

THE IMPACT OF ECONOMIC GROWTH ON THE MARKET AND COMMUNICATION VALUE OF REAL ESTATE: CASE SLOVENIA

UTJECAJ GOSPODARSKOG RASTA NA TRŽIŠNU I KOMUNIKACIJSKU VRIJEDNOST NEKRETNINE: PRIMJER SLOVENIJE

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Abstract

In the last five years is on the Slovenian real estate market observed highly trend in market volatility in property prices. Developments in the housing market have drastically changed and also represent an important indicator of overall economic trends. There is a lot of factors that affect the market price of real estate. With research we were focus on the problem of the impact of economic growth in the market value of real estate in Slovenia. We were present trend of economic growth in the last decade and its impact on growth or decline in real estate transactions. We were also established if declining real estate transactions affect the provision of more and bigger discounts on the sale of real estate. Among the research parameters, we were presented as well as their interdependence. With constant monitoring of parameters and statistical methods, we were collect data on the impact of economic growth and offered discounts on the real estate market prices, for future periods. The aim of the research is to define those factors that need to be considered for the analytical prediction of the trend of market prices and selling real estate in the future. The results obtained will help real estate valuers in the drawing up of reports assessing the value of real estate.

Sažetak

U posljednjih pet godina je na slovenskom tržištu nekretnina promatrati izuzetno volatilnost u kretanju tržišnih cijena nekretnina. Kretanja na stambenom tržištu drastično su se promijenila i također važan su pokazatelj ukupnih gospodarskih kretanja. Čimbenika koji utječu na tržišnu cijenu nekretnine je puno. Istraživanje je usmjereno na problem utjecanja gospodarskog rasta na tržišne vrijednosti nekretnina, u Sloveniji. Predstavili smo trend gospodarskog rasta u posljednjem desetljeću i njegov utjecaj na rast ili pad u prometu nekretnina. Također smo promatrali ili padanje prometa nekretnina utječa na davanje velikih popusta na prodaju nekretnina. Tijekom istraživačkih parametara, mi smo također prezentirali njihovu korelaciju. Uz stalno praćenje parametara i statističkih metoda, prikupili smo podatke o utjecaju gospodarskog rasta i ponuđenih popusta, na tržišne cijene nekretnine, za buduća razdoblja. Cilj istraživanja je definiranje tih faktora koje treba uzeti u obzir za analitičko predviđanje trenda kretanja tržišnih cijena i prodaje nekretnina u budućnosti. Dobiveni rezultati pomoći će ocjenjivačima nekretnina pri sastavljanju izvješća procjene vrijednosti nekretnina.

1. Introduction

The trend of volatility in market prices of real estate has a major impact on the entire Slovenian economy. With the fall of real estate prices is consequently expected to reduce investment. Those causing a potential increase in unemployment in industries tied to the domestic market. Decline in real estate sales lead to falling property prices and

thus reducing the value of each individual home. This leads to a reduction in the quantity and amount of loans and in turn reduces consumer spending. Reduction in consumer spending contributes to the collapse of the economy, resulting in further unemployment, further reducing revenues and further reduced consumer spending. If the central bank does not provide timely manner by reducing interest rates, the country falls into

recession. The only good news of lower property prices in the domestic market is that it reduces the possibility for inflation. That inflation reduces investment and thus economic growth was also noted by Clark /1/. Huizinga /2/ and Zion, Spiegel and Yagil /3/ argue that inflation leads to lower relative price stability, which leads to greater uncertainty about investment. Problem to be dealt with, in the past did not devote much attention. Research on "real estate market or the impact on economic growth and vice versa," progress a lot of research. Detected, however it is, that different authors give different views. Guo and others /4/ found that the real estate market is the impact on economic growth. LHT C. and KW C /5/. In their study examining relations between the prices of real estate, real estate investment and economic growth. The results showed no relationship between GDP and investment in real estate which is in opposed to the results of previous similar studies in other economies. Due to the different views of authors, we decided to carry out a survey in which we determined whether economic growth in Slovenia affects the functioning of the housing market or not. We have also detected the drastic fall in property prices over the period 2008 – 2011, established or falling real estate transactions affect the provision of more and bigger discounts on the sale of real estate.

The survey results will help valuers, real estate in the drawing up of reports assessing the value of real estate. The survey will help us determine whether the treated parameter (Growth and discounts provided to) important for predicting the future operation of the housing market in Slovenia.

2. Methods

In an empirical study, we selected in the sample from the actual population included 150 respondents from Slovenia. To verify the hypothesis, we used quantitative and qualitative research techniques. To obtain quantitative data, ie data of standardized techniques and data suitable for statistical processing and induction, we used a standardized structured interview using a questionnaire consisting of closed questions. The views of respondents were measured on a five-Likert scale. In drawing up the questionnaire were collected in support primary data. Data were collected in the designing and construction companies, real estate agencies, banks, potential buyers,

the Statistical Office, SMA-U, SLOnepu, secondary sources such as information from books, manuals, articles in professional and scientific journals and tertiary data. The data were examined and analyzed using statistical computer program. To obtain qualitative data, ie data standardized techniques, instruments which bring qualitative data, ie data suitable for qualitative analyzes, we used unstructured observation and document analysis.

The data were treated quantitatively and qualitatively. Quantitative data were processed according to the tendency to generalize, using descriptive and inferential statistics, and according to the number of variables, by univariate and bivariate analysis. The descriptive statistics, which is a method of analysis without the tendency to generalize across the range of collected data, we show the frequency distribution (graphical and tabular displays) and the extent of correlation (Pearson correlation coefficient). By univariate analysis, which is a method of analysis of one variable, we show the frequency distribution (graphical and tabular displays), with bivariate analysis, which is a method of analysis of two variables, we show the analysis of association (Pearson correlation coefficient).

The hypothesis was tested as follows:

- Stakeholders in the Slovenian real estate market perceive a positive correlation between what was "reducing the impact of economic growth in the fall of real estate" and "due to the deterioration of real estate are increasingly offering discounts on the sale of real estate."

Hypothesis was verified on the basis of the views of all respondents. The views of respondents were measured on a five-Likert scale. Under the hypothesis, we studied the following variables: "reduce the impact of economic growth on the reduction of real estate" and "offer higher discounts due to the deterioration of real estate." For the first variable, 1 means that there is no correlation between economic slowdown and the fall of real estate, 5 means, that there is a strong correlation between economic slowdown and the fall of real estate. For other variables, 1 means that there is no dependence between falling real estate transactions and increasing discounts on the sale of real estate, 5 means, that there is a strong relationship between the decline in real estate transactions and increasing discounts on the sale of real estate. The hypothesis was tested by correlation analysis and

adopted, if the correlation coefficient is positive and significantly different from zero.

Verification of hypotheses

In verifying the hypothesis, we studied the following variables V1, "reducing the impact of economic growth in the fall of real estate" and V2 "due to the deterioration of real estate are increasingly offering discounts on the sale of real estate." The findings show that the most that 61.3% of stakeholder completely convinced that the reduction in economic growth affect the drop in real

estate transactions. That due to the deterioration of real estate offering increasing discounts on the sale of real estate is absolutely sure 26% of participants. Most that 30% of stakeholders was held to answer 4, on a five-Likert scale. That is to say that more than half of those surveyed believe that "the reduction in economic growth affect the fall of real estate" and "due to the deterioration of real estate are increasingly offering discounts on the sale of real estate", as shown in Tables 1 and 2.

Table 1: Frequency distribution of the variable V1.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	0.7	0.7	0.7
	3.00	6	4.0	4.0	4.7
	4.00	51	34.0	34.0	38.7
	5.00	92	61.3	61.3	100.0
Total		150	100.0	100.0	

Table 2: Frequency distribution of the variable V2.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	0.7	0.7	0.7
	3.00	6	4.0	4.0	4.7
	4.00	51	34.0	34.0	38.7
	5.00	92	61.3	61.3	100.0
Total		150	100.0	100.0	

Given the interdependence of variables we measured the views of stakeholders on a five-Likert scale. For variable V1, 1 means that there is no correlation between economic slowdown and the fall of real estate, 5 means that there is a strong correlation between economic slowdown and the fall of real estate. For variable V2 means 1 that there is no relationship between the decline in real estate transactions and increasing discounts on

the sale of real estate, 5 means that there is a strong relationship between the decline of real estate and major discounts on property sales.

The hypothesis was tested by correlation analysis and adopted, if the correlation coefficient is positive and significantly different from zero. Below we show the results of correlation analysis for the variables V1 and V2.

Table 3: Correlation between variables V1 and V2

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1.00	-.048
	Sig. (2-tailed)	0.00	0.558
	N	150	150
VAR00002	Pearson Correlation	-.048	1.00
	Sig. (2-tailed)	0.558	0.00
	N	150	150

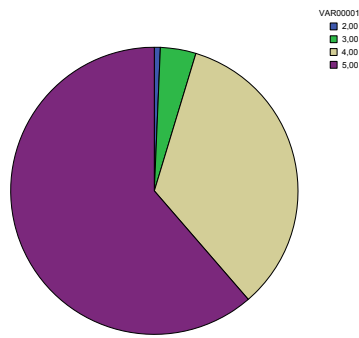


Figure 1: Graphical distribution of variable V1.

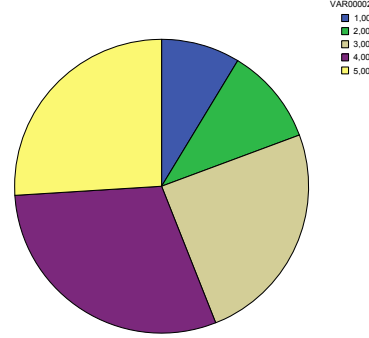


Figure 2: Graphical distribution of variable V2.

The results of correlation analysis, we found the correlation coefficient between the variables V1 and V2 is - 0048 and not significantly different from zero at significance level 0.05 (0558), which means that the data do not confirm the correlation between these two variables. Hypotheses do not

accept. Means that stakeholders do not perceive the interdependence between what was "reducing the impact of economic growth in the fall of real estate" and "due to the deterioration of real estate are increasingly offering discounts on the sale of real estate."

Table 4: Descriptive statistics for the variables V1 and V2.

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00001	150	2.00	5.00	4.5600	0.60734
VAR00002	150	1.00	5.00	3.5400	1.22956
Valid N (listwise)	150				

With the help of descriptive statistics for the variables V1 and V2, we found that the average value of responses to variable V1 is 4:56, for the variable V2 is 3.54. Argument as each accepted and written, that stakeholders in the Slovenian real estate market perceived that the reduction in economic growth affect the decline of real estate, due to the

deterioration of real estate to offer greater discounts on the sale of real estate.

Data on the impact of economic growth in the fall of real estate in Slovenia is also confirmed by data we have obtained on the SORS (2011) and shown in the graph below. The graph is a perception that economic growth in Slovenia strong growth and falling real estate prices.

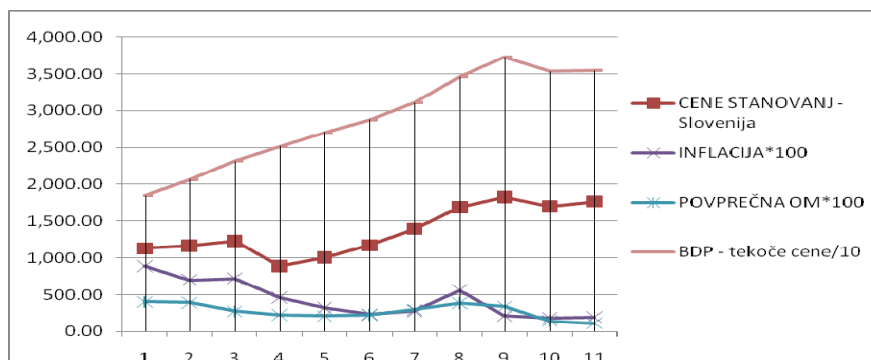


Figure 3: Graphical representation of the interdependence of the average house price in Slovenia, inflation, average interest rates and GDP from the year 2000 to 2011.

3. Discussion and conclusion

Empirical research, wich determine the impact of economic growth on the functioning of the housing market and offering discounts because of

falling sales of real estate is very little.v Changes in the housing market caused different expectations of investors and the requirements at the price of real estate. The fall market prices of real estate due to the impact of the financial and eco-

economic crisis, unified views of researchers, scientists and stakeholders in the housing market, on account of defining and influencing factors in the real estate market and the deviation of methodological approaches for the acquisition of data for real estate appraisers, were the reason for conducting the survey. We found that the arguments in "reducing the impact of economic growth in the fall of real estate" and "due to the deterioration of real estate are increasingly offering discounts on the sale of real estate," there is no correlation. Each of these statements is confirmed by the stakeholders, but in different percentages.

Economic growth is therefore one of the influential factors, which should be necessarily take into account in defining the methodology for calculating the final value of the property within a specified period. Provided to discounts on property sales are dependent on demand in the housing market. If demand is low, the discounts are growing. By the definition, treatment and analysis of the two arguments and their interdependencies, which are crucial to determine the influential factors in the housing market and commercial real

estate prices in the future, we have contributed to science in the construction industry, partly scientific disciplines, building economics. The results obtained will help valuers, real estate in drawing up reports and designing further methodological approaches for assessing the value of real estate.

Notes

- /1/ Clark, T. E. *Cross-country evidence on long-run growth and inflation*. Working paper, Federal Reserve Bank of Kansas City. (1993).
- /2/ Huizinga, J. *Inflation uncertainty, relative price uncertainty, and investment in US manufacturing*. Journal of Money, Credit, and Banking, 25, 521-549. (1993).
- /3/ Zion, U. B., Spiegel, U., & Yagil, J. *Inflation, investment decisions and the fisher effect*. International Review of Economics and Finance, 2, 195-206. (1993).
- /4/ Guo, J., Yuan, J., Chen, H. *Analysis on the Influences of Local Economic Growth about Real Estate in Jilin*. Energy Procedia. Vol. 11, pg. 3406-3414. (2011).
- /5/ LHT C., KW C. *An Empirical Study of the Relationship between Economic Growth, Real Estate Prices and Real Estate Investments in Hong Kong*. Surveying and Built Environment vol. 16 (2). (2005).