceuticals and cosmetics. A Halal industry zone has been established with the aim of attracting companies working in this sector and establishing clusters for the Halal sector. Today, this zone has more than 7 companies, in addition to which other companies are still being set up, specializing in nutrition, cosmetics, and health. Moreover, Halal accreditation services have been introduced to certify Halal products, and periodic exhibitions are held with the participation of Islamic banks, insurance companies, transport operators, logistics and distribution companies.

The pharmaceuticals industry is one of the targeted industries. There is now coordination with the relevant authorities to provide facilities to companies in this sector, and to guarantee the production of high-quality products.
which conform to international specifications. As a result, this sector’s trade volume reached US$ 3.6 billion, and the volume of Halal industries market worldwide is estimated at around US$ 2.3 trillion.

**Targeted Industrial Subsectors**

The Dubai Industrial Strategy has specified six industrial sectors, based on their contribution in achieving the strategic goals and their economic impact on the medium and long terms. They have been chosen through evaluating their future growth forecasts and their products exporting potential, taking into account Dubai’s competitiveness and the attractiveness of local and global markets. These sectors include: Aviation, Ships, Pharmaceuticals, Consumable Goods, Fabricated Metals and Machinery & Equipment. (Figure 4.8).

**Aviation.** The strategy highlighted the pivotal role which Dubai will play in the aviation industry through manufacturing airplanes’ spare parts and the provision of maintenance and repair services to the huge number of airplanes landing in the country’s airports, as it has become one of the main aviation hubs in the world. This will contribute to raising the industrial added value of this sector. In addition it will have a great impact on the aviation sector through creating job opportunities, raising the level of research and development, and contribute to making Dubai a base for global companies.

**Ships.** Dubai enjoys a special location in the world as a center for trade, maritime, and logistic services. It also possesses a high level of experience through the services offered by Drydocks World, the presence of a specialized zone in Dubai Maritime City and the support provided by the Dubai Council for Marine and Maritime Industries.

**FIGURE 4.8 | Pivotal Industrial Subsectors of “Dubai Industrial Strategy”**

The Jebel Ali Port is considered the largest sea port in the Middle East with a capacity of 21 million standard containers. The industrial strategy’s emphasis on the sector of ships, oil platforms and floating installations is due to Dubai’s leading position in the field of ship repair services, and its potential to expand its activities to attract higher traffic to its facilities. The strategy also highlights Dubai’s potential which qualifies it to access this sector through the manufacturing and marketing of boats and small yachts to the increasing needs of the tourism sector in the country.

THE JEBEL ALI PORT IS CONSIDERED THE LARGEST SEA PORT IN THE MIDDLE EAST WITH A CAPACITY OF 21 MILLION STANDARD CONTAINERS
**Pharmaceuticals.** This sector has vital importance to the country and the community. This derives from the significant value added it generates, in addition to its contributions in building and developing scientific research, and development of skills and competencies. There is a great opportunity for developing this strategic sector in Dubai when consideration is made of the low regional production, while around 80 per cent of pharmaceutical products consumed in Gulf countries are imported.

The strategy also concentrates in the first stage on the sector of manufacturing medical cosmetics since Dubai has an active global market for these products. Dubai can also benefit from the growth achieved by the Halal pharmaceuticals and cosmetics market to strengthen Dubai’s role in the Islamic economy, so that it becomes the main source of “Halal” medical cosmetics in the Middle East.

The emphasis on the medical cosmetics sector will contribute to increasing investment in R&D infrastructure and preparing competencies and capacities for the following stages. This involves a transition to the creation of pharmaceutical industries which require highly skilled labour and advanced technological and research capabilities.

**Consumer Goods.** The strategy deals with the food and beverages industry as the volume of the global food and beverages market amounted to around US$4 trillion in 2014, while Dubai’s exports from these industries amounted to only US$13 billion (AED 47.7 billion)

Dubai has high potential to play a pivotal role in this sector. Gulf countries depend on imports to meet 70 per cent of their total food needs and the sector is expected to grow by a compounded annual rate of over 3 per cent until 2030. Dubai is in a unique position to access this growing market since it possesses the required capabilities including an advanced infrastructure, a strategic location, a connection with the region’s countries and the world through its network of airports, ports, and routes crossing Gulf countries. This could all help in facilitating support and supply which is considered one of the most important resources for success in this sector. It is noteworthy that fast moving consumer goods in Dubai have grown significantly during the past years, and the trade volume of this sector amounted to US$6 billion in “Jafza” alone.

The strategy concentrates on benefitting from the increased demand on foods, and especially Halal products, as Dubai seeks to be a global centre for their production and marketing. This will enhance Dubai’s position as a capital for the Islamic economy.

**Fabricated Metals.** Dubai has one of the largest aluminum smelters in the world. The UAE is considered one of the largest global exporters of aluminum as it exports an estimated 88 per cent of its 2.4 million tons production annually. The value of the global aluminum markets amounted to around US$421 billion in 2014.

Studies indicate that Dubai has the opportunity and capacity to increase its production capacity in the field of fabricated metals through its current base in aluminum production by developing activities related to manufacturing finished and semi-finished aluminum products. This will contribute to increasing the output of the current operations of smelters. Manufacturing finished aluminum products will also help local producers to reach world-class levels and to attract clients and investors specialized in manufacturing cars and airplanes in specific.

**Machinery and Equipment.** The strategy indicates that the machinery and equipment sector is considered to be a manufacturing sub-sector which has incredible potential for expansion especially that Dubai is considered one of the active markets in building and construction.
Summary and Concluding Remarks

The Dubai Industrial Strategy is considered an advanced step for Dubai towards establishing a knowledge-based economy and expanding its production base and economic infrastructure. It is hoped that the strategy will lay foundations for a comprehensive and sustainable economy and prepare for the post-oil period.

The strategy has formulated implementation mechanisms which keep pace with the continued growth in all sectors. It has also set specific tasks and responsibilities for each economic institution, free zones and industrial zones alike, by launching promising initiatives to stimulate the industrial sector to attract more foreign investment. Related entities are also working on removing the obstacles to the development and advancement of this sector, especially in the form of various incentives aiming to increase the sector’s contribution to the Emirate’s GDP.

Undoubtedly, the implementation of the strategy will face external and local challenges, such as the drop in global energy prices. These could compromise the sustainability of public funds on the UAE economy level and progress with the planned development projects. However, such a challenge may provide an incentive and a positive element to boost the promising industrial sector in Dubai and the country. In addition it reduces production cost which will push towards the promotion of the industrial diversification efforts.

Concerning labour productivity and total productivity of all factors of production in Dubai, the majority of the growth achieved in the past period was due to the accumulated growth in the productivity of both labour and capital. Effective incentives must be introduced to induce the private sector to speed up the employment of Fourth Industrial Revolution technology. This will provide local small and medium companies with a great opportunity for production through effective entry into specialized global value chains within the most important global industrial sectors. This will be achieved in cooperation with major UAE industrial companies in order to build specialized local supply chains capable of competing on the global level.

Applications of Fourth Industrial Revolution technology will allow Dubai and the UAE to transition from importing technological solutions to exporting knowledge. This will enable the knowledge-based industry sector to achieve a huge qualitative leap, which in turn will establish Dubai as a destination for global industries. Dubai’s success in leading a knowledge-based economy will present the Emirate as a model that can be applied both regionally and internationally.

One of the most important lessons learnt from successful global development experiences is that providing a climate suitable for business and investment leads to increased productivity. This will create new job opportunities and provide increased financial returns from public investments, which will contribute in the end to raising levels of well-being for everyone. Another lesson is that the most suitable investment climate results from a group of institutional factors. These include the existence of a strong infrastructure, an export-friendly business environment, business legislation that is up to date with local and global developments and finally, effective institutions to facilitate business transactions.

Furthermore, reaching the knowledge-based economy phase requires intensifying efforts in the field of human development. This must start with education, developing curricula and disciplines related to industrial innovation, and taking care of technical and vocational education. In addition research and development processes must be developed in all the industries in which Dubai has competitive capabilities to access global markets. In this context, it is important to establish partnerships and cooperation between universities and the industrial community in the Emirate, similar to the cooperation between universities and industries in industrial countries. Universities and their research facilities have played an important role in applied science research and development, as industrial companies used to seek applied solutions from them. Such solutions were then tested and developed in university labs to become applicable industrial technologies according to the industrial needs of such companies.
CHAPTER 5

Wholesale and Retail Trade
Introduction

The internal trade sector (which in the national accounts is defined to include the wholesale and retail trade, motor vehicles and motorcycles repair) is considered one of the main pillars of economic development in Dubai.

The sector plays a significant role in linking various regions, providing wide job opportunities in addition to distributing all kinds of commodities to consumers, and intermediate or investment commodities to various economic sectors. Internal trade is also considered to be one of the economy’s main sectors since it plays an important role in underpinning economic growth in Dubai, through attracting both domestic and foreign investment in wholesale and retail trade activities. This investment has helped transform Dubai into a global shopping destination.

Over the years, the wholesale and retail trade sector has evolved as a result of several factors, the most important of which are the modern and durable infrastructure, the existence of effective goods’ distribution channels to neighboring emirates, in addition to the quick construction of houses in the main urban areas and the relocation of shopping centers from the congested city center to the suburbs.
CHAPTER 5 | Wholesale and Retail Trade

Development of Wholesale and Retail Trade

5.1 Indicators of internal trade show significant developments in terms of the sector’s relative importance in GDP. The sector accounted for 27.5 per cent of GDP and 14.5 per cent of the total workforce in Dubai’s economy in 2016. (Figure 5.1).

The internal trade sector also contributes to the greater part of the tertiary (services) sector which includes transport, logistics, accommodation, food services, financial activities, insurance, and other services. Notably the tertiary (services) sector accounted for the largest share of Dubai’s GDP at 79.5 per cent in 2016 compared to 76.8 per cent in 2009, while internal trade accounted for around 35 per cent of the tertiary (services) sector. (Table 5.1).

Wholesale and Retail Trade Value Added

5.2 Economic data show that the value added (in constant prices) of the wholesale and retail trade sector in Dubai's economy increased in 2016 to AED 103.4 billion, up by 1 per cent over 2015, but less than the rise achieved (5 per cent) in 2015. In past years, the sector was negatively affected by the global financial crisis and its value added dropped by 6 per cent in 2009, but the sector has recovered again since then and resumed its important role as the main driver of Dubai's economy. Notably the forward and backward linkages of the wholesale and retail trade sector with other sectors and activities, such as tourism, logistic services, transport and others have contributed to increased demand for products and services from those sectors. (Figure 5.2).

| TABLE 5.1 | The Importance of the Services Sector in the GDP (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Main sector | 2 | 1.5 | 1.8 | 2.4 | 2.2 | 2.1 | 1.9 | 1.8 |
| Secondary Sector | 21.2 | 20.4 | 19.7 | 19.3 | 19.5 | 19.1 | 18.2 | 18.7 |
| Tertiary Sector | 76.8 | 78.1 | 78.5 | 78.3 | 78.3 | 78.8 | 79.9 | 79.5 |
| Wholesale and Retail Trade | 26.3 | 27 | 28 | 27.4 | 28.1 | 27.6 | 27.9 | 27.5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

SOURCE: Dubai Statistics Center
CHAPTER 5 Wholesale and Retail Trade

5.3 Value added per worker in the internal trade sector declined in the years following the global financial crisis dropping from AED 241 in 2008, to AED 182 in 2015. The decrease in the value added per worker during the period (2009-2012) can be attributed to several factors. One possible cause is that despite the decline in business activities during the crisis, retail businesses kept the majority of their workforce employed, albeit with lower wages and fewer benefits in anticipation that the business would improve in the future. However, in general, workers’ productivity in this sector is considered among the lowest compared to other economic sectors since the retail and wholesale trade is labour intensive with a relatively low use of advanced technology. (Figure 5.3).

The Wholesale and Retail Trade Sector Workforce

5.4 The data available indicates that the number of workers in the wholesale and retail trade sector reached 577 thousand workers in 2015 compared to 562 thousand workers in 2014. The number of workers in the sector continued to increase despite the impact of the global financial crisis. However, the share of the sector’s workers in the total workforce in Dubai’s economy, recorded a slight decline in 2015. Nevertheless, this sector’s share at 22.4 per cent is still the highest ahead of that of the construction sector’s (21.1 per cent), transport and logistics (10.1 per cent), manufacturing (9.7 per cent), and accommodation and food services (7.4 per cent). (Figure 5.4).

The growth of the workforce in the wholesale and retail trade sector has largely been due to population growth resulting from an increase in the foreign workforce and a higher growth rate in Dubai’s population.

In contrast, the decline of the sector’s share in the total workforce can be explained by a faster growth of the workforce in other sectors of the economy. (Figure 5.5).

ALTHOUGH THE NUMBER OF WORKERS IN THE WHOLESALE AND RETAIL TRADE SECTOR HAS INCREASED, THE SECTOR’S SHARE IN THE TOTAL WORKFORCE HAS BEEN DECREASING OVER THE PAST YEARS DROPPING TO 22.4% IN 2015 FROM 24.8% IN 2010.
Fixed Capital Formation in the Wholesale and Retail Trade Sector

5.5 Fixed capital formation, i.e. investment spending, is an important driver of an economy.\(^1\)

The value of fixed capital formation in the wholesale and retail trade sector as shown in Figure 5.6 dropped in the years immediately following the global financial crisis. Investment fell to AED 11.3 billion in 2008 and to AED 7.5 billion in 2009 compared to a much higher level of AED 20.5 billion in 2007, a decrease of about 63.4 per cent. However, the sector quickly recovered in 2010 and the value of fixed capital formation rose to AED 9.8 billion (up by 31 per cent over 2009). It then continued to rise until 2013 by 34 per cent before dropping again by 1 per cent in 2015.

5.6 Despite the importance of the wholesale and retail sector in Dubai’s economy, data about this sector’s activities are scarce. The sector does not receive the in-depth analysis and studies it deserves given that it is the largest sector contributing to GDP. It is also the most diversified sector in Dubai’s economy and it is important to know how quickly the sector adapts to global changes. Today, the wholesale and retail trade has become more complex than ever and this will prompt researchers and policymakers to develop new statistical and research programs which must start with separating retail trade data from wholesale trade and vehicle repair data. This is necessary in order to study each activity separately in-depth and to conduct detailed and periodic analysis of them.

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\(^1\) Capital formation represents investment expenditure by the sector’s companies with the purpose of building factories and buying capital goods such as machinery and equipment. Such goods are used to produce other goods and provide other services to support all sectors, including the internal trade sector. In addition, investment expenditure on buildings, real estate and various machines are also used in the production process, shipping and in marketing. For this reason, the rate and level of capital formation is considered one of the most important indicators of the success of any economic sector in attracting investment capital.
CHAPTER 6
Transport and Communications
**Introduction**

The transport and telecommunications sector is a pivotal sector for any growing and developing economy, which is why the Emirate of Dubai has accorded, and is still according great significance to supporting this sector. The government of Dubai has also allocated a huge budget for investment in the infrastructure of the transport and communications sector due to its importance in attracting more business and investment to the emirate. In the transport field, the Roads and Transport Authority in Dubai manages and regulates transport within Dubai and also between it and the other emirates belonging to the UAE. This includes means of transport comprising road, sea, and rail (the metro). Meanwhile the Civil Aviation Authority oversees all activities connected to the aviation sector and also the development of the air transport sector in the emirate. In order to develop the transport sector, the Dubai government, represented in the Roads and Transport Authority, has expanded the public transport network, namely buses, the metro, trams and ferries.

Dubai also enjoys a modern telecommunications network run by the “Du” and “Etisalat” Companies which are overseen by the Federal Telecommunications Regulatory Authority.

### 6.1 The contribution made by the transport and logistics sector, together with the information and telecommunications sector, to Dubai’s GDP lies in second place after that made by the wholesale and retail sector. The transport and telecommunications sectors were responsible for approximately 12 percent and 4 per cent of Dubai’s GDP respectively in 2016, (Figure 6.1).

---

**Figure 6.1** Contribution of Transport Storage and Communications to Dubai’s GDP (in constant prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>Transportation &amp; Storage</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>11.2</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>11.8</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>11.6</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Dubai Statistics Center
The transport sector grew by 4.7 per cent in 2016 whilst the telecommunications sector recorded a smaller growth of 3.6 per cent the same year. Both sectors achieved lower rates of growth than those recorded in 2015. (Figure 6.2).

## Developments in the Dubai Transport Sector

### Transport Services

6.2 The number of operatives working in the transport and logistics sector in 2015 was 262 thousand and their number increased by approximately 2.3 per cent over 2014. Employees in this sector comprise 10 per cent of Dubai’s total workforce, (Table 6.1).

### Dubai’s Trade Values

6.3 The total value of Dubai foreign non-oil commodity trade amounted to AED 1.28 trillion at the end of 2016, slightly dropping by 0.5 per cent from 2015 and by 4.1 per cent from 2014 when the value of foreign trade registered a record number of AED 1.33 trillion. This decline can be attributed to several factors. The most important factors was the slowing growth of global demand and the decline in the value of imports as a result of the rise in the AED exchange rate (in which imports are valued) against the currencies of Dubai’s chief trading partners. (Figure 2.2).

### Land Transport

Dubai enjoys wide high-quality modern roads. There are approximately 1.5 million cars on Dubai’s streets which makes it one of the cities with the densest traffic in the world. The traffic density on Dubai’s streets translates into an average of 540 cars for every thousand inhabitants. This number is greater than the average in major cities such as New York and London. This high figure is an indication of the high level of wealth enjoyed by its residents.

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### TABLE 6.1 | Economic Indicators of Transport and Storage activities-Emirates of Dubai (Value in AED ‘000)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of workers</td>
<td>232</td>
<td>234</td>
<td>241</td>
<td>256</td>
<td>262</td>
</tr>
<tr>
<td>Workers’ salaries</td>
<td>16,201</td>
<td>18,065</td>
<td>19,614</td>
<td>21,568</td>
<td>22,864</td>
</tr>
<tr>
<td>Average consumption</td>
<td>105,556</td>
<td>111,398</td>
<td>83,390</td>
<td>72,759</td>
<td>68,955</td>
</tr>
<tr>
<td>Production</td>
<td>143,304</td>
<td>150,152</td>
<td>123,329</td>
<td>113,967</td>
<td>114,723</td>
</tr>
<tr>
<td>Added value</td>
<td>37,749</td>
<td>38,754</td>
<td>39,939</td>
<td>41,208</td>
<td>45,767</td>
</tr>
<tr>
<td>Capital formation</td>
<td>10,806</td>
<td>12,218</td>
<td>20,507</td>
<td>21,914</td>
<td>23,446</td>
</tr>
</tbody>
</table>

SOURCE: Dubai Statistics Center
FIGURE 6.4 | Number of Passengers Using Public Transport in Dubai

<table>
<thead>
<tr>
<th>Year</th>
<th>Public Transportation Passengers</th>
<th>Metro Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>2011</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>2012</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>2013</td>
<td>400</td>
<td>450</td>
</tr>
<tr>
<td>2014</td>
<td>500</td>
<td>550</td>
</tr>
<tr>
<td>2015</td>
<td>600</td>
<td>650</td>
</tr>
<tr>
<td>2016</td>
<td>700</td>
<td>750</td>
</tr>
</tbody>
</table>

SOURCE: Dubai Statistics Center

6.4 However, a high level of car ownership in Dubai also has negative effects as represented in the problem of air pollution due to the traffic congestion since each vehicle emits an average CO₂ between 110 to 250 grams per kilometre. In order to combat this problem, the government of Dubai, by virtue of an agreement between the Supreme Council of Energy in Dubai and the United Nations Development Program, created Dubai’s Carbon Centre of Excellence in 2011. This centre, which is regarded as a public joint stock company shared between the Dubai Electricity and Water Authority, the Emirates National Oil Company, the Dubai Holding Company and the Tamkin Company, aims to transform Dubai’s economy from an intensive energy (carbon) economy to a “green” economy.

An increase in the number of road traffic accidents has also resulted from the rise in the number of cars. However, the efforts exerted by the Dubai police, together with the Roads and Transport Authority, have played a part in reducing the number of accidents recently.

Public buses

6.5 In Dubai there is a modern integrated network for mass transport with buses covering most parts of the city. The public buses are considered to be one of the most used means of transport in Dubai. This is because they are regarded as a cheap means of transport. In 2016 there were 1,107 buses running on 120 designated routes. They serve the requirements of all bands of society, including those with special needs, as they can use all means of public transport free of charge. From time to time, the Public Transport Corporation within the Roads Authority adds new routes to the network in order to meet the growing demand for mass transport services. This demand is shown in that in 2016 public buses transported almost 151 million passengers between the different areas within the emirate and between Dubai and the other emirates, compared with 129 million passengers in 2015. (Figure 6.4).

Taxis

6.6 Dubai owns a large fleet of taxis which provide a luxury service to the city’s residents and to its visitors alike. Taxis in Dubai excel in their modernity and in the discipline of their drivers who are monitored by the Roads and Transport Authority. In 2016 there were around 10,216 taxis in Dubai operated by six concession companies: the Dubai Taxi Institute which owned 4,893 vehicles; the Arabian Taxi Company with 926; National Taxi with 1,424; Cars Taxi with 1,644; Metro Taxi with 754; and al-Madina Taxi with 35 vehicles.

The importance of the Dubai Taxi Institute, which owns the greatest number of taxis and operates around the clock
Dubai’s Metro is a world-class project, as it is the longest driverless train in existence.
Dubai airports

6.11 Dubai enjoys an advanced infrastructure in the airport sphere and has become a global centre for air transport services. Dubai has two main airports, these are Dubai International Airport and the Al Maktoum International Airport, which is located within “Dubai World Central”. The “Dubai Airports Company” was established in 2007 as a commercial company to own and run operations at both airports.

The “Dubai World Central” project is regarded as one of Dubai’s most important projects in the field of aviation and comprises the construction of the first integrated airport city in the world. The project includes six specialised zones, namely: the Al Maktoum International Airport, Dubai Logistics City, Residential City, Commercial City, Golf City and Aviation City.

The total cost of the project will amount to AED 120 billion. The project will have will have a freight capacity amounting to 12 million tonnes and a passenger capacity of 160 million annually when construction is completed and thus will be the biggest airport in the world. The airport project is being executed in stages such that the freight building was opened in June 2010 whilst the passenger terminal was opened in October 2013.

6.12 Dubai international airport has three passenger terminals: Terminal 1 which serves all airlines, Terminal 2 which is used by the Fly Dubai Airline, low-cost airlines, for private flights and for special flights (the Hajj). Terminal 3 is dedicated for the use of Emirates Airline and was completed in October 2008 at a cost of AED 15.52 billion.

The Dubai Airports Company has announced an ambitious programme to expand the airport and its air space at a cost of US$7.8 billion (AED 28.8 billion). This will contribute to increasing Dubai International Airport’s capacity to 100 million passengers a year by the beginning of 2020. The airport currently serves more than 145 local, regional and international airlines, linking 260 destinations over six continents. In 2016 the number of flights was approximately 421 thousand.

6.13 The number of air passengers amounted to 83.7 million in 2016 compared to 78 million in 2015. Passengers of Indian nationality constitute the greatest proportion of the total number of passengers passing through Dubai airport. With respect to freight traffic, the weight of loaded goods reached 1 million tonnes and the weight of unloaded goods 1.4 million tonnes, giving a total of 2.4 million tonnes. Figure (6.5).
Dubai airport’s duty-free shopping is a world leader in quality and in the diversity of the services on offer. The shopping mall has won numerous major industry international awards, the most recent of which was winning the prize for the “Best Airport for Shopping” at the Business Traveller Middle East awards ceremony. Sales have increased in the shop in parallel with the opening of Concourse D and Dubai Duty Free shopping outlets in places connecting Concourse C with Concourse B.

The duty-free shop at Dubai International Airport now occupies an area of over 35,400 square metres of retail sales. Consequently, and according to Bloomberg Business Week magazine, the Dubai duty-free shop has become the largest duty-free shop in one airport in the world. The shop reported sales of US$1.85 billion in 2016, a drop of 2.6 per cent when compared to 2015.

The “Emirates Airline” company has become a world leader in the size of its operations as well as in the quality of the services it offers. The size of the company’s fleet has increased from 251 aircrafts in 2015 to more than 259 aircrafts in 2016. Noticeable the Emirates fleet include 94 Airbus A380 aircraft and 163 Boeing 777. Thus, Emirates Airline has become the biggest operator of these two types of aircrafts in the world. The opening of the Concourse D building at Dubai International Airport has also played a part in increasing the company’s growth as this outstanding building, which cost US$1.2 billion, has helped to increase the airport’s capacity to 90 million passengers a year. The company has won awards such as the Best Airline Company in the World, the Best Tourist Class and the Best Crew. This is due to the carrier innovations and its investments in products and in customer service according to the evaluation by the Business Traveller Middle East magazine. Moreover, it has won the “Best Air Carrier in the World 2016” award and “Best Air Entertainment System in the World” for the twelfth year running as well as the “Best Air Carrier in the Middle East” in the Skytrax awards for international air carriers.

In 2016 Emirates airline continued to achieve unprecedented growth rates, with the addition of 6 new passenger destinations and one new freight destination, as well as the expansion of available capacity to 35 cities via the network of its existing destinations. It flies to more than 156 destinations in more than 83 states around the world.

Emirates airline launched the first non-stop flight between Dubai and Auckland, which is considered to be one of the longest scheduled flights in the world, and one of the longest distances travelled by a flight in the world. To celebrate this new service which constituted a significant event in the aviation industry, Emirates airline brought into service, for once only, its Airbus 380 aircraft instead of the Boeing LR200-777 which is used for the daily scheduled flights on this route.

The company has also sponsored sporting competitions and cultural events creating a connecting bridge between different continents. Despite the fact that the Emirates airline is owned in its entirety by the government of Dubai, state protection has not been the main reason for its development and progress in both its position and its capabilities. Success has been achieved through its competitive capabilities at a world level against other international transport companies.

Despite economic challenges and strong competition, Emirates airline’s revenue registered a new record at AED 83.7 billion (US$22.8 billion) in 2016. The carrier’s fuel bill increased by 6 per cent to AED 21 billion (US$5.7 billion) in 2016. Fuel now constitutes 25 per cent of the carrier’s total operating costs compared with 26 per cent in the previous financial year.

In addition to the Emirates airline, the “Fly Dubai” company, since its launch in June 2009, has achieved tangible successes. In 2016 the company served 90 different destinations around the world in 44 countries. The number of weekly flights has increased and the airline, whose fleet has increased to 57 aircraft, has now reached 88,114 flights a year. The number of passengers flying with the carrier has gone up to 10.4 million compared with 9.04 million in 2015. “Fly Dubai” has played a big part in boosting tourist traffic to Dubai as it offers tourist and visa facilities to all its passengers from the regions the company covers. “Fly Dubai” has launched a business class to 17 new destinations in 2016 covering 88 per cent of its departures from Dubai.
6.19 The Dubai Road and Transport Authority provides a number of public maritime transport means including ferries, water buses, water taxis as well as the Dubai ferry. The ferries are regarded as the traditional means of transport in Dubai and are widely used by many citizens, residents and tourists, since they have kept their special character alongside the increase in the use of luxury vessels in the Emirates.

The number of ferries in Dubai is estimated at around 158 and there are 5 water buses. The ferries transported around 13 million passengers in 2016, while the water buses transported approximately 527 thousand in the same period.

The Dubai Ferry service is an important mass maritime transport service in Dubai launched by Dubai Roads and Transport Authority, which can carry 176 people at a time offering round trip services lasting one hour. These cover the most important tourist sites in Dubai such as the Zabeel Saray Hotel, the Atlantis Hotel, the Burj Al Arab, the Jumeirah Palm and others. (Figure 6.6).

6.20 Communications sector data for 2016, indicates that the number of subscribers to landline services in Dubai has reached 1.4 million, while the number of subscribers to mobile phone services was 6.3 million with 623,379 subscribers to internet services. Telecommunications services in the UAE are provided exclusively by the Emirates Communications Company (Etisalat) and by the Integrated Emirates Communications Company (DU).

6.21 The UAE has held the first place amongst all Arab states for the 2016\(^2\) network readiness index issued by the World Economic Forum, which measures the ability of a specific economy to make use of telecommunications and information technology to increase competition and development. The UAE, including Dubai, was ranked in 26th place amongst all the other countries evaluated, 139 in total. (Table 8.1).

According to the telecommunications and information technology development index,\(^5\) which measures the development level of telecommunications and information technology in states, the UAE’s ranking has moved up from 49th in 2010 to 38th in the world in 2016, thus occupying second place, after Bahrain, among the states of the Gulf Cooperation Council. (Table 6.2).

**Developments in the Dubai Communication and Information Sector**

**Telecommunications and Information**


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**Figure 6.6** Passengers of Maritime Transport 2014 (thousand passengers)

<table>
<thead>
<tr>
<th>Month</th>
<th>Abra Passengers</th>
<th>Water Taxi Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>56</td>
<td>40</td>
</tr>
<tr>
<td>February</td>
<td>72</td>
<td>50</td>
</tr>
<tr>
<td>March</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>April</td>
<td>88</td>
<td>70</td>
</tr>
<tr>
<td>May</td>
<td>96</td>
<td>80</td>
</tr>
<tr>
<td>June</td>
<td>104</td>
<td>90</td>
</tr>
<tr>
<td>July</td>
<td>112</td>
<td>100</td>
</tr>
<tr>
<td>August</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>September</td>
<td>128</td>
<td>120</td>
</tr>
<tr>
<td>October</td>
<td>136</td>
<td>130</td>
</tr>
<tr>
<td>November</td>
<td>144</td>
<td>140</td>
</tr>
</tbody>
</table>

*Source: Transport and communications statistics – Dubai Statistics centre*
In the 2016 World Competitiveness Report, which evaluates a competitiveness index by measuring a group of 12 indicators, including technological readiness and innovation, recorded the UAE’s ranking at 16th out of a total of 138 states. The state occupied second place in the world in the sphere of government purchases of advanced technology products, third place in terms of the investment in quality of higher education, and fifth place in the world in government regulation. (Figure 6.7).

According to the landline telephone indicator for each 100 inhabitants for 2016, Dubai’s position advanced ahead of the world average and the average for advanced countries at 51.2 per 100. For mobile telephone lines in 2016, Dubai occupied the first place in the world as the index registered 235.2 telephone lines for each 100 inhabitants. Thus, Dubai comes ahead of Hong Kong, Singapore and many other advanced nations. As for the broadband – internet lines, the index value for Dubai reached 23.1 for every 100 inhabitants in 2016. This is higher than the average for Arab countries, developing nations and most of the Gulf States but lower than the advanced countries, the Euro zone countries, Singapore, and Hong Kong. (Figures 6.8, 6.9 and 6.10).
The number of subscribers to landline services reached 2.3 million and 19.9 million for mobile phone services.
**Introduction**

The United Arab Emirates’ oil reserves amounted to some 97.8 billion barrels in 2016, equal to approximately 5.73 per cent of the world’s oil reserves at 1.71 trillion barrels. This meant that the UAE occupied the eighth place in the world for oil reserves.

Most of the state’s oil reserves are in the Emirate of Abu Dhabi while Dubai possesses about 4.1 per cent of the state’s confirmed oil reserves. The Emirates are sixth in the world for oil production, and in 2016 the state produced an average of 3 million barrels a day. (Figure 7.1).

**FIGURE 7.1** | The Distribution of Crude Oil Reserves in the UAE (2016)

![Distribution of Crude Oil Reserves](image)

*Abu Dhabi 54.0% 10% 0.4% Sharjah 4.1% Dubai 94.0% Other emirates 1% 2% 92.0%*

*Source: OPEC, BP, the US Energy Information Administration (EIA)*

Regarding natural gas, the state’s confirmed reserves amounted to 6.1 trillion cubic metres, which is 3.3 per cent of the world’s reserves. This means the state occupies the seventh place in the world for natural gas reserves. As with oil, the Emirate of Abu Dhabi holds the majority of the state’s reserves of natural gas at 92 per cent of the total reserves while only 2 per cent are in Dubai. (Figure 7.2).

**FIGURE 7.2** | The Distribution of Natural Gas in the UAE (2016)

![Distribution of Natural Gas](image)

*Abu Dhabi 92.0% 2% Sharjah 9% Dubai 2% Other emirates 1%*

*Source: OPEC, BP, the US Energy Information Administration (EIA)*
Oil and natural gas

The extraction of oil in Dubai started in 1969. The oil represented significant financial support for Dubai's balance sheet and contributed more than 50 per cent of the Emirate's GDP generated during the seventies and eighties. However, this share of GDP has declined gradually to below 2 per cent in 2016. In fact, this decline reflects Dubai government's success in diversifying the economy of the Emirate further away from oil, the price of which tends to fluctuate, thus increasing the risks of relying on it as a major source of income. This is also due to the small volume of the Emirate's reserves and the extraction of the majority of it in past years, and not to mention key developments in the non-oil sectors which came in parallel with a reduction in oil production in recent years to less than 100 thousand barrels a day.

The rapid economic and population growth in Dubai has led to a rise in the Emirate's need for sources of energy for local consumption. Dubai's government has worked to provide sufficient sources for the economy's growing energy needs. However, the few energy resources it possessed and the miniscule quantities of oil and gas it produced were no longer sufficient to cover the Emirate's energy source requirements. Therefore, Dubai's government is resorting to importing large quantities of gas to cover the growing electricity production requirements. These imports also cover the needs of the industrial sector, as well as the need for natural gas to inject into old oil wells to increase their productivity. This means that Dubai has reached the point of becoming a pure importer of energy. The emirates of Sharjah and Abu Dhabi have been the traditional source for meeting Dubai's energy source requirements, particularly for natural gas. However, Dubai's requirements have risen to unprecedented levels, and there is the additional growth in the needs of the other emirates. This has led to the emirates of Sharjah and Abu Dhabi being unable to meet all of Dubai's energy requirements. Consequently, in 2011 Dubai began to import liquid natural gas from the state of Qatar.

Below, we will first review the role of the electricity, gas, and air conditioning sector in Dubai's GDP. This will be followed by a discussion on oil derivatives, the production and consumption of electricity and the production and consumption of water. The management of the energy sector in Dubai and the supply and pricing policies of both energy and water will also be reviewed.

The air conditioning, steam, gas and electricity sector

The contribution of the electricity, gas, steam, and air conditioning supplies in real GDP has risen slightly from 2.4 per cent in 2015 to 2.5 per cent at the end of 2016. The data on real GDP indicates that the sector's share of GDP has fluctuated between a minimum of 1.4 per cent in 2009 and a maximum of 2.5 per cent in 2016. It is worth mentioning that the rate of growth in the gas, water, and electricity sector amounted to an average of 4.6 per cent between the years of 2015 and 2016. (Figure 7.3).

The production of oil derivatives

Dubai possesses a single oil refinery in the Jebel Ali area which is run by the “ENOC” oil company. It has a capacity of 120,000 barrels a day. The local market's requirements for oil derivatives is mostly met by the quantities produced in this refinery, which was built in 1999 and developed further in 2010. Oil derivatives are distributed exclusively in Dubai by three companies, namely: Emirates, ENOC and EPPCO. The federal government owns the Emirates Company, while Dubai's government owns the ENOC Company. The EPPCO Company is owned by both the Dubai government, as represented by the ENOC Company, and the global Chevron Company with ownership shares of 60 per cent and 40 per cent respectively.
Production and consumption of energy in Dubai

7.5 The overall energy requirements in Dubai have risen to an unprecedented level over recent decades as a result of the rapid growth experienced by the Emirate's economy. In order to ensure the community's electricity supply keeps pace with the increase in consumption demand, with high level of availability and quality, the Dubai government has worked to construct new electricity generating stations and to expand existing power plants. Thus, it has succeeded in covering 100 per cent of the water and electricity requirements for both industry and the population. The Dubai Electricity and Water Authority (DEWA) is the exclusive producer and distributor of electricity in the Emirates. Since its creation, the Authority has built an integrated production and distribution system in line with the world’s best systems. The Authority is also expanding and developing that system in order for it to keep pace with the rapid growth in the Emirate’s electricity requirements.

7.6 The electricity supply of the Emirate of Dubai are generated in 11 power plants in different locations. The capacity for generating electricity in the Emirate of Dubai has risen from 9.65 gigawatts in 2015 to 10.0 gigawatts in 2016. Electricity is generated in Dubai using gas turbines which form approximately 75 per cent of the electricity capacity installed. In addition to local sources of electricity, Dubai can also make use of the inter-territorial electricity grid available across the state. There is a grid extending between the state and the other Gulf Cooperation Council states too. Another option is that Dubai Electricity and Water Authority can obtain electricity from the grid connecting the Gulf Cooperation Council States as its grid is actually connected to the state’s local grid. (Figure 7.4)

7.7 Dubai has experienced and is still going through a phase of rapid economic growth, resulting in a corresponding growth in the Emirate’s energy requirements, especially for electricity. In 2016, the number of the Authority’s electricity customers increased to more than 752,000 residential, commercial, and industrial consumers as well as other groups compared to 708,100 consumers in 2015. The residential sector accounts for around 74 per cent of the total number of subscribers. (Figure 7.5).
The Emirate’s electricity consumption has risen from approximately 33 billion kilowatt-hours in 2010 to approximately 43 billion kilowatt-hours in 2016. The increase in consumption represents an average annual growth of approximately 4.8 per cent. It is anticipated that the growth in electricity demand will continue to rise in the near future as a result of the continued economic revival in the Emirates since 2010. However, the rate of growth in electricity demand has started to decline recently with the growth rate dropping to approximately 2.6 per cent between 2015 and 2016. This can be attributed to the relevant bodies succeeding in their efforts to cut down energy consumption in the Emirates. (Figure 7.6).

The increased growth in Dubai’s economy, the consequent rise in GDP per capita and living standards, the huge developments occurring in the Emirate’s urban centres, and the rise in the demand for air conditioning in Dubai’s hot summer weather, have all led to Dubai becoming one of the highest consumers of electricity in the world. Average per capita electricity consumption amounted to about 15.11 thousands kilowatts/hour (kWh) per annum in 2014 compared to 7.4 thousands (kWh) in Japan, 12 thousands (kWh) in the United States of America, and 9.7 thousands (kWh) in Saudi Arabia. (Figure 7.7).

Production and consumption of water in Dubai

Dubai’s Electricity and Water Authority is meeting the emirate’s needs of water sufficiently from 8 water desalination plants, all of which are situated in the Jebel Ali district. In 2016, the combined production capacity for water stabilised at its 2015 level (470 million gallons a day), while the production capacity for groundwater was 32 million gallons a day. It is worth mentioning that the Authority owns 11 water and electricity production units, three of which are in the al-Aweer district, and they produce electricity alone. The eight other plants are all located in the Jebel Ali district, and they produce both water and electricity. In this context, it must be mentioned that peak demand reached 347 million gallons a day in 2016 compared to 337 gallons in 2015. (Figure 7.8)

Dubai’s desert climate necessitates the availability of large amounts of water for consumption, and substantial amounts of energy are required to deliver the necessary water for homes and facilities as well as for irrigation and industry. In 2016, the total consumer demand for desalinated water was approximately 116.9 billion gallons with a 2.7 per cent increase in capacity from 2015. This increase meant that the average per capita consumption in Dubai was...
considered to be one of the highest in the world as it exceeded 43 thousand gallons in 2016. Groundwater covers a tiny percentage of the Emirate’s demand for water; the rest is produced in seawater desalination plants, making these plants the main consumer of energy in Dubai. (Figure 7.9).

7.12 Dubai is working to explore other options for future energy resources in order to achieve sustainable growth in its economy. This demands adopting policies to effectively manage both sides of the energy equation, namely, production and consumption. In the production field, these policies aim to select and provide the right mix of fuel to secure sufficient energy that can be relied on to meet the growing requirements of the economy. While generating electricity currently depends greatly on natural gas as a fuel, Dubai’s Electricity and Water Authority has announced its determination to diversify the energy sources it is relying on to include clean coal and nuclear energy in the near future. In this context the Authority have decided to take action to attract the interest of external investment in the energy sector, for the first time, by opening up to foreign investment for the construction of electricity generating reactors using nuclear power.

7.13 Dubai’s government is taking rapid steps to increase the use of renewable energy sources. In October 2013 Dubai Electricity and Water Authority launched the first stage of the “Mohammad bin Al Maktoum Solar Energy Park” project at a cost of AED 124 million. This project aims to produce electricity using solar energy and is expected to have cost AED 12 billion upon completion. When the project is completed in the year 2030, it will have the capacity to generate 1,000 megawatts of energy using photovoltaic (PV) cell technology and concentrated solar power (CSP). Thirteen megawatts will be generated in the first stage. Once the project is completed, Dubai will have approximately 1,000 megawatts of electricity supplied from the park. Production is scheduled to be approximately 15 per cent of capacity in 2030, which is about 3,000 megawatts. The Authority has also announced that the second stage of the project, to produce 200 megawatts, has entered its operational phase in April 2017.
Energy Sector Management

The management of the energy sector in Dubai is of great importance for its influence on the level of the sufficiency and sustainability of the sector. The Dubai government is adopting successful policies in running the energy sector by relying exclusively on public sector institutions for production and distribution. As stated previously, the Dubai Electricity and Water Authority operates the production and distribution of the electricity and water, while the production and distribution operations for petroleum derivatives and household gas are restricted to a limited number of state-owned companies. There is no doubt that the government’s appointment of a public sector company in Dubai for the provision of the different energy sources for end consumption has been a completely successful experience, although worldwide experience has proven that the public sector is capable of meeting the energy requirements but not as competently as the private sector.

Although the authorities concerned with energy in Dubai have been to a large extent successful in supplying the sources of energy necessary to maintain the economic growth and sustainable development in the Emirate by providing the infrastructure for operation, production, and distribution at the highest levels, future challenges facing the sector. These challenges require more study and analysis in order to modernise the mechanisms providing the necessary energy, and to manage demand.

The main energy problems generally include the widening gap between locally available resources in Dubai and the demand for diverse types of energy. Securing investments in a high cost energy infrastructure that is compatible for a future expansion is at the forefront of these challenges. Dubai’s government is planning to reduce some of the pressure on the public sector to provide the necessary investment by forming some partnership with the private sector by encouraging private sector investment in the generation of electricity using the Public Private Partnership (PPP) model. These partnership projects require the amendment of current laws and regulations to encourage the private sector to invest in energy projects. Aware of these requirements, the authorities in Dubai are currently undertaking a study on the restructuring of the energy sector to involve the private sector in some limited activities within it. In this context decree number 1 of 1992 establishing the Dubai Electricity and Water Authority has been amended to facilitate the participation of the private sector in generating both electricity and in water desalination. In addition, in 2011 decree number 9 was issued along with Act number 6 of 2011 on the amendment of some stipulations on the establishment of the Authority and the regulation of the participation of the private sector generating energy and water desalination in the Emirate of Dubai. This will permit the private sector to play a part in the production of electricity alongside the Authority, while the transportation and sale of electricity and water to the end consumer will remain restricted to the Authority.

The Dubai government has founded “The Supreme Energy Council” and issued law number 19 of the year 2009 which stipulated its establishment and determined its tasks. The Council aims to regulate the energy sector and to achieve sustainable targets for economic growth and for environmental protection. The Council consists of a group of organisations concerned with energy such as the Department of Oil Affairs, the Dubai Aluminium Company (DUBAL), the Emirates National Oil Company (ENOC), the Dubai Supply Authority, the Dubai Petroleum Institute, the Municipality of Dubai and the Dubai Nuclear Energy Committee.

The Council has been commissioned with the task of identifying the regulatory framework for the sector, drawing up energy policies and supervising their implementation. Immediately after its inception the Council developed “Dubai’s Integrated Energy Strategy” which it launched in 2011. Through this strategy the Council is seeking to secure Dubai’s requirements for all types of energy, and achieve efficient supplies for electricity and water consumption.

Energy and Water Efficiency and Pricing Policies

Reducing dependence on traditional fuel in order to secure and stabilise the provision of energy, to develop a sufficient supply for end consumption in order to be in control of the increasing demand for energy and consequently reduce the need for additional capacity for energy generation, are some of the factors that will help the sustainability of the Emirate’s economic growth. This has prompted the Dubai government to adopt new policies to re-structure the sector so that it is fit to meet these challenges. These policies deal with the production and provision challenges arising from the limited nature of diminishing local energy sources, securing channels for the importation of supplementary quantities for the local production of oil and gas, and looking for alternate local non-traditional sources such as renewable energy and nuclear energy.

With regards to consumption and demand, the government’s policies are tackling the large increase in various kinds of energy consumption and the low level of competence in managing and using the energy sources available.
The UAE is considered as a state that subsidises the consumption of energy and water by fixing their prices at low levels. One of the main targets of such subsidies was to provide all kinds of energy and water to groups with low incomes. Additional aims were to increase the competitiveness of local producers in the international markets while achieving stability in local energy prices to help put an end to the fluctuation in general price levels.

Another important aim in subsidising energy and water consumption was to distribute the oil and gas revenue to the citizens of the state and give them the benefits of their country’s wealth deriving from these two important sources. However, experience has proved that subsidising energy and water consumption does not help the economy as the support does not go to the targeted population, which are the high-income groups, which are not the target.

The Gulf area in general is suffering from low energy consumption efficiency, such that the average “energy density”\(^2\) in Dubai is greater than 480 tonnes of oil equivalent in value to a million dollars of GDP. This is a high density by world standards. It is probable that the rise in energy density is the result of a number of factors, the most important of which is the nature of the climate in Dubai as the hot dry climate leads to the rise in the levels of consumption and its density. Consequently, the Emirates’ energy requirements has increased.

The second factor is the low consumption efficiency in energy use which calls for new policies to improve it, the most important of which is a rectification of the pricing system for the consumption of the various types of energy. Thus, the Dubai government, and its various institutions, has recently adopted programmes to encourage more efficiency and effectivity in consumption. The Dubai Electricity and Water Authority is therefore adopting some programmes to manage the demand for electricity and water, including measures to increase efficiency on the part of the end user. Those measures include media campaigns aimed at educating people and institutions in the importance of economising in water and electricity consumption. The media campaigns are integrated with the most comprehensive policies known for increasing efficiency in the end consumption of electricity or a programme to manage demand. The programme includes a collection of measures focusing on the end consumer to influence the quantity, and time of energy used, to increase the efficiency of their energy use, and finally to concentrate on pricing policies for electricity and water.

\(^2\) The term “energy density” refers to the quantity of energy needed to produce one unit of the gross domestic product.

7.20 The policy of managing the demand for electricity uses pricing to rein in consumption. This is done by gradually curtail the subsidies the consumer receives which provide energy for end consumption at a cost much lower than the equivalent level in the majority of other states. Sometimes energy is offered at prices less than the cost of providing the power to the consumer.

Through the Dubai Electricity and Water Authority, the Dubai government has recently adopted a new system of tariffs for both electricity and water called the segment system. This system is especially designed to make higher charges when the customer exceeds specific levels in his use of electricity and water. Furthermore, in January 2011, the Authority announced a new pricing policy involving a 15 per cent increase in the price of electricity and water consumed by residents. The new tariff system will partially rectify the low prices and encourage a more efficient use of resources. However, the current tariff system does not reflect the total overall cost to the community, including the environmental cost, as it is still much less than the levels prevalent in the majority of states around the world and yet it is the highest amongst the states of the Gulf Cooperation Council. (Figure 7.10).
**Introduction**

Dubai’s banks continued to perform well in 2016 as loans and deposits grew (although growth rates were lower than 2015) while maintaining high levels of capitalisation represented by capital adequacy ratios and Tier 1 capital ratios. This far exceeded Basel 3 requirements and those of the Central Bank of the UAE. According to the Bank Stress Test performed by the Central Bank of the Emirates recently, with the exception of some small and medium-sized banks, most of the 21 national banks covered by the test will be able to maintain capital adequacy ratios above 12 per cent in the event of adverse developments in the banking system. The year 2016 witnessed a continuation in the decline in the ratio of non-performing loans to total loans on the balance sheets of Dubai’s banks while their profitability decreased compared to the previous year.

The general index of the Dubai Financial Market, rose by 12.1 per cent by the end of 2016 compared to 2015. This increase came despite the decline in the value of transactions and in the number of executed deals compared to the previous year. The decrease in value and in the volume of trading in NASDAQ Dubai continued for the second consecutive year. The decline in the performance of local capital markets was driven by the continued decline in international oil prices and the subsequent economic slowdown in local markets which were also affected by the state of uncertainty prevailing in global markets.

**Developments in Banking**

8.1 The UAE has 49 banks, of which 26 are Gulf and foreign banks. The total assets of all banks reached AED 2.61 trillion by the end of 2016, equivalent to 192 per cent of the country’s GDP. Banks’ assets in the UAE rose by 5.1 per cent in 2016 compared to the end of 2015, totaling AED 2.5 trillion. However, the sector is highly concentrated, with only 10 banks accounting for 77 per cent of total assets in 2016. Emirates National Bank of Dubai continued to be the UAE largest bank with total assets of AED 445 billion, 2016. However, the merger between the National Bank of Abu Dhabi and First Gulf Bank, which entered into operation in the first quarter of 2017, has created the UAE largest financial institution with assets totaling AED 666 billion.

8.2 According to the Central Bank of the UAE, 23 national banks reduced the number of their branches by the end of 2016 to 846 branches from 874 by the end of 2015, as an attempt to raise the efficiency of operations, while the number of foreign banks branches fell by one branch only to 85 by the end of 2016. A decline in the number of employees in national banks also occurred dropping to 30,108 employees by the end of 2016 from 32,352 in the previous year. Foreign banks also reduced the number of employees to 7,439 by the end of 2016 from 7,807 in 2015.
8.3 Most of the national and foreign banks registered with the Central Bank operate in Dubai. In addition, Dubai hosts the main offices of 28 banks, including 8 national banks and 20 foreign banks. The assets of national banks in Dubai accounted for about 43 per cent of the total assets of national banks in the UAE. The assets of Islamic banks accounted for about 27 per cent of the assets of national banks in Dubai. (Figure 8.1).

8.4 Banking deposits in Dubai grew by 8.1 per cent in 2016 compared to 14.1 per cent in 2015. Banking deposits in Abu Dhabi increased by 6.1 per cent compared to 4.1 per cent in 2015. Overall, bank deposits increased by 6.2 per cent by the end of 2016 compared to the previous year rise of 3.5 per cent. According to the Central Bank, the rise is due to the increase in government deposits, which had previously recorded a significant decline by the end of 2015 equal to 16.6 per cent. Non-resident deposits also recorded a substantial increase of 16 per cent over the previous year. Deposits of residents and of the private sector, also recorded growth of 4.9 per cent and 6.2 per cent respectively. Only the deposits of Government Related Establishments (GREs) recorded a decline of 11.8 per cent compared to the end of 2015. (Figure 8.2).

8.5 In 2016, bank loans in Dubai grew by 10 per cent compared to a 15 per cent growth in 2015 with the private sector and government-related Establishments being the most significant beneficiaries of these loans. Loan growth in Abu Dhabi banks slowed significantly to 1.8 per cent in 2016, a marked decline from the 10 per cent growth in lending that had followed the global financial crisis. The slowdown occurred as banks continued to tighten lending while developing a more selective lending policy, additional to the steps taken by governments to reduce debt (deleveraging) as part of efforts to improve the financial and banking framework. At the same time, state banks recorded a lower growth rate of 5.2 per cent in lending in 2016 compared to 8.1 per cent in 2015. (Figure 8.3).

8.6 The loan-to-deposit ratio in Dubai in 2016 was 91.7 per cent, a level higher than the level reached in 2015 (about 90 per cent) but this remained below the 100 per cent ceiling set by the Central Bank. The increase is due to the faster pace of lending rather than the increase in deposits. On the other hand, the ratio of loans-to-deposits decreased in Abu Dhabi banks to 92.5 per cent in 2016 compared to 95 per cent at the end of 2015. For the states’ banks, this ratio dropped from 93.9 per cent in 2015 to 93 per cent in 2016. (Figure 8.4).
8.7 Dubai’s capital adequacy ratio rose from 16.7 per cent at the end of 2015 to 17.6 per cent in 2016, a clear indication that the banks continue to strengthen their capitalisation. The same strengthening applies to Abu Dhabi banks, which have also slightly increased their capital adequacy ratios to 17.9 per cent from 17.7 per cent the previous year. The average capital adequacy ratio across the country’s banks has risen from 18 per cent in 2015 to 18.6 per cent in 2016. The rates recorded in 2016 place UAE banks in a comfortable position regarding their ability to withstand unexpected shocks to the banking sector.

According to a stress test performed by the Central Bank of the UAE recently, except for some small and medium-sized banks, most of the 21 national banks covered by the test will be able to maintain capital adequacy ratios at levels above 12 per cent in case of adverse developments. (Figure 8.5)

8.8 Dubai’s banks have increased the ratio of the first tranche of capital from 15.5 per cent in 2015 to 17 per cent by the end of 2016. It is a significant and expensive increase considering that this segment of capital is regarded as the highest quality in bank capitalisation. This ratio is also much higher than the rates stipulated in the Basel 3 agreements, as well as the minimum ratio of the first tier of capital, which the central bank sets a minimum of 8 per cent. On the hand, Abu Dhabi and the state banks generally recorded significant increases in Tier 1 capital ratios, with 16.8 per cent in Abu Dhabi (compared with 16.2 per cent at the end of 2015), while the average ratio in all banks was 17.1 per cent (compared to 16.5 per cent at the end of 2015). (Figure 8.6).

8.9 The ratio of non-performing loans to total loans in Dubai banks fell slightly from 6.9 per cent in 2015 to 6.4 per cent in 2016. This improvement can be attributed to the efforts made by banks to improve the quality of their assets as well as to the restructuring of loans to some government subsidiaries. In contrast, the non-performing loans ratio in Abu Dhabi banks stabilized at 3 per cent (the same as the previous year), while the ratio was 6.3 per cent across the state banks in general. (Figure 8.7).

8.10 The continuation of a conservative lending policy led to a decline in profitability in 2016 compared with the previous year. This is evident in the decrease in the return on assets from 2 per cent in 2015 in both Dubai and Abu Dhabi banks to 1.5 per cent and 1.8 per cent respectively in 2016. This decline came despite the relative improvement in bank liquidity and asset quality. (Figure 8.8)
Developments in Capital Markets

8.11 The Dubai Financial Market index closed at the end of 2016 at 3,531 points, 12.1 per cent up from 3,151 points at the end of 2015. On the other hand, the Abu Dhabi Stock Market closed the year 2016 at 4,546.37 points, up 5.6 per cent from 4,307.26 points recorded at the end of 2015. In contrast, financial markets indices in the rest of the Gulf countries had decreased by the end of 2015 driven by the volatility of world oil markets. In Saudi Arabia, “Tadawul” recorded its lowest close at 5,416.47, down 36 per cent in October 2016. In Qatar, the financial index fell 11.7 per cent in October 2016. Capital markets in Kuwait, Oman and Bahrain recorded declines too; 6.5 per cent in Kuwait, 2.3 per cent in Oman and 11.8 per cent in Bahrain. (Figures 8.9 and 8.10).

8.12 At the sector level, 8 sectors out of 9 witnessed an increase in their indices by the end of 2016 compared to the end of the year 2015. The rise was led by the services sector, which increased by 36 per cent, followed by consumer goods with 22.1 per cent and then by communications with a rise of 21.6 per cent. Manufacturing was the only sector whose index declined by the end of 2016 by 16.7 per cent from its level at the same period last year. (Figure 8.11).

8.13 Analysis of the performance of the Dubai Financial Market for 2016 shows a continued decline in market value, which fell to AED 133.7 billion compared to AED 152 billion in 2015 and AED 381.5 billion in 2014. (Table 8.1).

The volume of trading in the market rose from 92.7 billion shares in 2015 to 105.8 billion shares in 2016, while the number of transactions executed for the second consecutive year decreased to 1.3 million by the end
The value of shares trading on the NASDAQ Dubai market amounted to about AED 4569 million dirhams by the end of 2016, down 9.1 per cent from the value of trading in 2015, which amounted to about AED 5025 million dirhams. The volume of shares traded in 2016 fell significantly to 138 million shares from 219 million shares in 2015, a decline of 37 per cent. On the other hand, the FTSE NASDAQ Dubai index, which tracks the performance of 20 companies listed on the Dubai Financial Market, the Abu Dhabi Stock Market and the NASDAQ Dubai in 2016 at 3294 points, was up by 7.5 per cent from 2015 with 3063 points. (Table 8.3).

### Table 8.1 | Dubai Financial Market Indicators

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<tr>
<td>Trading Value (AED Billion)</td>
<td>48.58</td>
<td>159.88</td>
<td>381.50</td>
<td>152</td>
<td>133.7</td>
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<tr>
<td>Trading Volume (Billion Shares)</td>
<td>40.46</td>
<td>127.18</td>
<td>160.53</td>
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<td>No. of deals (Million)</td>
<td>0.62</td>
<td>1.33</td>
<td>2.41</td>
<td>1.5</td>
<td>1.3</td>
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<tr>
<td>Market capitalization (AED billion)</td>
<td>181.89</td>
<td>259.62</td>
<td>322.60</td>
<td>300.7</td>
<td>337.6</td>
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<tr>
<td>Capitalization ratio (% of GDP)</td>
<td>52.6</td>
<td>78.9</td>
<td>106</td>
<td>84.1</td>
<td>89.6</td>
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### Table 8.2 | Value of Trading in the Dubai Financial Market by Sector (AED billion)

<table>
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<tr>
<td>Banks</td>
<td>8.86</td>
<td>31.61</td>
<td>60.88</td>
<td>39.9</td>
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<td>Investment and Financial</td>
<td>5.07</td>
<td>33.27</td>
<td>50.15</td>
<td>15.4</td>
<td>13.3</td>
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<td>Insurance</td>
<td>1.71</td>
<td>4.76</td>
<td>4.72</td>
<td>1.8</td>
<td>2.6</td>
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<td>Manufacturing</td>
<td>0</td>
<td>0.001</td>
<td>12.66</td>
<td>0.057</td>
<td>9.2</td>
</tr>
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<td>Estates and Construction</td>
<td>23.18</td>
<td>70.88</td>
<td>243.27</td>
<td>78.6</td>
<td>57.2</td>
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<td>Communication</td>
<td>2.83</td>
<td>4.22</td>
<td>3.43</td>
<td>1.3</td>
<td>3.9</td>
</tr>
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<td>Transport</td>
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<td>12.36</td>
<td>13.63</td>
<td>5.5</td>
<td>6.4</td>
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<td>Consumer Goods</td>
<td>0.024</td>
<td>0.049</td>
<td>1.04</td>
<td>5.8</td>
<td>8.7</td>
</tr>
<tr>
<td>Services</td>
<td>4.06</td>
<td>8.63</td>
<td>4.35</td>
<td>3</td>
<td>5.8</td>
</tr>
</tbody>
</table>

CHAPTER 9

Real Estate and Construction
Introduction

Although the contribution shares of both real estate and construction sectors in GDP are similar, they differ greatly in their share of the total workforce. The construction sector which has in the past employed more than one-fifth of the total workforce in Dubai is a labour-intensive cyclical sector. The number of workers increases with the expansion of construction works and decreases upon their completion, whether they are residential, commercial, entertainment or infrastructure projects. With the advancement of technology, specifically the application of artificial intelligence and the transition towards replacing human beings with robots, the construction sector would be transformed from a labour-intensive sector into a capital-intensive sector.

Developments in the Real Estate and Construction Activities

9.1 Value added by the real estate sector grew strongly by 6.5 per cent in 2016 compared to 4.5 per cent in 2015. This growth has led to an increase in the share of real estate activities in GDP (in constant prices) from 6.4 per cent in 2015 to 6.6 per cent in 2016. In contrast, the construction sector shrank by 0.7 per cent in 2016, compared to an increase of 0.5 per cent in 2015. This development has led to a drop in the sector’s share in GDP (in constant prices) from 6.7 per cent in 2015 to 6.4 per cent in 2016. (Figures 9.1 and 9.2).

FIGURE 9.1 Development of Real Estate Activities (%)

THE CONSTRUCTION SECTOR EMPLOYED AROUND 542,924 WORKERS IN THE SAME YEAR, I.E. AROUND 21.1% OF DUBAI’S TOTAL WORKFORCE OF 2,577,545

VALUE ADDED BY THE REAL ESTATE SECTOR GREW STRONGLY BY 6.5% IN 2016

THE TOTAL VALUE OF INVESTMENTS IN REAL ESTATE AMOUNTED TO MORE THAN AED 91 BILLION IN 2016

SOURCE: Dubai Statistics Center

Dubai Economic Report 2017 | DED 74
9.2 Although the contribution shares of both real estate and construction sectors in GDP are similar, they differ greatly in their share of the total workforce. Real estate activities employed around 45,697 workers in 2015, which is equal to approximately 1.8 per cent of the total workforce in Dubai, while the construction sector employed around 542,924 workers in the same year, i.e., around 21.1 per cent of Dubai’s total workforce of 2,577,545. This shows to a great extent that the construction sector is a labour-intensive cyclical sector. The number of workers increases with the expansion of construction works and decreases upon their completion, whether they are residential, commercial, entertainment or infrastructure projects. (Figure 9.3).

Real Estate Transactions

9.3 Real estate data includes all established and off-plan real estate transactions registered during the year, including land transactions inside and outside freehold areas and units and buildings transactions in freehold areas only. Units also include offices, stores and warehouses inside freehold areas. There were 60,579 real estate transactions, including sales, mortgages and others, in 2016 with a total value of AED 259,131 million, compared to 65,536 transactions with a total value of AED 263,169 million in 2015, i.e., transactions have dropped in number and value in 2016 compared to 2015. (Figure 9.4).

9.4 Changes in both the number and value of transactions in 2016 also led to a change in the structure of transactions. The share of sales in the total number of transactions dropped from 73 per cent in 2015 to 69 per cent in 2016. This drop led to a decline in the share of the value of real sales in the value of total transactions, as shown in the following (Figures 9.5 - 9.8).

9.5 Real estate mortgage transactions increased in number and value in 2016 compared to 2015, while the average transaction value increased from around AED 8 million in 2015 to around AED 9 million in 2016. Figure (9.9).
Figure 9.5 | Number of Transactions Structure 2015

- Sales: 22%
- Mortgages: 6%
- Others: 72%

Source: Dubai Statistics Center

Figure 9.6 | Number of Transactions Structure 2016

- Sales: 24%
- Mortgages: 7%
- Others: 69%

Source: Dubai Statistics Center

Figure 9.7 | Value of Transactions Structure 2015

- Sales: 4.3%
- Mortgages: 49%
- Others: 49%

Source: Dubai Statistics Center

Figure 9.8 | Value of Transactions Structure 2016

- Sales: 50%
- Mortgages: 39%
- Others: 41%

Source: Dubai Statistics Center

Figure 9.9 | Development of Real Estate Mortgage Transactions (value in million AED)

- 2016: 13,122 (Number), 113,425 (Value)
- 2015: 43,142 (Number), 113,425 (Value)
- 2014: 14,560 (Number), 93,255 (Value)

Source: Dubai Statistics Center
CHAPTER 9 | Real Estate and Construction

9.6 The number of residential units (villas, apartments and other types of housing) increased from 502,830 in 2015 to 518,982 in 2016, i.e. up by 3.2 per cent. This percentage is based on the growth rate in the number of villas by 4.1 per cent and of apartments by 3.3 per cent. (Table 9.1).

Construction & Building Activities

9.7 Construction is the activity of building and constructing houses, residential and commercial buildings and infrastructure such as roads, bridges and pipelines. Measuring this activity surveys establishments operating in the field of construction, buildings’ maintenance and establishments operating in the field of infrastructure construction and maintenance.

9.8 The value added of the construction sector dropped from AED 24,483 million in 2015 to AED 24,302 million in 2016, registering a decline of around 0.7 per cent in 2016. This fall has led to smaller contribution by the construction sector to GDP, decreasing slightly from 6.7 per cent to 6.4 per cent over the two years.

9.9 The number of all kinds of buildings under construction rose in 2016 by around 23 per cent compared to 2015, and the number of investment villas rose by around 30 per cent from 13,100 to 17,041 villas between 2015 and 2016. The number of private villas increased by around 21 per cent. (Table 9.2) and (Figure 9.10).

It is noteworthy that both the number of industrial buildings and the number of residential apartments decreased by around 12.4 per cent and 11 respectively between 2015 and 2016.

The number of all kinds of buildings under construction rose in 2016 by around 23 per cent compared to 2015

### Table 9.1 Progress of Residential Units

<table>
<thead>
<tr>
<th></th>
<th>2015/2016</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth %</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apartments</td>
<td>3.3</td>
<td>410,863</td>
<td>397,718</td>
</tr>
<tr>
<td>Villas</td>
<td>4.1</td>
<td>88,623</td>
<td>85,098</td>
</tr>
<tr>
<td>Other</td>
<td>-2.6</td>
<td>19,496</td>
<td>20,014</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.2</td>
<td>518,982</td>
<td>502,830</td>
</tr>
</tbody>
</table>

**SOURCE:** Dubai Statistics Center

### Table 9.2 Buildings Under Construction by Type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth %</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private villas</td>
<td>21.4</td>
<td>4,961</td>
<td>6,024</td>
</tr>
<tr>
<td>Investment villas</td>
<td>30.1</td>
<td>13,100</td>
<td>17,041</td>
</tr>
<tr>
<td>Industrial buildings</td>
<td>-12.4</td>
<td>817</td>
<td>716</td>
</tr>
<tr>
<td>Public buildings/facilities</td>
<td>-9.9</td>
<td>808</td>
<td>728</td>
</tr>
<tr>
<td>Multi-story buildings</td>
<td>4</td>
<td>1,162</td>
<td>1,209</td>
</tr>
<tr>
<td>Semi multi-story buildings</td>
<td>13.3</td>
<td>632</td>
<td>716</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23.1</td>
<td>21,480</td>
<td>26,434</td>
</tr>
<tr>
<td>Number of residential apartments</td>
<td>-11.1</td>
<td>58,185</td>
<td>51,714</td>
</tr>
<tr>
<td>Number of shops</td>
<td>-20.1</td>
<td>5,808</td>
<td>4,639</td>
</tr>
</tbody>
</table>

**SOURCE:** Dubai Statistics Center

### Figure 9.10 Development of Buildings Under Construction % (2015-2016)

**SOURCE:** Dubai Statistics Center

9.10 The value of completed buildings rose from AED 19,096 million in 2015 to AED 30,376 million in 2016, up by 59 per cent. (Figure 9.11).

9.11 The value of public buildings increased by around 156 per cent, multi-story buildings by around 72 per cent, while the growth rate of the value of other types of buildings varied between 95 per cent for investment villas to (-8 per cent) for private villas. (Figures 9.12 and 9.13).
Real Estate Investments

The total value of investments in real estate amounted to more than AED 91 billion in 2016 compared to AED 135 billion in 2015. Emiratis dominated the list of GCC investors in 2016 with AED 22 billion. The total investments value of other GCC nationals amounted to more than AED 13 billion in 2016 as compared to AED 18 billion in 2015. Saudi investors came in second place (after the Emiratis) with 3,294 investors providing more than AED 8 billion. Qatars came in third place with 1,006 investors and an investment volume of over AED 1 billion followed by Kuwaitis, Omanis and Bahrainis, respectively.

9.12 The total value of investment from Arab investors dropped from AED 16 billion in 2015 to more than AED 12 billion in 2016, provided by 6,416 investors, from 16 nationalities. Foreign investments also dropped from AED 74 billion in 2015 to AED 44 billion in 2016, provided by 22,834 investors from 136 nationalities.

9.13 Indian investors held the first position among foreign investors where 6,263 investors provided the Dubai real estate market with more than AED 12 billion. UK nationals held the second position with 3,372 investors while the value of their investments amounted to more than AED 5.8 billion. Pakistani nationals came in third place with 3,372 investors supplying more than AED 4.4 billion. (Figure 9.14).
Introduction

Dubai’s government has paid great attention to tourism. This has resulted in millions of tourists from all parts of the world pouring into the country achieving high sector growth rates. It has also increased the interest of local and global companies to invest in building hotels, resorts, and amusement parks in the emirate. All this has increased Dubai’s global reputation as a world tourist destination for the attractive atmosphere it offers all year round.

To implement the Dubai’s government vision, the Department of Tourism and Commercial Marketing has played a pivotal role in development and planning and overseeing all tourism activities. The Department has worked to encourage investment in the sector and to provide an attractive environment to tourists all year round. The Department has also worked to encourage the participation of both public and private sectors in developing a modern and luxurious tourism infrastructure.

The Dubai Commercial and Tourism Marketing Institute, affiliated to the Department of Tourism, was set up for the purpose of marketing and promoting the Emirate of Dubai. It works with partners in the private and public sectors in the fields of tourism and commerce, to strengthen the position of Dubai as a leading world touristic and commercial destination. There is no doubt that the success of the Department of Tourism in setting up numerous touristic events, festivals, and activities was one of the factors that increased the attractiveness of Dubai for foreign tourists. The emirate has now become a favourite tourist destination and is the fastest growing in the region and the world. It is expected that Dubai’s hosting Expo 2020 will give a powerful stimulus to the tourism sector and the emirate is hoping that its visitor numbers will reach 20 million in 2020.
CHAPTER 10 | Tourism Sector

Performance of Hotels and Restaurants Sector

The contribution of tourism - represented by the restaurants and hotels sector – to Dubai’s GDP stabilised at 5.1 per cent in 2016. This was additional to the part played by the sector indirectly in the value added of other sectors such as aviation and airports, and land and marine transport sectors, as well as the construction and trade sectors. The sector grew by 10.6 per cent in 2016 and is expected to continue to rise during the years ahead of Expo 2020, and also during the 6-month period it is being held in (from October 2020 until April 2021). It is also expected that more than 270 thousand new jobs will be created in the various sectors of the economy as a result of holding the exhibition and the associated activities. The hotels and restaurants sector will have a large share of the value the exhibition will add. (Figure 10.1).

Attraction Factors in Dubai’s Tourism

The year 2016 has seen numerous festivals and events run in Dubai. Among the most significant festivals - for demonstration and not limitation - was “Dubai's 2016 Shopping Festival” which is regarded as one of the most important and largest festivals, not only in the region alone but in the world. The Festival has been held for twenty five years, starting every year from January until February.

The festival is famous for its numerous international entertainment events, and carnivals running alongside the shopping in the most splendid and luxurious of shopping centres in the region and in the whole world.

The “Global village” also opened its doors to visitors between 1 November 2016 and 8 April 2017. There was also the “2016 Dubai World Cup” festival for the best horses, races, and trainers, in addition to the “2016 Dubai Food Festival”, which included impressive cooking events and various activities for all food lovers, including shows by the most famous chefs in the world, specialist conferences, and outstanding offers from restaurants in parts of the city. On top of that, “Wonderful World” entertainment for children, “Dubai’s Summer Surprises”, and “Ramadhan and Eid in Dubai” festivals were held.

In addition to the festivals and entertainment events, Dubai has become a venue for several sports, commercial, and scientific events and conferences. In 2016 the most important of these were: the GITEX electronics fair; the “Cityscape Global” exhibition; the “Gulffood” exhibition in its 21st cycle which is one of the largest leading platforms in the world food trade; the Arab Health exhibition and conference; the “INDEX 2016“ exhibition, which is considered the biggest and most diverse international event in the interior design market; and dozens of other events.

There have been numerous sporting events. The most important of these were: the “al-Marmoum” camel rider racing season; basketball and volleyball championships; and football, golf, swimming, tennis, cycling, motor racing, sailing, and boxing events. Additionally, Dubai’s International Boat race is held, as Dubai has become one of the main international locations in which owners of yachts and boats, water sports lovers and specialists in this sphere can see and purchase the most modern leisure boats of all types, sizes and uses.

Tourism Flows in Dubai

The number of tourists who visited Dubai in 2016 was more than 14.91 million visitors, a 4.9 per cent increase over 2015 and most of them stayed in the various facilities for accommodating tourists. In 2016, the average occupancy rate of hotels and hotel apartments in Dubai was 78 per cent, an increase of 1.3 per cent over 2015. Dubai occupied the fourth place in the list of most attractive cities for tourists in the world in the MasterCard rankings of the most visited cities in the world.

Dubai also took first place as the world tourist destination with the biggest average foreign tourist expenditure amounting to US$31.3 billion (AED 115.2 billion) in 2016 with a growth rate of 7.5 per cent over the previous year. This outstanding performance by the tourism sector is a positive indication of Dubai’s ability to achieve its declared target of increasing the number of tourists to 20 million by 2020. (Table 10.1).

1 Data from the Department of Tourism and Commercial Marketing in Dubai
TABLE 10.1 | Dubai’s Ranking in Tourism and that of other Selected Global Cities (2016)

| Source: MasterCard’s “Global Destination Cities Index”, 2016 |
|---|---|---|---|---|
| Ranking | 2015 | 2016 | Increase between 2015/2016 | Tourist spending (billion USD) |
| Bangkok | 1 | 18.24 | 21.47 | 9.6% | 14.8 |
| London | 2 | 18.82 | 19.88 | 7.0% | 19.8 |
| Paris | 3 | 16.06 | 18.03 | 2.1% | 12.9 |
| Dubai | 4 | 14.26 | 15.27 | 7.5% | 31.3 |
| New York | 5 | 12.27 | 12.75 | 3.1% | 18.5 |
| Singapore | 6 | 11.88 | 12.11 | 4.1% | 12.5 |
| Kuala Lumpur | 7 | 11.12 | 12.02 | 7.4% | 11.3 |

FIGURE 10.2 | Average Nights stayed in Dubai’s Hotels (night per guest)

![Average Nights stayed in Dubai’s Hotels graph]

SOURCE: Tourism statistics – Dubai’s Statistics Centre

10.4 | The indicator for the average number of nights spent in Dubai’s hotels reflects the emirate’s ability to attract visitors, and this is at the same level as last year. (Figure 10.2).

10.5 | The hotel room and hotel apartment occupancy rate indicator also reflects the increases in the flow of tourists into Dubai. In 2016, the rate decreased slightly as a result of a big increase in the number of hotels and, consequently, in the supply of new rooms which had become available. (Figure 10.3).

10.6 | The neighbouring areas represent the main source of tourists to Dubai. The highest numbers of visitors came from Asian countries, with India at the forefront. These are followed by visitors from the GCC states, especially from the Kingdom of Saudi Arabia. Then come visitors from the European states, at the forefront of which is the United Kingdom. It is noteworthy that the number of recorded visitors does not include those who stay at their relatives’ or hosts’ private residences and so the real total for the number of visitors to Dubai is greater than that in the official statistics.

Dubai has maintained its position in 2016 as the fourth biggest tourist destination in the world and has beaten traditional tourist cities such as New York, Singapore, Kuala Lumpur, Istanbul, Tokyo and Seoul. With respect to the Middle East and Africa, Dubai gained first place taking over Riyadh in second place with three times the number of visitors, and double the number of visitors to Johannesburg in South Africa at third place². (Figure 10.4).

CHAPTER 10  Tourism Sector

TABLE 10.2 | Dubai’s hotels 2015-2016

<table>
<thead>
<tr>
<th>Classification</th>
<th>1-3 stars</th>
<th>4 stars</th>
<th>5 stars</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of hotels</td>
<td>2015</td>
<td>264</td>
<td>106</td>
<td>91</td>
</tr>
<tr>
<td>Number of rooms (in thousands)</td>
<td>2015</td>
<td>19,714</td>
<td>21,208</td>
<td>31,551</td>
</tr>
<tr>
<td>2016</td>
<td>21,767</td>
<td>22,990</td>
<td>33,122</td>
<td>77,879</td>
</tr>
</tbody>
</table>

SOURCE: The Department of Tourism and Commercial Marketing in Dubai and Dubai’s Statistics Centre

FIGURE 10.5 | The Number of Rooms and Hotel Apartments in Dubai (in thousands)

10.8 The new hotels opening in 2016 have added more than 5,406 rooms to the stock available, while the number of hotel apartments has been reduced by 894. Consequently, the number of rooms and hotel apartments available is 77,900 and 25,000 respectively and the total number grew by 4 per cent. These increases are part of the ambitious plan announced by the Department of Tourism, which aims for a total hotel capacity of 160,000 rooms to be ready for when the Expo 2020 exhibition opens, Figure (10.5).

10.9 The luxury hotel category predominates in the Dubai hotel sector with 4-5-star hotel rooms accounting for more than 70 per cent of the total number of hotel rooms. The hotel rooms available in Dubai in 2016 were distributed as follows: 42 per cent in the five star category; 30 per cent in the four star category, and; 28 per cent in the one to three star category. Figure (10.6).

Developments in Tourism Infrastructure

10.7 In the last few years, the government of Dubai has been successful in stimulating and encouraging tourism by providing the infrastructure and by encouraging investment in tourism.

During 2016, 14 new hotels were opened increasing the total number of hotels in Dubai to 475 in all categories. Nevertheless, 10 hotel apartment buildings were closed, during the same year. (Table 10.2).

The luxury hotel category predominates in the Dubai hotel sector with 4-5-star hotel rooms accounting for more than 70 per cent of the total number of hotel rooms. The hotel rooms available in Dubai in 2016 were distributed as follows: 42 per cent in the five star category; 30 per cent in the four star category, and; 28 per cent in the one to three star category. Figure (10.6).
Cruise tourism in Dubai

The importance of cruise tourism has increased in recent years. Dubai has become a centre for the activities of five luxury cruise companies operating globally and a maritime hub for cruises run by approximately 20 companies around the world. Cruises set off from Dubai to visit other Gulf cities as well as the Far East, India and the Mediterranean.

There are four ports, namely: Rashid, al-Hamriya, Jebel Ali and al-Shandaghah, which enable cruise tourists to enter Dubai. In 2015 a large number of passenger ships anchored in the emirate’s ports with more than 145,700 passengers on board. This was a growth rate of 37.3 per cent over the previous year.

Rashid port, which is called the “Passenger Terminal” has the greatest proportion of passenger traffic at 92 per cent of the total, followed by Jebel Ali port with 6 per cent. The cruise ship harbour in Rashid port in Dubai sits in an area of two million square metres and is equipped to receive five super-sized cruise ships at any one time. In 2015 the harbour received the prize for the Best Cruise Port in the Middle East for the eighth consecutive year in the “World Travel Awards” competition.

The passenger building has a capacity for 14 thousand visitors at any one time and two thousand seats for visitors to rest. There are plans to expand the port so that its capacity will increase from five super-sized cruise ships at present to seven cruise ships at any one time. (Figure 10.7).
Introduction

The composition of Dubai’s population according to numbers and gender, together with the community’s ability to participate effectively, play a pivotal role in its economic growth process. This chapter overviews the social indicators related to economic development in Dubai, including indicators of population, education, and health.

Population and employment indicators

At the end of 2016 Dubai’s population was estimated to be 2.7 million and it had grown by approximately 5 per cent compared with the previous year. The population gender composition was comprised of 70 per cent males and 30 per cent females. (Table 11.1).

Figure 11.1 shows the population spectrum of the Emirate of Dubai in 2015, which reveals that the number of males far exceeds the number of females, especially in the mid-age group (20-49). This is attributable to the fact that a large part of Dubai’s population is comprised of male immigrant workers. Dubai’s population growth is linked to the size of the demand in the labour market as the population increases significantly at times of economic revival which entails bringing in labour from abroad.

| TABLE 11.1 | Dubai’s Population according to the Gender |
|---|---|---|---|---|---|
| Males | 1,515,770 | 1,547,135 | 1,579,145 | 1,613,175 | 1,703,355 |
| Females | 487,400 | 558,740 | 634,700 | 714,175 | 743,320 |
| Total | 2,003,170 | 2,105,875 | 2,213,845 | 2,327,350 | 2,446,675 |

* Estimated data

SOURCE: Dubai Statistics Center

Figure 11.1 shows the population spectrum of the Emirate of Dubai in 2015, which reveals that the number of males far exceeds the number of females, especially in the mid-age group (20-49). This is attributable to the fact that a large part of Dubai’s population is comprised of male immigrant workers. Dubai’s population growth is linked to the size of the demand in the labour market as the population increases significantly at times of economic revival which entails bringing in labour from abroad.

<table>
<thead>
<tr>
<th>FIGURE 11.1</th>
<th>Dubai’s Population Pyramid according to Age and Gender (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Male</td>
</tr>
<tr>
<td>75 +</td>
<td>45</td>
</tr>
<tr>
<td>70 - 74</td>
<td>30</td>
</tr>
<tr>
<td>65 - 69</td>
<td>25</td>
</tr>
<tr>
<td>60 - 64</td>
<td>20</td>
</tr>
<tr>
<td>55 - 59</td>
<td>15</td>
</tr>
<tr>
<td>50 - 54</td>
<td>10</td>
</tr>
<tr>
<td>45 - 49</td>
<td>5</td>
</tr>
<tr>
<td>40 - 44</td>
<td>0</td>
</tr>
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<td>35 - 39</td>
<td>0</td>
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<td>30 - 34</td>
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<td>25 - 29</td>
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</tr>
<tr>
<td>5 - 9</td>
<td>0</td>
</tr>
<tr>
<td>0 - 4</td>
<td>0</td>
</tr>
</tbody>
</table>

SOURCE: Dubai Statistics Center
Developments in Education

11.2 Education services are provided in Dubai by both public and private sectors. The UAE’s Ministry of Education finances and supervises all matters related to public education in Dubai (up to the secondary stage and for special needs schools), while the Ministry of Higher Education and Scientific Research supervises and finances public education after the secondary stage. The Human Development and Knowledge Authority, which was established in 2006, oversees the development and quality of private education. Finally, the Ministry for Social Affairs oversees the licensing of all kindergartens and nurseries in the Emirate.

Post-secondary educational establishments are overseen by the Academic Accreditation Authority, which is a federal organisation responsible for ensuring quality and reinforcing educational distinction via the various higher education establishments in the state in accordance with international standards. The University Quality Assurance International Board (UQAIB) was set up by the Knowledge Authority in 2008 to evaluate and license the universities operating in the free zones in Dubai such as Dubai Academic City and the Knowledge Village.

Education indicators

11.3 The uninterrupted growth, which started to accelerate in the mid-eighties, has continued both in the number of schools and universities and in the number of students enrolled in the educational establishments in Dubai.

Private education has played an important role in this at all stages of education. The number of students enrolled in primary and secondary stages of education in the 2015-2016 academic year amounted to around 265,000 students with a growth rate of 5.6 per cent, while the number of students enrolled in private higher education was 26,000 with a growth rate at 7.8 per cent. The students resident in Dubai constitute 67 per cent of the total number, while students coming from elsewhere constitute 33 per cent. Indian students form the highest proportion, namely, 30 per cent.

Table 11.2 shows the development of higher education establishments in Dubai in the years between 2008 and 2015. The table shows that at the federal level, the number of universities has not changed and has settled at three universities, while the number of universities outside the free zones dropped from 35 universities in 2008 to 20 universities in 2015. In contrast, the number of universities in the free zones increased from 17 to 34 during the same period.

The state universities, which mainly contain Emirati students (99.1 per cent), are considered to be the biggest in size and they provide a greater number of scientific degrees when compared to the private universities. This has led to an increase in the number of state university lecturers compared to higher education institutions in the private sector. It is noteworthy that the number of universities in the free zones (34 universities) have exceeded the number outside the free zones (20 universities) in 2015. Despite the fact that the total number of universities declined by one university in 2013, the number of students enrolled increased by 19.9 per cent in the same period and that in the academic year 2014 - 2015 it reached approximately 60,000 students. The World Bank’s world growth indicators reveal that the cost of state education in the Emirates is similar to the average cost in the economies of the Organisation for Economic Cooperation and Development.

### Table 11.2 Higher Education Indicators in Dubai

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Universities</th>
<th>Number of Teachers</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal</td>
<td>Outside of Free Zones</td>
<td>Within Free Zones</td>
</tr>
<tr>
<td>2008</td>
<td>3</td>
<td>35</td>
<td>17</td>
</tr>
<tr>
<td>2009</td>
<td>3</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>2010</td>
<td>3</td>
<td>32</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>3</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>2015</td>
<td>3</td>
<td>20</td>
<td>34</td>
</tr>
</tbody>
</table>

SOURCE: Dubai Statistics Center and Knowledge and Human Resources Authority
11.5 (Figure 11.2) shows that despite the fact that the number of Emirati students is less than the number of non-Emiratis in private education, there is a clear evidence of increasing tendency for Emirati families to enroll their children in private education in the last two years. In the academic year 2014/2015, the number of Emirati students in private schools amounted to 31,736 pupils compared to 30,994 in the 2013/2014 academic year, and 24,770 in 2008, i.e. an increase of more than 28 per cent during the years from 2008 to 2015. Consequently, the percentage of Emirati students enrolled in private schools had risen to 58 per cent in the 2015-2016 academic year. In contrast, the number of Emirati students in state schools has declined over the last few years stabilising at 22.5 thousand pupils in 2014 after peaking at (26.6 thousand) in 2002/2003 (Figure 11.3).

11.6 The Dubai universities’ admission data for the academic year 2015/2016 indicates that about 37 per cent of the total number of students in Dubai’s universities enrolled in science departments compared to only 24 per cent in the previous year (Figure 11.4).

33% of students in private education in Dubai come from abroad
### Table 11.3 | The Healthcare Institutions in Dubai

<table>
<thead>
<tr>
<th></th>
<th>Governmental Institutions</th>
<th>Private Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Hospitals</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Number of clinics and Health Centers</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Number of beds</td>
<td>2,376</td>
<td>2,036</td>
</tr>
<tr>
<td>Number of Doctors</td>
<td>1,569</td>
<td>1,655</td>
</tr>
<tr>
<td>Number of Nurses</td>
<td>4,041</td>
<td>4,273</td>
</tr>
</tbody>
</table>

SOURCE: Dubai Statistics Center and Dubai Health Authority
Developments in Healthcare

11.7 The Health Authority in Dubai was founded in July 2007 and was commissioned with the task of organising the healthcare sector in the Emirate. The Federal Ministry of Health sets the basic quality standards for all health care services within the state (which cover hospitals, specialist centres and clinics). It also provides the necessary finance for the healthcare institutions (hospitals or specialist centres) belonging to it. The Health Authority in Dubai has an organisational role involving monitoring the adherence of all health care centres (private and public) to the quality standards set by the Ministry of Health. At the same time, the Health Authority in Dubai is also tasked with building and financing healthcare facilities.

11.8 The health services provided by the medical institutions in Dubai have developed considerably between 2013 and 2016. It is also obvious that there is a discrepancy between the development of these services in public and private institutions. The number of private hospitals increased by five between 2013 and 2016 while the number of government hospitals recorded no change in the same period. Perhaps this reflects the private sector’s interest in investing in the health sector and the government encouraging it in this direction. (Table 11.3).

11.9 The government of the UAE and the local governments are endeavouring to continue raising the level of health in the state to help increase average life expectancy at birth to a level similar to that of advanced states such as the United States of America and Singapore. (Figure 11.5).

Dubai Healthcare City Authority - Regulatory

11.10 The Authority is tasked with laying down new standards for the quality of healthcare in Dubai Healthcare City in line with the best medical practice. The Authority has therefore been created as an independent organizational body with the aim of maintaining the best standards in the quality of healthcare services and in the care of patients in Dubai Healthcare City.

Healthcare and professional service providers must adhere to the standards accredited by the Authority to obtain a licence and legitimacy. The Authority prioritises the quality of healthcare and patient safety to guarantee quality standards by means of a series of continuous requirements and inspections.

The tasks of the Authority for Planning and Quality in Healthcare Services are based on seven crucial points.

- Drawing up bed occupancy plans
- Inspecting the design and technical settings related to the buildings (in and out)
- Issuing licences to healthcare service providers
- Providing routine evaluation to manage the quality of medical services, and proposing training programmes in order to achieve conformity with the accredited quality standards
- Collecting information on healthcare services within and outside the Emirate of Dubai
- Management of customer relations, patient, and client affairs units
- To guarantee that the professionals in healthcare services in Dubai Healthcare City receive continuing education programs.
Mission

Enhance the economic welfare, prosperity & happiness of the people of Dubai.
The Department of Economic Development (DED) is the government body entrusted to set and drive the economic agenda of the emirate of Dubai, UAE. The DED supports the structural transformation of Dubai into a diversified, innovative service-based economy that aims to improve the business environment and accelerate productivity growth.

The DED and its agencies develop economic plans and policies, identify and support the growth of strategic sectors, and provide services to domestic and international investors and businesses.

Vision
Achieve Dubai’s economic development goals of competitiveness & sustainability

Mission
Enhance the economic welfare, prosperity & happiness of the people of Dubai