Over a period of half a century the city state of Dubai has progressed from pre-industrial to industrial to post-industrial status. Change is evident in the economic, social and cultural characteristics of the city and, most visibly, in the scale, pace and nature of urban development. This paper identifies the key forces and processes underlying the transformation of Dubai from an insignificant fishing settlement on the Arabian Gulf to a cosmopolitan regionally significant twenty-first century city. © 2005 Elsevier Ltd. All rights reserved.

Keywords: Dubai, pre-industrial, post-industrial, urban development, mega-projects, urban planning

In contrast to major Western cities where the transition from pre-industrial to industrial to post-industrial status occurred over a period of two centuries, Dubai has undergone a similar transformation in only fifty years. The decision by the International Monetary Fund and the World Bank to convene their 2003 meeting in Dubai bears testimony to the city state’s remarkable progression from an insignificant fishing settlement on the Arabian Gulf to a cosmopolitan regionally dominant twenty-first century city. The emerging international status of the city was also signalled by property consultants Jones Lang Lasalle who recently identified Dubai, (along with Dublin and Las Vegas), as one of the three most successful cities of the 1990s as measured by economic growth and real estate activity. In regional terms Dubai’s unemployment rate of 5% is less than half that of Egypt while its GDP per capita is more than five times that of its larger Arab neighbour. In addition, Dubai, with more than five million annual visitors, is now a more popular tourist destination than Egypt or India (Molari, 2004).

The economic transformation of Dubai over recent decades has been accompanied by major changes in relation to its population structure and pattern of urban development. This paper identifies the key forces and processes underlying the economic, social and physical transformation of Dubai; examines the major developments in the city’s urban structure; and considers future directions for urban growth in the city state.

Urban origins

The origins of the modern city of Dubai are rooted in the tribal culture and political history of the region. In the eighteenth century, the southern part of Trucial Oman, (now the territories of Dubai and Abu Dhabi), was occupied by the Bani Yas tribe while their historic rivals the Qawasim controlled the area north of Dubai, (now the emirates of Sharjah and Ras al Khaimah). The period was marked by a struggle for maritime supremacy of the Gulf between the two tribes, with the British allied to the Bani Yas. In response to attacks on the shipping of the East India Company and the consequent disruption of trade with India a British expedition was sent, in 1819, to defeat the Qawasim. Subsequently, in order to consolidate their position the British required the leading sheikhs along the coast of Trucial Oman, including those of the Bani Yas, to enter into a General Treaty of Peace. Not only did this secure the trade route to India but also enabled the pearling industry of the Gulf to prosper, to the benefit of Dubai where many of the pearl fishers and traders were based (Kazim, 2000).

A political change of fundamental importance for the growth of Dubai
occurred in 1833 when a group of around 800 members of the Al Bu Falasah subsection of the Bani Yas tribe seceded from Abu Dhabi following a dispute with the ruler and moved to form an independent sheikhdom in Dubai. This community was ruled by Maktoum bin Buti from 1833 until his death in 1852. Significantly, all subsequent rulers of Dubai are descended from the Maktoum family that has exercised an ongoing and paramount influence on the development of the city state.

A second key political decision that impacted on Dubai's post-war growth was the decision by Britain, in 1967, to withdraw from its military bases east of Suez. This signalled the termination of the treaty relationships in Trucial Oman, and on 1st December 1971 a new political entity of the United Arab Emirates came into existence, comprising the former sheikhdoms of Dubai, Abu Dhabi, Sharjah, Ajman, Umm al Qairain, Ras al Khaimah and Fujairah. While the administrative capital of the federation is in Abu Dhabi, Dubai has emerged as the principal economic and urban growth centre not only for the UAE but also for the other Gulf Cooperation Council countries of Saudi Arabia, Kuwait, Bahrain, Qatar, and Oman, as well as for the wider region.

**The urban economy**

For much of the nineteenth century, the pearl industry was a mainstay of the Dubai economy that also benefited from a prevailing philosophy of economic liberalism that encouraged entrepreneurial activity. The growth of the urban economy received a major boost in 1902 when the government of Persia imposed high customs duties on merchants operating from their ports, including the main entrepot for the Indian trade at Lingeh at the entrance to the Gulf. The effect was to set in motion a transfer of the Indian trade, along with merchants, craftsmen and their families, to the more liberal economic climate of Dubai. As a result, over the course of the early decades of the twentieth century, Dubai as well as being the key distribution centre for trade with the interior, also became the main port where goods from India were re-exported to Persia and neighbouring countries. The growing regional economic importance of Dubai was reinforced in 1904 with the introduction of a regular steamship service to Bombay.

The inter-war period, however, proved difficult for the Dubai economy. The world recession of 1929 and the introduction of the cultured pearl by Japan undermined the economy of Trucial Oman. With the demise of the pearling industry Dubai placed even greater emphasis on trade. The outbreak of the Second World War disrupted commercial links with India, however, and the resultant economic difficulties were offset only marginally by income from aviation and petroleum exploration concessions.

Following discovery of petroleum offshore in 1966, the development of the oil industry revolutionised the economy and society of Dubai. Oil revenues enabled the government to undertake major infrastructure and industrial projects that included construction of Port Rashid, the dry docks, an aluminium smelter, and the Jebel Ali port and industrial area. (see Plate 1) In addition to oil revenues, another important force in the post-war development of Dubai was the local merchant community with its network of international contacts.

Plate 1  Jebel Ali port and industrial complex.
Having diversified into a variety of business activities ranging from oil to marketing, the merchant group financed large projects, acted as consultants, and invested as shareholders in private companies, such as the Dubai Telephone Company. The commercial acumen of the city’s entrepreneurs flourished during the 1980–1988 Iran–Iraq war when Dubai’s merchants engaged in a lucrative trade supplying consumer goods and equipment to Iran at considerable profit to individual traders and to the urban economy as a whole. The war also stimulated growth in the business of servicing international shipping that found Dubai’s massive dry docks a safer alternative to Kuwait or Iranian ports. Since the early 1980s Dubai’s trade with the other GCC countries and other Gulf states has expanded to make Dubai the busiest port in the region. The city’s growth as a commercial entrepot was accompanied by expansion of the banking sector and, as early as 1970, 18 banking houses including 3 British, 2 Pakistani, 2 Iranian, 2 North American, 1 Jordanian and 3 locally chartered banks, were represented in the city. By 2002, 42 foreign banks and 112 local banks were operating in Dubai. A third critical factor underpinning Dubai’s post-war economic growth was the liberal economic approach of government that sought to attract inward investment to a low-taxation, business friendly, and politically stable environment. This strategy was expressed in concrete terms with the opening of the Jebel Ali free zone in 1985 as an enclave where businesses could operate outside Dubai’s customs and legislative barriers and benefit from a ready supply of low wage non-unionised labour. By 1992, Jebel Ali accommodated 480 firms from 56 countries, and by 1995, this figure had increased to 800 firms from 72 countries, and included many major multinational corporations such as Nokia, Daewoo and Reebok seeking to penetrate the markets of the Arabian Gulf–Arab World. The number of firms in the Jebel Ali free zone has continued to increase, reaching 1633 in 1999 and 2051 by 2002. Since the early 1990s, Dubai has been engaged in a process of economic expansion and diversification driven by the knowledge that oil production, having peaked at 410,000 barrels per day in 1991, is in decline and now accounts for less than 10% of GDP. The primary objective of the 1996–2010 Dubai strategic development plan is to attain the status of a ‘developed economy’ by the latter date. This goal is being pursued within a context of planned economic growth, by means of several strategies including modernisation of production in low value added sectors; investment promotion and attraction of well established firms in modern high value industries; and diversification, with increased development of tertiary sector activities. The shift to higher value added manufacturing is evident in the Jebel Ali free zone where, as the economy has matured, attempts have been made to attract more high technology industries, (such as assembly of computers and electronic equipment), and to phase out labour intensive industries, (such as textile processing), dependent on expatriate labour. Thus, in 2000, while manufacturing accounted for 17% of GDP, (second only to trade, with 18%) (Figure 1), the sector ranked only third, behind construction and trade, in terms of number of employees (Table 1). Diversification is also evident in the tenant mix of the Jebel Ali free zone that includes, in addition to manufacturing, warehouse and distribution companies, producer services, (such as banking, insurance and legal services), and trading companies engaged in importing goods from various global markets for re-export to regional markets. While manufacturing and trade remain major elements of the non-oil economy the more recent emphasis on expanding the tertiary sector is evident in the importance of producer and other services, real estate, hotels and restaurants, and construction (Figure 1). Between 1993 and 2000, the number of hotel rooms in Dubai increased by 37% from 18,638 to 25,571, and number of hotel beds by 32%, from 31,267 to 41,226. The acknowledged importance of the international ‘visitor economy’ is reflected in the particular attention that has been focused on developing upmarket tourism, as symbolised by the development of the iconic 7+ Burj al Arab hotel. Further planned luxury development projects include The Palm Jumeirah, (a $1.5 billion development of man-made islands in the Gulf to provide 10,000 exclusive residences, 40,000 hotel rooms, and shopping and entertainment facilities); Dubai Marina, and ‘The World’, (another Gulf island development consisting of 300 private islands arranged in the shape of a world map—with ‘Britain’ having already been sold for £18 million) (see Plate 2).

In addition to strong inward flows of investment capital the liberal ‘open door’ economic policy of Dubai has attracted a steady stream of immigrants that has had significant impact on the socio-cultural character of the city.

The urban population

The population growth curve for Dubai takes the form of an elongated S, with slow initial growth from 1500 inhabitants in 1833 to 10,000 in 1900, and to 59,000 in 1968. Thereafter, the city entered a period of rapid population growth. By 1985, the number of residents had risen to 370,788, representing a five-fold increase over two decades. The population has continued to grow at a (relatively) reduced rate, increasing to 689,420 in 1995, (an increase of 86% over the decade), to 862,387 by 2000, and to 961,000 by 2002.

The rapid population growth of recent decades is the result of two main factors. Of greatest significance has been immigration fuelled initially by economic expansion based on the oil industry that created a demand for labour and expertise that could only be satisfied from abroad. The second factor, natural increase, is the result of high fertility combined with a decline in infant mortality rates and an increase in life expectancy consequent upon the introduction of modern health care facilities.

Despite a policy of ‘emiratisation’ of the workforce since the mid 1990s based on repatriation of illegal immigrants, restrictions on entry of unskilled foreign workers, and granting priority to emiri graduates in some state sector employment, foreign-born residents still constitute a dominant
The proportion of Dubai’s population. In 2000, of the 862,387 inhabitants, 460,691 (53%) were born abroad. Two principal waves of immigrants may be identified. The first influx arrived in the early part of the twentieth century and were largely Arabs from coastal Iran attracted by the economic opportunities (discussed earlier). Many of these migrants came from the Bastak district of Fars province and were settled in a new urban quarter, (Bastakigah), that remains a distinctive element in the urban morphology of the contemporary city. The second main wave of immigrants, arriving from the 1960s onwards, were primarily labour migrants from India and Pakistan, as well as from Iran, other Arab states and Europe and North America. This is evident in the distinctive demographic profile of the expatriate population that is characterised by a preponderance of economically active males in the 20–40 age range (Figure 2). The influx of foreign workers in the late 1960s occurred because the mainly British companies to which the Emirate’s government awarded contracts for major

Table 1 Sectoral distribution of economic activity in Dubai, 2000

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number employed</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and fisheries</td>
<td>10,377</td>
<td>1.9</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>1,456</td>
<td>2.6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>66,799</td>
<td>11.9</td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>1,819</td>
<td>0.3</td>
</tr>
<tr>
<td>Construction</td>
<td>147,468</td>
<td>26.3</td>
</tr>
<tr>
<td>Trading and repair services</td>
<td>117,738</td>
<td>21.0</td>
</tr>
<tr>
<td>Hotels and restaurants</td>
<td>31,727</td>
<td>5.7</td>
</tr>
<tr>
<td>Transport, storage and communications</td>
<td>47,058</td>
<td>8.4</td>
</tr>
<tr>
<td>Financial, intermediation</td>
<td>9,988</td>
<td>1.8</td>
</tr>
<tr>
<td>Real estate, renting and business services</td>
<td>22,726</td>
<td>4.1</td>
</tr>
<tr>
<td>Public administration and defence</td>
<td>33,117</td>
<td>5.9</td>
</tr>
<tr>
<td>Education</td>
<td>11,719</td>
<td>2.1</td>
</tr>
<tr>
<td>Health and social work</td>
<td>10,715</td>
<td>1.9</td>
</tr>
<tr>
<td>Other social and personal services</td>
<td>15,373</td>
<td>2.8</td>
</tr>
<tr>
<td>Housemaids</td>
<td>30,857</td>
<td>5.5</td>
</tr>
<tr>
<td>Extra-territorial organisations</td>
<td>422</td>
<td>0.1</td>
</tr>
<tr>
<td>Not stated</td>
<td>718</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Figure 1  Dubai non-oil sector GDP, 2000.
developments, such as the airport, roads, port facilities and hotels, sourced cheap labour from these countries. In 1969, construction workers constituted 17% of the total labour force of 24,014. The continued importance of the construction sector is indicated by the fact that in 2000 the sector accounted for 26% of the total labour force of 560,077 (Table 1).

Immigrants were also attracted to opportunities in the wholesale and retail trades. To the merchant tradition of the colonial period was added a new class of immigrant merchants from India, Pakistan, Iran and Afghanistan who often occupied a particular niche in the commercial sector. Indian and Pakistani immigrants commonly sold clothing, electrical appliances or cameras, while Iranians frequently established grocery outlets. Segmentation by ethnicity and class was evident in other sectors of the economy with, for example, British bank managers being supported by tellers, clerks and secretaries from India and Pakistan. Stevedores were frequently Baluchis, other dock workers Omani or Yemeni, carpenters and electricians were often Indian Sikhs, while most street sweepers were Iranian.

The influx of foreign workers has had a major cultural impact on the city, most visibly in variations in dress and language, and in the growth of restaurants, shops and other facilities to serve the needs of the immigrant populations. Immigration remains a key determinant of the urban character of Dubai. As Table 2 shows across all main sectors of the economy the majority of the economically active male population have lived in the city for less than a decade.

The urban outcomes of these major historical, economic, demographic and cultural processes are manifested most clearly in the socio-spatial pattern of city development.

Urban development

Four major phases of urban development may be identified in Dubai:

1900–1955: A period of slow growth and limited physical expansion due to constrained economic growth and marginal increase in population. At the beginning of the period Dubai’s population of 10,000 was concentrated in three residential quarters of

- Deira, consisting of 1600 houses and 350 suq shops, with Arabs, Persians and Baluchis making up the majority of the inhabitants.
- Al Shindagha, a former residence of the ruling family, where there was 250 houses but no suqs and only Arab residents.
- Dubai, the smallest of the settlement areas with 200 houses and 50 suq shops, and dominated by Persian and Indian merchants.

By 1955, the urban area remained a modest 3.2 km². The majority of inhabitants lived in extended families in ‘barasti’ houses, (built of palm fronds). Residential quarters were built in clusters for reasons of privacy and collective security. The internal parts of each enclave were connected by narrow walkways intended for pedestrians and domestic animals used for transport of goods and

Plate 2  Jumeirah Beach hotel.
drinking water from four public wells. The first house constructed using concrete blocks was not built until 1956 (Heard-Bey, 1982).

1956–1970: A period of compact growth based on a 1960 master plan, (prepared by a British architect), that called for provision of a road system, zoning of the town into areas for different land uses, and creation of a new town centre. These modest goals were in keeping with the emirate’s pre-oil resources. The master plan strategy was indicative also of strong central control over urban development. During this period it was acknowledged that a formal institutional structure was required to guide future urban development. In 1957, the Dubai Municipality was established to administer and co-ordinate all municipal services under the supervision of a city council whose membership was drawn largely from the ranks of the leading merchants. Regulation of the pattern of urban development in Dubai is also made possible by the structure of the real estate market that is markedly different from that of the Western world.

In accordance with Arab-Islamic traditions land ownership is based on two principles. Within a settlement any plot of land that has been occupied by a homestead for a lengthy period belongs to the inhabitant. Elsewhere landed property is at the disposal of the ruler. In Dubai these principles have been applied based on a datum of 1960. Thus, in areas where by 1960 solid houses had been built the right to dispose of the plots normally belongs to the residents. In those areas of the city undeveloped by 1960 the ruler may sell the land, lease it, put it to special uses over a set period, or allocate it to the municipality for public utilities. If the land is disposed of without charge, (‘granted land’), the ruler reserves the right to reclaim it at a future date. The titles to plots that were already developed in 1960 may be traded freely and if such plots are required by the municipality landowners must be compensated according to market value. The owners of private land may decide on its uses within certain broad guidelines (for example, they may replace their house with a more modern dwelling, or with a rental apartment block of several stories, or may sell the land on the open market). The fact that the ruler may freely dispose of lands outside the settled areas of 1960 affords considerable central control over the pattern of urban development.

1971–1980: A period of planned suburban growth. In 1971, as a result of urban expansion and the availability of development capital a new and more ambitious master plan was conceived. The plan made provision for ring roads around the city and a radial street network to the suburbs. Other major transport developments included the Shindagha Tunnel beneath the creek to connect Bur Dubai and Deira, and construction of two bridges, (Maktoum and Garhoud), thus linking city districts on both sides of the creek. The area east of the creek, around Deira, developed rapidly into the major business banking and administrative centre for the city, the main area for handling coastal and re-export shipping activities, and the location for the international airport. On the other side of the creek the international import and container harbour was developed alongside the dry docks and several major industrial areas, as well as the landmark World Trade Centre.

The building of Port Rashid was also planned, and a large area, (now named Jumeirah), extending towards Jebel Ali was designated for residential use. To the south of the city additional areas were set aside for health, education and leisure/recreation developments (Gabriel, 1987). Of particular significance for the structure of the modern city was the growth corridor along Sheikh Zayed Road towards Jebel Ali. Characterised as the ‘New Dubai’ this zone is emerging as the new commercial and financial centre of the city.

1980–Present: A period of rapid urban expansion, in terms of both the scale and diversity of development projects and physical spread of the city, that in 2004 covered an area of 605 km². The annual urban growth rate is currently 3.9%, and the strategic plan envisages extending the built up area by a further 501 km² by 2015. The master plan of 1960 laid the foundations of the urban road network and the system of municipal services, but could not have foreseen the subsequent explosive growth of the economy and city. In the early 1990s, the government commissioned the Dubai Urban Area Strategic Plan 1993–2012 to guide the economic and physical development of the city into the twenty-first century. Key challenges to be addressed were—

- To accommodate urban expansion by allocating additional land in a phased planned process to meet current and future needs for residential, industrial and commercial uses.
- To extend the existing transport network and infrastructure facilities.
- To promote continued economic growth.
- To support and attract private investment by ensuring a sufficient land supply, adequate infrastructure, simplified administrative and planning procedures, and by conducting publicly funded feasibility studies for major development proposals to minimise the risk to private capital.
- To encourage co-operation between private sector companies and government agencies in undertaking development ‘mega-projects’.
- To encourage expatriates to reinvest capital and profits in local enterprises.
- To develop an inter-departmental planning framework capable of reviewing, monitoring and implementing the Structure Plan.
- To devise a regulatory environment capable of operating within a strong market economy and incorporating the needs and interests of a large number of agencies and organisations.

The Strategic Plan also represented an effort to provide an explicit spatial framework for urban growth. Figure 3 indicates the planned land use structure for the city.

Three particular challenges relate to the adequate provision of housing, transportation infrastructure, and public services and facilities. Housing represents the largest use of urban
space. As a consequence of the particular system of land ownership in Dubai, (discussed earlier), allocation of land for housing is based on three main elements. A fundamental distinction is drawn between nationals and expatriate housing needs. The former comprise two elements. The first refers to the need for new dwellings to accommodate a growing number of households, and to replace dilapidated housing units. The second type of nationals’ housing need stems from a state policy that dictates that all national males above 20 years of age receive a plot of land of 15,000 ft² (1400 m²) and that nationals with a plot of less than 10,000 ft² (935 m²) may be granted another plot of 15,000 ft² in addition to the original plot. Emiri nationals are also entitled to interest free loans to assist with house purchase. Both forms of nationals’ housing need are the responsibility of the public sector. Expatriate housing needs are catered for by the private sector, with the municipal responsibility confined to identification of development areas.

Figure 2 Population pyramids by age and sex for total and expatriate population.
The Emirate’s housing policy has several consequences for the physical development of Dubai—

- Because plots are provided to individuals rather than to households the total amount of land required for nationals’ housing is increased.

- The relocation of nationals to new 15,000 ft² plots has been accompanied by deterioration of housing conditions in older inner city residential areas.

- The peripheral location of new housing plots has stimulated a process of suburbanisation and creation of ‘dormitory communities’ on the fringes of the city, as at Mzarhar and Nad Al Hamar (Figure 3).

In response, some effort has been made by the municipality to reintroduce nationals’ housing in redeveloped inner urban areas such as Har Al Anz and Al Hamriya (Figure 3).

- While some of the vacated nationals’ housing filters down to low-income expatriates, in general, there is limited state provision of housing for this social group.

Indeed, the Structure Plan does not recommend public construction of low cost housing for expatriates on the grounds that it would place the state in unnecessary competition with the private sector. Further, state policy requires industrial firms to provide accommodation for their staff in existing or new estates as at Al Quoz and Jebel Ali (Figure 3).

A second major development challenge for Dubai is that of providing a modern transportation system in the context of a rapidly expanding urban area. Dubai is an automobile dependent city in which under five percent of person trips are made by public transport. Traffic congestion is a growing problem at peak times, especially at the road crossings of Dubai Creek. In addition, within the old central areas of Bur Dubai and Deira parking facilities are barely adequate. While there are plans to extend the road network including an outer ring route, to insert a rail system, enhance traffic circulation in the CBDs by means of traffic management schemes, and improve road and water transportation links across the Creek a major challenge is to expand use of public transport.

A third key development issue refers to the provision of public services and facilities. Traditionally in Dubai services such as electrical power, water supply, sewerage, and waste disposal, as well as the capital and operating costs of facilities such as hospitals have been subsidised by the Ruler’s Office. With an increasing population and declining oil revenues these social infrastructure subsidies are accounting for an increasing percentage of GNP. A fundamental challenge is how to maintain the level of service provision but restrain the rising cost of social welfare subsidies. Options under active consideration include higher cost recovery via increased user charges, improved demand management using price-related inducements to restrain consumption, and planned phased development of the city on land contiguous to the existing built up area in preference to ‘leapfrog’ urban expansion.

Central to the planned urban growth, and as part of the city’s strategy to establish itself as the region’s hub for commerce, services and leisure, is construction of a series of ‘cities within the city’ mega-projects. Principal among these are—

- Internet City: One of the first mega-projects, it is designed to provide an infrastructure and environment that enables ICT enterprises to operate locally, regionally and globally from Dubai, with significant competitive advantage, and is home to a number of major international companies including Microsoft, Oracle and Canon.

- Media City: Located close to Internet City this houses studios and offices of major media organisations including CNN and the Reuters News Agency.

- Festival City: One of the largest mixed use private sector developments, located along the shores of the creek, and comprising fifteen residential communities with a complementary 'world class' environment of entertainment, shopping and leisure facilities.

- Dubai Marina: Situated adjacent to Internet City and developed by a government real estate agency, (EMAAR), as a master planned community and the world's first intelligent city it will house 35,000 residents in 10 districts of upmarket apartments, with advanced IT systems as standard in every house (see Plate 3).

- International City: An 800 hectare mixed use development comprising 21,000 residences for 60,000 people designed in a series of 'national themed' districts built to architectural styles from a variety of coun-

### Table 2  Main occupations of males (%) by length of residence in Dubai, 2000

<table>
<thead>
<tr>
<th></th>
<th>Since birth</th>
<th>20+</th>
<th>15-19</th>
<th>10-14</th>
<th>5-9</th>
<th>1-4</th>
<th>&lt;1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislators and senior officials</td>
<td>9.8</td>
<td>14.2</td>
<td>8.2</td>
<td>12.4</td>
<td>21.3</td>
<td>29.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Professionals</td>
<td>7.0</td>
<td>12.6</td>
<td>7.5</td>
<td>12.8</td>
<td>24.3</td>
<td>32.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Technicians and associate professionals</td>
<td>12.1</td>
<td>13.1</td>
<td>7.4</td>
<td>13.3</td>
<td>23.0</td>
<td>28.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Clerks</td>
<td>12.1</td>
<td>12.9</td>
<td>7.6</td>
<td>12.9</td>
<td>22.6</td>
<td>30.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Service and sales workers</td>
<td>4.6</td>
<td>10.3</td>
<td>7.8</td>
<td>14.4</td>
<td>26.7</td>
<td>34.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Skilled agriculture and fishery workers</td>
<td>3.1</td>
<td>6.7</td>
<td>7.5</td>
<td>17.3</td>
<td>23.4</td>
<td>39.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Craft and related workers</td>
<td>0.5</td>
<td>4.9</td>
<td>4.0</td>
<td>9.9</td>
<td>28.3</td>
<td>49.8</td>
<td>2.6</td>
</tr>
<tr>
<td>Plant and machine operators</td>
<td>1.7</td>
<td>12.8</td>
<td>9.3</td>
<td>15.8</td>
<td>26.4</td>
<td>31.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>1.7</td>
<td>4.5</td>
<td>4.4</td>
<td>9.7</td>
<td>28.0</td>
<td>49.6</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.9</strong></td>
<td><strong>8.6</strong></td>
<td><strong>6.2</strong></td>
<td><strong>12.1</strong></td>
<td><strong>26.5</strong></td>
<td><strong>40.3</strong></td>
<td><strong>2.4</strong></td>
</tr>
</tbody>
</table>

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tries, including England, Italy, China and Indonesia; a 21 hectare central business district; an international exhibition centre and hotels, and a range of tourist facilities (including a re-creation of the Forbidden City in Beijing).

- Dubai International Financial Centre: This financial free zone is a multi-billion dollar real estate development on 450,000 m² of desert. Offering advantages such as zero tax on income and profits, and no restrictions on repatriation of capital/profit, and featuring a 50-storey headquarters building and 14 other towers DIFC is intended to become the financial centre for a region encompassing the countries of the GCC, the Indian sub-continent, Caspian states, Levant, and East Africa.

- Burj Dubai: The ‘Dubai Tower’ is a planned office and hotel complex that is designed to capture the distinction of being the world’s tallest building.

- Dubai Mall: Located adjacent to the Burj Dubai, with 9 million ft² of floor-space, this ‘Mall of Malls’ is planned to be the largest shopping mall in the world, and is expected to attract 35 million visitors in its first year of operations.

**Dubai’s development in international context**

Dubai has developed into a city of regional importance, with a planned objective of becoming a city of significance within the global urban-economic system. Development of the city has been energised by a synergistic relationship between global and local forces embedded within a particular historical and geographical context. Dubai’s development also usefully informs the convergence–divergence debate regarding contemporary urban growth by demonstrating the dialectic relationship between the forces of globalisation, (economic, political and cultural), and localisation (e.g. environment, demography, history and ideology), in the production of the urban environment (Smith, 2001; Newman and Thornley, 2005).

From the global perspective, within the capitalist world system concern with economic performance dominates the urban agenda, but this objective is pursued differentially within particular ideological and institutional contexts that vary from the neo-liberalism of the USA to the state entrepreneurship of Asia. Just as different societies embrace the economic imperative of capitalism in different ways and to differing degrees, so particular cities follow distinctive development trajectories that reflect the interaction of global forces and local context.

A primary global force, working in favour of some form of ‘convergent urbanisation’, is the competitive international environment engendered by economic globalisation that drives city managers to take steps to ensure that their city is an attractive location for investment. This competitive imperative is manifested in city promotion and marketing strategies embraced (unavoidably) by most large (ambitious) cities. In terms of physical development impacts the desire to attract multinational corporations and specialist service functions leads to provision of state of the art office, entertainment and residential areas to cater for the needs of ‘footloose’ capital. Dubai’s mega projects represent some of the most spectacular of such developments in the modern context.
world. Tourism has also become a major economic growth sector in the global economy. Property-based tourist-led development has transformed the economies and impacted upon the physical structure of many cities worldwide. Dubai with its attractive ‘sun-sand-sea’ ecosystem has become the leading tourist destination in the Middle East. In addition to hotel, entertainment and retail complexes the city has developed trade centres, conference facilities and theme parks in order to enhance its image as a major leisure-tourist destination. Global pressures also place greater emphasis on infrastructure provision in the form of airport extensions, rail transit systems and road projects, all of which are currently in progress in Dubai.

Notwithstanding the force of global processes, local context also prefigures how global forces are operationalised and impact upon cities in different parts of the world. A key factor is the political ideology of the state. Whereas in the USA city planning is undertaken by a range of development agencies with only limited co-ordination at the city-region scale, in Western Europe the state is involved more centrally in urban planning and development. Dubai represents a hybrid model between state control and economic liberalism in which urban development is determined largely by the planning vision of the ruling family within an environment of market capitalism that seeks to attract foreign investment and reduce restrictions to free enterprise. This form of state led entrepreneurial approach to urban development produces a city plan that is, in essence, a spatial expression of economic strategy and a mechanism for ensuring the provision of the required infrastructure and services.

The resultant differential economic growth leads inevitably to socio-spatial polarisation between high- and low-income groups in society, and to the possibility of social conflict. In Dubai the proliferation of up-market residential areas highlights the exclusive character of large parts of the urban space. While not a current priority issue for the government, the challenge of devising an appropriate strategy to manage social polarisation may tax the powers of urban planners. More generally, in terms of urban politics, the growth of ‘anti-globalisation’ urban social movements in many cities has enabled some citizen groups to exercise a degree of influence over city plans. In Dubai the centralised structure of government and economic imperatives of the structure plan afford limited potential for local democratic participation in urban planning. Top-down rather than grassroots decision-making is the principal means for carrying forward the development of the city. Although this model may not be generally applicable in the different political contexts of the USA or Western Europe its results in terms of the

Plate 3 Mina A Salam residential-leisure complex with the Burj al Arab in the background.
rapid economic and urban development of the city state are undeniable. Dubai thus provides a striking example of convergent urbanisation in terms of the city state’s response to global economic forces, but equally demonstrates the power of local environment, history, culture and politics to mediate the impacts of global processes to promote an urban form embedded in particular local context.

Urban prospect

Like many other contemporary cities, Dubai is working to establish its position within the global economy. In many respects, however, Dubai is also in a unique situation. In marked contrast with older industrial cities of the west and former Communist cities that are seeking to effect urban regeneration, Dubai is engaged primarily in a process of urban generation. Similarly while, in common with many cities of the Third World, Dubai is facing the challenge of providing adequate infrastructure in a context of rapid urban growth and expansion, Dubai is addressing the problem from a position of relative economic strength. It has an ample land resource in the form of a tabula rasa desert landscape, no legacy of industrial dereliction, no sprawl of spontaneous settlements, political stability, strong inward flows of capital investment, and is proceeding with a clear development blueprint that aims to create a city of regional significance for the twenty-first century.

Property development forms a cornerstone of Dubai’s development strategy. Investment by both private sector and government agencies is being used in a number of ways:

- as a mechanism to expand and diversify the urban economy by creating intra urban growth centres focused on specific economic activities such as retailing, IT and multi-media, and tourism.
- in image creation and place marketing, manifested in iconic architectures, (such as Burj al Arab), and global scale mega-projects, (such as Palm Jumeirah and the Burj Dubai), that perform a dual role as sources of pride and national identity and as a means of attracting inward investment by raising the global profile of the city.
- to extend the network of urban infrastructure, (including enlargement of the international airport, and construction of an urban rail system), promote population growth, and facilitate urban expansion.

The economic prosperity of the oil years has helped transform Dubai from a sleepy fishing village on the Arabian Gulf into a modern prosperous cosmopolitan city, and development planning for the post-oil decades is designed to continue this growth process. With a GDP per capita (US$19,900) that is well in excess of other states in the region and a strategic development plan target to increase this to US$21,700 by 2010 Dubai appears to be well placed to achieve its urban development goals. On the other hand, while economic and physical growth targets may be met, as in all capitalist cities, wealth is not distributed evenly. Highly visible income and lifestyle differences between affluent and poorer residents and socio-spatial polarisation between national and low-income non-national workers may require that, in future, greater consideration be directed to the distribution of wealth as well as to wealth creation.

References