

Abstract

Measuring the changes in housing prices is a prerequisite to the proper functioning and transparency of these markets. In conjunction with the French civil-law notaries (*notaires*), INSEE has developed a method to produce regular and reliable price indices of used dwellings, the *Notaires-INSEE* housing price indices. It was first introduced in *INSEE Méthodes* no.98 (David *et al.*, 2002), then in a revised version, “version 2”, in *INSEE Méthodes* no. 111 (Beauvois *et al.*, 2005). The latest *INSEE Méthodes* presents a new version, “version 3”, of the *Notaires-INSEE* housing price indices.

Housing price indices are difficult to compute because the price of a given dwelling is seldom observed and because housing quality can change over time. The method used to overcome this difficulty involves econometric models (hedonic models), based on the estimation of relative prices of housing characteristics. In each primary area, a model is estimated from a housing stock, called the *estimation stock*; it is assumed that the model will apply for a few years. Thus in each current period, the value of a fixed housing stock, called the *reference stock*, can be estimated from all the transactions observed during that period, by averaging the reconstructed prices of a corresponding reference property. The index consists of the ratio of the estimated value of the reference stock in the current period to its value observed in the base period.

The data are supplied by notaries (*notaires*), who draw up contracts for sales of existing dwellings in France. These data currently cover about two thirds of all sales. Housing characteristics include floor space, number of rooms, number of bathrooms, floor in a building, whether there is a lift, a garage, etc.

As was originally intended, the initial models were revised after four years. This revision produced “version 2” of the indices, in force from July 2004 to October 2011. Again in accordance with the original commitment, a further revision was carried out (version 3), in force since November 2011. When new indices are introduced, this is accompanied by the more systematic publication of indices that have been adjusted for seasonal variations, in order to monitor market trends better.

This version comprises 293 basic hedonic models, estimated for geographic areas (strata), which are homogeneous in terms of prices. Separate models are used for houses and apartments: 15 models for apartments and 7 for houses in the Paris region (Île-de-France), 97 for apartments and 174 for houses outside the Paris region (hereafter the “Provinces”).

The indices cover all of Metropolitan France and have been given the official “Notaires-INSEE” designation; production of the indices is monitored by a scientific board. A provisional version is published every quarter, two months after the end of the quarter in question, then a definitive version appears six months after the end of the quarter (five months for the Paris region indices). These quarterly indices of the prices of used dwellings in the Paris region have received official approval from the French Public Statistics Authority (ASP).

The present document describes the various improvements introduced into the calculation method and includes detailed appendices on the technical aspects of the new models.