Abstract

The correlation between price and output shocks provides information on the nature of macroeconomic shocks. In general, previous research finds that for short forecast horizons the correlation between shocks to real GDP and the GDP deflator are negatively correlated, while shocks to industrial production and the consumer price index are positively correlated. We argue that the positive correlation between industrial production and the consumer price index should be discounted because the goods in the industrial production index are not well matched to the prices in the CPI. The correlation between a measure of output and a mismatched price measure will be biased by the correlation between output and the mismatched price relative to the matched price. Since there is no price index that corresponds to industrial production, we examine the correlation between shocks to prices and output using data on types of expenditures and types of products included in GDP. When price and output indices are closely matched the correlation between shocks is typically small or negative. In contrast, correlations between shocks to output measures containing mostly durable goods and shocks to price indices containing mostly nondurable goods are mostly positive. This difference in signs is the consequence of a negative correlation between the output of durables and the price of nondurables relative to the price of durables. This finding suggests a positive bias in the correlation between Industrial Production and the Consumer Price index and so explains why that correlation is positive, while the GDP and GDP deflator correlation is negative.