

# Assessment of sources and methods used in the provision of basic information for Purchasing Power Parities (PPPs)

**COUNTRY: Czechia** 

2023



# CONTEXT

- 1. This report is written in the context of the implementation of article 7 (on quality criteria and control) of Regulation (EC) No 1445/2007 of the European Parliament and of the Council of 11 December 2007 establishing common rules for the provision of basic information on Purchasing Power Parities and for their calculation and dissemination (the "PPP Regulation").
- The PPP Regulation requires all Member States to maintain documentation which gives a full description of the manner in which the Regulation has been implemented (the "PPP Inventory"). It requires Eurostat to assess each Member States' compliance with the PPP Regulation at least once every six years and to publish a report, based on the assessment, on its website.
- 3. The current assessment report is based on the information presented by the Czech Statistical Office (CZSO) in the "PPP Inventory of sources and methods", version January 2023, as well as on other data and reports prepared in the context of the PPP programme. In addition, information provided during a videoconference on 12 October 2023 is taken into account.

#### **ORGANISATIONAL ISSUES**

4. In addition to the overall coordination of the PPP exercise in Czechia, the Price Statistics Department is in charge of the surveys on consumer goods and services, housing, energy, hospitals, equipment goods and construction, as well as temporal and spatial adjustment factors. The surveys on consumer goods and services are carried out by CZSO staff, while the surveys on equipment goods, construction and hospital services are outsourced to external parties.

The National Accounts Department is responsible for expenditure weights, housing, compensation of government employees (salaries), VAT on capital goods, and tips. For the salary questionnaire, the National Accounts Department cooperates with the Research Institute for Labour and Social Affairs. All CZSO staff contributing to the PPP exercise do so on a part-time basis. There is no full-time national coordinator.

There is no specific dissemination policy in place. Certain PPP-based indicators, like GDP per capital in PPS, are published in general CZSO publications.

## FINDINGS BY PPP SURVEY

## Consumer goods and services

The preview and pre-survey are carried out by permanent staff of the Price Statistics Department, while most price collection is done by Field Surveys unit of the Regional Office of the CZSO in the Capital City of Prague. Prices are only collected in the capital. The price collectors are also working for the CPI and have good knowledge of the market. Before each survey, they are briefed on any survey-specific issues. No specific tools are used in the price collection. The attribution of asterisks and the entire intra-country



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validation is carried out by staff in the Price Statistics Department, in consultation with price collectors if required. During inter-country validation, ad hoc Quaranta tables are used actively for comparison with neighbouring countries. Spatial adjustment factors (SAFs) are calculated on the basis of regional CPI data.

The CZSO has access to transaction data from seven big supermarket chains, and intends to partially use transaction data in the 2024 survey on food and beverages.

#### Housing services

5. In national accounts, Czechia uses the stratification approach for flats and the user cost approach for houses. In the PPP exercise, the price approach is used. In order to adapt the national accounts data to the requirements of the PPP questionnaire, certain adaptations are made, notably as concerns the transition from stratification by square meter (NA) to stratification by room (PPP), as well as the central heating criterion, which is not used in national accounts. The basic source of dwelling stock data is the census. For non-census years, survey data is used to estimate new dwellings while the disposal of dwellings is estimated in a model.

The rental market consists of municipal dwellings, cooperative dwellings and private dwellings. Actual rents cover all three market segments. For estimating the imputed rents of owner-occupiers, only private rents are taken into account. Given the use of the user cost approach for houses in national accounts, expenditure per square meter is taken as reflecting market rents in the context of the PPP rents questionnaire.

#### **Compensation of government employees**

6. Salary data is obtained from the Research Institute for Labour and Social Affairs, affiliated with the Ministry of Labour and Social Affairs. The data is extracted from the Average Earnings Information System (ISPV) maintained by the ministry, but the actual data source is the Quarterly Survey of Average Earnings, which is part of the CZSO annual work programme. The data on social contributions is taken from the same source.

## Hospitals

7. Due to its complex nature, this survey has been outsourced to the Institute of Health Information and Statistics, which belongs to the Ministry of Health. This institute collects data from all health insurance companies. The data provided for the PPP exercise is mostly complete, but some issues remain concerning certain cost components which should be excluded from the quasi-prices, notably research and development (R&D) and training. If possible, the CZSO should work with the contractor to ensure that these points are dealt with, and that the data is provided on time each year.

## Education

8. Data from the UNESCO-OECD-Eurostat education database is provided to the countries for checking, which is especially important if there are gaps in the database and Eurostat's PPP team has made imputations. In Czechia, the data for the UOE database is provided by the Ministry of Education, and the CZSO will discuss the PPP data with ministry whenever necessary.



## **Equipment goods**

9. The survey is outsourced to a market research company with long experience in PPP work. The main data source is the subcontractor's network of professionals in the various branches of trade, but information from the Internet is also used, subject to careful checks. Where applicable, there is also some double-checking against statistical data in the CZSO, like e.g. the Producer Price Index or the Import Price Index. The validation process involves both the CZSO and the subcontractor.

## Construction

10. The construction survey is outsourced to a commercial company. They take part not only in pricing the projects, but also in the validation phase. The main data source is a comprehensive database of unit prices for construction works and materials used by construction businesses. This database contains more than 170 000 items of construction works and over 1 000 000 material components, and is the most frequently used source for construction cost assessment in Czechia. The indicative prices are updated twice a year. In addition, the subcontractor has a comprehensive database of currently realised projects which enables the comparison of unit prices from the database with market prices.

## VAT on capital goods

11. Non-deductible VAT is calculated partly from Gross Fixed Capital Formation directly (expenditure including VAT), partly from a combined calculation based on data from supply-use tables and weighted average VAT rates.

## **Expenditure weights**

12. The expenditure weights are prepared by the National Accounts Department. A detailed overview is presented in the PPP inventory. For household consumption expenditure, basic headings that cannot be filled in directly from national accounts data at 4-digit level are in most cases filled in using data from the Household Budget Survey (HBS). For Non-profit Institutions Serving Households and for General Government, there is no need for data below the 4-digit level. The basic heading weights for Gross Fixed Capital Formation are estimated using input-output tables.



## CONCLUSIONS AND SUMMARY OF ACTION POINTS FOR CZSO

Czechia complies well with the PPP Regulation. The data is generally of good quality and the resulting PPPs are plausible. Some potential improvement points raised during the discussions are summarised in the table below.

Торіс	Action points
1 Organisation	Update and streamline the PPP inventory in line with the inventory guidelines.
	Look into ways to increase the visibility of PPP statistics at national level.
2.1 Consumer goods and services	Continue efforts to implement transaction data in the PPP exercise.
2.2 Housing	None.
3.1 Compensation of government employees	Ensure that actual and imputed social contributions are broadly consistent with national accounts (D.121 and D.122) if taken from another source.
3.2 Hospitals	Work with the contractor to ensure that data is provided by the deadline.
	Ensure that research and development, training and education, superannuation and income from private patients in public hospitals are excluded from the prices.
3.3 Education	None.
4.1 Equipment goods	None.
4.2 Construction	None.
4.3 VAT on capital goods	None.
5. Expenditure weights	None.