

 **ZA – South Africa**

The data for South Africa was added for the first time in the release corresponding to the first quarter of 2012. Before the 2017 second quarter release, all house price data came from ABSA Group Limited (formerly Amalgamated Banks of South Africa Limited), which produced a nationwide house price index for new and existing, single-family dwellings. In this index, house prices are based on loans approved by ABSA and represent the total purchase price of a house. To create the index, houses are first grouped according to size: small (80-140 square meters), medium (141-220 square meters), and large (221-400 square meters). The three indexes are computed individually, and then weighted by the volume of approved loan applications during the current period. Dwellings sold for over 3.6 million Rand are excluded from the index. This cutoff point has been revised over the years to account for house price growth and consumer price inflation. In 2011, the cutoff point was 3.5 million rand. In 2010, it was 3.1 million rand.

The index is reported at monthly frequency and starts in January 1966. We transform the index to a quarterly frequency by taking the arithmetic mean of the corresponding months, starting in the first quarter of 1975. The house price index is seasonally adjusted by the source using the X-11 method.

The source of the current house price data has changed. Starting in 2001, the series is based on the house price index developed by South Africa's First National Bank (FNB). The ABSA index was discontinued after November 2016. This affects the 2017 second quarter release and all subsequent updates. The FNB series is based on transaction price data from homes financed by FNB. The minimum size cut-off for full title stands (plots of lands) is 200 square meters, and the maximum size is 4000 square meters. The minimum price cut-off is 20,000 rand, and the maximum price cut-off is 10 million rand. Until the 2018 second quarter release, the FNB House Price Index was compiled from 18 sub-segment average house price time series. The 5-year moving average of the sub-segments' volumes was used to weight them to limit the impact of transaction volume shifts across segments. Starting with the 2018 second quarter release, FNB's preferred index methodology is repeat sales instead of stratified mean. The index is reported at a monthly frequency and starts in January 2001. We use the index aggregated into a quarterly frequency by taking the arithmetic mean of the corresponding months. The index is very lightly smoothed by the source using a Hodrick-Prescott smoothing function with a lambda of 5. We retain the ABSA series to extend the quarterly series before 2001. We re-base the spliced index to 2005=100 and deflate this series using the personal consumption expenditure (PCE) deflator obtained from the South African Reserve Bank.

We complete the data for South Africa by including a personal disposable income (PDI) series, reported in *per capita* terms. We use household disposable income data published by the South African Reserve Bank. The series is reported at a quarterly frequency and begins in the first quarter of 1960. This series is seasonally adjusted by the source. Current working age (15-64) population data is obtained from Statistics South Africa. The series is reported at a quarterly frequency starting in the first quarter of 2008. To extend this data we use an annual working age population series obtained from the United Nations (U.N.), where working age population is also defined as those aged 15-64. We interpolate the U.N. annual series to a quarterly frequency using quadratic-match average and use the resulting quarterly growth rates to extend the OECD series

back to the first quarter of 1975. Then, we divide PDI by working age population to create a PDI *per capita* measure. We use the PCE deflator obtained from the South African Reserve Bank to report the PDI in real terms. The series is reported at a quarterly frequency and begins in 1960. Both nominal and real measures are indexed to 2005=100.

Information Resources:

FNB Methodology

<https://blog.fnb.co.za/wp-content/uploads/2016/08/FNB-Property-Barometer-FNB-HPI-Methodologies-2-Aug-2016.pdf>

ABSA Group Limited Data

<http://www.absa.co.za/Absacoza/Economic-Research/Property-Research>

Reserve Bank of South Africa Data

<http://www.resbank.co.za/Research/Statistics/Pages/OnlineDownloadFacility.aspx>

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