Economic Dimensions of Gated Communities in Egypt

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Abstract

The Gated communities represent a rather new development product on the housing market in Egypt. This type of development is spreading fast since the nineties of the last century. A large number of research has been conducted on the topic of gated communities in a number of different countries. However, in Egypt, this topic needs to be more discussed and researched. Therefore the topic of gated communities in Egypt will be further explored and analyzed, focusing on the economic dimensions and the impact of such developments on the Egyptian real estate market. This study specifically focuses on the city of El Sheikh Zayed where most of the gated communities are located. The objective of this research is to identify the main factors that can influence the housing prices in Egypt in order to know in what extent the gated communities affect positively or negatively the housing price especially for those units located inside. In this sense, a comparative study is applied between the prices of gated and non-gated housing units using simple regression analysis as well as Hedonic Pricing Model, in order to understand the influence of gated communities on the value of the housing units. This study analyzes the sales prices of middle class housing units in El Sheikh Zayed City.

Keywords: Gated Communities - El Sheikh Zayed City - Hedonic Pricing Model-Economic Analysis - Real Estate Valuation

1 Background

Gated communities are defined as groups of residential units that are separated from the outer environment by gates or walls. The gated communities represent a rather new development product on the real estate market in Egypt. Therefore, this paper will discuss and analyze the economic impacts of gated communities and their influence on the real estate market in Egypt.

Gating a housing estate is a way for developers to market a property as more exclusive. For developers, they can be a marketing angle, another way to target specific submarkets. Developers build gated communities to meet niche markets: demand for security-by-design, for prestige living and for life-style of community living. For some property owners, gating is a mechanism to protect property values from being affected by changes in the city. For many urban planners, gated communities represent a physical withdrawal from civic, urban life. For residents, gated communities are lifestyles choices¹.

A large number of research has been conducted on the topic of gated communities focusing on the economic dimension. Most of this research confirms that the walls and gates that are surrounding a group of housing units have a positive effect on the

¹ T. Baycan Levent and A. Gulumser, 2004.

prices of those units. One of these studies is" Gated Communities in Prague-general overview and econometric analysis". This study used a regression model to investigate the differences between the housing prices in gated and non-gated communities in Prague. The hypothesis that gated communities add value is confirmed in the study. The study showed that the value of a gated community unit is higher due to higher security provision². "Gated Communities and Residential Property Value" is another study that is conducted in the USA. This study analyzed the sales prices of single-family homes located in six different neighborhoods in a medium-size metropolitan area. The study used a traditional hedonic pricing model to study 284 sales that occurred during the period 1996-1998, and it included an additional variable to indicate whether or not a home is located in a gated community in this model. The results indicated that the benefits provided by the gate add value to a given property³. Another research discussed the issue of gated communities in Los Anglos and in what extent this type of development produces changes in housing market patterns and favor property values. This study concluded that larger and wealthier gated communities are successful in shielding their property values. They also generate enough revenue to pay for a cost of private governance. On the other hand, a majority of average middle class gated enclaves do not succeed in creating a significant price premium, and/or did not maintain significant growth of price during the last decade. Such gated neighborhoods are at risk of a market failure in the private provision of urban infrastructure, leading to a potential decay. This study also showed the importance of the sustainability of these gated communities by supplying government infrastructure and do not rely only on private infrastructure, which leads to an increase in the cost of maintenance and a deterioration of the area over time⁴.

Likely in Egypt, by comparing the sales prices of gated and non-gated housing units in El Sheikh Zayed City during the period 1998 to 2013, it was found that the prices of gated housing units were higher than the non-gated ones within the same city (figure 1). This can explain that gated communities provide excellence factors such as security, landscape, private swimming pools, social clubs, privacy, as well as other factors that make residents willing to pay for them. In order to verify this hypothesis it was necessary to study the relationship between housing unit price and its location using a scientific methodology "Hedonic Pricing Model" which will be addressed later.

² Kolarikova, 2010.

³ Bible and Hsieh, 2001

⁴ Goix, 2005





2 Real Estate Appraisal Factors

Real estate appraisal is the process of valuing real estate properties⁵. All properties differ from each other according to certain factors: the physical characteristics of the property, the location, the context and finally the real estate market constrains⁶. These factors are identified through a set of database used in determining the Housing Price Index and some studies in this field⁷. The following are the factors influencing the housing unit appraisal:

2.1 Housing Units Physical Characteristics

Housing units physical characteristics such as area, number of rooms, number of bathroom/toilets, finishing, availability of infrastructure and views have a considerable influence on housing unit value. Table (1) shows a list of these characteristics and their units of measurements.

	to i mysical characteristics (the res	carchers
Characteristics	Units of Measurements	References
Sale Price	Egyptian Pound	Real estate appraiser
Meter Square Price	Egyptian Pound	Real estate appraiser
Sale Transaction Date	Year	Real estate appraiser
Unit Area	Meter Square	Field study
Area	Number of Closed Room	Field study
Area	Number of Bath/Toilets	Field study
Finishing	Half/Full Finishing	Real estate appraiser
Finishing Condition	Good/Fair/Bad	Field study
Infrastructures (natural gas availability)	Yes/No	Field study
Views	Yes/No	Field study

Table (1) Housing Units Physical Characteristics (the researchers)

2.2 Residential Buildings Physical Characteristics

The residential building and its physical characteristics have an obvious effect on the values of the housing units. These characteristics include the number of housing

⁵ Eldred, 2009

⁶ Ling and Archer, 2010

⁷ Gomaa, 2006.

units per floor, number of floors, availability of lifts, the finishing of the main entrance and stairs, date of establishment, design quality, elevation quality, maintenance, availability of parking areas, and the owner of the building. Table (2) shows a list of these characteristics and their units of measurements.

Characteristics	Units of Measurements	References	
Age	Year	Field study	
Number of units per floor	Number	Field study	
Number of flats	Number	Field study	
Lifts	Yes/No	Field study	
Floor	Number (1-2-3-4-5)	Field study	
Finishing of entrance and stairs	Good/fair/bad	Field study	
Finishing of elevations	Good/fair/bad	Field study	
Owner	Government/Developer/Private	Field study	
Maintenance	Yes/No	Field study	
parking	Yes/No	Field study	

2.3 Neighborhood Physical Characteristics

The value of the housing unit is usually affected by its location and the physical characteristics of the surrounding neighborhood. These characteristics include the location inside or outside gated communities, the socio-economic level, calmness, parking, services, infrastructure, transportations, density, project size, the average of housing units price, the average of housing units area, the age of the project, occupancy rate, the future of the project during the next five years, quality of the environment, liveability, quality of urban design, quality of street network, percentage of green spaces, entertainments and the developer. Table (3) shows a list of these characteristics and their units of measurements.

Characteristics	Units of Measurements	References
The average of housing units price	Egyptian Pound	Real estate appraiser
Location	Gated/Non-gated	Field study
Maintenance	Regular/Non-regular	Field study
Socio-economic level	High/Medium/Low	Field study
Calmness	Calm/Noisy	Field study
Parking	Yes/No	Field study
Transportation	Yes/No	Field study
Density	Floor area ratio	Satellite Maps
Project size	Hectares	Satellite Maps
The average of housing units area	Meter square	Real estate appraiser
Project age	Year	Real estate appraiser
Occupancy rate	Percentage	Field study
Liveability	High/Fair/Low	Field study
Green spaces percentage	Percentage	Satellite Maps
Accessibility to services and transportations	Percentage	Satellite Maps
Street network quality	Good/Fair/Bad	Field study
Urban spaces quality	Good/Fair/Bad	Field study
Services	Yes/no	Field study
Developer	Government/Developer/	Field study
	Private	
Context	High/Medium/Low	Field study
Environment quality	Considered/ Not considered	Field study
The future of the project during the next 5 years	Yes/No	Real estate appraiser
(Existence of future stages)		

 Table (3) Neighborhood Physical Characteristics (the researchers)

2.4 Real Estate Market Conditions

The general conditions of the real estate market are factors that influence the housing unit value. For example, the unbalance between the supply and the demand can affect the housing unit value as well as other factors such as the national and international economic stability, the unemployment rate, the income level, laws, legislations, taxes, construction material prices, labor force and the percentage of vacant units⁸. Table (4) shows a list of these factors and their units of measurements.

Factors of influence				Units of Measurements	References	
Demand and	l supply			Surplus in Supply/ Surplus in	Real estate appraiser	
				Demand		
Laws, legisla	tion and nati	onal politics		Incentivizing/Hindering	Real estate appraiser	
Economic	stability	nationally	and	Growth/Stability/Depression	Real estate appraiser	
internationa	lly					
Construction material prices				Higher than	Real estate appraiser	
			average/Stable/Lower than			
				average		

3 Hedonic Pricing Analysis

The hedonic price method is commonly applied in real estate economics in order to determine the added value of housing characteristics on parcel and housing sales prices. Application of the hedonic price method yields estimates of the implicit prices of the quality of environmental functions⁹. For example, Song and Knaap (2004) use the hedonic pricing model for measuring the effects of mixed land uses on housing values, while Chin and Foong (2006) consider the influence of school accessibility on housing values. This research aims to trace to what extent gates and walls favor property values using hedonic pricing model.

3.1 Site Selection (Case Studies)

The study area, El Sheikh Zayed City, is founded in 1995. It is one of Cairo suburbs and is considered as Cairo's west extension. Its area is 10386.65 feddans with 29,422 inhabitances according to the census of 2006. The study area contains nearly 50 gated communities¹⁰ as well as number of non-gated housing areas (figure 2). The study selects 60 transactions for middle class apartments that occurred during the year 2013 and that include 21 apartments inside gated communities and 39 non-gated apartments. There was a difficulty in collecting data, so this study will use a merely set of basic data for the purpose of the research as shown later in (appendix 1).

⁸ Stringham, Miller, and Clark, 2010

⁹ Deakin, Mitchell and others, 2007

¹⁰ Housing and Building National Research Center (HBRC), 2013



Figure (2) El Sheikh Zayed City (Metwally 2014)



3.2 Variables Selection

In order to fulfill the research objective, the housing unit sale price has been identified as the dependent variable while the housing unit location (gated or nongated) has been identified as an independent variable. To control the influence on sale price of other factors, the study includes five additional variables. A variety of physical housing attributes are included. These attributes include unit area, number of closed rooms, number of bathrooms and toilets, finishing level, floor number, and a dummy variable, which takes a value of 1 if the community is gated and 0 otherwise (Table 5). Our data come from four primary sources: developers internet sites, field study, real estate developers and real estate brokers.

The variables chosen on the model are based on their accuracy and easiness. Some variables have been omitted as they do not differ between case studies, such as the views where most of case studies have a view. In this study all the sales transactions occurred within the same area and within the same period, so the research has ignored the variables concerning the real estate market conditions, as they are the same and thus do not have any influence on the sale price in the present study.

Tab	
Variable	Definition
Dependent Variable	
Housing unit price	Sale price (Egyptian Pound)
Independent Variable	
1) Housing Units and Residen	tial building Physical Characteristics
Unit area	Housing unit area (meter square)
Number of closed rooms	Number of closed rooms in the housing unit
Number of baths and toilets	Number of bathrooms and toilets in the housing unit
Finishing	Dummy variable which takes on a value of 1 if the finishing is
	completed and 0 otherwise
Number of floor	Number of floor where the unit is available (from 0 for the ground
	floor to 5 for the fifth floor)
2) Neighborhood Physical Cha	aracteristics
Location	Dummy variable which takes on a value of 1 if the community is gated
	and 0 otherwise

Table (5) Variables Definition (the researchers)

3.3 Simple Regression Analysis

First, the study uses the simple regression analysis in order to find the correlation between the dependent variable, which is housing unit price, (Y) and each one of the independent variables (X) separately. The two variables are related by an expression of the form $y = bx + \epsilon$ (figure 3); where b is the x coefficient, the slope estimate for different independent variables. From these linear regressions shown in figure τ it can be deduced that the unit area, number of rooms, number of bathrooms, and the location in gated communities prove a positive correlation with the housing unit price. On the other hand, finishing level and the number of floor where the unit exists illustrate a negative correlation with the housing unit price.



In simple linear regression one predictor variable is considered at a time. When more than one predictor variable are included, a multiple linear regression model might be used. This model is just an extension of the simple model. The coefficient values for each predictor represent the estimated slope. As with simple linear regression, there are one Y or response variable (also called the dependent variable), but with multiple linear regression there are more than one X variable, also called explanatory,

independent, or predictor variables. For this reason the hedonic model is used in order to predict the combined influence of the selected variables on the housing unit's price.

3.4 Hedonic Price Model

To explore the effect of gated communities on property values the study uses a standard hedonic price model including all variables mentioned above. The study specifies the dependent variable as the unit sale price. Then the equation will be as follow:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k \qquad (equation 1)$$

where as

- Y Dependent variable (the sale price of housing unit)
- α Constant
- $\beta_k \quad \begin{array}{l} \text{Coefficients which refers to the true average change in the sale} \\ \text{price when the independent variable X_k changes by 1 unit and the} \\ \text{values of all the other variables remain constant} \end{array}$

Summary statistics for the dependent variable and all independent variables of the data set are provided in table (6). This table shows that the average sales prices of the included housing units are 207,842 LE. The average area of the units is 92 m2 with an average of 2 rooms and 1 bathroom per unit.

Table (b) Summary Statistics for All Variables (the researchers).								
Variable	Units	Units Minimum		Mean	Standard			
					deviation			
Dependent Variable								
Housing unit price	Egyptian Pound	68,000	820,000	207,842	16,062			
Independent Variable								
1) Property Physical Structural Ch	naracteristics							
Unit area	Meter square	53	215	92	37.076			
Number of closed rooms	Number	2	4	2	0.527			
Number of baths and toilets	Number	1	3	1	0.613			
Finishing	Binary	0	1	1	0.504			
Number of floor	Number of floor	0	5	3	1.533			
2) Urban Design Characteristics								
Location	Binary	0	1	0	0.481			

 Table (6) Summary Statistics for All Variables (the researchers).

3.5 The Results of the Multiple Regression Analysis

Multiple Regression results were developed as shown in table 7 based on the collected data shown in appendix (1).

Table (7) Results of the Multiple Regression Analysis (the researchers)

Regression Statistics					
Multiple R	0.93193177				
R Square Adjusted R	0.868496824				
Square	0.853609672				
Standard Error	61454.38609				
Observations	60				

ANOVA

	df	SS	MS	F	Significance F
Regression	6	1.32195E+12	2.20324E+11	58.33868169	1.34053E-21
Residual	53	2.00162E+11	3776641570		
Total	59	1.52211E+12			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-52427.92422	44402.07638	-1.180753886	0.242972389	-141487.209	36631.36059	-141487.209	36631.36059
Unit area	3347.389793	562.3275555	5.952740107	2.15269E-07	2219.503576	4475.276009	2219.503576	4475.276009
Num of rooms	-55027.41578	25203.48644	-2.183325545	0.033461003	-105579.2066	-4475.624958	-105579.2066	-4475.624958
Num of Baths	60303.66169	32246.2437	1.870098802	0.06699742	-4374.110964	124981.4343	-4374.110964	124981.4343
Finishing	9132.441873	17140.95357	0.532784937	0.596409392	-25247.95631	43512.84006	-25247.95631	43512.84006
Num of floor	-7674.847255	5272.132483	-1.455738694	0.15136316	-18249.40562	2899.711114	-18249.40562	2899.711114
location	51802.02347	18638.84897	2.779250133	0.007522497	14417.22766	89186.81927	14417.22766	89186.81927

By using the results shown above and based on the available data the linear equation for housing unit price will be as follow (refer to equation 1):

Housing unit price = (-52427.92) + [(+3347.39) × (unit area)] +

[(-55027.42) × (num of rooms)] +

[(60303.66) × (num of baths)] + [(+9132.33) × (finishing)] +

[(-7674.85) × (floor number)] + [(51802.02) × (location)]

Before interpreting the results, we need to make sure that the model can explain the variations in the prices of the housing units. By checking the adjusted R², this linear model is reasonably good since about 85% of the variations in housing prices can be explained by this model and through the chosen six variables. The results of the Analysis of Variance ANOVA are reviewed in order to show the validity of the model. By reviewing the F-test and F Significance shown in table (7), the value of F Significance is very small. Therefore, there is a great deal of evidence that this model is valid and can be used for understanding the variance of housing price value based on the used variables.

Thus the linear model could be interpreted as follow:

According to the results of the model and the available data, each additional meter in the area of the housing unit leads to an average increase in the price by 3,347 LE assuming that the values of all other independent variables in this model are held constant. Similarly, in this model, each additional closed room in the housing unit cause an average decrease in the price by 55,027 LE assuming that the values of all other independent variables in this model are held constant. As for the number of bathrooms and toilets, each additional bathroom/toilet in the housing unit leads to an average increase in the price by 60,305 LE assuming that the values of all other independent variables in this model are held constant. In this model, the price of the fully-finished housing unit is higher than the semi-finished unit by an average of 9,132 LE assuming that the values of all other independent variables in the floor number, the rise of one floor leads to an average decrease in the housing unit price by 7,675 LE assuming that the values of all other independent variables in this model are held constant. Finally, in this model, the price of gated housing unit is higher than the non-gated one on average by 51,802 LE assuming that the values of all other independent variables in this model are held constant. Finally, in this model, the price of gated housing unit is higher than the non-gated one on average by 51,802 LE assuming that the values of all other independent variables in this model are held constant. Finally, in this model, the price of gated housing unit is higher than the non-gated one on average by 51,802 LE assuming that the values of all other independent variables in this model are held constant.

It should be noted that the negative value of intercept might not affect our evaluation of the model where it refers to a hypotheses situation considering that the area of housing unit is zero, the number of rooms is zero, the number of bathrooms/toilets is zero, as well as the number of floor, finishing and location which is irrational.

The next step is to test whether there is enough evidence of the existence of a linear relationship between each independent variable and the dependent variable, which refers to the housing unit price in order to determine which variables influence this model and which ones do not. This can be checked by reviewing the t-stat and Pvalue for each independent variable. Whenever the absolute value of t-stat is about "1" or less and the P-value is "0.05" or more, there is not enough evidence to infer that the independent and dependent variables are linearly related in this model; and vice versa, if the absolute value of t-stat is more than "1" and the P-value is less than "0.05", there is evidence to infer that the independent and dependent variables are linearly related in this model. Consequently, by referring to the model results and reviewing the t-stat and P-value for the independent variables, there is enough evidence to infer that there is a linear relationship between the housing unit price (dependent variable) and each of unit area, number of closed rooms and the location (independent variables) in this model. Meanwhile, there is not enough evidence to infer that the housing unit price (dependent variable) and each of number of baths/toilets, finishing, floor number (independent variables) are linearly related in this model.

Accordingly, it can be deduced from the analysis of the model results that the unit area has a positive influence on housing unit price, while the number of closed rooms has a negative influence whereas the increasing number of closed rooms with small lot size may leads to small closed rooms which seems to be not favored by people. As for the location, the positive and significant coefficient in the model shows that the gates and fences do significantly increase property value, and house owners do generally consider the gated communities in their decision of home purchase.

Although the model indicates that the number of bathrooms/toilets and the finishing level have positive influence on the property value, while the floor number has a

negative effect, there is no enough evidence showing the existence of a linear relationship in this model.

4 Conclusion

This study examined the impact of gated communities on the price of housing units in Egypt. The study applied a Hedonic Pricing Model on a sample of 60 housing units at Sheikh Zayed City to provide a model to determine the price of the housing units including an independent variable to determine the location of the unit inside or outside a gated community. The study confirmed that gated communities have a positive impact on the price of the housing units. It showed that there is an average increase in the price of the housing unit by about 51,802 EGP compared to the unit outside the gated communities in this model assuming that the values of all other independent variables in this model are held constant. This shows that the owners are willing to pay a higher price in order to be inside a gated community.

It should be noted that this model helped to prove the hypothesis of the positive impact on the price of the housing unit that is located inside a gated community. However, we need to a larger sample with a larger number of independent variables that are affecting the unit price in order to reach a more accurate model in determining the prices of residential units.

The research emphasizes the importance of databases and the need to start preparing detailed databases in Egypt at the levels of the housing unit, building, and the surrounding area since the findings of the research are considered initial indicators. By using more detailed data for all variables shown in section 2 of this study along with a larger number of units for the sample, we can use the same methodology applied in this study to determine the effect of different variables on housing units prices in Egypt, including the existence of the unit within a gated community, in a more accurate manner.

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Appendices

Appendix A: Housing Units Data

	Unit	Meter	Unit	Num.	Num.	Finishing	g Floor	Location
	Price	Price	Area	Room	Bath	Finishing	Num	Location
1	170,000	1,753	97	3	2	1	3	0
2	165,000	1,701	97	3	2	1	4	0
3	85,000	1,349	63	2	1	0	1	0
4	190,000	2,111	90	3	2	1	0	0
5	90,000	1,429	63	2	1	1	5	0
6	150,000	1,875	80	2	1	1	3	1
7	115,500	1,650	70	2	1	1	4	0
8	250,000	2,976	84	3	1	0	0	0
9	108,000	1,543	70	2	1	0	4	0
10	140,000	1,647	85	2	1	0	0	0
11	165,000	1,774	93	3	2	1	5	0
12	80,000	1,270	63	2	1	1	2	0
13	160,000	2,286	70	2	1	1	2	1
14	150,000	2,143	70	2	1	1	2	0
15	100,000	1,429	70	2	1	0	4	1
16	120,000	1,905	63	2	1	0	3	0
17	110,000	1,571	70	2	1	0	5	0
18	120,000	1,714	70	2	1	0	5	0
19	165,000	2,538	65	2	1	0	2	1
20	95,000	1,319	72	2	1	0	4	0
21	100,000	1,587	63	2	1	0	2	0
22	180,000	2,571	70	2	1	0	0	0
23	150,000	2,143	70	2	1	0	4	0
24	100,000	1,429	70	2	1	0	5	0
25	160,000	3,019	53	2	1	0	0	0
26	150,000	2,273	66	2	1	0	3	0
27	85,000	1,349	63	2	1	1	4	1
28	120,000	1,412	85	3	1	1	4	0
29	125,000	1,786	70	2	1	1	3	0
30	220,000	2,245	98	3	2	0	3	0
31	175,000	2,188	80	2	1	1	0	0
32	160,000	2,286	70	2	1	1	0	0
33	130,000	1,857	70	2	1	0	3	1
34	115,000	1,825	63	2	1	0	3	1
35	130,000	1,857	70	2	1	0	4	1
36	135,000	1,985	68	2	1	1	5	0
37	210,000	3,000	70	2	1	1	3	1
38	150,000	1,500	100	3	2	1	4	0

	Unit Price	Meter Price	Unit Area	Room Num	Bath Num	Finishing	Floor Num	Location
39	235,000	3,310	71	2	1	1	3	1
40	108,000	1,543	70	2	1	1	4	0
41	110,000	1,571	70	2	1	1	5	0
42	200,000	1,538	130	3	2	0	2	0
43	150,000	1,546	97	3	1	1	1	0
44	130,000	1,625	80	2	1	0	1	1
45	200,000	1,852	108	3	2	1	1	0
46	110,000	1,571	70	2	1	1	2	0
47	68,000	958	71	2	1	1	1	1
48	280,000	1,818	154	4	2	1	2	0
49	165,000	1,701	97	3	1	1	5	0
50	435,000	2,605	167	3	2	0	2	1
51	470,000	2,500	188	3	3	0	4	0
52	220,000	2,245	98	3	1	1	3	0
53	430,000	4,095	105	3	2	1	2	1
54	792,000	4,500	176	3	3	1	2	1
55	820,000	3,814	215	3	3	0	3	1
56	404,000	2,886	140	2	2	0	1	1
57	660,000	3,300	200	3	3	0	2	1
58	390,000	3,047	128	3	2	0	3	1
59	380,000	2,923	130	3	2	1	3	1
60	390,000	3.000	130	3	2	0	2	1

The sources: Engineering Office for Project Management and Appraisal (Eng. Ali Bayoumi), the real estate investment companies' websites, field study.

ملخص

الأبعاد الاقتصادية للمجتمعات العمرانية المغلقة فى مصر

ظهر في مصر منذ التسعينات من القرن الماضي نمط جديد من الاسكان وهو إسكان التجمعات العمرانية المغلقة والتي شهدت انتشارا كبيرا خلال هذه الفترة مما يتطلب أهمية تناول البعد الاقتصادي لهذه التجمعات العمرانية ومدى تأثيرها على السوق العقاري المصري، ومن ثم يهدف البحث إلى التعرف على العوامل المؤثرة في تحديد أسعار الوحدات السكنية وما إذا كان وجود هذه الوحدات داخل التجمعات العمرانية المغلقة يؤثر سلباً أو إيجاباً على سعرها.

ومن هذا المنطلق تم اعداد دراسة مقارنة لأسعار الوحدات السكنية فئة الاسكان المتوسط الموجود داخل التجمعات المغلقة بنظيرها خارج التجمعات بإستخدام Hedonic Pricing Model في محاولة لفهم العلاقة بين التجمعات العمرانية وقيمة الوحدة العقارية، وذلك عن طريق تناول عمليات البيع وشراء التي تمت في السنة الماضية للوحدات السكنية ذات الاسكان المتوسط سواء داخل أو خارج التجمعات العمرانية المغلقة في مدينة الشيخ زايد.

الكلمات الدالة: المجتمعات العمرانية المغلقة - مدينة الشيخ زايد - السوق العقاري - Hedonic Pricing Model - الابعاد الاقتصادية - القيمة العقارية