BIG URBAN PROJECTS IN THE RECONSTRUCTION PROCESS OF CITIES AND THEIR EFFECTS ON HOUSING VALUES

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Abstract

Structural transformations of the cities started to rise through the effects of political developments in the world in recent years, through the restructuring of the economy and the globalization dynamics. Economic growth of the cities according to the international economic activities and reflection of this situation to the cities as a space demand can be observed clearly both on the location choices of these demands and on the functional changes of urban structures.

Today, cities have started to gain the property of ‘new prestigious spaces’ in which the service sector is located. One of the most evident indicators of this situation is big urban projects which are taken in hand as a whole. Complexes such as shopping centers, hotels, convention centers or universities can be exemplified to these types of projects that act as a catalyst in the process of transformation of the cities. The location choices of these types of projects are distinctive marks in the context of spatial development of the cities and for the social, physical, economical effects of them to their environs.

The basic aim of this study is to analyze the effects of changing economic values of the environs of these types of urban projects to the especially housing values in the city of Konya (Turkey).

Konya city which was selected as a case study has an important role on the industrialization and urbanization process of Turkey. For the last fifteen years, with the effect of rapid urbanization, lots of shopping centers, hotels and commercial projects have been constructed in the city. In the scope of the study, a ‘new prestigious space’ of the city which located on the eastern district of Konya and can be taken in hand as a big urban project was selected as a sample area. This selected area consists of some important usages such as New Court House of the city, urban park, shopping center and a private university. A total of 250 questionnaires related structural and environmental properties of the dwellings were applied to the users’ of the area. In addition, changing housing values of the area and distance of access to this area were analyzed too. In this study, statistical evaluations between the derived data from the field study and sales values of the dwellings were made through the multiple regression analysis. The results were interpreted within the reconstruction process of the cities, particularly on Konya city.

Keywords: Big urban projects, housing values, Konya.

1. Introduction

If cities are first and foremost considered to be the living spaces of human beings, they are expected to meet their needs, desires, wishes and demands. The ability of cities to meet such needs easily in terms of physiological, social and psychological aspects is highly important for the creation of high quality spatial environments. The need for accommodation, which is the most basic building stone of the human needs that comes after physiological needs (Maslow 1943), has constituted an important problem in the field
of urban planning from past to our day. In today’s urban economy, housing value, especially the value of the unit that provides the need for accommodation, is considered to be an important research topic because of having a determinative effect on both urban planning and real estate investment activities. In the course of time, urban mobility causes a decrease in the attraction of certain spots and an increase in the preferences for certain other spots. Such a state changes the spatial structure of the city and has a guiding effect on plans (Dökmeci and Berköz 1994; Topcu and Kubat 2009). From the point of view that the demand of the human for housing in order to live, shelter and invest will always exist, it is considered that forecasting the possible changes in housing value, which is one of the factors that affects the future of urban development, and urban factors that affect or may affect housing values is highly important for urban planning and urban development.

The factors that cause changes in housing prices have been the subject of various studies in different disciplines. Housing value is an evaluation regarding the characteristics of the housing unit, and it is effective for not only the housing unit itself but also the area in which the unit is located. In this sense, it makes it necessary to examine the housing unit together with various different variables that affect it.

It can be said that the number of the studies on housing values increased beginning from the middle of 1960s. Of these studies, Alonso’s theory on land selection (Alonso 1964) which explains the relationship between land values and the related functions of use, is regarded as the start of the studies on housing values.

The factors that affect housing values have been the subject of studies on a wide range of topics and in various dimensions from the structural characteristics of the housing to the spatial configuration of the district in which it is located, from socioeconomic and sociocultural structure to its location in the city. The studies conducted on this topic focus on;

- **Structural characteristics of the housing unit** (Muth 1969; Kain and Quigley 1970; Borukhov, Ginsberg et al. 1978; Li and Brown 1980; Tse and Love 2000),

- **Characteristics of the building in which the housing unit is situated** (Muth 1969; Kain and Quigley 1970; Borukhov, Ginsberg et al. 1978; Tse and Love 2000; Ozus, Dokmeci et al. 2007),
• Quality of the neighborhood unit (Muth 1969; Kain and Quigley 1970; Wabe 1971; Borukhov, Ginsberg et al. 1978; Richardson, Gordon et al. 1990; Arimah 1992; Mozolin 1994),

• Accessibility of the housing to the centers in the city (central business districts, social facilities, water entity, recreation areas, etc.) (Muth 1969; Weigher and Zerbst 1973; Brown and Pollakowski 1977; Bajic 1983; Richardson, Gordon et al. 1990; Arimah 1992; Daniere 1994; Mozolin 1994; Gat 1996; Bradbury, Mayer et al. 2001),

• Existence of a view (Brown and Pollakowski 1977; Tse and Love 2000),

• Local public services and investments (Li and Brown 1980),

• Social status of the neighborhood unit (Arimah 1992) and car park ownership (Tse and Love 2000).

It is observed that statistical methods that deal with more than one variable group rather than a single variable group are mostly preferred in the studies conducted on the factors that affect housing prices.

2. The Urban Transformation Process in Konya and Sample Area Selection

To evaluate the city of Konya in terms of the planning process, the city is located on a flat land and develops to the north according to the existing plans. A process that occurs in the form of the transformation of the existing housing structures is observed in the east and the west of the city. The city of Konya began to experience its present change and transformation starting from the 1990s. In those years, the commercial complexes (Shopping Centers) that were opened one after another brought about important changes in the identity and spatial characteristics of the city. In fact, the opening of these complexes accelerated the transformation process in their vicinity in a short time, housing zones entered into a reconstruction process and in one sense, these complexes acted as catalysts that accelerated development and added momentum to change and transformation. This process, which started with commercial complexes, continued its development with the support of the policies of local governments and public investments in the following stages. An area that is located in the east of the city and can be explicated as a big urban project (in which there is a Courthouse, City Park, Shopping Center and a private university) was selected within the scope of the study. Until 2008, the area selected for the study had
exhibited a slow-developing and low density housing fabric occupied by those who had moved from the country to the city. The courthouse project that was implemented by the central government in 2008 with its 64 thousand square meters open and 14 thousand square meters indoor area marked the start of the transformation process in the district. In the ongoing process, the local government realized a park planning process on an area of 100.000 square meters. The local government also planned a light rail system (tramway) that will connect the city center to the district and a big hospital on an area of approximately 200.000 square meters. Besides, the private sector carried out investments for a shopping center, business centers and a university (Picture 1, Picture 2).

![Picture 1](Image 1) The state of the project area in 2004

![Picture 2](Image 2) The state of the project area in 2012

This process led to big speculations on the land values in the district located in the immediate vicinity of the project area and the desire for unearned economic income has been effective on the changes in housing values and the creation of different housing fabrics. It is known that the housing fabric that existed before the transformation process mostly exhibited a settlement pattern of on average two-story houses with gardens and the
social structure consisted of low-income settlers who had migrated from the country to the city. It was observed that after the start of the projects, the existing housing fabric showed a transformation into gated communities and 7-8-story apartment blocks (Picture 3).

![Picture 3 The present state of the old and the new housing fabric](image)

### 3. Method

Within the scope of theoretical approaches, a questionnaire study with a sample size of 250 was conducted in order to evaluate the environmental and structural factors that were considered to affect housing values. The borders of the study area were determined by the housing areas that were within the approximately 1.5 km-diameter circle centered on the selected area (Figure 1).
In this study, housing value was examined through a total of 26 parameters. The structural characteristics of the housing (the number of flats in the building in which the residence exists, the façade of the residence, area of the residence, number of rooms, age of the building, existence of an elevator, size of the living room, on what floor is the residence) were examined through 8 parameters, the environmental characteristics of the housing (existence of a view, a car park, sport areas, playgrounds, security) were examined through 5
parameters and accessibility to public services (Table 1) was examined through 13 parameters.

**Table 1** Accessibility parameters of the housing units

<table>
<thead>
<tr>
<th>Accessibility</th>
<th>to facilities</th>
<th>to primary school</th>
</tr>
</thead>
<tbody>
<tr>
<td>to social facilities</td>
<td></td>
<td>to high school</td>
</tr>
<tr>
<td>to university</td>
<td></td>
<td>to university</td>
</tr>
<tr>
<td>to cultural areas (cultural center, library, museum, etc.)</td>
<td>to healthcare organizations</td>
<td></td>
</tr>
<tr>
<td>to entertainment centers (cafe, restaurant, cinema, theatre etc.)</td>
<td>to the religious facility</td>
<td></td>
</tr>
<tr>
<td>to the religious facility</td>
<td></td>
<td>to the police station, etc.</td>
</tr>
<tr>
<td>to recreation areas</td>
<td>to open and green spaces</td>
<td></td>
</tr>
<tr>
<td>to sport areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to children playgrounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to shopping centers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to the city center</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Afterwards, a *stepwise regression analysis* was performed by taking housing value as the dependent variable and all the other variables as independent variables.

4. **Evaluation and Conclusion**

When we examined the housing zones located around the projects implemented in the sample area selected in the city of Konya in the restructuring process of the city in terms of economic value, the results we obtained were not very surprising.

Taking housing value as the dependent variable in the regression analysis, it is seen that the factors that affect this value, that is, the parameters of existence of an elevator, distance of the housing to public transport, the existence of security cameras in the building, the number of flats in a building, area of the housing unit, age of the building, distance of the housing to the hospital, the existence of sport activity areas and the distance of the housing to the city center were effective on housing value and 11 factors explained the system at a rate of $R^2=0.826$ (Table 2).

As it can be understood from here, the structural characteristics, environmental characteristics and urban characteristics in terms of accessibility of the housing are effective on housing value.

The questionnaire study was conducted in both the new housing areas that developed after the project investments and the old housing areas. The important point that should be
emphasized here is that the parameters that were obtained as the result of the analysis mostly represent the characteristics in the newly developing housing areas.

Table 2 Regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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</thead>
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<td>.674</td>
<td>.673</td>
<td>19038.85173</td>
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<tr>
<td>2</td>
<td>.852b</td>
<td>.726</td>
<td>.724</td>
<td>17477.90587</td>
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<tr>
<td>3</td>
<td>.864c</td>
<td>.747</td>
<td>.744</td>
<td>16833.12670</td>
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<tr>
<td>4</td>
<td>.873d</td>
<td>.761</td>
<td>.758</td>
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<tr>
<td>5</td>
<td>.885e</td>
<td>.783</td>
<td>.779</td>
<td>15646.87927</td>
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<tr>
<td>6</td>
<td>.893f</td>
<td>.798</td>
<td>.794</td>
<td>15113.45154</td>
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<tr>
<td>7</td>
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<td>.818</td>
<td>.814</td>
<td>14369.67718</td>
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<td>.907h</td>
<td>.823</td>
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<td>14213.86463</td>
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<td>9</td>
<td>.907i</td>
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<td>13884.25089</td>
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</table>

k. Predictors: (Constant), elevator, distance to public transport, camera, number of flats in the building, housing area, age of the building, distance to the hospital, sport area, distance to central business districts

In conclusion, not only an increase is observed in the economic value of the housing in big-scale projects created through the collaboration of the public and private sectors in the reconstruction process of housing areas, but also it is understood that such projects have a significant effect on the structural, architectural and environmental characteristics of the housing. When the economic effects of such complexes on space are considered, the importance of examining land selection through a certain systematic approach comes into view.
References


