Summary

Recently oil prices have reached some of their historically highest levels in world stock markets and have often been mentioned as one of the main drivers of inflation. In this paper, using input-output tables we estimate the total contribution of oil prices to inflation in Slovenia in 2000-2004. The advantage of this method is that it takes into account the effects of oil price rises on product prices in other sectors, thereby estimating the overall effect on prices resulting from higher oil prices.

The estimates obtained by the input-output model indicate that a 100% rise in oil price contributes approximately 5 percentage points to inflation in Slovenia. The results are in line with the expectations: the model-based estimates were (except for 2002) higher than the contributions estimated by the consumer price index (CPI). The difference between the estimates and actual contributions varied considerably in the analysed years. Such deviations from the expectations can mainly be attributed to the shaping of petroleum product prices that are still under regulation, and partly also to the use of the input-output table from 2001 (for 2002 and 2003) which probably deviates slightly from the output structure in the current period. The model shows that oil price rises had the largest impact directly through the price rises of coke, petroleum products and nuclear fuel, which accounted for approximately two-thirds of the total contribution to inflation, while the final third came from the price rises of other products as a result of higher oil prices. The relatively small sensitivity of prices in other sectors to oil price changes can be explained by their low share of material costs for purchases of products produced by the coke, petroleum products and nuclear fuel sectors.

Key words: input-output analysis, oil, inflation.