# Market Analysis of Ağaoğlu 1453 Housing Settlement for Effective and Efficient Use in Real Estate Valuation Process

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Abstract- In architecture, the reason why the semantic structure of the house is multidimensional is related to the human-house / space relations, the preferences in the housing choices and the designs in the residential area are gained importance. The valuation completes the process in its own specific stages. The steps taken depend on the valuation task and the accessible data. Model; market research and market analysis, implementation of valuation techniques, and a scheme for delivering the results of the activities to a defined value. The final aim of the valuation process is to arrive at a well-supported value that reflects all the relevant factors affecting the property being assessed in the tasks to improve the market value. In this process, the most efficient and efficient use is the reasonable and probable use of a vacant lot and / or a structured property in a reasonable way that is physically possible, financially feasible and results in the highest value.

The most efficient and most efficient use of an immovable is the question of market analysis. Market analysis is used to decide on the most efficient and most efficient use of developed real estate and vacant land. In this study, the most effective and efficient market analysis for the real estate appraisal process was implemented on Ağaoğlu Maslak 1453 Housing Settlement.

Keywords Real estate, housing settlement, market value, building cost value, valuation process

#### 1. Introduction

Real estate investment is a dynamic and a unique investment tool because of its inherent characteristics. Therefore, a real estate development process is complicated and difficult. In order to overcome such a difficult and complicated process a systematic approach is needed to follow which have to refer systematic and applicable ways of real estate development projects even they developed in different context. Real estate development means providing places that people will live, work and recreate. It is influenced by cities and at the same time it influences them. It is related directly with city plans and it has an impact on distribution of population.

As it is known, in recent years there has been an increase in the production of housing in Turkey and especially in Istanbul. It is observed that the produced settlements are inadequate when they are evaluated in terms of spatial quality and especially outdoor - landscape quality. Qualified and sufficient samples are few in number. Market Analysis; is a study in which the market intelligence of the competitor developments is analyzed to determine the market conditions to be affected by the real estate. There are two basic functions of appraisal market analysis. The first provides information necessary to determine the most efficient and efficient use of real estate in terms of market analysis, real estate use, economic demand determination, market absorption rate (timing), market participants (potential users and sellers). The second basic function is to define the key factors that determine the purpose of the data entry and to use it in the three approaches used in the valuation.

After collecting appropriate data on real estate and land and being audited for their correctness, the appraiser starts the market analysis process. Market analysis has two components. These; market analysis and the most efficient and efficient use analysis. Even the simplest appraisal duties must be based on widespread market conditions and the most effective and efficient use of real estate. These two forms of analysis are linked. In fact, a valuation expert's search of trends affecting the economic base of the market area directly goes to the most efficient and efficient use of that property.

#### 2. Basic Concepts About Real Estate

Real estate is defined as land which is a physical entity and constructions made by people on this land. Real estate is a tangible 'asset' that can be seen and touched with all its affiliates above or below the earth.

Real estate can be defined as a land that can not be taken away from where it is, a land and everything immovable built on the line. Real estate, which is regarded as an investment instrument, can be dealt with in two groups as developed or undeveloped. Unfamiliar real estate is considered to be land, not just any piece of land, ie land. Improved real estate can be considered as a disposition of any structure on land.

Real estate is physically inseparable parts like land / land and its buildings. The legal description of the real estate has the following concrete components:

#### ➤ Land

 $\succ$  Naturally integral parts of the soil such as trees and minerals

> Additions such as buildings and landscapes attached to the land by people [3].  $\begin{bmatrix} 1 \\ 5EP \end{bmatrix}$ 

Freehold, All interests, benefits and rights that exist within physical real estate; it is basically a fundamental right that makes possible the possession of real estate. [SF] The concept of value means the price at which a good or service offered for purchase is likely to be concluded by buyers and sellers. Value represents hypothetical or fictitious price for the goods or services that buyers or sellers will reach agreement on. For this reason, value is not a reality, but an appreciation of a possible price to pay for a good or service offered for purchase over a certain period of time [1].

Value, can be defined as a monetary value for a particular property, goods or service at a particular time for buyers and sellers. The exact value is very complex, and it is a matter of personal difference. Because the concept of value is considered as a phenomenon which changes according to the point of view [4].

The concept of value is uncertain and varies from perspective. On the other hand, depending on the intent of the person making the determination, the result will be different. For example; "Market value", investment value, "net value", "cash value", "book value", "potential value" etc. [5]. Market Value; an estimated amount of time that must be changed at the time of valuation under the terms of an agreement in which an individual is acting in a knowledgeable, prudent and well-intentioned manner, without any coercion between an independent tenderer and a willing seller after an appropriate marketing of an immovable property, and under conditions in which the parties will not be affected by any relationship [1].

The market value is the price that the average logic and those with sufficient knowledge have agreed on in terms of market conditions [5].

In valuation process; the following are assumed to be valid:

▶ Buyer and seller act reasonably.

> The parties have full knowledge of all matters relating to real estate and act in such a way as to provide them maximum benefit.

 $\succ$  A reasonable period of time for sale of the property has been granted.

> Payment Cash or cash-like items. The financing that may be required during the purchase of real estate is carried out at market interest rates.

Investment Value; is defined as the transformation of the profit that will be provided from the future that the real estate will bring to the present.

The value of an investment is a value that transforms the whole of future benefits into what is now the assumptions of investors and the real estate they possess.

The investment value that differs according to the characteristics of the investment made by the individual person and the immovable; all other factors affecting the various economic variables, the future return of the property, the assumptions of the investors, the future asset and return of the property, the holding period, the sale price, the taxation, the current financial situation and the expected future net benefits. While value for use is focused on the use of a property the value of the investor. The property value of a property is its value to the present or future owner. Unlike the market value, the investment value is the value of the person and it does not necessarily reflect the value in the market [2–7].

Appraisal involves the collection of relevant data for an appropriate market, the use of appropriate analytical techniques, the application of knowledge, experience and professional judgment to resolve a valuation problem in an appropriate manner.

Valuation; to value, to value something, to value something. Property valuation; to determine the fair value of the property by using one of the methods appropriate to the situation of the real estate. For this; all basic information and documents are obtained and they are interpreted and

interpreted in a clear definition of the concepts. Real estate valuation is based on a fundamental research.

In order to be able to make real estate appraisal, it is necessary to know well the concepts of value related to real estate [6].

Valuation is the process of accurately and accurately determining the value of an immovable. One of the main problems in this regard is exactly what the concept of "value" means [5].

The Valuation Process is a systematic procedure used to establish the value of a property value.

The Valuation Report is a document in which the instructions for the valuation, the basis and purpose of the valuation and the results of the analysis used in reaching the final value are recorded. The Appraisal Report can also describe the analysis processes used when performing the valuation and the meaningful information used in the analysis. Valuation reports can be either oral or written. The type, content and length of a report may vary depending on the user to whom the report is to be given, the legal requirements, the nature of the property, and the nature and complexity of the assessment.

Appraisal Expert is a licensed-licensed practitioner who has at least 4 years of university education, sufficient professional experience and discipline, knowledge and skill to evaluate the rights and benefits based on the real estate, real estate, company and machine park, independent, objective and objective [8].

Supply is the amount of real estate on a given market, at a certain time at various prices for sale or rent.

Demand is the amount of real estate desired to purchase or lease at a certain price at a certain time [9].

#### 2.1. Scientific Process and Property Assessment

Real estate valuation process and scientific method are two processes arranged for problem solutions. Scientific method; to investigate economic problems and to provide documentation of experimental value estimates. This process, which comes from the following five steps, shows the similarities of the scientific method and the valuation process [10].

#### 2.1.1. Step 1 (Identification of Problem)

The application of the scientific method begins with the problem determination. Often the correct detection of the problem can reach 90% resolution. At the same time, the valuation process starts with problem determination. However, the area of problem conditions is generally more limited. The problem that needs to be solved in the valuation is indicated using a valuation process. In other words; The main reason for its implementation is the need to evaluate the properties that customers have. The valuation may have been addressed in the following various situations.

- > Trading-purchase of property and transfer.
- ► Loan extension collateral value estimation.

Indemnity – compensation for property loss.

≻ Tax.

> Refurbishment of the property or development of the property.

Alternative usage considerations.

 $\succ$  Real estate portfolio analysis and administration costs.

The detection of problems directly affects the collection of documentation and analysis of information.

#### 2.1.2. Step 2 (Hypothesis Formulation)

The second step in the scientific method is a hypothesis formulation. This hypothesis is a test hypothesis about the relationship between one situation and another. In the real estate appraisal process, the hypothesis is used to estimate a value that is generally market value. The value found may vary with the valuation problem. For example, the type of value required in compensation disputes can be an estimate of the insurable value. This is typical of traditional positioning or specific evaluation. Hypotheses proposed in problem conditions need to be more flexible.

In general, the hypothesis clearly demonstrated in real estate market analysis is based on the supply-demand relationship with the product shown. Such a hypothesis has emerged from defined supply-demand relationships and property efficiency analyzes that shape the market [10].

#### 2.1.3. Step 3 (Identify the data to be used)

The problem state and the hypothesis predict the determination of the required data for the investigation of the problems. The available and valid data are the main problems in real estate research. Although available data can not meet the needs of the research task, the best available information will be used. The data available usually determine which evaluation methods will be used in market analyzes and valuation processes. For example, comparisons compiled from the peer comparison approach and the direct capitalization approach depend on aggregated market information. In market analyzes, a preliminary plan for the identification of forecasted claims is made when the preliminary estimates are unfavorable or unrealistic. The nature of the problem, the hypothesis formulation, and the available data available help analysts to decide which research methods to use [10].

The fourth step in the scientific method is the use of the appropriate method. When a problem is identified and the appropriate hypothesis is suggested, specific relationships can be controlled. These relationships can be investigated by means of Tumulus and Whole derivation, analogue use, descriptive and static analysis, observation, laboratory experiments and causal analysis. Many evaluation techniques and methods of market analysis aggregate analog categories, descriptive analysis, and cause-effect analysis under one roof [10].

2.1.5. Step 5

The last step in the scientific method is to update the findings present at hand in order to arrive at the problem. Analysts' intent is to settle the problem. This is also the final step in the market analysis and evaluation process. It has seen in "Table 1."

#### 2.2 Real Estate Valuation Process

The appraisal process begins when the valuation specialist accepts a task and ends when the results of the appraisal are reported to the customer. The most common valuation task is to express your thoughts about market value.

The appraisal process is completed in its own specific stages. The steps followed depend on the valuation task and the accessible data. The model provides a framework for market research and market analysis, the application of valuation techniques and a way to deliver the results of these activities to a defined value. Models that apply the valuation process help valuation specialists to do their work as well as make it easier for valuation users to recognize the market and understand valuation results.

#### 2.2.1 Application of Three Approaches Used in Appraisal

The valuation process is used to generate a well-supported value idea using appropriate generic and specific data. Valuers create a real estate value idea with unique valuation transactions using different market analysis methods; these methods include;

- ➢ Cost approach
- Commodity comparison
- ▶ Income capitalization [10].

#### 2.2.1.1 Cost Approach

The cost approach is based on the assumption that market participants value is related to cost. In the cost approach, the value of an immovable, the estimated land price, and the cost of constructing the same (or similar) existing buildings are added and deducted from the depreciation (wear and tear). Entrepreneur can be added to profit and / or initiative value indicator. This approach is suitable for real estate with new or near-new configurations, or real estate types that do not change frequently in the market. The cost approach technique is also used to collect the information required for methods such as the comparison of sales such as the cost of repairing buildings, and income capitalization approach.

The current construction costs of the configurations can be obtained from discovery experts, cost manuals and contractors. Depreciation is determined by market research and implementation of specific procedures. In the cost approach, the land value is also calculated [4]. The formula used in this method is briefly as follows:

Dm: Building Cost Value

Da: Land Value

Db: Building Value (Production value together with external fittings and operating equipment of the building)

A: Depreciation (Value losses due to technical aging and functional or economic aging )

Dm = Da + Db - A

2.2.1.2 Peer Comparison Approach

The peer comparison approach is the most useful method in markets where real estate similar to real estate is sold or offered for sale in the near future. The valuation expert uses this approach to create a value indicator by comparing the subject property with similar properties. The range of sales prices of real estate that is judged to be comparable is an idea of the selling price indicator of the subject real estate.

The valuation specialist uses the various comparison elements to derive the similarities or differences between the subject property and similar sales. These elements are:

- Transferred ownership rights.
- Financing conditions.
- ➤ Terms of sale.
- ➤ Expenses immediately after the sale.
- ➢ Market conditions.
- > Location.
- Physical features.
- ➢ Economic features.
- ➤ Use / reconstruction.
- ➢ Valuation rights.

Thereafter, a comparable value indicator is developed for the comparable real estate by applying currency or percentage adjustments. After this comparison, the valuation expert will reveal the valuation of value stated in the problem definition as of the date specified.

Revenue factors and capitalization rates can also be deduced from comparable sales analysis. However, these elements are not considered as comparative elements in the method of comparing sales. These elements are often used in income capitalization approach [7].



Table 1. Progress of scientific process and valuation process [13].

#### 2.2.1.3. Income Capitalization Approach

In the income capitalization approach, the present value of the future benefits of real estate ownership is measured. The value of a property can be capitalized at a present momentary value of return and return. There are two methods for income capitalization. These; direct capitalization and return capitalization methods. In direct capitalization, one year of income and value is reflected either as a rate of capitalization or as a multiplier of income. In return capitalization, the steady return for a few years and the return value at the end of a specified period are reflected as a return rate. The most commonly used application of return capitalization is the discounted cash flow analysis.

Similarly, income capitalization approaches, such as peer comparison and cost approach, require an intense market research. Data collection and analysis are managed at the base of supply and demand relationships and provide information on market trends and expectations.

The specific data the valuation specialist has examined through the income capitalization method includes the expected gross income expectation, the gross income reductions, the expected annual operating costs, the pattern and duration of the proprietary income stream, and the expected return value. Once the revenues and expenses are estimated, the revenue streams are converted to their present value, discounted with an appropriate rate or factor. In the discounted income analysis, the amount of the periodic income, the variability, the timing and the duration and the amount and timing of the return are specified and discounted at a specified rate of return. The rates used for capitalization and discounting are derived from acceptable rates of return for similar properties [4].

#### **Direct Capitalization**

Income capitalization is a method used to transform the expectation of a single year into a value indicator in the approach. This conversion is obtained by dividing the income estimate by the capitalization rate [4].

Dy: Value by Revenue Method ENNOI: Net Operating Income = Business Income - Business Expense r: Capitalization Ratio

Dy = NOI

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#### 2.3. Market Analysis During Real Estate Evaluation

Valuation Experts and those using the valuation study need to understand the link between market analysis and real estate appraisal. Market research and analysis is the basis for economic decision making. The economy is concerned with the choices made with the competitive environment under limited resources. In the context of real estate, market analysis, supply-demand relation and competitiveness of real estate in the market are examined [11].

#### 2.3.1 Factors and Market Analysis of Real Estate Value

Valuable relationships are complex and the value changes as the factors that affect the value change.

Four interdependent factors create economic value.

- Benefit
- ➤ Famine
- ➤ Claim

Effective procurement power.

➢ Location.

Benefits and scarcity are factors of supply. If demand and effective purchasing power are demand factors [4].

Value factors are the results obtained from the market analysis result.

#### 2.4.1 Types of Market Analysis

Market analysis principles seem simple, but the techniques and methods used in market analysis can be extremely complex. Market reviews can be transformed into detailed analyzes. The levels of market analysis that can be done reflect a range of increasingly complex methodologies [4].

There are two basic types of market analysis.

- Forecasting based analysis
- Basic analysis

#### 2.4.2 Forecast-Based Analysis

Forecasting analysis, which is similar to the technical analysis used by economically market analysts, is also defined as trend analysis. It examines past market behaviors and aims to predict future changes in value.

#### 2.4.3 Basic Analysis SEP

The valuation specialist can use current and past market conditions to predict future supply and demand conditions. In addition, during the retention period of an immovable, the subject may assess the analysis of current and past market conditions with basic analysis to estimate the specific supply, demand, absorption and market share for the property.

#### 2.4.4 Market Analysis Decision Making Process

The appraiser uses specific criteria to decide the level of market analysis of a particular real estate appraisal task. The appraiser can use the following steps as a guide to determine the level of market analysis. Market Conditions and Subject for Commercial Use Real Estate Market Analysis by Type [11].

#### 2.5 Market Analysis Process

Market analysis can be considered as a separate study from the real estate appraisal process. However, the real estate valuation process can not be carried out without market analysis.

Market analysis, which is the basis for developing market analysis, consists essentially of 6 steps. Real estate productivity analysis (Step 1) defines the characteristics of the real estate, determines the properties suitable for the user market. This user market is then determined in the market research (Step 2) and the customer's request is measured (Step 3). The intensity of competition in step 4, and the competitiveness of the market in step 5 are determined. Finally, in step 6, the power of attracting customers to the real estate market is determined. From all these data, the most effective and efficient usage analysis of real estate and its value are gained. It is determined by the financial analysis carried out between the alternatives that the use of an area of the real estate will yield the best and highest profit. After these transactions, the buy-sell market can be analyzed to identify which buyers or sellers are interested in different types of real estate and to determine the geographical area where the real estate is in competition.

#### 3. Ağaoğlu Maslak 1453 Residential Market Analysis For Efficient And Efficient Usage

In this study, the process of market analysis was systematically dealt with in determining the efficient and efficient usage of the 1453 residential settlements in Istanbul, Sarıyer District Ağaoğlu Maslak. In the direction of supply and demand analyzes, it has been tried to determine the level of market support which is critical in determining effective and efficient usage.

#### 3.1. Ağaoğlu Maslak 1453 housing settlement

"Agaoglu Maslak 1453" residential settlement is located in the province of Sisli, Istanbul province. The project was built by Agaoglu Construction under the partnership of TOKI (Prime Ministry Housing Development Administration) and Real Estate Housing REIT. The project has 4789 houses and 178 offices. The housing types are 1 + 0', 1 + 1', 2 + 1', 3 + 1'1' and '4 + 1' and their size is 54.06 - 401.05 m<sup>2</sup>. The project, which is made in 3 stages, consists of 4789 independent sections on 320.000 m2 land area. In the project; a large part of the site's electricity, heating, cooling and hot water needs have been met with a trigeneration system to be installed within the project for the economic use of resources. The project is designed with a concept of culture, art, eating, drinking and entertainment that will be a lifeline as a center of attraction for the city center, the main street. It is a neighbor to Fatih Forest from the north. It is a project that houses environmentally sensitive green building systems. In the project; 'Terrace houses T1 block', consists of 642 residences. There is a direct connection point to street 1453 from the terrace houses. Terrace houses are designed to be directly connected to lifts and car parks. Each terrace house has its own reception area. The terrace houses are positioned facing a green area and the front facing nature view. 'Terrace houses T2 block', 'T3 block' and 'T4 block' consist of 642 residences. These blocks also have a direct connection to street 1453 from the terrace houses. The squares are designed as two giant squares with one area of 12,000 m<sup>2</sup> and the other area of 28,000 m<sup>2</sup>. There are shops, shops and many activity areas in the square that will be the attraction center of Istanbul. Street 1453, 'Ağaoğlu Maslak 1453' project located within the 1453 m. long street. Along the street are shops, specialty boutiques, food and beverage venues, art galleries, and world-famous stores where two distinctive shopping malls will feature exclusive brands at the beginning and end of the cadden. Street 1453's traffic is designed to facilitate project residents thanks to the road connections on the outer rim.

In the project; 'A' blocks, Maslak 1453 consists of 24 units of 3 different types, 'A', 'B' and 'C' blocks. There are 4039 houses in the grounds with floor heights varying from 3.25 to 3.5 m. Each guest has its own reception area. 'Ağaoğlu Maslak 1453' project has a total of 175 office departments. Offices are made up of bright, lighted sections of different sizes between

60 and 800 m2. Offices have their own car parks independent of the residential sections. Restaurants and cafes located on 5,000 m<sup>2</sup> open space are designed. The 'Ağaoğlu Maslak 1453' project features a large scale project with large squares, theaters, a fashion center in international standards and 1453 m long cottages and furnishings. The project has 24 towers with 55 being the highest and 21 being the lowest. Figure 3.186 shows the location plan of the whole project.

Table 2. Project scor	be belonging to	"Ağaoğlu Maslak	1453 Housing Settlement".

	PROJECT NAME:	AĞAOĞLU MASLAK 1453							
AG	PROVINCE:	İSTANBUL – SARIYER							
TAGTAG	DISTRICT:	MASLAK							
	CONTRACTOR:	TOKİ / Emlak GYO/ Ağaoğlu İnşaat A.Ş.							
Z TOTAL LAND AREA:		325.000 m	<sup>2</sup> TO	TOTAL CONSTRUCTION AREA 1.68		1.688.898	m <sup>2</sup> <b>XAKS</b> : <b>2,00</b>		
CONSTRUCTION	CONSTRUCTION START 2012 CONSTRUCTION DATE:				DATE:	2016			
S	HOUSING CODE:	<b>4789</b> housir	ng US	ER / PARCEL U	SE (m2)	1	16,97 m²		
	CAR PARK:	Parking Garage							
	SECURITY:	ECURITY: 24 hour security							
DONATI	SOCIAL AND GREEN AREA:	Terrace gardens, water surfaces							
SOSYAL VE DONATI	ACCESSORIES:	Shopping center, office, restaurant, cafe Large green areas, sports fields, fitness center, mini golf, football field, tensi courts,							
FİVAT	PRICE LISTS:	Smallest Housing (TL)	g 63.00 m2 Largest Residence 192.00 m2 (TL)			er. m2 Unit Price (TL)			
		134.000		826.000		3236			
	BY LOCATION	In the City Center	Around the City Center		Away from the City Center		-		
RMA	ACCORDING TO CAS	Smaller than 0.2	Between 0.2 - 1		Between 1 and 2 Gre		Greater than 2		
GRUPLANDIRMA	ACCORDING TO HOUSE	Less than 50	Between 50 - 100		Between 100 -	- 500 Greater than 50			
	ACCORDING TO THE SETTLEMENT SYSTEM	Road System	Road Vertical System		Courtyard System G		roup Patterned		
	ACCORDING TO PLACEMENT	One or several blocks	Group Block		Multi-Bloc	k -			

|--|

There are outdoor parking, large green areas, sports fields, fitness center, mini golf, soccer field, tennis courts, basketball court, volleyball court, bicycle path, walking areas, outdoor swimming pool, indoor swimming pool, children park in the concept of the project (Url-1, Url-2). It has seen in "Table 2."





Figure 1. State plan of the project 'Agaoglu Maslak1453' (Url-1).





Figure 2. "Ağaoğlu Maslak 1453 Housing Settlement", various perspective pictures of projects areas (Url-2).



Figure 3. "Ağaoğlu Maslak 1453 Housing Settlement", various perspective pictures of projects areas (Url-1).

**3.2 Productivity Analysis** 

3.2.1 Use of the Scoring Method in Productivity Analysis

The main components of the productivity analysis are the

- > Physical
- ≻ Legal
- Spatial characteristics.

The quality of the properties is determined by their presence in the market and their competitiveness with these three components.

Table 3. Using the Scoring Method in the Productivity Analysis of the Subject

Physical properties and zoning	Real Estate	Housing Settlement	Commercial Business Center
Area (m2)	325.000 m2	Positive	Positive
Point		3	3
View	Fatih Forests View,	Positive	Positive
	Bosphorus View, City View	3	3
Visibility	City center	Positive	Positive
		3	3
Zoning	Residential, Commercial	Positive	Positive
	Center Peer 2	3	3
	Hmax: Free		
TOTAL		12	12

According to the result, it is seen that the usage foreseen in the residential settlement area is close to each other. This suggests that the subject property has physical and location characteristics and qualities that enhance the efficiency of many commercial real estate investments.

#### 3.2.3 Marketplace Description and Analysis

It was determined by considering the market area of the real estate, accessibility, physical boundaries of the area, location of other competing projects, possible users and customers. The most important impact on the market areas has been the location of the real estate. The subject real estate Sarıyer District Maslak borders are located beside Fatih forest. It has a significant advantage in terms of being in the city and the city center. This information is in the light of the subject real estate;

- First Grade Market area; Maslak Region
- Second Grade Market Area; Levent Region
- Third Grade Market Area; As European Side City Center

#### It has been identified.

#### 3.2.4 Location Analysis

The physical and legal characteristics as well as the positioning of the real estate in the market and the other and most important factor that reveals the competitive power are the properties of the property. Location features evaluated in location analysis, which is part of productivity analysis; current urban area uses and intensities, transportation links, urban growth directions, growth rate, zoning and planning decisions, potential urban area use decisions in the neighborhood environment are discussed in the context. For this reason, within the scope of the study, the processes of identification of the real estate and the determination of the market area were dealt with later.

- 3.2.4.1 Positive Directions
  - The subject real estate is located in the direction of development in the western direction of the city.
  - The rate of population growth of the real estate real estate's primary market area is above the Istanbul average.
  - > The area is the CBD area.
  - Subject is the railway system projects planned to pass through the immediate vicinity of the real estate.
  - In the present case, region B income group also comes.

#### 3.2.4.2 Negative Directions

- > Population density is high in the region.
- Commercial centers in the region are fragmented, developing as sub-centers. The hinterland of the commercial investments intersect to a great extent and a separate center is formed in each of the neighborhood units of 3-4 thousand people.

#### 3.2.5 Supply Analysis

The residential settlement that is located within the market area of Istanbul and the subject real estate has been researched. The supply of housing settlement is developing rapidly. Housing production includes investments in the territorial and regional sense. In order to better understand the housing supply, TOKI and Emlak Konut Gayrimenkul Yatırım Ortaklığı A.Ş. projects are underway. In this context, such issues as rent and occupancy rates, foreign investor supply, spatial distribution of investments can be considered. This makes it possible to define competitive supply if the subject is projected as residential settlement and trade center for real estate.

#### 3.2.6 Market Share Forecast

The main reasons for the rapid increase in the number of residential settlement projects in Istanbul are the increase in the demand for credibility, the increase in population and the increase in the level of income over the years. However, the increase in the number of investments also brought competition. Particularly in the same concepts, the residential properties developed targeted the same masses, so the competitive power of investments decreased considerably.

The market share of investments is shrinking due to the high competition environment seen throughout the housing market. The development of the market and definition of the market area, those housing locations that are directly related to the access time are easily accessible, are regarded as domain of influence at first degree.

#### 3.2.7 Effective and Efficient Usefulness Identification

Effective and efficient use, market demands and financial feasibility; It is linked to the physical, legal, architectural and location characteristics of the property.

The most effective and efficient use of an immovable is the question of market analysis. Market analysis is used to decide on the most efficient and efficient use of developed real estate and vacant land. Reliable market data is crucial to creating a true value mind. Because market analysis is used as a stage for the most efficient and efficient use and is necessary to establish and understand the basis for the most effective and efficient use.

It is aimed for the real estate to carry the uses that can meet sectoral needs in line with the market conditions it is in and can be a strong part of the urban touch.

In this framework, the most effective and efficient use of the target is determined in accordance with the following criteria:

- ➢ Egality
- > Physical likelihood
- ➢ Feasibility
- Maximum profitability.

The legal and physical characteristics of the real estate are given in the section "Definition of real estate" in the market analysis process and the analysis of these criteria is summarized below.

#### 3.2.7.1 Legally Feasibility Criteria

The subject real estate has functioned as "Residential Area and Trade Area" in related plans. The right to settle on the subject property is designated as "precedent = 2" and "hmax = free". There is 1.688.898 m<sup>2</sup> construction area on parcel with net parcel area of 325.000 m<sup>2</sup>. Close to forest and green area.

#### 3.2.7.2 Physical Feasibility Criteria

Subject to the size and shape of real estate, it is suitable for residential and commercial business center use. There is 1.688.898 m2 of construction area on the net 325.000 m2 parcel. It is suitable for developments that can be done on the shape and slope of the mountain.

Within the context of effective and efficient usage determination, there are no physical and legal restrictions within the trade center which is other uses.

#### 3.2.7.3 Alternative 1: Housing Settlement

The subject real estate has already been built as a residential settlement. The total land area of the subject real estate is 325.00 m2 net. Within the framework of the 1/1000 Implementation Plan, it is defined as CASH: 2.00 and the clearable construction area on the ground is calculated as 1.688.000 m2. While the housing prices are determined as 63 m2vand 134.000 TL (2012 inflation rates), the most residential type is 192.000 m2 and 826.000 TL (2012 inflation rates).

#### 4. Conclusion

The two most important components of the appraisal process are market analysis and effective and efficient use analysis. Appraisal duties should be based on widespread market conditions and for the most effective and efficient use of real estate. These two forms of analysis are linked. The appraisal expert's research of trends affecting the economic base of the market area directly goes to the most efficient and efficient use of the property.

In the scope of the study, primarily the basic concepts related to real estate and real estate appraisal are emphasized. Real estate is the main topic of the appraisal. For this reason, concepts related to real estate are of great importance in the study. Factors affecting the value of real estate are also an important part of market analysis. The concepts described in this section of the work are important for understanding the valuation process.

The most efficient and most efficient use of an immovable is the question of market analysis. Market analysis is used to decide on the most efficient and most efficient use of developed real estate and vacant land. Reliable market data is crucial to creating a true value mind. Market analysis is used as a stage for the most efficient and efficient use. Market analysis is required to establish and understand the basis for determining the most efficient and most efficient use.

Within the scope of price analysis of 'Ağaoğlu Maslak 1453' project, m2 unit price was determined as 6163.00 TL / USD 2371.48. The residential sale price is very high compared to other projects in Sarıyer. Subject Real Estate For the purpose of efficient and efficient use, it was constructed as Housing Settlement and Trade Center.

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