

**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 Index (RPPI) refers to index numbers that measures the rate of change in the prices of residential properties over time. Compiling and monitoring RPPI of house prices is fundamental to Brunei Darussalam Central Bank (BDCB) in observing and maintaining financial stability of the country’s economy. The main objective of this research paper is to analyze and compare RPPI index derived from hedonic modelling of house prices using big data. The model will assess the structural, neighborhood and locational attributes of the properties to determine its effect on house prices. In this research paper, the dataset of house price listings in Brunei Darussalam will be derived through the likes of social media such as Instagram and Facebook along with property web portals such as Bruneiproperty.com. Further into the project, the research aims to compare the dataset from online sources and the official dataset from Brunei Darussalam Central Bank (BDCB) using the hedonic regression method to conclude the reliability and accuracy of online residential property listings and assess its potential to be an official housing index.

**Keywords:** RPPI,

INTRODUCTION

In the primary and secondary housing market, accessibility of residential price index is important to consumers. As technology has developed and usage is more frequent, housing agents release house prices on online platforms as a mean to reach out to a bigger audience. The details of the houses are often displayed on social media to provide transparency and attract serious customers. However, this poses many problems as the

Main pt of Introduction:

Why is RPPI important to BDCB?

How is RPPI calculated in Brunei Darussalam/The process of compiling & observing RPPI/What variables is considered?

The process of getting official house prices from BDCB/Mention how difficult it is

The alternative is online residential properties listing – How accessible the details are

Mention the online platforms such as Instagram and Facebook

Conclude with how this alternative is more accessible

**INTRODUCTION**

The Residential Property Price Index (RPPI) functions as one of the macroeconomic indicators for Brunei Darussalam Central Bank (BDCB) in monitoring economic growth in the country. Particularly in Brunei Darussalam, the RPPI is systematized and published on a quarterly basis. It also enables the central bank to observe and evaluate the trend of real estate market in the country. This is because deriving the index involves computing the house prices in each quarter. According to the Brunei Darussalam Central Bank (BDCB) official website, RPPI “serves as an input into individual decisions to buy/sell property”. Thus, the index is an analytical tool to discern housing affordability for individuals.

* 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

Notes:

* Big data offers potential as a new source of data that might be used to produce official statistics on property