

CENTRE FOR REAL ESTATE RESEARCH, UNIVERSITY OF ABERDEEN

Aberdeen Housing Market Report: A note on methods

The information in the quarterly Aberdeen Housing Market Reports is based on transaction data provided by the Aberdeen Solicitor's Property Centre (ASPC) to the Centre for Real Estate Research, University of Aberdeen. The data is used to compute quality-adjusted indices for different areas and different types of dwellings. Such indices control for the observed characteristics of the transacted properties using regression techniques. They thus avoid the problems faced by indices based on average transaction prices which can be heavily influenced by the characteristics of the dwellings sold in a particular period, thereby providing a biased picture of the underlying market trends.

A five-year rolling window approach is adopted with the number of quarters included in each particular regression fixed at twenty-one. This approach allows for possible changes in preferences for the various property characteristics over time. The technique also provides a means of excluding aberrant influences on individual house prices.

A single regression model is estimated each quarter with individual housing attributes (bedrooms, floors, public rooms, bathrooms, availability of garages and gardens) interacted with the index area and dwelling type dummies. This allows the value placed on a particular housing attribute (for example, number of bedrooms) to vary across locations and between house types. Having estimated the implicit prices of each of the housing attributes together with the time dummy for that quarter, the price of a standard semi-detached house is estimated and then used to compute the index numbers. Thus a Laspeyres-type index is computed.

The characteristics of the standard semi-detached house and that of other standard dwellings reported in the bulletin are given in the table below. The number of floors, bedrooms, bathrooms, and public rooms were based on the rounded means of the characteristics of all properties transacted in 2005. Similarly, the choice of location for the Aberdeen City and suburbs dwellings was based in the number of transactions in 2005. For the other areas, the geographic centre of the specific towns was used as the location of the standard dwelling.

Table 1: Quality characteristics of the dwelling types whose prices are reported

	Housing characteristics	Location of the properties
Flat	<ul style="list-style-type: none"> • two bedrooms • one floor • one public room • one bathroom • no garage • no garden 	<ul style="list-style-type: none"> • For Aberdeen City and suburbs: central Rosemount • For Ellon, Inverurie and Stonehaven: respective geographic centre; for Other country areas: geographic centre of Banchory
Semi-detached	<ul style="list-style-type: none"> • three bedrooms • two floors • two public rooms • one bathroom • no garage • garden 	<ul style="list-style-type: none"> • For Aberdeen City and suburbs: Middle Park • For Ellon, Inverurie and Stonehaven: respective geographic centre; for Other country areas: geographic centre of Banchory
Detached	<ul style="list-style-type: none"> • four bedrooms • two floors • two public rooms • one bathroom • garden • garage 	<ul style="list-style-type: none"> • For Aberdeen City and suburbs: Kingswells • For Ellon, Inverurie and Stonehaven: respective geographic centre; for Other country areas: geographic centre of Banchory

In 2013Q3, the ASPC changed the definitions of some of the variables slightly. At the same time, the presentation of the index series in Figure 1 in the Aberdeen Housing Market Report became too cluttered. Effectively from 2014Q2, we use 2009Q1 as new base period. This implies that the level of prices reported for the previous quarter reported in the Aberdeen Housing Market Report 2014Q2 can differ slightly from those reported in the Aberdeen Housing Market Report 2014Q1 (which used 2005Q1 as base period).