

## A Review of Factors Affecting Real Estate Value for Property Developers in UAE

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### Abstract

The research study aims to examine factors that have influenced the performance of property developers in the construction and real estate sector of UAE and Middle East with a view to identifying the root causes faced by property developers while completing construction projects. The UAE real estate market has witnessed significant losses and is facing a severe downturn, especially after the 2008 international financial crisis. Though the market has slowly managed to recover, real estate development continues to be hindered by several factors. The current study reviews some of the key variables that impact real estate value for property developers in the UAE. It examines factors that influence the price of real estate in the UAE and other countries, such as Kenya, Nigeria, Malaysia, Saudi Arabia, and countries in Europe. The current review shows that property developers must account for the current supply of properties, the prevailing interest rates, crude oil price, investor purchasing power and liquidity, USD exchange rate fluctuations, and regulatory impositions by the Real Estate Regulatory Agency (RERA) when determining the current and prospective value of a property in the Middle East, esp, UAE. Other micro factors that impact the value of property include location, availability of amenities, and property features. The impact of the UAE stock market on property value remains unclear. Furthermore, this research also analyzed relationship in stock market and real estate boom and found positive relation in USA but no such relationship was seen in UAE markets.

**Keywords:** *Real estate, interest rates, real estate prices, property developers, crude oil price, investor liquidity, RERA, UAE*

### 1. Introduction

According to (Hatemi-J, Roca, & Al-Shaye, 2014), the UAE real estate market is among the most integrated markets in the world. In the past, the real estate market suffered huge losses at the time of the global financial crisis of 2008. (Al-Malkawi & Pillai, 2013) have reported that property prices and rents in the UAE have declined by 20% to 50% during the 2008 crisis, and construction projects worth an estimated US \$364 billion were either put on hold or canceled. The primary reasons for these losses were foreign investors retreating from the market, a decline in customer confidence, the supply and demand gap, and a decline in the expatriate population. The real estate market has also faced funding difficulties due to

stringent liquidity conditions after the global meltdown of 2008. Unlike Abu Dhabi whose economy is based on oil resources, Dubai's economy is based on tourism, hospitality, construction, real estate, banking, shipping, and logistics. In some UAE cities, especially Dubai, a trend was witnessed whereby domestic and international buyers came forward and invested in freehold real estate properties with the utmost intention of making profits for themselves and capitalizes from a vibrant economic environment. This relaxation of norms in other Middle East countries and giving them incentives can certainly go a long way in providing much-needed stimulus to the UAE real estate sector. To tide over the slowdown and boost sales, some of the leading real estate developers such as Nakheel, Deyaar, and Emaar have significantly cut property prices up to half of that prevailing before 2008 bubble in order to attract buyers. Similarly, they have offered flexible payment terms in order to retain earlier customers, refixed the installments considering the reduced cash flows. This has reduced the incidence of defaulting also. Furthermore, homebuyers have even offered facilities to swap apartments and shift to a smaller unit from larger one if its payment terms are suitable to the buyer.

Some of these challenges have persisted from 2014 to 2021. (Saba & Barrington, 2021) suggest that prices have been declining steadily in the residential real estate market in the UAE from 2014 to date. This decline is limited not only to residential properties available for sale but also to rental properties in the Middle East. Moreover, the economy of Dubai has drastically suffered during the COVID-19 pandemic with trade and tourism declining significantly during 2020.

Across the globe, economy has taken a big hit after 2008 crisis. In developing and resource poor countries, economies have yet not revived fully and business sentiments remain lull. As infrastructure and real estate sector form core sectors in economy and provide employment to a lot of people and also boost other sectors such as metals, cement, etc. it is imperative to make a thorough review of underlying factors behind real estate sector in UAE and suggest ways to bring the property developers out of the current logjam. This will definitely help economy, and house buyers can get affordable houses as per their repayment capacity, choice, and inventory availability with the property developers. The findings reveal a negative impact of the business cycle on the performance of real estate companies in the UAE. There is a significant fall in the liquidity, profitability, leverage and activity ratios after the financial crisis.

According to the house price index published by (Global Property Guide , 2021), house prices in Dubai have fluctuated significantly between 2010 and 2020. A summary is presented herewith:

As evident, the house price index for Dubai residential real estate recovered from 2010 to 2015 but has been declining steadily since (Figure 1).



**Figure 1: House Price Index for Dubai, 2010 – 2020 Source: (Global Property Guide , 2021)**

Therefore, it becomes important to analyze and determine the elements that continue to influence the value of real estate in the UAE property market. Doing so can help us develop appropriate strategies that guide the market’s recovery, enabling it to thrive again.

Accordingly, this paper investigates the factors that affect real estate value for property developers in the UAE and provides useful recommendations regarding the same. We have also reviewed the factors influencing real estate markets in other countries such as Malaysia, Kenya, Nigeria, and Saudi Arabia. These countries were selected because as per a preliminary analysis, the factors that influence their real estate markets appear similar to the variables observed in UAE. These variables include an oversupply of homes, government influence, reliance on crude oil prices, and interest rates. Moreover, these countries are among the fastest-growing economies in their respective regions, a trait they share with the UAE. Several other factors influencing the value of the real estate in UAE and other countries. They are also examined in the current study.

Since, real estate sector is entwined with other numerous policy variables such as banking system’s easy credit facilities, relaxed lending policy, people’s interest in the property under development, planning matters, and early approvals, these all factors need to be factored in to devise a comprehensive policy for revival of real estate sector in a big way in UAE. We have also evaluated the potential impact of the stock market on the UAE real estate market.

## **2. Materials and Methods**

We primarily relied on secondary data. Our approach in this regard focused on utilizing the experience and findings of previous research done on the UAE real estate market. We have conducted a systematic review of recent studies to identify factors that affect property value. Our search strategies combined terms about the UAE real estate market, property value, property pricing, and market forecasts. We have mainly focused on research papers, newspaper articles, and other forms of reliable literature with an authentic source. Given the limited literature available on the UAE real estate market, we have also expanded the scope of our research to identify key factors that impact property value in other countries in Asia and Europe. A comparative analysis allowed us to determine which of these factors apply to UAE.

### 3. Theory

With respect to the local market in UAE, the Dubai government introduced an initiative in 2002. It reversed a law, enabling the expatriate community in the city to buy and own residential and commercial property in freehold areas. (Abdelgalil & Bakheet, 2007) and (Renaud, 2012) have reported that property developers received an overwhelming response for the properties available and numerous local and international buyers made short-term and long-term investments in these properties to earn a profit after the 2002 real estate regulation in Dubai.

However, after the 2008 global meltdown, property developers are struggling hard to continue the construction of residential and commercial properties and ensure the timely completion and handing over possession to buyers. Stretched cash flow remains one of the key challenges that have hindered the performance of the developers. A majority of their customers default on their payment plan and cannot make monthly or quarterly payments due to a liquidity crunch.

Furthermore, as per the Real Estate & Regulatory Authority (RERA) laws enforced by the Dubai government, especially in 2006-2007 property developers are required to safeguard the interests of customers. These measures can play a significant role in determining property value.

According to few researchers (Buckley & Hanieh, 2014); (Renaud, 2012), there are several other problems that make it difficult for the property developers to complete construction on time. These issues include acute lack of property demand, oversupply of completed properties that are currently vacant and minimal buyer intent to purchase new properties. All of these challenges can ultimately go a long way in influencing the value of the real estate for property developers in the UAE market.

A review of international markets shows that property developers in Malaysia are confronted by issues of unaffordability and high construction costs associated with the construction sector. (Mohd Thas Thaker & Ariff, 2020) reported that the value of residential properties in Malaysia is largely uncontrollable due to several factors. These include high construction costs, the existing abundant supply of homes, payable taxes, the location of the property, and the growing urbanization. Government support also plays a key role in determining property

prices in the Malaysian real estate market. The Malaysian government offers low-cost residential properties supported by several incentives. Naturally, the easy availability and affordability of these properties can remarkably drive down price growth in the real estate market. (Wan Rodi, et al., 2013) focused on decision factors driving real estate pricing for property developers in Klang Valley, Malaysia. They revealed that developers rely on demographics and the neighborhood where the property is located to determine and fix a price. Secondary aspects that influence property value include the physical features of the property and the condition of the local economy.

(Alola, 2020) focused his research on the property market in Saudi Arabia. There appears to be a non-linear relationship between the price of crude oil and the real estate market. A rise in crude prices also impacts the real estate market in the Kingdom of Saudi Arabia (KSA).

Furthermore, (Cunha & Lobão, 2021) also evaluated real estate price determinants in Europe and identified other key factors that can influence the value of the real estate. As per the research findings, interest rates, gross domestic product, tourism, and housing starts were statistically significant variables in affecting real estate prices in the region. The results of the study also confirmed that real estate prices follow an autoregressive trend where the last period price change is the most significant determinant for real estate price changes in the current period.

(Karoki, 2013) researched various determinants of real estate prices in Kenya and revealed a significant negative relationship between the interest rate and residential real estate prices. There is also a positive correlation between real estate prices and the GDP and the level of the money supply. The study showed that interest rates have the most significant impact on real estate price levels followed by the country's GDP and money supply. (Abubakar Alkali, Sipan, & Najib Razali, 2018) in their study on the Nigerian real estate market identified inflation rate, GDP, interest rate, exchange, and crude oil price as the important determinants of real estate price. These factors generally make a significant impact on the Nigerian real estate market as well.

In addition, in the current study, an attempt has and (Al-Mohana & Hatemi, 2016) evaluated the relationship between the international stock market and the UAE real estate market. The findings revealed that any symmetric shocks to the international stock market do not induce a statistically significant reaction on the UAE real estate market. This study also examined the impact of any positive variations in the international stock market on the UAE real estate market. The researchers showed that this impact was statistically insignificant. The study showed no evidence of the international stock market influencing the UAE real estate market price index.

Liow and Yang (2005) employed Johansen's multivariate co-integration technique and found a long-run equilibrium relationship between common stock price, securitized real estate price, money supply, gross domestic product, inflation, short-term interest rate, and exchange in four Asian economies of Hong Kong, Japan, Malaysia, and Singapore. The existence of a linear long-term relationship suggests that both the stock market and real estate market are exposed to the same economic conditions and they closely interact with each other. The researchers have documented a fractional co-integration between stock markets and real estate prices in Singapore and Hong Kong. This finding highlights that common stock and securitized real estate can work as fairly substitutable assets in the long term in these economies.

(Okunev, Wilson, & Zurbruegg, 2000) examined the relationship between S&P 500 stock markets index and US real estate prices between 1972 and 1998. The linear test results

from this study demonstrated a unidirectional relationship between the US real estate market and the stock market. These results do not support the financial theory. The non-linear test also shows a strong unidirectional relationship between real estate and the stock market.

(Bahmani-Oskooee & Ghodsi, 2018) Showed an asymmetric causality between the housing market and the stock market in the USA. They examined the housing market crisis in the US and its impact on the US stock market and economy in 2008. Results showed a short-run symmetric causality from stock prices to property prices in 10 states and property prices to stock prices in 20 states of the USA. In 39 out of 41 states, decline in house prices triggered a fall in stock prices. The two markets were also found co-integrated in half of the states in the USA.

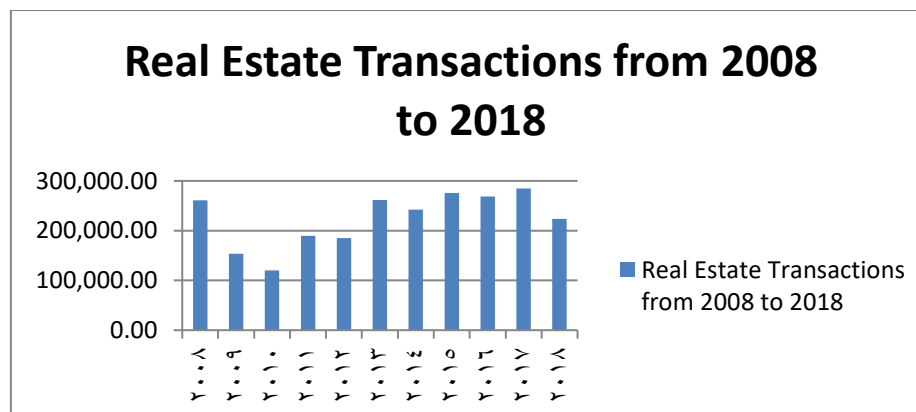
#### 4. Results

Based on the factors reviewed above, we can infer that the following variables play a prominent role in effective real estate values for property developers in the UAE.

##### *Cash flow and Liquidity*

The aftermath of the global financial crisis of 2008 had a significant impact on liquidity and cash flow, reducing the purchasing power of global investors that had previously been interested in the UAE real estate market. This resulted in a sharp decline in real estate transactions. With investors losing their savings and liquidity, property developers in Dubai were forced to sell properties at much lower prices.

The chart below demonstrates the real estate transaction values in Dubai from 2008 to 2018.

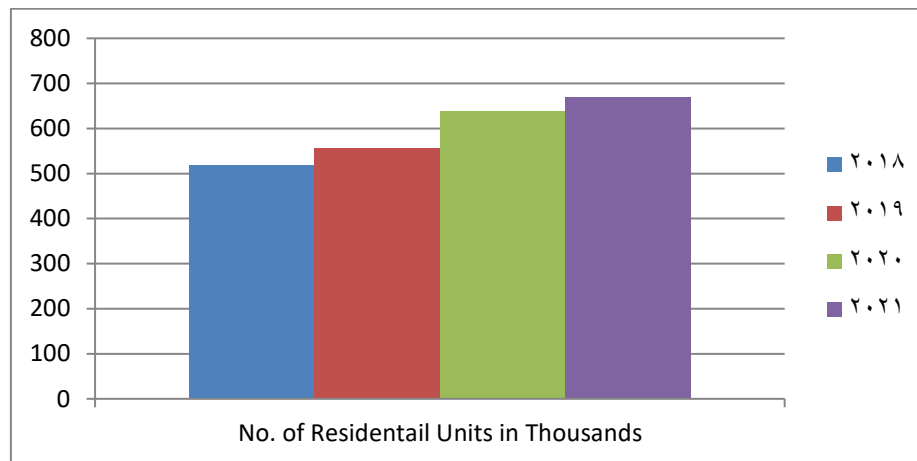


A report by (Al-Malkawi & Pillai, 2013) also suggests 9 real estate companies in the UAE witnessed a significant decline in profitability, liquidity, leverage, and activity ratios following the financial crisis.

According to (Falade-Obalade & Dubey, 2014) the value of the real estate is thus highly reliant on investor purchasing power and cash flow. As per a report by (KPMG Lower Gulf Limited, 2016) examining the Dubai real estate market, in 2016, several UAE banks were also reluctant to lend money to investors in 2016, thereby impacting the ability of buyers to invest in real estate.

### Supply of Properties

Oversupply of residential real estate properties continues to play a dominant role in determining the value of real estate in the UAE. The number of properties available automatically reduces real estate prices and affects profit margins for property developers. According to (Maceda, 2021), the oversupply of residential units reached nearly 1 million in 2020. The combined residential stock of Abu Dhabi and Abu Dhabi was noted to be 860,000 residential units in the last quarter of 2020. It was reported that an additional 68,000 units were expected to be delivered. The oversupply has caused property prices to drop by 8% in Dubai and 4% in Abu Dhabi in Q4 of 2020, demonstrating the clear impact of this variable on property value.



### Crude Oil Price

Crude oil price appears to influence price levels in the real estate market for oil-rich countries since it represents their economic viability. The UAE is no exception to this.

Dubai, Abu Dhabi, and Sharjah, in particular, recorded a significant drop in property values with a 54% decline in oil prices in 2014. Falling oil prices have the ability to impact the purchasing power of buyers in local real estate, thereby driving real estate prices down.

As per a report by (Kennedy, 2016), house prices were expected to reduce by 10% in 2015 as the price of oil dipped. Researchers have also established that declining oil prices hurt real estate in Dubai.

Not to forget, the hydrocarbon sector makes up the largest share of the UAE's economy. UAE, along with other Arab Middle East countries, is largely dependent on oil revenues to meet the national budget. This correlation between hydrocarbon profits and the nation's spending also puts pressure on the job creation rate.

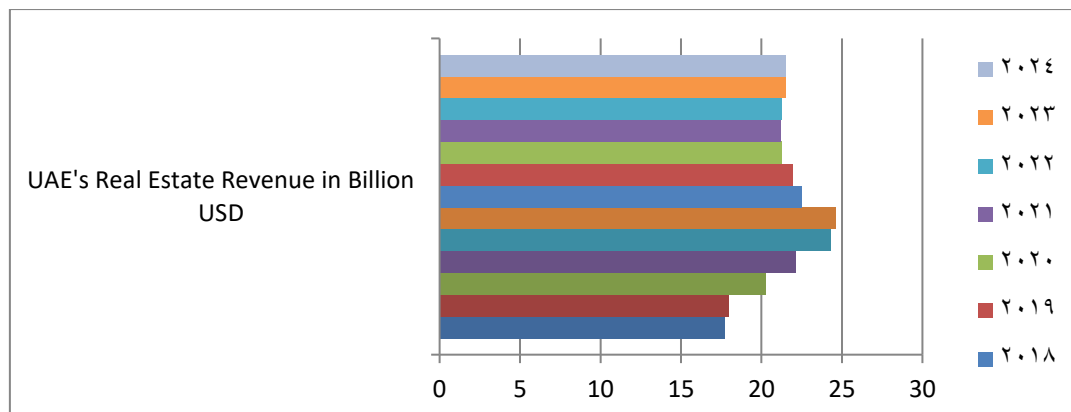
The decline in oil prices, thereby, hurts the countries' financial position. Lower oil prices also influence the security and foreign policies of these countries (Al-Marri, 2017).

To counter these impacts, the UAE has attempted to diversify its economy and reduce its reliance on oil. (Ahmed, Maheshwari, & Mirani, 2020) also recommend that property

developers work to predict customer behavior and segment customers to determine which are worth targeting. Focusing on sustainable growth and careful recovery can contribute to the success of the real estate sector here.

Meanwhile, a global economic recovery, community improvements, and rising oil prices provide hope for the UAE property market. Property Monitor data from Q4 2020 indicates a rise in oil prices and improvement across all sectors of the real estate market. Average residential property prices in Dubai increased 1.2% quarter by quarter, while villa and townhouse rents increased 3.4% from the previous quarter. Similarly, the average property sale prices in Abu Dhabi increased 1% on a quarterly basis and the villa and townhouse prices rose 2% quarter by quarter (Maxwell, 2020).

As oil prices rise and more UAE communities display stabilization in capital values, developments are underway for the real estate sector and the broader economy. It is expected that the revenue of the real estate activities in the UAE will reach approximately 21.5 billion USD by 2024.



### US Dollar Value

Research suggests a link between real estate value in the UAE and falling US dollar value. As the US dollar appreciates against other global currencies, the cost of real estate in the UAE also increases and vice versa. According to (Nair, 2019); (Warrier, 2020), dollar prices falling 13% from its March highs and around 7% for 2020 led to an increase in property sales in the UAE. The total value of Dubai's residential real estate transactions in Q2 2020 was approximately \$2.7bn, despite the impact of the pandemic and the value of US dollar going down. The volume of transactions was significantly up in May and June 2020.

The report suggested the price of real estate development projects also reduced by 14.8% and 11.2%, with investors opting for euros or pound sterling instead. This was because the investors buying in pounds could save over \$50,364.8 when purchasing a one-bedroom luxury apartment.

A 2019 report also suggested that weakening US dollar value also results in positive outcomes for the UAE real estate market as it invites investors from non-dollar-denominated markets, such as China, Russia, India, and the UK.



### ***Interest Rates***

(Saba & Barrington, 2021) suggests an inversely proportional relationship between interest rates and demand for residential real estate. Lower interest rates allow buyers to purchase property at a much lower cost. However, if we observe the price levels for real estate in the Emirates, it appears that property prices are still falling. This is primarily due to the COVID-19 pandemic, as well. This is supported by (Rocha, 2019) who demonstrates Dubai property prices remaining relatively stable despite a declining interest rate. It is also suggested that the actual impact from interest rate cuts takes one or two years to emerge fully. This is primarily because a majority of buyers and investors in the UAE opt for fixed-term rates.

### ***Regulatory Concerns***

As mentioned earlier, regulations put forth by RERA also influence property value for developers in the UAE. According to (Peacock, 2019), RERA requires developers to protect buyer interests, which can influence a developer's profit margins. New laws also allow RERA to study and approve real estate development projects. Moreover, it supervises their execution and issues any necessary decisions and recommendations for development.

These factors can greatly increase construction costs for property developers, requiring them to focus more on due diligence, quality checks, and labor standards.

As per (Sajan, 2020) RERA has also launched a Service Charge Index, creating benchmarks for the service charge rate for each property type. Previously, property developers relied on service charges as a source of additional revenue. Enforcing the service charge index could put constraints on this revenue source. Conversely, reducing service charges could make property investments more lucrative for investors and increase the number of property sales. This could benefit property developers in the long run.

### ***Stock Market***

While there appears to be a relationship between stock markets and real estate markets in countries like the United States, Hong Kong, and Singapore, it is difficult to determine whether this applies to the UAE stock market and real estate market, as well. As per the limited research available on this subject, the world stock market does not have a statistically significant impact on the UAE real estate market. Any positive or negative shocks to the world stock market do not influence the UAE property price index.

As per (Mohd, 2021), the Dubai stock market recently benefited from gains in real estate shares. An increase in property sales of developers such as Emaar Properties appears to increase the value of the company's share prices, which can in turn lead to gains in the UAE stock market. Whether this impact is consistent and relates to other property developers as well in the UAE remains undecided.

### ***Other Factors***

Besides the aforementioned variables, there are other factors that can also influence property value for developers in the UAE. These include the location of the property, the

availability of amenities, and property features. Such factors have a universal impact on real estate prices in all parts of the world and play a determining role in the UAE real estate market, as well.

To elaborate, properties that are located in areas with easy access to amenities and in close vicinity of attractions such as malls, restaurants, parks, good schools etc. will be priced higher. Moreover, the structural integrity, architecture, design, and interiors of residential properties can also influence price levels.

## 5. Discussion

The UAE real estate market is influenced by a variety of macroeconomic factors including investor cash flow, liquidity, regulatory impositions by RERA, crude oil prices, US dollar value, interest rates, and oversupply of real estate property. It may also be potentially impacted by the stock market. Property developers must account for these variables while considering property value. A decline in the case of cash flow and liquidity can hurt property value, forcing developers to sell real estate at a lower price.

In this backdrop, a better understanding of all attendant issues is relevant for the current analysis. The authorities and developers should also incorporate companies in Abu Dhabi also, and involve the local institutional framework and planning system, analyzing the oligarchic network and key actors in urban development. Saadiyat Island mega-development project, in Abu Dhabi includes a cultural district, hotel, retail and residential areas, with spectacular architecture. Such multi-disciplinary approach can definitely give an stimulus to the property developers in UAE.

Moreover, policies relating to planning and regulation of real estate sector in UAE needs a thorough ramp up. Policy planners, governments, buyers' associations, other stakeholders and large housing finance companies should join hands together with property developers and a comprehensive policy need to be formulated.

India has done good in this example where affordable housing scheme has proven a grand success. Such affordable housing schemes may be launched aggressively in UAE as well to cater to the rising property demand, meet the increasing pressure on urban cities, provide needed cash flow to the property developers so that they can complete the stalled delayed projects on a war footing.

Furthermore, ample attractive options should be provided to buyers especially during project inception stage so that project cost is designed in away so that it is sold timely, there are no defaults, EMIs offered to banks are not huge and there is no performing asset.

In this way, it is suggested that all the existing issues plaguing the real estate sector must be relooked and appropriate customized solutions in a time bound manner must be provided so that projects are timely complete, cash flow is restored, liquidity crunch is resolved, and buyers do not have longer to get possession of their properties on time, and banks also can reduce their NPAs and grant more liberally to the real estate sector, Property developers must also consider the costs of getting approvals from RERA and any decisions

and recommendations that can influence construction costs. As these costs increase, property developers may increase price levels. However, given the oversupply of properties and stiff competition in the market, these increases may prove detrimental to the sale of the property at the right time or right price.

A review of the recovery of the US housing market shows that a number of post-crash reforms were introduced that enabled the US market to recover from the 2008 crash. These reforms include greater transparency in providing mortgages, removing several complex and non-transparent loan products that flooded the market before the crash, improved documentation, and better monitoring of credit scores. These reforms brought the desired effect in the revival of the property market. Home prices had fallen by 33% during the recession. However, in 2018, they had recovered by over 50%. The crash also motivated real estate agents to adopt more responsible practices, so that they no longer encourage buyers to buy the most expensive house.

Falling US dollar value can impact the UAE real estate market positively as it may invite international buyers residing in non-dollar-denominated economies to invest in the UAE. Conversely, a decline in crude oil prices can discourage foreign and local investment in the UAE real estate market. This can go on adversely impacting property developers who must account for the reduced number of buyers and investors when determining property value. However, with the UAE diversifying its economy, the impact of oil prices on real estate may become less pronounced going forward.

Finally, we observe that reduced interest rates have not done much to increase property price levels in the UAE. They do not appear to have a major impact on the prices of residential units like villas and apartments as villas and apartments are expensively priced already. However, several real estate sector experts have stated that these effects may take a year or two to bring desired results. Therefore, a decline in the housing interest rate can have positive implications for increasing property value for developers in the long run. This is because property developers' lending and borrowing costs are reduced and they can raise loans at reduced interest rates. This

saving on account of the low cost of capital and easy availability of loans and less interest payable to banks can be passed on to the property buyers who can get properties at reduced prices. It can also help counter the problem of an abundant supply of sellable properties in the UAE real estate market and significantly boost development to meet rising demand.

With respect to the stock market, it remains unclear whether the UAE real estate market can affect the value of the real estate for property developers. As per research, the UAE real estate market is not affected by the world stock market. This is in sharp contrast to USA markets where real estate prices and stock market have shown some correlation. However, the UAE stock market may still play a crucial role in determining the value of properties to some extent. This impact may be limited to the rise and fall of share prices of the public property development companies that are listed on the UAE stock markets and in this manner can

influence the price levels of their properties of listed real estate companies, especially if the market sentiments are positive.

### Conclusions and Recommendations

The residential real estate market in the UAE witnessed a major setback after the international financial crisis of 2008. Prior to the crisis, the real estate market had proven to be attractive to foreign investors, especially foreign institutional investors (FIIs). However, with contractions in investor liquidity and poor cash flow management, property developers have struggled against a myriad of factors to boost property value in the UAE after the 2008 global meltdown.

In the current study, we have reviewed some of the major price determinants that influence property value in the UAE real estate market. Our findings suggest that property developers must acknowledge the current supply of properties, interest rates, crude oil prices, investor liquidity and purchasing power, and any regulatory guidelines by the RERA that drive up construction costs. The developers must also consider the location of the property, its features, and the availability of amenities when determining and fixing property prices.

Accounting for these factors can allow real estate developers to price properties more strategically to ensure that properties appeal to buyers while also earning a profit. As per researchers in Malaysia, the use of different construction styles, provision of incentives, using local vs. imported materials, and building partnerships with private and government institutions to launch affordable housing projects can help strengthen the real estate market and counter the prevailing challenges and revive the real estate sector.

We suggest formulating and implementing stricter energy policies to address real estate challenges in Saudi Arabia. This approach could benefit the UAE real estate market as well.

Property developers in the UAE can also benefit by conducting geographical analysis of each area to identify different price determinants. This information can be used to fix real estate prices more effectively and reduce inventory holdings that have been completed. This study also suggests focusing on market momentum to estimate real estate returns.

In summary, it is recommended that property developers and investors should closely monitor macroeconomic factors to make more informed decisions while predicting and fixing real estate prices. Moreover, governments also should proactively monitor interest rate levels closely to reduce the impact of this variable on real estate prices. Finally, governments should be more supportive in extending the required boost to the worst affected sector over the past decade. Comprehensive data from various agencies and stakeholders can be useful to property developers, as well and help strengthen the real estate market.

Further research is required to determine the quantitative impact of different variables on the value of the real estate in the UAE. Lenders and policymakers in UAE have also emphasized the need for better credit and underwriting standards.

Lenders now focus on offering less-risky loan products. Instead of pushing loan products with a high-interest rate, lenders provide sustainable products that are affordable for the buyer. New regulations have also been introduced between the appraisal process and the underwriting process. In addition, private mortgage lending has become limited.

In comparison, the UAE real estate continues to struggle with problems of oversupply. While RERA is focusing on improving the regulatory framework for both developers and buyers, it remains to be seen how this can impact the value of the real estate. Lending institutions, property developers, homeowners, and investors must work in tandem with each other to realize mutual benefits and contribute to the market's recovery.

Overall, this study will be extremely helpful to have a first-hand overview of the real estate sector in UAE and will help better planning, implementation and early revival of the UAE real estate sector.

### References:

- Abdelgalil, E., & Bakheet, B. A. (2007). Dubai Real Estate Sector. *Data Management and Business Research Department*.
- Abubakar Alkali, M., Sipan, I., & Najib Razali, M. (2018). An Overview of Macro-Economic Determinants of Real Estate Price in Nigeria. *International Journal of Engineering & Technology* , 7(2), 484-488.
- Ahmed, F., Maheshwari, S., & Mirani, S. (2020). Dubai House Prices and Macroeconomic Fluctuations: A Time Series Analysis, 13, 61-73.
- Al-Malkawi, H. A., & Pillai, R. (2013). The impact of financial crisis on UAE real estate and construction Sector: . *Analysis and implications, Humanomics*,, 29 (2):115–135.
- Al-Mohana, S., & Hatemi, J. A. (2016). The impact of recent crisis on the real estate market in the UAE: evidence from asymmetric methods. *International Economics*, 69(4),389–428.
- Alola, A. (2020). The dynamics of crude oil price and the real estate market in Saudi Arabia: A Markov- switching approach. *Journal of Public Affairs* , 21(2),e2178.
- Bahmani-Oskooee, M., & Ghodsi, S. H. (2018). Asymmetric causality between the U.S. housing market and its stock Market: Evidence from state level data. *The Journal of Economic Asymmetries* , 18(C),1-1.
- Buckley, M., & Hanieh, A. (2014). Diversification by urbanization: Tracing the property-finance nexus in Dubai and the Gulf. *International Journal of Urban and Regional Research* , 38(1), 155-175.
- Cunha, A., & Lobão, J. (2021). The determinants of real estate prices in a European context: a four-level analysis. *Journal of European Real Estate Research*.
- Falade-Obalade, T. A., & Dubey, S. (2014). Analysis of the Real Estate Market in Dubai - A Macro Economic Perspective. *International Journal of Academic Research in Economics and Management Sciences* , 3(2), 160-166.
- Global Property Guide . (2021). Emirian home PRICES, graphed as Time-Series”,. 28 May.

- Hatemi-J, A., Roca, E., & Al-Shaye, A. (2014). How integrated are real estate markets with the world market? *Evidence from case-wise bootstrap analysis, Economic Modeling* , 37, 137–142.
- Karoki, R. W. (2013). Determinants of residential real estate prices in Kenya. *University of Nairobi Research Archive*.
- Kennedy, C. (2016). The oil crash is crushing the UAE's real estate market. . *Business Insider*.
- KPMG Lower Gulf Limited. (2016). Building Confidence: . *A Review of Dubai's Residential Real Estate Market*.
- Maceda, C. (2021). UAE property market to decline further as oversupply hits close to 1mln units. *ZAWYA MENA Edition*.
- Mohd Thas Thaker, H., & Ariff, M. (2020). . Supply-side drivers of residential price in Malaysia: a qualitative analysis from developers' perspectives. *Property Management*, 38(4), 543–564.
- Mohd, S. (2021). MIDEAST stocks Most Gulf MARKETS Fall; Dubai rises on real estate strength. *Reuters*.
- Nair, M. (2019). Dubai realty hopes weak dollar breathes new life into market. *Property – Gulf News*.
- Okunev, J., Wilson, P., & Zurbruegg, R. (2000). (2000). The Causal Relationship Between Real Estate and Stock Markets. *The Journal of Real Estate Finance and Economics* , 21(3), 251–261.
- Peacock, J. (2019). New Dubai RERA Law Issued. *Real Estate and Construction - United Arab Emirates*.
- Renaud, B. (2012). Real estate bubble and financial crisis in Dubai: Dynamics and policy responses. *Journal of Real Estate Literature* , 20(1), 51-77.
- Rocha, J. (2019). Interest rates, lending and the real estate market. Cavendish. . *Maxwell*.
- Saba, Y., & Barrington, L. (2021). Analysis: Buyers return but Dubai real estate faces long road to recovery. Reuter. *Reuter*.
- Sajan, R. (2020). Dubai must get Developers, property companies to follow rules in setting service charges.
- Wan Rodi, W. N., Sedaralit, Z., Mahamood, N. M., Rasam, A. R., Abdullah, M. I., & Idris, N. H. (2013). Residential real estate pricing decision factors among developers IN Klang Valley Malaysia 2013 IEEE. *Business Engineering and Industrial Applications Colloquium (BEIAC)* , 733-738.
- Warrier, R. (2020). “Weaker dollar pushes Dubai property sales to surge amid Covid-19”, . *Construction Week, 20 Augus*.