

# INVESTIGATION OF EFFECT OF SALES OF ARAB REAL ESTATE COMPANIES ON INCOME OF TURKEY

## ARAP GAYRİMENKUL ŞİRKETLERİNİN SATIŞLARININ TÜRKİYE GELİRLERİNE ETKİSİNİN İNCELENMESİ

MAJD HASAN MOHAMMAD ABUDOUSH

Istanbul Aydın University, Department of business, Istanbul/Turkey

ORCID: 0000-0002-8809-4667

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**ÖZET:** Son zamanlarda, birkaç Arap şirketi Türk gayrimenkullerini Arap dünyasına pazarlamak için yayıldı ve Türk gayrimenkul piyasasında Arap yatırımcı sayısında gözle görülür bir artış oldu.

Bu tezde, Arap gayrimenkul şirketlerinin satışlarının Türkiye'nin geliri üzerindeki etkisinin araştırılması, 2015-2020 yılları arasındaki yılları, enflasyona göre düzeltilmiş konut fiyatlarındaki değişimi, konut amaçlı gayrimenkul fiyatları - endeksi, nominal konut gayrimenkul fiyatları ve Bu tez Türkiye'de son altı yılda gayrimenkul yatırım ortamının koşullarına ışık tutmaktadır.

Türkiye'deki yatırım ortamının analizini ve Türkiye'deki ana gayrimenkul yatırım politikalarını da içeren çalışma metodolojisini kullandık, analizler için bir zaman serisi modeli de kullandık, sonuçlar enflasyondan arındırılmış değişim arasındaki ilişki Türkiye'nin GSYİH'si üzerinde konut fiyatları, Türkiye'de GSYİH üzerinde nominal konut gayrimenkul fiyatları arasında bir ilişki olduğunu da gösterdi, ancak sonuç, Türkiye'de GSYİH'nin bir göstergesi olan konut gayrimenkul fiyatları arasında bir ilişki olmadığını da gösterdi.

**Anahtar Kelimeleri:** Türkiye, Emlak piyasası, DYY, ekonomik büyüme, Zaman Serisi Modeli, Birim Kök Testi.

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**Abstract:** This paper investigated the impact of sales of Arab real estate companies on Turkey's income from 2015 to 2020, the change in inflation-adjusted housing prices, residential real estate prices - index, nominal residential real estate prices. This thesis sheds light on the conditions of Turkey's real estate investment environment during the past six years. We used the study methodology that includes analyzing Turkey's investment environment and studying Turkey's central property investment policies. We also used a time series model for the analyzes. The results showed a relationship between the change in inflation-adjusted housing prices on the GDP of Turkey. They showed an association between nominal residential real estate prices on the GDP in Turkey. However, the result also showed no relationship between residential real estate prices - an indicator of GDP in Turkey.

**Keywords:** Turkey, Real estate market, FDI, economic growth, Time Series Model, Unit Root Test.

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## 1. INTRODUCTION

Turkey advantageously located on the crossroads between Europe and Asia, which benefits Turkey as international commerce increases and the energy resources of the Caspian region extend into Europe. In addition, among the countries with a predominantly Muslim population, Turkey is the only secular nation.

Since 2002 Turkey has been through a period of remarkable economic performance. The rapid growth of the economy and the rising purchasing power levels have significantly increased demand for new housing, retail centres, office buildings, and industrial logistics facilities.

## 2. REAL ESTATE MARKET CONCEPT

Turkey has achieved the most significant improvement in the global real estate transparency index conducted in 2012 a search of 97 real estate markets to analyze the performance of real estate investors about their ownership. Turkey is the most improved market for the second time out of 97 markets. The 2014 Doing Business Report also ranked Turkey 69th because the Foreign Direct Investment Law in Turkey meets the international standards stipulated in 2003, Deloitte (2013).

### A. Turkish Economy And Real Estate

The housing sector further provides job opportunities provide avenues for the improvement of the economy. The State Planning Organization (2006) argued that the construction industry is 1.1 million people on average and the overall employment for the people increased to 5.3 up to the end of 2005.

### B. Traditional Invest In Turkish Real Estate Market

With Law No. 4916 enacted in 2003, foreign nationals legal personality established in foreign countries by the laws of these countries. New principles regarding the acquisition of immovable by the trading companies in Turkey has brought.

### C. Types Real Estate Market

Turkey, after 1980, tends to open up politically and economically entered. In this period, the dynamics determining the urbanization process rapidly took a direction new forms of housing supply emerged. Build-sell style contracting based on housing supply has lost its feature of being the dominant presentation style will mass housing production that enables the development of large and regular urban areas. Sayar and Süer (2008).

### D. Advantages Of Turkish Real Estate

By COŞKUN (2011), The factors favouring strong demand are Real Estate Investment Trusts (REITs), the advantages of being a latecomer development in the regulatory framework and developing academic knowledge. These factors would all have classified as opportunities (or positive factors) supporting the potential of the Turkish economy and real estate business. These factors can contribute to the expected return rate on investment.

### E. Disadvantages Of Turkish Real Estate

Appraisal problems may also negatively impact the marketability of reinstating and lead to dissatisfaction amongst real estate investors. Real estate and stock market investments are incomparable; while real estate shows unique characteristics heterogeneity.

### F. Merits And Demerits Of The Real Estate Sector

increasing economic stability, Geopolitical positions, EU nomination, Means of civilization are sufficient to enable commercial values that support the public and private policy on supply and changes in entrepreneurship that support demand factors on the local side that affect a great deal.

### G. Opportunity For Real Estate Markets In The Turkey Economy

Differences in land use caused by the population increase in the main cities in Turkey followed by the preliminary development plan as most of the buildings are not licensed, so the building area in Istanbul province increased to 40% from 1990 to 2005.

## H. Turkish Income From The Real Estate Market

Poterba (1984) provides three explanations for house price movements in the past three decades: changes in construction costs, changes in the actual after-tax cost of ownership and changes in demographic factors. His framework for explaining house price movements considers both the existing houses and the flow of constructions. In terms of the land costs, he finds that a surprisingly small fraction of the changes in house prices may have explained by changing land costs.

## I. Challenges In Housing Market In Turkey

Due to Turkey's problems about economics, such as low level of Gross National Product per capita, chronically high inflation and high-interest rates, enough savings for house building and buying cannot be formed. The implemented policies about housing are not efficient enough to solve the problems of the Turkey housing market. Gurbuz (2002).

## 3. LITERATURE REVIEW

Turkey has a distinct environment to attract foreign direct investment. What are the laws that the Turkish state obliges investors to acquire a property within its territory, the returns for the real estate market from the foreign investment?

### A. Turkeys Real Estate Market

Abu Hassan (2013), the Turkish real estate market is extensive. It includes several options, making it exclusively the focus of preference for foreign investors, especially in real estate investment.

### B. Real Estate In Turkey And Attraction Of Arab

Kuran (2012), Especially Arabs in particular, delivered in, said about the economic markets and real estate investment within Turkish lands that their economies complement each other through economic trade exchange.

### C. Property Laws In Turkey

According to McGarrigle & Montezuma (2018), foreign real estate investors prefer countries with larger market sizes and a higher level of foreign investment in other sectors. When the Turkish state allowed the opening of the door to owning property foreigners within its lands, the Arabs were among the first to compete, and they always had the largest share of the purchase.

### D. Pulling Factors For Investing In Turkeys Real Estate

Yankaya & Vannetzel (2017), there is a significant commercial and economic exchange between Turkey and the Arab countries in general, On the political and economic relations between the Turkish state and the Arab world and the value of trade exchange between them. That is why he came in a speech by the President of the Turkish state to foreign investors.

### E. The Effect Of Influx Of Foreign Capital Into Turkish Market

According to Ozaktas (2018), About the flow of foreign capital in Turkey, the researcher said, foreign capital from foreign direct investment is significant to Turkey in providing the necessary resources for the balance of payments.

### F. The Influence Of The Tourism Sector On Foreign Direct Investment In The Turkish Real Estate Market

Alleyne (20018), on direct foreign inquiries for foreign direct real estate investment, are interpreted as an internal flow related to the demand of tourists for housing services. Foreign direct real estate investment impacts the per capita GDP of the number of tourists. The individual investor was a previous visitor Or a tourist from a high-income country to get a good return on investment for the future to invest.

## 4. RESEARCH METHODOLOGY

Applying traditional standard methods to statistically inconsistent data will give inaccurate or false results. This means that most time series is unstable (not constant).

So the current study will use unit root tests such as the Dickey-Fuller and Phillips questioning to ascertain whether the data of the studied variables are stable or unstable.

When checking the unit root of the time series, it can detect whether it has a trend available in the developed Dickey-Fuller test models (Dickey-Fuller increment), specifying the number of years of lag to see if it has a tendency.

### Hypothesis Testing

We take the first divergence and test the stability again. If it is not stable, we take the second divergence, and so on, until one time series becomes stable. Usually, the strength of the time series is achieved only with slower periods above the first order.

So the Dickey-Fuller test for the first hysteresis may not be suitable for demonstrating time-series invariant, so this study will use a form of testing that provides a higher idle like Dickey- (Augmented Dickey-Fuller).

Entered in cases in which different regressions have made because there is a trend in the data for the variables involved in economic growth will influence the direction in the coefficients of other variables and if the time series is unstable.

**Table 1. GDPEXP, HPA, RRPP and NRPP**

YEAR	GDPEXP	HPA	RRPP	NRPP
2015 Q1	375,634,271,641.00	1.68	115.33	163.33
2015 Q2	381,358,071,746.00	2.61	116.39	170.56
2015 Q3	386,702,858,137.00	0.87	118.97	174.2
2015 Q4	391,215,165,662	0.89	119.68	180.17
2016 Q1	392,629,557,024	1.8	121.31	186.57
2016 Q2	398,247,639,965	1.48	123.86	192.96
2016 Q3	386,827,198,225	1.58	125.09	197.87
2016 Q4	408,139,874,395	-1.49	124.82	202.13
2017 Q1	413,726,759,537	-1.07	123.15	208.74
2017 Q2	423,161,048,697	1.01	123.12	213.86
2017 Q3	429,575,825,408	-0.24	123.63	216.2
2017 Q4	437,663,712,221	-2.23	121.22	220.47
2018 Q1	444,191,302,532	-0.57	120.57	225.37
2018 Q2	446,449,774,977	-2.79	118.73	232.62
2018 Q3	439,348,775,011	-9.65	110.04	229.85
2018 Q4	426,214,598,929	-0.56	103.51	230.28
2019 Q1	433,391,707,073	-1.34	103.69	232.41
2019 Q2	442,358,661,257	-0.82	102.42	236.67
2019 Q3	444,138,767,624	0.53	103.58	245.63
2019 Q4	453,054,078,295	-0.03	103.22	253.3
2020 Q1	453,498,317,526	3.19	106.39	267.38
2020 Q2	402,722,291,931.00	7.6	115.28	297.44
2020 Q3	468,065,196,672	2.67	118.03	312.79
2020 Q4	475,901,281,291	-0.19	118.57	330.28

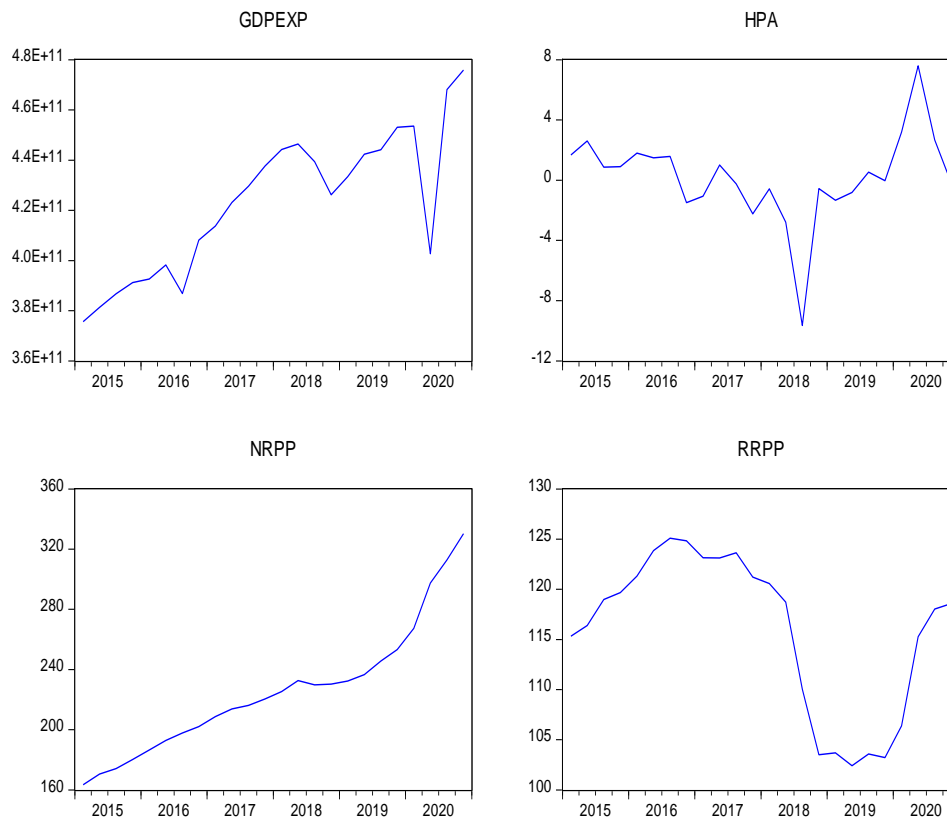
GDPEXP : Gross domestic product.

HPA : The change in house prices adjusted for inflation.

RRPP : Real residential property prices - index, respectively.

NRPP : Nominal residential property prices.

**Table 2. Graph of the HPA, RRPP, NRPP, GDPEXP**



The graph of GDPEXP shows variable patterns from We note that they started increasing until they peaked with the highest points recorded by GDPEXP, the time duration of all variables analyzed from 2015 Q1 to 2020 Q4, the lowest recorded Point in the GDPEXP.

The nominal price of residential real estate, we note that the graph is increasing. The graph covers the beginning of the first quarter of 2015, where the index recorded 163.33. The index continued to rise after that until it reached the fourth quarter of 2020, and the index recorded the highest Point at 330.28 is the peak point in the NPRR.

We can see a break in 2018 in almost all variants due to the 2018 currency crisis. Radical increases in resident money outflows accompanied the sudden stop in spring 2018. Notably, total capital outflows in August mainly stemmed from money transferred abroad by Turkish citizens.

While net foreign inflows into Turkey may have slowed down due to global financial conditions, net outflows of resident funds have exacerbated the urgent financing needs of the economy. Thus, the Turkish currency crisis of 2018 differs from the crises of 2001 and 2008-2009. The sudden stop scenario highlights the importance of capital inflows to emerging markets. The sudden-stop mechanism works like this: "The exchange rate goes down, reserves go down, and stock prices go down, Gupta, (2016).

So, as we can see, it is not enough to interpret the graphs to obtain solid results; for that to obtain more detailed results, the descriptive statistics will also have interpreted.

The central bank only while trying to reach its target, inflexible targeting, interest rates, foreign exchange, It also deals with economic magnitudes such as exchange rates, production and employment. This In this study, within the logic of strict inflation targeting, univariate time, The inflation rate is predicted with series models.

Because The aim of this study is to use time series analysis methods, in other words, structural It is to examine the consistency of a prediction to be made with methods that are not available. This In the methods, the internal dynamics and movements of the series are observed.

Relationships with other variables are not taken into account. In the study, the long-term and short-term courses of the series were examined.

All series are first-order integrated. In contrast to the unit root tests, she used level series in regression models. When the stochastic error of a regression is unit root nonstationary, the regression is called a spurious regression.

This is because the standard t-test tends to be spuriously significant even when the regressor is statistically independent of the regress and in Ordinary Least Squares. The second negation is interpreting statistically insignificant coefficients of models. If the coefficient is statistically insignificant it cannot be interpreted.

**Table 3. Descriptive Statistics**

	GDPEXP	HPA	NRPP	RRPP
Mean	4.23E+11	0.205417	225.8783	115.8583
Median	4.28E+11	0.250000	222.9200	118.6500
Maximum	4.76E+11	7.600000	330.2800	125.0900
Minimum	3.76E+11	-9.650000	163.3300	102.4200
Std. Dev.	2.87E+10	2.999342	43.21306	7.904743
Skewness	-0.043865	-0.886339	0.812158	-0.648117
Kurtosis	1.901317	7.134214	3.207990	1.916514
Jarque-Bera	1.214801	20.23411	2.681660	2.854164
Probability	0.544765	0.000040	0.261628	0.240008
Sum	1.02E+13	4.930000	5421.080	2780.600
SumSq. Dev.	1.90E+22	206.9092	42949.47	1437.154
Observations	24	24	24	24

This data was conducted on Turkey in 6 years from 2015 to 2020, and it covered several variables, GDPEXP, RRPP, NRPP, HPA, Table 3 shows several statistics: mean, median, maximum proportion, minimum proportion, standard deviation, skewness, and kurtosis.

## 5. RESULTS DISCUSSION

### Overview of the Findings

The hypothesis was as following:

**H01** There is a statistically significant effect at the  $(0.05 \geq \alpha)$  effect of HPASA with GDP in Turkey.

**H02** There is a statistically significant effect at the  $(0.05 \geq \alpha)$  level in the NRPPSA on GDP in Turkey.

**H03** There is no statistically significant effect at the  $(0.05 \geq \alpha)$  level in the RRPPSA on GDP in Turkey.

## 6. CONCLUSIONS AND RECOMMENDATIONS

In this thesis, the investigation of the impact of sales of Arab real estate companies on Turkey's income covered the years from 2015 to 2020, the change in inflation-adjusted housing prices, residential real estate prices - index, nominal residential real estate prices.

Moreover, this thesis sheds light on the conditions of the real estate investment environment In Turkey during the past six years. In the end, the top results have summarized with suggestions for future studies in the field of foreign - Arab - direct real estate investment.

Arab investors invest in Turkey for many reasons. One of the main reasons is the proximity to the border. The Middle East, especially the Arab world, is very close to Turkey. The main factor in the rise of Arab investment in Turkey. On the

other hand, the Turkish people and the Arab people have good relations. This factor is also responsible for the rise in Arab investment in Turkey.

One of the main reasons for Arab investment in Turkey's real estate and tourism industry is that Arab investors have waived taxes and other strict policies that were previously the main obstacle to investing in Turkey.

The Turkish government removed these barriers and made Turkey a modern state and a liberal state in its true sense. The Turkish government has made it easier for neighbouring countries and the rest of the world to come to Turkey and invest openly without any restrictions.

This thing stimulated investors in Arab countries. The Arab countries are rich and full of natural resources, and there are opportunities for high investments from these countries. That is why the Turkish government allowed Arabs to invest in the real estate sector.

On the other hand, the Turkish government also introduced a visa policy for investors. It has given the facility to the investors to invest in Turkey and get the citizenship of Turkey who invests an amount of specific limit and provide the jobs to the people equal to the 100 workers or more.

In this way, the government of Turkey appeases foreign investors to invest in Turkey and maximize their profits. There are few facilities for investors globally, and Turkey is leading the regions concerning investment in the real estate business.

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