

Sample purchasing power calculation

Calculation of the equivalent general purchasing power (PP) in May 2020 of one euro (€) in March 2003:

$$\begin{aligned} PP_{5/2020} (1 \text{ €})_{3/2003} &= \text{€}1 \times \frac{\text{price index}_{2020=100} \text{ 5/2020}}{\text{price index}_{2020=100} \text{ 3/2003}} \\ &= \text{€}1 \times \frac{100.4}{79.0} \\ &\approx \text{€}1.27 \end{aligned}$$

Notes

- The calculated purchasing power equivalent corresponds to the value of goods and services in May 2020 that could be obtained for one euro in March 2003.
- The calculation of purchasing power equivalents is subject to certain limitations. Please refer to the explanatory notes on our website:
<https://www.bundesbank.de/en/statistics/economic-activity-and-prices/producer-and-consumer-prices/purchasing-power-comparisons-of-historical-monetary-amounts-795290#tar-5>
- Purchasing power equivalents for amounts from other years and month can be calculated using the time series of the consumer price index.
Link to the time series of the consumer price index for Germany (2020=100); in the example above, the calculation was performed using the monthly values:
https://www.bundesbank.de/dynamic/action/en/statistics/time-series-databases/time-series-databases/759784/759784?listId=www_ssb_lr_vpi
- The calculations are provided without any guarantee on our part.