

NEW BUILDING PRICE INDEX – METHODOLOGICAL CARD

| CONCEPT OR VARIABLE | DESCRIPTION |
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| RESEARCH TITLE | NEW BUILDING INDEX PRICE |
| RESEARCH ACRONYM | IPEN (By its acronym in Spanish) |
| BACKGROUND | <p>In 2000, and in order to provide the country with reliable and useful data, DANE constructed two indicators that measure directly the evolution of the housing (IPVN) and building (IPEN) price. This was done using the information from the Building Census (CEED), which was a research project initiated by DANE in 1997 with the ultimate goal to inquire in a specific manner on the construction process, housing price per square meter, and the stage and advance of a project. After that, in 2006, DANE updated the IPVN calculation, by using, instead of the Paasche methodology, the Fisher one instead. This change was done in order to establish the trend in the evolution of new housing prices, comparing the price of the first unit sold in a construction project to the price of the last one sold.</p> |
| GENERAL OBJECTIVE | To establish the trend in the prices of new buildings from the moment they are under construction to the time when the project is sold out. |
| SPECIFIC OBJECTIVES | <p>To establish the evolution of new building price, still under construction, for the national totals and according to their type.</p> <p>To quantify the evolution of the building price, whether they are intended for residential or non-residential purposes.</p> <p>To generate the aggregated results for the national totals, classifying them in marketable and non-marketable.</p> <p>To produce indexes for the urban and metropolitan areas, classifying them in marketable and non-marketable.</p> <p>To provide the public and economic agents with prompt and reliable statistic information that will guide them in the decision making process.</p> |
| BASIC DEFINITIONS | <ul style="list-style-type: none"> - Building: Construction project whose destination is either residential or commercial. - Built Area: It represents the meters of the construction. It only includes covered areas, either private or for public use. - Residential buildings: Buildings that are under construction and that have a residential purpose (houses and apartments). -Non-Residential buildings: Buildings that are under construction and that have non-residential purposes (commercial use, storages, offices, education, hotels, hospitals, health centers, public administration, and other similar purposes). -Marketable buildings: Buildings that are under construction and that, according to their characteristics, can be put in the market (houses, apartments, commercial buildings, offices, storages). - New Project: It's the construction of a completely new work; whether or not the grounds where it was built was vacant before. - Sale Price: It corresponds to the price given to a building including its marginal utility. - Direct cost: It refers to the sum of the products of the amount of projects multiplied by their unit price. It normally includes monies such as materials, direct labor, and equipment. |
| THEMATIC COVERAGE | With the use of the index, it is intended to establish the trends in the price of new buildings from the moment when the construction process starts up to the moment |

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| | <p>the project is sold out.</p> <p>Reference Basket: It is made up by the ten purposes used by the Building Census classification. They are: 1- apartments, 2-houses, 3-commercial buildings, 4- offices, 5- storages, 6- education, 7-hotels, 8-hospitals and health center, 9-public administration, 10-other purposes not listed.</p> |
| TYPE OF RESEARCH | Statistics originated by the Building Census |
| VARIABLES AND INDICATORS | <p>Classification Variables:</p> <p>1- Purpose: It corresponds to the building type, whether residential or non-residential</p> <p>2- Urban and metropolitan areas</p> <p>3- Use: This specific variable is related to the construction purpose; whether it is for sale or for private use.</p> <p>Study Variables:</p> <p>Square meter sales price: It corresponds to the value in thousand pesos of the square meter of a project under construction.</p> <p>Total built area: It corresponds to the number of square meters of the project. This area includes, technically speaking, only the covered areas in the buildings, whether they are intended for the public or private uses.</p> <p>Calculated Variables:</p> <p>They are the Fisher index prices at the different disaggregation levels.</p> |
| ESTIMATING PARAMETERS | Does not apply |
| SCOPE OF STUDY | The total of the building projects that at the moment of the census are at any stage of the construction process, as well as those that have concluded their activity or have been sold out. |
| POPULATION AND SAMPLING | The total of the housing projects that at the moment of the census are at any stage of the construction process; as well as those that have concluded their activity and have not been sold yet, both in urban and metropolitan areas. |
| STATISTICAL UNITS OF OBSERVATION, SAMPLING, AND ANALYSIS | <p>Observation Units: The square meter cost of the projects being built and/or to the sale of the last unit in it.</p> <p>Response Unit: Show room, project manager, engineer.</p> <p>Analysis Unit: The units in a construction project classified according to the use they will have.</p> |
| AMOUNT OF PRIMARY AND SECONDARY SOURCES | An average of 13,000 projects that are visited every three months by the Building Census. |
| STATISTICAL FRAMEWORK | Does not apply |
| PRECISION REQUIREMENTS | Does not apply |
| SAMPLING DESIGN | Does not apply |
| TYPE OF SAMPLE | Does not apply |
| SELECTION METHOD | Does not apply |
| SAMPLE SIZE | Does not apply |
| CONSERVATION OF SAMPLE | Does not apply |
| QUALITY INDICATORS | Reliability and Quality indicator |
| GEOGRAPHIC COVERAGE | Urban areas, for a total of 23 municipal areas: |

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| | <p>AU Armenia: Armenia</p> <p>AU Barranquilla: Barranquilla and Soledad</p> <p>AU Bogota: Bogota and Soacha</p> <p>AU Bucaramanga: Bucaramanga, Giron, Floridablanca, and Piedecuesta</p> <p>AU Cali: Cali and Yumbo</p> <p>AM Medellin: Medellin, Bello, Envigado, Itagui, Barbosa, Copacabana, Caldas, La Estrella, Girardota, and Sabaneta</p> <p>AU Pereira: Pereira and Dosquebradas</p> <p>(AU is the acronym in Spanish for Urban Area; AM is the acronym for Metropolitan Area)</p> |
| REFERENCE PERIOD | The information is collected by CEED every three months (January, April, July, and October every year) |
| COLLECTION PERIOD | The collection and census operations are conducted in the months already established: January, April, July, and October. |
| DISAGGREGATION OF RESULTS | <p>Thematic: National index, according to the purpose of the building.</p> <p>Geographic: Metropolitan and urban areas.</p> |
| COLLECTION METHOD | Does not apply |
| AVAILABLE YEARS AND PERIODS | Since the first quarter of 1997 up to the date. |
| MEANS OF DISSEMINATION | Press Bulletin, Press Release, Statistic Bulletin, and DANE's web page. |
| COMPUTER SYSTEMS: A TOOL FOR DEVELOPMENT | SAS |
| COMPUTER SYSTEMS: DEVELOPED MODULES | In process |
| COMPUTER SYSTEMS: DEVELOPMENT ARCHITECTURE | Does not apply |
| COMPUTER SYSTEMS: DEVELOPMENT LEVEL | Intermediate |
| PUBLICATION | Bulletins, Internet, and Statistic Bulletin. |