27 January 1983

Comments on Treasury Analyses of a 40% Drop in the Price of OPEC Oil

1. We have focused our attention on the two OASIA studies, "Impact on the World Macroeconomic Situation" and "Impact on the Energy Industry". We also have some comments on the paper entitled "Economic Impact on the United States", but we have not attempted to make judgements on the study dealing with the effect of a $20 oil price on major US commercial banks.

Impact on the World Macroeconomic Situation

2. Although we use a somewhat different technique (that of formal econometric modeling) and differ to a minor degree in numerical results, our assessment of the macroeconomic impact on the OECD of a $20 oil price is basically the same as that in the Treasury study. Some Treasury estimates made at the time of the study (August 1982) are in need of revision. For instance, we now believe that increases in OECD oil production and further stock drawdowns are likely to place net OECD oil imports in the range of 17-18 mb/d in 1983 rather than 20 mb/d, a judgement Treasury staff might well agree with at this juncture. In any event, this does not cause our conclusions to differ materially from those of Treasury, as may be seen from the following table:

Effects on the OECD of a 40% Decline in OPEC Oil Prices

	Percent Change in Real GNP	Change in Inflation Rate	Change in Current Account Balance (Billion Dollars)
Treasury Estimate*	+1.5	-2.0	+35
CIA Estimate**	+2.0	-1.8	+36

* Oil Study, Section 3, page 11
** The Global Implications of a Possible Price Decline, pages 11-12. (The current account figure was not published.)

3. Both the Treasury approach and our's recognize that the sharp drop in the oil price raises real incomes in the OECD, which in turn causes higher real spending and output within existing monetary constraints. The higher spending in turn reinforces the initial income effect, causing further positive repercussions on spending and output. These effects take place both within national economies and across borders through trade linkages.

4. While the Treasury study treats the initial and secondary effects separately for analytical purposes, we normally solve our model for all effects simultaneously. Several years ago, when we experimented with our second generation linked model by imposing an oil price shock with and without the normal trade linkages, we found that the existence of the linkages added considerably to the impact of the shock. If Treasury staff would find the results of interest, we could perform the same experiment on our current, third-generation model.

Impact on the Energy Industry

5. Here too, we are in general agreement with the Treasury analysis, although again we may differ on minor points. If the oil price were to fall to $20 in 1983 and remain there for several years, we question whether Saudi Arabia would be able or willing to raise output to 9.6 mb/d in 1985 and 10.95 mb/d in 1986. One problem is that Riyadh is already reducing operating capacity in order to hold down ARAMCO expenditures. If prices decline sharply and investment outlays are further reduced, the erosion in capacity could accelerate. In general, however, we agree that the oil market could tighten considerably in the years following an oil price decline, as conservation weakens and global economic growth strengthens.

Economic Impact on the United States

6. Our chief concern in this study is the importance attached to the ratio of energy consumption to real GNP derived from work by Hudson and Jorgenson. Our difficulty is that the energy-GNP ratio changes over time; the Treasury report, however, assumes no change in the relationship following the oil price decline. This, in effect, assumes no change in the relative level of conservation.

7. In addition to this issue, we have difficulty following the links between the analysis and the numerical conclusions. The problem is most apparent in the first paragraph on page 10, where an estimated impact on GNP of 1 to 1.5 percent is proferred, without indicating how it was derived.