A Micro View of Dubai Real Estate: Focus on Dubai Marina

Executive Summary

- This report is a detailed quantitative analysis of residential real estate data for transactions in the Dubai Marina and JBR
- Our analysis will complement research reports provided by property consultants using their proprietary transactional data
- The analysis quantifies and confirms the spike in prices in Q2/Q3 2008 and the subsequent reduction through to Q4 2009
- In the boom, quartile one buildings commanded a 100% premium over quartile four properties, which has subsequently been halved in the bear market
- The number of bedrooms has little affect on the price per sq ft of an apartment
- The number of reported transactions fell 55% in Q2 2009 compared to Q2 2008
- Apartments with a price greater than AED 2 million made up 51.5% of total transactions in Q3 2008, but only 25.8% in Q4 2009
- Market share of apartments with a price of less than AED 1 million grew from 25.9% to 39.5% in the same period
- Analysis of mortgage transactions confirms the significant reduction in the number of mortgages provided from mid-2008 to the end of 2009 and the decrease in the LTVs of completed mortgages
- Availability of credit had a very significant impact on higher prices, particularly during mid 2008
- A significant number of the mortgages completed in mid-2008 are on properties currently in negative equity; how these properties behave in future will be important for the evolution of the market
- It is too early to tell what impact the Dubai World restructuring news will have on Dubai's real estate market

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1. Introduction

Property consultants use proprietary data to produce their research reports

Research reports on the evolution of property prices in Dubai are typically prepared by property consultants using data from their own property agency divisions or data shared with other property agents. The methods these property consultants use are a "black box" and you typically only see the reported results, but not the raw data or any transformation methodologies applied.

We use Dubai Land Department data provided by Reidin

In this report we discuss our findings from analysis of sales and mortgage data collated by the Dubai Land Department and provided through an internet-based information portal, Reidin (www.REIDIN.com). This report is targeted to real estate investors wanting a more in depth understanding of the dynamics of real estate in Dubai, mortgage providers concerned with real values of real estate assets, and end user buyers who wish to understand the types of properties that may hold value relatively successfully in this environment. The report is a complement to traditional property consultant research in the Dubai market.

We looked at the Dubai Marina and JBR between 2007 and 2009

In order to look at Dubai real estate from a micro view, we had to select an area of Dubai to analyse; otherwise the analysis would have been distorted by different standards of buildings and locations. Additionally, we had to ensure there was enough liquidity in these markets over our analysis period (beginning of 2007 to end of 2009) to make reasonable conclusions. Therefore our analysis is constructed from data pertaining to the Marina including Jumeirah Beach Residence towers.

In its raw form, data is difficult to interpret and trends can be misleading. To provide meaningful information, we have gone through a process of data cleaning and mining to gain an understanding of the market. A description of our process is provided in the methodology section.

This report is a micro analysis of the Dubai Marina and JBR. For a macro perspective of Dubai's economy and an analysis of the evolution of the emirate's real estate market please read our report "Dubai Real Estate Opportunities" from September 2009 available on the publications page of our website www.isthmuspartners.ae.

2. Key Findings

We divided buildings into four quartiles based on price per sq ft

For each quarter of the years 2007-2009, we divided homogenous clusters of buildings into four quartiles, the first quartile representing the top one-fourth clusters by price per square foot and the fourth quartile representing the bottom one-fourth clusters. The makeup of each quartile is discussed in more detail in the methodology section below.

Quartile four shows the most volatility (highest standard deviation) in prices when measured by index, but quartile one was the most volatile in absolute terms. This is to be expected considering the much higher absolute price of quartile one apartments.

Average Price (AED) Per Sq Ft By Quartile

	Absolute Prices				Indexed at Beginning of 2007			
	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Q1, 2007	1,579	1,012	777	528	100%	100%	100%	100%
Q2, 2007	1,367	925	815	534	87%	91%	105%	101%
Q3, 2007	1,227	899	803	524	78%	89%	103%	99%
Q4, 2007	1,312	1,136	959	791	83%	112%	123%	150%
Q1, 2008	1,504	1,270	969	843	95%	126%	125%	160%
Q2, 2008	1,743	1,453	1,072	848	110%	144%	138%	161%
Q3, 2008	1,997	1,590	1,380	1,002	126%	157%	178%	190%
Q4, 2008	1,552	1,274	1,098	794	98%	126%	141%	150%
Q1, 2009	1,507	1,124	993	819	95%	111%	128%	155%
Q2, 2009	1,224	1,029	894	760	78%	102%	115%	144%
Q3, 2009	1,599	1,060	936	817	101%	105%	120%	155%
Q4, 2009	1,172	1,031	905	752	74%	102%	116%	143%
Max	1,997	1,590	1,380	1,002	126%	157%	178%	190%
Min	1,172	899	777	524	74%	89%	100%	99%
Difference	825	691	603	478	52%	68%	78%	91%
Average	1,482	1,150	967	751	94%	114%	124%	142%
Std Dev	240	210	164	148	15%	21%	21%	28%

Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

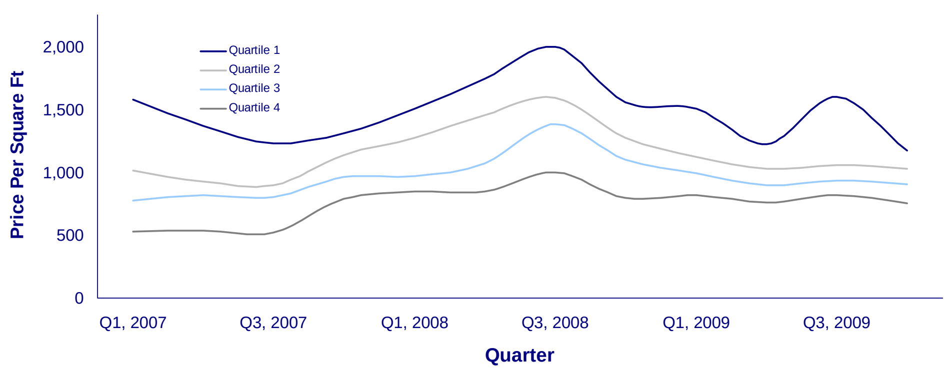
Quartile four property values are still greater than 2007, while quartile one property are below

Another interesting observation from the table above is how quartile one properties on average are now below 2007 prices, whilst quartile three and four properties are still above 2007 levels. On average, this illustrates that investors still need to pay 43% more to enter the market at the lower end than at the beginning of 2007. Also, from the data, we can see quartile one properties are at their lowest point over the last three years. Of course this data is an average, so there is a dispersion of prices around the mean of both higher and lower prices.

The spread between quartile one and quartile four properties is tightening

The spread of prices between quartiles seems to be tightening mainly due to the price compression at the higher end of the market. At the lower end prices have been fairly resilient since the last quarter of 2008. The increase in quartile one prices in Q3, 2009 seems to have been short lived, as positive sentiment dissipated quickly after a surge of transactions in certain buildings.

Purchase Price Per Sq Ft By Quartile



Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

In the boom times, the attractiveness of what were perceived as very high end apartments created a large spread between quartile one and quartile four properties. As the market has become more discerning, this spread has diminished, which is counter intuitive. In most markets there is a 'flight to quality' in poor economic environments, but here it seems value has become the watchword of the market leading a collapse at the high end. The increasing number of areas providing luxury apartments, such as The Palm, Burj Khalifa, etc. has also added to the reduction of prices at the luxury end of the Marina market. With this said the spread of AED 400 per sq ft (USD 1,172 psm) between quartile one and quartile four clusters is still considerable.

Nizar Al Aswed, a director at Halcon Real Estate agrees with our assessment stating "prior to the drop in market prices towards the end of 2008 we saw many investors focus on quality and location with more priority than merely price. Theoretically this allows the investor to protect their investment should they have to hold for the long term. This has changed quite radically in this current market due to a lack of liquidity and a significant tightening in mortgages. Now price seems to be the chief indicator of value."

We expect the tightening between quartiles to continue

With most additional supply expected to cater for luxury apartments, we can expect tightening to continue, until pressure is felt at the lower end possibly reducing prices for all real estate.

The number of bedrooms has little effect on price per square foot

We next looked at how different apartment types have faired over the last three years, segmenting apartments by the number of bedrooms. From the table below we can see three bedroom apartments had the most volatile pricing followed by one and two bedroom apartments. Two and three bedroom apartments are the only sectors that are favourably priced compared to 2007 prices. Five plus bedroom apartments have seen relatively little volatility.

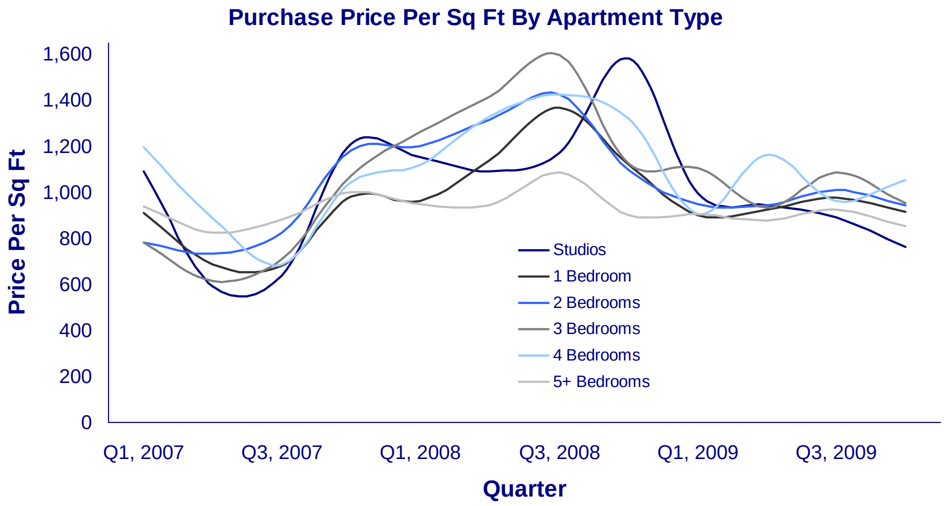
Average Price (AED) Per Sq Ft By Apartment Type

	Absolute Prices						Indexed at Beginning of 2007					
	Studio	1 Bed	2 Beds	3 Beds	4 Beds	5+ Beds	Studio	1 Bed	2 Beds	3 Beds	4 Beds	5+ Beds
Q1, 2007	1,091	911	780	780	1,199	941	100%	100%	100%	100%	100%	100%
Q2, 2007	593	688	736	615	885	826	54%	76%	94%	79%	74%	88%
Q3, 2007	638	683	826	713	686	880	59%	75%	106%	91%	57%	93%
Q4, 2007	1,213	984	1,181	1,071	1,042	1,004	111%	108%	151%	137%	87%	107%
Q1, 2008	1,153	962	1,202	1,263	1,120	951	106%	106%	154%	162%	93%	101%
Q2, 2008	1,093	1,141	1,316	1,416	1,329	945	100%	125%	169%	182%	111%	100%
Q3, 2008	1,175	1,367	1,425	1,598	1,428	1,086	108%	150%	183%	205%	119%	115%
Q4, 2008	1,585	1,121	1,098	1,124	1,321	899	145%	123%	141%	144%	110%	95%
Q1, 2009	999	903	948	1,107	908	908	92%	99%	122%	142%	76%	96%
Q2, 2009	946	923	942	936	1,164	880	87%	101%	121%	120%	97%	93%
Q3, 2009	892	978	1,013	1,089	964	925	82%	107%	130%	140%	80%	98%
Q4, 2009	763	915	946	955	1,053	851	70%	100%	121%	122%	88%	90%
Max	1,585	1,367	1,425	1,598	1,428	1,086	145%	150%	183%	205%	119%	115%
Min	593	683	736	615	686	826	54%	75%	94%	79%	57%	88%
Difference	992	684	689	983	742	259	91%	75%	88%	126%	62%	28%
Average	1,012	965	1,034	1,055	1,092	925	93%	106%	133%	135%	91%	98%
Std Dev	274	187	215	284	213	70	25%	21%	28%	36%	18%	7%

Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

Apartments with five plus bedrooms suffered the least volatility of prices

Looking at the graph of prices below over time below, we can see that the lower volatility in five plus bedroom apartments led to relatively little price appreciation over the period. The curve representing three bedroom apartments peaked highest followed by studios after a lag. However, for the most part all apartments followed a similar pattern and there is no discernable spread between apartment types.



Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

One and two bedroom apartments provide the greatest liquidity in the market

In terms of liquidity, we can see that one and two bedroom apartments lead the way in sales. The numbers in the table below are only a subset of the overall sales in the Dubai Marina market, but we believe them to be fairly representative. A question that arises is whether the number of studios sold is a little underweighted, which may be the case if more studios were transacted outside of the Land Department's registration process.

Liquidity By Apartment Type

	Number of Transactions						
	Studio	1 Bed	2 Beds	3 Beds	4 Beds	5+ Beds	Total
Q1, 2007	10	74	68	43	4	5	204
Q2, 2007	23	109	172	120	21	6	451
Q3, 2007	63	162	204	121	32	5	587
Q4, 2007	30	100	151	97	39	4	421
Q1, 2008	28	160	182	107	33	8	518
Q2, 2008	37	206	186	87	44	10	570
Q3, 2008	30	119	147	72	27	10	405
Q4, 2008	15	104	135	86	14	13	367
Q1, 2009	18	120	101	40	16	104	399
Q2, 2009	22	71	93	43	12	25	266
Q3, 2009	16	65	61	50	6	29	227
Q4, 2009	15	81	77	40	10	33	256
2007	126	445	595	381	96	20	1,663
2008	110	589	650	352	118	41	1,860
2009	71	337	332	173	44	191	1,148
	307	1,371	1,577	906	258	252	4,671

Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

We can also see that liquidity has dried up with 2009 sales representing approximately 61.7% and 69.0% of 2008 and 2007 transactions respectively on a macro level.

Lower priced apartments are more liquid in the bear market

By looking at the number of transactions by price in the table below, we can see the most liquid sector of the market was at the lower nominal price range. Though the proportion of apartments sold with a value of less than AED 1 million (USD 272,000) dropped to as low as 25.7% at the peak of the market, this segment now represents significantly more of the Dubai Marina market at close to 40%. Transactions of more than AED 2,000,000 (USD 545,000) represented more than 50% of total sales in Q3 2008, while only 25.8% of sales in Q4 2009.

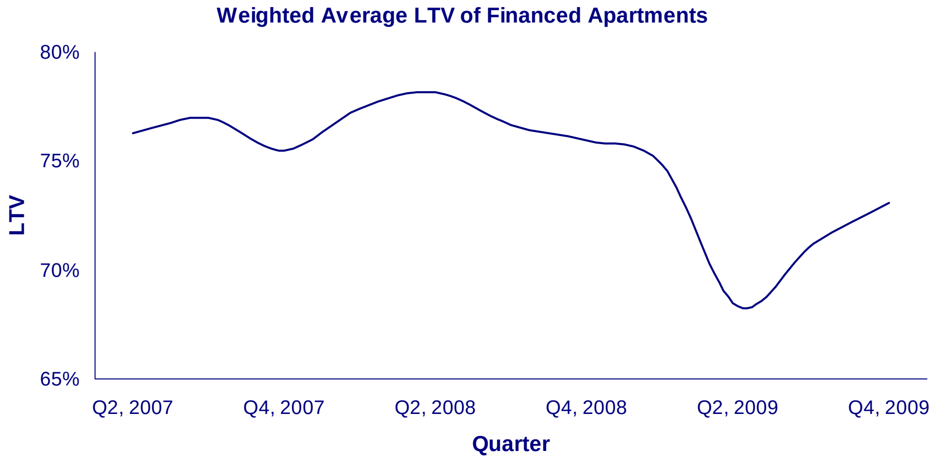
Number of Transactions By Transaction Price

	Number of Transactions						Proportion of Transactions					
	<= 1M	>1M - 2M	>2M - 3M	>3M - 4M	>4M - 5M	>5M	<= 1M	>1M - 2M	>2M - 3M	>3M - 4M	>4M - 5M	>5M
Q1, 07	118	63	16	2	0	5	57.8%	30.9%	7.8%	1.0%	0.0%	2.5%
Q2, 07	306	101	33	6	1	4	67.8%	22.4%	7.3%	1.3%	0.2%	0.9%
Q3, 07	373	167	30	5	3	9	63.5%	28.4%	5.1%	0.9%	0.5%	1.5%
Q4, 07	108	194	89	16	7	7	25.7%	46.1%	21.1%	3.8%	1.7%	1.7%
Q1, 08	162	180	125	30	11	10	31.3%	34.7%	24.1%	5.8%	2.1%	1.9%
Q2, 08	203	155	121	53	23	15	35.6%	27.2%	21.2%	9.3%	4.0%	2.6%
Q3, 08	105	91	122	57	16	14	25.9%	22.5%	30.1%	14.1%	4.0%	3.5%
Q4, 08	149	110	61	32	9	6	40.6%	30.0%	16.6%	8.7%	2.5%	1.6%
Q1, 09	153	132	64	30	11	9	38.3%	33.1%	16.0%	7.5%	2.8%	2.3%
Q2, 09	100	112	27	15	4	8	37.6%	42.1%	10.2%	5.6%	1.5%	3.0%
Q3, 09	76	94	30	16	1	10	33.5%	41.4%	13.2%	7.0%	0.4%	4.4%
Q4, 09	101	89	41	15	3	7	39.5%	34.8%	16.0%	5.9%	1.2%	2.7%
Max	373	194	125	57	23	15	67.8%	46.1%	30.1%	14.1%	4.0%	4.4%
Min	76	63	16	2	0	4	25.7%	22.4%	5.1%	0.9%	0.0%	0.9%
Diff	297	131	109	55	23	11	42.2%	23.7%	25.0%	13.2%	4.0%	3.5%
Ave	163	124	63	23	7	9	41.4%	32.8%	15.7%	5.9%	1.7%	2.4%
Std Dev	91	41	41	18	7	3	14.1%	7.5%	7.5%	3.9%	1.4%	1.0%

Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

LTVs have dropped from an average of 78% to an average between 68% and 73%

Finally we looked at how financing has changed over time and the amount of financing a bank will provide. From the graph below we can see that the weighted average Loan To Value (LTV) levels moved up to 78% on average. The LTVs are weighted by the purchase price of each property. Certainly in boom times, higher LTVs were available. More recently it looks like weighted average LTV is fluctuating between 68% and 73%.

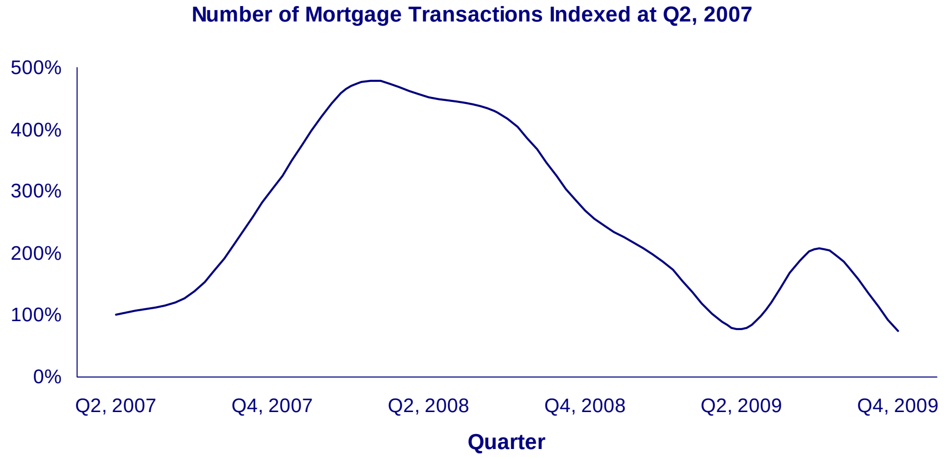


Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

Liquidity in the number of mortgages has also fallen. From the data we

The number of completed mortgages has dropped to below 2007 levels

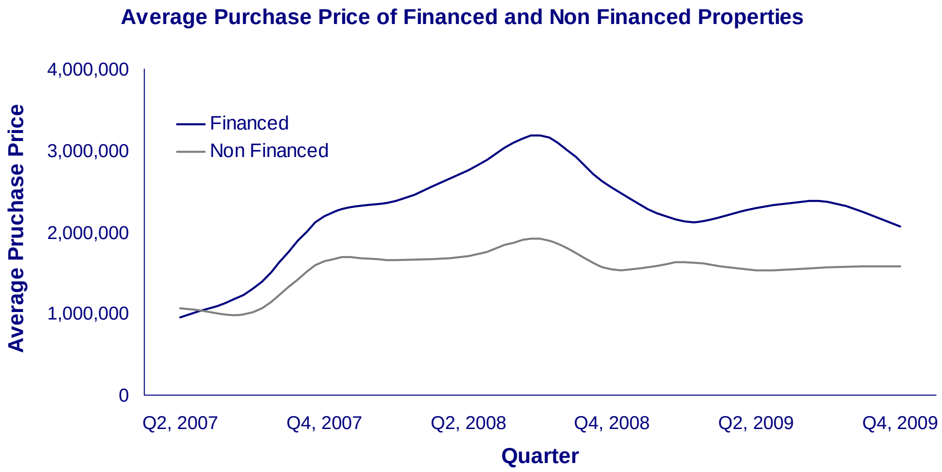
can see that the number of mortgages issued rose to a peak of 4.7 times the number of mortgages issued in Q2, 2007. The graph below indicates that the number of mortgages issued in the last quarter of 2009 has fallen below 2007 levels for the first time.



Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

Credit spurred on the purchases of apartments with ever increasing values

We looked at the average price of apartments bought with and without financing. After relative similar values of apartments at the beginning of 2007, we find that financing fuelled purchases of more expensive apartments. Credit was relatively easy to obtain in 2007 and early 2008, but since then, as financing has dried up, we can see from the graph below that the spread between financed and non financed apartments has tightened.

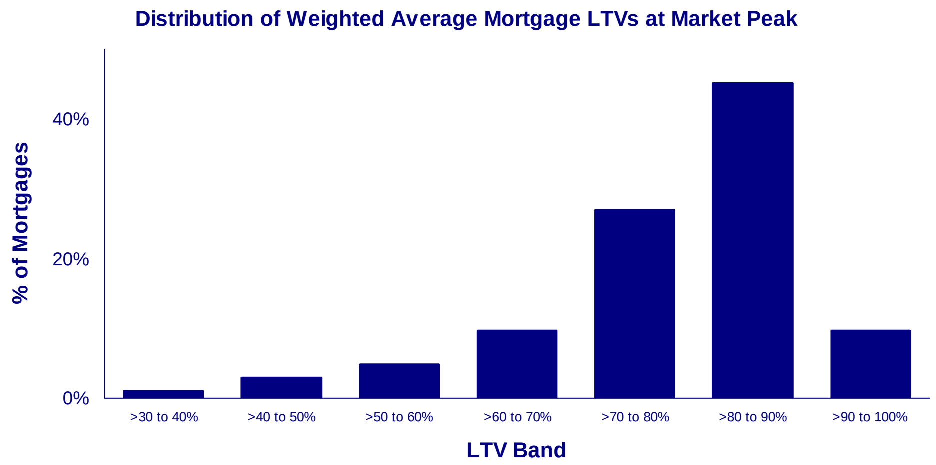


Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

Over 90% of mortgages completed at the peak of the market are likely to be in negative equity

It is evident that some of the mortgages completed at the peak of the market are under water; that is the mortgage is worth less than the collateral. It is widely reported that the market value of properties have fallen by 50% from the peak. If that is true, from the graph below we can deduce that more than 90% of mortgages issued at the peak are under water. It will be interesting to see how these mortgages are handled in the market. If the buyers are still in possession of their apartments, it is unlikely they would wish to sell, as that would trigger a payment to the mortgage bank for the differential between the outstanding financed amount and the proceeds of a sale. This cash outlay maybe difficult for many current apartment owners.

The above may be linked to anecdotal reports of banks increasing rates on loans citing higher "risks" or funding costs, or demanding borrowers to reduce the outstanding amounts of a loan.



Source: Analysis prepared by Isthmus Partners. Data provided by Reidin (Dubai Marina data only)

Many of our findings appear to confirm market expectations. Prices have fallen, liquidity has dropped, less financing is available and high end properties are suffering. However, what is interesting is the fact that the spread between different quartiles of property is tightening. The market seems to be focusing on value rather than differentiation; though some differentiation is no doubt taking place.

Most of the tightening of values between quartile one and quartile one is due to a large fall in quartile one properties

Spreads are now as tight as they have ever been in the last three years with an average gap of AED 400 per sq ft between the first and fourth quartiles. Much of the tightening has been precipitated by a falling top quartile. It does not seem like high end properties are reaching the bottom just yet, but as with all property there has to be a price at which value is recognised.

From this point, either the whole market will continue to fall or differentiation will start to set in

It is unlikely this tightening can continue for much longer. Therefore, either the prices of lower quartile properties will follow suit and start to fall more or we can expect to see differentiation increasingly taking precedence in the market leading to spreads widening again.

Nizar Al Aswed expects to see differentiation in the future stating "we wait to see investors shift focus from a 'pure price perspective to a 'quality and location perspective'. This will gradually happen and we will see a difference in client interest from building to building, within a community itself, based on quality of finishing and of the neighbourhood as a whole, rather than price. Of course this will only happen as liquidity returns to the market and as lower end properties become more affordable."

As a final note, it is still too early to tell what impact the Nakheel standstill has had on prices and financing on Dubai real estate. Market sentiment from the Dubai World workout will make itself known over the next six to 12 months, as the innovative framework under Decree 57 is put to the test.

3. Methodology

Our data is sourced from Reidin, who have exclusive access to transactional data from the Dubai Land Department. The first point to note is whether the Land Department has effectively captured all the transactions made in the analysed period. We believe it is likely that many transactions have not been captured, but that the number of transactions that have been captured is at least representative of the market.

We hope to provide some rigour and statistical analysis to support market commentary

Due to the volume of data and our analytical methods, we believe our insights have some statistical significance. However, sections of the dataset had to be disregarded because of the spurious nature of certain data points or inconsistencies we found. Though the data is improving in Dubai, there are still big gaps in data sets. We hope, through our study, to best use the data available to provide some rigour and statistical analysis to support assertions presently being made in the market.

Our analysis focuses on apartments sold in the Marina and Jumeirah Beach Residence between Jan 2007 and Dec 2009. This provides us with enough data points to carry out our analysis and gives us a view of how the market developed before, during and after the boom. Though the sub sector of the real estate market cannot be used to extrapolate inferences for the whole of Dubai, we are confident the sub sector can shed some light on how Dubai's real estate market as a whole is performing in the property downturn.

We have not differentiated between off plan and completed property sales. As most buildings in Dubai are relatively new, data would be too scarce to provide a reasonable analysis of how the market has developed. In addition, little price differentiation was seen in off plan and completed property prices during the boom periods, which is when most of the relevant pricing data was co-mingled.

Reidin's cleaning up of Dubai Land Department data has proved useful in developing this report

The Land Department uses a registration date as a time stamp for each transaction. However, this time stamp is very misleading as apartment sales could have been registered years after the actual transaction. Reidin have been cleaning up the data by retrospectively adding the actual transaction date to their database by looking at the original sale and purchase agreements. As a proxy, 22,058 transactions were registered in the analysis period, whilst 15,970 transactions have transaction dates in the analysis period, representing 72.4% of the registered transactions. 72.4% would represent the upper bound of usable transaction data, as some data lines do not have registration dates and some transactions which occurred in the analysis period could have registration dates outside the analysis period.

Once we had a robust data set, we looked to clean the data set further through our own analysis. We used both data that signified either a straight sale or an Islamic finance giving us 5,023 data lines. Other data lines were related to title deed issuances, gifts, modifications, etc.

We clustered buildings to increase the significance of our data sets

We clustered buildings in the Marina by different projects. For instance, the Promenade included apartments sold in Attessa, Aurora, Beauport, Delphine, Shemara and Paloma towers. With a steady set of buildings or building clusters we could see if the data sets provided enough information to be part of our analysis. At this stage we selected 16 buildings or building clusters to move forward with representing approximately 70 buildings in total. From these we removed two building (or clusters) as a building was only recently delivered, or the data set had too many outlier values, which could not be reconciled due to lack of liquidity.

Finally we removed lines of data within the remaining 14 building clusters, which contained spurious size of apartment information that would have skewed price per square foot calculations. This final step left 3,659 transactions to draw conclusions from.

From these data lines we constructed four quartiles representing the most expensive to the cheapest apartments by price per square foot. The makeup of the each quartile varied over time with some building clusters moving from one quartile to another.

Persistence of buildings within quartiles was good

We measured how persistent each building cluster was with regard to the quartile it fell into and graded persistence as good, average or poor. If at least two thirds of the time a building cluster fell into a certain quartile, or otherwise fell into a contiguous quartile, we regarded that as good persistence. If a cluster had a median average of observations in one quartile and other observations fell into contiguous quartiles, we regarded that as average persistence. If there was no pattern in which quartile a building cluster fell into, we regarded that as poor persistence.

Of the building clusters we looked at, 42.9% had good persistence, 50% had average persistence and only 7.1% demonstrated poor persistence.

When looking at trends on how different types of apartments faired over the analysed period, we could use some of the data lines previously stripped out from unused buildings, which boosted the number of transactions to analyse to 4,565.

Mortgage Data

We have considerably less mortgage data, but still a significant data set

For mortgage information there was considerably less data. First we had to reduce our analysis period to 11 quarters from 12, excluding the first quarter of 2007. This is because data for Q1, 2007 was very scarce in Reidin’s database.

For the 11 quarters we looked at there were 1,481 mortgage data lines. We reduced this dataset further by stripping out data lines where the mortgage transaction date was not near the sales transaction date. We define close transaction dates as the mortgage transaction being between one month before and three months after a sales transaction. This ensures the purchase price and mortgage amount correspond in what was a fast moving market. This left us with 676 data lines.

From these data lines we calculated LTVs for individual transactions. Some spurious LTVs were produced, which we removed resulting in a final data set of 622 data lines.

About Isthmus Partners

Isthmus Partners is a UAE based consultancy that offers consultancy advice on private equity, real estate assets and consumer finance. It was founded and is owned by three partners with a wealth of principal finance and structuring experience from 25+ years in investment banking and management consulting.

The partners have worked on restructuring a number of real estate deals in Dubai including The World, Sports City, The Marina, and The Waterfront. They have also worked on a number of new venture proposals based on product and materials manufacturing across the GCC.

Isthmus Partners' services include project health checks through financial due diligence, feasibility studies, process improvement for real estate firms, monitoring ongoing projects ensuring greater control through cash flow monitoring models, and advice on sourcing financing. Isthmus Partners can also be commissioned to provide bespoke research reports on real estate markets across the GCC.

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