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Conference Paper

Differentiation of Real Estate Market in Istanbul between 1995, 2005

45th Congress of the European Regional Science Association: "Land Use and Water Management in a Sustainable Network Society", 23-27 August 2005, Amsterdam, The Netherlands

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Yirmibesoglu, Funda (2005) : Differentiation of Real Estate Market in Istanbul between 1995, 2005, 45th Congress of the European Regional Science Association: "Land Use and Water Management in a Sustainable Network Society", 23-27 August 2005, Amsterdam, The Netherlands, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:

<https://hdl.handle.net/10419/117731>

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**45th CONGRESS OF THE EUROPEAN REGIONAL SCIENCE
ASSOCIATION
VRIJE UNIVERSITEIT AMSTERDAM**

**DIFFERENTIATION OF REAL ESTATE MARKET
IN ISTANBUL BETWEEN 1995, 2005**

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ABSTRACT

Due to migration and rapidly increasing urban population settlement in urban land, lacking any planning or infrastructure, in addition to the destruction of the 17th August 1999 earthquake, it is necessary to examine uncertainty of housing demand and supply in Istanbul.

After the 17th August earthquake, Istanbul has been adversely affected economically and socially. Significant differentiation in urban housing demand and supply has been observed. In the paper, this differentiation will be scrutinized for the 1995-2005 period before the earthquake, and the period after the earthquake until present. The distribution of real estate companies will be examined with the help of GIS and the changes in the real estate market.

The purpose of the research is to analyse; Housing production in the housing market in Istanbul; Differentiation of housing demand and supply; Distribution of real estate companies; Differentiation of land value in neighbourhoods before and after the earthquake. The study provides an insight into the housing and real estate market in Istanbul, results and proposals of which will be presented.

Key words: Housing, Demand, Supply, Real Estate, Earthquake

1. INTRODUCTION

The 21st century is the beginning of an era where urban attachment at the international and national level, equity, continuity, capability, administration with many actors and the settlement systems need to be dealt with new settlement management ethics. In this period, a multidimensional change, a process of modification and new constitutions are observed for residential areas as well. A significant portion of the demand for housing in our major cities that are subject to a rapid population increase as well as needs that arise as a result of disasters that cause loss of lives and property and the dilapidation and transformations of old city centers, is met through illegal means of supply - squatter areas or illegal constructions - which lead to the deterioration in urban quality and to the problem that the urban population cannot benefit from urban services.

Those living in the rural areas began to migrate to the cities in our country as of the 1950's in order to have access to better living conditions; hence they causing the urban population to increase rapidly. In the 1960's, following this rapid urbanization the order and organization of our cities were distorted and our cities became unhealthy with regions added in an unplanned manner, the problem of urbanization and a deficit in housing supply becoming an agenda. The problem of housing reached significant levels in the 1980's and continues to be a problem.

The established manner of planning since the 1930's was that a planner contractor would be hired through the Iller Bank to make plans away from that city (in Istanbul or in Ankara) and deliver the plan to a municipality for implementation of the plan which would be left to destiny (Tekeli, 1991). Plans prepared with this method remained largely ineffective in their application, (as stated in the National Report and Plan for Turkey within the framework of the Habitat II conference held in 1996), due to two basic processes;

- By-passing of Master Plans and legalization by means of Local Plans,
- Legalization of Illegal Constructions through Construction Amnesties.

In an environment where planning remains so ineffective, it is natural that great deficiencies and gaps exist in the production of housing aiming to meet the existing residential demand of the Housing Market. Because the two processes explained

above almost encourage households not only to meet their accommodation needs by themselves but also to make illegal profits from housing supply other than the purpose of own accommodation. Hence, the relation between planning and the housing market was built on wrong foundations from the beginning (Yirmibesoglu, Özüekren, 2002).

In addition to these existing negative factors, the 1999 earthquake has occurred as a most important factor affecting the housing market. August 17th, 1999 earthquake has been the turning point for the public to scrutinize the quality and safety of construction systems and geological location, especially in the housing market in Istanbul, where rapid increase of population and migration have been creating serious social disorders.

In a very short time, changes in housing preferences with fear of an earthquake, new political and legal arrangements in the housing market have reflected in the urban environment. Shortly, urban development dynamics have changed with the earthquake.

The aim of this study is, to scrutinize the role of Real Estate Companies in these changes and to research the differentiation in the housing and real estate markets before and after the earthquake.

In relation with this aim, socio-economic structures of households, housing production, differentiation in demand and supply in the housing market and distribution of real estate companies have been investigated.

2. HOUSING DEMAND AND SUPPLY IN THE HOUSING MARKET

Housing Demand

Population increase, migration, rapid transformation to nucleus families and the desires of households to own better houses are the factors which keep the housing demand alive. Turkey has a rapid increase in population with 0.002 according to the census of 2000. Housing demand has been rising since the 1960's in Turkey and during the period of the 8th Development Plan it has reached its highest levels in 2005 (2714000), and is still rising.

The ratio of housing demand to housing occupancy permits in the post-1995 period is 51.1% and housing shortage is 1240000.

Table 1. Estimated Housing Demand and Housing Shortage in Five Years Development Plans

| Period of Five Years Development Plans | Housing Demand*(A) | Number of Housing Occupancy Permits**(B) | % (B/A) | Housing Shortage (A-B) |
|---|--------------------|--|---------|------------------------|
| 1st Five Years Development Plan 1963-1967 | 1 112 052 | 138 212 | 12.4 | 973 840 |
| 2nd Five Years Development Plan 1968-1972 | 1 200 000 | 360 761 | 30.1 | 839 239 |
| 3rd Five Years Development Plan 1973-1977 | 1 663 000 | 499 312 | 30.0 | 1 163 697 |
| 4th Five Years Development Plan 1979-1983 | 2 080 065 | 607 721 | 29.2 | 1 472 344 |
| 5th Five Years Development Plan 1985-1989 | 1 219 000 | 943 830 | 77.4 | 275 170 |
| 6th Five Years Development Plan 1990-1994 | 1 300 000 | 1 170 000*** | 0,90 | 130 000 |
| 7th Five Years Development Plan 1995-2000 | 2 540 000 | 1 300 000*** | 51.1 | 1 240 000 |
| 8th Five Years Development Plan 2001-2005 | 2 714 000**** | ---- | ---- | ---- |

* Estimated Total Housing Demand for Villages and Cities

** Total number of houses which have occupancy permits does not include data from 1963

*** Approximate value

**** Total housing demand resulting from the disaster 3075000

Source: 6th, 7th, 8th FiveYear Development Plan

It has been observed that average size of households is continuously decreasing in each census. Approximate size of households is 5,05 in 1990 in Turkey and housing demand is 11119000 housing units in the same year.

There are serious gaps between the number of housing occupancy permits to the number of demand to housing units.

Table 2. Population, Number of Households and Size of Average Households in Turkey (1955-1997)

| Census Year | Total Population (A) | Total Number of Households | Size of Average Household according to (A) |
|-------------|----------------------|----------------------------|--|
| 1955 | 24 064 763 | 4 237 176 | 5.68 |
| 1960 | 27 754 820 | 4 885 325 | 5.68 |
| 1965 | 31 391 421 | 5 536 116 | 5.67 |
| 1970 | 35 605 176 | 6 261 949 | 5.69 |
| 1975 | 40 347 719 | 6 982 505 | 5.78 |
| 1980 | 44 736 957 | 8 522 499 | 5.25 |
| 1985 | 50 664 458 | 9 730 018 | 5.21 |
| 1990 | 56 473 035 | 11 188 636 | 5.05 |
| 1997 | 62 810 111 | 13 042 414 | --- |

Source: SIS, 1990-1997 General Census of Population

In Istanbul the average size of households has decreased to 4,02 and the housing demand is 2172807 housing units. However, there is also an unoccupied housing potential in the Istanbul metropoliten area. Giritlioglu (et.al., 1993; 1995) have established that 5% of houses in Beyoglu and Eminonu, 4% in Sisli, 3% in Uskudar, 1% in Besiktas, 06% in Kadikoy, 05% in Bakirkoy were unoccupied. In the overall

picture, these figures represent the existence of a significant percentage of unoccupied housing potential for Istanbul.

Table 3. Population, Number of Households and Size of Average Households in Istanbul (1980-1985-1990)

| Census Year | Total Population (A) | Total Household Population (B) | Total Non-Household Population (A-B) | Total Number of Households | Size of Average Household according to (A) | Size of Average Household according to (B) |
|-------------|----------------------|--------------------------------|--------------------------------------|----------------------------|--|--|
| 1980 | 4741890 | 4546773 | 195117 | 1063886 | 4.46 | 4.27 |
| 1985 | 5842985 | 5499047 | 343938 | 1293507 | 4.52 | 4.25 |
| 1990 | 7309190 | 6888928 | 420262 | 1664821 | 4.39 | 4.14 |
| 1997 | 9198809 | 2172807 | | | | 4.02 |

Source: SIS, 1980,1985,1990,1997 Census of Population

According to the 1990 census, the housing tenure ratio is 63,4% compared to 36.6% non-homeowners in Istanbul (Tablo 4).

Table 4. Home Ownership Status in Istanbul (1990)

| Census of 1990 | Households Which Own Two Homes % | Households Which Own Their One Home % | Households Which Do Not Own Their Home % | Unknown % |
|-----------------------|----------------------------------|---------------------------------------|--|-----------|
| Province | 12.5 | 50.8 | 36.6 | 0.1 |
| The Main Municipality | 12.3 | 50.0 | 37.6 | 0.1 |

Source: SIS, 1990 Census of Population

It had been established after the earthquake of 1999 that there were 2 billion 400 thousand houses, 700 thousand buildings in Istanbul and that 50% of these were illegal (IMM, 2001).

Housing Supply

The most important problem that rapidly urbanizing countries such as Turkey face is the ability to provide sufficient housing for the large masses that come to the cities from rural areas and do not have the skills required for urban life (Habitat II-National Report, 1996), which is tried to be solved by various means of housing supply in the market. Factors affecting housing availability are supply, renovation, and loss of residences due to knocking down, fires and disasters and the houses used for nonresidential purposes (ISO, 1983).

The most important factor which makes solving the housing problem harder is the fact that besides serving accommodation needs, real estate is perceived as a means of investment since the majority of the society lacks a widespread and effective Social Security system. Hence, the aim of making investments also lies behind the demand for residences besides meeting the accommodation needs of households (Özüekren, 1996). As a result, this aim can lead to household demands that exceed existing and future needs, which may lead to extreme production and the concentration of too much investment power in housing supplies leading to the rise of speculative behavior and to a stronger attachment of households to urban asset ownership. Meeting residential needs in this atmosphere becomes difficult, supply types become more polarized and reduced to a few and stereotyped processes, inequalities increase and the necessary tools for supervision are restricted (Habitat II – National Report, 1996).

Different methods cannot be implemented in Turkey for meeting the housing requirement and the few existing supply channels try to meet the demand. Thus, after the Second World War, there is only the individual means of supplies for residences and those wishing to own a house purchase a piece of land, use the construction rights of this land, get permission from the municipality for the implementation of the project prepared by a person with a technical profession and have the house constructed by contractors or small scale producers. This process could not be sufficient to meet the rapidly increasing demand after the Second World War. The price of urban land increased rapidly in the system that could not generate sufficient amounts of land with construction permission and the process of migration led to other unfavorable factors. This bottleneck led to two types of housing supply. (Habitat II, National Report, 1996):

- Squatter areas that were established in time and
- Build and sell.

As rapid urbanization and the increase of prices in urban areas were combined with the rule allowing only the landowner to make the construction, this crisis was overcome by means of a legal arrangement allowing the construction of apartments allowing owning of flats by different individuals, which otherwise made it impossible

for the middle income group to own a residence. Hence, housing cooperatives became a means of supplying residences in the residential market.

The existing and developing means of housing supplies which used to exist after the 2nd World War were overcome and in the 1980's a transition was made to a multi-channel mass housing implementation that can be regarded as a success in the housing market. The positive conditions established for the realization of this transition were:

- The development of Construction Technologies in Turkey,
- The establishment of Mass Housing Fund for financing construction of houses,
- The allocation of large areas for housing through local administrations or the Land Offices.

This transition, which was important for solving the housing problem, was achieved through four channels:

- Cooperatives,
- The production made by the Mass Housing Fund Administration,
- The Mass Residential Areas that Local Administrations produced with the support of the Mass Housing Fund Administration,
- The efforts of Private Investors and the Turkish Real Estate Bank.

Although larger demands caused by an increasing population are met, due to the speculative based behavior of the population, it does not necessarily mean that production of housing and environments are of sufficient quality, despite the fact that sufficient number of houses are produced from a quantitative point of view. Thus the fact that housing policies implemented aim at possession of houses and do not encourage the supply of houses for rent suitable for the payment capabilities of the middle and low income groups, appear as an important deficiency which makes the situation even more difficult for the lower income groups.

In view of the above facts of demand and supply in the housing market and the 1999 earthquake as an important turning point, the influence of Real Estate Companies, before and after the disaster, is examined in this research.

3. DIFFERENTIATION OF REAL ESTATE MARKET

An ambiguous and stagnant period started in the housing market after the earthquake of 1999. Due to lack of legal control on houses and unreliable construction trends not complying with earthquake safety standards, brought about the question of safety of existing houses. Various legal arrangements have been made after the earthquake, enforcing geological surveys and safer construction systems complying with earthquake safety standards for all new constructions. In addition to the existing depression during this period in the housing market, the 2000 and 2001 economic crisis have further affected the housing and real estate markets. This situation continued until the end of 2003, causing sharp decreases in rents and house prices. Towards the end of 2003 the market started to pick up and prices rose to the same levels as in 1998. Studies on new arrangements such as the mortgage system have started. This positive atmosphere nearly doubled the prices after the second half of 2004. There are four major events which had significant effects on Istanbul's development and growth (Yirmibesoglu, 1997; 2000) (Yirmibesoglu, Özbekren, 2002) (Kalkan et.al., 2004);

- 1) The Bosphorous Bridge and connecting highway systems
- 2) Illegal housing and improvement development plans
- 3) Establishment of town municipalities in the Potential Development Areas of Istanbul
- 4) 1999 Marmara earthquake and the trend to spread out of the city

The situation of the housing market and distribution of real estate companies will be investigated, in relation with the above mentioned events, during 1998-2002 in various districts of Istanbul. Demographic data such as population, increase rate of population, density, number of households and physical characteristics such as land use, kinds of housing, wealth of districts, distance to city center, area, date of becoming districts and land value characteristics of districts have been researched and the distribution of real estate companies have been analyzed.

DEMOGRAPHIC AND PHYSICAL CHARACTERISTICS OF DISTRICTS IN ISTANBUL

A descriptive study is made which evaluated the relationship between the distribution of real estate companies among districts and the different physical and social structures observed in these districts in 1995-2005. All the data are summarized in Table 6.

- Real Estate Companies lists were taken from Istanbul Chamber of Commerce 1994, 1998, 2002, The number of Companies were evaluated in 5 categories 1=very low; 2=low; 3=middle; 4=high; 5=very high.
- Land values were evaluated from Real Estate Tax Lists, (1994, 1998, 2002), and calculated in 5 categories 1=very low; 2=low; 3=middle; 4=high; 5=very high.
- The date that districts were established was retrieved from the census data of State Institute of Statistics of Turkey (SIS, 1980-1985-1990-1997-2002). The districts were evaluated in 3 categories according to their date as: old (before 1987); new (after 1987); very new (1992).
- Distance from the center was taken from General Directorate of Highways (<http://www.kgm.gov.tr>). The districts were evaluated in 4 categories according to their distance from the center as 10-20-30-40 kilometers and above.
- The data of land use was taken from the Istanbul Master Plan, prepared by Istanbul Metropolitan Municipality (IMM, 1995). Land uses were evaluated according to 3 categories “residential”, “residential+commercial”, “residential+industrial”.
- Population, density, rate of population increase, area size of districts, and the number of households of all districts were taken from census data of the State

Institute of Statistics of Turkey (SIS, 2002). There were four groups in this characteristic e.g. “very low”, “low”, “high”, “very high”

- Characteristics of Residence: The number of total official residences and squatter residences in each district of Istanbul was obtained from the Istanbul Metropolitan Municipality (IMM, 2000). Istanbul average is 0.21 and represent formal + squatter districts in table 6. Below this level has shown highly formal, and formal districts; Above this level has shown highly squatter and squatter districts.
- Wealth of districts were evaluated according to 3 categories “1=low”, “2=middle”, “3=high”

Land Values in Istanbul

When a classification according to the values of areas is made in the Formal Residential areas, it is observed that the very low, low and middle income groups correspond to a very high ratio of 88% in 1994, 79% in 1998, 78% in 2002 (Real Estate Tax Lists, 1994, 1998, 2002).

Table 5. The Distribution of Income Groups in the Formal Residential Areas according to the Land Values of 1990.

| Income groups | 1994 | | | 1998 | | | 2002 | | |
|---------------|----------------------|---------------------|---------------|----------------------|---------------------|---------------|----------------------|---------------------|---------------|
| | Land Values TL. sqm. | Number of districts | In Istanbul % | Land Values TL. sqm. | Number of districts | In Istanbul % | Land Values TL. sqm. | Number of districts | In Istanbul % |
| very low | 0-25000 | 110 | 19 | 0-2500000 | 119 | 16 | 0-10000000 | 89 | 11 |
| low | 25001-100000 | 206 | 36 | 2500001-10000000 | 236 | 31 | 10000001-75000000 | 291 | 38 |
| middle | 100001-500000 | 191 | 33 | 10000001-30000000 | 240 | 32 | 75000001-200000000 | 207 | 27 |
| high | 500001-1000000 | 47 | 8.5 | 30000001-75000000 | 111 | 15 | 200000001-500000000 | 138 | 18 |
| very high | 1000001 > | 20 | 3.5 | 75000001 > | 44 | 6 | 500000001 > | 31 | 4 |
| total | | 574 | 100 | | 750 | 100 | 100 | 755 | 100 |

Source: The list showing the Minimum Unit Values of Land in Districts in Istanbul, Real Estate Tax Lists, 1994, 1998, 2002

Table 6. Demographical-Physical Characteristics, Real Estate Companies and Land Values in Istanbul

| Districts | Characteristics of Settlement | | Real Estate Companies 1998-2002 | | Land Values 1998-2002 | | Population | Population Density | Area Pers./Km.Sq. | Increase of Population | Wealth |
|----------------|-------------------------------|-------------------|------------------------------------|-----------|--------------------------|-----------|------------|-----------------------|----------------------|---------------------------|----------|
| | Land use | Residence | 1998 | 2002 | 1998 | 2002 | 2000 | 2000 | 2000 | 2000 | 2000 |
| | | | | | | | | | | | |
| Eminönü | Residential and commercial | Formal | Low | Low | Very high | Very high | Very low | Low | Very low | Very low | High |
| Beyoğlu | Residential and commercial | Highly formal | High | Very high | High | High | Low | Very high | Very low | Very low | Moderate |
| Fatih | Residential and commercial | Formal | High | Moderate | High | High | Very high | Very high | Very low | Very low | Moderate |
| Sisli | Residential and commercial | Formal + squatter | Very high | Very high | Very high | Very high | Low | Low | Very low | Low | High |
| Besiktas | Residential and commercial | Highly formal | Very high | Very high | High | High | Low | Low | Very low | Very low | High |
| Zeytinburnu | Residential and Industrial | Highly squatter | Low | Very low | Moderate | High | Low | High | Very low | High | Moderate |
| Uskudar | Residential and commercial | Formal | High | High | Very high | Very high | Very high | High | Very low | Low | High |
| Kadıköy | Residential and commercial | Formal | Very high | Very high | Moderate | Very high | Very high | High | Very low | Very low | High |
| Eyup | Residential and Industrial | Highly squatter | Very low | Very low | Low | Low | Low | Very low | High | Low | Moderate |
| Bakırköy | Residential and commercial | Formal | Very high | Very high | Very high | Very high | Low | Low | Very low | Very low | High |
| Gaziosmanpasa | Residential and Industrial | Highly squatter | Low | Very low | Moderate | Moderate | Very high | Very low | High | Very high | Low |
| Sarıyer | Residential | Formal + squatter | Moderate | Low | Low | Low | Low | Very low | High | High | High |
| Beykoz | Residential | Highly squatter | Very low | Low | Very low | Very low | Low | Very low | High | Low | Moderate |
| Kartal | Residential and Industrial | Highly squatter | High | Moderate | Low | Moderate | High | High | Very low | High | Moderate |
| Adalar* | Residential | Highly squatter | Very low | Very low | High | High | Very low | Very low | Very low | Very low | High |
| Catalca* | Residential | Formal | Very low | Very low | Very low | Very low | Very low | Very low | Very high | High | Moderate |
| Silivri* | Residential | Formal | Very low | Very low | Moderate | Low | Very low | Very low | Very high | Very high | Moderate |
| Sile* | Residential | Formal | Very low | Very low | Very low | Very low | Very low | Very low | Very high | High | Moderate |
| Bayrampasa** | Residential | Formal + squatter | Very low | Very low | Moderate | High | Low | Very high | Very low | Low | Low |
| Kagithane** | Residential and Industrial | Highly squatter | Very low | Very low | Very low | Very low | High | High | Very low | Low | Low |
| Umraniye** | Residential and Industrial | Highly squatter | Moderate | High | Moderate | Very low | Very high | Very low | Low | Very high | Low |
| Pendik** | Residential and Industrial | Highly squatter | Very low | Very low | Very low | Low | High | Very low | Low | Very high | Moderate |
| Kucukcekmece** | Residential and Industrial | Highly formal | Low | Low | Moderate | Low | Very high | Low | Low | Very high | Moderate |
| Buyukcekmece** | Residential | Formal | Moderate | High | Very low | Low | Very low | Very low | High | High | Moderate |
| B.Evler*** | Residential | Formal +squatter | Moderate | Low | Low | Moderate | Very high | Very high | Very low | High | High |
| Esenler*** | Residential | Formal + squatter | Very low | Very low | Moderate | Low | High | Low | Very low | Very high | Moderate |
| Maltepe*** | Residential and Industrial | Highly squatter | Low | Moderate | Low | Moderate | High | Very low | Low | High | Moderate |
| Güngören*** | Residential | Highly squatter | Very low | Very low | Moderate | Low | Low | Very high | Very low | Low | Moderate |
| Bagcilar*** | Residential and Industrial | Highly squatter | Very low | Very low | Low | Low | Very high | Very high | Very low | Very high | Low |
| Sultanbeyli*** | Residential | Squatter | Very low | Very low | Very low | Very low | Low | Low | Very low | Very high | Low |
| Avcilar*** | Residential | Formal | Low | Low | Very low | Low | Low | Low | Very low | Very high | Moderate |
| Tuzla(**)(*) | Residential and Industrial | Formal | Very low | Very low | Very low | Low | Very low | Very low | Low | Low | Low |
| Average | | 0,21 squatter | 35 | 39 | 17154000 | 109489000 | 283925 | 10861 | 162 | 0, 027 | |

Own analysis (Ergun, Yirmibesoglu, 2005) (*) Suburb districts (**) Districts have been formed in 1987 (***) Districts have been formed in 1992

DISTRIBUTION OF REAL ESTATE COMPANIES IN ISTANBUL

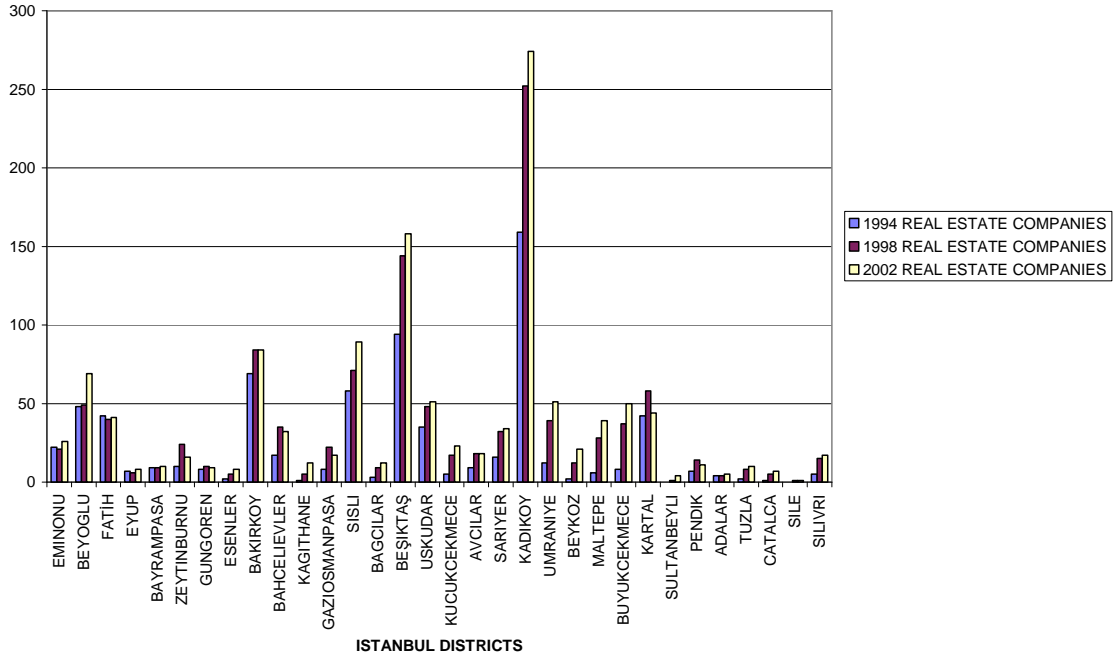
There are more real estate companies in the old districts of Istanbul (Map1, Map 2);

- Kadıköy, Besiktas, Bakırköy, Sisli (sub center);
- Beyoglu (city center);
- Büyükçekmece (suburb); Fatih (old distict); Kartal, Ümraniye (new district), Üsküdar (sub center)

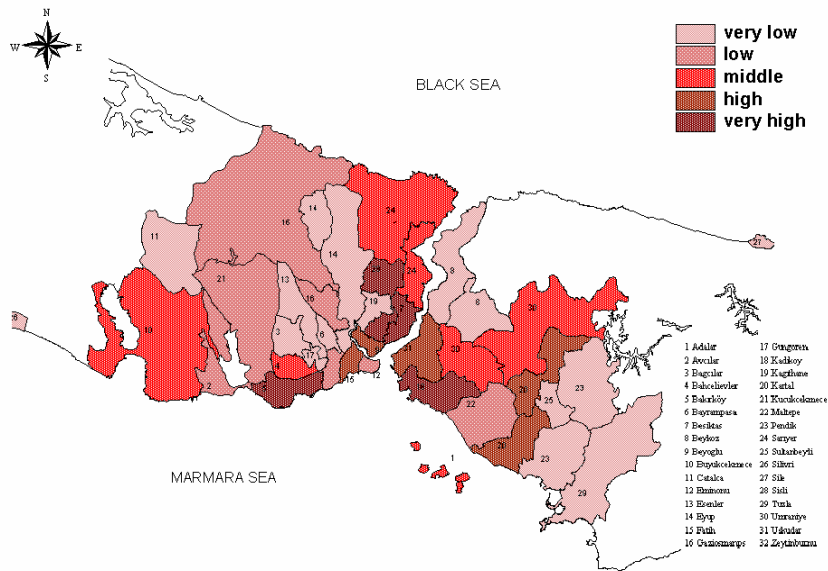
Districts where there are fewer real estate companies are;

- Sile, Tuzla, Adalar, Catalca (suburb),
- Esenler, Bagcilar (new districts); Eyüp (old district); (Kagithane and Sultanbeyli squatter)

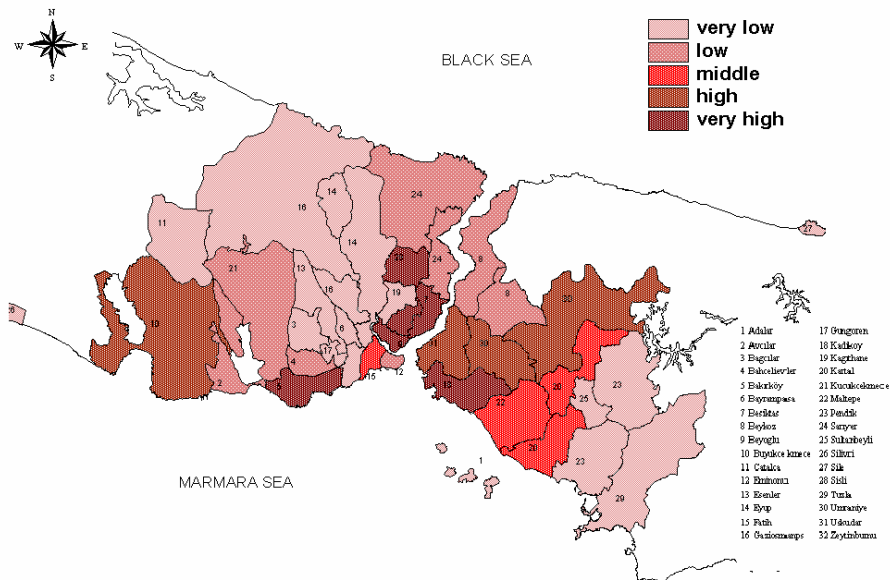
Figure 1. Real Estate Companies between 1994-1998-2002 in Istanbul Districts According to Distance from City Center



Map 1. Distribution of Real Estate Companies in Istanbul Districts in 1998



Map 2. Distribution of Real Estate Companies in Istanbul Districts in 2002



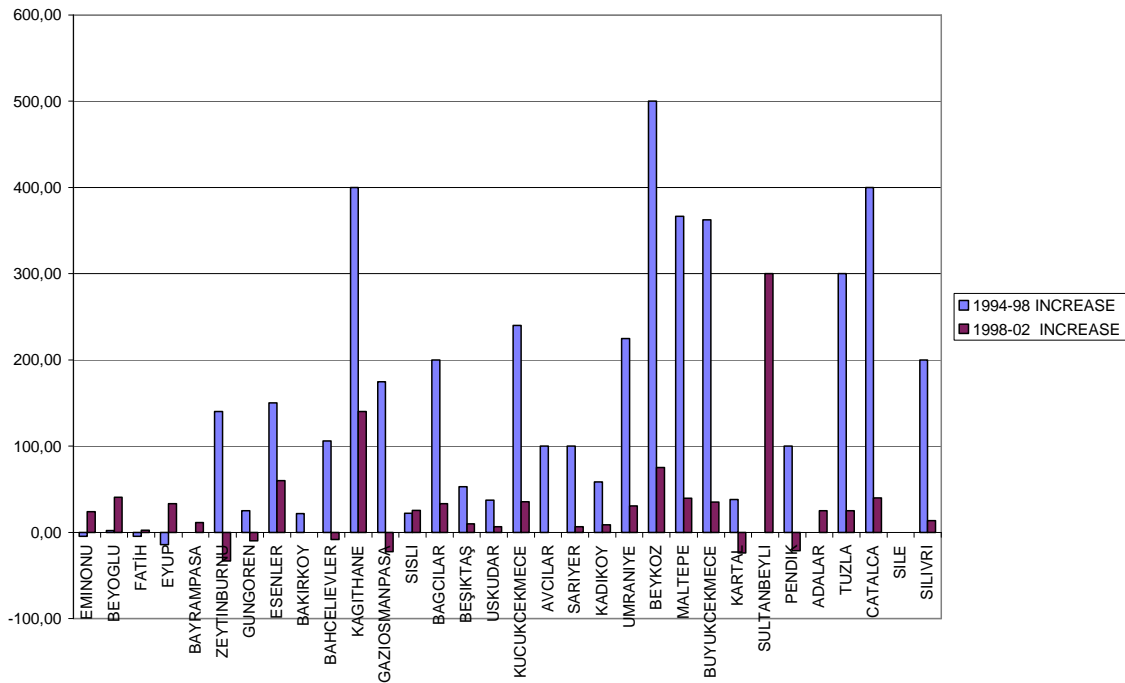
Before the earthquake, between 1994-1998, the highest rate of increases in real estate companies by districts are;

- Beykoz, Büyükçekmece, Catalca, Silivri, Tuzla (200%-500%) (sub urb)
- Bagcilar, Küçükçekmece, Ümraniye (200%-500%)
- Avcilar, Bahcelievler, Esenler, Gaziosmanpasa, Pendik, Sariyer, Zeytinburnu (100%-200%)(districts which are away from the city center and sub-center)

The number of real estate companies has sharply increased in squatter areas such as Sultanbeyli, Kagithane at a rate of 100-300% in 1998-2002. It could be concluded that squatter houses have been introduced in to the real estate market starting changes in these districts (squatter houses transforming into multi-flat apartments and illegal houses being traded by the real estate companies.)

Beykoz and Esenler are other districts where 50%-100% increases have occurred. During this period the increase rate of real estate companies is decreased being affected by the 1999 earthquake and the economic crisis of 2001-2002.

Figure 2. Increase of Real Estate Companies between 1994-2002 in Istanbul Districts According to Distance from City Center



4. CONCLUSIONS

Earthquake and economic crises are the major events in the housing and real estate markets in Istanbul between 1995-2005. Both markets have been interactively affected by these events, with occasional depressions or active years.

This research has aimed to investigate changes in the housing market in relation with the real estate market in the last decade. It has been observed that close relationships exist between demographic, physical characteristics of districts and distribution of real estate companies.

The analysis reveals that the number of real estate companies in the districts in Istanbul correlates closely with its population, number of households, living quality, and land values. In other words, the number of real estate companies increase, as districts become larger, wealthier, more valuable, more populated and with larger households, whereas in districts away from the city center, and in new districts the numbers drop.

Considering that both markets have undergone various changes, the increase and decreases in demand in the housing markets, reflect on the distribution of real estate companies according to location.

In the following years, the most important subjects to be urgently dealt with will be; to rehabilitate existing housing stocks, which are in central and subcentral old districts more dense with real estate companies, according to certain standards, and to build new houses with good quality in new, urban fringe districts which demonstrate an increasing number of real estate companies and more demand after the earthquake.

In Turkey, where the demand and supply balance in the housing market is established by the market itself, taking precautions for the supply of the demand by housing according to certain standards and by planning strategies which take into account the environment and proper characteristics of each city individually, is very important.

In the models tried in many countries such as England, India, Japan and the US, it was observed that the "Public-Private Partnerships" were quite successful for the

provision of all kinds of urban services and projects such as the production of mass housing for the accommodation of low income groups and the improvement of squatter areas that the private sector does not otherwise find attractive as a means of investment. The public sector is able to draw the capital of the private sector to projects of this type with a small transfer of funds and a good organization. (Payne, 1999)(Dutta, 2000)(Golany ve digerleri, 1998) (Osborne, 2000) (Pierre, 1998).

Along with the rapid increase of migration from the rural areas to cities and the rapid population increase, trying such partnerships, after having established the legal and administrative system according to our conditions, that utilize the private sector can be perceived as a positive step for decreasing the urban problems in our country where public resources are scarce and the problems to be solved are plenty.

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