

Hotel Income Index methodological note (HII) Base 2001

The Hotel Income Index (HII) is a statistical measurement of the monthly development of income by room obtained by hoteliers.

The HII complements the information supplied by the [Hotel Price Index \(HPI\)](#), an indicator that measures the development of hotel prices, as it measures the joint development of prices and the occupancy produced in each period. In such a way that the variations in this index may be due, not only to modifications in prices (as occurs with the HPI) but also for changes produced in the tariff structure (different application percentage of each one of the tariffs), different from the occupancy volume in each period for the different hotel structure, etc.

To obtain this the [Tourist Apartment Occupancy Survey: Hotel Establishments \(HOS\)](#) is used with the information that is obtained monthly from some 8500 establishments in summer and some 6500 in winter to whom a questionnaire is sent. From this survey information is obtained on hotel occupancy (travellers, overnight stays, degree of occupancy, etc.), their structure (vacancies, personnel, etc.) and other variables of interest with a broad geographic breakdown and by category of establishment. In the questionnaire they are asked, among other variables, for the prices applied to different types of client by double room with bathroom as well as the application percentage in the reference week of each one of the prices indicated over the total occupied rooms. These prices are broken down into the following tariffs:

- Normal tariff.
- Weekend tariff
- Special tariff for tour-operators and travel agencies
- Special company tariff.
- Special group tariff.
- Other tariffs

To calculate the HII a simple index of the variable *income per room IN* is used obtained from hotel establishments accommodation activity. This *income* is calculated from the information supplied by the survey on prices applied to a double room and the total number of rooms occupied and offered. In this index the *income per room* obtained in the current period (month *s*, year *T* and *income per room* obtained in the base period (average income obtained over the base year 2001) are related. The calculation of the index has the following expression:

$${}_{01}I^{sT} = \frac{\hat{IN}^{sT}}{\hat{IN}^{01}} \cdot 100$$

$$\text{where } \hat{IN}^{sT} = \frac{\hat{M}^{sT} \cdot \hat{B}^{sT}}{\hat{H}^{sT}}, \hat{IN}^{01} = \frac{\sum_{s=1}^{12} \hat{IN}^{s(01)}}{12} \text{ and } \hat{IN}^{s(01)} = \frac{\hat{M}^{s(01)} \cdot \hat{B}^{s(01)}}{\hat{H}^{s(01)}}$$

where:

\hat{M}^{sT} : average price of double room with bathroom (excluding VAT and breakfast), in the month s of year T .

\hat{B}^{sT} : total number of rooms occupied in the month s of current academic year T .

\hat{H}^{sT} : total number of rooms offered in the month s of year T

As commented above, the HII must be understood as an indicator which is different from and complementary to the HPI, both in that it differs in the calculation method and in the interpretation that can be made from its results.

Each indicator that reflects a different aspect of hotel activity: while the HPI reflects the variations produced, exclusively by alterations in prices, maintaining a structure of constant weightings. The HII may vary also due to the modifications in the hotel structure (eliminating the effect of variations by increase or reduction of available hotel supply in each moment) and/or tariff for the different volume of occupancy in each period. From the calculation of interannual variation rates, information may be extracted on the increase or decrease in income obtained by hoteliers by room offered in the current month in relation to the same month from the previous year.

Interannual, intermonthly and accumulated interannual indices and variation rates are calculated and disseminated for the seventeen Autonomous Communities, Ceuta and Melilla; moreover, indices are also published for the national categories.