

**UNIVERSITY OF BRUNEI DARUSSALAM**

SM-4290 (RESEARCH PROJECT)

**TITLE OF RESEARCH PROPOSAL:**

COMPARING RESIDENTIAL PROPERTY PRICE INDICES (RPPI) INDEX OBTAINED FROM HEDONIC MODELLING OF HOUSE PRICES USING BIG DATA

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**ABSTRACT**

Residential Property Price Indices (RPPI) refers to index numbers that measures the rate of change in the prices of residential properties over time. The main objective of this research paper is to analyze and compare RPPI index derived from hedonic modelling of house prices using a large data set. The hedonic pricing model will assess the structural attributes, neighborhood attributes and locational attributes of the residential properties to determine its effect on house prices. Variables such as the number of rooms, the year that the property is advertised in the house market, the size of the land area and the distance between the properties and respective amenities will also be accounted for. In this research study, the primary source of data on house prices will be derived through the likes of social media such as Instagram and Facebook as well as real estate websites such as Bruneiproperty.com. This report aims to plot the data found from online sources on a graph of linear regression through R software. Further into the research project, the said graph will be compared with the graph of linear regression plotted from the official data set from Brunei Darussalam Central Bank (BDCB) to deduce the reliability of online data sources.

**Keywords:**

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5. **Data Collection**

* **How you intend to collect the data based on scrapping on the website**

1. **Statistical Considerations**
2. **Work plan (gntt chart)**
3. **Summary**

* Compare with official data to see whether you can produce RPPI by clicking a button
* To portray the house market (Microeconomy which indicate the overall economy)
* Official RPPI uses 4 important attributes: Prime/Not prime location, year in which the data is collected (When ia bejual) to track the increase/decrease in house price, land size, no of bedrooms
* Keywords for research paper: Words that capture the essence of your paper
* Strsplit – to cut the strings of the thingy
* Gsub
* Grap
* Don’t contain solution
* Full of questions and intentions
* How did we get the data
* What do we do with the data
* Objectives of this research – Main objective (2-3)

**INTRODUCTION**

1. **General Background**

* The use of RPPI for economists
* The importance of online data source (Consider its accessibility)
* What this study can contribute in terms of trust towards social media
* Deductions foreshadowing
* How in brunei it is a measure of our microeconomy which indicates inflation and whatnot

1. The use of RPPI