

## **Technical Notes for Residential Property Price Index (RPPI)**

### **Definition**

The Residential Property Price Index (RPPI) measures the rate at which the prices of private residential properties purchased by households are changing over time. RPPI is a useful indicator to assess the state of the real estate market, which may serve as one of the macroeconomic indicators of economic growth. RPPI can also be a financial stability/soundness indicator to measure risk exposure. It serves as an input into individual decisions to buy (sell) private residential property and in general, RPPI can be used in measures of homeownership affordability.

The RPPI computed for Brunei Darussalam excludes cash-based transactions, non-household transactions, the various Brunei Government national housing schemes and Brunei Government's/non-financial corporates' internal housing loan schemes for employees. The RPPI is estimated for the entire country of Brunei Darussalam for private landed properties only due to limited data.

### **Data Sources**

The RPPI is compiled from a variety of data sources. The principal data source is mortgage loans/financing transactions reported to BDCB by banks licensed in Brunei Darussalam. The data collected includes the purchase price, locational information such as *kampong* and *mukim*; property characteristics such as number of bedrooms and bathrooms, floor area and land size; mortgage loan/financing details; property type specified as detached, semi-detached, terrace, apartment or land; property identification details based on the Plot Number, Lot Number and EDR Number. There are some data gaps from this data source.

To address data gaps in property characteristics such as the number of bedrooms and bathrooms, floor area and land size, these data are matched with the records kept by the Land Department, Ministry of Development and Authority for Building Control and Construction Industry, Ministry of Development. Each property is identified based on the Plot Number, Lot Number and EDR Number to obtain the missing details for compilation.

### **Methodology**

Price changes are estimated using the hedonic regression method to address the difficulties of dealing with heterogeneous transactions for each period. This methodology allows the property price to be decomposed to the estimated contributions of property characteristics. This allows for an estimation of average price changes with a consistent set of property characteristics, with an estimated pure price change from one time period to another. The RPPI uses an 8-quarter rolling window hedonic regression model. Property characteristics that have exhibited significant explanatory power in the model are the number of bedrooms, built up area, property type (detached, semi-detached, terrace) and locational data (prime locations were identified based on Mukim: Mukim Berakas A, Mukim Berakas B, Mukim Gadong, Mukim Kianggeh, Mukim Kilanas, Mukim Kota Batu, Mukim Lumapas, Mukim Sengkurong, Mukim Kuala Belait or Mukim Seria).

**Periodicity**

The index is compiled and published on a quarterly basis.

**Base Period**

The base period for the RPPI is the first quarter of 2015. The index for Q1 2015 is set to 100 and all subsequent price movements are expressed relative to this base. For example, if the RPPI for Q4 2017 is 94.9 this implied that there was a decline of 5.1% in RPPI compared to Q1 2015.

**Publication**

Provisional results for the latest quarter may be published due to delays in receiving all the information required. Therefore, the RPPI results for the latest quarter may be subject to change.

Additional ancillary statistics relating to the property market, including transaction activity and median prices are published separately in the BDCB Statistical Bulletin which is released quarterly.