

The Imperfect Price-Reversibility of World Oil Demand

by
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Abstract:

This paper analyzes the imperfect price-reversibility ("hysteresis") of oil demand in the OECD and LDC.

The oil demand reductions following the oil price increases of the 1970's will not be completely reversed by the price cuts of the 1980's. The response to price cuts in the 1980's is perhaps only one-fifth that for price increases in the 1970's. This has dramatic implications for projections of oil demand, especially under low-price assumptions.

We also consider the demand effects of a price recovery in the 1990's (due either to OPEC or to a carbon tax), specifically whether the effects would be as large as for the price increases of the 1970's or only as large as the smaller demand reversals of the 1980's. On this the results are inconclusive.

Finally, we demonstrate the implications of wrongly assuming that demand is perfectly price-reversible. Such an assumption will grossly overestimate the demand response to price declines of the 1980's, and it will underestimate the effect of income growth on future demand. Moreover, it will inevitably mischaracterize the demand response to a price recovery.

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