

# The Capacity Utilization and the Effect of Energy Price Shock in Japan \*

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## Abstract

It has been said that the severe economic recession after the first oil crisis was triggered by the sharp rise in relative price of energy. In this paper, a simple neoclassical growth model with energy as an input for production is constructed and examined quantitatively whether the conventional wisdom mentioned above is true. The benchmark model shows that the sharp rise in relative price of energy has a limited role on explaining the depressed value added after 1974 due to the small energy share of value added. It is shown, however, that once an endogenous capacity utilization is incorporated in the model, the increase in relative price of energy can account for the severe recession after 1974 reasonably well.

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