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The mainstream solution to real estate npl management is recourse to judicial processes



as 2018 on average a property remains at auction 4,2 years before finding a buyer (vs 5 years of 2017)

As 2018, real estate assets at auction are 245.000, up 4,6% on the previous year



properties for sale have a bidding of € 51,38 billion vs real market value of € 128,5 billion



The reason is due to the limited number of investors

auctions remain a prerogative of speculative operators

Between 2005 and 2017 the initiatives of last governments have intended to facilitate a solution, reducing time on market and supporting the development of the segment



- fiscal incentive for buyers
- possibility for investors to propose a price already 25% lower than the fixed base value



Average discount of 31% compared to the traditional market



Cities as Milan and
Bologna are
characterized by an
average discount of
44% on sale price

Secondary cities as
Bari and Florence
stand at a level
between 31% and 36%



Several scholars have investigated the relationship between auction market and the segment of private negotiation in terms of final transaction price:

- Knight, Sirmans and Turnbull (1994): lower listing prices could increase the number of bidders, simultaneously reducing the bid offered by each participant
- ➤ Clauretie and Daneshvary (2009): physical conditions of the property and the relationship between marketing time and price influence discount
- Campbell et al. (2011): study on a sample of 1.8 million of properties sold at auction in Massachusetts in the last 20 years, reveling an average discount of 28% and a relevant influence of the maintenance status, also highlighting a negative influence on the trades of neighboring properties
- Woei-Chyuan Wong (2017): proximity to the city center, number of previous auction attempt and number of online viewers are positively related to sale price and sale probability



#### Reference model:

#### Canesi, d'Alpaos and Marella (2016):

comprehensive study about Italian Real Estate distressed market

#### Sample:

119 auction properties sold between 2006 and 2014 in Veneto Region, North-East Italy

#### Analyzed variables:

socio-economic characteristics as physical location, income, variation of NTN, population and IMI; other included characteristics are profitability in terms of occupancy, physical features (type, state of maintenance, size and construction quality) and auction market features (day on market and discount – or premium-)



focus on a **contiguous area** in order to control variables such as spatial price interdependence (Clauretie and Daneshvary, 2009)



Selected independent variables:

**Property location**: relative provincial macro-area of each observation and identifying them as central, semi-central and suburban

**IMI**: specific index representative of market dynamics in each macro-areas and determined as the ratio of NTN (normalized number transactions) to available stock

Size: in terms of commercial surface

**State of maintenance**: qualitative variable from 0 to 4 (inadequate, poor, adequate, good, excellent)

**Private and shared outbuildings**: dummies variables

**TOA** - **time on auction**: years as temporal difference between the first day of bidding and auction clearing date



## Descriptive Statistics 2014-2018

Description	Obs.	Mean	Std. Dev.	Median	Skewness	Kurtosis	Min.	Max.
Type of property								
Residential	225 (100%)							
Size	225	133,393	119,173	112,175	3,745	17,161	12,000	916,000
State of maintenance	225	2,013	0,966	2,000	-0,027	-0,295	0	4
Inadequate	13 (6,2%)							
Poor	51 (22,6%)							
Adequate	94 (41,7%)							
Good	54 (23,9%)							
Excellent	13 (5,7%)							
Elevator	80 (35,5%)							
No elevator	145 (64,4%)							
Outbuildings	218 (96,9%)							
Private	61 (27,1%)							
Shared	41 (18,2%)							
Private and shared	116 (51,5%)							
No outbuildings	7 (3,1%)							
Location	225							
Central	56 (24,8%)							
Semi-central	95 (42,2%)							
Suburban	74 (32,8%)							
TOA (years)	225	2,291	2,160	1,411	1,164	0,346	0,000	8,844
IMI	225	1,63	0,24	1,57	-0,32	-0,19	1,03	1,96
Ve	225	154 871,02	130 842,60	128 227,00	2,93	13,50	1 000,00	1 021 295,00
Vf	225	79 382,67	70 537,72	61 000,00	2,44	9,44	750,00	500 000,00
D	225	0,459	0,232	0,448	-0,769	1,240	-0,435	0,901



#### Empirical analysis:

We use a single-equation ordinary least squares (OLS) test assuming as dependent variable the discount between the estimated listing price and the sale price

$$D=\sum n=1 \uparrow n = Ve-Vf/Ve = \sum n=1 \uparrow n = (1-Vf/Ve)$$

#### Model:

$$Discount_i = 1 - Vf \downarrow i / Ve \downarrow i = \beta_1 Size_i + \beta_2 State of Maintenance_i + \beta_3 Outbuildings_i + \beta_4 TOA_i + \beta_5 IMI_i + \varepsilon$$

#### Sample:

225 auction residential properties sold between 2014 and 2018 in Apulia Region, South Italy



# Results of regression model

Independent variables	Estimate	Std. Error	p-value	Signif. codes					
Size	-0.0001	0.0001	0.154	·					
State of maintenance	0.0011	0.0145	0.937						
Outbuildings	0.0113	0.0306	0.711						
TOA	-0.0466	0.0062	2.53e-12	***					
IMI	0.4002	0.0229	< 2e-16	***					
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1									
Multiple R-squared	0.8856								
Adjusted R-squared	0.883								
Residual st. error	0.2013 on 220 degrees of freedom								
f-statistic	304.6 on 5 and 220 DF								
p-value	< 2.2e-16								



#### Discussion:

- Timeline influence has proved by **IMI** and **TOA significance**; both are subject to change in time, in contrast to other selected variables;
- > While TOA directly reflects time-variable, IMI is prone to changing over time, even though related to location and market dynamics;
- ➤ Italian national average of real estate auctions duration is one of **the longest in Europe**, however with a certain reduction in the last year but anyway not sufficient;
- > This gap reveals limits of foreclosure procedures in Italy, with an **informative inefficiency** which generates a limited participation by potential buyers with auctions monopolized by small groups operating with **speculative intents**;
- ➤ Influence of stagnant condition of real estate segment in secondary market, especially in semi-central and suburban contexts.



#### Conclusions:

- > Reduce duration of procedures: reduction in the discount
  - government initiatives have led to positive results, however not yet satisfactory compared to other European contexts
- Encourage recourse to other options: auctions are still perceived by creditors, for 95% banks, as the main instrument in property loans recovery



Italian government in the wake of European Commission strategies, has already promoted initiatives aimed at encouraging the re-launch of real estate securitization market



Law of conversion of the D.L. n. 50/2017 has introduced ReoCo



# THANKS FOR YOUR ATTENTION

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