Chapter 8

Introduction: Real Estate Tax System and Real Estate Market in Japan

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Abstract This introduction summarizes chapters of Part II. In Chap. 9, Yamamoto (Jpn J Real Estate Sci 31:88–96, 2018) has compared between the street method, the asset valuation adopted for the imposition of property tax in Japan, and the computer-assisted mass appraisal (CAMA) method generally adopted in North America focusing on education and training of valuers. In Chap. 10, Yamazaki (Jpn J Real Estate Sci 31:97–101, 2018) argues that one of the major causes for relatively low density use of land in the city in Japan is the land tax system. He focuses on property tax and examines defects of the tax from view of economist. In Chap. 11, Kobayashi (Jpn J Real Estate Sci 31:129–138, 2018), taking an actual example, has examined difference between precise legal interpretation of ‘exemption from real estate acquisition tax due to purpose of use’ and taxation practices conducted by local administrative bodies. In Chap. 12, Shirakawa and Okoshi (Jpn J Real Estate Sci 31:88–96, 2017) have shown that the real estate companies were committed to transactions as dual agencies to whatsoever degree, and analyzed attributes of real estate brokerage companies which are able to be dual agencies and how such dual agency affects contract price.

In Chap. 13, Ueno (Jpn J Real Estate Sci 31:97–105, 2017) has analyzed impacts of the macroeconomic conditions on the land price gradient curves which are estimated using real estate data of the Tokyo Metropolitan Area in 1970, 1976, 1985, 1988, 1994, 2008, 2010, and 2016. In Chap. 14, Komatsu (Jpn J Real Estate Sci 31:110–118, 2017) has analyzed impacts that refurbishment of existing apartment has on possible increase in rent using the multinomial probit model and the Tobit model. In Chap. 15, Hanazato (Jpn J Real Estate Sci 31:119–128, 2017) has shown that around 90% of condominium reconstruction cases are predictable using the estimated discriminant function in terms of objective real estate data only. In Chap. 16, Ota et al. (Jpn J Real Estate Sci 31:109–119, 2018) have analyzed determinants of rent for rental house, office, and shop within 10-min walking distance from Shibuya Station in Tokyo. Multiple regression analyses are conducted

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and have shown that space syntax (SS) measures (Hillier and Hanson, *The Social Logic of Space*. Cambridge University Press, Cambridge, 1984) significantly affect rent as well as conventional location attributes.

Keywords Real estate sciences in Japan · Property · Tax practices · Dual agencies · Land price gradient · Premium rent · Reconstruction of condominium · Space syntax indices

8.1 Characteristics of Real Estate Affairs in Japan

The real estate science has evolutionally developed as a unique interdisciplinary and multi-disciplinary science in Japan. One of the research groups has focused on issues of legal systems which prescribe transparency, fairness, taxation, due diligences, etc. in the market. Experts in administrative law, civic law, and/or sociology of law analyze issues caused by the existing land legal systems from a wider view focusing on their social and economic impacts. On the contrary, experts in economics and management science argue that national economic losses are caused by the existing land legal systems, pointing out that such system decreases international competitiveness of the real estate market in Japan. The other group focuses on the determinants of price/rent in the land and housing markets. Experts in the field of civil engineering and urban and regional economics, etc. have tried to identify the mechanism with an eye on improvements in the existing land systems, business model of real estate companies, housing companies, regional and urban planning, real estate information systems, etc. by applying various scientific methods such as hedonic price approach, discriminant analysis, and other statistical and econometrics methods.

Issues of property tax are old and new. In Japan, structure (e.g., house) built on a lot of land is precisely discriminated from the land. Real estate has, therefore, two meanings: structure and land. So, issues of property tax are more complicated and have developed unique analyses in Japan. Property tax is essential revenue source for municipalities, some of which are declining due to low birthrate and longevity. Municipalities are actively responsible for actual practices of property tax irrespective of issues argued by scholars in the abovementioned context.

As the economy has globalized, fairness and transparency of real estate markets have become important topics. Real estate information system such as Land General Information System (or, specifically Real Estate Transaction-price Search) has been prepared and enriched. It is expected that such information system can help buyers and sellers in the real estate market.

Japanese people generally prefer new house to old house. This holds with owned house on a lot of land, owned or rented house in a condominium building, etc. Japan is an earthquake country, and quake-resistance standards of architectures were revised a several times in these five decades. So-called existing non-conformed buildings are still located everywhere in Japan. Existing non-conformed buildings

mean buildings that conformed to the laws at the time when structures were built and do not conform to the current laws and especially many condominium buildings located in large cities like Tokyo, Osaka, etc. are classified into this category. One reason which caused existence of such buildings was the rapid and miracle economic growth with the concentration to large cities during the 1960s and 1970s. Entering the new century, the timing has arrived in which those condominium buildings should be rebuilt. However, due to Act on Building Unit Ownership, most of them are not yet rebuilt. House owners in such condominium buildings have to decide whether they rebuild their houses in a new condominium building, or renovate old one, or destruct old one, etc. while they are constrained with each other when they make decision since the ownership of house in a condominium building is firmly combined with joint ownership of the floor and land pertinent to such a condominium building.

Real estate is asset which becomes target of investment and speculation. Crucial factors for determinants of land price, rent of house on a lot of land, in a condominium building, etc. are important indices for decision with such business. The market of REIT (Real Estate Investment Trust) in Japan, J-REIT, looks prosperous business and transparent and objective indices such as the expected internal rate of return and related risk become more important.

8.2 Issues Related to the Land Legal Systems in Japan

Property tax charged on residential housing is differently charged on both house and land on which house is located as house and land are different ideas of real estate in Japan. Most of the practices of property tax in Japan include the fixed asset (land and house) valuation, especially valuation of land for the imposition of property tax, since value of land is relatively higher than that of house, especially in large cities, and they are conducted by municipality staffs. The asset valuation for the imposition of property tax conforms to the valuation standards promulgated around 60 years ago. The valuation standards are based on the street value method. It is globally unique one.

In Chap. 9, Yamamoto (2018) has compared between the street method, the asset valuation adopted for the imposition of property tax in Japan, and the computer-assisted mass appraisal (CAMA) method generally adopted in North America focusing on education and training of valuers, by examining knowledge, level of skill, and experience necessary for experts in the practice. In reality, most of municipalities have a shortage of experts of the asset valuation in Japan. Resolution may be given cooperation between municipalities and universities, which are officially qualified, for ‘training at university (a sort of re-education for once licensed experts)’ and active use of real estate appraisers.

Property tax is imposed on office buildings and facilities for production as well in Japan. It is well known that use of land in the city in Japan is relatively low compared to Europe and America. In Chap. 10, Yamazaki (2018) argues that one major cause

for relatively low density use of land in the city is the land tax system in Japan. He focuses on property tax and examines defects of the tax from the view of economist. Abolition of property tax on structures (house, condominium building, office building, apartment, etc.) and facilities for production is proposed because they distort resource allocation in the markets and discourage high density use of land. On the other hand, increase in property tax rate on land is proposed as it is neutral with the resource allocation while unavoidable shortfalls in revenue for municipalities can be made up for by the increase.

The public land purchased by the Incorporated Educational Institution Moritomo Gakuen (abbreviated to Gakuen) had made devastated and idle the diet of Japan for a while. In Chap. 11, Kobayashi (2018) picked up this case as an example and has examined difference between precise legal interpretation of ‘exemption from real estate acquisition tax due to purpose of use’ and taxation practices conducted by local administrative bodies. He has argued some sort of correction should be made with the gap that is caused by delay between the timing (timing A) in which the acquisition of land was made with the objective of using land for a public interest (this case, elementary school education); therefore, the real estate acquisition tax shall be exempted at this timing (A) following precisely prescription in the law otherwise it shall be charged on this timing (A), and the timing (timing B) in which it became apparent that Gakuen would not use the purchased land for elementary school because of the rescission of establishment approval of elementary school that was made later on and the local administrative body charged land acquisition tax on Gakuen by cancelling the exemption of land acquisition tax once tentatively given at the timing (A) in a practical way.

The law stipulates that the commission for real estate brokers shall be 3% of contract price +60,000 yen for each of selling and buying mediation transactions in Japan. So-called dual agency in the transaction of real estate is strictly regulated in US with each of states’ own legislation, and it is not necessarily prohibited in Japan though it is tough for real estate brokers to be faithful and trustable for both of seller and buyer. In Chap. 12, Shirakawa and Okoshi (2017) have shown that, according to the survey by Jutaku-Shimpo, Inc., the average commission level of the ten major residential real estate brokerage companies in 2015 was 4.02%, which has apparently exceeded the upper limit commission level for a single mediation transaction, and it means that the companies were committed to transactions as dual agencies to whatsoever degree. They analyzed attributes of real estate brokerage companies which are able to be dual agencies and how such dual agency affects contract price compared to the case of transaction by single agencies after clarifying quantitatively the status quo of mediation transactions in Japan. Possibility of moral hazard against sellers due to dual agencies is shown since it is statistically significant that the dual agency decreases contract price.

8.3 Characteristics of Real Estate Market in Japan

In 1960s and 1970s, so-called New Urban Economics (NUE) was prosperous in Japan too, being affected by prosperity of the neoclassical economics in the same era. A most popular model is the mono-centric urban model represented by the conventional von Thünen-Alonso-Muth model, in which land (or housing) price is determined decreasingly dependent on the distance to the city center, that is the central business district (CBD). This is the theoretical basis for the distance (geographical or time distance) to the city center to be incorporated into dependent variables with any regression analysis of land price in the city even after the analysis has been drastically improved through adoption of the hedonic approach.

In Chap. 13, Ueno (2017) has examined location attributes such as distance to the city center (Tokyo Station), distance to the nearest railway station, residential area, access to sewerage service, etc., which may affect residential land price in the Tokyo Metropolitan Area, of which distance to Tokyo Station is 50 km or less, by applying the hedonic approach with data in each year of 1970, 1976, 1985, 1988, 1994, 2008, 2010, and 2016. Giving same values for significant attributes except for distance to the city center to normalize selected residential lots, the logarithmic value of residential land price of the selected lots is specified and estimated as a function in distance to the city center for each year. Using graphs (called land price gradient curves) of the estimated functions, impacts that changes in economic conditions such as rapid economic growth, bubble economy and its burst, low bank rate, consumption tax and in social conditions such as population concentration, depopulation, etc. have on changes in the gradient of the curves, vertical and horizontal shifts of the curves, etc. are chronologically analyzed.

Facing the era of aging population combined with the diminishing number of children and low economic growth rate, it is argued that the scale of market for existing house should be increased in order to effectively utilize housing stock accumulated through the era of high economic growth and bubble economy in the 1960s–1980s. However, the share of existing house in the housing market is very low compared to US and Europe, and it fluctuated around 15% recently. One reason is that the rate of refurbished houses is very low, and the rate of existing houses with defect liability insurance is very low in the market. Whether rent can be increased for refurbished apartments is a critical criterion for the decision of owners whether they would make further investment in the refurbishment.

In Chap. 14, Komatsu (2017) has analyzed impacts that refurbishment of existing apartment has on possible increase in rent. Willingness to pay of additional rent for refurbished apartment that is revealed by lessee via questionnaire (called as premium rent) is examined with each of dwelling performances improved by refurbishment works. With the total 18 categories of refurbishment work, premium rent is statistically explicated in terms of attributes of respondent using the multinomial probit model. Using the estimated probit models, a Tobit model is constructed as a Bayes statistic model, and simulation is conducted with actual data of lessee, refurbishment works, and rent for refurbished apartment.

The condominium reconstruction is a social issue in Japan especially in large cities. It has become serious since the probability that a mega-scale earthquake of magnitude 9 class happens in coming several decades is increasing while replacement of existing non-conformed condominium buildings has been little in progress due to a several reasons. It has been highlighted and argued that the ownership of house in a condominium building is firmly combined with joint ownership of the floor and land pertinent to such a condominium building is a critical barrier for the reconstruction because any matter related to the common property pertinent to condominium apartment requires an approval based on a principle of majority decision. The requirement for concluding a resolution of a meeting of co-owners varies from a simple majority through unanimous decision dependent on agenda items, though the requirement has been recently weakened by amendments to related laws. Difficulty to reach a consensus among co-owners is taken as a major barrier for the reconstruction of condominium apartment. However, it is necessary to examine factors which may cause the difficulty in the background in order to enhance the reconstruction actually because just making weak the requirement for concluding a resolution among co-owners may not be sufficient.

In Chap. 15, Hanazato (2017) constructed a hypothesis that the feasibility of condominium reconstruction can be explicated and evaluated in terms of objective real estate data such as ‘Increase and Decrease of Volume Ratio before and after reconstruction’, ‘Total Floor Area before reconstruction’, ‘Site Area before reconstruction’, ‘Nearby Land Prices’, ‘Building Years at Time of Reconstruction’, and so on. A discriminant analysis is applied to samples of reconstructed or refurbished condominium buildings, and a discriminant function is estimated. Simulation using the function applied to actual data shows around 90% of reconstruction cases are predictable by using the estimated discriminant function.

Though it is difficult to evaluate location quantitatively, it is an important factor for real estate business as rent and/or price of real estate are critical for investments in such business and they are determined by reflecting characteristics which are associated to location—location attributes. Therefore, it is natural and has a meaning for business purposes to analyze quantified factors which determine rent.

In Chap. 16, Ota et al. (2018) have analyzed determinants of rent using data of rental house, office, and shop within 10-min walking distance from Shibuya Station in Tokyo. Multiple regression analysis is conducted to explain the rent determination. The estimated rent function includes space syntax (SS) measures (Hillier and Hanson 1984) as dependent variables in addition to conventional location attributes. An analytic technique was applied based on SS theory to calculate two measures with the grids of 4 m × 4 m in which the area of road of 4 m width is more than 8 square meters (a half) on a map—(1) ‘the visible area’ of a grid that is defined as an index representing a sort of visibility of a grid, and is the number of other grids which can be seen from a grid without obstacles and (2) ‘the integration value’ is an index representing street network centrality, a sort of accessibility to the nearest venue, and is defined as the number of turns on roads which connect two grids with the shortest distance. Results show that both indices of SS affect rent significantly as well as conventionally used location attributes.

8.4 Conclusion

As it is pertinent to the real estate science, any article should have implications in the field of practices. Traditionally, there have been (implicitly or explicitly) battles between practitioners and theorists, especially economist, over the land tax systems in Japan. Above all, arguments with the property tax on real estate are complicated and seem to continue forever since (1) real estate is discriminated into land and structure on the land; (2) property tax on real estate is the major source for the revenue of municipality; and (3) tax practices are conducted by staffs of municipalities of which job positions are not necessarily professionals. Facing the era of depopulation jointly with decreasing birth of children in a several coming decades, the above (2) looks a stubborn barrier for a resolution between the two groups. It is said that tax systems in Japan are relatively more complicated than other countries in Europe and US. Although inclusion of argument by Yamazaki (2018) into a comprehensive discussion including direct taxes such as corporation tax and income tax, indirect taxes such as consumption tax, succession tax, objective taxes such as gasoline tax, etc. should be ideal, suggestion by Yamamoto (2018) may improve premises for leading to a constructive discussion. A huge variety of tax exemption or relief systems are prescribed for taxable objects in relation to ‘the public interests’ in Japan, and some of them can be double, triple, or even more exemption/relief for a certain objective. Kobayashi (2018) has analyzed a good example which shows critical roles for staffs of taxation practices in order to balance between aims of exemption/relief tax and precise interpretation of law in good or bad sense. Real estate information systems have been prepared with the purpose of making transparent the real estate market especially for buyers and sellers, to whom information is biased and can be blocked otherwise. Shirakawa and Okoshi (2017) have analyzed typical cases in which such information system may work well as designed though there is a space for amendments to existing related laws.

The share of the gross regional product of the Tokyo Metropolitan Area to the GDP is more than one-third. The economy in Japan is heavily dependent on and influenced by that of Tokyo and surrounding areas. As for the trends in the real estate market, this is true, too. Ueno (2017) has shown that, as generally argued and pointed out, the macroeconomic indices some of which are controlled by macroeconomic policies crucially affect the real estate market, and even they may affect the urban spatial structure through the arbitrage in the real estate market.

Expansion of house refurbishment markets is a key for the expansion of the markets of existing house as an important real estate business. Komatsu (2017) has provided useful results for real estate investment business. He has identified effective refurbishment works for rental houses in condominium buildings by identifying premium rent. The replacement of non-conformed existing buildings by new ones which are conformed to current regulations is big issues. Hanazato (2017) has also provided useful and effective information for various policies which enhance reconstruction of houses in a condominium building. The transparency of the real estate market and provision of objective real estate data are essential for any real estate

business and stakeholders, especially in order to call for further investments from abroad. Ota (2018) has been successful to quantify complicated and unique qualitative characteristics which affect the real estate market, e.g., being secluded from the noisy area, adjacent to a main street, etc. by adopting the space syntax theory. This suggests prosperous developments in research by using GIS data and effective utilization for business purposes.

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