Research Article

REAL ESTATE MARKET: ANALYSIS BUY OR RENT – CASE OF BUSINESS ENTITY IN TIRANA, ALBANIAN CAPITAL CITY

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ARTICLE INFO	ABSTRACT
	The article shows some evidence of factors determining the Real Market estate in Tirana, Albanian capital city (in 6 business zones). Data set used in this article is based on the official statistics in Albania and primary data by the authors through interviews, for the years 2005-2014. The analysis aims to identify the benefits and costs of buy-rent of real estate for the development of a small or medium business. The main tools, refers to financial decision-making criterion NPV and the regression analyze. The findings of the study can be used as a useful and helpful guide for all businesses.

INTRODUCTION

Real estate market is affected by so many factors. The degree level of these factors is subject of different markets and regions, national or international as well (Car.2009). Although, the development of the real estate market of a country on its own, is affected by the development of other markets, to and from which there is a cultural or economical interaction, especially this is remarkable in a legal or governmental issue perspective (Clois and Joan, 2009). As far as individuals is concerning, buying of a dwelling, is considered as one of the biggest investments in a lifetime (Glindro, Subhanij, Szeto and Zhu, 2008). One the other hand, referring to business entities, the buying of a real estate, is considered as one of the most important decision within their budget capital (Lawrence, Gitman and Zutter, 2012). In this context, the variability of the prices and rents of the real estates is considered as very important information which affects the consumers', businesses' and decision makers' behaviors. Actually, the Albanian real estate market is characterized by a high level of informality, since post communist period (1990) till now.

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The only study regarding the real estate market is referring to buying or renting the dwellings as this is focused only locally. The only official institution that publishes the index of prices and rents of dwellings in Tirana (capital city of Albania) is Bank of Albania. According to Kristo and Bollano (2012), it is difficult to study the prices of dwellings in Albania, due to the following reasons:

- The buying of a dwelling is mainly the highest expenditure of a family, so the transactions of this type are timely rare.
- It is very difficult to find two identical dwellings in a time difference.
- If a "basket" of dwellings will be fixed in a certain time, further changes in a dwelling, such changes as the building of another public or private facility near the dwelling or any qualitative change will direct to a variability of the price.

The variability of dwelling prices surely affect the welfare of families as well as their ability to borrow in order to invest in residential estate, having a further affect in macro economy. Theoretical and empirical studies have resulted that a high increased level of credit portfolio, accompanied with a sensitive increase of dwelling prices is one of the most consistent and warning indicator of future financial crisis

(Borio and Lowe, 2002). Some comparative studies among countries with different economical and financial development (Tsatsaronis and Zhu, 2004; Annt 2005; Egert and Mihaljek, 2007), concludes that the elasticity coefficients of changes in dwelling prices toward main factors sensitively varieties according to country's measure, its financial markets development and the period of the study as well. Egert and Mihaljek (2007), while comparing Central East European Countries and OECD ones, analyzed that besides the abovementioned factors, the dynamic of the dwelling' prices is affected by some specific ones such as: the lack of the institutionalization of the dwelling markets; the limited supply of the new dwellings in the moment of the market liberalization; the improvement of the qualitative of the dwellings; the increased demand of nonresidents ect. Some other studies in the field of real market estates, such as Hilbert et.al. (2008); FTI Consulting (2012) mention 4 main group factors that affect the demand and supply of the market: (1) Economic Factors; (2) Governmental factors; (3) Geo – Climate factors, and (4) Socio-demographic factors

TO BUY OR RENT REAL ESTATE FOR BUSINESS PURPOSES IN TIRANA - WHICH IS THE BEST ALTERNATIVE?

In the economic cost-benefit analysis, renting or buying a real estate for business purposes are seen as simultaneous decision-making alternatives. Therefore, in order to give answer to our question: which is the best alternative for businesses, we will analyze the factors in 6 business zones within the capital city of Albania, Tirana. The analysis aims to identify the benefits and costs of buy-rent of real estate for the development of a small or medium business, in Tirana. There are several reasons why we have been concentrated only in the city of Tirana in conducting our study, however, the most important ones are:

First, the number of residents in the district of Tirana is 788,330.00 inhabitants, comprising about 30%[1] of the total population of Albania (INSTAT, 2014). Therefore, due to the high population density in this district, the real estate market has been developed more compared with other districts. *Second*, referring to the official statistical institution in Albania, INSTAT, in 2013 and 2014 almost 43%[2] of the private businesses operating in Albania were located in the district of Tirana. Thus, this is the district with the highest concentration of the number of businesses and consequently the most developed real estate market. *Third*, the performance of the buying and rent of the housing market is an actual discussion topic among academics and economists, but the approach followed in this paper remains unique and it has not been used before in the case of Albania.

The methodology and data

Before we start explaining the methodological aspects, we will determine some of the terms used in the study. The term 'rent' is used referring to the operating lease, meaning that the business (lessee) gets to use a real estate, without any possession of ownership over it, and it is obliged to periodically pay an amount of money to the owner (lessor) till

the end of the leasing period. This payment is a cash outflow on the business perspective or classified as "lease expense"[3] on accounting perspective. Given that the market for renting real estate in the whole country is very informal, including the capital city as well, lease contracts are subject to frequent changes, therefore not sustainable in time. As a consequence, rent expense will be indexed with the expectations on annual basis for each zone examined. On the other hand, the term 'buy' means the purchase of a real estate for business purposes, including small and medium business entities. The purchase of property will be considered only if financed by loans. The reason is simple, in our study we want to analyze the direct effect of the costs of real estate loans and operating leases for a business in the capital of Albania. In order to have the same basis of values comparison, we will build an analysis for each zone according to the measurement unit m^2 (square meter of the building). The monetary value will be expressed in Euro, because more than 80% of mortgage loans in Albania are denominated in Euro, and, at the same time, rent payments of businesses are mostly done in this currency. Given the fact of mortgage loans for businesses and business development plans in Albania, 10 years period is considered optimal. Thus, in our analysis we will project a future 10 years period from 2016 to 2025, to a business in one of six zones of Tirana (the selection of zones is representative for the whole city).

In the Albanian banking system, the trend of interest rates on loans and the additional conditions of loan contracts as well, do not significantly differ among commercial banks. The interest rate on loans for buying real estate for a business in the euro currency is EURIBOR + 5.3% (changeable at the end of each calendar year), but not less than 6.8%[4]. If based on 12-month EURIBOR data on December of each year from 2005 to 2014, we will have this trend: The best possible trend, in both the statistical and economic context, it is shown by the dotted lines in the above graph. The economic reason relates to the fact that the exponential function $y = 0.054*e^{-0.19x}$ takes no negative value (different from the linear trend), and the statistical reason relates to the determination coefficient R^2 which is higher than in the linear trend. By using the equation of this trend for the 12-month EURIBOR for the next 10 years, we can build a projection to predict future rates:

If we add the loan interest rate spread (mortgage loans) to the 12-month EURIBOR rates projected above, we expect the value to be less than 6.8%. Given that the rate of such loans is:

$$i = min\{EURIBOR\ 12M + 5.3\%;\ 6.8\%\} = 6.8\% \qquad (1)$$

Then, this will be the rate used for the calculation of the loan installments and the discount rate of any cost-benefit flow relevant for the 'real estate buy-rent' analysis. The financial analysis will be based on the net present value (NPV) criterion for discounting the benefits that come from the difference, "monthly rent" minus "monthly loan installment" for 10 years:

$$NPV = \sum_{k=0}^{n} (1 + i)^{-(\tau_k - \tau_0)} \cdot C_k \qquad (2)$$

Where: C_k = financial flows "(monthly loan installment) - (monthly rent payment)" for the k month; n = total number of

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[1] According to INSTAT publications, Census 2011: Albania had resident 2,821,977.00 inhabitants
[2] http://www.instat.gov.al/al/figures/statistical-databases.aspx

[3] IAS 17 Leases
[4] http://www.bkt.com.al/kredi-per-shtepi-dyqan-.aspx

months included in the forecast, i.e. 120 months; i = the discount rate for financial flows C_k, which is the interest rate of mortgage loan explained above. The monthly installment R will be calculated using the rule of calculation used by banks:

$$R = \frac{L \cdot i}{1 - (1+i)^{-n}}$$
(3)

Where, L indicates the amount of the loan, which is equivalent to the purchase price of real estate per m². The calculations of monthly installments will also include the payment of property tax for businesses as given in table. 1 above, but it will be distributed linearly in each month. So, the value of an average property tax per month is 0:12 Euros/m² (this amount should be paid by the buyer of the property). Referring to the specifics of doing business in Albania, maintenance costs are paid by the lessee. This means that these costs are not relevant to be calculated in this case, because the NPV criterion assesses the net benefit balances. If the real estate is rented, businesses will generate monthly savings, which discounted with the interest rate will result in NPV = + 5,063.68 €/m².

Zone No. 3. (Komuna e Parisit): In this zone it is expected that the annual growth rate of rent to be 1.8% per annum. Based on the corresponding graph, we conclude that there isn't any critical point for the next 8 years in this zone, while in the ninth year there is one. This means that it is better for businesses operating in this zone not to buy real estates, but to rent them. If the real estate is rented, businesses will generate monthly savings, which discounted with the interest rate will result in NPV = +451.94€/m².
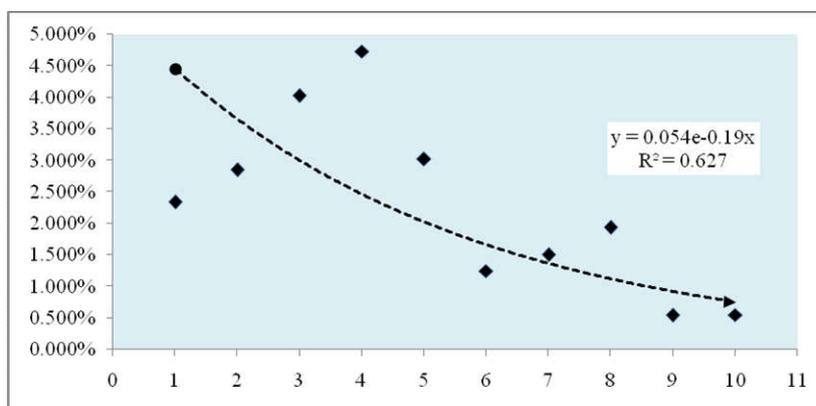
Zone No. 4. (Lapraka): In this zone it is expected that the annual growth rate of rent to be 1.5% per annum. Based on the corresponding graph, we conclude that there isn't any critical point for the next 5 years in this zone, while in the sixth year there is one.

This means that it is better for businesses operating in this zone to buy real estates, not to rent them. If the real estate is rented, businesses will generate monthly savings, which discounted with the interest rate will result in NPV = -166.22€/m².

Table 1. Cost of the rent and the purchase price per m², in Tirana.

Location	Rental cost (Euro/m²)	The expectation of rental growth (per year)	The purchase price (Euro/m²)	Taxes on business buildings (200 ALL / m2)[1]
Zone 1 (Twin Towers)	70.00	2.5%	6,500.00	200
Zone 2 (Piazza)	27.00	1.5%	5,000.00	200
Zone 3 (Komuna e Parisit)	10.00	1.8%	1,700.00	200
Zone 4 (Lapraka)	17.96	1.5%	2,000.00	200
Zone 5 (Myslym Shyri)	16.83	2.0%	6,000.00	200
Zone 6 (Rruga Bardhyl)	25.00	2.0%	3,000.00	200

Source: Market Research by the authors and interviews with experts on real estate valuation of "Century 21 Albania", in 2015.

Source: Authors calculations in Excel.

**Fig. 3. Exponential trend, 12-month EURIBOR[1]**

Table 2. Forecasting the trend of 12-month EURIBOR (in %) over the years

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EURIBOR	0.552	0.457	0.378	0.312	0.258	0.214	0.177	0.146	0.121	0.100

Source: Projections by the authors.

Zone No. 2. (Piazza): In this zone it is expected that the annual growth rate of rent to be 1.5% per annum. Based on the corresponding graph, we conclude that there isn't any critical point for the next 9 years in this zone, while in the tenth year there is one. This means that it is better for businesses operating in this zone not to buy real estates, but to rent them.
If the real estate is rented, businesses will generate monthly savings, which discounted with the interest rate will result in NPV = +1,917.09€/m².

Zone No. 5. (Myslym Shyri): In this zone it is expected that the annual growth rate of rent to be 2% per annum. Based on the corresponding graph for this zone, we conclude that there isn't any critical point for the next 10 years. This means that it is better for businesses operating in this zone not to buy real estates, but to rent them. If the real estate is rented, businesses will generate monthly savings, which discounted with the interest rate will result in NPV = +4,046.81€/m².
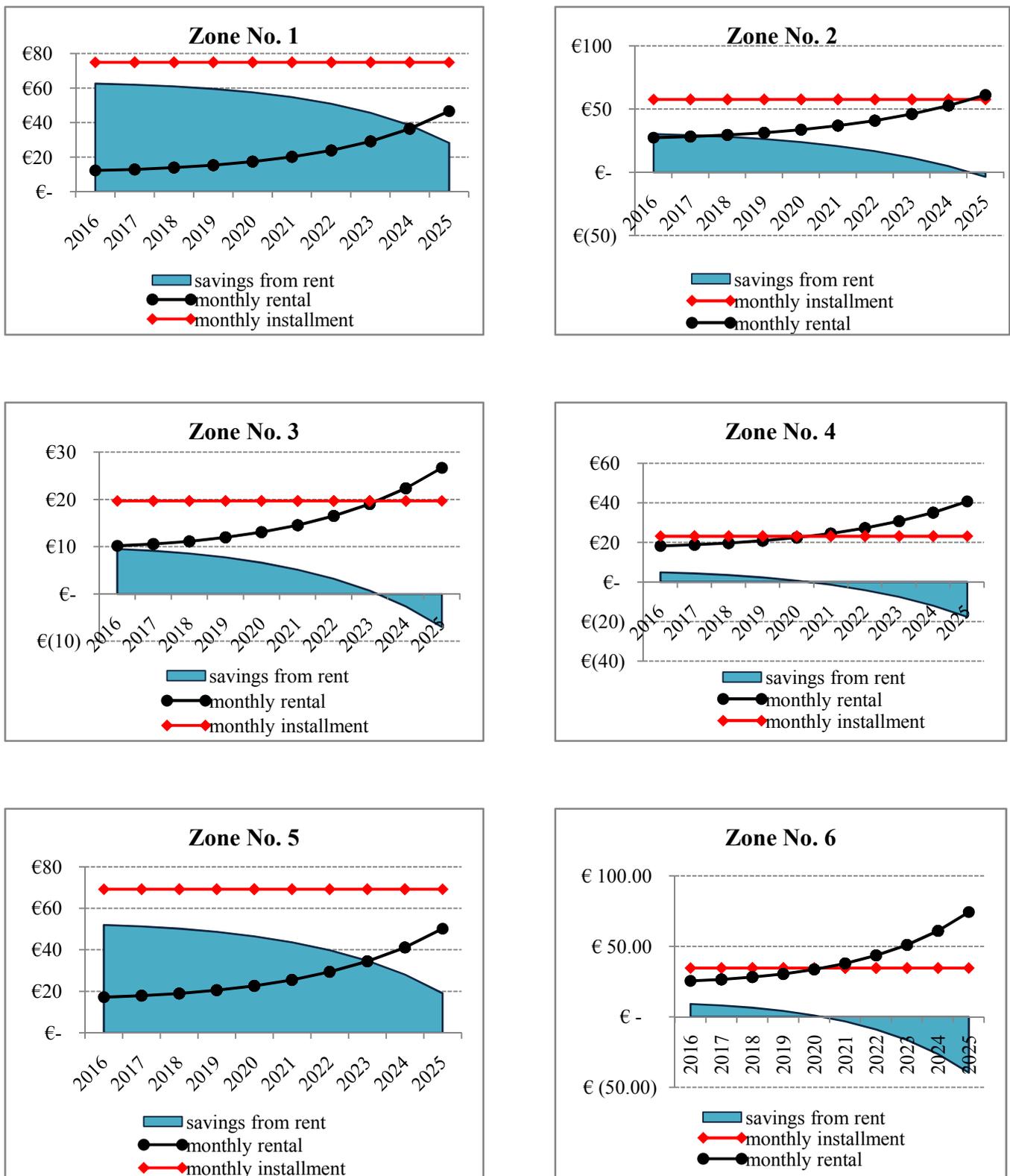
Source: Graphic illustration in Excel by authors.

Fig. 4. The results of the breaking points and monthly rental savings.

Zone No. 6. (Rruga Bardhyl): In this zone it is expected that the annual growth rate of rent to be 2% per annum. Based on the corresponding graph, we conclude that there isn't any critical point for the next 5 years in this zone, while in the sixth year there is one. This means that it is better for businesses operating in this zone to buy real estates, not to rent them.

If the real estate is rented, businesses will generate monthly savings, which discounted with the interest rate will result in NPV = -431.90€/m². So, if you need to buy or rent a real estate to start a business in Tirana, all small and medium entrepreneurs can choose their zone of activity and they can use the NPV technique to take the best decision of investing in real estate.

Conclusion

The level of complexity in the real estate market in Albania is significantly higher because the purchase of a dwelling is considered the largest capital expense for Albanians. Notwithstanding this fact, this market is characterized by a high level of informality and lack of statistical data. The only official data on the housing and rental price index in Albania can be obtained by the publication of the Bank of Albania and the data are limited to the market in Tirana. There is no other official data available. Currently in Albania the demand has failed to overcome the real estate offer, although there were some supportive factors, namely: the outstanding loan for real estate investments in the first semester of 2015 was about 6% higher compared to the same period last year; Interest rate on loans for real estate purchase marked 6.8%, remaining within a downward trend that has characterized the past two years; the relative cost of installments for real estate purchase is softened, reflecting more favorable conditions for the purchase of real estate from the perspective of the borrower; and loans for construction have fallen close to the 12.8% of the total loans granted to businesses (compared to the average of 20% during the period 2007-2011). In the capital of Albania, it is evidenced an irregular trend in house prices for the period 2005-2008, while from 2008 to 2012 the index has experienced sustainable changes. In the following years, the index values fluctuated significantly, meaning an unpredictable demand and changeable prices as well. Meanwhile, referring to the rent price index, the period 2005-2015 generally shows volatile values, but the variance of such volatility has been smaller when compared to the house price index at the same period. We conducted a study on the purchase and rent prices of real estates in the capital of Tirana. We divided the city in six different representative business zones and performed the NPV analysis which concluded in measurable and comparable results. For the purpose of this technique, we used the monthly savings from renting a real estate, discounted by 6.8% interest rate for the next 10 years. The findings of the study can be used as a useful and helpful guide for all businesses in preparing and analyzing business plans. When comparing the buy-rent alternatives for the district of Tirana, the best zones to rent rather than buy real estate are: Zone No.1. (Twin Towers), Zone No.2. (Piazza), Zone No.3. (Komuna e Parisit), and Zone No.5. Tirana (Myslym Shyri). On the other hand, zones such as Zone No.4. Tirana (Lapraka) and Zone No.6. (Rruga Bardhyl) offer better and profitable opportunities for buying real estate.

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