# Dubai Real Estate Opportunities

## Executive Summary

- The key issue driving market expectations in the Dubai real estate market is how well demand will absorb the additional supply coming online in the coming years.
- Dubai has created a vibrant economy. Without oil resources it has been driven to become a tourist destination and a logistics, business and financial services hub.
- Dubai's public enterprises, Dubai Inc, have been a catalyst for Dubai's economic growth. Without oil revenues Dubai Inc relied on leverage for growth and the credit crisis has tested the sustainability of this model and the inter-emirate solidarity of the UAE.
- The boom and bust of the Dubai real estate market was bolstered by a combination of internal factors together with global factors, and the boom was prolonged due to monetary and credit dynamics.
- The strength of the non-real estate sectors of Dubai's economy will determine whether real estate demand catches up with supply. Forecasts of healthy supply absorption are dependent on continued population and economic growth, and on a shift of the working population towards more skilled office-based workers.
- Supply estimates and reasonable absorption assumptions indicate that office will suffer more than residential property. Residential rental levels should find stability and growth earlier, and if Dubai experiences a strong economic rebound, the residential sector should show upward price and rental pressure earlier than the office sector.
- The structure of the Dubai office real estate sector is starting to differentiate between prime and secondary CBD, prime non-CBD locations and areas surrounding free zones. Residential real estate segmentation is also becoming more defined. Rental yields reflect this segmentation, starting at around 9.0% for prime office CBD and 5.0% for high-end residential.
- The yields in Dubai's real estate market have reached levels that warrant the attention of diversified international investors and HNWIs. Market expectations are negative, but positive surprises are plausible and value in projects is attainable.

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# 1. Overview of Dubai

Dubai is one of seven Emirates of the United Arab Emirates, a country founded in 1971. Dubai has managed to achieve the status of a world-class city state without oil reserves by embracing globalisation and creating an open, dynamic and cosmopolitan economy.

GCC

UAE represents 12.6% of the GCC's population and 23.6% of its 2008 GDP

The United Arab Emirates is one of the founding members of the Gulf Cooperation Council (GCC), which also includes Saudi Arabia, Kuwait, Bahrain, Qatar and Oman. In total GCC countries have a population of 38.2 million with an average GDP per capita of USD 27,000.

**GCC Countries - Key Statistics**

| Country | Size (Sq Km) | Population (MM) | GDP 2008 (USD Bn) | 2008 GDP (USD Per Cap) |
|---|---|---|---|---|
| UAE | 83,600 | 4.8 | 243.5 | 51,000 |
| Saudi Arabia | 2,149,690 | 25.3 | 467.6 | 18,500 |
| Kuwait | 17,818 | 3.0 | 138.3 | 46,000 |
| Bahrain | 1,189 | 0.8 | 19.7 | 24,500 |
| Qatar | 11,437 | 1.6 | 102.3 | 64,000 |
| Oman | 309,550 | 2.7 | 59.9 | 22,000 |
| | **2,573,284** | **38.2** | **1,031.3** | **27,000** |

*Source: Nominal 2008 GDP estimates from Bank of America Merrill Lynch*

GDP per Capita in the UAE is higher than in Saudi Arabia

Compared to Saudi Arabia, the UAE with only a fifth of the population has a GDP of over half the size of its larger neighbour in nominal USD terms. According to the IMF, in 2007 the UAE imported goods and services worth USD 148.5 billion, compared to USD 146.0 billion for Saudi Arabia. The nominal GDP per capita of the UAE is higher than that of the United States, USD 51,000 versus USD 46,000.

The GCC an important region for oil and natural gas

The key to the GCC's economic and strategic relevance is its production and reserves primarily of oil and secondly of natural gas. In 2008 the GCC commanded 40% and 23% of the world's proven oil and gas reserves respectively, and contributed 23% and 8% to world oil and gas production respectively.

**Oil and Gas Production and Reserves**

| Country | Oil: Daily Production ('000 Barrels) | % of World | Proven Reserves (Bn Barrels) | % of World | Gas: Production (Bn Cubic M) | % of World | Proven Reserves (Tn Cubic M) | % of World |
|---|---|---|---|---|---|---|---|---|
| **GCC Countries** | | | | | | | | |
| UAE | 2,980 | 3.6% | 97.8 | 7.8% | 50.2 | 1.6% | 6.4 | 3.5% |
| Saudi Arabia | 10,846 | 13.3% | 264.1 | 21.0% | 78.1 | 2.5% | 7.6 | 4.1% |
| Kuwait | 2,784 | 3.4% | 101.5 | 8.1% | 12.8 | 0.4% | 1.8 | 1.0% |
| Bahrain | - | 0.0% | - | 0.0% | 13.4 | 0.4% | 0.1 | 0.0% |
| Qatar | 1,378 | 1.7% | 27.3 | 2.2% | 76.6 | 2.5% | 25.5 | 13.8% |
| Oman | 728 | 0.9% | 5.6 | 0.4% | 24.1 | 0.8% | 1.0 | 0.5% |
| **Total GCC** | **18,716** | **22.9%** | **496.2** | **39.4%** | **255.2** | **8.3%** | **42.3** | **22.9%** |
| **Non-GCC Countries** | | | | | | | | |
| Russia | 9,886 | 12.1% | 79.0 | 6.3% | 601.7 | 19.6% | 43.3 | 23.4% |
| Iran | 4,325 | 5.3% | 137.6 | 10.9% | 116.3 | 3.8% | 29.6 | 16.0% |
| Iraq | 2,423 | 3.0% | 115.0 | 9.1% | - | 0.0% | 3.2 | 1.7% |
| Venezuela | 2,566 | 3.1% | 99.4 | 7.9% | 31.5 | 1.0% | 4.8 | 2.6% |
| **Total World** | **81,820** | **100.0%** | **1,258.0** | **100.0%** | **3,065.6** | **100.0%** | **185.0** | **100.0%** |

*Source: BP, 2008*

The vast energy reserves ensure that GCC countries will play a key role in the world economy in decades to come.

## United Arab Emirates

The UAE is a federation of seven emirates, which have a combined population of 4.8 million with a land mass of 77,700 sq km excluding islands.

**Emirates of the UAE - Key Statistics**

| Emirate | Size (Sq Km) | Est. Resident Population 2008 ('000) | 2007 GDP (AED Bn) | 2007 GDP (USD Bn) | 2007 GDP Per Cap (AED) | 2007 GDP Per Cap (USD) |
|---|---|---|---|---|---|---|
| Abu Dhabi | 67,340 | 1,559 | 400.0 | 109.0 | 267,948 | 73,010 |
| Dubai | 3,885 | 1,593 | 226.5 | 61.7 | 153,256 | 41,759 |
| Sharjah | 2,590 | 946 | 68.5 | 18.7 | 77,622 | 21,150 |
| Ajman | 259 | 237 | 9.5 | 2.6 | 42,522 | 11,586 |
| Umm Al Qaiwan | 777 | 53 | 3.2 | 0.9 | 60,635 | 16,522 |
| Ras Al Khaimah | 1,683 | 231 | 13.6 | 3.7 | 61,059 | 16,637 |
| Fujairah | 1,165 | 145 | 8.5 | 2.3 | 61,869 | 16,858 |
| | **77,699** | **4,764** | **729.7** | **198.8** | **162,596** | **44,304** |

*Source: IMF, UAE Ministry of Economy (areas exclude islands)*

Dubai is an important part of UAE's non-oil economy and has become a tourism destination, and a logistics, business and financial services hub

In 2007 according to the IMF, of the UAE's 2.53 million barrels a day of crude oil production, 2.42 million barrels were produced in Abu Dhabi and only 0.11 million barrels in Dubai, Sharjah and Ras Al Khaimah combined. Abu Dhabi's oil production is the reason it has one of the highest GDP per capita in the world and for its importance as a sovereign wealth fund investor. The lack of oil explains why Dubai has been driven to become a tourism destination and a logistics, business and financial services hub. According to IMF data, over the period 2003-2007 the annualised increase of nominal GDP of the UAE was 22.8% but for Dubai it was 29.2%. Inflation was also high during this period at an average annualised rate of close to 8.0%, which accelerated in 2007 to over 11.0%. Taking into account inflation, we estimate annualised real GDP growth of close to 14.0% for the 2003-2007 period.

Dubai represents two thirds of UAE's increase in non-oil GDP from 2003 to 2007

The oil sector originated 38.7% of the UAE's GDP in 2007 using IMF data. Stripping out the oil sector from the nominal GDP data reveals that Dubai represented two thirds of the UAE's AED 217.7 billion (USD 59.3 billion) increase in non-oil nominal GDP over the 2003-2007 period.

Bank of America Merrill Lynch estimates the UAE's 2008 real GDP increased 7.4% and forecasts 2009 real GDP will fall 1.0%, so the global crisis has effectively stalled a long period of strong economic growth. However, the reduction in GDP is moderate compared to developed countries and the forecast for 2010 is for an increase of 2.0%.

Non-citizens represent 89.6% of Dubai's population

One of the outstanding characteristics of the UAE is the large number of non-citizens (expatriates) with respect to the overall resident population. The UAE economy has been able to grow at high rates through the labour of non-citizens. According to the 2005 census non-citizens account for 79.9% of the UAE's population and 89.6% of Dubai's population.

**Population by Emirate, 2005 Census**

| Emirate | Total Population | Citizens | Non Citizens | % Non Citizens |
|---|---|---|---|---|
| Abu Dhabi | 1,399,484 | 350,277 | 1,049,207 | 75.0% |
| Dubai | 1,321,453 | 137,573 | 1,183,880 | 89.6% |
| Sharjah | 793,573 | 138,272 | 655,301 | 82.6% |
| Ajman | 206,997 | 39,231 | 167,766 | 81.0% |
| Umm Al Qaiwan | 49,159 | 15,873 | 33,286 | 67.7% |
| Ras Al Khaimah | 210,063 | 87,848 | 122,215 | 58.2% |
| Fujairah | 125,698 | 56,421 | 69,277 | 55.1% |
| | **4,106,427** | **825,495** | **3,280,932** | **79.9%** |

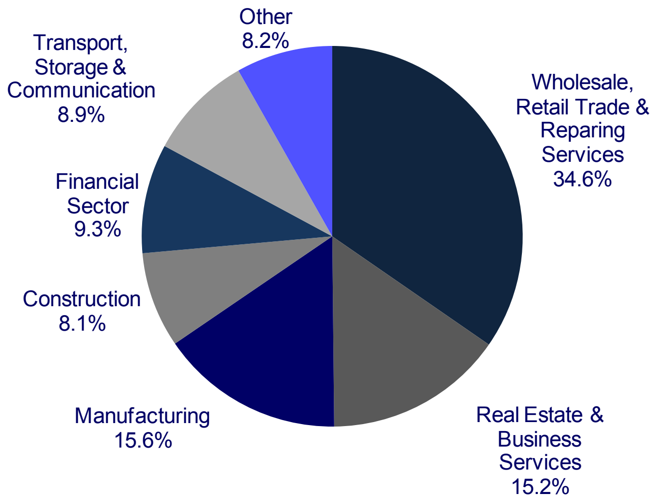
*Source: UAE 2005 Census*

## Dubai

Oil only accounts for 3.2% of the Emirates GDP

Over the last decade Dubai became known across the world for its strong economic and population growth, and for the scale and ambition of its real estate projects. Dubai has built its economy by diversifying away from the oil industry, which accounted for only 3.2% of the Emirate's GDP in 2006 according to the Dubai Statistics Center. Dubai has become a major logistics and services centre, not just for the GCC or Arab world but also for Iran, India and increasingly sub-Saharan Africa, in addition to being a major tourist destination.

## Breakdown of Dubai GDP, 2006




*Source: Dubai Statistics Center*

Dubai Government-owned entities form the basis through with Dubai Rulers' make investments

In spite of low oil revenues, Dubai has managed its phenomenal growth through the investments and activities of a diverse group of Dubai Government-owned enterprises, the cornerstone of what has been described as the "Dubai's corporatist model". These enterprises are often referred to collectively as "Dubai Inc", and they are the Dubai Rulers' instruments to help implement their strategy for the development of the Emirate.

The Dubai Government's expenditure as reported by the IMF in 2007 was AED 26.5 billion (USD 7.2 billion), a modest 11.7% of the Emirates 2007 GDP. However, the contribution of Dubai Inc to the economy is much more important.

Fears of Dubai's bankruptcy were alleviated by the subscription of a USD 10 billion tranche of unsecured bonds through the UAE central bank

Dubai Inc's dependence on leverage to carry out its ambitious investments and activities is understandable considering its contribution to the economy and the lack of oil revenue. Therefore, Dubai's economic model has logically been impacted by the worldwide credit crisis, which has led to observers to question the sustainability of the model. This situation brought to light the issue of inter-emirate solidarity and to what extent Abu Dhabi would support Dubai's debt. Hence the significance of the subscription by the UAE Central Bank of USD 10 billion of unsecured bonds issued by the Dubai Government in February 2009.

Dubai Inc has an estimated USD 80 billion in debt

In media reports the total amount of Dubai Inc debt is estimated to be USD 80 billion and there has been and will continue to be media focus on this debt load and the ability of the enterprises to service and repay it.

Dubai provides a sizable trading platform through a friendly and competitive business environment

Dubai is the biggest re-exporting centre in the Middle East and total international trade has grown on average by over 11% per year since 1988. The city is served by over 120 shipping lines and linked via 85 airlines to over 130 global destinations.

As a commercial hub, Dubai offers a friendly economic environment for doing business, relative political stability and competitive cost structures for international companies. There are no exchange controls, quotas or trade barriers, foreigners are permitted ownership rights (100% in freezones and up to 49% on-shore), and there are no direct taxes on corporate profits (with the exception of oil companies and branches of foreign banks) or personal income.

The government has and will continue to invest in infrastructure

The government has invested heavily in transport, telecommunications, energy and industrial infrastructure to facilitate business growth and improve living conditions for citizens. Dubai has world class infrastructure facilities and it will be difficult for other cities in the Middle East to rival this infrastructure in the years ahead.

Government spending has increased in 2009 and infrastructure works such as roads, bridges and utilities remain on track despite recent turmoil. The Road and Transport Authority (RTA) announced that it finished 11 road and bridge projects worth over USD 1 billion in various parts of the city in H1 2009.

## Dubai's Population

Dubai's population has grown rapidly to the current 1.7 million people

Dubai's resident population has grown rapidly over the past 15 years. The 1993 census accounted for a resident population of 611,000, the 2000 census 862,000, the 2005 census 1.3 million and the Dubai Statistics Center claims a current population of 1.7 million in the second quarter of 2009.

Whilst the active population has shown signs of decline, resident population numbers are most likely flat

The burst of the local real estate bubble and the world economic crisis, together with anecdotal evidence of expatriate departures, leaves many observers sceptical of statistics claiming modest population increases. We have segmented the discussion into two looking at both "active" and "residing" populations. Whilst we agree the active population has probably decreased, modest increases reported by statistics in the residing population are not necessarily incorrect.

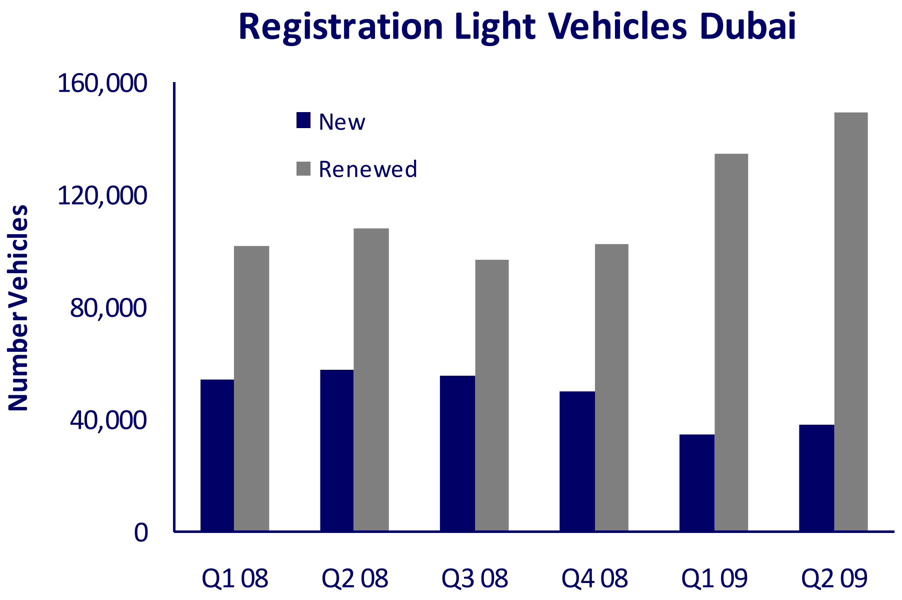
The active population was estimated to be 2.5 million people at the end of 2008

The Dubai Statistics Center calculated the number of workers residing outside Dubai and temporary residents (including tourists) to be 805,000 at the end of 2008, which led to an estimation of a total active population of 2.5 million people. We suspect a number of temporary residents have exited the country reducing the active population. Anecdotal evidence shows many Western expatriates resided in Dubai without residence visas and overcame immigration issues by continuously entering and exiting the country. As the economic climate changed a number of these people have left reducing this floating population. The number of visitors has also fallen with the Dubai Statistic's Center showing a 16% reduction in the total number of hotel guest nights from Q1 2008 to Q1 2009.

People who work in Dubai, but live elsewhere are being attracted to the Emirate

However, the permanent resident base looks fairly stable. Anecdotal evidence suggests that people who used to live in the neighbouring emirate of Sharjah, but who work in Dubai are moving to the Emirate given the now more affordable rental levels. Further evidence supports the assertion that workers in Abu Dhabi are increasingly moving to Southern Dubai and commuting to work. These newcomers are replacing previous Dubai residents.

Looking at light vehicle registration statistics over the past six quarters, we can see that new registrations have decreased by 30% in the first two quarters of 2009 compared with the same period in 2008. However, the increase in registration renewals has more than compensated for this decrease. Vehicle registration needs to be renewed every year in Dubai, which requires the payment of a fee. This data suggests a reduction in the flow of newcomers to Dubai and in the rate at which consumers switch from old cars to new, but not the population reduction that has been claimed by some observers.




*Source: Dubai Statistics Center*

Whilst many people have left Dubai decreasing the active population, we believe the influx of new people has kept the residing population fairly stable. The new census scheduled to take place in the UAE in April 2010 should shed more clarity on the issue of population growth. Observers will be scrutinising statistics for trends in population growth and this will have a considerable impact on expectations for real estate demand.

A breakdown of the worker population shows a large proportion of both unskilled and skilled labour comes from Asia

The population and workforce of Dubai have a high proportion of Asians (Indian, Pakistani, Filipino and Bangladeshi). Most of these workers provide manual labour, but Asians also provide 61% of the total university and post-graduate educated workers, providing the backbone of the professional and managerial ranks of the Emirate. Western expatriates consist mostly of highly educated workers.

**Workers in Dubai**

| Region | Total Workers | % Of Total | % With University Or Post Grad Degree |
|---|---|---|---|
| UAE | 36,888 | 3.8% | 33.2% |
| GCC | 1,667 | 0.2% | 45.1% |
| Arab | 54,570 | 5.6% | 45.3% |
| Asia | 849,533 | 86.5% | 11.7% |
| Africa | 9,222 | 0.9% | 27.6% |
| Europe | 22,232 | 2.3% | 76.4% |
| America | 5,122 | 0.5% | 84.1% |
| Oceanic & Australia | 2,733 | 0.3% | 72.6% |
| Other | 329 | 0.0% | 23.4% |
| | **982,296** | **100.0%** | **16.6%** |

*Source: UAE 2005 Census*

There are more than 200,000 households in Dubai

A large number of the worker population live in communal housing (labour camps), estimated to be 476,700 in 2005 or 36% of the resident population. The 2005 census reports that the remaining 844,700 residents lived in 203,000 households, with an average household size of 4.16 people.

Many speculators have left Dubai, which will mean Dubai will be left with a more professional population seeking ways in which to emerge from the current economic malaise

Many speculators have left the city in the first half of 2009 and more will leave in the coming months but this is one of the positive outcomes of the crisis. There are many people, including Arab professionals, middle-class Asians and Western expatriates that will ride out the storm and continue making a good living in Dubai. They will make the city grow further but in a healthier, more carefully planned and sustainable pace.

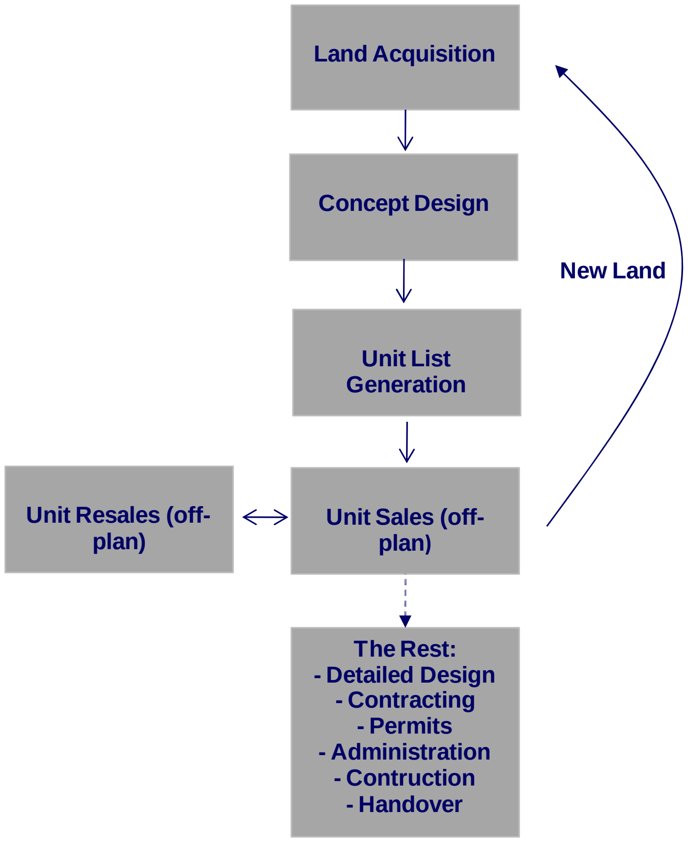
Afshin Molavi, in an article published in Financial Times in March 2009, very effectively summarised the merits of Dubai. "*To understand why Dubai will survive, it is important to understand its commercial geography. It is not solely an Arab state – demographically or commercially. It is a commercial and tourist hub for a region that encompasses the growing markets of South Asia, emerging Africa, oil-rich Russia and the Gulf states, Iran, central Asia and the Caucasus, Europe and China. And it works largely because of the heavy infrastructure investment made by Dubai's Rulers and the expatriate traders, service professionals, construction workers, bankers and techies who make up 90 per cent of the population*."

## 2. The Dubai Real Estate Storm and Current Challenges

<u>Selling the Future: Off-plan Real Estate</u>

Risks in off-plan sales were ignored, as prices rose sharply

The protagonist of Dubai's real estate market over the past few years has been the off-plan sale. Off-plan real estate is a promise of future delivery of real estate and should be analyzed distinctively from completed real estate. Off-plan real estate has its own peculiarities and risks, which were largely ignored when times were good.




*Source: Isthmus Partners*

The schematic above simplifies how some developers thought of their business model during the boom times (certainly many developers are exceptions to the above).

Development companies became sales focused and ignored core competencies in project management, financial controls, and customer service

If a developer had the ability to generate unit sales, the developer had a license to print money. Off-plan units would be sold on an instalment plan and only 5%, 10% or 20% would be received up-front, but that was a considerable amount of money given rising prices, and taking into account land acquisition could also be paid in instalments, the revenue generated from the developer's initial investment could be very attractive. Furthermore, additional income could be made by the developer's intermediation of resales of previously sold units. Some units were resold many times over with each resale generating more commissions.

The problem is that "the rest" of the activities in the schematic represent the core activities a developer should be engaged in. Managing the architects (detailed design), consultants (project management), contractor and subcontractors (building), internal administration (customer services), utility providers, the regulators, the permit providers, the financiers and handover to end-users is complex and hard work. Problems, challenges and changes are continuously arising and need to be actively managed. In particular, coordination of different parties involved in a project requires constant monitoring, problem solving and persuasion. Some developers seemed to be under the impression that those tasks could be easily delegated or outsourced. In Dubai, as a market with many recently arrived players, new practices and an evolving regulatory framework, the need for active management was more acute.

Other factors were at work:

- Dubai's economy was growing fast.
- The resident population of the Emirate was growing quickly attracted by jobs and opportunities.
- Rising oil prices fed into more economic activity for the Middle East and therefore Dubai, and into more spare funds for Middle East investors to allocate.
- Areas of Dubai were opened to freehold foreign ownership.
- Dubai's reputation as a business-friendly location and celebrity status attracted foreign investors.
- The US dollar weakness (the dirham is pegged to the dollar) made Dubai relatively cheap to investors from non-USD regions.
- Increase in money supply and credit, in particular to the real estate sector (we dedicate a section to money and credit below).
- In Dubai there is no tax payable on income or capital appreciation, there is no need to hold investments for a certain timeframe to reduce capital appreciation taxes and all profits could be rolled over into further investments.

At the peak prices increased by 2 to 3% a week

All of the above led to an increase in demand for completed real estate in both the commercial and residential sectors, and rents and sales prices for completed real estate progressively accelerated. In mid-2008 it was very difficult to find usable office space and residential rents and prices were increasing by 2% to 3% a week.

Accelerated price growth commenced approximately at the start of 2007 through to mid-2008. Office prices increased by approximately 40% year on year in that period, whilst rents increased by approximately 45% in 2007 and 20% in 2008. In 2008, apartment and villa rents rose by approximately 20% and 35% respectively. According to the Colliers International House Price Index, in 2007, apartment prices rose by 15%, whilst villas rose by 25% across Dubai. In 2008, apartment prices rose by 50% and villas rose by 75%.

So there was a real need and demand for additional real estate supply. This fundamental driver together with the factors above and the off-plan sales business model created incentives for a self-reinforcing escalation of off-plan prices that led to the inevitable boom and bust. There were signs indicating overheating of off-plan sales by early 2008:

- The demand for more off-plan units increased the demand for land leading to substantial land price increases. Paper profits on land plots acquired early by developers reinforced their behaviour.
- "Launches" of new off-plan opportunities were announced daily and provided extravagant marketing events.
- Each new project launch and the subsequent off-plan resales were at ever higher prices, reinforcing the behaviour of participants and attracting new players.
- The allocation of units and entire floors at launches (or even before the official announcement) took on similar traits to the allocation of hot IPO stocks during the dot com bubble, with preferences to insiders and friends and family.
- Price rises were so steep that developers had strong incentives to claim an unavoidable or forced design change, void previous off-plan sales, return the money to the original buyers and then re-churn a project.
- Delays in completion of the earlier projects (due to late plot handover, construction delays, etc) did not bring the supply of completed properties that would have alleviated pressure on prices and rents, which would have reduced the upwards price pressure on off-plan units.
- Development companies became sales and marketing focussed. Salespeople were stars and top performers were rewarded handsomely. The incentive was to generate sales commission income, while construction was considered a boring and commoditized activity. Hubris and greed drove developer and investor behaviour.
- Observers or more cautious participants who questioned the sustainability of the escalation were simply dismissed with "they don't get it" or "they don't understand real estate".

When construction finally started, construction costs also accelerated quickly

From early 2007 to mid-2008, when a number of construction projects started, construction costs also accelerated at more than 20% annualised rates, coinciding with a world spike in commodities prices. Developers observed early projects did not realise expected profits. However, this was brushed aside as developers thought they would still profit handsomely on newer projects. Escalating construction costs only served to confirm the sustainability of price increases.

Regulatory authorities and master developers took some action to stabilise the market, but the market continued accelerating unabated

It is important to point out some of the measures that were taken by authorities and master developers:

- In 2007 the Real Estate Regulatory Authority (RERA) was created to regulate escrow accounts and developers. A mandatory Developer Registry and Broker Registry were established and non-objection certificates ("NOCs") were required before launching off-plan sales.
- In mid-2007 the Escrow Law regulated how off-plan sales proceeds would be governed. Developers were only allowed to withdraw 5% of an overall unit's sales price to cover sales and

marketing activities. Further funds could be withdrawn to cover land purchase and construction costs as the project progressed.

- In mid-2008 laws were issued for off-plan unit registration ("pre-title registration").
- Master developer's sale agreements for plots did not allow flipping and the original purchaser had to develop the land.

The measures above and others could not stop the strong momentum in the market, but we believe that without these measures price escalation would have been accentuated further, leading to a higher peak and a deeper and more damaging bust.

Money and Credit

UAE was not immune to the global credit crises

The UAE is an open economy and could not be immune to the global credit and monetary expansion, driven by a combination of global imbalances (high surplus balance of payment nations transferring funds to high deficit nations), new sophisticated financial instruments (securitisation, CDOs) and the numbing comfort provided by ever rising real estate prices worldwide. In the case of the UAE increasing oil remittances from higher oil prices was an additional key ingredient.

The table below details the changes in monetary aggregates from 2005 to June 2009. The monetary aggregates are:

- M1 = Currency in circulation + checking deposits
- M2 = M1 + time deposits + foreign currency deposits
- M3 = M2 + government deposits

**Monetary Aggregates**

| | 2005 Dec | 2006 Dec | 2007 Dec | 2008 Mar | 2008 Jun | 2008 Sep | 2008 Dec | 2009 Jun |
|---|---|---|---|---|---|---|---|---|
| *Billions of AED* | | | | | | | | |
| M1 | 104.4 | 120.0 | 181.7 | 221.9 | 244.1 | 235.3 | 208.1 | 218.0 |
| M2 | 324.1 | 399.3 | 565.7 | 624.4 | 676.4 | 681.4 | 674.3 | 718.1 |
| M3 | 415.4 | 504.0 | 696.2 | 754.6 | 815.5 | 831.3 | 899.1 | 925.9 |
| *% change interperiod* | | | | | | | | |
| M1 | | 14.9% | 51.4% | 22.1% | 10.0% | -3.6% | -11.5% | 4.7% |
| M2 | | 23.2% | 41.7% | 10.4% | 8.3% | 0.7% | -1.0% | 6.5% |
| M3 | | 21.3% | 38.1% | 8.4% | 8.1% | 1.9% | 8.1% | 3.0% |

*Source: UAE Central Bank*

Monetary growth was string until mid-2008 leading to hikes in inflation

Monetary growth was strong until mid-2008, with growth peaking in the first quarter of 2008 (annualised M1 growth of 122% and M2 growth of 48%). From December 2005 to June 2008 M1 grew by 134%, M2 by 109% and M3 by 96%. It is not surprising that the UAE's inflation accelerated from close to 3.0% in the early part of the decade to over 11% levels in 2007/08. In mid-2008 monetary growth stalled and M1 actually contracted 11.5% in Q4 2008 (an annualised rate of -39%), but strong increases in government deposits allowed M3 to continue to grow.

Monetary growth is intrinsically linked to credit growth, and the next table illustrates aggregate domestic credit growth in the UAE.

**Credit Growth**

| | 2005 Dec | 2006 Dec | 2007 Dec | 2008 Jun | 2008 Sep | 2008 Dec | 2009 Mar |
|---|---|---|---|---|---|---|---|
| *Billions of AED* | | | | | | | |
| Total Credit | 353.1 | 474.2 | 626.7 | 810.1 | 909.4 | 924.4 | 930.2 |
| Construction | 41.9 | 54.3 | 66.0 | 84.9 | 107.2 | 119.3 | 108.9 |
| Mortgage Loans | 17.2 | 31.0 | 56.5 | 87.6 | 115.7 | 125.8 | 129.1 |
| *% change interperiod* | | | | | | | |
| Total Credit | | 34.3% | 32.2% | 29.3% | 12.3% | 1.7% | 0.6% |
| Construction | | 29.7% | 21.5% | 28.6% | 26.3% | 11.2% | -8.7% |
| Mortgage Loans | | 80.1% | 82.1% | 55.1% | 32.2% | 8.7% | 2.6% |

*Source: UAE Central Bank Aggregated Balance Sheet of Banks*

Credit is hard to find now, but until September, 2008 mortgages and construction loans grew rapidly

Up to September 2008 credit growth was strong for all sectors, but particularly for mortgage loans. In the first half of 2008 annualised overall credit growth was 67% and 140% for mortgages. Credit growth stalled in Q4 2008 and stopped in Q1 2009, even decreasing for construction loans. The current sentiment in Dubai that credit is just not available is reflected in the absence of credit growth. However, construction and real estate still make up 26% of aggregate domestic lending in Q1 2009, up from 17% in December 2005.

What was the cause of such an increase in credit and monetary aggregates? Apart from higher oil remittances and increased economic activity, one key source was the dramatic change in banks' aggregate net foreign liabilities (or negative net foreign assets) in 2007, detailed in the table below.

**Aggregate Net Foreign Liabilities**

| *Billions of AED* | 2005 Dec | 2006 Dec | 2007 Dec | 2008 Jun | 2008 Sep | 2008 Dec | 2009 Mar |
|---|---|---|---|---|---|---|---|
| Foreign Assets | 175.0 | 231.9 | 196.9 | 231.0 | 223.4 | 203.4 | 202.8 |
| Foreign Liabilities | 85.2 | 133.7 | 321.0 | 294.7 | 326.3 | 282.6 | 273.6 |
| Net Foreign Liab. | -89.8 | -98.2 | 124.1 | 63.7 | 102.8 | 79.2 | 70.8 |
| Absolute Change | | -8.4 | 222.3 | -60.4 | 39.2 | -23.6 | -8.4 |

*Source: UAE Central Bank Aggregated Balance Sheet of Banks*

Foreign flows entered the UAE and helped fuel credit growth

Quite simply, a deluge of money entered UAE banks from overseas, particularly in late 2007. These were funds that may have been playing the Dirham de-pegging trade (a bet that breaking fixed parity to the dollar would result in an appreciation of the Dirham) or seeking refuge from the troubled waters that were brewing overseas. What do banks do when they receive a surge of unexpected deposits? They park the funds with the central bank, and in 2007 aggregate deposits with the central bank grew from AED 58.4 billion to AED 231.1 billion (these deposits were back down to AED 101.5 billion in March 2009). But eventually if there is confidence in the economy the banks will want to lend those deposit increases, and credit expansion feeds further deposit growth, which feeds further credit growth, etc. This helps explain the extraordinary credit growth in H1 2008.

The UAE's balance of payments detailed in the table below confirms the impact on the financial account balance of movements in net bank balances, with a strong surge in 2007 of AED 178.3 billion, reversed in 2008 both for the balances of net banks and also net private non-banks, showing balances of AED (44.9) billion and AED (50.4) billion, respectively.

In the UAE, hydrocarbon exports supported deficits in the trade, net services and net transfer balances

The balance of payments is also illustrative of the weight of hydrocarbon exports, which grew 46% from 2006 to 2008. Income from hydrocarbon supports deficits in the trade balance, net services and net transfers (remittances to overseas by immigrants). Hydrocarbon inflows also support strong investments overseas by the UAE's public sector enterprises.

**UAE Balance of Payments**

| *Billions of AED* | **2006** | **2007** | **2008** |
|---|---|---|---|
| Hydrocarbon Exports | 257.4 | 271.1 | 374.9 |
| Net Other Trade | -50.4 | -100.3 | -143.8 |
| Trade Balance | 207.1 | 170.9 | 231.1 |
| Net Services | -65.3 | -95.4 | -124.2 |
| Net Investment Income | 17.4 | 30.8 | 14.0 |
| Net Transfers | -30.1 | -34.1 | -39.0 |
| **Current Account Balance** | **129.1** | **72.1** | **81.8** |
| Private FDI Outwards | -40.0 | -53.5 | -58.1 |
| Private FDI Inward | 47.0 | 52.1 | 50.4 |
| Portfolio Investment | 4.4 | 5.3 | 8.1 |
| Net Banks | 35.6 | 178.3 | -44.9 |
| Private Non-Banks | 40.6 | 35.1 | -50.4 |
| Public Sector Enterprise | -146.6 | -111.9 | -108.2 |
| **Financial Account Balance** | **-59.0** | **105.4** | **-203.1** |
| **Net Errors and Omissions** | **-46.2** | **5.7** | **-51.2** |
| **Overall Balance** | **23.9** | **183.2** | **-172.5** |

*Source: UAE Central Bank*

The central bank moved quickly to avoid a run on any of the nation's banks

The UAE Central Bank provided a blanket guarantee to depositors and inter-bank lending in October 2008 for three years. The guarantee prevented any run on UAE, and in particular, Dubai banks, leaving domestic deposits relatively robust. The strength of hydrocarbon exports and Abu Dhabi's vast energy reserves make that guarantee credible. The UAE has experienced a surge of foreign monetary flows, a real estate bubble and an adverse international situation, but the financial sector remains relatively unscathed and there is no pressure on the Dirham. A more vulnerable developing economy would have expected to face economic crisis such as devaluation, sovereign credit problems or a financial sector upheaval.

Dubai is rightly expecting the real estate sector to restructure rather than bailing it out through a credit expansion policy

Some commentators are exploring whether the UAE should adopt a Chinese-style credit expansion policy to prop up the real estate sector. However, we believe that the UAE's Central Bank and Government are being prudent and that the real estate sector needs to restructure itself on its own merits, and that financing further real estate supply that otherwise would not be built would just exacerbate problems for the long-term.

The UAE financial sector is starting to show credibility in handling financial crises

The UAE's financial sector has been subjected to a stringent test and is obtaining a credible track record that will serve the country well when the world economy rebounds. The key issues for the future are:

- Losses from bad debt and the impact that it will have on certain banks' capital bases
- Concerns on the recognition of bad debt losses via adequate provisioning.
- Will credit expansion help fuel economic growth and stability in the real estate sector?

<u>The Bust</u>

It was difficult during the boom times to predict when prices would reverse

Once price escalation is in progress, it is impossible to predict how high the peak will be and its timing. The key is that prices had moved beyond the levels supported by fundamental analysis, even in optimistic scenarios. With hindsight it is simple to identify the Lehman September 2008 debacle or peaking of oil prices in June 2008 as turning points. The reversal is primarily a psychological process concerning the expectations of future prices.

The reversal in the real estate sector was quick and abrupt

When a critical mass of off-plan and completed unit owners suddenly came to realise that they would not be able to pass on their investments to others at a premium, price escalation was substituted by a sudden downward spiral and greed was replaced by fear. What is surprising to observers and so alarming to participants was the abruptness of the reversal; how an asset that seemingly had so much demand was suddenly shunned.

The disconnect between sales of off-plan and completed property should have raised alarm bells

A tell-tale sign that something was amiss was provided by the large disconnect between the prices of off-plan and completed units by Q2 2008. The nominal prices of off-plan units (i.e. the sum of all the instalments in the purchase plan plus any upfront premiums) were higher than the prices of completed property. This does not make economic sense. All else equal, in normal times an off-plan unit should trade at a discount to a completed unit, to reflect both the time delay until the unit is available for rent or use, and to compensate for development risk. An exception would be if off-plan units were of a much higher quality, but that argument did not hold for Dubai in mid-2008. The reason for the disconnect was that completed property required the buyer to pay 100% of the purchase price upfront, while off-plan units only required 5% to 10% of the nominal purchase price in cash. For speculators with short-term horizons who wanted to resell units at a higher price, off-plan units were a useful tool, acting as a leveraged derivative instrument on Dubai real estate.

Regardless of the reasons, sometime between July 2008 and September 2008 the bubble deflated, and Cityscape Dubai in October 2008 served as a confirmation that times had changed.

Some market participants were prudent and professional, but have been tarred by the same untrusting brush

It is important to point out that not all market participants acted the same. There were end users who purchased an off-plan unit to be their main residence or holiday home. There were developers who were more cautious and very professional in their development activities. But the tragedy is that intentions do not matter. The behaviour of speculators, buying whole floors and large portfolios of units, was driving the overall market and the reversal damaged all participants caught in the net.

All participants started to hoard cash and became strongly risk adverse

Once the crisis struck, participants' behaviour was driven by a desire to source and to hold on to cash, and by strong risk aversion. The ability of participants to deal with the situation depended on individual balance sheet positions and commitments. In extreme cases, speculators with no ability to honour future instalments or post-dated cheques fled the country. It is difficult to get confirmation on how many, but some developers have also fled the country. End users are reluctant to continue paying instalments because of the uncertainty surrounding completion of projects. Groups of end-users ("investor groups") have flocked together to defend their interests especially if construction has not commenced. They seek clarification on development progress and, in some cases, project cancellations with the return of funds held in escrow. Banks which had agreed mortgages for off-plan units balk at continuing financing. Foreign investors have particularly shown revulsion to Dubai real estate.

From Q3 2008 to Q2 2009 apartments prices fell by 45-50% and villas declined by 50-55%. In the same period office rents fell by 35-50% and prices declined by 40-60%.

Developers have started to find novel solutions to their funding and liability problems

Developers with multiple projects have recently started consolidating off-plan investments, swapping investments in delayed or cancelled projects for investments in projects nearer completion, or offering credit notes for paid instalments that can be sold to other investors at a discount.

On the other hand, domestic investors who had been waiting on the sidelines and with access to liquidity have been active in the completed real estate sector, investing in distressed sales. Dependent on the area, probably some of the best distressed opportunities were available in February and March 2009, when it seemed that the world was in the midst of an economic and financial meltdown.

## Market Challenges

The Dubai crisis continues to unfold and there are many factors which represent a challenge to a return to market normality.

There is hardly any trust between participants in the market

- **Lack of trust.** There is a general lack of confidence in third parties fulfilling their contractual commitments. In the case of off-plan developments, end-users do not trust projects will be completed, developers do not have confidence that end users will pay instalments, contractors fear making commitments and investing in working capital and not being paid and banks do not trust anyone.
- **Additional supply, how much and what impact?** There is an abundance of new supply coming online in both the residential and commercial sectors over the coming years. Estimates of the amount of new supply are wide ranging, but an expected oversupply, together with the downward trend in prices leads to expectations of further price drops.
- **Lack of faith in the non-real estate sector.** The events of the past few years have dampened faith in the dynamism of Dubai's general economy and the Emirate as a global player.

There is a strong focus on Dubai Inc debt

- **Focus on the debt of Dubai Inc.** Particularly in early 2009 financial markets were hit by expectations of a potential default in the companies that form "Dubai Inc". Much attention has been centred on the cumulative debt of these companies and their ability to repay. Dubai launched a USD 20 billion bond in February 2009 to be issued in two tranches. The first tranche of USD 10 billion was fully subscribed by the UAE Central Bank. Positive sentiment over the second tranche has reduced fears over Dubai Inc debt.

RERA is expected by market participants to do more, but it is likely that private agreements will provide faster and more amicable solutions

- **Reliance on the regulator.** It seems that many participants expect the regulator to fix their problems. It is unreasonable to assume that the regulator will be able to pass judgment on every contractual relationship and dispute. Eventually, private sector participants who got into the mess together will have to sort out the mess themselves. Furthermore, participants need to accept there will be losses as a result of the restructuring process.

The regulatory framework is evolving, but needs stability and to become clearer to all market participants

- **Shifting regulatory framework.** In response to the crisis new laws and regulations have been introduced. However, there are sometimes different interpretations over the meaning of certain articles or regulations that creates confusion in the market.
- **Investment consolidation difficulties.** The consolidation of off-plan investments into fewer projects is a positive development that would facilitate restructuring and reduce the supply of new units. However there are issues regarding transparency and the pricing of the consolidation. A mechanism understood by both developers and end-users would provide more confidence in the consolidation process.

Not all the negative media is true, and much has been sensationalised, which detracts from real investment opportunities and scares away potential financiers

- **Negative media and rumours.** Particularly in the foreign press, Dubai has been continuously portrayed in a negative light. On the flipside of the positive coverage that the Emirate once enjoyed, the focus has turned to the "Dubai nightmare" from the "Dubai dream". Some media pieces seem particularly vicious in their attacks, with quotes from people with xenophobic views. Particularly damaging are media pieces that portray a Dubai unfriendly to foreigners and expatriates, with focus on some court cases that have garnered media attention, especially in Britain. The articles also mention, and rightly so, the situation of many of the labourers in the country, but fail to give due credit to the Dubai authorities' efforts to improve their lot and to not tolerate human trafficking.

Rumours and urban legends have been rife. Perhaps the most famous and globalised urban legend has been the "3,000 cars abandoned at the Dubai airport", which depending on the source can mutate to 10,000 or 20,000 cars. Though there are obviously some abandoned cars, whether they are in the airport or in town, numbers look to have been sensationalised for headlines. Particularly beguiling is the added detail that cars are abandoned in the car lane at the departure terminal, offering the archetype of the hyper-egoistical expatriate, who in his last moments in Dubai commits one final act of misbehaviour.

Credit is difficult to obtain worldwide, but is required to enable Dubai to emerge from the downturn

- **Lack of credit.** As detailed in our Money and Credit section, credit growth in the UAE has stalled especially mortgage and construction financing. Mortgages for completed properties are only available to borrowers with the strongest credit profiles. Financing for developers is also difficult to obtain. Additionally, other sources of funds such as mezzanine lending or equity have also dried up.

A more robust civil system would help to ensure business uncertainty is not treated as a criminal offence

- **Post-dated cheques as a criminal offence**. In Dubai not honouring post-dated cheques is a criminal offence and can be punishable by prison. It is worthwhile pointing out that in many countries, such as the United States, writing a cheque knowing that it will be bounced is a crime. The issue in the UAE however, is the use of cheques as an instrument for future commitments where it is not possible to know if cheques can be honoured. Other instruments could be used to avoid unnecessary prison time for principally civil matters, such as a promissory cheque, which is a document that looks like a cheque but with a future maturity date different from the date of issuance.

# 3. Dubai – An Attractive Emerging Markets Hub

Dubai displays a number of attributes that will allow it to continue to be a leading economy within MENA

Though we have seen from the previous section that Dubai has a number of challenges to overcome, we believe Dubai has strong fundamentals to bounce back from the economic downturn. For decades Dubai has built itself as a hub for commercial activities being ideally placed between western and eastern trading blocks. Over the last decade, Dubai has aggressively been adding facilities for new industries such as finance, tourism and other ancillary business activities.

In this section we look at how Dubai will continue to provide facilities and services that ensure its position as a commercial hub for the region and the globe. We divide our study into two sections looking at key operations, which will foster further growth, and foundations that give Dubai a competitive advantage in the region.

## 3. 1 Key Operations

Dubai has successfully diversified away from oil exports

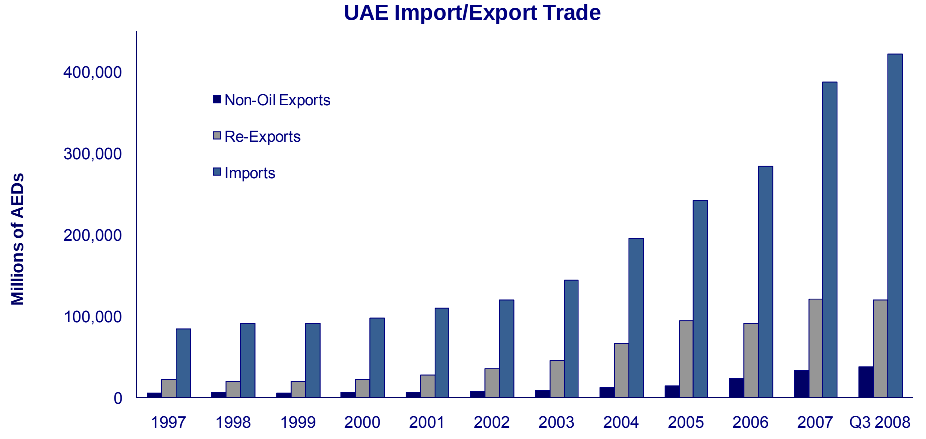
To diversify its economy, Dubai has developed a number of free zones to attract foreign investors. The free zones have helped to foster a number of manufacturing industries and Dubai claims manufacturing activities such as metal processing, furniture production, food-processing, and jewellery design and production are ongoing. Other active areas include logistics, finance and banking, tourism, and construction.

We will briefly look at each of these sectors in turn to understand the dynamics and potential future for each industry.

<u>Trade</u>

UAE growth in non-oil exports and re-exports are impressive with annualised increases of 18.2% and 18.6% respectively for a decade

Total UAE import, non-oil export and re-export trading volume in 2007 was AED 578.8 billion (USD 157.7 billion), an amount representing 80% of the UAE's 2007 GDP. The 10 year annualised growth rates of UAE trade from 1997 to 2007 were 18.2% for non-oil exports, 18.6% for re-exports and 16.5% for imports. UAE imports are much larger than non-oil exports and re-exports, as the country uses its vast oil revenue income to finance consumption and investment goods from the rest of the world.




*Source: UAE Central Bank Statistical Bulletin 1Q 2009; Customs Departments of Abu Dhabi, Dubai and Sharjah*

Dubai is at the forefront of the UAE's non-oil trade

Dubai accounted for 80% of the combined non-oil trade activity of Abu Dhabi, Sharjah and Dubai in the first three quarters of 2008.

The data on the composition by origin or destination of trade reveal an intricate picture of the UAE's trading partnerships, removed from the simple image of a country that imports from the Far East and exports to other Arab nations.

In the first three quarters of 2008 China was the source of 11.0% of the UAE's imports, but imports from India were even larger, representing 11.3% of total imports. The EU block accounted for 22.4% of all imports, underlying the UAE's importance to the EU as an export destination. Other European countries accounted for 11.5% of imports. The USA represented 7.8% of overall imports.

**Trading Partners (AED MM)**

| | Imports | | Non-Oil Exports | | | Re-Exports | |
|---|---|---|---|---|---|---|---|
| **Origin** | YTD | % | YTD | % | **Origin** | YTD | % |
| **Asian Countries** | **184,401** | **43.7%** | **19,592** | **52.4%** | **Asian Countries** | **60,546** | **50.6%** |
| Japan | 32,822 | 7.8% | 93 | 0.2% | Iran | 18,240 | 15.2% |
| India | 47,680 | 11.3% | 13,343 | 35.7% | India | 30,168 | 25.2% |
| China | 46,359 | 11.0% | 769 | 2.1% | Pakistan | 1,442 | 1.2% |
| Other Asian | 57,539 | 13.6% | 5,386 | 14.4% | Other Asian | 10,697 | 8.9% |
| **Arab Countries** | **26,145** | **6.2%** | **9,955** | **26.6%** | **Arab Countries** | **31,225** | **26.1%** |
| GCC | 19,912 | 4.7% | 4,540 | 12.1% | GCC | 13,816 | 11.5% |
| Other Arab | 6,233 | 1.5% | 5,415 | 14.5% | Other Arab | 17,409 | 14.5% |
| **Europe** | **143,212** | **34.0%** | **5,392** | **14.4%** | **Europe** | **16,392** | **13.7%** |
| EU | 94,601 | 22.4% | 2,018 | 5.4% | EU | 7,238 | 6.0% |
| Other Europe | 48,611 | 11.5% | 3,373 | 9.0% | Other Europe | 9,154 | 7.6% |
| **Americas** | **41,989** | **10.0%** | **714** | **1.9%** | **Americas** | **2,667** | **2.2%** |
| USA | 32,684 | 7.8% | 497 | 1.3% | USA | 1,751 | 1.5% |
| Other Americas | 9,305 | 2.2% | 218 | 0.6% | Other Americas | 917 | 0.8% |
| **Oceania** | **9,643** | **2.3%** | **328** | **0.9%** | **Oceania** | **144** | **0.1%** |
| **Africa** | **16,324** | **3.9%** | **1,417** | **3.8%** | **Africa** | **8,751** | **7.3%** |
| **Total** | **421,714** | **100.0%** | **37,399** | **100.0%** | **Total** | **119,726** | **100.0%** |

*Source: UAE Central Bank Statistical Bulletin 1Q 2009, 3Q 2009, Customs Departments of Abu Dhabi, Dubai, Sharjah*

India represents UAE's largest trading partner

For both non-oil exports and re-exports, India is the largest trading partner of the UAE. Arab countries represent approximately 26% of non-oil exports and re-exports, with non-GCC countries representing approximately more than half of Arab trade. Iran is a large recipient of re-exports from the UAE.

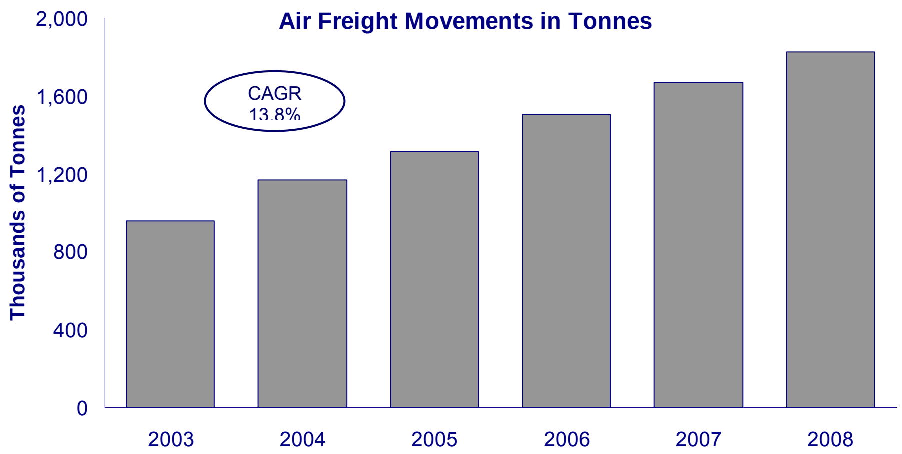
Free zones have helped to foster industry

The establishment of many free zones in Dubai, such as the Jebel Ali Free Zone and Dubai Airport Free Zone, has been able to attract many enterprises to set up free zone companies. Amongst other benefits, a free zone company is provided operational incentives, awarded exemption from corporate taxes and allowances on trading activities. These free zones have also contributed to logistics and the trade sector and have boosted activity in industry.

## Logistics

Dubai provides a large airport logistics hub, which continues to grow

Dubai has worked hard on developing an extensive logistics hub for both air and marine freight. According to the Airports Council International (ACI), Dubai has progressed from being the 18th largest airport in terms of cargo traffic in 2003 to the 11th largest in 2008 and is currently running 7th in 2009 year to date.

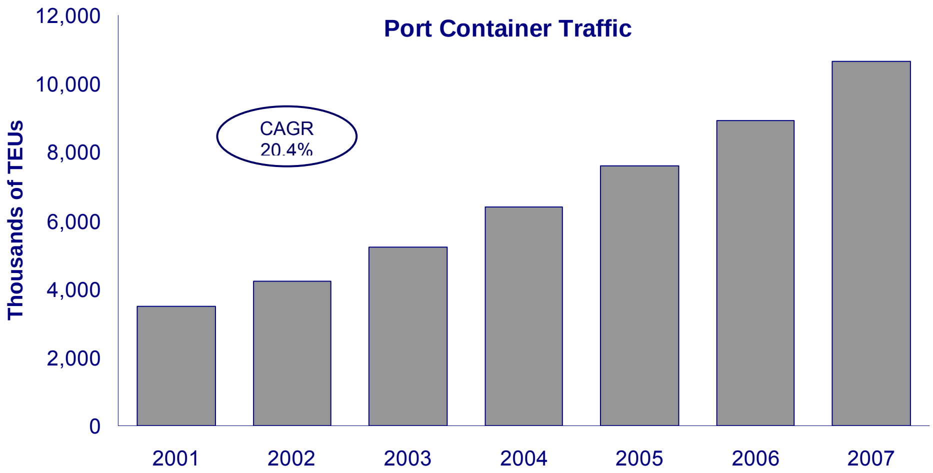



*Source: Airports Council International*

Dubai will continue to develop its airport infrastructure with Al Maktoum International Airport, a new development south-east of the city expected to be delivered in 2017. Al Maktoum International Airport is expected to have a capacity of 160 million passengers nearly doubling Atlanta's 90 million capacity. Atlanta is currently the world's busiest hub.

Dubai's ports also provide major cargo facilities

With regard to sea freight, Dubai's marine ports have moved from being the 11th largest in 2003 in terms of container traffic to the 8th largest according to the American Association of Port Authorities (AAPA).




*Source: American Association of Port Authorities*

We see these growth trends persisting, as Dubai continues to invest in logistics. While Dubai has been receiving negative press for its financial situation and the state of its real estate industry, logistics has been continuing to strengthen, albeit at a slower pace as consumer and business purchases across the world has slowed reducing the need for transportation of goods, fuels and materials.

Finance and Banking

The DIFC has proven to be successful in developing a financial hub for the region

Dubai provides financial services through banks and financial institutions based in Dubai and through the DIFC (Dubai International Financial Centre). The DIFC was set up in September 2004 and allows foreign entities and individuals to have 100% ownership of a financial institution.

In essence, the DIFC is Dubai's initiative to attract large financial institutions to the Emirate to set up operations and create a financial hub that would be preferred to the region's traditional hub in Bahrain and challenge other more established international hubs as an alternative capital market.

Growth in the DIFC has been impressive with it claiming over 700 companies registered within the free zone including 20 of the world's top 25 banks and six of the world's 10 largest asset managers. In addition, NASDAQ Dubai was established in September 2005.

Rules and regulations, and enforcement procedures in the DIFC are the best in the UAE

The DIFC is still to prove its credentials. On the positive side, there is no tax on income and profits, and no restrictions on the repatriation of foreign exchange, capital or profits. In addition, the DIFC is relatively transparent and the laws can be well enforced. The regulatory framework has been modelled on British laws and British judges are used to adjudicate cases.

However, some of the rules and regulations can be cumbersome

However, the rules and regulations lack the institutional background and history which accompany any particular environment. Anecdotal evidence suggests the lack of experience with the legal framework tends to hinder day to day business. Though senior people within the DIFC are competent and experienced, more mundane tasks can be time consuming and frustrating as more junior staff struggle to understand how certain rules should be interpreted.

In such an environment, strict adherence can sometimes circumvent the spirit of such rules, which is evidenced by the onerous process of registering a fund within the DIFC.

With all the above mentioned issues, it is still impressive to see the establishment of such a large scale financial hub. These teething problems are to be expected, and its transparency and relative efficiency should be welcomed in the region.

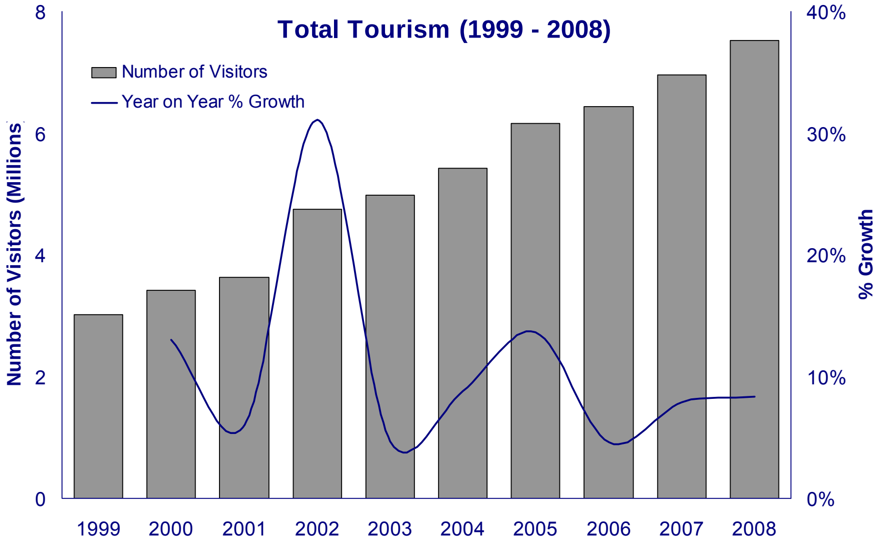
Corporate governance issues may prove to be an important test continuing foreign investment

The quality of corporate governance is an issue within the region and a factor for foreign investors considering investments in Dubai. Events such as the settlement of a convertible bond issue between Shuaa Capital and Dubai Banking Group (DBG), a subsidiary or Dubai Holding, and the proposed merger between Emaar Properties and Dubai Properties, Sama Dubai and Tatweer will be scrutinised for fairness and transparency. The future of the financial hub may hinge on investor's outlook on fair trading ideals and Dubai's ability to foster integrity and transparency in the system.

## Tourism

Tourism is an increasingly important industry for Dubai

According to the Department of Tourism and Commerce Marketing (DTCM), the tourist industry represents approximately 19% of the Emirate's GDP and has seen strong growth rates with a CAGR of 10.7% between 1999 and 2008. However, this sector has been hit fairly hard by the global slowdown.




*Source: Department of Tourism and Commerce Marketing*

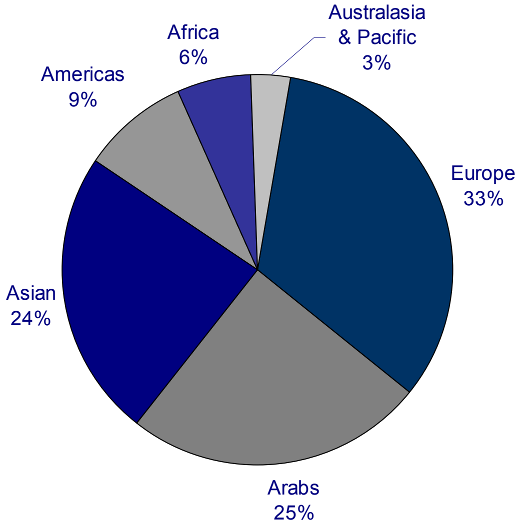
Dubai has positioned itself as a high end holiday destination

Dubai has positioned itself as a high end holiday destination, and would like to see itself mentioned in the same group as exotic locations such as the Maldives or high end cities such as Monte Carlo. As a result, the downturn in Dubai's tourism economy should be expected as contractions are more extreme in the luxury sector given the greater volatility of sales.

Europeans provide the largest visitor group

The largest visitor group in 2008 consisted of Europeans making up 33% of tourists according to the DTCM. Of those, tourists from the UK represent the largest sub-sector. With Europe having its own economic problems, many tourists are looking for cheaper holiday packages and staying closer to home. UK tourists are feeling a double pinch with the pound depreciating against the dollar over the last several months. Consequently, the demographics of Dubai tourists have changed recently with more Asians discovering the Emirate, whilst Arab tourists have shunned Dubai to look for cheaper destinations in the region.

Visitors by Area (2008)



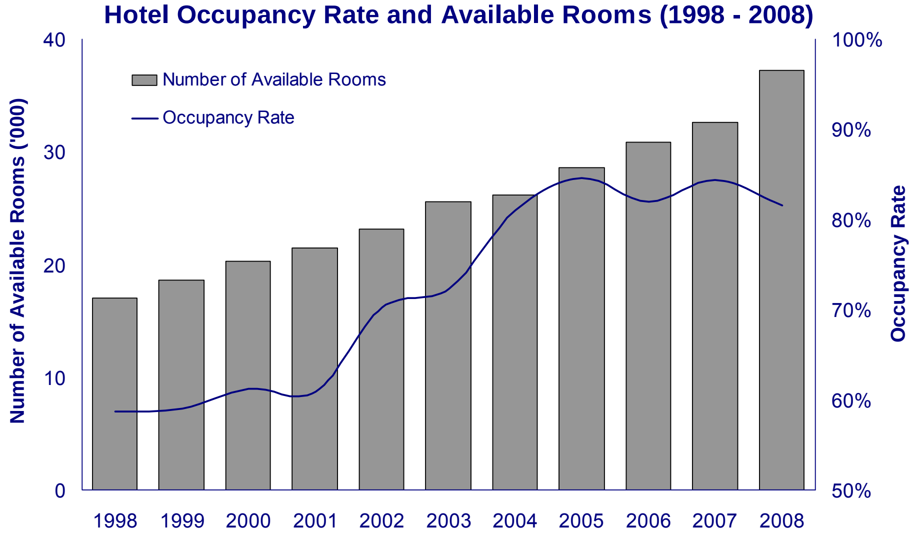

*Source: Department of Tourism and Commerce Marketing*

Dubai is still looking to achieve its 2015 visitor targets, but this could prove difficult without a shift in strategy

Nevertheless, the Dubai government is still seeking to achieve its proposed target of 15 million visitors by 2015. The Emirate benefits from better infrastructure than other destinations within the region with the first lines of the new metro system delivered on 9$^{th}$ September, a new low cost airline, Fly Dubai, ready to provide flights to MENA and South East Europe giving greater access to middle income visitors, and a concentration on bringing more activity days to add to the relatively few real tourist activities. Currently activities are overly centred on shopping and the Emirate is looking for new attractions for visitors, which will make better use of the beach, sea, construction marvels and amusement parks.

The hotel sector is suffering, but beach hotels are faring much better than their in-town counterparts

There are a number of challenges that Dubai will face in the short term. Some hotels are lowering their rates to attract tourists, and lower rates can take a while to come back. The number of new hotel rooms to come online in the next few years will put further pressure on rates as increased supply becomes a reality. Though the beach hotels seem to be faring better than their city counterparts, according to the Dubai Statistics Center average room occupancy rate fell from 90% and 80% in Q1 and Q2 2008, respectively, to 73% and 68% in Q1 and Q2 2009. Estimates of RevPAR falling 30-40% from the peak are consistent with Dubai Statistics Center data that the number of guest nights fell 16% Q1 2008 to Q1 2009, while the total supply of rooms increased 17% in the same period from 34,884 to 40,984 rooms.




*Source: Department of Tourism and Commerce Marketing*

As with the rest of the real estate industry, financing for new projects seems to be drying up, but a prolonged downturn may lead to Dubai repositioning itself to attract more moderately wealthy visitors. In order to attract the number of tourists Dubai has targeted, the Emirate may need to diversify away from the luxury end of the market into this more sustainable segment.

In essence, a diversification of visitors and additional tourist facilities will help Dubai continue to grow its tourist industry. With Dubai increasingly being seen as a short break destination and its proximity to Asia, tourism from Asia may become the growth area over the next few years. In the medium to longer term, Dubai is sure to add additional tourist facilities to attract holiday makers, who are looking for longer breaks.

## Construction

Construction and related services has undoubtedly been an important industrial sector for Dubai

According to the Dubai Statistics Center, the construction industry accounted for 8.1% of Dubai's GDP in 2006. However, construction related trading and services elevate the importance of construction to the Emirate.

Real estate has taken a big knock over the last 18 months and many projects have been cancelled, postponed, or put on 'go slow'. Some commentators indicate that only 50% or less of scheduled projects are currently continuing.

Dubai Inc real estate companies are feeling the pinch

A number of Dubai Inc's companies are experiencing problems. We have already mentioned the proposal for Sama Dubai, Tatweer and Dubai Properties to merge with Emaar Properties to deal with their financial problems. Nakheel has had notable problems over the contraction period with numerous cancelled or postponed projects including the Nakheel Harbour and Tower and the Trump International Hotel and Tower, and there is considerable uncertainty surrounding the ambitious World development. During 2009, Nakheel announced 900 redundancies over two rounds.

Payments from Dubai sponsored companies to suppliers have been slow.

Contractors are either not being paid or being offered a fraction of what they are owed.

Smaller developers are facing real problems, which larger players may be able to navigate better

A number of smaller developers are also feeling the pinch at the moment. Some have real problems with the principals leaving the country, and no money to even start construction. Others are more constrained by the lack of funding, whilst dealing with unit buyers defaulting on their payment plans.

Developers will be helped by the fall in material costs

Nevertheless, there are a few rays of light for the industry. The construction sector will benefit from the reduction in material costs with the price of steel falling by two thirds, timber falling by approximately 25%, and cement falling by approximately 30-35%. Some of these savings will fuel contractor's battered profit margins, and some will be passed onto developers dependent on circumstances and negotiation positions. Infrastructure projects should benefit more from falling costs, as those projects are less subject to delays and more funding is available.

The construction problem in Dubai is deep seated, but not unsolvable. It has become evident that government enterprises have depended on leverage and find it difficult to service their debt burdens and other developers are in the same boat. In addition, buyers are walking away from units that they have only made a few payments on. As such contractors and sub contractors are grinding to a halt due to cash drying up within the value chain.

Transparency and the acceptance of losses will help the real estate industry move forward

To find a way out, the market needs more transparency and the acceptance to make losses. Transparency will provide confidence for new capital to understand the fundamentals of investing in Dubai by allowing it to better model cash flows. This combined with an acceptance that values have fallen and that some losses will occur, even to the point of allowing bankruptcies, will ensure the market starts to flow again. Poor developers and investors rightly should feel the brunt of the pain, as the market becomes more professional, which in turn will create a more sustainable construction model.

### 3.2 Foundations

The liveability of any city is enhanced by the mundane things that many city dwellers in the West take for granted, such as mobility, the efficacy of utilities, the availability of social infrastructure, and leisure activities. Dubai has been working hard over the years to improve these areas for its mainly expatriate population.

Mobility

The Dubai road network is extensive and enables fairly rapid movement across Dubai

In terms of mobility infrastructure, Dubai has developed an extensive road network which, though not perfect, is functional and enables people to move from one end of Dubai to the other with relative ease. Every major city has traffic problems, and Dubai is usual in this respect. The amount of construction in the city state does not help, but is reasonable considering the number of developments in progress. In addition, traffic has notably eased since the departure of a portion of the active population since the beginning of the downturn.

Current projects undertaken by the Road and Transport Authority (RTA) not only concentrate on road improvements, such as the AED 1.4 billion approved in April for Al Khail, Al Wasl and the Trade Centre, but also on innovative solutions, such as the ITS probe vehicle project, which will utilise real time data from taxis and public transport to better understand traffic patterns.

Parking can be an issue, as too few spaces were planned for this mainly driving city

If there is one area in which Dubai's planners need to work on, it is in parking. In a city where cars are the main form of transportation there is little in the way of available parking, and even in built up commercial areas it is difficult to find suitable places.

The metro will support the road network and provide quick and cheap transportation

The metro will further reduce road congestion now that it has been launched. Once completed it will be the longest driverless metro in the world, with 75 km of rail line and 47 stations with a current cost estimate of AED 28 billion. The red line will be able to handle 23,000 passengers per direction per hour connecting Jabel Ali Port to Al Rashidiya city centre and the green line will be able to handle 18,000 passengers per direction per hour connecting Festival City to Dubai International Airport terminal two. Two further lines have been proposed for approximately 95 km of additional track.

To service the routes, bus and water routes have been amended to allow passengers easier access to the metro. A number of park and ride facilities will also be produced. Moreover, the RTA recently announced its pricing plans aiming to make the metro one of the cheapest transport networks in the world.

## Utilities

Dubai utilities provision is adequate for current and future requirements

Though there are many rumours over the provision of utilities in Dubai, for the most part utilities work reasonable well. There have been some unfortunate articles in the press about the treatment of sewage, but the government seems to have acted upon this to ensure it is treated appropriately.

More relevant topics in this area concern the continual development of its electricity network and the provision of fresh water. The recent reduction in active population growth would have helped both, at least in the short term.

Using figures from the Dubai Electricity and Water Authority (DEWA), the peak demand for electricity has increased by a CAGR of 13.1% over the last five years, but production has increased by a CAGR of 14.9%. Recently, US President Obama gave his official backing to a nuclear agreement between the US and the UAE, so in the future we should see US energy manufacturers selling nuclear technology to the country allowing it to keep up with electricity demand, whilst weaning itself off more pollutant technologies.

In the same five year period, desalinated water production has increased by a CAGR of 10.4%, whilst peak demand has increased by a CAGR of 9.4%. Over the last five years, absolute peak demand and production are closely aligned. Therefore, DEWA needs to look at increasing production in the medium term.

Desalinating water is an expensive and energy-hungry method of production, but in a region where desert abounds, it seems like the only mass production process available. Therefore, the energy and water strategies are inextricably linked.

## Social Infrastructure

Dubai is essentially a safe place to live

We define the main tenets of social infrastructure as the ability to stay safe, and the provision of healthcare and education. We do not include the safety net of social services that protects against job losses etc., as this cannot be expected for an expatriate community in a tax free environment.

Dubai does not suffer from petty crime, and people are safe to walk the streets at any time of the day or night. Sometimes this can be overlooked, but it is not possible to say the same for some large and medium sized western cities.

Among the expatriate community there is a feeling that the law is not always meted out evenly and that the outcome of a brush with the law is difficult to predict. However, sometimes this is due to the different philosophical basis of the law, which people have to live within if they wish to remain in Dubai. Dubai despite embracing globalisation is a more conservative society than the West, but much more liberal than other areas in the Middle East. Dubai provides a more compatible environment for Westerners than many of the other countries in the region.

In terms of healthcare, Dubai is well catered for. Health insurance is a must, even if it is only for basic cover as expatriates are usually required to provide for themselves. There are numerous facilities and their private nature means waiting lists are usually minimal. However, for some specialist treatments, it may be better for people to look outside of Dubai.

Dubai has recently seen a boom in higher education. A number of well known universities have been setting up local satellite programs and institutions, such as the London Business School and Harvard Medical School. For secondary education, the picture is less rosy. A number of expatriates complain about the high cost, but low standards.

## Leisure Activities

Dubai offers a number of leisure activities, but lacks a certain cultural attractions

There are a number of activities available for residents. Many revolve around active pursuits including sports and activities such as diving, horse riding and desert-based endeavours. With that in mind the mostly transient population spend a lot of their time utilising the abundant restaurants, bars and clubs, or spending time in the numerous shopping malls without necessarily shopping.

However, Dubai lacks more cultural pastimes, such as availability of art galleries, museums or theatres. In order to attract longer term residents, Dubai will need to develop these types of attractions, which would also help its lure as a holiday destination.

The above discussion on the foundations that Dubai has built combined with the low tax environment and relative freedoms enjoyed by the people has proved to be a success in enticing an expatriate population, which brings the skills required to build the businesses that will help Dubai remain a hub within the region. In Mercer's 2009 Quality of Living survey, Dubai topped the charts for the region overall and with regards to the quality of infrastructure.

Though Dubai is currently suffering from financial and real estate problems, we believe the advantage it has over its regional competitors through the foundations it has established will help it come out the other side stronger, and it will remain the place of choice for expatriates to live and work within the region.

# 4. Investing in Dubai

As a consequence of steep price reductions and our view that Dubai possesses strong fundamentals, Dubai real estate should attract international institutional investors and high net worth individuals for consideration as part of a diversified global portfolio.

An approach to Dubai real estate should distinguish between completed real estate and development real estate.

## 4.1 Completed Real Estate

Conceptual Framework

Real estate price dynamics are better understood in terms of expected rental levels and required yields

Assessing investments in real estate should be based on rental values and yields. We will not discuss the hotel business, which has specific characteristics focussing on occupancy, revenue per average room (RevPAR) and running costs. For the rest of the real estate industry, both residential and commercial (office, industrial, retail) the key drivers of valuation are the expected net operating rental income ("NOI") and yields. Yields are determined by the type of unit and its location and are calculated by NOI/ Price expressed as a percentage.

NOI is rental income minus costs such as service fees. The first leg of the conceptual framework is overall rental levels. The factors that determine rental levels can be split into supply and demand factors:

- **Supply factors**: Overall stock of units and expected supply of new units.
- **Demand factors**:
  - Demographics: Population size, population growth, household size.
  - Economic: Level of economic activity and economic growth.
  - Affordability: Household income available for residential costs, attractiveness of commercial rates to businesses.

The second leg of our conceptual framework is yield. The factors that drive yield are:

- **Returns from other asset classes:** The returns from other asset classes will influence required returns on real estate. If returns from other asset classes such as stocks fall, it will make real estate comparatively more attractive and eventually yields on real estate will also fall.
- **Availability and cost of credit:** All else equal, the more available and cheaper credit is, the lower required yields will be.
- **Expectations of rental levels:** If rental levels are expected to weaken, then current required yields will be higher to compensate for future rent reductions. Expected vacancy rates influence the expectations on rental levels.

## Real Estate Cycle

Prices are more volatile than rents in a real estate cycle, and yields tend to tighten in boom times and fall during corrections.

Sentiment and expectation drive the real estate cycle

**Real Estate Cycle**

| Phase | Rents | Yields | Prices | Comment |
|---|---|---|---|---|
| Boom Euphoria | ▲▲ | ▼ | ▲▲▲ | Overconfidence, overinvestment |
| First Stage Correction | — | ▲ | ▼ | First doubts, rent activity can actually pick up while sales activity reduced |
| Second Stage Correction | ▼ | ▲ | ▼▼ | Talk of crisis, lower activity, rents also falling |
| Third Stage Correction | ▼▼ | ▲ | ▼▼▼ | Panic, revulsion to real estate |
| Fourth Stage Correction | ▼ | — | ▼ | Yields stabilize as they are becoming more attractive, rental decreases slow |
| First Stage Recovery | ▼ | ▼ | — / ▲ | Some investors re-enter market because yields are attractive and anticipating that rents are bottoming out |
| Second Stage Recovery | — / ▲ | ▼ | ▲ | Talk of recovery, activity picking up |
| Third Stage Recovery | ▲ | ▼ | ▲▲ | Investment and activity recovered, real estate considered attractive again |

*Source: Isthmus Partners*

The key questions are whether Dubai is still working through the third stage of correction or is entering the fourth stage, and how long it will be before Dubai starts the first stage of recovery. Given conventional wisdom dictates Dubai's real estate market will not recover until rental levels increase, it is worth highlighting that yields and prices generally recover ahead of a turnaround in decreasing rental levels.

Positive sentiment has turned very negative, but positive surprises are plausible

The negative sentiment driving the Dubai real estate market is based on the assumption that everything will continue to go wrong for Dubai. A weak economy will lead to little or negative population growth and to lower salaries for those that have jobs, reducing the demand for rental residential and commercial properties. On the other hand, a surge of new supply in office space and residential units will be coming onto the market. The combination of increased supply and reduced demand leads to very negative expectations of future rental levels, which together with the assumption of continued reduced availability of credit leads to higher yields and reduced prices. The negative view on Dubai is so entrenched and sentiment has been so depressed that positive surprises to expectations are a real possibility in the near future. There is no doubt that the key driver of the market will be whether the economic activity of the non-real estate sector of the Dubai economy will be able to foster the demand that will absorb the increased supply in real estate.

## Supply and Demand Considerations

We have looked at a number of property agency figures for stock and future supply to understand how the market will evolve.  We provide ranges of stock and supply, as numbers between the agencies are not consistent most likely due to the inconsistencies in reporting in Dubai and different measurement periods. Future supply has been adjusted by agencies for delays, postponements and cancellations. Consequently, new supply has been drastically reduced, though the amount of supply in office, residential and retail is still considerable.

Office stock is approximately 30-35 million sq ft. An additional 35 million sq ft is expected by the end of 2011, which would more than double current space to 70 million sq ft. Residential stock estimates range from approximately 280,000 to 320,000 units with an additional 65-90,000 expected by the end of 2011 to a total of 345,000 to 410,000 units.

Looking at demand, Dubai's population at the end of 2008 stood at 1.65 million, of which we estimate approximately 1.25 million are in the workforce. From the latest figures on the breakdown of Dubai's workforce provided in 2005, we estimate approximately 287,500 of workers work in offices, representing 23% of the total workforce. If we divide 35 million square feet office space by the estimate of office workers, the average square foot per worker is 122, not an unreasonable estimate.

Office supply absorption depends on worker population growth, the proportion of office workers and space per office worker

With office supply looking to double over the next three years, we have analysed a number of factors that would affect vacancy. Three key factors to consider are the total office worker population, the proportion of office workers, and the amount of space provided per office worker.

The DSP 2015 forecast strong population growth

The Dubai Strategic Plan 2015 which was announced by the Dubai government in February 2007 calls for a working population of 1.73 million in 2015. The Dubai government is actively seeking to increase the number of high and medium skilled workers. Highly skilled workers are expected to increase 5% from 20% to 25% of the workforce from 2005 to 2015. Medium skilled workers are expected to increase 3% from 41% to 44% of the workforce. If this trend can be supported, the number of office workers would be expected to rise.

If the percentage of office workers were to increase to 30%, with a working population of 1.73 million there would be 520,000 office workers in 2015. Leaving space per worker constant at 122 square feet per office worker we estimate a demand for 63.4 million square feet. This calculation illustrates the amount by which the worker population would need to increase to absorb the upcoming additional office supply.

Though the active population growth looks as if it will be negative for 2009, we envisage that 2010 shows signs of recovery to the region and Dubai attracting people back to the region. We would expect population numbers to have returned at least to 2008 levels by 2011. The active population consists of the resident population, temporary workers, and workers who work in Dubai, but reside outside the Emirate. It has a greater impact on office space demand than the resident population alone.

Residential supply will be more easily absorbed than office supply

Residential supply, though large, looks more manageable. Three factors to consider include the percentage of people who live in households, the average household size and the migration of people to Dubai from other emirates and abroad. We expect the downward trend in the average household size to continue, again at a slow pace. Western European, US and Japanese average household sizes range from two to three people, giving Dubai a lot of potential for the number of households to grow as it develops further.

As Dubai's prices continue to fall, we would expect people to move from Northern Emirates such as Sharjah to Dubai. Many people who live in Sharjah actually work in Dubai, but were forced to move due to high rental prices. This trend should reverse as more reasonable prices can be found and rents start to reach Northern Emirate levels. Moreover, we expect more highly skilled people to enter the Abu Dhabi workforce, as its economy picks up, with those people residing in Dubai due to cost, proximity to Abu Dhabi and general lifestyle requirements.

Of the current population, we estimate approximately one million live in non-labour camp households. The average urban household size in 2005 was 4.14, which has been trending down over a decade from 4.6 people per household. Given household sizes, we estimate there are currently approximately 250,000 households in Dubai.

Given the Dubai Strategic Plan 2015 calls for a working population of 1.73 million in 2015 and assuming the ratio of total population to worker population remains relatively constant, the implied total population is 2.3 million. This assumes an annual increase of 4.9% from the end of 2008 to 2015 and could lead to a total number of approximately 355,000 households in Dubai by 2015 if ratios of labour camp dwellers and average household sizes remain constant. Using average European dwellings per household of 1.2, the potential demand for residential units would be 426,000. The above calculation shows residential supply is more manageable, but will require a sizeable population increase.

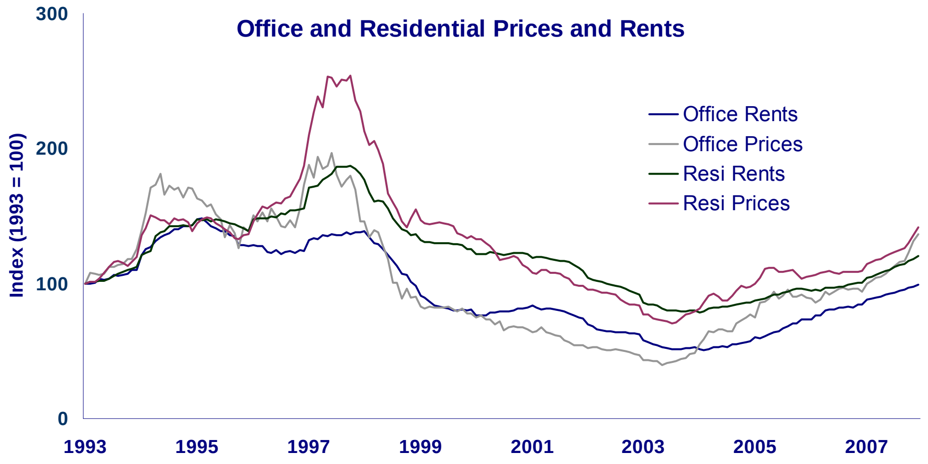
Development projects delays and cancellations will affect absorption rates

The current disconnection between supply and demand is wide, but with delays and cancellations of developments the gap looks more manageable albeit difficult. To shoulder much of this gap the real economy will need to pick up in 2010 and look robust going into 2011. Due to the smaller increase in supply in residential units than office space, the likely stable residing population, and the greater likelihood of supply being mopped up if Dubai were to rebound quickly, we would favour the residential asset class over office in terms of factors that sustain and grow rental levels

<u>Hong Kong - A Benchmark?</u>

The Hong Kong experience points to a strong boom and a protracted bust

Hong Kong's property boom in the mid-90s and subsequent fall from 1997 to 2003 can provide some insight into Dubai's current situation. In real terms Hong Kong suffered an 80% and 72% fall in office and residential prices respectively from late 1997 peaks to 2003 troughs. In the same period office rents fell by 64% and residential rents fell by 58%. By the end of 1998, approximately 60-70% of the price falls and 45-50% of the rent falls had been achieved demonstrating rapid initial reductions followed by a long period of slow declines. To date 1997 prices and rents have not been achieved.




*Source: Rating and Valuation Department, Hong Kong*

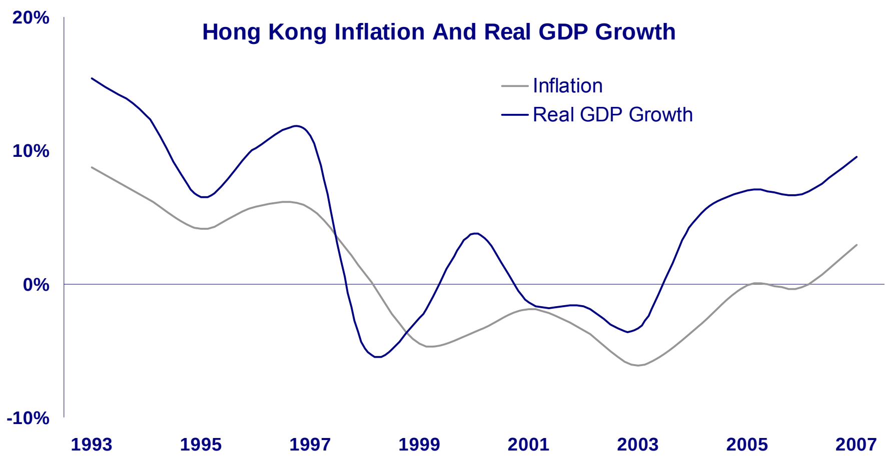
Hong Kong experienced a property boom caused by a number of factors including the limited supply of land restricted under the Sino-British Joint Declaration, the emergence of Hong Kong as an important trading hub, influx of illicit capital from mainland China and speculation. New property and infrastructure projects abounded including airports, bridges and railway networks. Many parallels can be drawn with Dubai including the supply constraints manifested through a government-led process for the release of land, the influx of foreign capital and speculation.

Hong Kong's peak in late 1997 was very extreme

In 1997, the Asian Crisis precipitated pessimism in the region and a withdrawal of capital in an area which had attracted almost half of the total capital inflow from developing nations. At the same time, the British had handed over Hong Kong to China. These circumstances combined with the fact that the Hong Kong dollar was pegged to the US dollar, but with an inflation rate that had been significantly higher than the US for years led to speculative pressure on the currency. Hong Kong was able to weather this storm at the cost of higher interest rates, which further depressed the Hang Seng stock market.

Hong Kong's protracted period of negative growth followed a series of economic shocks

Beyond 1997, GDP continued to fall, but due to further economic shocks including the bursting of the dot com bubble in 2000, the New York 9/11 attacks in 2001 and the SARS outbreak in 2003. Hong Kong also suffered a number of years of deflation during the same period.




*Sources: Hong Kong Annual Digest of Statistics - 2001 to 2008, World Bank Group*

Dubai is unlikely to follow Hong Kong's prolonged real estate recession

We could conclude from this analysis that Dubai is likely to follow a similar path leading to years of declining values and rents. However, we believe that Dubai will emerge from the current malaise earlier for a number of reasons:

- Hong Kong suffered continuous GDP declines from a number of new economic shocks in the early 2000s and was in a region that was suffering just as badly if not worse. The Middle East looks to be more stable and has some strong economies that are likely to drive the whole region forward including Saudi Arabia, Abu Dhabi and Qatar particularly as oil prices are beginning to trend upwards again.
- Hong Kong's absolute prices in real terms in 1997 were considerably higher than both Dubai at its peak 10 years on and Hong Kong today. For instance, Hong Kong residential prices at their peak in 1997 were two to three times the prices of Dubai residential at their peak in 2008 and one and a half times current Hong Kong prices.
- Hong Kong's residential supply continued to increase after 1997, as the government increased supply of homes to 85,000 units a year from 53,000 units a year over the 1987-1997 period, due to the Territory's housing policy.

In Hong Kong, anecdotally we have seen that the average space per office worker to be in the 120-140 sq ft range. With 3.6 million workers of which approximately 45% work in offices, and close to 230 million sq ft of office space Hong Kong has a vacancy rate of 8.5%. For Dubai to achieve a moderate vacancy of 10% and assuming Hong Kong levels of office space per worker and that Dubai achieves its 2015 plan of having 1.73 million workers, we estimate the percentage of office workers would have to increase from approximately 23% to 28%.

The Hong Kong experience has illustrated a few key drivers to the recovery of the real estate market, though an exact comparison cannot be made. First, Dubai's economy and ability to attract new businesses will be the precursor to any real estate recovery. Absorption of current and upcoming office supply is essential, especially in an expatriate concentrated market. Second, it is unrealistic to assume prices will return to the levels seen at the peak for a period that could stretch over a decade. Third, the cancellation and delays in projects should provide a backstop against further price and rent falls, as demand is allowed to catch up with supply.

Investment Approach

Investment decisions need to be based on sound due diligence

The strong correction in Dubai real estate prices warrant consideration by the international investor with a diversified global portfolio. Real estate investing requires a long lead time and waiting for confirmation of a turnaround or trying to fine tune timing generally lead to missing out on the early and frequently steepest stages of recovery.

An investment in completed Dubai real estate should be based on careful due diligence. Dubai has grown significantly in the past decade and there are many different areas with different characteristics and target populations. Within the residential sector, a choice must be made between apartments and villas. The location of the unit is a key determinant of the kind of population that demands the unit, and there is a whole spectrum of residential options from the most affordable apartments in International City to five bedroom villas in the Palm Jumeirah.

For office space, location and licensing is key, with clusters such as those surrounding the DIFC and downtown Burj Dubai more attractive and requiring higher rents. A new factor to consider is the access of residential or commercial properties to the new metro system that Dubai inaugurated on 9th September, 2009.

Further factors to consider include the quality of construction, servicing costs, the quality of servicing and maintenance, access to parking, traffic conditions, access to shopping and other conveniences, perceptions of residents about the location, etc. Data is sometimes hard to find and stringent standards need to be adhered to when looking at costs even if that means going through old receipts to check accuracy.

There are opportunities for distressed acquisitions

In the current market opportunistic purchasing of distressed opportunities at attractive yields could be a way to enter the market. This should lead in the near future to the aggregation of units that fit the investment style or policy of the investor. The decision to focus on high end real estate such as a signature villa in the Palm Jumeirah or to focus on affordable units such as International City, or the mix of property types, should de driven by expectations of Dubai's economic recovery. Investment decision should also be driven by discipline in terms of yield requirements and confidence of the sustainability or increase of rental levels.

The Burj will anchor the office sector

At the time of writing, property agencies have stated prime office yields are approximately between 8.5% and 9.0%. However, through distressed sales and acquisitions in secondary locations, it is possible to achieve yields in the mid-teens. Market chatter suggests that the iconic Burj Tower will achieve yields of 9%, with prices and expected rents between AED 4,000 to 7,000 per sq ft and AED 350 to 600 per sq ft respectively dependent on the attractiveness of the unit. The Burj is close to handover and observers will be closely scrutinising rental levels and prices, as it will act as an anchor for the whole market.

We are seeing how the Dubai office real estate market is coalescing into

Segmentation of Dubai's office sector is crystallising

Office yields range from 9-14%

different segments. The Downtown Burj Dubai District and the DIFC form the prime Central Business District (CBD), with Business Bay a secondary CBD location. Areas like Jumeirah Lake Towers, Tecom and Media City will form the prime non-CBD locations. Rents and prices currently vary widely, but prices and rents fluctuate between from AED 3,500 to 4,500 per sq ft and AED 350 to 400 per sq ft respectively for prime CBD locations (excluding The Burj). Business Bay rents have been seen as low as AED 150 to 175 per sq ft. Market data suggests yields of 9% in DIFC, 12% in Business Bay and 13-14% in Jumeirah Lake Towers. This suggests a 500 bps difference between prime Central Business District (CBD) and secondary locations, a spread higher than the 100-150 bps typically seen in more mature markets. Higher gross yields result from high expected vacancy rates.

Location segmentation is increasingly driving residential yields, which are lower than office yields

Segmentation is also a key driver of rents and yields in the residential sector. Prestigious residential areas in Dubai are represented by Palm Jumeriah, Jumeriah Beach Residence, the Marina, The Burj, and prime areas within the CBD. Whilst rents and prices are dropping in most areas, Palm Jumeriah and The Burj apartments have seen recent rent and price appreciation. Palm Jumeriah yields range from 5-6% for shoreline apartments. Old Town is achieving 6-7% yields, whilst Dubai Marina yields fall between 7-8%.

Secondary locations are becoming more attractive as more residents move to cheaper accommodation. International City is achieving yields of 9-10%, while Arabian Ranches is achieving yields of 6-7% mainly due to the low prices.

### 4.2 Development Real Estate

When considering development real estate as opposed to completed real estate, the analysis needs to consider (i) the time delay until the property is ready to generate rental income or be used by an owner occupier and (ii) the risk that the development suffers severe delays, is never completed, or is completed to a different specification than agreed.

Currently there is a very negative bias against development projects

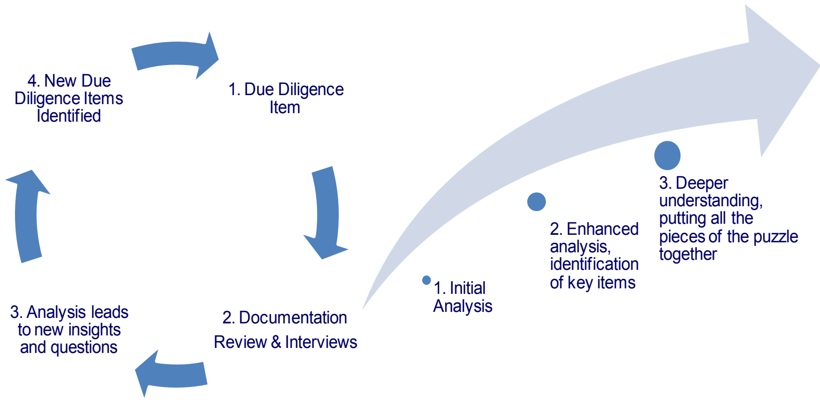
As mentioned before in this research report, during the halcyon days of off-plan sales there was little consideration given to the risk of non-completion. Since then, Dubai has suffered a 180 degree turn and market participants have little faith in completion of real estate developments. With exception of some of the larger and more respected developers, little discrimination is made for the status of a development, the quality of the developer and the peculiarities of the project. There is a strong resistance to take on development risk, either as an end user investor, an equity investor or a construction lender.

## The Importance Of Due Diligence

Due diligence is about thoroughness and hard work

Considering an investment in a development requires careful due diligence particularly in the current market. Due diligence is an iterative process that requires persistence and discipline for meaningful discovery.

**The Due Diligence Process**




To ensure the best possible appreciation of a situation a number of key tasks have to be carried out:

- Asking the right questions, pursuing answers and in turn asking further questions.
- Coordinating the due diligence team to share insights and pull together facts until a clear picture emerges to achieve a meaningful and truthful assessment.
- In organisations under stress, due diligence requires hands-on work in sourcing, cleaning and verifying information.

The due diligence process should provide information relevant to the criteria that will be used assess the critical success factors of a project. The table below summarizes some of the key factors and criteria relevant to real estate developments in Dubai.

Criteria to assess development real estate is varied and complex

| Factors | Criteria |
|---|---|
| Equity | ▪ Amount of to-date equity investment is related to developer's incentive<br>▪ Amount of expected future equity reward is related to developer's incentive |
| Management | ▪ Past track record in completing projects is indicative of management's skills<br>▪ Project history is revealing of management's commitment to the project (especially when facing tough challenges) |
| Operations | ▪ Quality of bookkeeping and records facilitates due diligence and the strength of conclusions<br>▪ Quality of customer services, processes and personnel is related to strength or relationship with end users |

| Factors | Criteria |
|---|---|
| Compliance | ▪ Quality of relationship with regulator<br>▪ Abidance to rules and regulations |
| Construction Progress | ▪ Construction progress to date<br>▪ Contractor payments to date and unpaid amounts<br>▪ Track record of contractor and main subcontractors, particularly in the same geographical location<br>▪ Variation claims to date, both approved and under study<br>▪ Quality of consultant's reports including the detail and strength of updated budgets and quantity surveyor reports<br>▪ Remaining timeline |
| Sales and Defaults | ▪ Amounts held in escrow account and available to fund construction progress<br>▪ Concentration of buyers; dependency on few large buyers indicates weakness<br>▪ Purchase price; higher purchase price means higher incentive to default<br>▪ Percentage of total price paid to date; higher percentage means less likelihood of default<br>▪ Quality and depth of price comparables for unsold and defaulted units supports revenue projections<br>▪ Number of defaults |

Riders in the Storm

A key focus of a due diligence review will be a review of the parties involved in the project and the relationships, contractual or otherwise, between the parties. The table below summarizes the conflicting points of view and interests that different parties will have when making decisions about the project.

Project stakeholders have different views, objectives and fears

| Party | Objectives | Key Issues | Worst Case |
|---|---|---|---|
| Developer | ▪ Finish project<br>▪ Obtain satisfactory return for equity and time invested<br>▪ "Stay in the game" for future developments | ▪ Financing: equity and lending dried up<br>▪ End user instalment uncertainty adds to financing woes<br>▪ No market for off-plan, weak market for completed property, is project still feasible | ▪ Bankruptcy<br>▪ Legal problems<br>▪ Reputation ruined |
| Equity Investor (if Different to Developer) | ▪ Get money back<br>▪ Obtain satisfactory return | ▪ More equity: just good money after bad? | ▪ Lose whole investment |

| Party | Objectives | Key Issues | Worst Case |
|---|---|---|---|
| Master Developer | ▪ Obtain land payment instalments, if any remaining<br>▪ Project completed within its guidelines, does not affect perception of other projects | ▪ Infrastructure development<br>▪ If plot still not handed over, remaining plot preparation costs and financing of those costs | ▪ Plots that have to be repossessed<br>▪ Project abandoned mid-way by developer<br>▪ Loss of reputation |
| End Users | ▪ (If not defaulted)<br>▪ Purchased units completed<br>▪ To achieve a profit or at least minimize loss | ▪ Purchase price probably higher than current market levels for completed units<br>▪ Decision of default and losing paid-in instalments against completing payments on out-of-market price<br>▪ Further instalments tied to certainty of project progress | ▪ Invest in substantial instalments, then project abandoned |
| Regulator | ▪ Completion of projects<br>▪ Fair treatment of end users | ▪ Adapting regulatory landscape to challenging and changing environment<br>▪ Intermediation between conflicting parties | ▪ Abandoned project midway |
| Contractors Subcontractors Consultants | ▪ To be active<br>▪ To generate cash flow | ▪ Sourcing and investing working capital, needs to be tied to the certainty of getting paid<br>▪ Weak construction contracts undermine bargaining strength | ▪ Abandoned project midway |
| Finance Provider | ▪ To get principal repaid<br>▪ To not provide further lending | ▪ Uncertainty about project feasibility<br>▪ More lending: just good money after bad? | ▪ Abandoned Project midway |

Lack of trust permeates the market

In essence there is a lack of trust amongst all participants. The current world economic crisis is characterised by a lack of trust in counterparties, in banks, in borrowers, in providing credit and in relying on another party's commitments. This generalised lack of trust is exacerbated in local real estate development due to the market circumstances that led to investor revulsion towards real estate, particularly development real estate.

Focus on Cash Flow

Cash flow is key and forecasts should become more coherent through a strong due diligence process

When modelling cash flows, it is extremely important to understand the current financial situation including all moneys that had been paid out to contractors, project management, consultants etc., and revenues that have been received. This may require looking through actual receipts and auditing the contractor's payments to sub contractors. In addition, all accounts used for receiving and paying monies must be reconciled with payments, particularly any escrow accounts related to the project.

From this point future cash flows will need to be projected. Revenues should be determined through the expected receivables from current and potential buyers, with a fairly stringent look at defaults. A look at booking forms and sales and purchase agreements can provide an insight into potential issues with revenues.

The quantity surveyor on the project together with the project manager should provide a view on future costs with a timeline for those costs. This will form the baseline for any future investment, so the project can be monitored after loans are made or equity acquired. Project managers should expect to be managed from this baseline.

It is important to assess risks to revenues and costs

The due diligence exercise should provide confidence in modelling the cash flows of the project, which will require an assessment of the risks to revenues and to costs. Risks to revenues include:

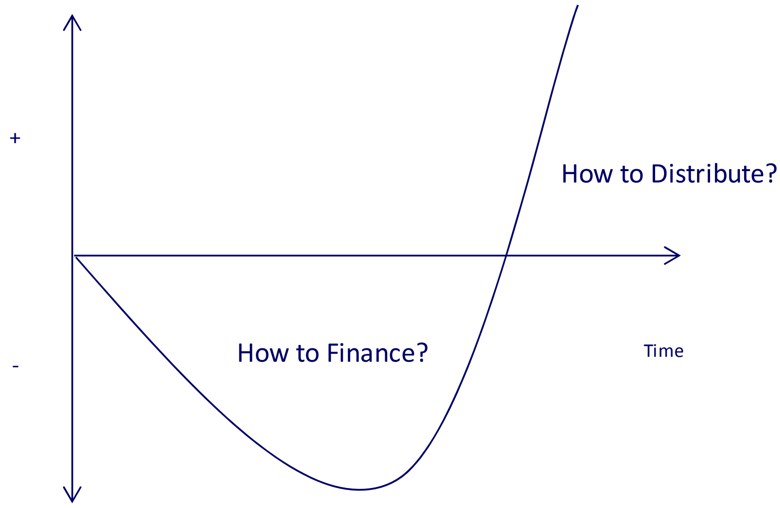
- Reluctance of end users to pay instalments due to uncertainty about when a project will finish.
- Defaults of future instalments on off-plan sales. There would be a time lag before units are available for resale and the administration process can be cumbersome. Once on sale, the units may not obtain the previous price on resale.
- Change to payment plans due to regulatory actions, such as linking the payment plan to the construction progress.
- Inability to sell unsold units at expected price.
- Delays in construction may lead to delays in future revenues.

Risks to costs include:

- Unexpected infrastructure costs.
- Variations in costs due to time delays, variations in work programmes, poorly formed initial budgets not covering all essential activities, changes in building regulatory requirements, etc.
- Very expensive financing (debt, mezzanine or equity), if any available.

Once project inflows and outflows are modelled the next stage of the analysis will be to structure the finance required for project completion. Any financing solution will have an eye to how profits are distributed post completion.

## Cumulative Cash Flows




Structuring An Investment In Development Real Estate

Structuring an investment should be robust and protect an investor's interests

Defying conventional wisdom, the timing is now correct for institutional investors to consider investing in development projects in Dubai, as long as the following criteria are met:

- **Due diligence.** The opportunity must be vetted by detailed due diligence.
- **Late-stage developments**. Developments under way and with a short-time frame to completion (less than one year to completion and handover and commencement of rental income generation).
- **High certainty of completion**. There are no obstacles aside from the financing to completion of the property in the forecasted time.
- **Well documented transaction**. Robust transaction documents with the inclusion of the relevant parties, including contractor (i.e. if required, agreement on limiting existing cost and time variation claims) and previous financiers (i.e. negotiating a standstill with mortgagee).
- **Conservative cash flow forecasting**. The cash flow projections of the development must be robust and defendable. Costs include allowances for variations and unexpected items. Revenues are based on conservative projections taking into account the current environment. Exit values assume sensible rental values and yields as detailed in section 4.1 of this research report.
- **Milestone based investing**. The investor's disbursements should be tied to delivery milestones.
- **Developer remains in the game**. The developer should not extract cash out from the investment and should remain tied and incentivised to the successful completion of the project.
- **Rigorous monitoring of the development**. The investor should negotiate a detailed reporting package on the project's evolution and be able to audit progress through representatives, as well as

be consulted on critical decisions.

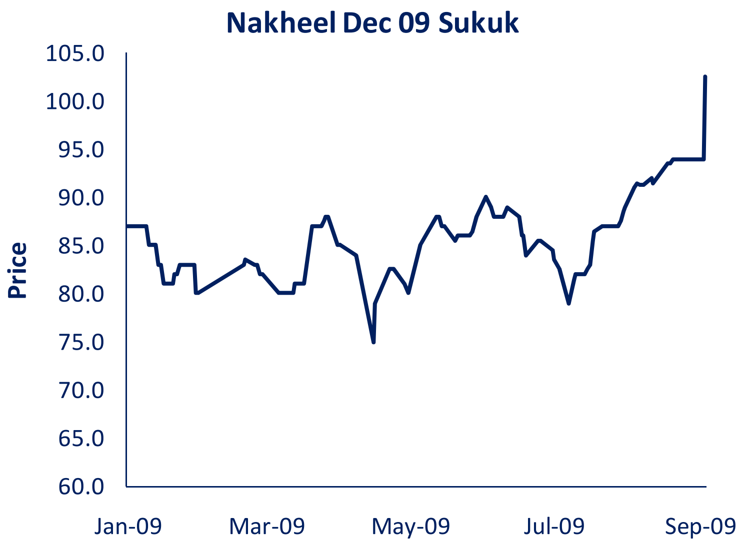
There are different ways for an investor to obtain an interest in a development in return for financing or investment, the simplest way being a straight acquisition of equity. More complicated structures can include a loan that is repaid ahead of equity distribution with an upside through a share of equity, options to purchase units in the development upon completion, straight acquisition of units at a discount (via loan redemption upon completion), etc.

## 5. Likely Scenario

Although the events of the past two years have proven that forecasting is a risky business, we will like to finish this research paper by laying out a plausible path for Dubai over the medium term.

The focus on Dubai Inc debt will be mitigated by more confident sentiment

1. **Concerns over Dubai Inc's debt servicing capacity progressively diminish.** We started this research paper by highlighting the importance of Dubai Inc to the Emirates' economy and focussed attention on the sustainability Dubai Inc's debt during the credit crunch. Very recently trading in the key Nakheel USD 3.5 billion sukuk maturing in December 2009 has recovered strongly and pricing indicates a renewed confidence that the sukuk will be redeemed successfully.



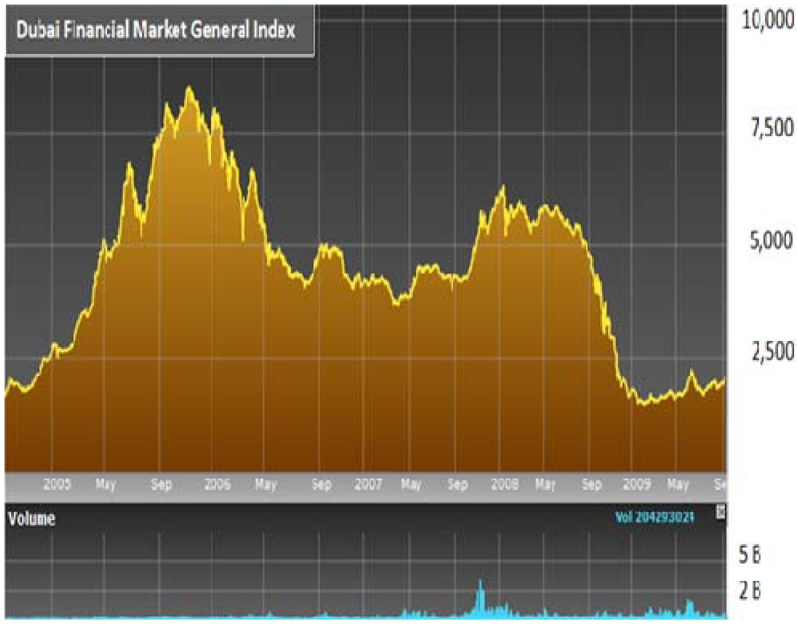

*Source: Bloomberg*

Credit default swap spreads for Dubai Inc entities still need to decrease to reduce their difference over Abu Dhabi and other regional benchmarks. There is evidence that the differentials are still in the 250 bps area and will be reduced with increased confidence in Dubai.

Dubai's economy especially non-real estate sectors will gain in confidence

2. **Rediscovery and renewed confidence in the non-real estate part of Dubai's economy.** There will be an increasing appreciation of the importance of the logistics, services and tourism sectors of the Emirate's economy. There will be renewed interest by entrepreneurs and in Dubai's success stories. There will be a realisation that the real estate crisis has lowered commercial and residential rental levels, reducing the cost of living and running a business in the Emirate.

3. **Recovery of investment and risk appetite.** The DFM index, which reached lows of 1,430 in February of 2008 and is now trading at above 2000, will be an indicator of appetite for Dubai risk.




*Source: Bloomberg*

4. **Recovery in job market.** As confidence improves, companies will start hiring again and increase their staff levels. New overseas companies will set up in Dubai and add to the demand for jobs.
5. **Credit recovers.** Credit will slowly normalise as banks relax stringent lending criteria and increase their total mortgage lending, but at slower growth levels to those seen in early 2008.
6. **Recovery of rental levels.** There will be moderate increases in general of rental levels, while the properties most in demand due to location and prestige will probably recover more strongly and earlier. There will be a clearer segmentation of the rental market according to location, quality and prestige associated with the property.
7. **Recovery in completed real estate units.** There will progressively be fewer distressed sales and there will be moderate increases in the prices of completed residential real estate units. Offices will probably take longer.

Confidence will eventually extend to real estate development

8. **Renewed confidence in completed real estate supports development projects on hold.** Confidence will progress through the real estate chain from completed properties to development properties, starting with late-stage developments and progressing to earlier-stage developments. There will be renewed investment appetite for equity, mezzanine and senior lending, and end users will have more incentives to meet instalment plans.
9. **Resumption of normal real estate activity.** Yes, one day in Dubai there will be launching of completely new residential and office projects, and volumes of real estate activity will reflect the levels of a healthy economy.

Growth in 2007/8 does not represent normal growth characteristics and should not be expected again

It is important to state what “normal” means. Some market participants are hoping or expecting a return to the long period of price acceleration of 2007 and first half of 2008. That was an exceptional period brought about by the confluence of extraordinary internal and external factors. The bubble was not good for the economy as a whole, only for those that either through skill or luck exited on time. Normal means real estate development based on solid demand and supply fundamentals and sustainable business margins for developers, agents and contractors, grounded on a tested and solid legal and regulatory framework that provides confidence to investors and end users.

The supply and population statistics imply that residential property rental levels will recover more quickly that offices, however this does not mean that investments should only be directed to residential. If office properties are available at a considerable yield higher than residential, then the yield differential may warrant investing in offices and getting the benefit of larger potential price increases due to yield compression in the mid-term.

A note of warning. Real estate is a cyclical business and it takes a long lead time from planning to completion. If Dubai's economy recovers strongly and its population increases again at high single digit annual rates, a prolonged period of very low housing and office starts may result in the mid-term in overall supply stalling, and the joint effect will be renewed stresses from demand that exceeds supply. Once the surrounding storm clouds are dissipated, perhaps a strategic focus on increasing the supply of affordable housing will be a good insurance policy against repeating some of the worst effects of the stresses of the past.

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