#### ASSESSMENT BIAS IN THE LOCAL RESIDENTIAL PROPERTY RATE ASSESSMENT : EVIDENCE FROM JOHOR BAHRU AND MELAKA

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### INTRODUCTION

#### THE ENGLISH PRINCIPLE OF PROPERTY RATE

"In the case of a rate, the taxing authority decides how much it wants in the aggregate, and this amount is raised by apportioning the payment of it between the various ratepayers in accordance with some definite standard made for the occasion or already in existence. (While) In the case of a tax, the taxing authority decides that individuals shall make particular occasions, and the aggregate sum is received depends on how these payments add up to" (Cannan, 1912, pp. 4-5)

# **60%**

of Malaysian local governments' is fueled by the local property rate

#### CRITICAL ISSUES OF LOCAL PROPERTY RATE

- ACCURACY & RELIABILITY
- Performance ILLITERACY
- **ABSENCE** of relevant Standards or Guide Notes

#### AIMS OF STUDY

- to evaluate the **PERFORMANCE** of local property rate assessment
- to discover the **EXISTENCE OF ASSESSMENT BIAS** amongst the rateable residential properties

### THEORIES

- local governments' provisions of public goods are similar to firms' behaviour in allocating the private goods
- consumers move into the jurisdiction which suit to his/her preferences akin to the concept of shopping in the market mechanism

### THE BENEFIT PRINCIPLE OF PROPERTY RATE

- SERVICE CHARGE for local public goods
- NON-DISTORTIVE

TIEBOUT THEOREM

- NON-REDISTRIBUTIVE
- Benefits are CAPITALISED into IMPROVED VALUE





# Why 'Market Value'?

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serves the fairness and certainty (Almy et al., 2008)



notes the changes in property attributes (Oates, 1969) make property rate as an INELASTIC TAX

**FLAW** 

- sluggishly responds to the change of MV
- high administration cost revaluation

### THEORIES

### PERFORMANCE INDICATIONS FOR PROPERTY RATE ASSESSMENT

### THEORIES



### ASSESSMENT LEVEL

- the general ratio of assessed and market values of all properties in the valuation list.
- COMMON LEVEL the conceptual of tolerable level of assessment in the observed tax jurisdiction; due to MVs are empirically unobservable.



# ASSESSMENT Uniformity

- the use of SALE PRICES AS PROXIES comes with acceptable errors.
- signifies the SYSTEMATIC VARIANCE of the assessment ratio to its common level.





- systematic similarity of property assessments across levels of property groups defined by value
- the fundamental of contending property rate as a benefit tax

#### **RESEARCH DESIGN METHODOLOGY CROSS-SECTIONAL** STUDY based on FISCAL **YEAR OF 2017 MEASUREMENT OF DATA SECONDARY DATA** Cross-observation COMMON LEVEL = the weighted mean (the overall ratio) $\bar{A}/\bar{S} = \sum A/\sum S$ NAPIC • = the sum of the assessed values **DATA ANALYSIS** • Local Governments of : $\Sigma S$ = the sum of the sales prices Iskandar Puteri Ratio analysis • Johor Bahru City **Binomial** tests ASSESSMENT UNIFROMITY $COD = 100 \times \left(\frac{\sum |(A_i/S_i) - (\widetilde{A/S})|}{n}\right) \div (\widetilde{A/S})$ Melaka City Regression Hang Tuah Jaya $(A_i/S_i)$ = the assessment ratio of the sample **F**-tests $(\widetilde{A/S})$ = median ratio Model **Null Hypothesis** Author Paglin and Fogarty (1972) $AV = \beta_0 + \beta_1 SP + \varepsilon$ $\beta_0 = 0$ ASSESSMENT NEURTALITY $\ln SP = \beta_0 + \beta_1 \ln AV$ $\beta_1 = 1$ Clapp (1990) = Price-related Differential PRD $PRD = \frac{A/S}{\bar{A}/\bar{S}}$ $+\epsilon$ = mean ratio $\ln AV = b_0 + b_1 Z + \varepsilon$ = weighted mean ratio $AV/SP = \beta_0 + \beta_1 SP + \varepsilon$ $\beta_1 = 0$ IAAO (2013) Notes : AV = assessed value; SP = sale price; $\beta$ = coefficient estimator; and b = coefficient estimator

### RESULTS

#### ISKANDAR PUTERI

(n = 332, Base Year = 2013)

### **P&FMODEL**

### CLAPP MODEL

### IAAO MODEL



 $\beta 0 = -70,645.43$ 

0.620

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**ASSESSME** 

UNIFORMI

**ASSESSMEN** 

LEVEL



**ASSESSMEN** 

24.6%

5% - 20%



 $\beta_1 = 2.702 \text{E-}7$ 

0.931 UNDER-ASSESSED 1.000 PROGRESSIVE



### RESULTS

#### MELAKA CITY (n = 358, Base Year = 2015)

#### **P&FMODEL**



#### IAAO MODEL





