Level 3 national report on quality of statistics underlying the MIP indicators

Statistical domain: Housing Price statistics

Country: Italy

Institution: ISTAT

Reference year: 2024

Date of update: 03/2025

National report providing information on quality, sources and methods, together with information on the statistical processes used for the compilation of the statistics underlying the MIP indicators (including concrete specifications for housing price statistics) - 2025 update

Reporting institution: ISTAT

Selected principles					Some specific examples for indicators and related questions (Response options, unless indicated otherwise: not implemented; partially implemented; fully implemented)	Statistical domain specifications	Country response
European Code of Practice principles	Public Commitment on European Statistics by the ESCB	Selected elements					
Institutional Environment	*Institutional Environment*	*CoP/PC*	*IMF DQAF*	*SIMS*	*Question(s)*	*Housing price statistics*	Housing price statistics
CoP1 Professional Independence	PC1 Professional Independence	1.1/1.1	1.1.1 1.1.2		The independence of [name of reporting institution], from political and other external interference in developing,	*Legal basis:* Please. specify the statutory basis for ensuring independent	Istat Regulation issued by Decree of the President of the Republic No 166/2010 stipulates that the Italian National Statistical Institute (Istat), a public body with scientific, organizational, financial and accounting autonomy, operates according to principles of scientific independence,

| | | | | | | producing and disseminating official statistics is guaranteed by law.

Legal basis: Please confirm the independence by referring to the relevant national and EU legal act(s) and the formulation used in the legal act. | professional authority in all statistical decision making and activities at the institutional level. This legal authority provides the ground to exercise professional integrity to the fullest extent and is conducive to embedding a professional culture in the statistical office.

Statistics work programme: Please confirm the existence of a statistics work programme covering | impartiality, objectivity, reliability, quality and confidentiality of statistical information established at European and international level. |
|---|---|---|---|---|---|---|---|---|
| | | 1.4/1.5 | | | | The [name of reporting institution] has an annual statistical work programme which is made public.

Statistics work programme: Please confirm the existence of a statistics work programme and specify where to find it (or similar document), if available. | | The Italian National Statistical Programme, which was established under the Law on the National Statistical program of December 1994, details Istat's responsibility for the compilation of price statistics. The most recent National Statistical Programme 2023-2025, entered in force with Decree of the President of the Republic of 24 September 2024, can be accessed at https://www.sistan.it/index.php?id=688. |

						housing price statistics and specify where to find it, if available.	
CoP2 Mandate for data collection	PC2 Mandate for data collection	2.1/2.1	0.1.1		S 7.1	The mandate(s) of the [name of the institution(s)] to collect information for the development, production and dissemination of European Statistics is specified in law. *Allocation of responsibilities: Please explain the allocation of responsibilities in producing the relevant statistics.* *Legal basis: Please confirm the mandate by referring to the relevant legal act(s) and any other kind of formal agreements.*	*Allocation of responsibilities: Please explain the allocation of responsibilities for the production of housing price statistics.* *Legal basis: Please confirm the mandate for the production of housing price statistics by referring to the relevant legal act(s) and/or any other kind of formal agreements.*	Istat is the unique national agency responsible for the compilation and dissemination of the Italian HPI. The mandate for the production of house price statistics is laid down in the Regulation (EU) N° 2016/792 of the European Parliament and of the Council of 11 May 2016 on the harmonized indices of consumer prices and on the house price index and by the Commission Implementing Regulation (EU) No 2024/1470 of 17 July 2024.

| CoP6 Impartiality and objectivity | PC6 Impartiality and objectivity | 6.6/6.6 | 1.2.4 | S9.1 + S9.2 S.20.1 | Advance notice is given on release calendars and on major revisions or changes in methodologies, source data and techniques. *Advance release calendar: Please confirm the existence of an advance release calendar and provide a link to it.* *Revision policy: Please explain succinctly the revision policy and provide a link to material on the revision policy, if existent.* | *1.3.1 Advance release calendar:* Please confirm the existence of an advance release calendar for housing price statistics and provide a link to it.

1.3.2 Revision policy: Please explain succinctly the revision policy for housing price statistics and provide a link to material on the revision policy, if existent. | In December of each year, Istat publishes an advance release calendar giving precise release dates for the coming year. The calendar is distributed to the press and is available free of charge to all interested parties. It is also disseminated on the Istat website https://www.istat.it/en/information-and-services/journalists/press-releases-/press-calendar.

HPI releases, each quarter, are provisional and subject to revision when new information is available in the following quarter. Final indices relating to the previous quarter are published in the following quarter. Users are informed about revisions in press releases. The text of the press release contains a note explaining which figures are preliminary estimates subject to revision and which are definitive. |

Statistical Processes	Statistical Processes	CoP/PC	IMF DQAF	SIMS	Question(s)	Housing price statistics	
CoP7 Sound methodology	PC7 Sound methodology	7.1/7.1	2.1 2.2 2.3 2.4	S4.3 S4.4 S4.5 S4.6 S 6 S12.1	Please specify the relevant statistical standards to which the statistics abide. *Links/references to existing comprehensive methodological documentation on specific aspects of the national sources and methods can also be provided*	*2.1.1 General remarks*: Specify if housing price statistics follow the methodological recommendations in the Technical Manual and the RPPI Handbook.	The HPI compilation follows methodological standards set out in the Technical Manual on Owner-Occupied Housing for HICP provided by Eurostat to ensure comparability of HPI indices across Member States. The HPI measures the evolution of market prices of all residential properties purchased by households. It includes both new and existing dwellings, regardless of whether the purchase is for own-occupancy or investment. Land price is included in prices and weights. House price statistics are based on final market prices paid by households (VAT included), while non-market prices (e.g., self-building) are ruled out from the scope of the HPI. Detailed information on compilation methodology is available on the agency's website, https://www.istat.it/en/archivio/house+prices.
					Please specify adherence or deviations from concepts and rules according to international standards and highlight coverage	Deviations from concepts, rules, and coverage gaps specific to housing prices statistics with material	The geographical coverage of house price statistics is the entire national territory, with the exception of two provinces (Trento and Bolzano) which are regulated by a different cadastral system (approximately 2.6 % of the Italian population).

				gaps that are of material relevance for the statistics. Please indicate whether actions to address the deviations and coverage gaps are envisaged.	impact should be identified. .	
CoP8 Appropriate Statistical procedures	PC8 Appropriate Statistical procedures	8.2/8.2	3.1 3.3 3.4	S12.1 S21.1 S21.3 S 21.5-6	Please provide a succinct assessment of the robustness of the statistics by elaborating briefly on the relevant sources of information, statistical methods and procedures used across the various frequencies. *Please provide links/references to existing comprehensive methodological documentation on specific aspects of the national statistical procedures. The objective should be to get an overview on*	*Main features*: For *housing price statistics,* this description should start by assessing the soundness of sources of information, procedures and methods used in data compilation of the most relevant frequency (quarterly), e.g. price concept, index formula,	The production of HPI statistics is based on administrative data; in particular, prices of dwellings gathered from notarial deeds of sales data provided by the Tax Office. Data transmission between the Tax Office and Istat is done on a quarterly basis. Prices of dwellings are taken into account in the quarter where the final deed of sales is signed and ownership rights are transferred.

Data validation is performed mainly through outlier detection by applying thresholds for surface and price per square meters pre-defined on the base of the Observatory of Real Estate Market data and Tax Office experts' suggestion. In addition, a robust regression model is employed to further support technical rigor.

HPIs are calculated using a chained Laspeyres formula, applying stratification combined with a hedonic method to take into account of quality changes. For each stratum (defined on the base of territorial variables, demographic variables, and dwelling size), the elementary index is a Jevons index adjusted by a quality change index calculated from a vector of regression coefficients obtained by the estimation on a chosen reference set of price observations. Elementary indices are then aggregated to obtain two sub-indices (new and existing dwellings) and the overall |

					how much the statistical output are anchored in actual collected data rather than on estimation methods or similar judgemental inputs.	weights, and adjustments. *Country specific aspects*: Present succinctly information on the collection methods of specific material relevance for house price data. A link could be provided to the national provisions in this respect, if existent.	index. Starting from October 2018, quarterly HPIs by geographical area (North-West, North-East, Central, South/Islands) and by three major cities (Milan, Rome and Turin) are disseminated. The general aggregate index is calculated as a weighted arithmetic average of stratum elementary indices, where the weight of its stratum is proportional to its importance on the total expenditure of households to buy houses (weights are updated yearly and are estimated on the basis of the same data base used for processing price information). HPI methodology is briefly illustrated in the methodological note attached to the Press release https://www.istat.it/en/archivio/house+prices.

Statistical Output	Statistical Output	CoP/PC	IMF DQAF	SIMS	Question(s)	Housing price statistics	
CoP11 Relevance	PC11 Relevance	11.1-11.3	0.3	S.14	Please specify briefly why the statistics are relevant by referring to the multiple purposes for which the statistics are used at (i) international, (ii) EU and (iii) national level. References to the statistical legislation and other formal or informal commitments could be sufficient. In addition, if applicable, the outcome of user consultation processes could also be given.	A variety of potential uses of HPIs are provided for consideration: - to assess housing affordability over time - a measure of specific price trends - for inflation targeting - to monitor economic imbalances and financial stability - an input for national accounts purposes - an input to economic	Housing is an important sector of the economy which warrants a close monitoring of its movement in terms of overall performance, soundness, vulnerability, and risks. The HPI is a handy measure, although a broad one, to identify housing market shifts and assess its impacts on micro- and macro-economy and decision making at various levels. As such, it is a component of the IMF's Financial Soundness Indicators and of the European Commission's Macroeconomic Imbalances Procedure headline indicators. Nationally, the HPI responds to the needs of a wide range of user groups interested in the behaviour of the domestic housing market, including government policy makers, the financial sector, the construction sector, households, related associations, and researchers. User Consultation: there is not a formal user consultation process. Users are free to interact and to provide feedback and suggestion possible the usual channels: on line on the ISTAT web site or directly contacting the reference persons.

						forecasting and analysis - an input for decision making in respect to the housing market	
CoP12 Accuracy and reliability	PC12 Accuracy and reliability (including stability)	12.1/12.1	3.5	S 15.1 S 15.2 S15.3 S.18.2 S 20.2	The analysis should be based on the following indicators (to be compiled by the ECB/Eurostat on a common data vintage) on the reliability of first releases for the relevant series (selected for their material impact and to avoid compensatory effects in the case of balancing items): - Directional reliability indicators; - Revisions indicators (e.g. MAPE, MACE or RMSRE depending on the indicator).	The accuracy of housing price statistics can be monitored by assessing the methodological soundness of price and weight sources and adherence to the methodological recommendations. Please also provide a detailed description on the data	HPI is perceived to be accurate and to reflect adequately the overall performance of the housing market. Methodological rules and guidelines prescribed in the official manual are closely followed in the processes of data collection, modelling, weighting, and estimation. The data sources, which are administrative data supplied by the Tax office, are monitored on a routine basis for accuracy, reliability, stability, and exhaustiveness. The monitored outcomes are translated into follow-up actions for improvement. The Italian HPI is not subject to sampling error, because index calculation is based on administrative data which cover the universe of dwelling transactions (except only two provinces). Italian HPIs are revisable. There is a strict revision policy. In particular, HPIs released each quarter are provisional and they are revised and published in the following quarter. Revision figures are released with a press release containing a note explaining which one is a preliminary HPI estimate subject to revision and which one is definitive. Users are informed about revision in the press releases. Revision is due to incompleteness of quarterly database at the time of the first release (it contains more than 90% of total transactions in the quarter);

					and provide a succinct assessment of the accuracy and reliability of the statistics on the basis of the results, with an attempt to provide a relative objective measure, explaining also the main reasons for revisions.	sources for both weights and prices, and price collection methods.	full coverage will be achieved in the following quarter. As a consequence HPIs released each quarter are provisional and they are subject to revision with new information available the following quarter; final indices relating to the previous quarter will be published in the following quarter.
					Please provide a succinct assessment of the level of the statistical discrepancies ("*internal consistency*")		Internal consistency is ensured through the hierarchical estimation steps from elementary indices to two sub-indices (new and existing dwellings) and then to the final aggregated index.
CoP13 Timeliness and punctuality	PC13 Timeliness (including punctuality)	13.1 13.4	4.1	S.16	Please specify the timeliness requirements for international and EU purposes and the national target publication dates. Please specify punctuality defined as deviations in relation to the timeliness requirements and	*3.3.1 National requirements*: HPIs may be required at national level at different frequencies and timeliness. *3.3.2 EU and other international*	House price statistics are released within the timeliness limits set internally and externally. Nationally, dissemination of quarterly HPIs follows the preannounced release schedule. At the EU level, provisional indices are transmitted to Eurostat 85 days after the end of reference period, and final estimates are provided in the following quarter.

					target dates specified above.	*requirements*: HPIs are released after 100 days from the end of the reference quarter. The release schedule has significantly improved and close to T+1Q at present, which is the target timeliness for this indicator	
CoP14 Coherence and comparability	PC14 Consistency and comparability	14.1/14.1	4.2.1 4.2.2 4.2.3	S17.2 S18.1	Please provide a succinct assessment of the results of the consistency check of the statistics with other related domains or data sets with which the statistics must show coherence ("*external consistency*"). The results should provide a relative	*3.4.1 Consistency with related statistics*: Housing price estimates may be confronted with other indicators available at the national level, e.g., price valuation by a	There are no other sources of information for official data on house prices at national level, it is not possible to run consistency check with reliable data.

						objective measure to facilitate cross-country comparability, e.g. be presented as a ratio of the inconsistency between compared statistics, as a percentage of GDP, where appropriate.	national appraisal board.	
						Please provide a succinct assessment of the time series consistency, specifying (i) whether the time series presents breaks and if so explaining the reasons for the breaks; (ii) the length of the series for which back data are consistent; and (iii) whether the statistics are consistent across the various frequencies (monthly/quarterly/annual) where relevant.	3.4.2 "Time" and back data consistency: In the housing price statistics context, specify the following: - breaks in time series and reasons (whether they relate to methodological or other changes) - time periods for which data are consistent	At the moment the series start from 2010 and are produced consistently over time regarding methodology and definitions. No breaks in time series recorded. The availability is going to be increased since a back calculation, from 2008, will be published as soon as possible. The used back calculation methodology will ensure coherence with data of the following years already published.

						- availability of back data and back calculations performed.	
CoP15 Accessibili ty and Clarity	PC15 Accessibili ty and Clarity	15.1/15 .1	5.1.1 5.2.1	S9.3 S 11 S12. 1	Please provide a brief description of the dissemination policy and dissemination means, including links to the data and respective metadata.	Please provide a brief description of the dissemination policy and dissemination means, including links to the data and respective metadata.	HPI statistics are disseminated through the on-line press release, as part of Consumer Prices (Statistics-Flash, House prices) https://www.istat.it/en/archive/house+prices. Istat makes available HPI data from the indices referred to 2010 on the data warehouse IstatData, in the Category "Prices", Subcategory " House price (Ipab)" https://esploradati.istat.it/databrowser/#/en/dw/categories/IT1,Z0400PRI, 1.0/DCSP_IPAB. Microdata are not released.