



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

COUNTRY: Portugal

2022



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").
2. 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 Statistics Portugal in the "PPP Inventory of sources and methods", version January 2022, as well as on other data and reports prepared in the context of the PPP programme. In addition, information provided during a videoconference on 25 March 2022 is taken into account.

ORGANISATIONAL ISSUES

4. The PPP work at Statistics Portugal is fully integrated in the Consumer Price Section, which is part of the National Accounts Department. This organisational arrangement ensures close interaction with the two other statistical domains. The PPP team currently consists of the national coordinator and one officer, the latter also works for the CPI but will take over as PPP coordinator when the current coordinator retires later this year. The plan is to recruit one additional staff member in the near future and to further exploit synergies between the PPP and CPI domains. Price collectors are employed on a freelance basis and provide the input data for the surveys on consumer goods and services. The total amount of work allocated to PPPs in Statistics Portugal is estimated at just under three full-time equivalents per year, including outsourced tasks.
5. The PPP team is responsible for the overall coordination of the PPP exercise. Data for the rents survey and the detailed breakdown of expenditures are compiled by the National Accounts Section, while a unit under the Ministry of the Presidency provides the data on the compensation of government employees. The hospital survey is based on data from the Central Administration of the Health System, which belongs to the Ministry of Health. The two capital goods surveys are outsourced to a commercial company.



FINDINGS BY PPP SURVEY

Consumer goods and services

6. The surveys on consumer goods and services are carried out by the PPP team and a group of experienced price collectors. The price collectors are independent contractors, i.e. not staff of Statistics Portugal. The quality of their work is ensured through briefings and post-collection quality checks of the price data. Price collection takes place in the greater Lisbon area, and follows for the most part a traditional approach. The CPI provides fuel prices for the PPP exercise, and there are plans to extend the use of CPI data to other areas, like flights and hotels. Prices for pharmaceuticals are provided by the National Association of Pharmacies. Efforts to access transaction data have so far not brought the expected results, mostly due to shop chains' reluctance to share the data. Spatial adjustment factors are calculated on the basis of CPI data.
7. Eurostat's release of annual PPP results in December each year is followed up with an article on Statistics Portugal's web.

Housing services

8. Portugal uses the price approach, but as a linking country provides quantity approach data as well. The PPP rents questionnaire is completed by the National Accounts Section in line with NA practice. The imputation method used in National accounts is a regression hedonic model and not a stratification one. Census data on actual rents are extrapolated by data from the CPI rents survey to produce annual figures, while the dwelling stock is updated with data from construction statistics. For the estimation of imputed rents, dwellings belonging to the public sector, dwellings with social or subsidised rents and dwellings with artificially low rents are excluded.

Compensation of government employees

9. The data for the salaries survey is provided by the Directorate-General for Administration and Public Employment, a cross-sectional service of the State Administration which is part of the Ministry of the Presidency. They maintain a database with survey-based data on salaries and wages by post, career and occupation. The survey covers all public entities at central, regional and local level. National accounts provide the data on social contributions, in line with the survey guidelines. The holiday entitlement entered into the PPP questionnaire is the legal minimum; employees' actual holiday requirement depends on age and seniority.

Hospitals

10. The survey is coordinated by Statistics Portugal but the information is supplied by the *Administração Central do Sistema de Saúde* (Health System Central Administration), which manages the central database and calculates the data. All public sector hospitals (except specialised hospitals) are obliged to report data to this database.



Education

11. Spatial volumes and PPPs for education are calculated by Eurostat based on the UNESCO/OECD/Eurostat (UOE) database. Countries are encouraged to check the data with their education experts, especially if Eurostat has made imputations to fill in gaps in the UOE data.

Equipment goods

12. Since 2021, the two surveys on capital goods are outsourced to a commercial company. The company deals primarily with data on construction projects, but is also able to fulfil the requirements of the equipment goods survey. Market information and prices are collected from company websites and by contacting suppliers directly. Installation and transportation costs are usually included in line with the survey guidelines, but discounts often represents a challenge since businesses are reluctant or find it difficult to provide information.

Construction

13. Statistics Portugal's new contractor is an established commercial company operating in the field of supervision and quality control of construction projects. Unit prices for various construction projects are collected from actual companies active in the Portuguese market and entered into a database. This database is the main source of data for the PPP construction survey. For civil engineering works, data is collected from a different company, since the contractor does not have in-house data on these projects.

VAT on capital goods

14. Statistics Portugal confirms that only non-deductible VAT is included.

Expenditure weights

15. The expenditure weights are prepared by the National Accounts Section. Data for the most recent reference year (t) is based on quarterly accounts, while the data for the preceding years (t-1, t-2) are taken from annual accounts. General government expenditure is taken directly from the COFOG questionnaire, while the breakdown for Gross fixed capital formation is obtained from supply-use tables (for equipment) or directly from annual or quarterly accounts (for construction).



CONCLUSIONS AND SUMMARY OF ACTION POINTS FOR STATISTICS PORTUGAL

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

Topic	Action points
1 Organisation	Ensure that sufficient staff resources are available. Continue to explore potential synergies between CPI and PPP.
2.1 Consumer goods and services	Increase efforts to explore and implement new data sources (administrative data, transaction data, web-scraping).
2.2 Housing	None.
3.1 Compensation of government employees	Investigate possible options to improve the data on annual leave.
3.2 Education	Check imputations in the UOE data made by Eurostat for the purpose of the PPP exercise, if applicable.
3.3 Hospitals	None.
4.1 Equipment goods	None.
4.2 Construction	Liaise with the subcontractor to ensure that data on civil engineering works are of sufficient quality and properly validated.
4.3 VAT on capital goods	None.
5. Expenditure weights	None.