Abstract: Real estate market could have significant difference between the behavior of buyers and sellers. The recent period had showed increasing irrationality in consumption correlated with housing bubble and financial crisis. The purpose of this paper is to analyze top prices for residential properties in Bucharest and comparison with the median prices. By stating as initial hypothesis the Veblen effect of consumers, our analysis will present the actual price premium of the top 10% of transaction on a significant sample on Bucharest transactions. Through this analysis, we include conspicuous consumption as a factor of potential housing crisis.

Keywords: conspicuous consumption, housing market, real estate market, Veblen effect

JEL Classification: R21, R31, O18

Introduction

The recent financial crisis provides real evidence for analysis in the real estate market. Although, the signs for housing bubble appeared since beginning of 2000s, the actual effect was seen during the financial crisis.

The development of good and services lead to different types of consumer behavior. Thus, some of consumers are highly motivated in consuming highly conspicuous goods and services, in order to show greater social status. (Lee & Mori, 2013) In this sense, “Veblen effect” named after Thorstein Veblen (Veblen, 1899) exists when consumer exhibit willingness to pay a higher price for a functionally equivalent good. (Simon & Douglas, 1996) In developing countries there could be a higher level of conspicuous

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consumption as the extreme inequalities creates differences in population income. Moreover, conspicuous consumption could be an instrument to signal the wealth or social achievement. (Memushi, 2013). Veblen effects could mean also supernormal profits which do not have as fundamental in strategic interaction among firm, but in the characteristics of the demand. (Simon & Douglas, 1996) Also, the social influence plays a crucial role, as seen in a study on the Finnish automobile consumption, in which the nearest neighbors’ purchases have a certain level of influence. (Grinblatt, Keloharju, & Ikaheimo, 2004).

Several articles have analyzed the impact of conspicuous consumption on real estate market. In real property markets it relates to housing size and subdivision name. Another research on housing demand showed that there is likely higher volatility for house premium for areas in which consumer’s desire for luxury consumption changes over time. (Lee & Mori, 2014). The Veblen effect leads to higher prices for larger houses and lower prices from smaller houses in the neighborhood. (Turnbull, Dombrow, & Sirmans, 2006). The size and area are important when analyzing the Veblen effect. Thus, Veblen (Veblen, 1899) that there are differences across areas, while consumer behavior signaling wealth are more evident where density is higher, mobility is higher and contact between consumer is increased. (Lee & Mori, 2013). Moreover, branding strategies could impact the increasing conspicuous consumption. The use of different names for residential development could lead to price premiums. In one study, the including of words like „country” in the property name made buyers pay 4.2% more, while including words like “country club”, made buyers pay 5.1% more. (Zahirovich-Herbert & Chatterjee, 2011). There is also evidence of how real estate purchases of major company CEOs have the basis in conspicuous consumption, and what is more interesting that this could have an impact on future company performance. (Liu & Yermack, 2007).

The main question of this paper is to signal if there is a conspicuous consumption effect in Bucharest housing market. Although, there are multiple factors that could lead to this effect, our approach focused on comparison the price based on available data.

Our research questions was grounded on the need to understand the relationship between more than average housing prices and general increase of prices which could lead to housing bubble.

Additional questions refer to establishing the actual difference in the price of top 10% of apartments compared with median price. Moreover, assessing if there is an impact of conspicuous consumption in the North and Central area, will create a better understanding related to this study.

A view on internet search behavior

The spread of the use of internet has made possible gathering information about search that potential buyers could make for buying a property. In this sense, we used Google
Trends, which provide a level of interest in a period on a particular keyword. The number on the graph is the number of searches on a particular term, relative to the total number of searches on Google over time. “Each point on the graph is divided by the highest point and multiplied by 100.” When we don't have enough data, 0 is shown. “A downward trending line means that a search term's popularity is decreasing. It doesn't mean that the absolute, or total, number of searches for that term is decreasing.” ("Google Trends," 2015).

Analyzing keyword “luxury homes”, in English, we find an overall decreasing trend since 2005 to 2015, without any high impact because of the financial crisis. During this period, the searches had small decrease.

Figure 1: Search analysis for keyword “luxury homes”

This type of graph could trigger a new way of analyzing behavior of buyers and sellers, through big data captured by large services like internet search portals and social networks. This will provide not information related to interests on a particular time, but could also become the first step in forecasting possible scenarios about behaviors in the future.

Using search for Romanian, on keyword “luxury apartments” and “luxury house” (translation was used for this article), we observed a constant level of interest during 2010-2015, with high values for keyword “luxury houses” during the financial crisis, especially at years’ end.
As the luxury market is completely different than the normal market, an impact on the search for luxury apartments & houses could be assessed, which should be also correlated with the actual supply of this type of properties.

**Data & Methodology**

In order to understand the conspicuous consumption effect in housing market, the calculation of top 10% minimum value of area of Bucharest was needed. We used this rationale for the analysis in order to exclude possible outliers in the sample. In this sense, looking at the minimum value of the top 10% of properties, will show us possible difference with median prices.

We used the data available in the Flexmls database for Bucharest, which comprised 4200 transactions in 2013, totaling a value of 223.5 million euro and 6500 transaction in 2014, totaling a value of 332.7 million euro. We divided Bucharest into five main areas: Central, West, East, South and North. This delimitation was made based on the distribution of the sample and concentration of higher prices for central and north area, as seen in Figure 3. In this figure, we can see the lower levels of prices for South & West area, which shows that Bucharest has the potential for conspicuous consumption based on multiple factors: business district development (North area), newly retrofitted cultural areas (Center) or sport & shopping landmarks (East area).
Figure 3. Distribution of the sample based on price of transaction

![Figure 3. Distribution of the sample based on price of transaction](image)

Source: author’s own calculation

By using the median values, our main goal was checking the minimum price value for top 10% of apartments in the five areas. The analysis took also into consideration the median values of all transactions. (Anghel, Ciora, & Udrea, 2015). We calculated percentage difference for a flat with 2 bedroom, as seen in Figure 4. The method of calculation involved weighted averages based on area and type of apartment. The methodology followed the common indicators in the industry related to transaction price and price/square meter.

Findings

The findings of our analysis, have as main assumption that inside a particular area there are limited reasons to have high differences between housing prices. In most of the area, there is a high degree of homogeneity of constructions in terms of size and age, as most of the buildings were built during the communist era, when the accent was made towards home ownership. In this sense, most of the neighborhoods in Bucharest have been affected by this process, and thus we can see vast areas in which apartments blocks have the same size and age.
Starting from the dataset presented above, we calculated significant difference between minimum prices of top 10% of apartments with 2 bedrooms compared with the median price. The differences are represented starting from first quarter of 2013 until the last quarter of 2014 on the five areas of Bucharest. We can notice higher percentages for the North and Central area, which are recognized as having the highest price per unit or price per square meter.

Moreover, the North area which is characterized also by increasing number of commercial and office buildings, has led to increase in residential developments.

**Figure 4. Percentage difference (price premium) between top 10% minimum price and median price for 2 bedroom apartments**

![Graph showing percentage differences between top 10% minimum price and median price for 2 bedroom apartments across different quarters of 2013 and 2014 for different areas of Bucharest.](source)

*Source: author's own calculation*

Figure 5 shows the difference for the Central area, which are between 200-400 euro/square meters, which represent 25% to 40% difference. The central area is quite limited in terms of land for development, meaning that there could be even higher impact on prices of apartment.
Figure 5. Median and top 10% square meter price for Central area

Source: author’s own calculation

Figure 6 presented the difference for the North area of Bucharest with significant difference of square meter price. The North area has still potential for development, because of increased opinion that the office area could become a new Central Business District. In this sense, the demand could increase and thus, could have the basis for price premiums.

Figure 6. Median and top 10% square meter price for North area

Source: author’s own calculation
In terms of price per unit, the differences are showing percentages between 30% to almost 60% for Central area. We reconsider that the difference was made between the median price and the top 10% minimum price, as the more detail analysis could emphasize higher values of apartment, which could not be correlated with specific features.

Table 1 – Comparison or price for Central area of Bucharest

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<td>18100</td>
<td>21000</td>
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Figure 7. Median and top 10% price for Central

Source: author’s own calculation and (Anghel et al., 2015)

The difference in percentages for the North area is between 32% and 45%, with median prices similar to the Central area, which is consistent with our opinion related to the potential of the North area. In the case of the city centre, new developments could have increase the median price and also the level of the minimum value of the top 10%, but in
the case of the North area, new constructions could be developed taken into consideration luxurious interior decorations.

Table 2 – Comparison or price for North area of Bucharest

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<td>18400</td>
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Source: author’s own calculation and (Anghel et al., 2015)

As seen in table 2, the evolution of the median price and minimum price of top 10% had a constant evolution, which made also a difference in a limited percentage margin.

Figure 8. Median and top 10% price for North

Source: author’s own calculation

These results question the difference related to Central and North area, and how could the developers follow through these results. Figure 8 shows the same trend of median price and minimum of top 10%, which could mean higher priced transactions depending
on periods, mainly because the attractiveness of this area for business and residential constructions, and new projects to be opened in the following period.

Conclusions

Conspicuous consumption can have an impact on the real estate market as the lack of homogeneity of apartments is high in Bucharest. High-income individuals could pay more than the median price of apartments in specific area as a status condition. The innovation of this study comes from the fact that it is the first paper analyzing the Veblen effects on Bucharest housing market with specific data regarding prices, with relevant importance on the behavior of sellers and buyers. Better understanding of the behavior could mean better decisions for developers and policy maker in order to align the area of urban development to actual requirements.

Our results show high difference for the same area and same type of apartment from 30% to more than 50% between minimum top 10% and median price. The results could be even higher if the comparison would have been made with maximum levels. The main contribution of this paper is to assess, starting from a large sample, that conspicuous consumption is present in the residential property market in Romania, which should moreover be analyzed on particular cases and based on in-depth data and qualitative research. The further work should analyze in depth the difference based on a clearer evidence of the characteristics of the apartments. Developers could use the need for luxury apartments which has the basis in conspicuous consumption.

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