

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

Statistical domain: Housing Price statistics

Country: Hungary

Institution: Hungarian Central Statistical Office

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: Hungarian Central Statistical Office

Selected principles					Some specific examples for indicators and related questions (Response options, unless indicated otherwise: not implemented; partially implemented; fully implemented)	Statistical domain specifications
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 DQ AF</i>	<i>SIMS</i>	<i>Question(s)</i>	<i>Housing price statistics</i>
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, producing and disseminating official statistics is guaranteed by law. <i>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.</i>	According to the provisions of the Act No. CLV of 2016 on Statistics [Section 7. subsections (1)-(6)] the Hungarian Central Statistical Office is a professionally independent public budgetary organisation operating as a governmental office. Legislation shall not violate the professional independence of the HCSO. The budget of the HCSO constitute an independent chapter in the act on the central state budget.

		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: Please confirm the existence of a statistics work programme and specify where to find it (or similar document), if available.</i></p>	<p>According to the Act No. CLV of 2016 on statistics the statistical data collections involving obligation to supply data – with the exception of those ordered by law - shall be included in the annual national statistical survey programme of the official statistical service.</p> <p>The annual national statistical survey programme has been issued by a Government Decree (Government Decree 388/2017. (XII. 13.)) and is amended each year according to the changes in the data collections.</p> <p>The Government Decree is published in the Official Journal of Hungary.</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>Hungarian Central Statistical Office has full responsibility for the production and dissemination of housing price statistics in Hungary.</p> <p>The mandate for the production of house price statistics is laid down in the Regulation (EU) 2016/792 of the European Parliament and of the Council of 11 May 2016 on harmonised indices of consumer prices and the house price index, and repealing Council Regulation (EC) No 2494/95</p>
CoP6 Impartiality and	PC6 Impartiality and	6.6/6.6	1.2.4	S9.1 + S9.2	<p>Advance notice is given on release calendars and on major revisions or changes in methodologies, source data and techniques.</p>	<p>HCSO defines and publishes an advance release calendar, which is available on HCSO website: https://www.ksh.hu/katalogus/#/kiadvanyok/naptar/en</p>

objectivity	objectivity			S.20.1	<p><i>Advance release calendar: Please confirm the existence of an advance release calendar and provide a link to it.</i></p> <p><i>Revision policy: Please explain succinctly the revision policy and provide a link to material on the revision policy, if existent.</i></p>	<p>HPI is revisable in Hungary. There is a strict revision policy, there is always a clear indication whether data are preliminary or final. The reason for revisions in HPI is always the arrival of new or revised data set. Data are regarded as final at the 3rd quarter of the following year. Within this period data are/may be revised each quarter.</p> <p>http://www.ksh.hu/apps/meta.objektum?p_lang=EN&p_menu_id=110&p_ot_id=100&p_obj_id=BGBA&p_session_id=59445666</p>
Statistical Processes	Statistical Processes	CoP/PC	IMF DQ AF	SIMS	Question(s)	Housing price statistics
CoP7 Sound methodology	PC7 Sound methodology	7.1/7.1		<p>S4.3</p> <p>2.1 S4.4</p> <p>2.2 S4.5</p> <p>2.3 S4.6</p> <p>2.4 S 6</p> <p>S12.1</p>	<p>Please specify the relevant statistical standards to which the statistics abide.</p> <p><i>Links/references to existing comprehensive methodological documentation on specific aspects of the national sources and methods can also be provided</i></p>	<p>The HPI compilation follows methodological recommendation and international standards. The production is in line with the concepts and rules of the Technical Manual on Owner-Occupied Housing and the Commission Regulation on owner-occupied housing price indices.</p> <p>The HPI covers all transactions of dwellings made by households regardless of their final use. This index covers not only the transactions that are new to the household sector (purchasing of new dwellings) but also all that are traded between household (purchases of existing dwellings). Index figures for the purchase of new and existing dwellings are compiled on the basis of full transaction prices (recorded in the contract and approved by the</p>

					<p>National Tax and Customs Administration (NTCA) controlling stamp duty procedure), which are transferred from administrative registers of the NTCA. Transaction prices of homes include the value of land. The HPI is a chain-linked Laspeyres-type index. Data are presented in the form of index numbers (reference year for Eurostat: 2015). The HPI is weighted by the value of new and existing dwelling transactions. The administrative data source contains all transactions.</p> <p>Methodological documentation is available on HCSO website: http://www.ksh.hu/apps/meta.objektum?p_lang=EN&p_menu_id=110&p_almenu_id=101&p_ot_id=100&p_obj_id=BGBA&p_session_id=74982976</p>
				<p>Please specify adherence or deviations from concepts and rules according to international standards and highlight coverage gaps that are of <u>material relevance</u> for the statistics.</p> <p>Please indicate whether actions to address the deviations and coverage gaps are envisaged.</p>	<p>The HPI is compiled in adherence to the concepts and definitions of international standards.</p>
CoP8 Appropriate Statistical procedures	PC8 Appropriate Statistical procedures	8.2/8.2	3.1 3.3 3.4	<p>S12.1 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>S21.1</p> <p>S21.3 <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</i></p>	<p>Data transfer contains settlement code, address and type of property, date of sale, price and price estimates of stamp duty offices and floor area of homes.</p> <p>Data are recorded continuously by NTCA, in certain cases months after the property transfer, therefore the arrival of records may last 5-6 quarters long after the reference period.</p> <p>Processing of incoming data starts with check of completeness. Missing floor area data are imputed with regression estimation.</p>

				<p>S 21.5 -6</p> <p><i>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>Other variables are generally complete, however some 1-2% of records have to be deleted due missing data.</p> <p>Analysis of data is carried out with log linear regression model. Major data used in this model: floor area of the given dwelling, character of the building, specific geographical, administrative and income indicators of the given settlement (or district in Budapest).</p> <p>Based on the findings of the first model estimation around 5% of dwellings are filtered out as outliers and excluded from further index calculations. After the exclusion of outliers, based on repeated model estimation, changes in prices are broken down by composition effect and pure changes in prices. As a result of the log linear method the released price indices always result from the geometrical average of the given prices. However, the average prices are always arithmetical averages in publications.</p> <p>http://www.ksh.hu/apps/meta.objektum?p_lang=EN&p_menu_id=110&p_almenu_id=104&p_ot_id=100&p_obj_id=BGBA&p_session_id=74982976</p>
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<i>Statistical Output</i>	<i>Statistical Output</i>	<i>CoP/ PC</i>	<i>IMF DQ AF</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>HPI is used by many users:</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 - information on price developments for general public - for international comparison - information on local price levels and changes for estate agents
CoP12 Accuracy and reliability	PC12 Accuracy and reliability (including stability)	12.1/1 2.1	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 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>By the time of finalisation of annual data stock (i.e. on the 10th month of the following year) practically all transactions' data arrive.</p> <p>Published data have been calculated by a uniform methodology since 2007, data-series are fully comparable from the first quarter of that year.</p> <p>The applied methodology is in accordance with EUROSTAT recommendations, consequently fully comparable with other countries' similar indices.</p> <p>First quarterly releases are based on the available data of transactions which is generally less than half of the final number of all transactions. For that reason, the first estimations may significantly differ from final figures. The delayed arrival of data is the only reason of consecutive revisions.</p>

					Please provide a succinct assessment of the level of the statistical discrepancies (“ <i>internal consistency</i> ”)	
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 target dates specified above.	3.3.1 <i>National requirements</i> : HPIs are published together with regional and other specific details on T+115 on HCSO website in Statistical Reflections series. English version is available a week later. There are no substantial delays in announced publication dates. 3.3.2 <i>EU and other international requirements</i> : HPIs are released after one quarter from the end of the reference quarter.
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 (“ <i>external consistency</i> ”). 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.	3.4.1 <i>Consistency with related statistics</i> : Housing price estimates may be confronted house price indices produced by independent organisations, like Hungarian National Bank, MBH http://www.mnb.hu/en/statistics/statistical-data-and-information/statistical-time-series/vi-prices/mnb-house-price-index mbhindex The coherence of quarterly and annual indices is assured by the identical data-source and methodology.
					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 “ <i>Time</i> ” and back data consistency: from 2007 on there are no breaks or inconsistencies in source data. However, some methodological changes have been implemented simultaneously with the 2015 base change: housing market transaction records were linked with information available in the statistical registers of HCSO which meant more accurate information on dwellings sold on the market, i.e. the type of buildings and the type of neighbourhood. The calculation models of the housing market price index

						starting from 2015 are based on these more accurate information.
CoP15 Accessibility and Clarity	PC15 Accessibility and Clarity	15.1/1 5.1	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.	<p>Publication is freely available on HCSO website: https://www.ksh.hu/apps/shop.kiadvany?p_kiadvany_id=1076690&p_temakor_kod=KSH&p_lang=EN methodology is also available there: Publication Repertory - Hungarian Central Statistical Office (ksh.hu)</p> <p>Upon request specific data compilations may be ordered from HCSO. Data protection rules are always considered in those cases, too.</p>