

Impact of corona virus pandemic on GDP calculations

The new corona virus pandemic affects the collection and quality of data used for GDP calculations and, through this, the compilation of GDP.

HCSO quantified the impact of the corona virus pandemic on economic growth. The basic assumption of the calculations is that the path of growth of the economy was influenced solely by the situation caused by the pandemic, so the other factors are assumed to be unchanged in the estimation.

As a result of seasonal adjustments with JDemetra+, the economic effects of the new corona virus pandemic on the calendar adjusted volume indices can be calculated compared to the corresponding period of the previous year.

According to the results, the situation caused by the pandemic reduced the calendar adjusted volume index of GDP by 2.79 percentage points for the 1st quarter and by 18 percentage points for the 2nd quarter of 2020.

In the 1st quarter, there was a significant impact only in services, and especially in wholesale and retail trade as well as accommodation and food services activities. From the expenditure approach, the impact was only apparent in the exports of services, which was significant at the same time.

In the 2nd quarter, the impact extended to most industries of the economy. In agriculture as well as financial and insurance activities, the impact of the economic situation caused by the pandemic was not detected. From the expenditure approach, the impact was the most significant in exports and imports, followed by household final consumption expenditure and gross fixed capital formation. The pandemic had no negative economic impact on the actual final consumption of government.

Eurostat has published guidelines and methodological recommendations to address methodological issues in the new situation in an appropriate and single way.

During **seasonal adjustment**, the effect of the corona virus pandemic should be treated as an additive outlier¹.

Since the corona virus pandemic also affects the receipt of short-term, questionnaire-based **statistical data**, it is necessary to rely on data from administrative data sources to a higher extent than before (data from VAT returns and social contribution declarations) during the estimation.²

The corona virus pandemic does not affect the framework of national accounts and the accounting of economic transactions from a fundamental **methodological point of view**, however, in the special situation that has developed, the accounting of a number of economic phenomena, in particular as regards the accounting of non-market services, raised questions. In order to ensure harmonised accounting, Eurostat clarified the issues of non-market output in a separate guide³. Non-market output is typical in the industries of public administration,

¹ https://ec.europa.eu/eurostat/documents/10186/10693286/Time_series_treatment_guidance.pdf

² https://ec.europa.eu/eurostat/documents/10186/10693286/Estimation-imputation_of_missing_data_for_STS.pdf

³ https://ec.europa.eu/eurostat/documents/10186/10693286/Non-market_output_guidance.pdf

education, health and arts, entertainment and other services, where the weight of the government and non-profit institutions serving households is high. In accordance with the previous practice, the economic performance of non-market activities should be determined on cost basis, while the change in volume on the basis of the use of the service. For example, the change in the volume of health care reflects the development of the number of patients in these two institutional sectors.

The guidance on accounting the effects of the new corona virus pandemic on non-market output also covers the accounting of education. The main principle is that a service provided remotely and online is equivalent to a service provided 'physically'. Thus, in the case of education, there is no need for correction to be accounted in volume due to the transition to on-line education. Home teaching by parents is outside the production boundary considered in national accounts and should therefore not be recorded as household production.