

Experience in the 2021 International Comparison Program Implementation



I. Administrative Set-Up

The Price Statistics Department, General Statistics Office (GSO), implemented the ICP activity. The director of the Price Statistics Department was nominated as the national coordinator, while the National Accounts System Department director was the deputy national coordinator.

The Price Statistics Department developed plans, prepared the questionnaires, and provided training to guide statistics departments in collecting ICP price information. The department was also tasked to review and analyze data and coordinate with other units to conduct activities for the 2021 ICP.

In 2020, the GSO replaced the national coordinator and deputy national coordinator following the changes in the directors of the Price Statistics Department and National Accounts System Department.

Because of the impact of the coronavirus disease (COVID-19) pandemic, ICP prices were collected in the first quarter (Q1) of 2020 and throughout Q2, Q3, and Q4 of 2021. The ICP prices from Q1 of 2020 were extrapolated to Q1 of 2021 to maintain consistency.

II. Use of Existing Infrastructure in Collecting International Comparison Program Data

The GSO ICP team reviewed and built the list of ICP items for price surveys in Viet Nam, including household consumption, machinery and equipment, construction, and housing rental. Based on that list, the provincial statistics offices built local lists by reviewing the products sold in their province and, after completing the product lists, reviewed the items for price collection.

The ICP data collection for the household sector was integrated into the consumer price index (CPI) survey. For household consumption, prices of 215 items collected for the CPI were directly used for the ICP.

Some housing rental and volume data were obtained from the 2018 Household Living Standards Survey and the 2018 Viet Nam Intercensal Population and Housing Survey. Administrative sources were used for government compensation data, including data from the Ministry of Planning and Investment, the Ministry of Finance, and the Ministry of Health.

A government budget was allocated to carry out ICP activities.

III. Survey Framework

Prices were collected in urban and rural areas of eight major cities and provinces, representing the economic regions.

Price collection was conducted monthly for household items: food and foodstuffs were priced from the 8th to the 14th of each month, while nonfood items were priced quarterly over the same dates.

The consumer price survey network was collected in eight localities and included approximately 3,348 stores of various types, such as market stalls, grocery stores, small shops, supermarkets, and department stores. Overall, the stores selected operated in a fixed position on main streets and were in crowded and accessible areas frequented by households to purchase goods and services. Data on machinery and equipment were collected from dealers and distributors.



Construction and machinery and equipment items were surveyed in Q3 2021 in Hanoi and Ho Chi Minh City. A survey on housing rental was conducted for the ICP in Q2 of 2021, covering Ho Chi Minh City and Ha Noi.

IV. Gross Domestic Product Expenditure Values

GDP expenditure values were provided for 151 basic headings from 2017 to 2021. Four basic headings were not available: narcotics, combined passenger transport, prostitution, and acquisitions less disposals of valuables.

Different sources were used to disaggregate Viet Nam's GDP into basic headings. These included 2016 and 2020 supply and use tables; published annual and quarterly GDP by expenditure; exports and imports data from the State Bank of Viet Nam and Viet Nam Customs; 2018 and 2020 Viet Nam Household Living Standard Surveys; investment capital surveys; annual construction surveys; annual surveys of non-agricultural, forestry, and fishery individual production and business households; enterprise surveys; travel investigation; and other sources.

Individual consumption expenditure by households. The results of the Viet Nam Household Living Standard Survey were used to split the household consumption components into group and class estimates, which were further broken down into basic heading estimates using the ratios from the supply and use tables. The final consumption of households was mainly based on the supply and use tables, supplemented by data from sources such as the Viet Nam Household Living Standard Survey and total retail sales and service revenue. The survey conducted to compile the supply and use tables gathered information for the final consumption of households by province, city, and urban and rural areas. This covered the final consumption of goods and services purchased in the market, final consumption of self-sufficiency products, depreciation of self-owned and residential houses by type of house, and final consumer financial intermediation services. The household final consumption was then calculated by 164 products and aggregated to 12 categories: (i) food and non-alcoholic beverages; (ii) alcoholic beverages, tobacco, and narcotics; (iii) clothing and footwear; (iv) housing, water, electricity, gas, and other fuels; (v) furnishings, household equipment, and routine household maintenance; (vi) health; (vii) transport; (viii) communication; (ix) recreation and culture; (x) education; (xi) restaurants and hotels; and (xii) miscellaneous goods and services.

The COVID-19 pandemic significantly affected Viet Nam's economy in 2020 and 2021, which posed challenges in collecting household final consumption data because of social distancing measures. As a result, the review and synthesis of data on final consumption expenditure of households were also affected.

The structure of final consumption expenditure of households underwent substantial changes compared to the pre-COVID-19 period. Household final consumption spending on products experienced significant decreases, such as transportation activities, food services, and tourism activities. However, spending on medicine, medical services, and food products increased.

Individual consumption expenditure by nonprofit institutions serving households (NPISH). The NPISH was not published in official national accounts because of limited information sources. However, for ICP purposes, the NPISH was compiled from the supply and use tables updated in 2016 and 2020.

Government final consumption expenditure. Government final consumption expenditure data were mainly based on the annual state budget revenue and expenditure reports the Ministry of Finance provided. After calculating the total government final consumption expenditure, the GSO ICP team estimated the main aggregates, including the individual and collective consumption expenditure by government. In 2020 and 2021, because of the impact of the COVID-19 pandemic, the state's final consumption expenditure on health significantly increased to support anti-epidemic efforts.

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Gross capital formation. This was derived using various data sources, including the implemented investment capital survey, construction surveys, and supply and use tables, which were updated in 2016 and 2020.

Export and import of goods and services. Data for export and import of goods and services were compiled from customs and tourist spending surveys and administrative records from the State Bank of Viet Nam.

V. Data Validation and Quality Control

Data were entered through the ICP Asia Pacific Software Suite (ICP APSS), a computer program provided by the Asian Development Bank (ADB). Provincial statistics offices sent data to the GSO on the 25th of each month, which was then carefully checked for outliers and other data issues using the coefficient of variation and minimum-to-maximum ratio. Prices were also compared for some items in the 2017 and 2021 ICP rounds. To identify unusual fluctuations, prices in the ICP were compared to the consumer price fluctuations in the 2017 and 2021 CPIs. After the final data were aggregated to the national average and submitted to ADB for intereconomy validations, some data issues were not easily resolved because of insufficient information, as noted by the coordinator who re-checked the raw data. Any necessary revisions or findings were then communicated to ADB.

VI. International Comparison Program Price Collection Tools

The ICP APSS met most users' data entry, validation, and analysis needs. Survey questionnaires were translated into Vietnamese. Enhancing the software compatibility of the ICP APSS with various computer specifications will make the installation process easier in future rounds of the ICP.

The GSO ICP team used price collection tools for machinery and equipment and construction. Through the tools, price collectors could collect prices directly from the outlet or company.

VII. Challenges in the International Comparison Program Implementation

Despite the basic and general structured product descriptions in the ICP product catalogue, some items were not readily available in Viet Nam. Additionally, the requirement for items to be an "exact match" meant that many items were only available in urban areas. Many items were also not entirely accurate in quality and quantity as specified in the catalogue.

The GSO ICP team also faced difficulties finding suitable machinery and equipment products. Some of the products specified by the ICP required unique models that were not readily found in Viet Nam. Aside from the model-specific products, economies were also needed to price "unspecified" items with similar specifications, making it impossible to price many items. Vehicles may have very similar specifications but different model numbers in Viet Nam.

Because of the impact of the COVID-19 pandemic, many stores in some localities were closed as a precautionary measure. Since investigators could not collect prices directly from the stores, alternative methods such as phone calls, emails, or online channels were used for price collection.



VIII. Lessons Learned and Future Directions

The ICP helped price statisticians in Viet Nam improve their ability to analyze, review, and compare data between groups and localities. With new ICP tools and methods, the GSO improved its capacity to conduct price surveys in Viet Nam. These were especially helpful in laying the framework for estimating subnational PPPs. With a seed fund from ADB, the GSO acquired computer equipment and software necessary for ICP activities.

ICP workshops provided a valuable platform for participating economies to share experiences, which improved the quality of price data. Meetings with international experts in different fields—such as machinery and equipment, construction, and housing—helped the GSO ICP team understand product specifications and price collection methods.

The GSO has integrated ICP activities into the CPI price survey. For product groups with product specifications the same as those in the ICP list, the GSO plans to directly obtain the prices from the CPI without needing a separate survey for the ICP.

The assistance provided by international experts during the training on machinery and equipment was well received. The detailed guidelines helped GSO staff identify and collect prices for the most suitable goods according to ICP product specifications, determine what kind of prices were best suited to collect, and handle changes in the quality and design of items. With the knowledge gained from the training, the quality of price data has significantly improved.

For future rounds of ICP, the GSO looks forward to attending intensive training on price data validations and gaining deeper knowledge about PPP calculation methods at the regional level, particularly regarding handling special cases. The GSO ICP team also hopes to sooner align Viet Nam's ICP implementation plan with plans for Asia and the Pacific.

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Annex 2: List of Members of Core International Comparison Program Team (General Statistics Office)

Name	Title	Responsibility
Nguyen Thu Oanh	Director, Price Statistics Department	National Coordinator
Nguyen Thi Mai Hanh	Director, National Accounts Department	Deputy National Coordinator
Ta Thi Thu Viet	Deputy Director, Price Statistics Department	Household Consumption, Construction, Housing Rental
Dinh Thi Thuy Phuong	Deputy Director, Price Statistics Department	Government Compensation
Nguyen Thi Thu Huyen	Senior Statistician, Price Statistics Department	Machinery and Equipment
Vu Thi Thanh Thuy	Senior Statistician, Price Statistics Department	Government Compensation
Nguyen Thi Thu	Statistician, Price Statistics Department	Construction
Le Manh Quan	Statistician, Price Statistics Department	Household Consumption
Nguyen Thi Huyen	Statistician, Price Statistics Department	Housing Rental, Housing Volume
Ngo Nhu Ve	Statistician of the National Accounts Department	National Accounts
Nguyen Phuong Anh	Senior Statistician of the National Accounts Department	National Accounts