

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

Statistical domain: Housing Price statistics

Country: Portugal

Institution: Statistics Portugal

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: Portugal - Instituto Nacional de Estatística

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					
<i>Institutional Environment</i>	<i>Institutional Environment</i>	<i>CoP/PC</i>	<i>IMF DQAF</i>	<i>SIMS</i>	<i>Question(s)</i>	<i>Housing price statistics</i>	Housing price statistics
CoP1 Professional Independence	PC1 Professional Independence	1.1/1.1	1.1.1 1.1.2		<p>The independence of [name of reporting institution], from political and other external interference in developing, producing and disseminating official statistics is guaranteed by law.</p> <p><i>Legal basis: Please confirm the independence by referring to the relevant national and EU legal</i></p>	<p><i>Legal basis: Please specify the statutory basis for ensuring independent 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</i></p>	<p>According to the Law no. 22/2008 of 13 May 2008, Statistics Portugal (INE) is one of the main bodies comprising the National Statistical System (NSS), whose main function is to produce and disseminate official statistics, which are considered to be a public good. Official statistics are produced with technical independence, observing national and international quality standards</p>

					<p><i>act(s) and the formulation used in the legal act.</i></p>	<p>statistical office.</p> <p><i>Statistics work programme:</i> Please confirm the existence of a statistics work programme covering housing price statistics and specify where to find it, if available.</p>	<p>and with the objective of meeting users' needs without imposing an excessive burden to data providers.</p>
		1.4/1.5			<p>The [name of reporting institution] has an annual statistical work programme which is made public.</p> <p><i>Statistics work programme:</i> Please confirm the existence of a statistics work programme and specify where to find it (or similar document), if available.</p>	<p>The Portuguese National Statistical Program, which is established annually, defines, among other aspects, the main objectives, the most relevant statistical operations and provides an exhaustive explanation of all official statistical operations and their respective calendars. National Statistical Programs can be retrieved here.</p> <p>The production of the House Price Index (HPI) is included in the annual work programme of INE, which has to be approved by the National Statistical Council (a body that has the objective of coordinating the NSS).</p>	

CoP2 Mandate for data collection	PC2 Mandate for data collection	2.1/2.1	0.1.1	S 7.1	<p>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.</p> <p><i>Allocation of responsibilities: Please explain the allocation of responsibilities in producing the relevant statistics.</i></p> <p><i>Legal basis: Please confirm the mandate by referring to the relevant legal act(s) and any other kind of formal agreements.</i></p>	<p><i>Allocation of responsibilities:</i> Please explain the allocation of responsibilities for the production of housing price statistics.</p> <p><i>Legal basis:</i> 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.</p>	<p>INE is the entity responsible for the compilation and dissemination of official housing price statistics, including the Portuguese HPI. The obligation of compiling the HPI stems from (Council Regulation (EC) No 2016/792 on harmonised indices of consumer prices and the house price index). The Commission Implementing Regulation (EU) 2023/1470 of 17 July 2023 defines the methodological and technical specifications in accordance with Regulation (EU) 2016/792 of the European Parliament and of the Council as regards harmonised indices of consumer prices and the house price index.</p>
CoP6 Impartiality and objectivity	PC6 Impartiality and objectivity	6.6/6.6	1.2.4	S9.1 + S9.2 S.20.1	<p>Advance notice is given on release calendars and on major revisions or changes in methodologies, source data and techniques.</p> <p><i>Advance release calendar: Please confirm the existence of an advance release calendar and</i></p>	<p><i>1.3.1 Advance release calendar:</i> Please confirm the existence of an advance release calendar for housing price statistics and provide a link to it.</p> <p><i>1.3.2 Revision policy:</i> Please</p>	<p>An advanced release calendar is provided at the beginning of each year by INE. This calendar can be seen here.</p> <p>The HPI is not subject to systematic revisions and is considered as final once it is</p>

					provide a link to it. <i>Revision policy: Please explain succinctly the revision policy and provide a link to material on the revision policy, if existent.</i>	explain succinctly the revision policy for housing price statistics and provide a link to material on the revision policy, if existent.	provided to users. However, and as it is defined in other areas, there may be revisions whenever there is a change in the definitions underlying the construction of these indicators or an improvement in the basic information used in its compilation.
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. <i>Links/references to existing comprehensive methodological documentation on specific aspects of the national sources and methods can also be provided</i>	<i>2.1.1 General remarks:</i> Specify if housing price statistics follow the methodological recommendations in the Technical Manual and the RPPI Handbook.	The prices used in the compilation of the HPI correspond to market transaction prices. These refer to transactions of dwellings (both new and existing) that were acquired as a whole (i.e., parts of dwellings are ruled out from the calculation of the index) and for residential purposes (whether its use is for own-occupancy or other). Properties that were transacted at zero or abnormally low (high) prices are not included in the compilation of the index.

				<p>Please specify adherence or deviations from concepts and rules according to international standards and highlight coverage gaps that are of material relevance for the statistics.</p> <p>Please indicate whether actions to address the deviations and coverage gaps are envisaged.</p>	<p>Deviations from concepts, rules, and coverage gaps specific to housing prices statistics with material impact should be identified. .</p>	<p>The HPI covers the whole territory. Regarding the universe of transactions, until the first quarter of 2019, the index covers all transactions of residential properties. Due to a limitation in source data, it was not possible to separate non-household from household sector transactions for this period. Since the second quarter of 2019, due to access to new administrative information, it has been possible to restrict the index compilation to acquisitions of dwellings by Households. The impact on the overall price index movement of including non-household sector transactions in the construction of the indicator was considered not significant. For more information regarding the impact on the index of including all transactions of dwellings (acquisitions by Households and Non-Households) see the document available here.</p>
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CoP8 Appropriate Statistical procedures	PC8 Appropriate Statistical procedures	8.2/8.2	3.1 3.3 3.4	<p>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.</p> <p><i>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 how much the statistical output are anchored in actual collected data rather than on estimation methods or similar judgemental inputs.</i></p>	<p><i>Main features:</i> For <i>housing price statistics</i>, 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, weights, and adjustments.</p> <p><i>Country specific aspects:</i> 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.</p>	<p>The HPI is based on administrative data provided by the Portuguese Tax Authority of the Ministry of Finance. More specifically, the transaction prices are taken from Municipal Property Transfer Tax (IMT) records and dwelling characteristics are obtained from Municipal Property Tax (IMI) data. These data, which is used in the compilation of the HPI, is transmitted to INE monthly. The data is the most appropriate source of information available to support the compilation of a residential property price index for Portugal. The IMT is calculated based on the value of the transaction or on the updated fiscal appraisal value of the property, depending on which is higher. This system implies that the recorded transaction values are the same or close to real transaction values. Received data is subject to regular checks, which include the monthly validation of received raw data through the inspection of key variables (e.g., transaction prices, floor area) and</p>
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						<p>the use of descriptive statistics and exploratory data analysis.</p> <p>The HPI is compiled combining stratification with the use of the hedonic method (adjacent time dummy approach). This allows tackling changes in the composition and quality of transacted dwellings.</p> <p>The compilation methodology of the HPI is available on the website of INE. To access the methodology, which is available only in Portuguese, assess here, and type “618” in the field “<i>Código</i>”.</p>
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<i>Statistical Output</i>	<i>Statistical Output</i>	<i>CoP/PC</i>	<i>IMF DQAF</i>	<i>SIMS</i>	<i>Question(s)</i>	<i>Housing price statistics</i>	
CoP11 Relevance	PC11 Relevance	11.1-11.3	0.3	S.14	<p>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.</p> <p>References to the statistical legislation and other formal or informal commitments could be sufficient.</p> <p>In addition, if applicable, the outcome of user consultation processes could also be given.</p>	<p>A variety of potential uses of HPIs are provided for consideration:</p> <ul style="list-style-type: none"> - 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 forecasting and analysis - an input for decision making in respect to the housing market 	<p>The HPI responds to the needs of those users interested in making comparable analysis of housing price developments among EU member states and is an important indicator for the early detection of macroeconomic imbalances in EU member states. Nationally, the HPI responds to the needs of all users and interested, (such as, the Central Bank, Central and Local Governments, financial sector, the construction sector, or researchers) to know how prices evolve in the Portuguese housing market.</p>
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	<p>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</p>	<p>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 sources for</p>	<p>The HPI accurately reflects the evolution of house prices in Portugal. The sources used to compile this indicator provide information about transaction values and the moment in time in which the transaction took place. The whole population of residential property transactions is covered by</p>

				<p>balancing items):</p> <ul style="list-style-type: none"> - Directional reliability indicators; - Revisions indicators (e.g. MAPE, MACE or RMSRE depending on the indicator). <p>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.</p>	<p>both weights and prices, and price collection methods.</p>	<p>the sources.</p> <p>The (IMT and IMI) data sent on a monthly basis by the Tax and Customs Authority is systematically checked through routines and procedures that help identifying coding and editing errors. Discrepancies arising from erroneous data transformations and other type of inconsistencies are assessed during the compilation process of the HPI through the help of statistical software. Detected inconsistencies are tackled using appropriate adjustments. These procedures intend to reduce the risks of non-sampling errors.</p> <p>As a rule, HPI weights of year y are compiled using the value of transactions obtained in year $y-1$.</p>
				<p>Please provide a succinct assessment of the level of the statistical discrepancies (“<i>internal consistency</i>”)</p>		<p>Produced data are checked for internal consistency. HPI results are internally consistent in the sense that higher-level aggregations are derived from elementary aggregates according to</p>

							index chaining practices.
CoP13 Timeliness and punctuality	PC13 Timeliness (including punctuality)	13.1 13.4	4.1	S.16	<p>Please specify the timeliness requirements for international and EU purposes and the national target publication dates.</p> <p>Please specify punctuality defined as deviations in relation to the timeliness requirements and target dates specified above.</p>	<p><i>3.3.1 National requirements:</i> HPIs may be required at national level at different frequencies and timeliness.</p> <p><i>3.3.2 EU and other international requirements:</i> 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</p>	<p>The HPI is produced and transmitted in accordance with data transmission requirements established in article 7 of the regulation (EU) 2016/792 of the European Parliament and of the Council of 11 May 2016. House price index numbers are sent up to 85 days after the end of the reference quarter and weights are sent before 15 June of the year following the year to which the weights relate.</p> <p>Nationally, the HPI is disseminated quarterly in accordance with the dates set out in an advanced release calendar (see above).</p>
CoP14 Coherence and comparability	PC14 Consistency and comparability	14.1/14.1	4.2.1 4.2.2 4.2.3	S17.2 S 18.1	<p>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 (“<i>external consistency</i>”).</p>	<p><i>3.4.1 Consistency with related statistics:</i> Housing price estimates may be confronted with other indicators available at the national level, e.g., price valuation by a national appraisal board.</p>	<p>The coherence of produced HPIs is regularly checked against other sources of information on the housing market (e.g., bank appraisals data and with the number and value of transacted dwellings, which are also</p>

				<p>The results should provide a relative 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.</p>		<p>disseminated by INE). Any discrepancies found among these indicators are analysed. The information that is considered relevant for the explanation of the real estate market in Portugal is also collected from the press and analysed by the unit in charge of the production of the indicator.</p>
				<p>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.</p>	<p>3.4.2 “Time” and back data consistency: In the housing price statistics context, specify the following:</p> <ul style="list-style-type: none"> - breaks in time series and reasons (whether they relate to methodological or other changes) - time periods for which data are consistent - availability of back data and back calculations performed. 	<p>The data is comparable over time. The HPI is based on administrative tax data, which is available from 2009 onwards.</p> <p>However, a time series starting in the first quarter of 2008 is available from INE upon request. The HPI for 2008 is estimated using year-on-year rates of change taken from a HPI based on bank appraisals data. Following INE’s policy on this matter, changes in methodology or source data are identified and explained to users whenever this series is provided.</p>

CoP15 Accessibility and Clarity	PC15 Accessibility 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.	The HPI is disseminated through an on-line press release (<i>Destaque</i>), which is made available on the website of INE (www.ine.pt). The HPI quarterly press releases are available in Portuguese and English. The main HPI figures are also made available to users through the website of INE, in an on-line indicator database.
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