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RESEARCH ON FACTORS AFFECTING THE
MARKET OF RESIDENTIAL LAND USE RIGHTS IN
URBAN AREAS IN HANOI

Major: Land Management
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PUBLICATIONS INCLUDED IN THIS THESIS

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INTRODUCTION

1. Rationale of the study

Hanoi is the place that shows the most clearly the evolution of the formation and development of the residential land use rights market in urban area. The development of this market in Hanoi can be seen as the reference for the real estate market in Hanoi in particular, as well as, the real estate market of Vietnam in general. The residential land use rights market in urban areas are affected by market factors, the development of this market according to the market mechanism has achieved many remarkable achievements in recent times, but besides that, there are also some limitations and problems in State management of residential land use rights market in urban areas.

From the situation of the abnormal changes in residential land use rights market in urban areas in Hanoi, it is necessary to study the factors affecting on residential land use rights market, especially in urban areas in Hanoi, thereby proposing solutions to improve State management policies for this market to develop stable and sustainable residential land use rights market in urban areas in Hanoi.

Stemming from the above problems, the PhD student chose the topic: **“Research on factors affecting the market of residential land use rights in urban areas in Hanoi”**.

2. Objectives of the research

2.1. Overall objective: The study aims to evaluate the influence of factors on the market of residential land use rights in urban areas in Hanoi to propose solutions to improve the efficiency of state management of this market.

2.2. Specific Objectives:

- Assessing the current situation of supply and demand for residential land use rights in urban areas and prices of residential land in urban Hanoi in the period from 2011 to 2019;

- Evaluate factors affecting the supply and demand of residential land in urban Hanoi;

- Proposing solutions to improve the efficiency of state management of the market of residential land use rights in urban areas of Hanoi.

3. Significance of the research

3.1. Scientific significance of the research: Contributing to systematizing the theoretical and practical basis of the market of residential land use rights in urban areas through the supply and demand of residential land use rights in urban area in Hanoi, thereby evaluating the factors affecting the market of residential land use rights in urban area.

3.2. Practical significance of the research

- The research results provided a scientific basis, assess the current situation and propose solutions to strengthen the state management of the market of residential land use rights in urban area in Hanoi in order to meet the requirements of development economic and society of the study area;

- Research results can be applied to localities with socioeconomic similarity to Hanoi.

4. New contributions of the thesis

- Evaluating 05 groups of factors affecting the supply of residential land use rights in urban areas in Hanoi in primary market, including inputs, land policies, other policies, economy - infrastructure and expectations, and supply of residential land use rights on the market; 04 groups of factors affecting on the supply of residential land use rights in urban area in Hanoi in secondary market including inputs, state policies, economy - infrastructure and expectations, and supply of residential land use rights goods in the market; Identify 04 groups of factors affecting on the demand for residential land use rights in urban area in Hanoi in primary and secondary markets, including population, labor and employment; policy of government; psychology, tastes and economic markets.

- Forecasting development trends and proposing policy solutions affecting the supply and demand for residential land use rights in urban Hanoi.

Chapter 1. LITERATURE REVIEW

1.1. Theoretical review of the market for residential land use rights in urban areas

1.1.1. Land and residential land in urban

1.1.2. Real estate market, land use rights market, residential land use rights market in urban area

1.2. Overview of residential land use rights market in Vietnam

1.2.1. Policies and laws on the market of residential land use rights in Vietnam

1.2.1.1. Policy on development of real estate market and residential land use rights market

1.2.1.2. Land law related to real estate market and residential land use rights market

1.2.1.3. Current legal problems for real estate market and residential land use rights market in Vietnam

1.2.2. The process of formation and development of the real estate market and the market of residential land use rights in Vietnam

1.2.2.1. The period before 1986

1.2.2.2. The period from 1986 to 2001

1.2.2.3. The period from 2001 to present

1.2.3. Legal basis of the market for residential land use rights in Hanoi city

1.2.4. Some factors affecting on residential land use rights market in Vietnam

1.2.4.1. Factors affecting the supply and demand for residential land use rights

1.2.4.2. Factors affecting the supply of residential land use rights

1.2.4.3. Factors affecting the demand for residential land use rights

1.3. Research projects on the real estate market in the world and the market for residential land use rights in Vietnam

1.3.1. Research projects on the market economy

1.3.2. Research projects on the real estate market and land use rights market in Vietnam

1.3.3. Research projects on the real estate market and land use rights market in Hanoi

1.4. Evaluation of research projects and research direction

1.4.1. Review of researched projects

1.4.2. Research point of view

1.4.3. Research orientation

1.4.4. Research diagram

Chapter 2. CONTENT AND METHODOLOGY

2.1. Research object, scope, location

2.1.1. Research object: Residential land use rights in urban area; supply of residential land use rights in urban area; demand for residential land use rights in urban area.

Analysis of 02 markets: Primary market is assigned or leased by the state to implement housing development projects; and the secondary market is the transfer of land use rights in urban; Factors affecting the supply of residential land use rights in urban; demand for residential land use rights in urban.

2.1.2. Research scope

- Spatial scope: in 12 districts of Hanoi;

- Time scope: Collecting information on supply and demand for residential land use rights in urban, transfer transactions of land use rights in the period from 2011 to 2019; Interviews to investigate the need to transfer, receive the transfer of residential land use rights in urban in Hanoi from May 1st 2020 to July 31st 2020.

2.1.3. Research location: The research was conducted in urban areas in Hanoi and completed at Thai Nguyen University of Agriculture and Forestry.

2.2. Research content

- (i) Overview of the research area;
- (ii) Assessing the current situation of the residential land use rights market in urban Hanoi in the period from 2011 to 2019;
- (iii) Evaluating some factors affecting on the supply of residential land use rights in urban Hanoi;
- (iv) Evaluating some factors affecting the demand for residential land use rights in urban areas in Hanoi;
- (v) Forecasting development trends and proposing solutions to improve the efficiency of state management of residential land use rights market in urban.

2.3. Methodology

2.3.1. Method of secondary data collection

2.3.2. Professional solution

2.3.3. Method of primary data collection

2.3.3.1. *Study site selection*: the urban area in Hanoi can be divided into 03 areas:

- Area I includes districts: Hoan Kiem, Ba Dinh, Hai Ba Trung and Dong Da;
- Area II includes districts: Tay Ho, Cau Giay, and Thanh Xuan;
- Area III including districts: Hoang Mai, Long Bien, Ha Dong, Bac Tu Liem and Nam Tu Liem.

In each area, the study selected two representative districts, reflecting the supply and demand and land price of residential land use rights market in urban.

In each district, the study chose 03 routes with urban land prices, according to the City's Land Price List, classified into 3 levels: the highest, average and lowest level of prices, many inhabitants were living and building houses in the selected routes: Area I choose 02 districts including Ba Dinh and Hoan Kiem; Area II selects 02 districts including Tay Ho and Thanh Xuan; Area III chooses 02 districts including Long Bien and Bac Tu Liem.

The survey streets are shown in Table 2.2.

2.3.3.2. Method of sample size selection

According to Hair et al (1998), the minimum number of samples for exploratory factor analysis was 5 times the total number of observed variables ($n=5*m$). For multivariable regression analysis, the minimum number of samples to be obtained was calculated using the formula $n=50 + 8*m$ (m : the number of factors affecting on the market of residential land use rights in urban) (Tabachnick and Fidell, 1996).

The research selected 23 observed variables for 05 groups of factors, of which 04 are independent factors and 01 dependent variable was considered to affect the supply of residential land use

rights in urban areas in primary market and secondary market. 05 groups of factors (04 independent factors and 01 dependent variable) with 23 factors were considered to affect the demand for residential land use rights in urban in primary and secondary market. Thus, the minimum number of votes for exploratory factor analysis and linear regression in this research was 115 survey questionnaires ($23*5=115$) and 90 survey questionnaires ($50+8*5=90$). To ensure high reliability, the research selected 500 survey questionnaires, of which 200 questionnaires interviewed officials working in the real estate sector to find out the factors affecting on the supply and demand for residential land use rights in primary market; The remaining 300 survey questionnaires was utilized to interview households and individuals wishing to transfer, receive transfer and the price of residential land in the market, who had transferred or received the transfer to evaluate factors affecting on the supply and demand for residential land use rights in secondary market. The number of survey questionnaires for the secondary market was larger than that of the primary market because the secondary market had more transactions, excitement and participants.

2.3.3.3. Methods of sampling survey

The research randomly selected households and individuals who are living and doing business on the route according to the selected study areas. Investigating at area 1 was along traffic road from the beginning to the end of the road until the total number of samples was sufficient. The survey questionnaires were summarized according to each group on research criteria (Table 2.2).

Table 2.2. The number of household and individual in questionnaire survey

No.	Name of the routes	The number of samples			
		Households with transactions	Households with supply of urban land use rights	Households with demand of urban land use rights	Total
1	Area I	21	14	65	100
1.1	Ba Dinh district	10	6	34	50
1.1.1	Dien Bien Phu street	3	2	13	18
1.1.2	Nguyen Thai Hoc street	4	2	11	17
1.1.3	Nguyen Pham Tuan street	3	2	10	15
1.2	Hoan Kiem district	11	8	31	50
1.2.1	Hang Dao street	4	2	12	18
1.2.2	Ly Thuong Kiet street	3	3	11	17
1.2.3	Vong Ha street	4	3	8	15
2	Area II	22	25	53	100
2.1	Tay Ho district	10	10	30	50
2.1.1	Thanh Nien street (in Tay Ho district)	3	2	13	18
2.1.2	Yen Phu street (Tay Ho district)	4	5	8	17
2.1.3	Phu Xa street	3	3	9	15
2.2	Thanh Xuan district	12	15	23	50

No.	Name of the routes	The number of samples			
		Households with transactions	Households with supply of urban land use rights	Households with demand of urban land use rights	Total
2.2.1	Giai Phong street (the opposite side of the train line) - Truong Chinh street in Thanh Xuan district)	3	5	10	18
2.2.2	Nguyen Tuan street	4	6	7	17
2.2.3	Bui Xuong Trach street	5	4	6	15
3	Area III	26	42	32	100
3.1.	Long Bien district	16	18	16	50
3.1.1.	Nguyen Van Cu (Chuong Duong Bridge - Chui Bridge)	6	5	7	18
3.1.2	Ngoc Lam street (Long Bien 2 - Nguyen Van Cu)	5	7	5	17
3.1.3	Xuan Do street	5	6	4	15
3.2	Bac Tu Liem district	10	24	16	50
3.2.1	Hoang Quoc Viet (in Bac Tu Liem district)	4	8	6	18
3.2.2	Xuan La - Xuan Dinh street (Pham Van Dong street - Adjacent to Tay Ho district)	3	7	7	17
3.2.3	Yen Nai street	3	9	3	15
	Total	69	81	150	300

(Source: *Compilation of questionnaire survey*)

The interviewees were officials working in the field of real estate in Hanoi, according to Table 2.3.

Table 2.3. The number of survey samples for people working in the field of real estate

No	Interview subject	Total
1	Land management agency	50
1.1	Hanoi Environment and Natural Resources Department	10
1.2	Hanoi Land Registration Office	10
1.3	Branch of Hanoi Land Registration Office in Ba Dinh - Hoan Kiem - Dong Da area	10
1.4	Branch of Hanoi Land Registration Office in Tay Ho district	5
1.5	Branch of Hanoi Land Registration Office in Thanh Xuan district	5
1.6	Branch of Hanoi Land Registration Office in Long Bien district	5
1.7	Branch of Hanoi Land Registration Office in Bac Tu Liem district	5
2	Real estate brokerage and valuation company	50
3	Real estate investment and trading company	50
4	Individuals working freely in the field of real estate investment and brokerage	50
	Total	200

(Source: *Compilation of survey questionnaires*)

2.3.3.4. Methods to design for scale of evaluation

The research used a 5-level Likert scale to assess the influence of factors on residential land use rights market in urban, including: (1) Not sure if there is an effect, (2) Not influential, (3) Partially

affected, (4) Influential, (5) Very influential.

2.3.3.5. *Methods of constructing questionnaire survey*

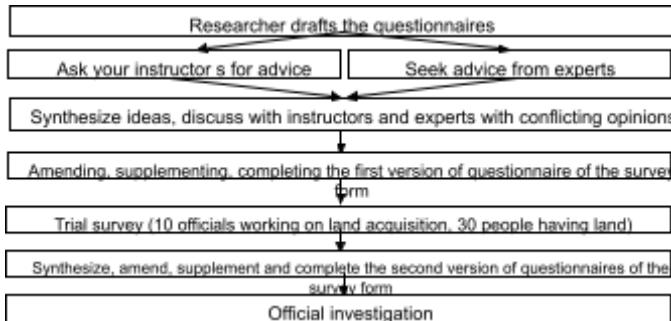


Figure 2.1. The process of constructing the questionnaire survey

2.3.3.6. *Method of survey designs*

2.3.3.7. *Methods to standardize data before processing*

2.3.4. *Analytical methods to evaluate factors and groups of factors affecting residential land use rights market in urban areas*

2.3.5. *Comparative methods*

2.3.6. *Descriptive statistical analysis*

Chapter 3. RESULTS AND DISCUSSION

3.1. The overview of the research area

3.1.1. *The overview of natural, economic and social condition of Hanoi*

3.1.2. *The situation of land management and use in Hanoi*

3.2. The current situation of the market for residential land use rights in urban in Hanoi in the period from 2011 to 2019

3.2.1. *Situation of supply of residential land use rights in urban areas*

3.2.1.1. *Situation of land fund for residential land purposes in urban*

According to the Hanoi Statistical Yearbook in 2012, 2016, 2020: (Figure 3.2)

Unit: ha

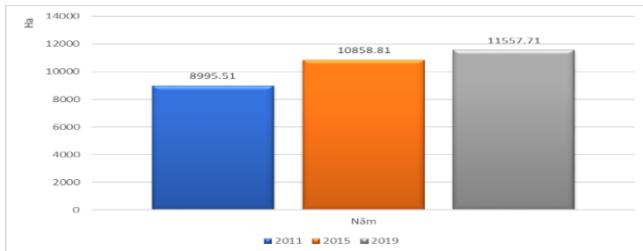


Figure 3.2. Land fund for residential land in urban in Hanoi

The total area of residential land in the urban area in 2011 was 8,995.51 ha. At that time, there were not many projects for housing development, the market was still quiet and frozen due to the impact of the 2008 America Unit State economic crisis. By 2015, the area for residential land in urban increased to 10,858.8 hectares (an increase of 1,863.3 hectares in comparison to 2011), the economy recovered and grew fast, housing development projects continuously increased. By 2019, residential land in urban area will reach 11,557.7 hectares (an increase of 698.9 hectares compared to 2015 and 2,562.2 hectares compared to 2011).

3.2.1.2. Actual situation of supply of residential land use rights in urban areas

* Supply of residential land use rights in urban in primary market: The situation of land allocation for investment in construction of housing development projects in Hanoi in the period from 2011 to 2019 was shown in Table 3.4.

Table 3.4. The situation of land allocation for investment and construction of housing development projects in Hanoi in the period from 2011 to 2019

No.	District	2011 - 2015		2016 - 2019		Total	
		Number of projects	Area (ha)	Number of projects	Area (ha)	Number of projects	Area (ha)
1	Hoan Kiem	8	0.77	3	0.25	11	1.02
2	Ba Dinh	7	1.88	8	12.69	15	14.57
3	Dong Da	12	6.77	4	1.45	16	8.22
4	Hai Ba Trung	15	12.82	3	0.67	18	13.49
5	Tay Ho	9	9.68	5	4.95	14	14.63
6	Thanh Xuan	30	23.3	3	3.06	33	26.36
7	Cau Giay	30	27.83	12	14.01	42	41.84
8	Hoang Mai	25	109.59	18	81.01	43	190.6
9	Bac Tu Liem	15	37.75	9	21.32	24	59.07
10	Nam Tu Liem	28	56.68	24	131.27	52	187.95
11	Ha Dong	20	63.09	9	12.44	29	75.53

No.	District	2011 - 2015		2016 - 2019		Total	
		Number of projects	Area (ha)	Number of projects	Area (ha)	Number of projects	Area (ha)
12	Long Bien	20	21.02	12	20.57	32	41.59
	Total	219	371.18	110	303.69	329	674.87

Source: Hanoi Environment and Natural Resources Department from 2011 to 2019

Table 3.4 shows that: in the period from 2011 to 2019, there were 329 housing development projects in the 12 provinces with 674.87 hectares. In which, in the period from 2011 to 2015, there were 219 projects with 371.18 hectares, housing development projects, new urban areas were concentrated in the districts of Cau Giay (30 projects), Thanh Xuan (30 projects), Hoang Mai (25 projects), Nam Tu Liem (28 projects), Ha Dong (20 projects), Long Bien (20 projects), these are districts near the center with large area, suitable for implementing housing development projects, meeting the requirements of population expansion in the center of the city. By the period from 2016 to 2019, there are 110 projects, with a total area of 303.69 ha, the scale of the project normally was larger than that of the period from 2011 to 2015.

* *Supply of residential land use rights in the secondary market:*

(i) *Supply from investment and business enterprises:* including housing construction enterprises and housing and land service businesses, many strong corporations and enterprises had play an important role in the field of housing and land investment and trading such as HUD, Viglacera, HANDICO, HANCORP, UDIC, Vingroup, Tan Hoang Minh, FLC; ii) *For the supply of residential land use rights without houses on the land (plumbing land):* In 2012, there were about 112 projects providing villas and land plots with the construction and offering progress of the projects. Those projects continue to be delayed (with about 86% of future projects had not yet started). In 2013 and 2014 the supply and inventory for land plots continued to increase and became illiquid in the three years 2015, 2016 and 2017. However, according to the provisions of Article 194 of the 2013 Land Law and Article 41 of the Government's Decree No. 43/2014/ND-CP in May 15th 2014, the supply of residential land use rights in the form of subdivision of plots for sale tends to downward trend in 2018 and 2019; (iii) *For the supply of land use rights with houses on the land:* including individual houses, villas, townhouses, condominiums, in which the long-term profit potential of this villa segment was usually higher than other segments because most of the projects were located in well locations; (iv) *Supply by households and individuals who want to trade on the market:* In 2011, the total number of land transfer transactions in urban areas was 5,729 transactions, concentrated mainly in Hoan Kiem, Dong Da

and Ba Dinh districts. In 2015, the total number of transactions in the districts was 30,757, an increase of 25,028 transactions compared to 2011. Long Bien was one of districts which had the largest number of transactions. By 2019, the number of transactions was 49,221, an increase of 18,464 transactions compared to 2015. At that time, investors in housing development projects had completed handing over houses to house buyers. Ha Dong district was one of places which had the largest number of transactions (8,929 transactions). Implement changes in supply, demand, and prices for residential land use rights in urban of households and individuals in Hanoi was shown at Table 3.6.

Table 3.6. Supply of residential land use rights in urban areas in Hanoi

Evaluation criteria	Number	Rate (%)
Total number of surveyed households	300	100.00
The number of households surveyed on supply of land use rights	112	37.33
Number of households that have transferred their land use rights to the market	31	10.33
Number of households providing land use rights for transaction in the school, in which:	81	27.00
<i>Have a need to transfer an apartment</i>	40	13.33
<i>Have a need to transfer land without housing</i>	10	3.33
<i>Have a need to transfer individual housing in a residential area</i>	22	7.34
<i>Have a need to transfer villa/adjacent land in urban area</i>	9	3.00

The data in table 3.6 shows that in the period from 2011 to 2019, out of the total of 300 surveyed households, 31 households (accounting for 10.33%) have implemented and 81 households (accounting for 27.00% of surveyed households), wishing to transfer residential land use rights to the market. In which, the number of households with the most need to sell apartments is 13.43%, and the need to transfer land with houses in residential areas accounts for 7.34%; having the lowest need to transfer residential land with houses in housing development projects (3.0%).

- The results about the purpose of the transfer of residential land use rights are shown in Table 3.7.

Table 3.7. Purpose of the transfer of residential land use rights in urban areas

No.	Criteria	Num of household	Rate (%)
1	Number of households with supply of residential land use rights	112	100.00
2	Transfer purpose		
2.1	No need to use	17	15.18
2.2	Transfer in a better place	59	52.68

2.3	Need capital to invest in other business fields	18	16.07
2.4	Transfer for profit	15	13.39
2.5	Others	3	2.68

The data in table 3.7 shows that Purpose of transfer included “to receive land transfer in a better place”, accounting for 52.68%; “need capital to invest in other business fields” accounted for 16.07%, “transfer for profit” accounted for 13.39%; “no need to use” accounted for 15.18%.

3.2.2. Situation of demand for land use rights in urban areas

3.2.2.1. Demand for residential land use rights for households and individuals

Survey results was shown in Table 3.8.

Table 3.8. Demand for urban land use rights in Hanoi

Evaluation criteria	Number of households	Rate (%)
Total number of surveyed households	300	100.00
Number of households surveyed on demand for land use rights	188	63.00
Realized residential land use rights demand in urban	38	12.67
Demand for residential land use rights in urban areas has not been fulfilled:	150	50.00
Of which	11	3.67
<i>Immediately implement</i>	19	6.33
<i>Intent to implement in 1 year</i>	39	13.00
<i>Intent to implement from 1 year to 5 year</i>	44	14.67
<i>Intent to implement for over 5 year</i>	37	12.33
<i>Have not intention</i>	300	100.00

Table 3.8 shows that: In the period 2011 - 2019, there were 43 households that had received the transfer of residential land use rights in urban areas, accounting for 13.00%. The number of households with demand for residential land (not yet implemented) accounted for 50.00%, of which only 11 households could implement it immediately, the rest was 19 households, accounting for 6.33%, could implement it within 1 year, 39 households (13.00%) could be implemented in a period of 1 to 5 years, 44 households (accounting for 14.67%) need more than 5 years, while the number of households whose implementation time had not been determined, accounted for 12.33 % (equivalent to 37 households).

- *The purpose of demand for land use rights in urban areas in Hanoi:* The survey results (Table 3.9) show that: For households with urban land use needs, their main purpose was to live, accounting for 63.3% (of which 55 households only live in). 79% used for living in combination with business, trading was 8.51%). The number of households investing due to financial abundance accounted for 15.43%), the number of households investing for profit was 38 households (20.21%). People with other needs accounted for a low percentage (1.06%).

Table 3.9. The purpose of residential land use rights demand in urban areas

No.	Criterias	Num of household	Proportion (%)
1	Total number of households with demand for residential land use rights in urban areas	188	100.00
2	<u>The purpose of land use</u>		
2.1	Residential	103	54.79
2.2	Business, trading	16	8.51
2.3	Investment	29	15.43
2.4	Investment for profit (lease back, buy and resell)	38	20.21
2.5	Other	2	1.06

3.2.2.2. Demand for residential land use rights in urban areas for foreigners

According to survey data in the period 2011 - 2019, in 03 districts of Hoan Kiem, Ba Dinh and Bac Tu Liem, no foreigners had registered for ownership of houses attached to residential land. Ha Dong was the district with the highest number of registered foreigners with 129 foreigners registered to own. The segment was mainly luxury housing in the West of Hanoi. Thanks to the State's policy, it was not so difficult to own houses for foreigners, many foreigners had made investments, put their names in many apartments, then transfer or sublease.

3.2.3. Price of the residential land use rights

Land prices in the period 2011 - 2019 were generally stable, without much fluctuation. Land price in 2015 compared to 2011 has increased from 1.08 to 3.05 times. Particularly for the Giai Phong (opposite of the railway) - Truong Chinh to the end of Thanh Xuan district, the land price has decreased from 185 million VND/m² to 160 million VND/m². By the period of 2015 - 2019, the market is stable, there was no bubble, the land price returned to close to the real value. In addition, in 2019, the market had become stable, in some routes, there was a tendency to decrease from 0.28 to 0.98 times. Besides, land prices still increased slightly in some Dien Bien Phu roads (First - End of the road); Nguyen Thai Hoc (At the beginning of the road - at the end of the street) in area I; Nguyen Tuan Street (At the beginning of the road - at the end of the road) in areas II and Ngoc Lam (End of Long Bien 2 - Nguyen Van Cu); Hoang Quoc Viet (Location of Bac Tu Liem district); Xuan La - Xuan Dinh Street (Pham Van Dong - Adjacent to Tay Ho District), Yen Noi Street (At the beginning of the road - at the end of the road) belongs to area III.

3.2.4. Assessing the market for residential land use rights in urban in Hanoi city

The supply of new urban land use rights from urban real estate and housing projects decreased sharply. The main reason was due to the review and inspection of compliance with legal regulations on investment, construction, real estate... at the projects. Contrary to supply, demand for housing had always remained in high level. Especially projects with full legal status, fully invested in technical infrastructure, services and implemented by reputable developers, reasonable selling prices... Forecast of the market for residential land use rights in urban areas, for the period 2021 - 2025, the market could be continue to grow at an average rate. The impact of the economy affected by the epidemic and policies lead to the difference in supply and demand (supply decreases but demand does not change).

3.3. Research on factors affecting the supply of residential land use rights in urban areas in Hanoi

3.3.1. Determining factors affecting on the supply of land use rights in urban areas

Input factors (1) includes land use levy, land rent, land use rights transfer; Non-agricultural land use tax; Taxes, fees and charges on the transfer; Expenses for construction of houses and works on land; Land prices and real estate values in the market and capacity of real estate supply of organizations.

State policy (2) includes preferential policies when building subsidized house; Policy on exemption and reduction of land use levy, land rent and non-agricultural land use tax; Credit policy on real estate; Land use planning and plans; State Land Fund and State Land Policy.

Expectations and supply of land use rights in the market (3) includes the expectation of rapid price increase in the short term; Long-term price appreciation expectations; The number of transferors in the market and the amount of land use rights available in the market.

Economic factors - infrastructure (4) includes GDP growth rate; urbanization speed in the region and infrastructure development.

3.3.2. Evaluate the influence of factors on the supply of residential land use rights in urban areas

3.3.2.1. Factors affecting on the supply of residential land use rights in urban areas in primary market

**** The results of the reliability analysis of the scale***

There were 03 variables with total correlation coefficient less than 0.3: Non-agricultural land use tax ($YT2=0,295$), Tax, fee, fee on

transfer (YT3=0,188), Expected price increase quickly in the short run (KV1=0,216. They were moved out of the input variables and then rerun the model to ensure that all of variables had a total correlation coefficient greater than 0.3.

*** Exploratory factor analysis (EFA) for the independent variable**

The EFA exploratory factor analysis would introduce five new groups of factors respectively as follows: input factor (YT), land policy (CSDD) including CS4, CS5, CS6; other policy (CSK) include CS1, CS2, CS3; expectations and supply of land use rights in the market (KV) and economic factors - infrastructure (KH).

Test the reliability of the scale for two newly formed groups of factors. The results of the analysis of the correlation coefficient of the total variable showed that all variables with the total correlation coefficient greater than 0.3, which met the requirements of reliability. The results of testing the reliability of the scale by Cronbach's Alpha coefficient all had Cronbach's Alpha coefficients in the range of 0.6 - 0.95.

*** Multivariate regression analysis to determine the influence of factors**

The results of multivariate regression analysis are shown in Table 3.21.

Table 3.21. Results of linear regression analysis of factors affecting on the supply of residential land use rights in urban areas in primary market

Factors	Standardized Coefficient (B)	t	Collinearity Statistics		Influence rate (%)	Order
			Error (Sig.)	VIF		
Constant	0.172	1.480	0.140			
YT	0.328	10.071	0.000	1.211	22.59	1
CSK	0.292	9.305	0.000	1.122	20.11	3
CSDD	0.318	9.991	0.000	1.155	21.90	2
KV	0.237	7.356	0.000	1.182	16.32	5
KH	0.277	8.363	0.000	1.250	19.08	4
Sig.F = 0.000						
R ² = 0.830						
Adjust R ² = 0.826						
Durbin-Watson = 2.095						

(Source: Data analysis)

From the standardized regression coefficient, we can determine the regression equation of the form that Y (supply in primary market) = 0.140 + 0.328*YT + 0.292*CSK + 0.318*CSDD + 0.237*KV + 0.277*KH and the ratio of the influence of factors on the supply of residential land use rights in urban areas in Hanoi city in primary market.

3.3.2.2. Factors affecting on the supply of residential land use rights in urban areas in secondary market

*** Analyze the reliability of the scale**

The results of the analysis of the total correlation coefficient showed that 20 observed variables with the total variable correlation coefficient were greater than 0.3, which met the requirements for reliability and 03 observed variables had the correlation coefficient less than 0.3: YT2=0.177, YT6=0.038 and CS5=0.185. Removing 03 factors YT2 Non-agricultural land use tax, YT6 Capacity of real estate supply organization and CS5 State land fund and rerun the model, all remaining factors had Cronbach's Alpha coefficient within range from 0.6 to 0.95.

*** Exploratory factor analysis EFA**

The factor groups participating in EFA exploratory factor analysis all satisfied the requirement of statistical significant. The results of the rotation matrix determining the load weights have shown that from 04 groups of factors with 16 observed variables were arranged into 04 groups, which differ from the original order.

*** Multivariate regression analysis to evaluate influence of factors**

The results of multivariate regression analysis are shown in Table 3.26.

Table 3.26. Results of linear regression analysis of factors affecting on the supply of residential land use rights in urban areas in secondary market

Factors	Standardized Coefficient (β)	t	Collinearity Statistics		Influence rate (%)	Order
			Error (Sig.)	VIF		
Constant		1.732	0.084			
YT	0.287	11.655	0.000	1.428	23.07	3
CS	0.329	13.204	0.000	1.461	26.45	2
KV	0.206	8.053	0.000	1.535	16.56	4
KH	0.422	18.055	0.000	1.285	33.92	1
Sig. F = 0.000						
$R^2 = 0.875$						
Adjust $R^2 = 0.873$						
Durbin-Watson = 1.876						

(Source: Data analysis)

From the standardized regression coefficient, we could determine the regression equation like that: Y (supply in secondary market) = 0.143 + 0.287*YT + 0.329*CS + 0.206*KV + 0.422*KH and the influence ratio of factors affecting on the supply of residential land use rights in urban areas in Hanoi in secondary market have shown in Table 3.26.

3.3.3. Evaluating factors affecting on the supply of residential land use rights in urban areas in Hanoi

Through the assessment of influencing factors, the market for residential land use rights in urban areas in Hanoi in primary and secondary market has some different characteristics.

In the primary market, the supply of residential land use rights in urban areas was heavily influenced by input factors. The input factors could determine the investment of investors in real estate projects. In addition, land policy and other policies of the State such as tax policy, housing policy also have a great impact on the supply of residential land use rights in urban areas in primary market. In the period 2011 - 2019, the residential land use rights market in urban in Hanoi went through 3 periods: (1) the market was quiet from 2011 to 2013 due to the policy of tightening credit for investment in real estate; (2) the residential land use rights market in urban area had gradually recovered and developed after the Resolution No. 02/NQ-CP dated 07/01/2013 for the period 2014 - 2018, (3) the market slowed down again in 2019 due to the impact of the implementation of the Land Law in 2013 which had some overlaps with the Law on Housing in 2014 which came out later. Thus, all the ups and downs of the market could be affected by the State Policy.

In the secondary market, the factors of economic - infrastructure had the greatest influence on the supply of residential land use rights in urban in Hanoi. Economic development made people's income higher, the transfer of residential land use rights also could increase. Infrastructure would determine the choice of where people live. If the infrastructure was synchronously developed and met the needs of the people, probability of buying choices would be higher. Expectations and supply of residential land use rights in the market also had a great influence on the supply of land use rights in urban areas. People's expectations could drive demand which lead to future transactions arise.

Expectations and supply of land use rights in the market had a low degree of influence on the supply of land use rights in primary market and secondary market in urban areas. Because land use rights in urban areas was a specific commodity, it took a long time to bring this product to the market so it could be lags behind the current market.

3.4. Research on some factors affecting on the demand for residential land use rights in urban areas in Hanoi

3.4.1. Factors affecting on the demand for residential land use rights in urban areas

Population, labor and employment (1) including people's

income; population growth and changes in the employment of workers.

State's policy (2) including interest rates on bank loans; taxes, fees and charges on the receipt of the transfer; regulated land prices; plans on land use; policies for foreigners to buy houses and spend money from the state.

Psychology, tastes (3) including seeing that many buyers should buy along; see future profitability, transfer-ability, and rumour.

Market - Economy (4) including the gold market; financial markets; Food market; Land price in the market; Economic Growth and Development of Infrastructure.

3.4.2. Evaluating influence of factors on the demand for residential land use rights in urban areas

3.4.2.1. Factors affecting on the demand for residential land use rights in urban areas in primary market

**** Analyze the reliability of the scale***

The analysis results had 03 variables with the total correlation coefficient less than 0.3: Rumors (TL4=0.05), Food and food market (TT3=0.264) and Taxes, fees and charges on the transfer (NN2=0.169). Run the model again with removing these variables, then all remained variables are eligible.

**** Exploratory factor analysis (EFA) for the independent variable***

The EFA exploratory factor analysis would bring out four groups of factors, respectively, as follows: State policy (NN), economic market (TT), psychological, taste (TL); population, labor, employment (DS), they were included in the regression analysis.

**** Multivariate regression analysis to determine the influence of factors***

The results of multivariate regression analysis was shown in Table 3.31.

Table 3.31. Results of linear regression analysis of factors affecting on the demand for residential land use rights in urban areas in primary market

Factors	Standardized Coefficient (B)	T	Collinearity Statistics		Influence rate (%)	Order
			Error(Sig.)	VIF		
Constant	-0.106	-0.835	0.405			

DS	0.325	9.454	0.000	1.392	26.68	2
NN	0.300	8.575	0.000	1.443	24.63	3
TL	0.242	6.743	0.000	1.518	19.87	4
TT	0.351	9.949	0.000	1.464	28.82	1
Sig.F = 0.000						
$R^2 = 0.835$						
Adjust $R^2 = 0.831$						
Durbin-Watson = 1.812						

(Source: Data analysis)

From the standardized regression coefficient, we can determine the regression equation of the form that Y (demand in primary market) = $-0,106 + 0,325*DS + 0,300*NN + 0,242*TL + 0,351*TT$.

3.4.2.2. Factors affecting on the demand for residential land use rights in urban areas in secondary market

* Analyze reliability of the scale

The results of the analysis of the total correlation coefficient show that all 18 observed variables had the total correlation coefficient greater than 0.3, meeting the requirements of reliability, suitable for the next analysis, and 05 variables had a total correlation coefficient less than 0.3, which does not qualify, as NN5=0.202; NN6=0.083, TL4=0.076, TT3=0.232 and TT6=0.175. With implement of removing 05 variables such as NN5: Policy for foreigners allowed to buy houses, NN6: State money supply, TL4: Rumor, TT3: Food market and TT6: Development of infrastructure. After re-running the model, all of remained variables gained qualified results.

* Exploratory factor analysis

The exploratory factor analysis of EFA would give 04 groups of factors respectively as follows: (1) State policies; (2) economic market; (3) psychological, tastes; (4) population, labor and employment, both were included in the regression analysis.

* Exploratory factor analysis EFA for the dependent variable

The results of analysis by KMO and Bartlett's For the dependent variable, the factors affecting on the demand for residential land use rights secondary urban are shown in Appendix 4.4.:

- The KMO coefficient = 0,733 satisfy the condition of $0,5 < KMO < 1$, meaning that exploratory factor analysis is appropriate for real data.

- The Coefficient of Bartlett get the $Sig. = 0,000 < 0,05$,

meaning that observed variables are linearly correlated with each other at significant level of 95%.

The results of determining the total value of the explanatory variances for the dependent factor are shown in Appendix 4.4. Total Variance Explained and cumulative column % get the value of $53,392\% > 50\%$, meaning the model was acceptable.

*** Multivariate regression analysis to evaluate the influence of factors**

Results of Multivariate linear regression analysis are shown in Table 3.36

Table 3.36. Results of linear regression analysis of factors affecting on the demand for residential land use rights in secondary market

Factors	Standardized Coefficient (β)	T	Collinearity Statistics		Influence rate (%)	Order
			Error (Sig.)	VIF		
Constant	-0,073	-0,725	0,469			
DS	0,303	11,805	0,000	1,277	23,10	3
NN	0,344	13,812	0,000	1,202	26,22	2
TL	0,407	15,290	0,000	1,371	31,02	1
TT	0,258	10,461	0,000	1,178	19,66	4
Sig.F = 0,000						
$R^2 = 0,847$						
Adjusted $R^2 = 0,845$						
Durbin-Watson = 1,830						

From the standardized regression coefficient, we can determine the regression equation of the form that Y (demand in secondary market) = $-0,073 + 0,303*DS + 0,344*NN + 0,407*TL + 0,258*TT$.

3.4.3. Assessing factors affecting on the demand for residential land use rights in urban areas in Hanoi

Demand for residential land use rights in primary and secondary urban areas was influenced differently by some main factors. The market-economic group has the greatest influence on the demand for residential land use rights in primary market urban areas. The land use rights market in general is closely related to other markets such as the gold or stock market. In addition to investing in gold or stock market, land is an investment that people always think will be profitable in the future. When the price of gold become higher, people will turn to invest in real estate, then, the land price also increases. As for the stock market, when people make profitable in stock investments, that money can be also invested in real estate, from which the real estate market also goes up. In addition, population, labor and employment also affect the demand for

residential land use rights in primary urban areas. Since the land area has not increased, so mainly the supply of land use rights belongs to housing development projects. In order to serve the needs of the city's people, the investors are constantly increasing the number and scale of projects. Therefore, the demand of the primary market depends deeply on population density and people's income.

For the demand for residential land use rights in secondary urban areas, psychology and tastes most influenced on the decision of buyers. Housing and residential land were considered a great wealth of a lifetime. A family must saved and accumulated for many years to have the rights to use and own them. Therefore, they did not have much experience in housing and land buying decision. When they saw a lot of good feedback about where many people live, the price could be reasonable, then they could be more likely to buy. In addition, arising from psychology, when buying, they were also interested in future profitability (can be invested in business or leased) and pay attention to the possibility of further transfer in case of change they would not need to resident.

3.5. Forecast development trends and propose solutions to improve the efficiency of state management of residential land use rights in urban areas

3.5.1. The trend of the development of residential land use rights market in urban areas in Hanoi until 2030

3.5.1.1. Current context of residential land use rights market in urban areas in Hanoi

The source of supply from urban and residential land projects drops sharply. The main cause is the review and inspection of compliance with legal regulations on investment, construction, land... at the projects.

The supply-demand mismatch, especially in big cities like Hanoi, is increasingly scarce for the affordable residential land segment. The luxury segment thrives and is suitable for foreign customers, but is limited by the regulation of the quantity of products can be sold for foreigners. Contrary to supply, demand for housing has always stayed in high level. Especially projects with full legal status, well invested in technical infrastructure, services and implemented by reputable developers, reasonable selling price.... consumption rate mainly reached 70-80%.

3.5.1.2. Forecast the trend of residential land use rights market in Hanoi until 2030

a. Land plots

In Hanoi, the market for land plots can be have not developed due to strict policies on the form of plots for sale.

b. Apartment

Low and mid-cost apartments could be the segment with the largest market share and had an upward trend in demand; villas and

townhouses could keep stable in the short term and could tend to decrease market share in the long term; Housing for low-income people continues to be in the shortage of supply in the short and medium terms. In the coming period, it could be necessary to focus on the supply of apartments to meet the demand of the market. The demand for apartment houses depends quite a lot on the urbanization rate and proportion of young families with low income.

c. Individual houses, villas, townhouses

The forecast results shows that the supply and demand in the villa and townhouse segment of the luxury houses could prosper and be vibrant when finishing the connecting infrastructure systems for expanding Hanoi urban area to the north of the Red River.

d. Subsidized house

This type of house could increase sharply in the future due to the high demand for subsidized houses

3.5.2. Solutions

3.5.2.1. Group of solutions affecting on the supply of residential land use rights in urban areas

a. Solutions to affect the supply of residential land use rights in primary urban areas

For the primary market, factors related to inputs are decided by the State. When implementing project assignment, the State needs to consider the investor's capacity, choose a suitable and serious investor, select reputable and financially capable investors to implement the project.

In addition, State policy factors also has a great influence on the supply of residential land use rights in primary urban areas. As currently the land management belongs to Environmental Resources Management, while the houses and real estate are under the management of construction agency. It is necessary to improve the overlap in management of residential land use rights and ownership of assets attached to land by unifying the specialized management agency of land - house - real estate market into a single agency. Promulgating documents in order to consolidating regulations related to Land use rights and Ownership of assets attached to land. At the same time, quickly adjust the Land Law to solve the current shortcomings and problems.

Build the land database into utilize, publicize information on the mass media about land use plans; urban infrastructure development plans and local housing development programs and plans; implementation progress and legal documents of real estate projects in the area to provide the information for people when buying and selling houses, real estate, transferring land use rights.

b. Solutions to affect the supply of residential land use rights in secondary market

In the secondary market, economic infrastructure factors have

the greatest influence on the supply of residential land use rights in urban areas. Managers can come up with measures to affect the supply of land use rights in secondary market through deciding which areas to invest in infrastructure construction to ensure conditions for economic development, thereby attracting people to work and live, stimulate and balance the supply and demand of residential land use rights in urban areas.

Through housing development project owners, policies have an indirect impact on the secondary market. It is necessary to step up the work of granting certificates for all residential land plots and houses in urban in Hanoi.

3.5.2.2. Solutions affecting on the demand for residential land use rights in urban areas

a. Solutions to affect the residential land use rights demand in primary market

Accelerate the construction of satellite urban areas in the suburbs of Hanoi, limit the approval of housing projects in the central areas. Accelerate the relocation of people in the old districts. Relocation of the offices away from the central area in order to minimize population pressure to the city center area.

Apply financial measures such as taxes and fees to control real estate business, land speculation; and progressive tax on land use with residential land to combat speculation; partially progressive tax on income from land transfer to regulate real estate market, improve tax collection management and tax sanctions to force all real estate transactions to be formalized, legalized and made full tax declaration and payment. Converting Tax on land use rights transfer into income tax on income arising from land use rights transfer as prescribed in the Law on Personal Income Tax to suit the market economy and management in national level. Amending and supplementing the Law on tax on non-agricultural land use; amending and supplementing the Law on Personal Income Tax, regulations on Registration fees related to real estate.

Stabilizing real estate prices in line with the growth of the economy and people's incomes in order to increase the competitiveness of the economy and meet people's demand, limit unbalanced investment in real estate, which can help to overcome the situation of investment spillover, imbalance of supply - demand. Synchronous combination of solutions to bring the market's price close to the value of real estate, at the same time combined with some other solution, for examples, reform the salary structure, increase income for employees to ensure multi-faceted goals. number of workers enable to improve their housing.

Resolve administrative procedures quickly and neatly for businesses that propose subsidized house projects, affordable low

price and housing projects. Support and solve existing difficulties and obstacles for subsidized house projects, affordable and low price housing projects, especially in compensation and site clearance. The project implementation took a long time, partly because the administrative procedures at state agencies were still cumbersome and complicated. Most people or businesses were very afraid to go to the State offices. Therefore, in the coming time, it is necessary to further reduce the complication of administrative procedures and make them become widely publicized so that people can understand the steps of implementation.

b. Solutions to affect the residential land use rights demand in secondary market

People often conducted transactions on residential land use rights in urban areas according to the psychology of crowds and groups. When there was information that many people buy and sell in this area, there could be a sharp increasing land price there, they usually tend to buy there for the main purpose of profiteering. The last person to buy was often due to lack of knowledge or high demand for housing, who often faced many disadvantages in terms of land price and legal status of the land plot. The cause of this situation was that a group of brokers intend to speculate, pushing the land price to increase higher than the market value.

Therefore, in order to become professional and truly control the brokerage activities, it is necessary to implement the insurance of a practicing certificate, an identification number and set up the obligations for real estate brokers. In addition, it is necessary to publicize information on plans, land plot status, and land prices so that people can get accurate information before investing.

CONCLUSION AND RECOMMENDATION

1. Conclusion

1.1. Assessing the development of residential land use rights market in urban areas in Hanoi

Hanoi has a fast urbanization rate, with favorable conditions for the development of residential land use rights in urban areas. The management of land use in Hanoi city has step by step entered into the rules, the promulgation of land prices in accordance with regulations, partly meet the development requirements of the city. Up to now, the city has implemented all bidding packages in the area of 27 districts, towns; synchronously deploying the work of surveying, digitizing, editing and editing maps, integrating with the construction of a land database in the city. The results of granting certificates and registering for land registration for the first time gained 99.4% of total. In the period 2011 - 2019, urban land area had increased by 2,562.2 hectares.

1.2. The real situation of the market for residential land use rights in urban in Hanoi in the period 2011 - 2019

Regarding the supply of residential land use rights in urban areas, the land fund for residential purposes decided by the State was constantly increasing, mainly for implementing housing development projects. During the period 2011 - 2019, the city approved 329 housing development projects. Types of housing varied from villas, townhouses to apartments.

Regarding the demand for land use rights in urban areas, the actual demand accounted for a low-level of proportion, the future demand accounted for the majority. Therefore, people's willing to pay to own houses and residential land use rights was still in low level.

In the area of Hanoi, there still existed 02 types of land prices on the market, the price prescribed by the State and the market price. The market price of land was usually different from the state price. However, this disparity had gradually narrowed in the period 2011 - 2019.

1.3. Factors affecting on the supply of residential land use rights in urban areas in Hanoi

According to the survey results, there were 5 groups of factors affecting on the supply of residential land use rights in primary market in urban areas. The first was "Input factors" with the rate of 22.59%, the second was "Land policy" with the rate of 21.90%, the third was "Other policies" with the rate of 20.11%, then, "Economics - infrastructure" with the rate of 19.08%; and the lowest was "Expectation and supply of land use rights in the market" with the rate of 16.32%. The degree of influence of factors on the supply of residential land use rights in secondary market in urban areas were "Economics - infrastructure" with the rate of 33.92%, "State policy" with the rate of 26.45%, "Input factors" with the rate of 23.07%, and "Input factors" with 16.56%;

1.4. Factors affecting on the demand for residential land use rights in urban areas in Hanoi

For the demand for residential land use rights in primary market in urban areas, some main influences were the factors of "Economic market" with 28.82%, "Population, labor and employment" with the rate of 26.68%, "State policy" with the rate of 24.63% and "Psychology, tastes" with the rate of 19.87%. With the demand for residential land use rights in secondary urban areas, some main influences were "Psychology, tastes" with the rate of 31.02%, "State policy" with the rate of 26.22%, "Population, labor, employment" with the rate of 23.10% and "Economic market" with the rate of 19.66%.

1.5. In order to improve the efficiency of state management of the market of residential land in urban rights in Hanoi, it is necessary to synchronously implement solutions affecting on the supply and

requirements of residential land use rights in urban. The group of solutions affecting on the provision of residential land use rights in urban areas includes solutions to perfecting policies, planning, economy and infrastructure and the group of solutions affecting on the requirements of residential land use rights in urban areas includes solutions on residential planning, administrative reform, solutions to improve the law on brokerage activities.

2. Recommendations

- 2.1. Applying the results and proposed solutions in the research to the State management of certificates of the market of residential land use rights for the residential land in urban in Hanoi and other urban areas with similar development situations.
- 2.2. The State needs to supplement and adjust legal regulations on land, housing and real estate market to suit the reality price of land, transparency of information related to land use plans.