Abstract

The aim of the paper is to determine problem areas of the housing market in Turkey and in Istanbul; the characteristics of the housing demand in Istanbul; household mobility of different households with different socio-economic characteristics and to provide inputs for the housing market.

The paper is based on the scenario, that households have different household mobility and residential location behaviours resulting from different socio-economic characteristics as opposed to the classical residential location models which are based on the neo-classical Economic Approach.

Since social and economic conditions are not homogenous in the various districts of Istanbul, the field analysis in the research are determined by randomly selecting among lists of three different sample areas such as Mass Housing Areas, Legal Residential Neighbourhoods and High Income Housing Areas. The questionnaire results provide an insight in to the family structures of households, housing types and decisions on residential location and preferences for the future. The analytical study of these results assist in providing data for the planning of the housing market and housing demand in Istanbul.
1. Introduction

The city models are being used for the attainment of a simpler understanding of the factors that affect the land usage decisions of urban settlements. In these analytical studies, urban systems are considered as mathematical equations and are used in the solution of spatial problems. (Foot, 1981). The scientists who collect their efforts under three different urban models dating back to the 19th century, namely economic, “Micro-Economic / Behaviorist Approaches”, physical “Macro Approach / Social Physics” and simulation “Simulation Approach (see Baxter, Perraton, 1974; Bertuglia, Leonardi, Occelli, Rabino, Tadei, Wilson, 1987) share the view that studies conducted especially in the field of location selection, are valuable sources for the world urban planning history (Von Thünen, 1826 (Agricultural Location Model), Weber, 1909 (Industrial Location Model), Christaller, 1933 (Services Location Model), Losch, 1954 (Services Location Model), Alonso, 1964 (Residential Location Model), Carey 1858, Lowry 1964, Hill 1965, Wilson 1970, ....... , See Urban Systems, 1987).

In the studies conducted on the land usage of cities and location of different functional areas, various views have been developed for the determination of the levels of activities and for the residence, service, and industrial area usage based on principles of land allocation for such models as in the Lowry (1964) model. As in other types of area usage, the selection of Residential Location and the criteria according to which such selection is made are among the issues that are being handled with importance.

In the research, among the economic approaches developed by Von Thunen 1826, Weber 1909, Christaller 1933, Losch 1954 and Alonso 1964, “... Micro Economic Theory which dates back to the creators of Neo-Classical Economic Theory ...” (See Baxter, Perraton, 1974) have been analyzed. This current theory to which the existing Residential Location Model has been based on, have become the subject of research because it emphasizes the “choices of the household populations”.

2. Theoretical Framework

The residence location choices and their mobility is being questioned in the study within the framework of the Residential Location Models. The location selection models and
the behavioural models based on the current neo-classical economic theory mentioned above, considers the household population to be homogeneous and the theory is formed and questioned in this respect. The study aims at investigating the assumption that the households, because of their different social and economic structures, are not homogeneous in their behavior for residential location selection. The cycle related to the different structures of individuals and household populations is aimed to be questioned and solved following a field study and a survey to be carried out in the sampling area (Greenwood, Stock, 1990) (Pickvance, 1974), As well known, in parallel to the increase of population in metropolitan residential areas, differences in demand and tendencies of users are being observed. This leads to a quantitative increase of the need for housing and this increase in return increases the speed of growth on one hand and causes the change in the mobility of settlement types on the other hand. (Giritlioglu, Bölen, Ergun, Yirmibesoglu, 1993). The aim of the study is to question this spatial theory by defining this mobility and the underlying reasons. Similar studies and examples are present on this issue which form a basis of resource and contribution (Alden Speare (1974), Muth (1969), Newman (1979), Clark ve Van Lierop (1986), Gleave ve Cordey-Hayes (1977)).

Pickvance (1968) mentioned that a number of types of determinants about the level of residential behaviour can be distinguished: Household characteristics, such as life-cycle position and housing tenure; housing values, such as preference for owner occupation; neighbourhood characteristics, such as proximity to amenities, and social status; housing characteristics, such as the age, size and the tenure composition of the housing stock in an area; and central and local government policy affecting access to different types of housing, etc.

According to his results different social and economic household characteristics display different behaviors such as:
- Married people are more likely to own their house than single
- Older people are more likely to own their house than younger people
- High income people are more likely to own their house than lower paid people
- Home owners are less likely to be mobile than tenants
- Older people are less likely to be mobile than younger people
- High income people are less likely to be mobile than lower paid people
- Small households are more likely to be mobile than large households
Pickvance’s analysis suggests that the consistently observed correlation between tenure and mobility is not spurious. In the case of desired mobility there is a direct causal relation between tenure and mobility, and for expected mobility, there is also an indirect path via the life-cycle position variable.

3. Assumptions
Due to lack of statistical data for the Istanbul Metropolitan Area a field survey and interviews have been performed in order to determine various types of housing requirements depending on diversities in family structures, household preferences and residential location behaviours, taking into account the country’s economic and social characteristics. Since social and economic conditions are not homogenous in the various districts of Istanbul, the fields in the research are determined by random selection among lists of three different sample areas such as:

i) Mass Housing Areas (Yirmibesoglu, 1990),
ii) Formal Residential Areas (Lists of Districts, 1994),
iii) High Income Residential Areas,

where a total of 600 interviews have been performed (in the above mentioned three groups each having 20 different sample areas and a total of 200 interviews at each group.

Since Istanbul was founded and until recently, urban population has increased and decreased in relation to economical and political conditions, and the spatial mobility of population was distributed and shaped between the two sides of the Bosphorus and along new transportation facilities (Bölen and others, 1996).

In this formation, by assuming that different social and economic characteristics of household populations are dominant, further assumptions of the study based on space in order to determine the direction of this formation and the current situation of the present time are as follows:

**Assumption 1.** That households have different household preferences and residential location behaviours resulting from different socio-economic characteristics contrary to the traditional theories, and that households may not find the most suitable houses and
environments they want. This causes inequity in the distribution of households in the metropolitan area.

**Assumption 2 (A2).** That different social and economic household characteristics like age, income, life cycle and tenure, result in different household behaviours.

The assumptions through which Pickvance (1974) has reached certain conclusions for household mobility (see pp.3) are being analyzed as sub assumptions under the second assumption. (With various addition in relation with Turkish social structure).

**4. Empirical Analysis**

The aim of the survey and interviews were aimed to examine the effects of population and household characteristics on residential location and its spatial distribution in Istanbul. Population and household characteristics are determined with the help of statistical data. Household preferences and residential location behaviors are examined with the help of cross tabs and linear/non-linear regression analysis. Statistical data and the results of the interviews are evaluated.

**4.1. Household Size and Structure in Istanbul**

According to the census of population during the period of 1985 and 1990, while the total number of households has increased, household sizes have decreased from 4.25 to 4.14 (see Table 1.).

According to the results of the interviews and field analysis, household size is 3.76 persons which is under the average of Istanbul.

**Table 1. Population, Number of Households and Size of Average Households in Istanbul (1980-1985-1990)**

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Total Population (A)</th>
<th>Total Household Population (B)</th>
<th>Total Non-Household Population (A-B)</th>
<th>Total Number of Households</th>
<th>Size of Average Household according to (A)</th>
<th>Size of Average Household according to (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>4741890</td>
<td>4546773</td>
<td>195117</td>
<td>1063886</td>
<td>4.46</td>
<td>4.27</td>
</tr>
<tr>
<td>1985</td>
<td>5842985</td>
<td>5499047</td>
<td>343938</td>
<td>1293507</td>
<td>4.52</td>
<td>4.25</td>
</tr>
<tr>
<td>1990</td>
<td>7309190</td>
<td>6888928</td>
<td>420262</td>
<td>1664821</td>
<td>4.39</td>
<td>4.14</td>
</tr>
</tbody>
</table>


**4.2. Social and Economic Structure in Istanbul**

The distribution data of members of household populations as received from the SIS (State Institute of Statistics) has been classified according to their work and job groups
in relation to monthly income groups, which were classified by dividing into groups of 20%.

Although there are 1-2% crossings and transitions among the groups, the first group of 59% stands for the low, low middle and middle income group with income less than or equal to 100 million. The upper middle group of 22% corresponds to an income level ranging between 100-300 million and the upper group of 19% is the group of people with income exceeding 300 million. When a classification according to the values of areas is made in the Formal Residential areas, it is observed that the low, low middle and middle income groups correspond to a very high ratio of 88% (Real Estate Tax Lists, 1994).

Table 2. The Distribution of Income Groups in the Formal Residential Areas according to the Land Values of 1990.

<table>
<thead>
<tr>
<th>Income groups</th>
<th>Land Values</th>
<th>Number of districts</th>
<th>In Istanbul %</th>
</tr>
</thead>
<tbody>
<tr>
<td>low income</td>
<td>0-24999 TL. sqm.</td>
<td>110 districts</td>
<td>19</td>
</tr>
<tr>
<td>low middle income</td>
<td>25000-99999 TL. sqm.</td>
<td>206 districts</td>
<td>36</td>
</tr>
<tr>
<td>Middle income</td>
<td>100000-499999 TL. sqm.</td>
<td>191 districts</td>
<td>33</td>
</tr>
<tr>
<td>Middle high income</td>
<td>500000-999999 TL. sqm.</td>
<td>47 districts</td>
<td>8.5</td>
</tr>
<tr>
<td>High income</td>
<td>1000000 and above TL sqm.</td>
<td>20 districts</td>
<td>3.5</td>
</tr>
<tr>
<td>TOPLAM</td>
<td></td>
<td>574 districts</td>
<td>100</td>
</tr>
</tbody>
</table>

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

With respect to the levels of income in the research area, households with middle income are 32.3%, the others are:
- Low income: 0.8%,
- Low middle: 18.2%,
- Middle high: 22.7%,
- High income: 26%.

When the economic activity of the Istanbul population is analyzed in the last week’s in comparison with the years of census, it can be observed that the percentage of the people working for a wage has increased while the ratio of the self employed people has decreased (see Table 3).
Table 3. Population by Last Week’s Economic Activity, Employment Status in Istanbul

<table>
<thead>
<tr>
<th>Census Years</th>
<th>Total</th>
<th>Employee</th>
<th>Employer</th>
<th>Self employed</th>
<th>Unpaid Family Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1563939</td>
<td>110587</td>
<td>68731</td>
<td>305193</td>
<td>76541</td>
</tr>
<tr>
<td></td>
<td></td>
<td>70.8%</td>
<td>4.5%</td>
<td>19.7%</td>
<td>4.9%</td>
</tr>
<tr>
<td>1985</td>
<td>1873597</td>
<td>1371718</td>
<td>70152</td>
<td>346985</td>
<td>84512</td>
</tr>
<tr>
<td></td>
<td></td>
<td>73.2%</td>
<td>3.8%</td>
<td>18.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>1990</td>
<td>2539963</td>
<td>1886241</td>
<td>127345</td>
<td>400885</td>
<td>124765</td>
</tr>
<tr>
<td></td>
<td></td>
<td>74.3%</td>
<td>5%</td>
<td>15.7%</td>
<td>5%</td>
</tr>
</tbody>
</table>


37.7% of the population in the Analysis works in a job that generates income

4.3. Home Ownership in Istanbul

Ownership rates of households is at a high 63.4% compared to the low 36.6% of tenants (See. Table 2). These rates do not include the rate of illegal houses, which have increased from 63% to 83% according to some researches (83% in Sultanbeyli, 72% in Sarıgazi, see Bölen and others, 1996) (74% Talatpasa, 63% in Soguksu, see Ergun, 1996).

Table 2. Home Ownership Status in Istanbul (1990)

<table>
<thead>
<tr>
<th></th>
<th>Households Which Own Two Homes %</th>
<th>Households Which Own Their One Home %</th>
<th>Households Which Do Not Own Their Home %</th>
<th>Unknown %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Province</td>
<td>12.5</td>
<td>50.8</td>
<td>36.6</td>
<td>0.1</td>
</tr>
<tr>
<td>The Main Municipality</td>
<td>12.3</td>
<td>50.0</td>
<td>37.6</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Source: DIE, 1990 Census of Population

Ownership of Residences in the area of study is close to the Istanbul city general level with a ratio of 64%.

4.4. Household Mobility in the Field Survey

In the future middle income households prefer to live in middle class districts at 12.8%, only 11% of these middle income households prefer to live in high middle income districts, preferences of high income groups (at 15%) are middle high and high class districts, and for the others there is no relationship between the residential area and household income, but it is observed that as the income increases the dwelling area increases. On the other hand big households live in small houses and small households live in big houses.
Looking at the mobility of households in the last decade, it is observed that 15% have not moved at all, 43.5% have moved at least once, 26.3% have moved twice, that the small sized households are more inclined to move (A 2), that as the income increases mobility decreases(A 2), and that tenants move more than landlords (A 2) (the rate of landlords moving more than three times is 12% while for the tenants it’s 22%).

4.5. Mobility of Households and Regression Analysis

In summary the results of the interviews give an insight about the family structures of households, housing types and decision on residential location and preferences for the future and the regression analysis are made to determine and support household preferences in Istanbul with the help of the Pickvance Model (1968). The most consistently observed relationship is the one between housing tenure and mobility. According to this relationship, dependent variables are determined to be tenure and mobility, and independent variables are other household characteristics like life-cycle, age, income, occupancy etc. The results will be evaluated with these analysis, with the help of dual and ternary relationships conducted following the regression analysis.

**Linear Regression Analysis**

\[
\begin{align*}
\text{LCYC} & \quad 0.009 \\
\text{AGE} & \quad -0.009^{**} \\
\text{HOUSING TENURE} & \quad 0.059 \\
\text{INCOME} & \quad -0.045^{**} \\
\text{MOBILITY} & \quad -0.022^{**}
\end{align*}
\]

**Logarithmic Regression Analysis**

\[
\begin{align*}
\text{LCYC} & \quad -0.067^{**} \\
\text{AGE} & \quad -0.362^{**} \\
\text{HOUSING TENURE} & \quad -0.068^{*} \\
\text{INCOME} & \quad -0.162^{*} \\
\text{MOBILITY} & \quad 0.038
\end{align*}
\]
Results of the linear and logarithmic regression analysis, these results has been taken: When tenure is taken as the dependent variable, and life-cycle, age, income and mobility are taken as the independent variables, the following results are obtained; while home ownership ratio increases, mobility increases and that as the age of the head of the household increases income may decrease. When mobility is taken as the dependent variable, home ownership and mobility of households have increased in the last decade while age and income react disproportionately, or negatively if mobility in the last decade has decreased, ownership has also decreased but age has increased while income has increased.

Due to the low coefficient values of linear and logarithmic regression analysis, it has not been possible to establish any tangible relationships to support the research’s assumptions. On the contrary, logistic regression analysis has provided much more insight for the study.

**Logistic Regression Analysis**

When tenure is taken as the dependent variable and life-cycle, age, income and mobility factors are taken as the independent variables, the following results are determined:

- Home ownership probability is very low for low, low-middle and middle income groups,
- Nucleus family group, who are married but some of the children live on their own, are more likely to own their homes, contrary to young-age household heads of below-29 or 30-39 year age group,
- Older people are more likely to own their houses.

When mobility is taken as the dependent variable:

- Middle income groups think of moving,
- Married (with all of the children having left) groups do not consider moving,
- Heads of households in the age group of 30-39 and 40-49 consider moving, while the very young and the elderly do not,
- Households, which are located in the middle to high level status districts, do not think about moving,
- There is no tendency of moving with households living in low level status districts,
As a result it was established that different social and economic household characteristics display different behaviours such as:

- Older people are more likely to own their house than younger people
- High income people are more likely to own their house than lower paid people
- Home owners are less likely to be mobile than tenants
- Older people are less likely to be mobile than younger people
- High income people are less likely to be mobile than lower paid people
- Small households are more likely to be mobile than large households

These results show that young households who in general do not own their homes have much higher mobility. They tend to change their houses more often than older people.

**Correlation Analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCYC</td>
<td>0.110</td>
</tr>
<tr>
<td>AGE</td>
<td>(-)0.22</td>
</tr>
<tr>
<td>HOUSING TENURE</td>
<td>0.1</td>
</tr>
<tr>
<td>INCOME</td>
<td>(-)0.27</td>
</tr>
<tr>
<td>INCOME</td>
<td>(-)0.095</td>
</tr>
</tbody>
</table>

As a result of the correlation analysis, the following findings were reached: mobility increases as the age of the father increases; the ownership of the house and mobility (even if it may be a low ratio) increases as a shift from separated families to the nucleus families is observed; on the contrary an indirect relationship is observed between the age of the father and income on one hand and ownership of the house on the other hand. In short, as the age of the father and the level of income increase, the ratio of ownership of a house decreases or vice versa.

The effect of Age and Family Cycle characteristics on MOBILITY have been researched in the following manner with dual and ternary relationships in order to be able to better understand the household population mobility by taking into account the Income Level, ownership of House and Father’s Occupation:
### Crosstabs

#### Income

When the relationship between HOUSEHOLD POPULATION MOBILITY – INCOME LEVEL is analyzed, it has been observed that those who have not changed their house in the area where the survey has been conducted is concentrated in the middle income group (10-20 million) (34.8%), those that have moved twice or three times belong to the middle and high income group and their tendency to change location is more.

When the relationship between MOBILITY- AGE-INCOME have been analyzed by taking income as basis and when the averages with frequency are observed, it is seen that those who have not moved at all in the last 10 years either belong to the age group of 40-59 or 65 or more. The findings about the fact that those belonging to the age group of 65 or more and having moved more than twice or three times belong to the lower income group is interesting because it is in contradiction with the assumption that the mobility of old people is low as stated in A.2 (but generalizations can not be because their ratio in the survey is low).

Again, the same is valid for those who belong to the age group of 29 or lower and have moved three times or more. When the table below is analyzed in general, it is observed that the middle-high income group is dominant in the tendency to change location when compared with averages obtained.

#### Table 5. The Relationship between Mobility, Age and Income in the Survey Area

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>Did not move at all</th>
<th>Once</th>
<th>Twice</th>
<th>Three times or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 29 or less</td>
<td>middle high</td>
<td>middle high</td>
<td>middle</td>
<td>middle</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>middle high</td>
<td>middle high</td>
<td>middle</td>
<td>middle high</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>middle</td>
<td>middle high</td>
<td>middle high</td>
<td>middle high</td>
</tr>
<tr>
<td>Age 50-64</td>
<td>middle high</td>
<td>high</td>
<td>middle high</td>
<td>middle high</td>
</tr>
<tr>
<td>Age 65 or more</td>
<td>middle</td>
<td>high</td>
<td>low- low middle</td>
<td>low- low middle</td>
</tr>
</tbody>
</table>

When the desire for relocation of the household population is observed, the dominance of the middle high income group is observed. Also, the young-middle age groups have more desire for relocation.

When the relationship between MOBILITY, LIFE CYCLE (LCYC) – INCOME, the desire for relocation is highest (twice or more) in the nucleus family group which are married and have all their children with them especially those belonging to the middle
income group. The tendency of relocation of the high income groups is also high. The situation observed in other groups according to the family cycle is as follows:

The following tendencies are striking (A 2.): Married couples without children belong to the income group of high and high middle group and relocate mostly once or twice; those who do not relocate among the separated families belong to the middle income group; the situation of the family group of married couples whose children have left the house are similar to separated families; the tendency of married nucleus families where some of the children or all of the children live together or apart belong to the middle high income group and their tendency of relocation in comparison to other groups is higher. (A 2.).

Table 6. The Relationship between Mobility, LCYC and Income in the Survey Area

<table>
<thead>
<tr>
<th>LCYC</th>
<th>Did not move at all</th>
<th>Once</th>
<th>Twice</th>
<th>Three times or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not married, without children</td>
<td>middle high</td>
<td>high</td>
<td>middle high</td>
<td>middle high</td>
</tr>
<tr>
<td>Separated families</td>
<td>Middle</td>
<td>middle high</td>
<td>middle high</td>
<td>High</td>
</tr>
<tr>
<td>Married, all the children live separately</td>
<td>middle</td>
<td>High</td>
<td>middle high</td>
<td>middle- low middle</td>
</tr>
<tr>
<td>Married, some of the children live separately</td>
<td>middle high</td>
<td>high</td>
<td>middle</td>
<td>middle high</td>
</tr>
<tr>
<td>Married, all the children live together</td>
<td>middle high</td>
<td>middle high</td>
<td>middle high</td>
<td>middle high</td>
</tr>
</tbody>
</table>

The thought of moving and the desire for relocation is higher in the nucleus family and when the averages of the income is studied as in other groups, the middle high income group becomes dominant.

Home Ownership

When the relationship between age and home ownership is observed, it is seen that the majority of the home owners belong to the age group of 40-49 (29.5%) and the percentage of home ownership decreases as age decreases (A 2.). When the relationship between mobility and home ownership is studied, it is observed that the ratio of people who have not changed their house within the last ten years and who do not own a house is very low, 3%. The ratio of those who own a house and have not moved at all is 11.6%.

When the relationship between MOBILITY, AGE AND HOME OWNERSHIP is analyzed, it is observed that the middle age group of (40-49) and (50-64) are more mobile and the least mobility is observed among the oldest age group. It is observed that the middle age group is more mobile also among those who do not own a house (A 2.).
The number of home owners who think about relocating is quite high (62.7% in the total). The biggest share among this group of people belongs to the age group of 40-49 with 20.8%.

When the relationship between MOBILITY, LCYC and HOMEOWNERSHIP is analyzed, it can be concluded that the mobility of married families that have all their children with them is highest in comparison to other groups. The mobility is also high among those who do not own a house. (A2).

While 65.5% of the families who are married have all their children with them and own a house think about relocation, the percentage is 75.5% among the group that does not own a house (A2).

**Occupation Of The Father**

When the relationship between MOBILITY, AGE and the OCCUPATION OF THE FATHER is analyzed, it is observed that the rate of relocation of the group that deal with wholesale or retail trading among the age group of 30-39 and 40-49 are highest when compared with other groups.
It is observed that the members of financial institutions, real estate firms and assistance work services, social services and personal services follow the other group. The retired group of people within the age group of 50-64 have changed their house once or twice in the last ten years. On the other hand, the group of businessmen and managing bosses seem to have less mobility.

The most active group in relocation when the relationship between MOBILITY-LCYC- OCCUPATION OF THE FATHER is analyzed in the married nucleus family where all the children live with the family, is the group of people doing their own business dealing with wholesale or retail trading (The percentage of relocating twice or three times within the total is 12%).

4.6. The cycle of Household population in the Istanbul Metropolitan Area
Following the survey conducted in the area of sampling, the mobility of the household populations and their cycle within the space was analyzed. While this was done, the main point of emphasis was accepted to be the circle with a radius of 5 kilometres on the historical peninsula (by accepting the surveys of Tekeli and others, 1992, Bölen and others, 1995 as basis) and the following regions were composed both by within and outside the boundaries of Istanbul: The Central European Side, The Central Anatolian Side, (those within the circle with a radius of 5 kilometres), The European Side outside the Center, The Anatolian Side outside the Center and outside of Istanbul.
Household mobility in the Istanbul Metropolitan Area move out from the citycentrum, within inside the suburbs and from suburbs to more distant locations.

5. Conclusion

5.1. The results related with the structure of the Household and the Socio-Economic Characteristics;
The study revealing the population and the characteristics of the household population, especially the household population structure of the Istanbul Metropolitan area, the size, the social and economic characteristics of the population and the home ownership reached the following conclusions:

- Household size has a tendency to decrease(3.76 persons.) Our social structure has changed from large family to nucleus family, resulting in the production of more middle size houses (80-100sqm.) Variations in the household sizes in Istanbul due to
differences in socio-economic levels makes it necessary to examine the situation at district levels rather than the metropolitan level.

- When population is divided into income groups of 20% segments according to the data of SIS (State Institute of Statistics) the income level of the medium income group and the two groups below this group have been determined to be 100 million TL or less. (according to the classification of the data by SIS (State Institute of Statistics) these three groups correspond to the 59% of the total and a transition of 1% to the middle high group is observed.) The middle high income group corresponds to 100-300 million TL and the high group corresponds to an income level exceeding 300 million TL (ratio 41%). The ratio in the survey area is in a level sufficient to represent the city in general.

- When the job situation with respect to years is analyzed, it is observed that the ratio of people working in exchange for a wage has increased and the ratio of self employed people have decreased. Thus, it is observed that the household populations are going through an economic change.

- According to the 1990 Census; the rate of households which currently own their houses is 63.4%. In the sample area are this rate is 64.5%, which is very close to the result of the census(Gecekondu areas are not included in these rates, and the rates of occupancy are 63-83% in these areas, Sultanbeyli 83%, Sarigazi 72%, Talatpasa 74%, Soguksu 63% etc.). The rate of households which own an additional house is 12.5%. This shows that a portion of the housing demand is canalised by speculative behaviour.

- In the groupings made according to land values and the status situations, the ratio of the Low, Low middle and Middle neighbourhoods within Istanbul in general (have the following values according to the land value lists of the Year 1990: Low for 0-25 000 TL, low middle for 25 000-100 000 TL, Middle for 100 000 – 500 000 TL, middle high group for 500 000 – 1 000 000 TL and the High group for those exceeding 1 million) The ratio of the Low, Low middle and Middle group neighbourhoods are 88% and the ratio of Middle high and High groups are 12%.
According to the data retrieved and classified from the State Institute of Statistics, it have been surveyed the current demand for houses and the production of houses in response to this demand, the need for the types of houses for different household population sizes, the need for different implementations in different neighbourhoods. In short, it have been researched the direction that the residence production sector should take in order to be able to direct the demand for residence. Thus; the gradual decline of the size of the household populations, the need for different measures in different neighbourhoods for the size of houses according to the new structure and the need for necessary legal and economic arrangements in order to help the household populations of middle and low middle income groups have been revealed. The social and economic characteristics of the population, thus the changes in the family structure and the ratio of home ownership are also crucial factors that need not be neglected in this production process.

5.2. The Results about the Mobility of Households and the Cycle in the Space:
Concrete results have been established like Picvance Model (1968), as a result of the survey, to the effect that characteristics such as the variety in socio-economic structures of households, life cycle, age, income, job and ownership have direct effects on mobility and residential location behaviour (e.g. lower mobility of owners compared to tenants; older people compared to young people; higher income households vs. lower income households; large households vs. smaller households; the phenomena that mobility in the Istanbul Metropolitan area is in the form of inclination to move away from the city centre, and the wish to attain the residential and environmental quality of the high income group).

Households have different household mobility and residential location behaviours resulting from different socio-economic characteristics contrary to the Neo-Classical Economic Approach. In Istanbul households may not find the most suitable houses and environment they want. This causes heterogenic distribution and variation of households in the Istanbul Metropolitan area.

Besides these results, there are some precedence in the housing mobility. These are:
When the mobility in terms of the number of houses changed by the household population and the wish for relocation are analyzed, it can be conclude that the Upper income group is dominant for all ranges of age, LCYC (life cycle). The conclusion that is derived from these findings is that income might be a significant factor in mobility and the accelerating effect of income on the daily life and future acts of the families can not be denied.

It has been observed that when age is analyzed, the ratio of home ownership is higher among older people and that the old people are less mobile than young people and that a small possibility exists for the low and low middle income group.

Since the family bonds are strong and the percentage of nucleus families is 80% in the field where the survey was conducted, it was concluded that LCYC (life cycle) was more mobile (in contradiction to the findings of Pickvance) in the married families where all the children lived with their families in comparison to other groups.

It is not possible to make a definite generalization for LCYC and mobility as with the others (age, income, home ownership) still it has been observed that, although their number is low, the separated families and other household population groups which are not families, 67.7% have changed their house at least once in the last ten years and consider moving once again except for a minor ratio of 13%. However, it was observed that 64.1% of this group lived in luxurious neighbourhoods, most of them were tenants and therefore had such wishes and could afford residence areas in middle high and luxurious value.

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