We define the aggregate real energy price index as the weighted average of energy prices across all the economic sectors in Saudi Arabia.

Figure 1. Total energy price index for Saudi Arabia (2010=100).

Source: Author’s Calculation.

- Our aggregate real energy index is constructed by averaging the sectoral energy prices and is weighted by each sector’s contribution to the gross domestic product (GDP). The index covers 17 sectors, including the energy end-use sectors (e.g., manufacturing and financial services) and the transformation sectors (e.g., power and refining). The index is adjusted for inflation using the consumer price index, obtained from GaStat (2022).

- Three elements influence this index: changes in energy prices, inflation, and the economic contributions of each of the 17 sectors included in the index. Sharp increases and decreases in the index are mainly driven by increases or decreases in energy prices. By contrast, the more minor fluctuations are driven by inflation and changes in sectoral contributions to the GDP.
• The combined impact of the 2016 and 2018 waves of the energy price reform in Saudi Arabia is particularly evident, as it raised the index to its highest level in over 36 years. (It is worth noting that, because of the adjustments for inflation, the index in 2019 was only 18.6% higher than it was in 2000, despite nominal energy prices in 2019 being markedly higher.)

References


Author: Abdulelah Darandary and Anwar Gasim