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FORECLOSED HOMES MARKET IN ITALY: BASES OF VALUE

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ABSTRACT

The aim of the paper is filling the gap in the existing Italian literature on the quantitative determination of FV. The concept of FV is generally defined in comparison to the Market Value (MV) of a property. By an empirical investigation, we identify the quantitative relationship existing between these two types of value and analyze the determinants of the Italian real estate forced sale auction market.

Key words: Real estate auctions and investments, forced sale value, market value, foreclosures, Italian housing market.

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Introduction

Real estate economics theory identifies bases of value other than market value MV. Such bases may either reflect the utility or functions of a property other than its marketability or unusual or non-market conditions [1]. The housing market usually differs from the textbook model of a liquid asset market, where the price is only influenced by demand and supply. Among those bases of value there is the so-called forced sale value (FV). This latter value applies to an asset sold at a forced sale, which is likely to sell for a price significantly lower than the asset's market value due to idiosyncratic factors that include the urgency of the sale [1-3]. In a liquid market, an asset can be rapidly sold with minimal impact on its price, therefore the price at which a house is sold coincides with its MV. This might not be the case when the sale is urgent or under duress (e.g. in a foreclosure).

The foreclosure process as applied to residential mortgage loans is usually a bank selling or repossessing a property after the owner has default in payment of a promissory note and violated a mortgage. Formally a mortgagee obtains a termination of a mortgagor's equitable right of redemption, either by court order or by operation of law (after following a specific statutory procedure).

As emerged from a recent literature review [4], the definition and the quantitative assessment of the FV is usually considered in comparative terms to the concept of MV [1]: the FV is generally determined as a percentage discount to the MV. Rather than measuring the difference between MV and FV, the literature has concentrated on validating the claim that a property's listing price (which in Italy coincides with its MV) influences its selling price (FV) [5].

In the last decade, a relevant number of contributions in the international literature analyzed the relationship between the auction market and the competitive market where sales are privately negotiated in terms of the final selling price of a property and investigated whether the selling price is higher than the listing price (i.e. the outcome is a premium) or the selling price is lower than the listing price (i.e. the outcome is a discount). In countries such as Australia, New Zeland, Ireland and Sweden the auction market is a viable method to dispose properties that coexists with private negotiations and auctions are the preferred method to sell high end properties [6-12]. In these countries auctioned properties usually sell more than in private negotiations.

In contrast in the US, Malaysia, Singapore, Italy and Japan auctions are primarily used to dispose foreclosed or distressed properties [5 and 13-23] and auctioned properties sell at a discount with respect to market value.

In the Italian literature, the FV of a property has always been investigated qualitatively, whereas no research has been conducted on how the main variables, such as listing/selling prices and timings, are quantified [4].

The aim of the paper is to fill the gap in the existing literature on the quantitative determination of FV and its determinants in Italy. Specifically, we aim at investigating the Italian housing auction market and the effects of foreclosures on the prices of foreclosed houses. In order to determine the FV of a residential property by comparison to its MV, we examined the Italian real estate residential forced sale auction market, surveying and analyzed 89 forced sales of residential properties that occurred over the period from 2006 to 2014 in the North of Italy. Our analysis is meant to distinguish different housing types and identify the characteristics of the foreclosed property and qualify its urban context. In other words, we examine whether peculiar property and location-specific characteristics are recurrent in foreclosed properties and can influence a property's FV. It is in fact argued in the literature that foreclosed houses are usually located in low-priced neighborhoods and that their FV is influenced by the home's age, size and conditions as well as by numerous neighborhood characteristics [5, 11 and 24-28]. The remainder of the paper is as follows. In section 2 we describe materials and methods. In Section 3 we present and discuss results and Section 4 concludes.

Survey and Data Analysis

Preliminary to the identification of the hedonic regression that describes the relation between FV and MV, is the analysis of the real estate housing auction market for foreclosed homes and its determinants. For this purpose, we collected data on foreclosures and created a database by cooperating with associations of public notaries in the Veneto Region (ANPEV Associazione Notarile Procedure Esecutive Venezia, APET Associazione Professionale per le Esecuzioni della Provincia di Treviso and APEP Associazione Professionale Esecuzioni Padova). This database represents one of the major novelties of the paper. In Italy, information on foreclosed homes, foreclosure procedures and auctions, listing prices (i.e. MVs) and relative selling prices (i.e. FVs) are not catalogued nor classified yet, because public agencies or private operators do not collect this information systematically, therefore, our survey sheds some light on the residential Italian auction market and its mechanism.

Our dataset consists of home foreclosures that occurred over the period from 2006 through 2014 in the provinces of Treviso, Venezia and Padova (a physically continuous territory with different social and economic characteristics in the North East of Italy). The set is composed of 89 residential properties and for each unit we surveyed the information listed in Table 1 by consulting the archives of the above mentioned institutions.

We then identified the main characteristics considered to be significant in representing the set according to [29]. We took into consideration, on the one hand, the property's physical location in relation to the city and, on the other hand, the socioeconomic features that characterize the local market. To identify the physical location (L) we considered the property's distance from the city center, by classifying it as central,

semi-central or suburban. Whereas we characterized the city market conditions by means of three indexes:

- the average per capita annual income for the city where the property is located (IPC);
- the average number of annual real estate transactions in the city where the property is located (NT) over the observation period;
- the percentage variation in the number of real estate transactions, in the city where the property is located, over the observation period (ΔNT);
- the ratio between the number of real estate transactions and the stock of real estate units in the city where the property is located (IMI), that explains for the local real estate market performances.

Table 1 : Survey Form.

Surveyed characteristics	**Unit of measure/classification**
N° of auction	N°
Synthetic description	.....
Cadastral identification	Fg. ..., Mapp. ..., Sub. ..., Cat. ..., Cl. ..., R. ...
Address	.....
Urban context	Central / Semi-central / Suburban
Residential Type	Apartment / Detached house / Terraced house / Loft
Size	m^2
Occupancy	Empty / Occupied by the owner / Rented
Expiry date of the contract	../../....
Lease	Euro
Pictures	Jpg.
Quality of constructions	Insufficient / Sufficient / Quite good / Good / Excellent
Year of construction	....
State of Maintenance	Insufficient / Sufficient / Quite good / Good / Excellent
Market value date of valuation	../../....
Methodological Approach	Income Capitalization Approach/Sales Comparison Approach/Cost Approach
Market value	Euro
Date of first auction	../../....
Date of sale	../../....
Number of bidding proceedings	N°

To describe a property from the physical and technological point of view, we considered the size (M), the quality of constructions (Q), and the state of maintenance (SM)

To describe a property from the physical and technological point of view, we considered the housing type, its size (S), quality of constructions (Q), and state of maintenance (SM). We then considered whether the house is productive and generates income by surveying if it is vacant, occupied permanently or occasionally by the former owner or rented to third parties (henceforth this variable is defined as Occupancy).

We finally estimated the mean discount (*Sc*), which corresponded to the average difference between the first listing price (i.e. MV) and the selling price (i.e. FV):

$$Sc = \sum_{i=1}^{n} \frac{V_i - P_i}{V_i} \quad (1)$$

where P_i is the selling price and V_i is the first listing price .

Finally, we investigated how long the foreclosed properties were for sale, by identifying both the number of days (GG) that occurred from the opening bid to the closing date, and the number of bidding proceedings (*Es*) each property was involved in before it was sold. According to [5] and [28] in fact, the time taken to auction a house is influenced by the listing price (MV) and in turn influences the selling price (FV).

Results and Discussion

In Table 2 we display the results of the statistical analysis conducted to identify the relationship between MV and FV and the urban context and characteristics of foreclosed homes. We find that forced sales take place at price discounts and we relate those discounts to the different components of a property's value. On average the FV amounts to 64.3% of the MV, and the minimum discount amounts to 24.4% whereas the maximum to 100.5% (i.e. it is a premium). The descriptive statistics reveals that the majority of foreclosed homes are located in suburbs (55.056%), followed by those located in semi-central areas (26.966%); only 18% of the residential properties were situated in the city center (Table 2). An interesting finding is related to the socioeconomic and market characteristics. neighborhoods and cities where the number of auctioned houses is relevant, reveal a market downturn reaching an average of -23.50% during the observation period (Table 2). There is evidence of a number of properties being located in municipalities featuring a rather depressed real estate market by comparison with their respective county capital cities. Similar conclusions can be drawn taking into consideration the average IMI that is equal to 0.013 and reveals a stagnating real estate market in the municipalities under investigation. With respect to the average IPC that amounts to about 12,149 Euros per year, according to our results, the majority of foreclosed properties are located in city centers characterized by an average IPC lower than the entire sample. The IPC median value is lower than the mean, this means that there is a slight prevalence of properties located in low-income areas, where the IPC is about 10,000 Euros per year. These results are in line with [5] and [11], that found evidence of the correlation between auctions due to foreclosures or to bankruptcies and properties that are located in low-priced neighborhoods.

With respect to the intrinsic physical and technological characteristics of the auctioned properties, we found that their average size is 138 m^2 with a positive asymmetry due to a sporadic presence of very large properties (larger than 200 m^2). The mean rating of

the properties' quality of construction (Q) is defined as adequate or fairly good in 61.798% of the cases (Table 2), and the state of maintenance (SM) was mostly judged to be good or fairly (32.584% and 30.337% of the cases respectively). These types of property belong to the mid-range of the market in terms of size, quality and state of maintenance and usually take longer to sell and are associated with larger depreciation then the upper level ones [5] and [28].

Table 2 : Dataset descriptive statistics (2006-2014)

Description	N. of obs. (%)	Mean	Standard deviation	Median	Skewness	Kurtosis
L	89					
Central	16 (17.977%)					
Semicentral	24 (26.966%)					
Suburban	49 (55.056%)					
IPC (€/year inhabitant)	89	12,149	1,911	11,965	0.346	-1.300
ΔNTN	73	-0.235	0.202	-0.261	1.640	6.133
IMI	89	0.013	0.007	0.014	-0.549	-0.163
S (m^2)	87	138.46	81.34	107.09	2.074	4.885
Q	89	2.6742	1.063	3.000	0.110	-0.715
Inadequate	0 (0.000%)					
Poor	13 (14.607%)					
Adequate	27 (30.337%)					
Fairly good	28 (31.461%)					
Good	18 (20.225%)					
Excellent	3 (3.371%)					
SM	89	3.027	1.251	3.000	-0.371	-0.601
Inadequate	2 (2.247%)					
Poor	10 (11.236%)					
Adequate	14 (15.730%)					
Fairly good	27 (30.337%)					
Good	29 (32.584%)					
Excellent	7 (7.865%)					
Occupancy	89					
Unoccupied	27 (30.337%)					
Occupied by tenants	8 (8.989%)					
Occupied by former owners	52 (58.427%)					
Occasionally occupied by former owners	2 (2.247%)					
Sc	89	0.357	0.179	0.408	-0.257	-0.329
GG (days)	89	815.110	484.88	685.00	1.870	3.611
Es	86	3.302	1.373	3.000	1.1103	2.465

Furthermore, most of the houses (58.427%) were occupied by their former owners, whereas a percentage of 30.337 were vacant, and in 8.989% of the cases properties were occupied by tenants in and 2.247% they were occasionally occupied by former owners for example for vacations. It is worth note that it takes on average three bidding proceedings to the auction closing and it takes on average 2.2 years to sell foreclosed

properties. In other words, it takes much longer than in Europe [30]: in Finland, for instance, the process lasts on average 2 months, 9 months in Germany, 17 in France, and 27 in Portugal.

Conclusions

Auctions in Italy are primarily used to dispose foreclosed or distressed properties. The FV applies to an asset sold at a forced sale, which is likely to sell for a price significantly lower than the asset's MV. A number of papers in the international literature have examined whether auctioned properties sell at a discount or premium relative to market prices that can be paid in private negotiated sales. In this paper we aimed at filling the gap in the Italian literature on the quantitative determination of FV and its determinants. It is of paramount importance to be able to predict as more accurately as possible the FV of a foreclosed property especially in the current housing downturn where it is experienced an increase in the number of non-performing loans and the foreclosure rate. We therefore investigated the Italian real estate forced sale market, analyzing 119 forced sales of auctioned residential properties that took place over the period 2006-2014 in the North East of Italy. Our results show that auctioned properties are listed at a 35.7% discount (on average) as compared to their market value. Foreclosure discounts are larger for low-priced properties in low-priced and low-income neighborhoods. This in turn might have spillover effects on the prices of local unforced sales, that should be further investigated in order to verify whether foreclosures have negative external effects in the housing market.

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