# **Land Valuation Problems of Turkey**

# Seda Nur MARABAOĞLU, Recep NİŞANCI and Osman DEMİR, Turkey

Key Words: Real Estate Valuation, National Valuation Unit, Turkey

## **SUMMARY**

Real estate values have a significant role on the basis of a sustainable land management system. One of the main goals of land management is to define basic policies related to the determination and use of real estate values. Although a system on real estate value has been established in many highly developed countries, administrative problems in developing countries continue. Lack of legal regulations and standards on determining real estate values are the main problems. In this context, law, regulations or similar legal arrangements should be made primarily. Putting real estates on the capital market is significant in terms of creating economic resources. On the other hand, real estate value has gradually become one of the main issues in rural and urban land arrangements, urban renewal and expropriation applications in recent years. Therefore, it is essential to determine real estate values accurately. Real estate values concern many different institutions as it is at the heart of land applications. They are obtained through different standards and various methods by these institutions and as a result, some differences emerge among values. The existence of different values (tax value, trading value, mortgage value, value defined by the court, etc.) belonging to the same real estate cause economic, social, technical and judicial problems. Problems related to the determination of real estate value in Turkey will be revealed in the scope of the study. In addition, a new model will be designed and discussed in order to record and manage these values, and some solutions will be offered for developing countries.

Anahtar Kelimeler: Gayrimenkul Değerlemesi, Ulusal Değerleme Birimi, Türkiye

# ÖZET

Sürdürülebilir bir arazi idare sisteminin temelinde gayrimenkul değerleri önemli rol ovnamaktadır. Arazi yönetiminin temel amaclarından birisi de gavrimenkul değerlerinin tespiti ve kullanımına yönelik temel politikaların belirlenmesidir. Günümüzde çok gelişmis ülkelerin birçoğunda gayrimenkul değerine yönelik sistemin kurulmuş olmasına rağmen, gelismekte olan ülkelerde idari sorunlar devam etmektedir. Gavrimenkul değerlerinin belirlenmesine yönelik kanuni düzenlemeler ve standart eksikliği bu sorunların başında gelmektedir. Bu bağlamda kanun, yönetmelik veya benzeri yasal düzenlemeler öncelikle yapılmalıdır. Gayrimenkullerin sermaye piyasasına sunulması, ekonomik kaynak yaratma açısından önemli rol oynamaktadır. Bunun yanında, gayrimenkul değeri son yıllarda kırsal ve kentsel toprak düzenlemesi, kentsel dönüsüm ve kamulaştırma uygulamalarında giderek en önemli konulardan biri haline gelmiştir. Bu sebeple, gayrimenkul değerlerinin doğru belirlenmesi önem arz etmektedir. Araziye yönelik uygulamaların temelinde yer alması nedeniyle, gayrimenkul değeri birçok farklı kurumu ilgilendirmektedir. Gayrimenkul değerleri, bu kurumlar tarafından farklı standartlar ve çeşitli yöntemlerle tespit edilmekte, bunun sonucunda değerler arasında farklar meydana gelmektedir. Aynı gayrimenkule ait farklı değerlerin (vergi değeri, alım-satım değeri, ipotek değeri, mahkemece belirlenen değer vb.) var olması ekonomik, sosyal, teknik ve hukuki sorunlara sebep olmaktadır. Bu çalışma kapsamında, Türkiye'deki gayrimenkul değerinin tespitiyle ilgili sorunlar ortaya konulacaktır. Ayrıca, bu değerlerin kayıt altına alınması ve yönetilmesine yönelik yeni bir model tasarlanıp tartışılarak gelişmekte olan ülkelere çözümler sunulacaktır.

# **Land Valuation Problems of Turkey**

## Seda Nur MARABAOĞLU, Recep NİŞANCI and Osman DEMİR, Turkey

#### 1. INTRODUCTION

Real estate processes directly or indirectly concern private individuals/companies and public institutions in Turkey as in all over the world. Real estate value is an indispensable element in carrying out transactions such as sale-purchase, expropriation, land regulation and taxation related to real estate. However, legal and institutional regulations are needed in relation to determination, registration and management of values.

Therefore, valuation is analyzed under two titles called private valuation and official valuation even if there are some internalized standards in the country-level. As parties in private valuation have a right to decide freely, not too many problems occur.

Value is defined as total benefit and usage value provided by a property, and the amount of material that can be taken in return to the property when given to someone else (Nişancı, 2005). Being one of three basic features of land management, value is based on securing justice in taxation and expropriation.

Today, many developed countries (Germany, Holland, Spain, etc.) have a Valuation Law or Regulation arranging real estate valuation activities. Some guidance documents have also been prepared in order to lead practitioners in the study. Thus, a centralized implementation of studies conducted in the national level is achieved as well (Yomralıoğlu, 2009). On the other hand, lack of creating an integrative structuring in legislative, administrative and technical aspects in developing countries causes problems in applications. Especially in recent years, there is a need for real estate value both in national and international standardization studies regarding spatial data. There is an e-state project aiming to; establish a Geographic Information System infrastructure in accordance with national-level technological developments and INSPIRE directive (National Geographic Information System of Turkey-TUCBS), create a web portal on which public institutions and organizations can provide users with geographical information which is under their responsibility through a common infrastructure, create content standards of geographical data to respond to the needs of all user institutions, and determine geographical data interchange standards (TUCBS, 2010).

### 2. Importance of Real Estate Valuation and the System in Developed Countries

Real estate valuation has a great importance in terms of; conducting planned urbanization, selecting residential areas, comparing the costs of internal and external links between these areas, evaluating construction plans economically, aggregating very small parcels in urban settlements, making real estate markets to attain clarity and reliability, availability to monitor changes in market prices, and guiding real estate buyers, sellers and heirs and parties for the establishment of rights on real estates (Utkucu, 2009).

One of the most important applications of real estate valuation is to determine tax base. In developed countries, property tax revenues have an important place for local and central governments (Nişancı, 2005). The main reason is that property tax is an obligation which is tightly connected to real estate valuation as structure. In fact, property tax is directly mentioned as "tax valuation" in some sources as well. Problems in determining the value of a real estate in a realistic way in the current regulatory framework in Turkey not only reduce productivity and efficiency of taxes related to real estate but have distorting effects on fair taxation (Hacıköylü and Heper, 2010). As a result of determining and taxing true values of real estates, the demand for buying real estates for speculative and profit-oriented reasons will also decrease and the flow of capital to real economy will be provided.

Real estate valuation is also important for expropriation applications. Expropriation is buying of real estates by the state or public corporate entities under the ownership of real and private law legal entities by paying the price in cases of public interest. Law No. 2942 of Expropriation Law clearly states by which factors and by whom the value of real estate or resource will be determined. As expropriation and ownership rights are seized, accurate and objective determination of real estate value is of great importance here. Likewise, expropriation price determined by the commission is frequently in dispute. Many of the objections to the expropriation process have been justified by courts and most claims have been concluded in favor of the owners (Yomralioğlu, 1995).

A great number of professional valuation organizations have been founded in developed countries. The most comprehensive ones are; International Valuation Standards Council (IVSC) and The European Group of Valuers' Associations (TEGoVA) (Çete, 2008). Appraisers Association of Turkey (TDUB) and Appraisers Association (DUD) are some available institutions in the field of valuation in Turkey.

These professional organizations have been established to; create and extend international valuation standards, ensure reliability and transparency of valuation activities, determine international valuation standards for real estate investments exceeding national borders, gather all professional organizations under a single roof and facilitate information exchange, etc. (Yomralıoğlu et al., 2011).

### 3. Problems Related to the Determination of Real Estate Value in Turkey

Real estate valuation is made to be used directly or indirectly in many applications. These applications can be listed as; collecting taxes, expropriation, nationalization, privatization, land arrangements, operations based on registration, capital market, banking, credit facilities, insurance, real estate management, establishment of real estate rights, determination of real estate sale or hire prices in some cases, and some similar applications (Yomralioğlu et al., 2011).

As in many other countries, various laws and related regulations exist in Turkey requiring the knowledge and monitoring of real estate values. The main ones are; Expropriation (Law No. 2942/4650), Real Estate Tax, Income Tax, Tax Procedure Law, Building Land Office, Courts, Land Registry, Land Survey (Law No. 3402), and Capital Market Law. In spite of some similarities between the applications of these laws for the determination of real estate values,

Seda Nur Marabaoglu, Recep Nisanci, Osman Demir, Bayram Uzun, Okan Yildiz and Usta Ziya Real Estate Evaluation Problems of Turkey (6949)

4/12

there are also many differences. The case is also the same for many institutions (General Directorate of Land Registers, Capital Market Board, Governorates, Municipalities, Housing Development Administration, Special Provincial Administration, General Directorate for Highways, Revenue Administration, etc.) carrying out valuation studies. For instance, separate values can be determined for the title deed fee or expropriation in the determination process of the tax base of a real estate by the municipality. As it is seen, the studies cannot be conducted in a standard structure and some quite different appraisals may appear in real estate valuation studies being made by different people or institutions.

**Table 1.** Values of the same real estate determined by many different institutions

Plot Number	Parcel Number	Institution (USD) (A)	Court	
			Expert (1st Board) USD (B)	Expert (2st Board) USD (C)
386	68	156	493	624
386	65	178	670	758
100	8	535	825	-
94	7	312	361	446
94	6	312	446	446
207	13	28	76	54

Implementation of Law No. 4650 necessitating the bargaining condition is also short of resolving the problem. Indeed, a judge is obliged to appoint the result when various values appear among experts in the expert council formed by courts as it is seen in Table 1.

Figure 1 illustrates the studies on real estate values of an area where expropriation is made for Urban Renewal. The parcel owner numbered 11 in the figure agreed with the administration conducting expropriation and accepted 256 dollars/m2 given by the council. The parcel numbered 12 next to the parcel numbered 11 did not agree with the administration and went to law. As a result, an expert council was formed and it evaluated 491 dollars/m2 for the parcel mentioned. The main contradiction occurred in the parcel numbered 9 on the left. The expert council appointed by the court evaluated 1226 dollars/m2 to real estate owners who did not agree with the administration.

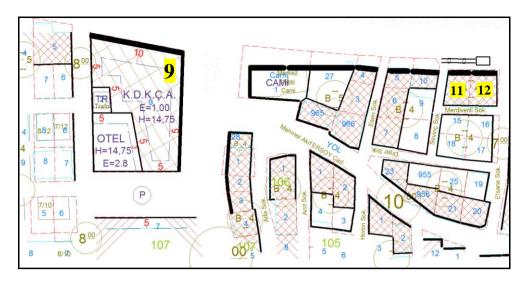


Figure 1. Plan of a valued area in Turkey

As it is seen in the figure 1, different prices were determined for two parcels located side by side which causes; one side to suffer, the state to pay extra money or not to make a claim for the rights of the people having no objection. As a result, the end time of the applications are delayed along with labor loss and injustice. The worst part is that a citizen who has accepted a low price in the bargaining most probably loses trust to the state in case his/her neighbor gets a higher price. Absence of compensation in the law for these cases is also one of the major shortcomings.

The method used in expropriation studies is the classical valuation method currently used all over the world. Precedent comparison method is used in case real estate related to valuation is a building land, income method is used for a land, and cost method is used for buildings. Especially the absence of real estate to serve as a sample in precedent comparison method make the process more difficult. People carrying out valuation activities in Turkey are obliged to collect the necessary data for their studies by themselves and they meet various difficulties during data-gathering process as they have no databases for both real estate characteristics and precedent purchase and sale values. This case not only makes the studies harder but also affect the quality of real estate valuation results (Çete and Yomralıoğlu, 2011; Candaş, 2012).

Basic principles to determine the cost of expropriation is given in Article 11 of Expropriation Law as follow:

Article 11- the expert council to be established in accordance with the Article 15 shall visit the place of the immovable property or the resource with the court commission. And the council shall listen to the related people. And then the council shall consider the below mentioned facts:

- a) Type and quality of the immovable or the resource
- b) Surface area
- c) all the qualities and properties that can affect the value of it and the values of every quality and property
- d) Tax statement, if any

- e) amount estimation made by the official authorities on the date of expropriation
- f) net revenue of the land, immovable property or resource according to the location and conditions valid on the date of expropriation and the fact that the land, immovable property or resource is used in their original condition.
- g) Sales amount of the similar land sold before the date of the expropriation without any special purpose.
- h) official unit prices, construction cost estimations and depreciation of the buildings on the date of expropriation
- i) Other objective measurements that can be effective on the determination of the amount.

The council shall take the aforementioned facts as the basis and state the comments on these facts one by one. And the council shall set the amount of the immovable property dependent upon an evaluation report with rationales by considering the statements of the related authorities.

During the determination of the cost of the immovable property, the value increase caused by the enterprise that require development and services and profit that can bring as a result of the use of the immovable property in the future shall not be taken into consideration.

In granting the right of easement through expropriation the decrease of the value of the immovable property or the resource due to the expropriation shall be stated with its rationales. Such decrease in the value is the cost of expropriation.

What shall be other objective values stated especially in item (i) are not indicated in the law. In other words, an expert may take "landscape" factor as an effective element to the value while another expert may not. Therefore, these should be defined as a whole. How the comparison shall be made when the precedent method is preferred remains unanswered as well. Even if such details are not stated in the law, such shortcomings reveal the necessity for a regulation that explains these items of the law.

A standard is defined for the member countries of the World Bank by the International Valuation Standards Committee (IVSC). Yet, this standard defines general valuation principles. In other words, it defines the outer frame of valuation. The standard has an expert-centered approach as well. This means the expert will transfer market value to his/her customer on condition of adhering to the code of ethics. When valuation process is handled as customer-centered, the point whether valuation serves for a private or public purpose becomes important. If it is a business of private individual property appraisal or not approved by the customer, another expert can be preferred. However, the owner of the real estate shall have no chance to make choice in the valuation process by the state. Thus, official valuation procedures should be defined in legal and technical terms. Which points and basic factors to be considered by the expert and the effect value of these factors should be defined. In addition, estimated value as a result of the report should be verified by checking it with book values. Therefore, complexity of value both in the regulations and between institutions during real estate valuation reveals the need to prepare a rule in compliance with international standards and create a centralized institutional structure.

### 4. Real Estate Valuation Model Approach for Developing Countries

An integrative structuring is not formed in administrative and technical aspects in the regulations on real estate valuation in developing countries. This causes confusion in applications. As valuation is open to illegal fiscal relations, it should include ethical rules, transparency and strict control mechanisms (AYÖP, 2012). A legal regulation of real estate valuation in developing countries is necessary to standardize real estate activities, centralize implementation and inspection operations, record real estate values, control fluctuations in the real estate market, eliminate repetitive operations and differences in the institutions, etc.

A model is formed for developing countries in the field of real estate valuation as shown in Figure 2. This model aims to establish a national-level geographical information system infrastructure (Turkish National Geographic Information System-TUCBS) in accordance with technological developments and INSPIRE Directive.

All data about real estate shall be collected in a common database through this system. The model is going to work with GIS data sets, store collected data from the institutions in the system, and serve them through the net. It is necessary to comply with national and international in institutional data gathering and sharing. For instance, spatial and non-spatial data in the model to be designed for Turkey should be prepared in accordance with the standards defined for Turkish National Geographic Information System (TUCBS) or INSPIRE Directive defined for Europe.

According to the draft model, each institution shall produce data in line with its own requirements and send standardized data to the center to meet the needs of other institutions as well. These data shall be served according to user restrictions. In addition, data in private standards should be presented to public and private individuals.

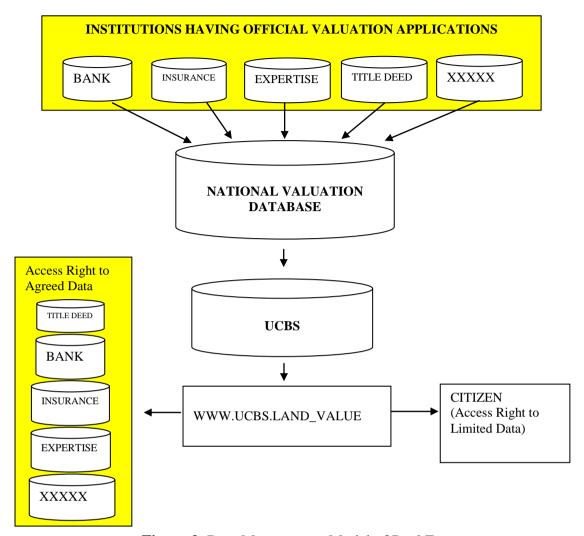


Figure 2. Data Management Model of Real Estate

Legal regulations should primarily be prepared for administrative structuring of real estate valuation model. This legal regulation should include all kinds of valuation activity related to private/legal and state real estates. Department of Real Estate Valuation (General Directorate) in which some experts from occupational groups related to valuation are involved and its subunits should be established in order to conduct real estate activities. To reduce complexity in the field of valuation, valuation methods, parameters affecting value, and the standards should be identified. (Yomralioğlu and Nisancı, 2006; Candas, 2012).

Real estates to be appraised should be recorded in the national geographical database and put into service of related institutions in stated national and international standards in order to determine regional differences and factors affecting value.

Data structuring model for real estate valuation is shown in Figure 3. In the model, it is suggested to establish the Department of Real Estate Valuation (General Directorate). This unit shall provide public institutions and citizens with data service in national and international standards. Valuation activities conducted by institutions shall also be controlled

and supervised whether they comply with the standards defined by the unit. The main purpose of the unit is to conduct real estate valuation processes carried out by institutions (General Directorate for Highways, General Directorate for State Hydraulic Works, etc.) under a single roof with common regulations and standards.

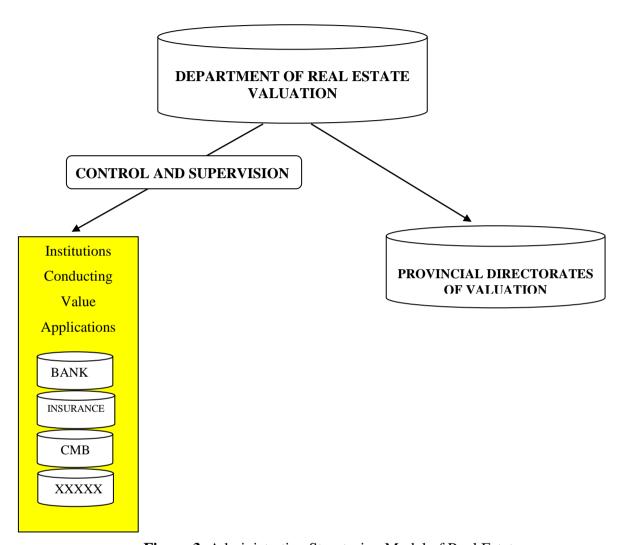


Figure 3. Administrative Structuring Model of Real Estate

## 5. CONCLUSION

Lack of creating an integrative structuring in legislative, administrative and technical aspects in Turkey causes complexity in applications. In this study, the problems on determining real estate valuation are mentioned and a valuation model approach is proposed for developing countries. The case in developing countries necessitates to form a centralized institutional structure and a regulation in accordance with international standards. Separate values for the same real estate appearing as a result of valuation applications by different institutions shall be removed and labor force and time loss shall decrease in this way. For this reason, a system should be established to provide efficient and productive evaluation of public resources,

Seda Nur Marabaoglu, Recep Nisanci, Osman Demir, Bayram Uzun, Okan Yildiz and Usta Ziya Real Estate Evaluation Problems of Turkey (6949)

10/12

perform the determination and recording of updated real estate values, prevent tax and fee loss, and support development policies. Regulatory, administrative and technical integration should also be achieved in the system.

#### REFERENCES

- Appraisers Association of Turkey (TUDB), (2012). 2012 Annual Report, 11.03.2014 <a href="http://www.tdub.org.tr/images/pdf/tdub\_faaliyet\_raporu\_2012.pdf">http://www.tdub.org.tr/images/pdf/tdub\_faaliyet\_raporu\_2012.pdf</a>
- Appraisers Association (DUD), (2011). Appraisers Association Regulatory, 11.03.2014, <a href="http://www.dud.org.tr/custom/odesismc/dud\_tuzuk\_1.pdf">http://www.dud.org.tr/custom/odesismc/dud\_tuzuk\_1.pdf</a>
- Candaş, E., (2012), Modelling of Regulatory Infrastructure for Real Estate Valuation, Master's Thesis, Yıldız Technical University, Institute of Sciences, İstanbul
- Çete, M. and Yomralıoğlu, T.,(2011), A New Land Management System for Turkey, Journal of Geodesy, Geoinformation and Land Management, pp: 70-76
- Çete, M., (2008), A Land Management System Approach for Turkey, Ph. D. Thesis, Karadeniz Technical University Institute of Sciences, Trabzon
- Din, A., Hoesli, M. and Bender, A., (2001), Environment Variables and Real Estate Prices, Urban Studies, 38, 11
- Hacıköylü, C. and Heper, F., (2010), Problems and Proposed Solutions Regarding Property Tax Assessment, Journal of Finance, Volume: 158
- Köktürk, E., (2009), Real Estate Valuation: Status Detection and Trends, 12th Scientific and Technical Conference on Geomatics in Turkey, Ankara
- Land Management Platform (AYÖP), (2012), Real Estate Valuation in Turkey, 2nd Land Management Workshop Final Declaration, İstanbul
- National Geographic Information System of Turkey (TUCBS), (2010). TUCBS- Feasibility Report,11.03.2014, http://www.tkgm.gov.tr/tr/icerik/tucbs
- Nişancı, R., (2005), Production of Pixel Based Urban Real Estate Maps Based on Geographical Information Systems and Nominal Valuation Method, Ph. D. Thesis, Karadeniz Technical University, Institute of Sciences, Trabzon
- Nişancı, R. and Yomralıoğlu, T., (2002), Creating Land Value Maps via RS and GIS Techniques, Proceedings of International Symposium on GIS, İstanbul, Proceedings, pp. 483-488
- Schiller, R., (2001), The Dynamics of Property Location: Value and the Factors which Drive the Location of Shops, Office and Other Land Uses, Spon Press, London.
- Tanaka, H. and Shibasaki, R., (2001). Creation of Spatial Information Database for Appraising The Real Estate, 22nd Asian Conference on Remote Sensing, Singapore, pp. 372-375
- Utkucu, T., (2009), The Importance of Real Estate Valuation the Components of Real Estate Value, World Tax Journal, Volume: 305
- Yomralıoğlu, T., (1995), Evaluation of Real Estate, Lecture Notes, Karadeniz Technical University, Trabzon
- Yomralıoğlu, T. and Nişancı, R., (2006), Place and Role of Geomatic Engineering in Real Estate Valuation in Turkey, Report 1, Trabzon
- Yomralıoğlu, T., (2009), TTDS: Real Estate Valuation System in Turkey, Working Report, İstanbul
- Yomralıoğlu, T., Nişancı, R., Çete, M., Candaş, E., (2011), "Real Estate Valuation in Turkey

11/12

Seda Nur Marabaoglu, Recep Nisanci, Osman Demir, Bayram Uzun, Okan Yildiz and Usta Ziya Real Estate Evaluation Problems of Turkey (6949) and the World", Workshop on Sustainable Land Management in Turkey, Okan University, İstanbul

Zeng, Q.T. and Zhou, Q., (2001), Optimal Spatial Decision Making Using GIS: A Prototype of A Real Estate Geographical Information System (REGIS), International Journal of Geographical Information Science, 15, 4, pp. 307-321

#### **BIOGRAPHICAL NOTES**

**Seda Nur Marabaoğlu,** is now PhD student at Dept. of Geomatics Eng., Karadeniz Technical University, Trabzon. She has obtained his M.Sc. and B.Sc. from Karadeniz Technical University. Her research interest is real estate valuation and land management.

**Recep Nişancı,** has obtained his PhD from Karadeniz Technical University in 2005. He is now Associate Professor in the Dept. of Geomatics Eng., Karadeniz Technical University. His research interests are real estate valuation and land management.

**Osman Demir,** is now Associate Professor in the Dept. of Geomatics Eng., Karadeniz Technical University. His research interests are real estate valuation and land management.

#### **CONTACTS**

Seda Nur MARABAOĞLU

Karadeniz Technical University/ Institute of Science Department of Geomatics Engineering Trabzon TURKEY Tel. +90530 581 1987

Fax +90462 377 2707

Email: sedanurturan@hotmail.com