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Sensitivity analysis of the Swedish GDP

Abstract

Gross domestic product (GDP) is a composite value of all goods and services produced in a country during a period, usually a year or a quarter. It is internationally well known that the uncertainty of GDP is difficult to measure. However, the uncertainty of GDP is of great interest both internally at Statistics Sweden, and by external users.

One approach to investigate uncertainty is to make sensitivity studies. For GDP this can be done through the framework of supply and use tables. In the supply and use tables relationships between supply and use in the economy as well as prices and volumes in the economy are analyzed at a detailed level. By changing the conditions for values or prices for a given good or service, the overall impact on GDP can be calculated under certain assumptions.

This paper concentrates on effects of price indices; In particular, producer, import and export price indices. Sensitivity analysis has been carried out where some prices have been changed, based on different assumptions, and the impact of these changes on the total GDP has been calculated.

Keywords: GDP, sensitivity analysis