

The 7th Hospitality Finance & Economics Conference(EHL and National University of Singapore), Singapore.

Session 4 - Real Estate Valuation.

**Comment on:**

# **Do Appraiser and Borrower Race Affect Mortgage Collateral Valuation?**

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# Key Contributions.

- *Valuation errors and Racially Bias.*
- “As collateral valuation is a key component in mortgage underwriting, *racially driven appraisal bias* could further erode the opportunity for *minority households to build wealth* through homeownership”.
  - New insights into the incidence and magnitude of *racial bias* in the valuation of residential properties
  - The appraised values are rarely below the contract price as appraisers target it, leaving less room for *racial bias*.

## Findings (1):

**Appraisals for all borrowers are on average 5% to 12% higher than *AVM values*.**

- Black and Asian owned homes are undervalued by an average of about 0.6 and 0.8 percentage points below the appraisal to-AVM ratio of comparable White owned homes, respectively.
- AVMs may systematically **undervalue (or overvalue)** minority owned homes or omit important facts about a property that an appraiser would notice when visiting a home in person, as AVMs are based on **“hard”** information about property features and sales prices that are recorded in electronic databases.
- Thus, we introduce an alternative value benchmark, accounts for **“soft” information** and omitted property characteristics not captured by the AVM.

## Findings(2): Systematically link appraiser race with borrower/homeowner race.

- Previous studies examining *racial bias* in appraisals only observe owner race or neighborhood demographics.
  - This study inferred the appraiser's race and **systematically link appraiser race with borrower/homeowner race.**
  - This study clarified *racial interactions* and provide novel insights to the literature that focuses on ethnic and racial group interactions.

## Findings(3):

### *Systemic appraisal bias* in Asian, Hispanic and Black owners

- This study explored whether the variation across race *in “the appraisal-to-transaction based predicted value gaps”* are the result of a few appraisers or if the differences are more *systemic*.
  - This study found from the estimating models that generate appraiser-specific measures of bias in valuations.
  - This evidence showing that the individual race coefficients are **concentrated and symmetric around a gap of -2 percentage points for Asian and Hispanic owners, and -4 percentage points for Black owners.**

## Findings(4):

### *Client pressure for appraisal prices.*

- This study investigated whether racial disparities exist along another dimension – *the appraisal fees* paid by minority and White owners.
  - The results indicated that such **differences are trivially small for Black and Hispanic owners**. For example, this study found that Black owners paid \$1.96 more, on average than White owners (without controlling for observable differences).
  - After controlling for location, time, and property type, they found that **Black and Hispanic owners paid no more than similar White owners**.

## Comments and Questions 1. *Risk management.*

- The GFC was caused by financial **institutions steering appraisal prices higher**. There was **client pressure**: in the post-GFC period, the appraisal order-taker changed from the **sales** department to the **risk management** department.
- This meant that sales staff were motivated to drive up the **higher prices**. And the main reason for this was that the **review process did not work** as a result. (New Century Financial Corporation
- (NCEN) from 2000 to 2007.)
- What motivates bank **salespeople** to discriminate in racial? Sales representatives are motivated to lend money.

## ***Risk management*** in financial institutions.

- Financial institutions calculate the **probability of default(PV)** in lending to mortgages. This is where the **DSCR(Debt Service Coverage Ratio)** test is key: Monthly payment for mortgage and **monthly salary** <25-30% .(Recourse or non-recourse loans?)
- In risk management, the amount recovered in the event of default is important. This is the **Loan To Value ratio (LTV)**.
  - The risk management department ***stresses the market price*** because the recovery in the event of future default is self-evident. In other words, risk is controlled by stressing and setting a lower price in the AVM estimation.



## Comments and Questions 2. *Lower Price.*

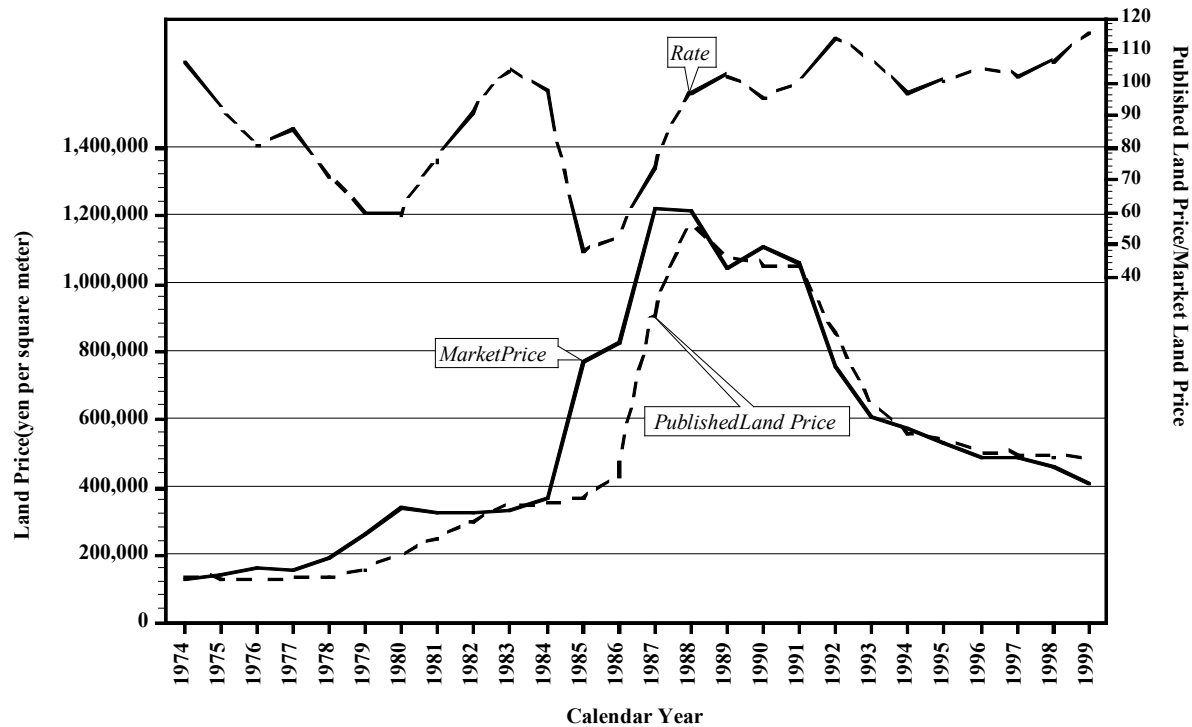
- **Sales comparison approach:**
- If transaction *comparables* are differentiated by race, the property appraiser has to react to this in the *appraised price*.
- There was debate as to whether the appraisal price should be determined as the '*fair value*' or as the '*competitive market price*'.
  - The Appraisal Institute in the USA states that it should be determined as the “market price with the most probable selling value” in the market.
- The issue of *differentiating appraisal prices by race* is *not an issue of the appraisal process or system*, but of market prices.
  - Are there differences in wages and instability by race in the US labour market? If wage instability, or volatility, differs by race, then this is reflected in the transaction price. This is not an *appraisal issue*, but a *labour market discrimination issue*.

## Comments and Questions 3. *Misspecification.*

- *Nationality* in Buyer, Seller and Appraiser (Broker) in property market.
- Nationality or Home country bias in property market:
  - Badarinza & Ramadorai (JFE 2017), Badarinza, Ramadorai & Shimizu (JFE 2021), Miyakawa, Shimizu & Uesugi (JREFE 2022) found the presence of *positive bias* among foreign buyers.
  - If a white owner did not want to sell to a black, Hispanic or Asian buyer, a positive premium would be incurred.
- Racial discrimination issues may be a problem in the low-income or low-price housing market and not the market as a whole.
- In this case, the market should be segmented or estimated by price range.
  - (McMillen and Shimizu (RSUE 2021), Shimizu, Nishimura and Watanabe (RSUE 2015).)

## Comments and Questions 4. *Market conditions.*

- Valuation errors or biases.
  - There are two types of error problems: *intentional errors* and *structural errors*. Structural errors in appraisal values include the '**smoothing problem**' and the '**appraisal error problem**'. Because of the time lag that exists in the acquisition of transaction comparables, appraisal prices are *smoothed* and deviate from *real-time market prices*.
  - Eurostat handbook on Commercial Property Price Indicators 2016(Geltner, Shimizu, Franke *et al*) and Shimizu and Nishimura(2004).
- Gallimore and Wolverton (1997), Kinnard, Lenk and Worzala (1997) and Wolverton (2000) suggested the possible bias caused by the client and appraisal fee structures that are based on appraisal values.



ID	Neighbourhood	Area	Land Value(Yen/m <sup>2</sup> ) at 1975	Lot size	Road Width	Nearest Station	Distance to NS	FLR	Value/Estimate Ratio at 1975	Value/Estimate Ratio at 1987	Value/Estimate Ratio at 1999
Point 1	Middle-sized detached houses are dominant	Setagaya Ward	129,000	264m <sup>2</sup>	3.5m	Soshigaya Okura	500m	150%	92.33%	73.60%	115.13%
Point 2	Middle-sized detached houses are dominant	Setagaya Ward	142,000	144m <sup>2</sup>	6m	Konoge	2600m	200%	101.08%	71.05%	119.74%

Shimizu, C. and K. G. Nishimura (2006), "Biases in appraisal land price information: the case of Japan," *Journal of Property Investment & Finance*, 24(2), 150- 175. <http://dx.doi.org/10.1108/14635780610655102>.

## Summary.

- Discussion1. Risk management in financial institutions.
  - The risk management department stresses the market price because the recovery in the event of future default is self-evident. In other words, risk is controlled by stressing and setting a lower price in the AVM estimation.
- Discussion2. Lower price in appraisal price in Asian, Hispanic and Black .
  - If transaction comparables are differentiated by race, the property appraiser has to react to this in the appraised price.
- Discussion3. Misspecification problems in regression.
  - Racial discrimination issues may be a problem in the low-income or low-price housing market and not the market as a whole.
- Discussion 4. Differences due to market conditions.
  - Do market conditions determine the ratio between the appraised value and the market value of the property?

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