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THE ECONOMIC IMPACT
OF THE
PRESIDENT'S 39 MONTH DECONTROL
PROPOSAL

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OFFICE OF ANALYSIS
FEDERAL ENERGY ADMINISTRATION

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EXECUTIVE SUMMARY

Background

The President has proposed a gradual removal of price controls from "old" crude oil, at the rate of 1 1/2 percent a month for 12 months, 2 1/2 percent a month for the next 12 months, and 3 1/2 percent a month for the next 15 months ending November 30, 1978. In addition, it is proposed that there be a cap on all new oil of \$11.50, on September 1, 1975, and that the cap will increase at 5¢ per month beginning October 1, 1975. Initially this will cause a decrease in the price of crude oil at the refinery, but the average price will increase more rapidly as the rate of decontrol increases. In the middle of 1976, the average price of crude oil due to the phased decontrol program will be approximately equal to that under the case of continued controls. The ceiling would ensure that further OPEC price increases would not trigger additional domestic crude oil price increases during the phase-out period. Finally, the President has proposed other energy taxes, including a windfall profits tax on the revenues that accrue to producers as a function of the decontrol of old oil. The revenues from these taxes would be returned to consumers to maintain consumer purchasing power in the face of higher petroleum prices.

The reason for decontrolling old oil is to remove regulations and the two-tier price system from the petroleum industry market. These regulations have tended to inhibit the production of new supplies of crude oil.

Benefits of Decontrol

With the decontrol of old oil, additional supplies of domestic crude will be forthcoming over the next decade. In addition, the eventually higher energy prices caused by decontrol will stimulate additional energy conservation by 1978.

Including the supply aspects of the program that the President has proposed, approximately 1.24 million barrels per day by 1977 would be saved in imports over and above what would have occurred without any tariffs or other components of the President's program.

In 1977 the cost of a future embargo without a program would be approximately \$33 billion, whereas the cost of an embargo with the President's program would be approximately \$12 billion. By 1985, the cost of an embargo without the President's program would be approximately \$110 billion whereas with the President's program there would be essentially no costs imposed on the United States economy by an Arab oil embargo. In addition, the reduced reliance on imports will reduce the dollar outflow from the United States economy for the purchase of foreign oil. In 1978 approximately \$7 billion more would flow out of the economy without the President's program than with the President's program just in terms of higher cost of imported crude oil. By 1985 the additional dollar outflow from the economy without the President's program would be approximately \$41 billion. These dollar outflows clearly would have an adverse effect on the balance of payments and hence would exert adverse pressure on the value of the American dollar overseas.

Costs of Decontrol

The phased decontrol of old oil will increase petroleum prices to the refiners and hence to consumers. By the end of 1977 total costs to consumers per household will be approximately \$30 annually. Direct costs will be approximately \$14 and indirect costs approximately \$16 per household. Due to the nature of the program, costs will be reduced for the remainder of 1975 by approximately \$8 per household. Gasoline prices will initially decrease and then increase by approximately 2¢ per gallon by the end of 1977 and 5¢ to 6¢ per gallon by the end of 1978.

In order to ascertain the impact of the President's proposed decontrol program on the national economy, a macro-economic simulation was performed using the President's program with respect to energy prices as a basic input. This analysis indicated that the President's program would insignificantly affect the unemployment level in 1975 and would decrease the unemployment rate (over what it would have been without any program) by approximately .1 percent during 1976 and an average of about .1 percent during 1977. The rate of inflation would be increased by less than one-half of one percent through 1977. However, the windfall profits tax and the import fees would be rebated to consumers and hence consumer purchasing power would be maintained in the face of these higher prices. The analysis showed that real GNP would increase on average in 1976 and 1977 and would probably decrease insignificantly in 1978.

In doing large simulations of an economy as complex as the United States' economy, there are considerable uncertainties involved. The levels of impact determined are small relative to the other uncertainties and various small changes in other policy variable and would eliminate the adverse effects indicated. For example, small changes in monetary policy could completely negate any adverse effects of the President's program both on real GNP and prices and on unemployment in 1978. In addition, the level of the effect on real GNP is clearly within the random variations of the performance of the economy as measured by analytical models. And in fact, the statistical error of national income accounts is close to the level of the effect on real GNP.

Conclusions

In summary, the President's proposed phased decontrol of old oil together with a windfall profits tax and the rebates to consumers of the windfall profits revenues and the crude and import fees collected will dampen demand and increase supply by 1978, hence reducing U.S. reliance on insecure imports without adverse economic impact. This, in turn, reduces our vulnerability to future embargoes.

I. INTRODUCTION

The President has announced a new plan to gradually decontrol the price of old oil (oil now under Federal price controls) over a 39-month period. In addition, the President has announced for the same period a ceiling on the price of all uncontrolled domestic oil (other than from wells which produce less than 10 barrels per day which are currently exempted from controls) of approximately \$11.50, increasing at \$.05 per month beginning October 1, 1975.

The President also called for enactment of energy taxes including a windfall profits tax (with appropriate plowback provisions) and a 3-month extension of the Emergency Petroleum Allocation Act to implement the decontrol plan. The energy taxes collected would be rebated to each energy consumer. These actions will result in substantial energy savings, provide an incentive for expanding domestic production, and ultimately remove a complex and counter-productive set of regulations.

Under the President's plan, imports will be reduced and prices will increase gradually. Phased decontrol will thus not impede economic recovery.

Background

The price of old oil is currently controlled at an average of about \$5.25 per barrel, while the average price of new domestic oil is now uncontrolled and is about \$12.50. Controlled oil currently represents about 60 percent of domestic oil production. New, released, and stripper well oil account for the remainder. Domestic oil production has been declining since 1970 (it is down 11 percent since early 1973) and is now about 8.4 million barrels per day (MMB/D), a decline of more than 500,000 barrels per day from last year (see chart 1). Imports are predicted to average about 6.5 million B/D, but are expected to rise to up to 7 MB/D by the end of this year, which is about 40 percent of domestic consumption. Imports are expected to grow to an average of more than 7.5 MMB/D in 1977, if no action is taken to reduce demand or increase supply. The added imports in the next two years are expected to come mainly from Arab nations and could double our vulnerability to an embargo (see chart 2).

DOMESTIC PRODUCTION OF CRUDE OIL

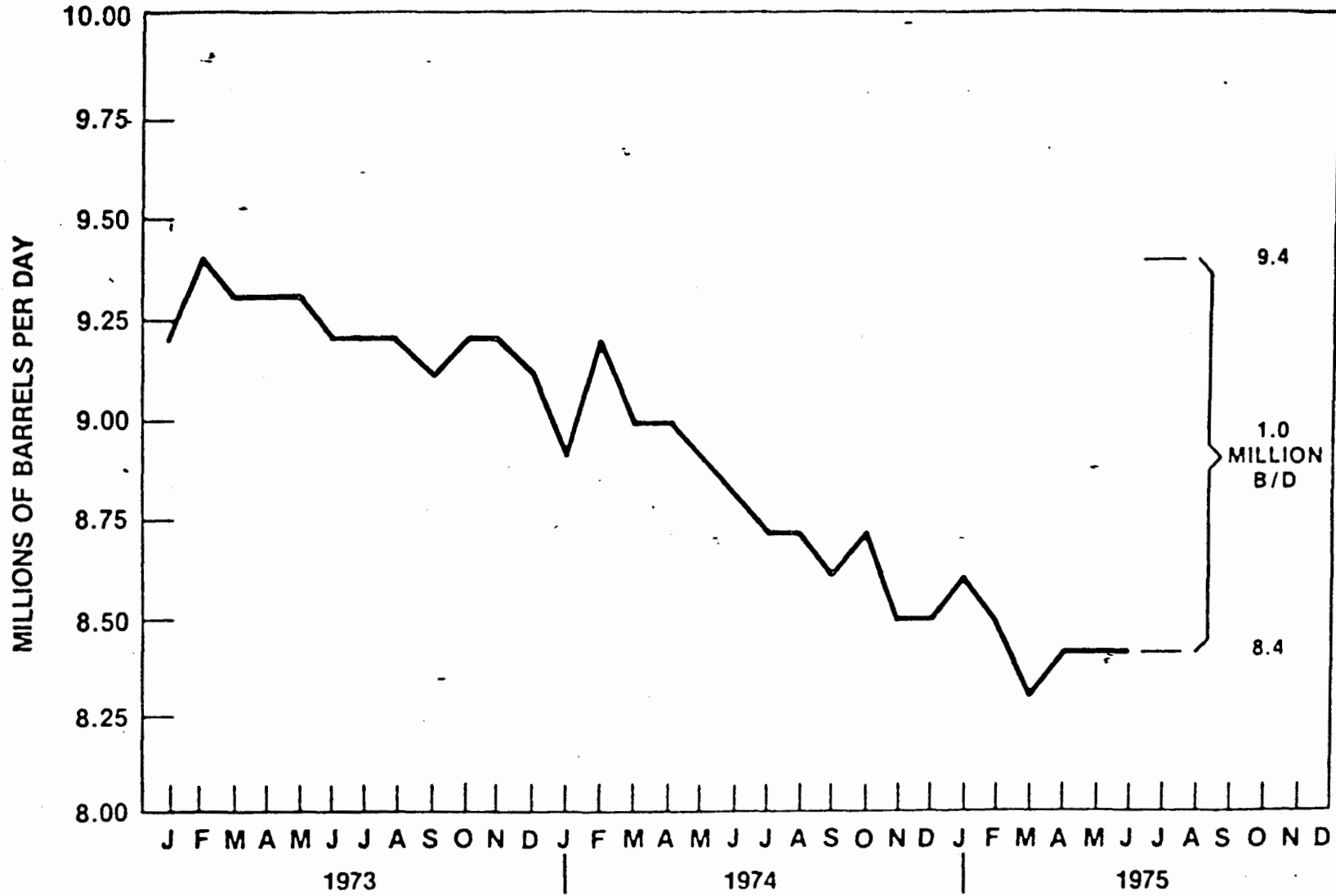
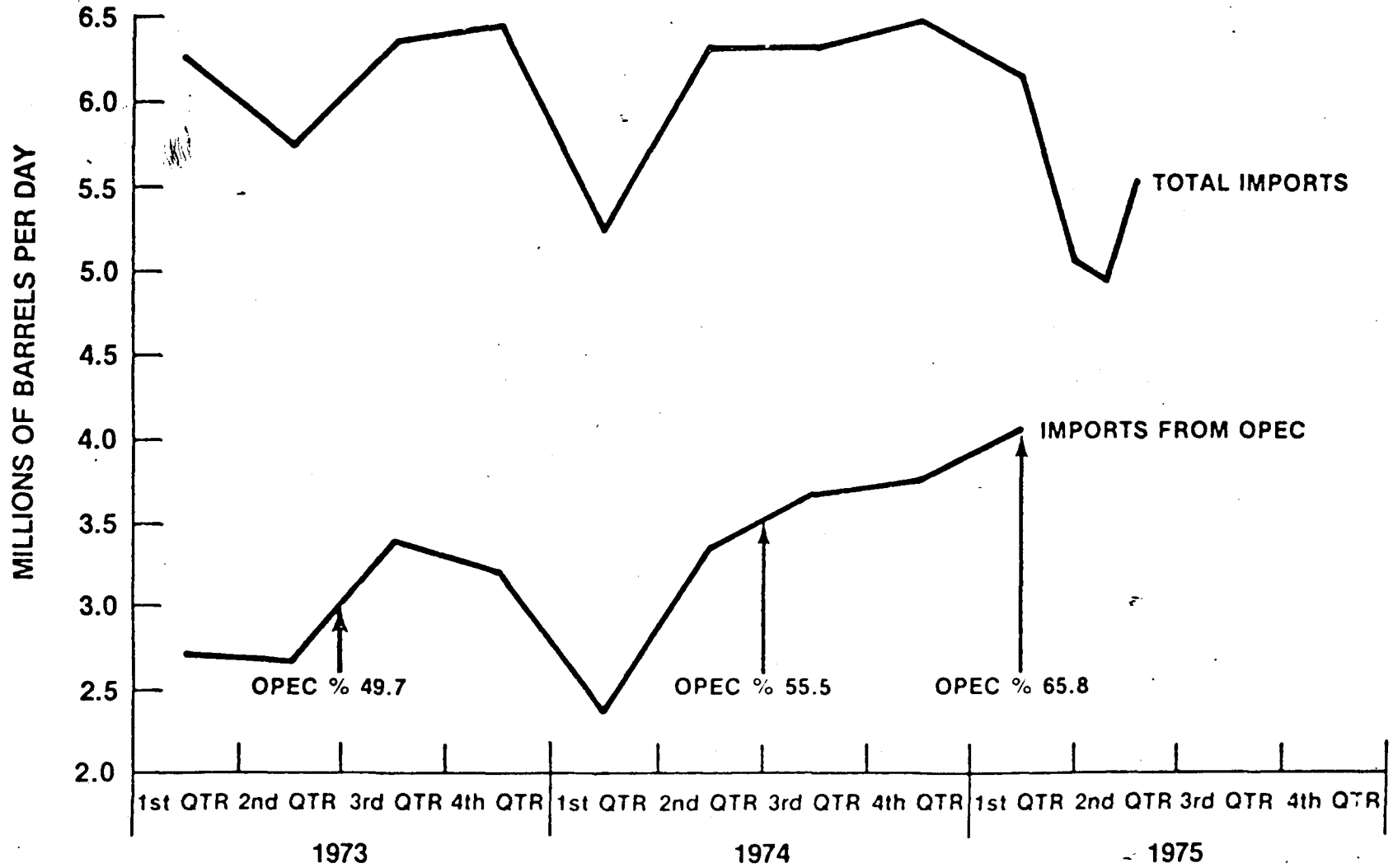


CHART 2

IMPORTS OF CRUDE OIL AND PETROLEUM PRODUCTS



The Emergency Petroleum Allocation Act of 1973, which requires the control of prices and distribution of oil expires on August 31, 1975. The expiration of this Act would bring about immediate decontrol. The President originally proposed in his State of the Union Address immediate and total decontrol in April 1975. In response to concerns expressed by some Members of Congress, on April 30, 1975, the President directed FEA to hold public hearings on a phased decontrol plan in May. As a result, the President submitted a 30-month decontrol plan to the Congress on July 14, 1975, which also contained a \$13.50 per barrel ceiling on domestic oil. The 30-month plan was disapproved by the House of Representatives on July 22.

Objectives

The plan announced by the President is designed to meet the following objectives:

- Achieve a major reduction in imports by providing an incentive to increase domestic production and by cutting demand through increased conservation.
- Reduce the power of foreign oil cartels to control the prices Americans pay for energy.
- Provide a compromise decontrol plan acceptable to the Congress.
- Remove over a 39-month period the complex, counter-productive, and administratively burdensome government regulations.
- Eliminate excessive oil company profits and minimize consumer and economic impact by rebating energy taxes.

This proposal by the President would gradually remove price controls from all currently controlled oil over a 39-month period beginning September 1 of this year and ending in November 1978. Under this plan, the amount of oil under controls is decreased by an additional 1.5 percent per month of a decontrol base production level (which is the

average monthly production of old oil during April, May, and June of this year) for the first year beginning September 1, 1975; 2.5 percent per month for the second year; and 3.5 percent per month for the remaining 15 months.

The 39-month ceiling on prices for domestic crude oil proposed by the President would be equal to the old oil ceiling price plus \$6.25 per barrel, for a total of approximately \$11.50 per barrel. Prices of domestic oil produced from stripper wells--wells producing less than 10 barrels per day--are not now controlled nor would they be under the President's proposal. The President also announced that along with the decontrol plan, he would urge the Congress to enact his proposed energy taxes including a windfall profits tax with appropriate plowback provisions and to extend the Allocation Act with appropriate modifications to cover this 39-month decontrol period. The President also called upon the Congress to enact the other critical conservation, domestic supply, and emergency standby measures which were included in his State of the Union proposals of January 15, 1975.

Petroleum Prices

The change in the average petroleum product price and the retail motor gasoline price over the 39 month decontrol period is delineated in Charts 3 and 4. Average petroleum product price as well as gasoline prices initially decline so that the economic recovery is not hindered and gradually increases to a level comparable with continued controls by the end of 1976. After that petroleum prices increase more rapidly for phased decontrol than for continued controls effecting conservation and reduced dependence on foreign sources of oil.

CHART 3

Base Case
Variable Decontrol

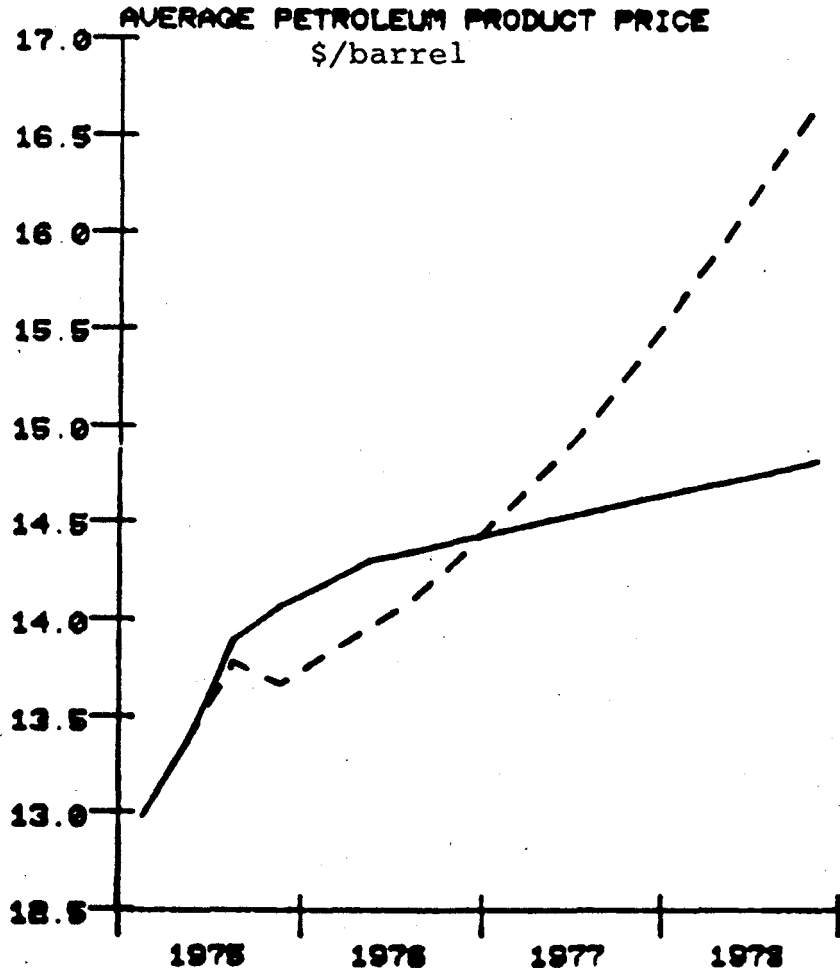
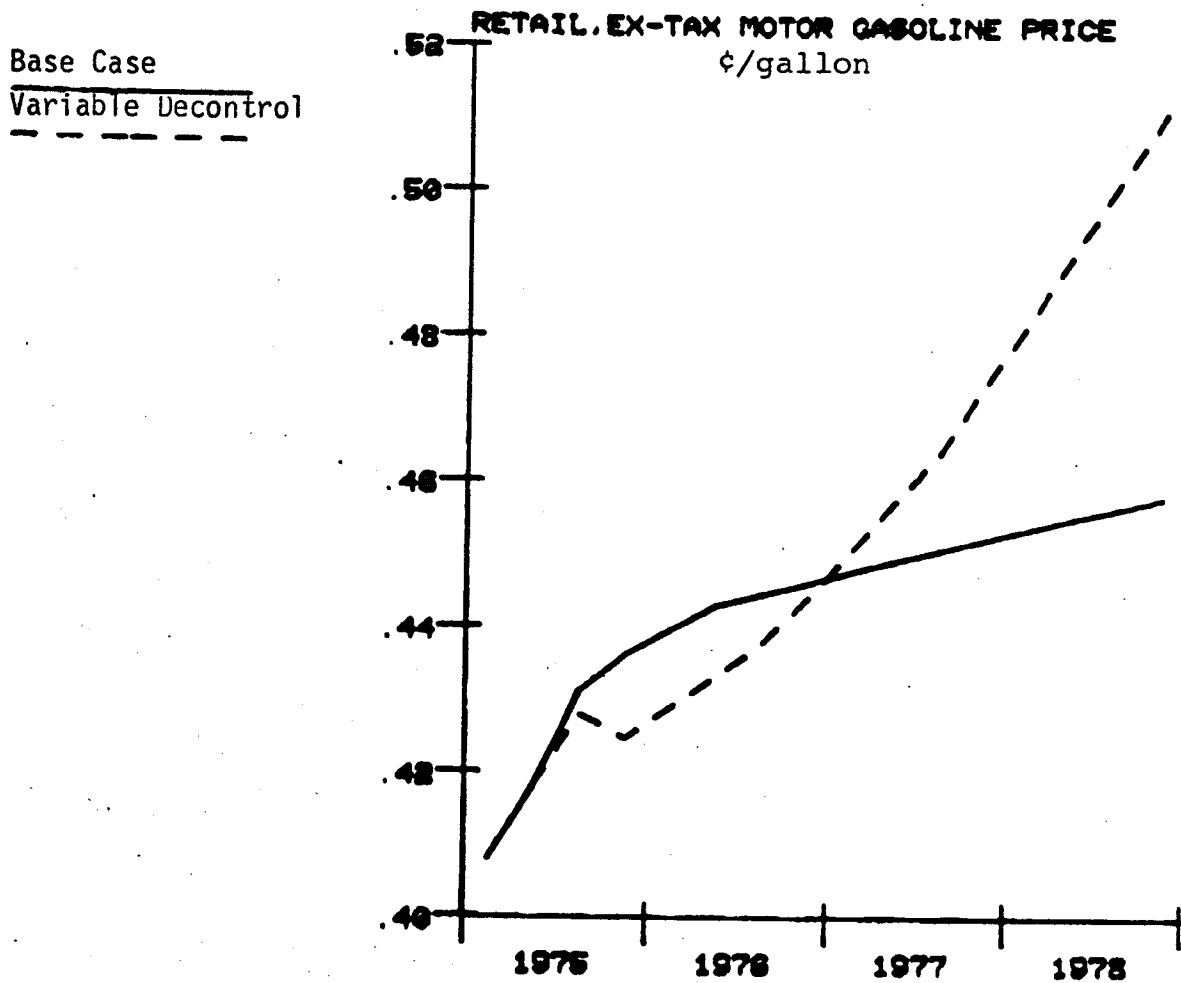


CHART 4

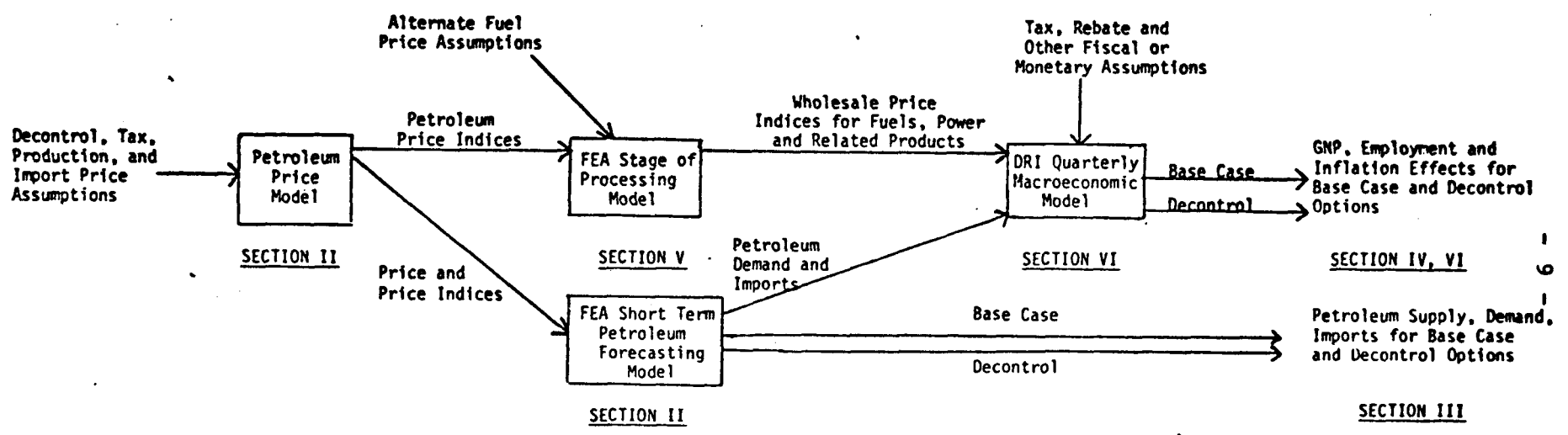


Estimation of Energy and Economic Impacts of
Policy Options

The estimation of the energy and economic impacts of the base case and decontrol policy options requires the successive applications of models developed by FEA or available through the DRI system. The attached chart overviews the major steps in this process and indicates the appropriate sections of this report which provide further explanation.

The base case or decontrol options are specified exogenously in terms of relative levels of old and new oil, imports, taxes, and the assumed price paths of imported and uncontrolled domestic oil. These assumptions are combined in the price model to calculate product prices assuming full pass through of costs appropriately weighted to reflect the changing mix of domestic production and imported prices. The petroleum product prices are converted into wholesale price indices for input to the petroleum demand and import computations. When combined with assumptions about wholesale price indices for alternative energy sources, these petroleum indices are also input to a stage of processing model to estimate ripple effects on downstream wholesale price indices for fuels and related products. The new indices are combined with the forecasts of petroleum demand, assumptions about taxes and rebates, and other economic variables as inputs to the DRI quarterly macroeconomic model to obtain estimates of the effects on GNP, employment and indices of inflation. These measures are combined with the petroleum supply and demand estimates to prepare to final statement and comparison of the impacts of the base case and decontrol option.

ANALYTICAL STEPS FOR COMPARISON OF
BASE CASE AND DECONTROL OPTIONS



July 28, 1975

II. PRICE ASSUMPTIONS AND DEMAND CALCULATIONS
FOR JULY 24th SIMULATIONS

Base Case

1. Imported crude as a percentage of total crude refined in the U. S. is assumed to be invariant across simulations and across time periods (at least within this forecast horizon). This fraction was set at .3 and corresponds roughly with observed, early 1975 values.
2. Old oil production is assumed to decline over the forecast interval as a result of natural depletion. Old oil production starts at 5 million barrels per day in January 1975 and declines to 3.694 million barrels per day in December of 1978. The rate of decline is constant across this interval and amounts to a production loss of approximately 27.77 thousand barrels per day in each successive month.
3. Total crude oil production climbs in a linear fashion from 8.4 million barrels per day in January of 1975 to 8.497 million barrels per day in December of 1977. Total domestic oil production stays at 8.5 million barrels per day in 1978. Additional domestic crude supplies from Elk Hills are not assumed in the base case supply forecasts.
4. The CPI's and WPI's used in the price calculation file are consistent with the April 3rd DRI base case; the same macro-economic simulation has been used over the last three months.
5. The world crude price is based upon a reported January 1975 refiners' acquisition cost of approximately \$12.50 per barrel. This price is assumed to remain constant in nominal terms.
6. To calculate an imported crude price, the existing crude tariff is added to the world crude price. Historically, this involves a \$1 tariff imposed in February 1975, subsequently changed to \$2 in June 1975. From July 1975 to the end of 1978, the \$2 tariff on imported crude is retained.
7. The old domestic crude oil price is kept at a constant \$5.25 per barrel over the entire forecast interval.

8. Uncontrolled domestic crude oil starts at a January 1975 reported price of \$11.37 per barrel and gradually equilibrates to 50¢ less than the imported crude price by April 1976. This 50¢ quality differential is retained throughout the remainder of the forecast, resulting in a new domestic crude price of \$14.00 per barrel from April 1976 to December 1978.

New Domestic Crude Price

1975				1976	
1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q
\$11.37	12.00	\$13.00	\$13.50	\$13.75	\$14.00

9. The composite price of refined crude oil is determined in the following manner:

$$\text{Composite Price of Crude} = \left[\left(\begin{array}{l} \text{Domestic} \\ \text{Crude} \\ \text{Fraction} \end{array} \right) * \left(\begin{array}{l} \text{Old Domestic} \\ \text{Crude Fraction} \end{array} * \begin{array}{l} \text{Old Domestic} \\ \text{Crude Price} \end{array} \right) + \left(\begin{array}{l} \text{New Domestic} \\ \text{Crude Fraction} \end{array} * \begin{array}{l} \text{New Domestic} \\ \text{Crude Price} \end{array} \right) \right] + \left(\begin{array}{l} \text{Crude} \\ \text{Import} \\ \text{Fraction} \end{array} * \begin{array}{l} \text{Crude} \\ \text{Import} \\ \text{Price} \end{array} \right)$$

10. Product prices are calculated on a straight cost pass-through basis, weighting proportionately both the higher costs of composite crude and the higher costs of imported products.

To arrive at the change in composite crude, the January 1975 calculated composite crude value of 9.13 is subtracted from the composite crude values (as determined in Step 9).

In similar fashion, the change in imported product is calculated. This is a value of 60¢ from June 1975 to December 1978.

12. The price of residual fuel is assumed to vary with respect to: (1) price fluctuations in the international petroleum market, and (2) changes in the price of imported products. This assumption is particularly plausible in the residual-dependent Northeast.

Residual Price = January 1975 Price
of \$11.36 per barrel

+

Changes in Price of
Imported Product

The January 1975 residual price was reported in the FEA price division April 7, 1975 report.

13. The average petroleum product price is calculated in the following manner:

$$\begin{aligned}
 \text{Average Petroleum Price for Jan 1975} &= \left[\begin{array}{l} \text{Motor Gasoline Price Weight} \\ \text{Jan 1975 Distillate Price} \end{array} \right] * \left[\begin{array}{l} \text{Jan 1975 Wholesale Price of Motor Gas} \\ \text{Residual Price Weight} \end{array} \right] + \left[\begin{array}{l} \text{Distillate Price Weight} \\ \text{Jan 1975 Residual Price} \end{array} \right] \\
 12.77 &= \left[(.62107 * 13.10) + (.29759 * 12.47) + (.08133 * 11.36) \right]
 \end{aligned}$$

As indicated, the January 1975 average petroleum product price was calculated as a weighted average of the wholesale prices of motor gasoline, distillate, and residual. The price weights are those currently used by BLS, normalized to 1.0.

The January 1975 residual and motor gasoline prices were reported in FEA's price division April 7, 1975 report. The distillate price was derived from distillate component prices contained in that same report.

Subsequent Average
Petroleum Product
Prices = January 1975
Average Petroleum
Product Price

$$\begin{aligned}
 & + \\
 & \left[(1 - \text{Total Petroleum Product Import Fraction}) * \text{Change in Composite Crude Price} \right] \\
 & + \\
 & \left[\text{Total Petroleum Product Import Fraction} * \text{Change in Import Product Price} \right]
 \end{aligned}$$

The total petroleum product import fraction and implicitly, the domestically-refined crude fraction, are derived from 1973 BOM numbers. No special allowances are made for either seasonality or longer term domestic/import shifts, although the 1973 weights are judged to be a reasonable approximation for use in the forecast period.

14. The retail, ex-tax motor gasoline price is forecast in the following manner:

Per Gallon Change
in Composite Crude
Price = Per Barrel Change/42
in Composite
Crude Price

Retail, Ex-Tax Motor
Gasoline Price = January 1975 Retail, Ex-Tax
Motor Gasoline Price (\$.402)
+
Per Gallon Change in Composite
Crude Price

The retail motor gasoline price varies according to increases in the composite crude price. Imported motor gasoline product prices are assumed to have no independent effect upon domestic motor gasoline prices.

15. FEA's short-term petroleum forecasts model utilizes deflated wholesale price indices rather than prices per se in its forecast (motor gasoline is the only exception). Hence, for each of the three product prices (distillate, residual, average), one must derive a wholesale price index forecast that is consistent with the wholesale price index used in the product's equation. This is done by calculating conversion factors.

January, 1975, FEA reported wholesale prices were used with January, 1975 wholesale price indices to arrive at conversion factors. These conversion factors were used to change the nominal price paths, as calculated above, into price indices for the petroleum model.

For example, residual's January price was reported to be \$11.36 per barrel. Residual's January wholesale price was \$6.04. Thus a conversion factor of .532 ($= 11.36/6.04$) was used to obtain wholesale price indices from the forecasted nominal prices.

Variable Decontrol Case

The underlying assumptions and methodology used to construct a product price forecast for the variable decontrol case are identical to those utilized in the base case, except as noted below. The step numbers listed below correspond to those used in the explanation of the base case price forecast.

2. The production of old oil is identical to the base case only for the first eight months of 1975. Thus, January 1975 production of old oil starts at 5 million barrels per day and declines to 4.806 million barrels per day in August of 1975. From September 1975 to August 1976, old oil production is decontrolled at the rate of 1 1/2% per month starting from a September 1975 old oil production level of 4.751 million barrels per day.

Old Oil Production
from September 1975 = 4.751 - (M1 * .071265)
to August 1976

where

M1 = 1 in September 1975, 2 in October 1975, ..., 12 in August 1976

and

$$.071265 = .015 * 4.751.$$

From September 1976 to August 1977, old oil production is decontrolled at the rate of 2 1/2% per month, starting from a September 1976 level of 3.89582 million barrels per day.

Old Oil Production
from September 1976 = 3.89582 - (M2 * .118775)
to August 1977

where

M2 = 1 in September 1976, 2 in October 1976, ..., 12 in August 1976

and

$$.118775 = .025 * 4.751.$$

From September 1977 to October 1978, old oil production is decontrolled at the rate of 3 1/2% per month, starting from a September 1977 level of 2.47052 million barrels per day.

Old Oil Production
from September 1977 = 2.47052 - (M3 * .166285)
to October 1978

where

M3 = 1 in September 1977, 2 in October 1977, ..., 14 in
October 1978

and

.166285 = .035 * 4.751.

By November 1978, old oil production is fully decontrolled.
Thus, the value for old oil production in our price forecast
is set to zero for November and December of 1978.

3. Total domestic oil production is assumed to rise at a
faster rate than in the base case because of the greater
price incentives to domestic producers. Total domestic oil
production starts at 8.4 million barrels per day in January
1975 and climbs to 8.681 million barrels per day in December
1977. Total domestic oil production remains constant at 8.7
million barrels per day in 1978.
8. The price of domestic, uncontrolled crude is identical
to the base case in the first eight months of 1975. In
September 1975 new domestic crude oil becomes subjected to
a price ceiling initially set at \$11.50 per barrel, but
allowed to rise by \$.05 per month thereafter.

New Domestic Crude

Price for September 1975 = 11.45 + (M6 * .05)
through December 1978

where

M6 = 1 in September 1975, 2 in October 1975, ..., 40 in
December 1978

In all periods the cap is effective thereby maintaining a new
domestic crude price that is at least 50¢ less than the current
imported crude price.

Interface with Petroleum Demand Forecasts

A complete description of how petroleum forecasts are made is contained in Technical Report 75-5, National Petroleum Product Supply and Demand: 1975. The general methodology used here is the same as that reported in the technical document. Basically, that methodology requires:

1. A number of macroeconomic variables (such as disposable income) which can be strongly related to the demand for petroleum products are estimated via Data Resources, Inc.'s macro-model. The same macroeconomic variables were used for both cases and were taken from the DRI simulation Interim Long, March 1975.
2. These macroeconomic variables are utilized (along with other variables, such as weather variables) in a series of eight regression equations.
3. The forecasts stemming from these eight regression equations are then adjusted for the impact of higher product prices.

It is at this point that the two forecasts diverge substantially. The same macroeconomic variables, the same equations, the same price elasticities are used in each case -- it is different price paths that characterize this difference.

The price responsiveness of the model may be summarized by referring to the individual product price elasticities, presented below:

PRODUCT PRICE ELASTICITIES*

<u>Product</u>	<u>Price Elasticity</u>		
	<u>3</u> <u>Months</u>	<u>6</u> <u>Months</u>	<u>9</u> <u>Months</u>
Motor Gasoline**	-.15	-.15	-.15
Distillate	-.09	-.12	-.12
Residual	-.15	-.18	-.21
Kerosine Jet	-.06	-.07	-.08
Naphtha Jet	-.06	-.07	-.08
Liquefied Gases	-.04	-.04	-.05
Petrochemicals	-.12	-.14	-.16
Other Products	-.05	-.05	-.05

(see following page for footnotes.)

- * The percentage change in the quantity demanded given a one percent change in price which is sustained for 3, 6, and 9 months, respectively. For example, residual fuel is assumed to have an impact price elasticity of $-.15$ for the first three months of a higher price; for the following three month period, the price elasticity would be boosted to $-.18$. For all subsequent periods, the equilibrium price elasticity would be $-.21$.
- ** Price effects are incorporated in the forecasting equation. The price elasticity mentioned here is for the Technical Report 75-5 base case; this price elasticity would vary slightly depending on the interval over which the forecast was run.

Results

The results of the applications of these assumptions are found in Tables 1-4 (Base Case) and in Tables 5-8 (Variable Decontrol).

Table 1 - Base Case - Annual Demand

Table 2 - Base Case - Quarterly Demand

Table 3 - Base Case - Nominal Prices

Table 4 - Base Case - Wholesale Price Indices

Table 5 - Variable Decontrol - Annual Demand

Table 6 - Variable Decontrol - Quarterly Demand

Table 7 - Variable Decontrol - Nominal Prices

Table 8 - Variable Decontrol - Wholesale Price Indices

Finally, a summary table (Table 9) is presented which compares the imports of these two options with the President's 30 month phased decontrol plan and the case of no program (i.e., no imposition of tariffs and taxes).

TABLE 1

BASE CASE - ANNUAL DEMAND

14, 1975

JULY 24TH BASE CASE
 ASSUMES \$2 CRUDE TARIFF AND \$.60 PRODUCT TARIFF
 PRICES FROM FILE BSJL24

FED SHORT-TERM PETROLEUM MODEL
 FORECAST DEMAND FOR
 PRIMARY PETROLEUM PRODUCTS
 (THOUSANDS OF BARRELS/DAY)

	1975	
DISTILLATE FUEL	3,096.4	
RESIDUAL FUEL	2,230.0	
JET FUEL - KEROSENE TYPE	835.3	
JET FUEL - NAPHTHA TYPE	243.7	
MOTOR GASOLINE	6,711.0	
PETROCHEMICAL FEEDSTOCKS	350.1	
LIQUEFIED GASES	1,247.9	
OTHER PRODUCTS	2,218.2	
TOTAL - ALL PRODUCTS	16,932.5	
	1976	1977
DISTILLATE FUEL	2,857.9	2,990.2
RESIDUAL FUEL	2,494.2	2,867.5
JET FUEL - KEROSENE TYPE	812.2	852.9
JET FUEL - NAPHTHA TYPE	226.8	229.1
MOTOR GASOLINE	6,870.7	7,237.7
PETROCHEMICAL FEEDSTOCKS	287.4	301.0
LIQUEFIED GASES	1,163.0	1,221.6
OTHER PRODUCTS	2,112.2	2,165.6
TOTAL - ALL PRODUCTS	16,824.4	17,865.6

TABLE 2
BASE CASE - QUARTERLY DEMAND

JULY 24, 1975

JULY 24TH BASE CASE
ASSUMES \$2 CRUDE TARIFF AND \$1.60 PRODUCT TARIFF
PRICES FROM FILE BSJL24

FED SHORT-TERM PETROLEUM MODEL
FORECAST DEMAND FOR
PRIMARY PETROLEUM PRODUCTS
(THOUSANDS OF BARRELS/DAY)

	1ST QTR 1975	2ND QTR 1975	3RD QTR 1975	4TH QTR 1975
DISTILLATE FUEL	3,926.2	2,676.5	2,281.2	3,501.5
RESIDUAL FUEL	2,565.4	1,989.9	1,953.6	2,411.2
JET FUEL - KEROSENE TYPE	760.0	870.0	845.1	866.2
JET FUEL - NAPHTHA TYPE	210.9	247.1	242.5	274.3
MOTOR GASOLINE	6,223.6	6,909.7	6,987.1	6,723.5
PETROCHEMICAL FEEDSTOCKS	334.5	359.4	347.5	358.7
LIQUEFIED GASES	1,515.3	1,037.0	997.3	1,441.9
OTHER PRODUCTS	2,035.3	2,202.3	2,421.1	2,214.2
TOTAL - ALL PRODUCTS	17,571.2	16,291.9	16,075.6	17,791.6

	1ST QTR 1976	2ND QTR 1976	3RD QTR 1976	4TH QTR 1976
DISTILLATE FUEL	3,679.1	2,438.1	2,132.5	3,181.9
RESIDUAL FUEL	2,771.7	2,226.6	2,245.1	2,733.4
JET FUEL - KEROSENE TYPE	780.2	819.6	820.4	828.7
JET FUEL - NAPHTHA TYPE	199.6	232.0	224.9	250.7
MOTOR GASOLINE	6,438.0	6,975.7	7,160.8	6,908.2
PETROCHEMICAL FEEDSTOCKS	284.2	285.3	284.1	295.9
LIQUEFIED GASES	1,420.0	983.7	926.8	1,321.6
OTHER PRODUCTS	1,989.5	2,072.9	2,292.6	2,093.7
TOTAL - ALL PRODUCTS	17,562.2	16,033.9	16,087.3	17,614.1

	1ST QTR 1977	2ND QTR 1977	3RD QTR 1977	4TH QTR 1977
DISTILLATE FUEL	3,745.1	2,560.2	2,283.5	3,372.2
RESIDUAL FUEL	3,139.7	2,613.0	2,620.3	3,096.8
JET FUEL - KEROSENE TYPE	818.5	853.8	860.6	878.9
JET FUEL - NAPHTHA TYPE	198.6	231.6	228.1	258.3
MOTOR GASOLINE	6,792.2	7,344.8	7,532.3	7,281.4
PETROCHEMICAL FEEDSTOCKS	296.4	299.8	298.8	309.2
LIQUEFIED GASES	1,463.4	1,046.7	989.3	1,387.0
OTHER PRODUCTS	2,023.5	2,119.5	2,352.7	2,166.6
TOTAL - ALL PRODUCTS	18,477.4	17,069.4	17,165.4	18,750.3

TABLE 3
BASE CASE - NOMINAL PRICES

DATE	PCR	PMRGASNS	PPETA VG
75: 1	9.37401	0.407810	12.9724
75: 2	9.80353	0.418036	13.3620
75: 3	10.3532	0.431125	13.8857
75: 4	10.5636	0.436133	14.0594
76: 1	10.7024	0.439437	14.1740
76: 2	10.8449	0.442830	14.2918
76: 3	10.9083	0.444340	14.3441
76: 4	10.9715	0.445846	14.3964
77: 1	11.0348	0.447353	14.4487
77: 2	11.0980	0.448856	14.5008
77: 3	11.1609	0.450354	14.5528
77: 4	11.2238	0.451852	14.6047
78: 1	11.2878	0.453377	14.6576
78: 2	11.3476	0.454801	14.7070
78: 3	11.4077	0.456231	14.7566
78: 4	11.4680	0.457666	14.8064

DATE	PD	PR
75: 1	12.6837	11.3600
75: 2	13.0840	11.5600
75: 3	13.6148	11.9600
75: 4	13.7984	11.9600
76: 1	13.9195	11.9600
76: 2	14.0439	11.9600
76: 3	14.0993	11.9600
76: 4	14.1545	11.9600
77: 1	14.2098	11.9600
77: 2	14.2649	11.9600
77: 3	14.3198	11.9600
77: 4	14.3747	11.9600
78: 1	14.4306	11.9600
78: 2	14.4828	11.9600
78: 3	14.5353	11.9600
78: 4	14.5879	11.9600

PCR ≡ Composite crude price.

PMRGASNS ≡ Retail, ex-tax motor gasoline price.

PPETA VG ≡ Average petroleum product price.

PD ≡ Wholesale distillate price.

PR ≡ Wholesale residual price.

TABLE 4

BASE CASE - WHOLESALE PRICE INDICES

DATE	WPI057NS	WPI0573NS	WPI0574NS
75: 1	2.45663	3.03593	6.04400
75: 2	2.53041	3.13176	6.15041
75: 3	2.62958	3.25879	6.36323
75: 4	2.66248	3.30274	6.36323
76: 1	2.68419	3.33174	6.36323
76: 2	2.70648	3.36152	6.36323
76: 3	2.71640	3.37476	6.36323
76: 4	2.72629	3.38799	6.36323
77: 1	2.73619	3.40121	6.36323
77: 2	2.74607	3.41440	6.36323
77: 3	2.75591	3.42755	6.36323
77: 4	2.76575	3.44069	6.36323
78: 1	2.77577	3.45408	6.36323
78: 2	2.78512	3.46657	6.36323
78: 3	2.79451	3.47912	6.36323
78: 4	2.80395	3.49172	6.36323

WPI057NS \equiv Wholesale price index for all petroleum products.

WPI0573NS \equiv Wholesale price index for distillate.

WPI0574NS \equiv Wholesale price index for residual.

TABLE 5
VARIABLE DECONTROL - ANNUAL DEMAND

24, 1975

24TH BASE CASE
VARIABLE DECONTROL STARTING SEPT. 1ST
DES FROM FILE DAJL24

FED SHORT-TERM PETROLEUM MODEL
FORECAST DEMAND FOR
PRIMARY PETROLEUM PRODUCTS
(THOUSANDS OF BARRELS/DAY)

1975

DISTILLATE FUEL	3,098.7
RESIDUAL FUEL	2,230.0
FUEL - KEROSENE TYPE	835.7
FUEL - NAPHTHA TYPE	243.8
MOTOR GASOLINE	6,719.0
PETROCHEMICAL FEEDSTOCKS	350.3
LIQUEFIED GASES	1,248.3
OTHER PRODUCTS	2,218.9
TOTAL - ALL PRODUCTS	16,944.8

1976

1977

DISTILLATE FUEL	2,868.7	2,998.3
RESIDUAL FUEL	2,494.2	2,867.5
JET FUEL - KEROSENE TYPE	812.2	852.9
JET FUEL - NAPHTHA TYPE	226.8	229.1
MOTOR GASOLINE	6,888.6	7,227.9
PETROCHEMICAL FEEDSTOCKS	287.4	301.0
LIQUEFIED GASES	1,164.9	1,225.6
OTHER PRODUCTS	2,115.9	2,171.5
TOTAL - ALL PRODUCTS	16,858.7	17,873.8

TABLE 6
VARIABLE DECONTROL - QUARTERLY DEMAND

Y 24 1975

Y 24TH BASE CASE
S DECONTROL STARTING SEPT 1ST
CES FROM FILE DAJL24

FED SHORT-TERM PETROLEUM MODEL
FORECAST DEMAND FOR
PRIMARY PETROLEUM PRODUCTS
(THOUSANDS OF BARRELS/DAY)

	1ST QTR 1975	2ND QTR 1975	3RD QTR 1975	4TH QTR 1975
DISTILLATE FUEL	3,926.2	2,676.5	2,281.8	3,510.3
RESIDUAL FUEL	2,565.4	1,989.9	1,953.6	2,411.2
FUEL - KEROSENE TYPE	760.0	870.0	845.2	867.5
FUEL - NAPHTHA TYPE	210.9	247.1	242.6	274.7
MOTOR GASOLINE	6,223.6	6,909.7	6,994.1	6,748.6
PETROCHEMICAL FEEDSTOCKS	334.5	359.4	347.7	359.6
LIQUEFIED GASES	1,515.3	1,037.0	997.5	1,443.4
OTHER PRODUCTS	2,035.3	2,202.2	2,421.4	2,216.2
TOTAL - ALL PRODUCTS	17,571.2	16,291.9	16,083.9	17,832.3
	1ST QTR 1976	2ND QTR 1976	3RD QTR 1976	4TH QTR 1976
DISTILLATE FUEL	3,691.4	2,445.8	2,138.6	3,198.6
RESIDUAL FUEL	2,771.7	2,226.6	2,245.1	2,733.4
JET FUEL - KEROSENE TYPE	780.2	819.6	820.4	828.7
JET FUEL - NAPHTHA TYPE	199.6	232.0	224.9	250.7
MOTOR GASOLINE	6,460.5	6,996.2	7,175.7	6,922.1
PETROCHEMICAL FEEDSTOCKS	284.2	285.3	284.1	295.9
LIQUEFIED GASES	1,421.8	984.9	927.9	1,325.0
OTHER PRODUCTS	1,992.0	2,075.3	2,295.4	2,100.6
TOTAL - ALL PRODUCTS	17,601.3	16,065.7	16,112.3	17,655.4
	1ST QTR 1977	2ND QTR 1977	3RD QTR 1977	4TH QTR 1977
DISTILLATE FUEL	3,765.5	2,571.0	2,288.5	3,368.2
RESIDUAL FUEL	3,139.7	2,613.0	2,620.3	3,096.3
JET FUEL - KEROSENE TYPE	818.5	853.8	860.6	878.9
JET FUEL - NAPHTHA TYPE	198.6	231.6	228.1	258.3
MOTOR GASOLINE	6,798.7	7,343.1	7,519.0	7,250.9
PETROCHEMICAL FEEDSTOCKS	296.4	299.8	298.8	309.2
LIQUEFIED GASES	1,469.2	1,051.1	992.7	1,389.2
OTHER PRODUCTS	2,031.6	2,127.3	2,358.9	2,168.1
TOTAL - ALL PRODUCTS	18,518.3	17,090.6	17,166.7	18,719.5

TABLE 7
VARIABLE DECONTROL - NOMINAL PRICES

DATE	PCR	PMRGASNS	PPETAVG
5: 1	9.37401	0.407810	12.9724
5: 2	9.80353	0.418036	13.3620
5: 3	10.2212	0.427982	13.7766
5: 4	10.0851	0.424741	13.6642
6: 1	10.2569	0.428831	13.8061
6: 2	10.4334	0.433034	13.9519
6: 3	10.6235	0.437561	14.1089
6: 4	10.8725	0.443489	14.3146
7: 1	11.1562	0.450243	14.5489
7: 2	11.4384	0.456961	14.7820
7: 3	11.7373	0.464078	15.0289
7: 4	12.1113	0.472964	15.3378
8: 1	12.5030	0.482309	15.6614
8: 2	12.9053	0.491888	15.9937
8: 3	13.3196	0.501753	16.3359
8: 4	13.6990	0.510787	16.6493

DATE	PD	PR
'5: 1	12.6837	11.9600
'5: 2	13.0840	11.9600
'5: 3	13.4995	11.9600
'5: 4	13.3807	11.9600
'6: 1	13.5306	11.9600
'6: 2	13.6848	11.9600
'6: 3	13.8507	11.9600
'6: 4	14.0681	11.9600
'7: 1	14.3157	11.9600
'7: 2	14.5621	11.9600
'7: 3	14.8230	11.9600
'7: 4	15.1495	11.9600
'8: 1	15.4915	11.9600
'8: 2	15.8427	11.9600
'8: 3	16.2044	11.9600
'8: 4	16.5356	11.9600

PCR ≡ Composite crude price.

PMRGASNS ≡ Retail, ex-tax motor gasoline price.

PPETAVG ≡ Average petroleum product price.

PD ≡ Wholesale distillate price.

PR ≡ Wholesale residual price.

TABLE 8
VARIABLE DECONTROL - WHOLESALE PRICE INDICES

<u>DATE</u>	<u>WPI057NS</u>	<u>WPI0573NS</u>	<u>WPI0574NS</u>
5: 1	2.45663	3.03593	6.04400
5: 2	2.53041	3.13176	6.15041
5: 3	2.60893	3.23121	6.36323
5: 4	2.58764	3.20276	6.36323
6: 1	2.61450	3.23865	6.36323
6: 2	2.64212	3.27554	6.36323
6: 3	2.67186	3.31527	6.36323
6: 4	2.71081	3.36730	6.36323
7: 1	2.75518	3.42657	6.36323
7: 2	2.79931	3.48553	6.36323
7: 3	2.84607	3.54799	6.36323
7: 4	2.90458	3.62615	6.36323
8: 1	2.96584	3.70799	6.36323
8: 2	3.02877	3.79206	6.36323
8: 3	3.09359	3.87864	6.36323
8: 4	3.15293	3.95792	6.36323

WPI057NS ≡ Wholesale price index for all petroleum products.

WPI0573NS ≡ Wholesale price index for distillate.

WPI0574NS ≡ Wholesale price index for residual.

TABLE 9
SUPPLY/DEMAND COMPARISONS
 (MB/D)

	<u>1975</u>		4Q Prices*			<u>1977</u>		4Q Prices			<u>1978</u>		4Q Prices		
	<u>4Q</u>	<u>Annual</u>	<u>G</u>	<u>P</u>	<u>C</u>	<u>4Q</u>	<u>Annual</u>	<u>G</u>	<u>P</u>	<u>C</u>	<u>4Q</u>	<u>Annual</u>	<u>G</u>	<u>P</u>	<u>C</u>
<u>Demand</u>															
Base Case W/Tariff	17,920	17,003	.411	13.08	9.50	19,088	18,158	.420	13.40	9.89	-	18,859	.425	13.56	10.08
Base Case W/O Tariff	17,792	16,933	.436	14.06	10.56	18,750	17,866	.452	14.60	11.22	-	18,402	.458	14.81	11.47
30 Month Phased Decontrol w/\$13.50 Cap	17,766	16,926	.444	14.33	10.90	18,452	17,647	.507	16.51	13.53	-	17,938	.513	16.73	13.80
Variable Decontrol and Cap	17,832	16,945	.425	13.66	10.09	18,720	17,874	.473	15.34	12.11	-	18,149	.511	16.65	13.70
<u>Supply/Conservation</u>															
Base Case		10,480					10,550					10,550			
Decontrol Cases		10,510					10,750					10,800			
Elk Hills		100					275					300			
Coal Conversion		60					200					200			
Insulation Credit		20					110					110			
Auto Efficiency		-					170					200			
<u>Imports</u>															
Base Case W/Tariff		6,523					7,608					8,309			
Base Case W/O Tariff		6,453					7,316					7,852			
30 Month Phased Decontrol w/\$13.50 Cap		6,236					6,142					6,328			
Variable Decontrol and Cap		6,255					6,369					6,539			

*Prices are: (G) Gasoline, retail ex tax ¢/gal.
 (P) Average product wholesale \$/BBL.
 (C) Average crude to refiners \$/BBL.

III. DIRECT ENERGY EFFECTS

This section discusses the effects that phased decontrol, over a 39-month period, will have on petroleum prices and consumption. The major assumptions that underlie the estimates given here are:

Current Situation: Base Case for Comparison Purposes

1. No change in OPEC prices.
2. Indefinite retention of tariffs (\$2.00 on crude oil and \$.60 on imported products).
3. No decontrol of old oil.

Phased Decontrol:

1. No change in OPEC prices.
2. Retain \$2.00 crude oil import fee and \$.60 fee on product imports.
3. Decontrol old oil according to the following schedule:
 - Reduce the quantity of old oil that has its price controlled at \$5.25 per barrel by 1½ percent per month for 12 months starting September 1975;
 - by 2½ percent per month for 12 months starting September 1976; and
 - by 3½ percent per month for 15 months starting September 1977.
4. Place an upper limit on the price of domestic uncontrolled oil of \$11.50 per barrel in August 1975 and increase the limit by 5 cents per month starting in September 1975.

Table 10 gives the petroleum prices for the base and phased decontrol scenarios. The methodology for calculating these prices, given the above assumptions, is documented in Section II.

Initially the upper limit on the domestic decontrolled price outweighs the effects of decontrol and the average prices drop relative to the base case through 1976. In 1977 the effects of decontrol begin to show up in the form of higher prices and by the end of 1978 the full impact is seen. By the fourth quarter 1978, the average price of refined products rises by \$1.84 per barrel or 4.4¢ per gallon relative to the base case; gasoline prices rise by 5.3¢ per gallon; and distillate prices rise by 4.6¢ per gallon. The price of residual oil is not expected to be affected by phased decontrol because a large amount of residual oil is imported and changes in the import price of residual oil are the major causal factors that influence the average domestic price of residual oil.

Tables 6, 7 and 11 show the impact that phased decontrol has on petroleum demand and on imports. Tables 2 and 3 give petroleum demand forecasts for the various refined products that make up total demand. Because three major factors influence these forecasts, economic activity, weather, and prices, and because price is the only variable that differs between the two scenarios, total demand rises slightly through 1976 but starts to fall in the third and fourth quarters of 1977 as the price effects of decontrol start to show up.

Table 11 illustrates the impacts that changes in total demand and domestic petroleum supply have on total petroleum imports. Underlying these forecasts is the assumption that any change in demand or supply is offset by a corresponding change in imports.

Import reductions come mainly from supply/conservation measures until 1978 when the higher prices finally start to have an effect on consumption--of about 253,000 barrels per day. However, the \$2 import fee on crude petroleum and \$.60 fee on products which are included in the base case demand reductions and import savings of 292,000 B/D and 457,000 B/D in 1977 and 1978. When these are added to the saving coming from phased decontrol and the conservation actions, the savings total 1,239,000 and 1,770,000 respectively for the two years.

Non-Petroleum Energy Prices

The analysis assumes there will be no sympathetic increases in the prices of electricity, natural gas, and coal due to the phased decontrol program proposed by the President. In fact, the analysis assumes that initially there will be no decreases in the prices of these other energy products nor later increases.

Coal is used primarily in the production of electric power and in industry. Eighty percent of all coal is under long-term contract, whereas twenty percent of coal is presently purchased on the spot market. The average price for coal purchased on a long-term contract is approximately \$18 per ton, whereas coal purchased on the spot market is currently selling for approximately \$25 to \$28 per ton on average. The BTU equivalent price for coal at present petroleum prices on the margin would be equivalent to \$40 per ton on average. At the present time, coal is competing with residual fuel oil which is effectively decontrolled and sells at the imported crude oil price. Thus, coal competes already at the margin with residual fuel oil and it would be highly unlikely that an increase in the price of domestic crude oil and hence an increase in the average price of crude oil would induce any increases in the price of coal on the margin. Over time, however, one would expect the price of coal to rise with the general price level of the economy. The analysis assumes that this rise will occur both in the base case and in the phased decontrol case.

Approximately two-thirds of all natural gas is presently regulated by the FPC in interstate commerce. Approximately one-third of all natural gas is presently uncontrolled and sells in the intrastate market or to direct industrial customers in the interstate market. Approximately 30 percent of all intrastate gas is under long-term contract. At the present time, new contracts for natural gas in the intrastate market are being negotiated at prices ranging from \$.60 per Mcf to \$2 per Mcf with most of the contracts ranging in the \$1 to \$1.20 per Mcf range. The resulting increase in the total fuel bill for natural gas would be relatively minor, if any, producing little or no effect in the economy as a whole. Some of the natural gas is being used in residential consumption and

this natural gas would not change in price hence the impact on residential fuel bills would be nill. What little price changes might occur in natural gas would not influence the price paths for energy in the economy at all.

TABLE 10

THE EFFECTS OF PHASED DECONTROL ON AVERAGE PETROLEUM PRICES BY QUARTER
1975 THROUGH 1979 (\$ PER BARREL IN NOMINAL DOLLARS) ^{a/}

Quarter	Crude Oil			Gasoline			Distillate Oil			Residual Oil		
	Base	Phased Decontrol	Change	Base	Phased Decontrol	Change	Base	Phased Decontrol	Change	Base	Phased Decontrol	Change
75:1	9:37	9.37	--	17.13	17.13	--	12.68	12.68	--	11.36	11.36	--
75:2	9.80	9.80	--	17.56	17.56	--	13.08	13.08	--	11.56	11.56	--
75:3	10.35	10.22	- 0.13	18.10	17.98	- 0.12	13.61	13.50	- 0.11	11.96	11.96	--
75:4	10.56	10.09	- 0.47	18.31	17.84	- 0.47	13.80	13.38	- 0.42	11.96	11.96	--
76:1	10.70	10.26	- 0.44	18.44	18.01	- 0.43	13.92	13.53	- 0.39	11.96	11.96	--
76:2	10.84	10.43	- 0.41	18.61	18.19	- 0.42	14.04	13.68	- 0.36	11.96	11.96	--
76:3	10.91	10.62	- 0.29	18.66	18.39	- 0.27	14.10	13.85	- 0.25	11.96	11.96	--
76:4	10.97	10.87	- 0.10	18.72	18.63	- 0.09	14.15	14.07	- 0.08	11.96	11.96	--
77:1	11.03	11.16	0.13	18.79	18.91	0.12	14.21	14.32	0.11	11.96	11.96	--
77:2	11.10	11.44	0.34	18.85	19.19	0.34	14.26	14.56	0.30	11.96	11.96	--
77:3	11.16	11.74	0.58	18.92	19.49	0.57	14.32	14.82	0.50	11.96	11.96	--
77:4	11.22	12.11	0.89	18.98	19.87	0.89	14.37	15.15	0.78	11.96	11.96	--
78:1	11.29	12.50	1.21	19.04	20.26	1.22	14.43	15.49	1.06	11.96	11.96	--
78:2	11.35	12.91	1.56	19.10	20.66	1.56	14.48	15.84	1.36	11.96	11.96	--
78:3	11.41	13.32	1.91	19.16	21.08	1.92	14.54	16.20	1.66	11.96	11.96	--
78:4	11.47	13.70	2.23	19.22	21.45	2.23	14.59	16.54	1.95	11.96	11.96	--

^{a/} See Appendix for a discussion of the forecasting methodology.

TABLE 10 (Cont'd)

<u>Quarter</u>	<u>Refined Petroleum Products</u>		
	<u>Base</u>	<u>Phased Decontrol</u>	<u>Change</u>
75:1	12.97	12.97	--
75:2	13.36	13.36	--
75:3	13.89	13.78	- 0.11
75:4	14.06	13.66	- 0.40
76:1	14.17	13.81	- 0.36
76:2	14.29	13.95	- 0.34
76:3	14.34	14.11	- 0.23
76:4	14.40	14.31	- 0.09
77:1	14.45	14.55	0.10
77:2	14.50	14.78	0.28
77:3	14.55	15.03	0.48
77:4	14.60	15.34	0.74
78:1	14.66	15.66	1.00
78:2	14.71	15.99	1.28
78:3	14.76	16.34	1.58
78:4	14.81	16.65	1.84

TABLE 11
 SUPPLY/DEMAND/IMPORT COMPARISONS
 (MB/D)

	<u>1975</u>	<u>1977</u>	<u>1978</u>
<u>Demand - Total</u>			
Base Case	16,933	17,866	18,402
Phased Decontrol	16,945	17,874	18,149
 <u>Supply/Conservation</u>			
Base Case	10,480	10,550	10,550
Phased Decontrol			
Supply	10,510	10,750	10,800
Elk Hills	100	275	300
Coal Conversion	60	200	200
Insulation Credit	20	110	110
Auto Efficiency	--	170	200
Total Phased Decontrol	10,690	11,505	11,610
 <u>Imports</u>			
Base Case	6,453	7,316	7,852
Phased Decontrol	<u>6,255</u>	<u>6,369</u>	<u>6,539</u>
Import Savings	198	947	1,313

IV. EFFECTS OF PHASED DECONTROL ON CONSUMER COSTS

A. Consumer Energy Price Effects

The effects of variable decontrol effective September 1, 1975 over a 40-month time path on consumer energy costs are shown in Table 12. Gasoline prices increase by about 2.0 percent by 1977 over the case of continued control. The price of heating oil rises 2.7 percent by 1977. There is no change in coal, natural gas, or electricity prices as discussed above.

TABLE 12
Percent Change in Consumer Energy Costs
From Variable Phased Decontrol

<u>Type of Energy</u>	<u>1975</u> (3rd & 4th Qtrs)	<u>1976</u> (Annual)	<u>1977</u> (Annual)
Gasoline	-0.6%	-1.5%	+1.9%
Heating Oil	-1.4%	-1.4%	+2.7%

B. Socioeconomic Impact

Direct and Indirect Consumer Costs

Table 13 below shows the effects of variable decontrol on the consumer costs of petroleum-related energy. Consumer costs decrease by 1.0 percent in the latter half of 1975, and annual in 1976. The increase in 1977 is 1.5 percent of current petroleum-related energy costs. Gasoline and motor oil account for approximately 86 percent of this increase.

TABLE 13

Impact of Variable Decontrol on Direct
Energy Expenditures a/

	<u>Costs Without Decontrol</u> b/	<u>Annual Costs Due to Variable Decontrol</u>		
		<u>1975</u> (3rd & 4th Qtrs)	<u>1976</u> <u>Annual</u>	<u>1977</u> <u>Annual</u>
Gasoline and Motor Oil	\$616	-\$4	-\$9	+\$12
Heating Oil	74	-\$1	-\$1	+\$ 2
Electricity	<u>230</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	\$920	-\$5	-\$10	+\$14

Total Costs

The methodology for estimating total and indirect consumer costs of variable decontrol is the same as the methodology reported in the paper entitled, "The Impact of the President's Proposed Energy and Economics Program of Net Energy Costs to Consumers," page 11. Table 14 below summarizes the results. Basically, the methodology involves forecasting the effects that the higher energy prices will have on the Consumer Price Index (using a stage of processing model developed by Data Resources, Inc.) and using this change to estimate the change in consumer costs per household.

Variable decontrol will cause about a .22 percentage point increase in the annual rate of change of the Consumer Price Index by 1977. Based upon this estimated change, the total cost per household of decontrol and the fees is \$30 and the indirect effects are about \$16 per household. It is important to emphasize that the estimated consumer costs shown here are based upon the assumption that all of the increased costs will be passed on to consumers.

TABLE 14

Estimated Total and Indirect Consumer Costs
(In 1977)

1. Estimated Personal Consumption Per Household

- a. Estimated current personal consumption = \$942.8 billion a/
- b. Estimated number of households = 70 million
- c. Consumption per household = \$13,469

2. Estimated Costs Per Household

<u>Total</u> <u>b/</u>	<u>Indirect</u> <u>c/</u>
\$30	\$16

a/ From DRI April 2, 1975 Control Forecast.

b/ Estimated as .22 percent x \$13,469

c/ Total less direct costs.

Direct Consumer Costs by Income Class

The lowest income class, those with an average income of \$3,000, bear the greatest burden (see Table 15). While the absolute increase in energy costs due to variable decontrol increases as incomes increase, the increases as a percentage of average incomes decrease from about .2 percent in the lowest group to about .06 percent for the highest income group.

TABLE 15

Average Increase in Direct Energy Costs by Income Class
(In 1977)

	Lowest Income Group (\$3000 Avg)	Lower Middle Group (\$9000 Avg)	Upper Middle Group (\$16800 Avg)	Highest Income Group (\$29400 Avg)
Gasoline	\$4	\$8	\$15	\$18
Heating Oil	2	2	2	2
Electricity	-	-	-	-
Total	\$6	\$10	\$17	\$20
Percent of Average Income	.2%	.1%	.1%	.06%

V. STAGE OF PROCESS PROCEDURE

Simulating the macroeconomic effects of phased domestic crude oil decontrol requires information on the future behavior of energy related price variables that appear in the DRI Macro Model for the cases of phased decontrol and continued control. This information is generated in a multiple step process.

First information on eight (8) specific energy prices is generated for both phased decontrol and continued controls in the following fashion:

- (1) Price forecasts for both scenarios are generated in the manner described above in Section II for the average price of crude oil (domestic and imported), residual oil, distillate oil, gasoline, and other refined products. The weighted average price of all refined products is used as a proxy for the price of other refined products.
- (2) These price forecasts are converted into indexes based in 1967 prices (1967 prices = 100).
- (3) Similar price indexes based on 1967 prices are constructed for coal, natural gas, and electricity. For the case of continued controls the assumption is made that these prices remain constant in real terms through 1977.

Second, the eight energy prices are then used in a stage of process price model to forecast the future behavior of the CPI and WPI and their components for the cases of both phased decontrol and continued control. This involves running two simulations of the stage of process price model, one for decontrol and another for continued control, based on identical assumptions about nonenergy prices and the two different sets of energy price indexes.

Third, a weighted average of four particular CPI and WPI components is used to yield a weighted average corresponding to the variable WPI05NSEX0 the WPI series for fuels and related products and power, which is need as an exogenous variable in the DRI Quarterly Macroeconomic Forecasting Model.

Fourth, adjustments are made to WPI05NSEX0 in the DRI Macro Model on a quarter-year by quarter-year basis. The exogenous values of WPI05NSEX0 in the DRI Macro Model are multiplied by the ratio of the weighted average proxy for WPI05NSEX0 with phased decontrol versus with continued control to obtain values of WPI05NSEX0 which reflect the impact of phased decontrol on prices.

VI. MACROECONOMIC ANALYSES

From an aggregate point of view higher energy prices should cause structural shifts in the pattern of demand for goods in the economy and it would be expected that the shifts would be different in the short run from the long run. The immediate effects are to raise the price of energy intensive goods relative to other goods and to cause some unemployment.

However, in the longer term the economy adjusts to the altered price and consumption patterns and the initial adverse effects are substantially mitigated. The short-run effects of increased energy prices can also be produced by maintaining consumer purchasing power in the face of rising energy prices. The President's phased decontrol program with rebates of the supplemental import fees on crude petroleum and petroleum products does just that - reduces the adverse impact. Moreover, the domestic uncontrolled oil cap at \$11.50 per barrel actually reduces the prices of petroleum products initially. This reduction plus returning energy taxes and fees to consumers and industry initially stimulates the economy in that the return of the supplemental fees to consumers considerably exceeds the additional costs to consumers of phasing out controls on old oil.

The supplemental fees have already increased energy prices and rebating the fees to consumers will stimulate the economy relative to its present status.

In addition, the phased decontrol of oil prices should provide a gradual incentive for investment by domestic energy industries under the 50% plowback assumptions of this analysis. The reduction in the level of imports should have a favorable effect on the economy in that the export of U. S. dollars for petroleum products will be reduced.

A. Taxes and Consumer Rebates

The President's program proposes a windfall profits tax on decontrolled old crude and rebates to consumers to maintain the purchasing power of consumers in the face of higher energy prices. For the sake of analysis, this paper considers a windfall profits tax that is levied on the accrued revenues to the decontrol of old oil. The manner in which the assumed windfall profits tax is levied is equivalent to 90% of the difference between the price at which the decontrolled old oil sells minus \$5.25 per barrel with a 50% plowback. Essentially, then, the windfall profits tax is approximately 45% of the revenues that accrue to the oil companies as the price per barrel of old oil rises from \$5.25 to the domestic price cap which will rise at the rate of 5¢ per month above the base \$11.50 per barrel in September 1975. In addition, the analysis assumes that the supplemental import fees on crude oil and refined products will remain in existence and that these fees will be returned to consumers and to industry: 75% to consumers and 25% to industry.

The purpose of the rebates to consumers is to mitigate any adverse economic impact to consumers due to higher petroleum prices. Thus, this paper assumes that the aggregate revenues that are collected by the Government on the windfall profits tax and supplemental import fees would be rebated to consumers by increasing aggregate disposable income. The revenues used in this analysis are given below in Table 17 and 18. Table 17 delineates (at annual rate) the source of revenues available for rebate for each quarter. Table 18 lists the rebates to consumers and industry for each quarter at annual rates. Because the impact of the program on the economy has not been forecasted after the end of 1977, only assumptions through the final quarter of 1977 are included.

B. Simulations Results for Phased Decontrol without Rebates

Two simulations are compared and the effects of 39-month phased decontrol are simulated by introducing exogenous changes into the NO Dereg 7/16 solution of the DRI Macro Model recently run by DRI. The exogenous changes made in the DRI solution include adjustments to: the price and quantity of crude oil imports; the wholesale price index for fuels and related products, and power. The wholesale price index adjustments were based on a stage of process price model that is used to develop implicit price deflations. The corporate and personal tax rate changes are used to represent the windfall profit.

Phased decontrol will cause the rate of change of the Consumer Price Index to slightly decrease during 1975 and then to increase by 0.1 points in 1976 and 0.3 points in 1977 above the case where controls are continued (see Tables 19 and 20). Both real GNP and unemployment are slightly affected by the changing prices and rebates. Table 21 illustrates that variable decontrol puts the economy on a slightly higher growth path of about \$3 billion per year during 1976 and 1977.

In doing large simulations of an economy as complex as the United States' economy, there are considerable uncertainties involved. The levels of impact determined are small relative to the other uncertainties and various small changes in other policy variables would eliminate the effects indicated. For example, small changes in monetary policy could alter effects of the President's Program on real GNP, on prices, and on unemployment. In addition, the level of the effect on real GNP is clearly within the random variations of the performance of the economy as measured by analytical models. And, in fact, the statistical error of national income accounts is close to the level of the effect on real GNP.

TABLE 17

REVENUES AVAILABLE FOR REBATES

(Billions of Dollars per Quarter at Annual Rates)

<u>REVENUE SOURCE</u>	<u>1975:3</u>	<u>1975:4</u>	<u>1976:1</u>	<u>1976:2</u>	<u>1976:3</u>	<u>1976:4</u>	<u>1977:1</u>	<u>1977:2</u>	<u>1977:3</u>	<u>1977:4</u>
Supplemental Import Fees (\$2.00/bbl on crude; \$.60/bbl on product)	2.93	3.70	3.64	2.72	2.68	3.42	3.80	3.02	3.06	4.18
Windfall Profits Tax (50% plowback on a 90% tax)	0	0.18	0.43	0.73	0.90	1.27	1.60	1.96	2.37	3.04
TOTALS	2.93	3.88	4.07	3.45	3.58	4.69	5.40	4.98	5.43	7.22

TABLE 18

REBATES*
(Billions of \$ at Annual Rates)

	<u>Consumers</u>	<u>Industry</u>	<u>Total</u>
1975:3	0	0	0
1975:4	0.13	0.05	0.18
1976:1	0.32	0.11	0.43
1976:2	0.55	0.18	0.73
1976:3	0.68	0.22	0.90
1976:4	0.95	0.32	1.27
1977:1	1.20	0.40	1.60
1977:2	1.47	0.49	1.96
1977:3	1.78	0.59	2.37
1977:4	2.28	0.76	3.04

*Based just on a windfall profits tax

TABLE 19

INDEX POINT DIFFERENCES* IN THE LEVELS OF THE
CPI AND WPI PHASED DECONTROL (WITHOUT REBATES)
MINUS BASE CASE

	<u>CPI</u>	<u>WPI</u>
1975:3	0.0	-0.1
1975:4	-0.1	-0.5
1976:1	-0.2	-0.7
1976:2	-0.2	-0.8
1976:3	-0.2	-0.8
1976:4	-0.2	-0.7
1977:1	-0.1	-0.3
1977:2	0.0	0.0
1977:3	+0.1	+0.5
1977:4	+0.3	+1.1

* Indexes defined on 1967=100.

TABLE 20

PERCENTAGE POINT DIFFERENCES IN THE ANNUAL RATES OF
CPI AND WPI CHANGE (FOURTH QUARTER TO FOURTH QUARTER)
PHASED DECONTROL MINUS BASE CASE

	<u>CPI</u>	<u>WPI</u>
1974:4 to 1975:4	-0.1	-0.3
1975:4 to 1976:4	+0.0	-0.1
1976:4 to 1977:4	+0.3	+0.9

TABLE 21

REAL GNP UNDER PRESIDENT'S PROGRAM (WITHOUT REBATES)

MINUS REAL GNP IN BASE CASE*

(Percentage difference in parenthesis)

1975:3	+0.6 (+0.08)
1975:4	+0.7 (+0.09)
1976:1	+1.2 (+0.15)
1976:2	+2.2 (+0.26)
1976:3	+3.1 (+0.36)
1976:4	+3.5 (+0.41)
1977:1	+3.6 (+0.41)
1977:2	+3.5 (+0.39)
1977:3	+2.4 (+0.27)
1977:4	+0.6 (+0.07)

* GNP in billions of 1958 dollars at annual rates.

TABLE 22

UNEMPLOYMENT RATE UNDER PRESIDENT'S PROGRAM (WITHOUT REBATES)
MINUS UNEMPLOYMENT RATE UNDER BASE CASE

1975:3	0
1975:4	0
1976:1	0
1976:2	-0.1
1976:3	-0.1
1976:4	-0.1
1977:1	-0.1
1977:2	-0.1
1977:3	-0.1
1977:4	-0.1

C. Simulation Results for Phased Decontrol with Rebates

In addition to the adjustments made above, the DRI model was adjusted to account for the windfall profits tax and rebates to consumers and industry given above in the Section on Windfall Profits Taxes and Rebates. The corporate and personal tax rates were changed to represent the windfall profits tax and rebate effects that are essential to the President's Program.

The rebates effect very minor changes in the WPI series and in the unemployment rates relative to the effect of the program without rebates. However, the economy and real GNP is higher during the latter part of 1977 as the higher energy prices due to the phased decontrol begin to be felt in the economy. The rebates substantially mitigate the impact of the higher prices. Without the rebates, GNP is \$0.6 billion higher whereas with the rebates, GNP is \$3.4 billion higher.

TABLE 23

INDEX POINT DIFFERENCES* IN THE LEVELS OF THE
CPI AND WPI PHASED DECONTROL
MINUS BASE CASE

	<u>CPI</u>	<u>WPI</u>
1975:3	0.0	-0.1
1975:4	-0.1	-0.5
1976:1	-0.2	-0.7
1976:2	-0.2	-0.8
1976:3	-0.2	-0.8
1976:4	-0.2	-0.6
1977:1	-0.1	-0.3
1977:2	0.0	0.0
1977:3	+0.1	+0.6
1977:4	+0.3	+1.3

* Indexes defined on 1967=100.

TABLE 24

PERCENTAGE POINT DIFFERENCES IN THE ANNUAL RATES OF
CPI AND WPI CHANGE (FOURTH QUARTER TO FOURTH QUARTER)
PHASED DECONTROL MINUS BASE CASE

	<u>CPI</u>	<u>WPI</u>
1974:4 to 1975:4	-0.1	-0.3
1975:4 to 1976:4	+0.1	-0.1
1976:4 to 1977:4	+0.3	+1.0

TABLE 25

REAL GNP UNDER PRESIDENT'S PROGRAM MINUS

REAL GNP IN BASE CASE *

(Percentage difference in parenthesis)

1975:3	+0.6 (0.08)
1975:4	+0.7 (0.09)
1976:1	+1.3 (0.16)
1976:2	+2.5 (0.30)
1976:3	+3.6 (0.43)
1976:4	+4.5 (0.52)
1977:1	+5.0 (0.57)
1977:2	+5.4 (0.61)
1977:3	+4.8 (0.53)
1977:4	+3.4 (0.37)

* GNP in billions of 1958 dollars at annual rates.

TABLE 26

UNEMPLOYMENT RATE UNDER PRESIDENT'S PROGRAM
MINUS UNEMPLOYMENT RATE UNDER BASE CASE

1975:3	0
1975:4	0
1976:1	0
1976:2	-0.1
1976:3	-0.1
1976:4	-0.1
1977:1	-0.2
1977:2	-0.2
1977:3	-0.2
1977:4	-0.2

APPENDIX
Technical Appendix

TABLE A

Partial listing of the output of the DRI Quarterly model. Row A gives the values for phased decontrol with a windfall profits tax and rebate; Row B gives these for the DRI solution NO DREG 7/16 (the base case); and Row D is the difference.

NEW.DEG.W/TAX&REB. DIFFERS FROM THE STANDARD SIMULATION
NO DREG 7/16 FOR THE FOLLOWING VALUES:

----EXOGENOUS VARIABLES

RTOSF	75:4	0.3404	0.3472	0.3493	0.3516	0.3561	0.3602	0.3647
	77:3	0.3697	0.3789					
MPI05NSEX0	75:3	2.494	2.542	2.676	2.735	2.777	2.854	2.912
	77:2	2.976	3.044	3.109				

----ADD FACTORS: NET CHANGES RELATIVE TO NO DREG 7/16

JFRB9	75:3	-0.001	-0.004	-0.007	-0.007	-0.005	-0.010	-0.014
	77:2	-0.010	-0.010	-0.015				
TXSF	75:3	-0.1	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5
	77:2	-0.5	-0.5	-0.5				
TPSF	75:4	-0.1	-0.3	-0.6	-0.7	-1.0	-1.2	-1.5
	77:3	-1.8	-2.3					

----THE FOLLOWING ENDOGENOUS VALUES ARE CONSIDERED EXOGENOUS

IMPROVEDOILS7	75:3	1.038	1.061	1.050	1.022	1.015	1.029	1.022
	77:2	0.989	0.996	1.027				
IMREFINEDOILS 7	75:3	0.239	0.242	0.238	0.230	0.230	0.236	0.237
	77:2	0.230	0.233	0.241				

A= NEW.DEC.W/TAXSER.: BASED ON NO DEREG 7/16
 B= NO DEREG 7/16
 D= A - B
 %= D/B * 100

75:3 75:4 76:1 76:2 76:3 76:4 77:1 77:2 77:3 77:4

---- IMPCRUDEOILS7 Imports of Crude Oil in 1967 Dollars

A	1.039	1.061	1.050	1.022	1.015	1.029	1.022	0.999	0.996	1.027
B	1.090	1.090	1.090	1.110	1.130	1.150	1.155	1.160	1.155	1.170
D	-0.042	-0.019	-0.040	-0.069	-0.115	-0.121	-0.133	-0.171	-0.169	-0.143
%	-3.99	-1.76	-3.67	-7.93	-10.13	-10.52	-11.52	-14.74	-14.51	-12.22

---- IMPREFINEDOILS7 Imports of Distillate and Residual Fuel Oil in 1967 Dollars

A	0.239	0.242	0.239	0.230	0.230	0.236	0.237	0.230	0.233	0.241
B	0.249	0.247	0.249	0.250	0.257	0.264	0.267	0.270	0.273	0.276
D	-0.010	-0.005	-0.010	-0.020	-0.027	-0.028	-0.030	-0.040	-0.040	-0.035
%	-4.19	-1.99	-4.07	-9.06	-10.57	-10.47	-11.27	-14.67	-14.60	-12.90

---- WPI05MSEX0 Wholesale Price Index - Fuels and Related Products and Power

A	2.494	2.542	2.576	2.735	2.777	2.854	2.913	2.976	3.044	3.109
B	2.504	2.579	2.712	2.769	2.800	2.863	2.903	2.957	2.995	3.032
D	-0.010	-0.037	-0.036	-0.034	-0.024	-0.009	0.011	0.019	0.049	0.077
%	-0.39	-1.43	-1.34	-1.21	-0.94	-0.30	0.37	0.65	1.63	2.53

---- TPGF Federal Government Personal Tax and Nontax Receipts

A	129.4	133.0	135.7	139.4	147.4	151.7	155.4	159.7	161.7	164.3
B	129.3	133.1	135.9	139.7	147.6	152.1	155.9	159.2	162.3	165.4
D	0.1	-0.1	-0.2	-0.3	-0.2	-0.2	-0.4	-0.5	-0.6	-1.0
%	0.10	-0.09	-0.14	-0.19	-0.16	-0.23	-0.27	-0.29	-0.39	-0.63

---- RTCGF Effective Rate of Federal Government Tax of Total Corporate Profits

A	0.3370	0.3404	0.3472	0.3493	0.3516	0.3561	0.3602	0.3647	0.3697	0.3789
B	0.3370	0.3370	0.3370	0.3370	0.3370	0.3370	0.3370	0.3370	0.3370	0.3370
D	0.0000	0.0034	0.0102	0.0123	0.0146	0.0191	0.0232	0.0277	0.0327	0.0419
%	0.00	1.02	3.04	3.66	4.35	5.69	6.90	8.23	9.72	12.45

---- TXGF Federal Government Indirect Business Tax and Nontax Accruals

A	26.9	27.8	29.5	29.2	29.9	30.7	31.1	31.9	32.4	32.9
B	27.0	27.8	29.6	29.4	30.1	31.0	31.5	32.1	32.7	33.2
D	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4
%	-0.36	-0.24	-0.43	-0.61	-0.72	-0.91	-1.10	-1.03	-1.00	-1.07

---- JFRB29 Federal Reserve Board Production Index for Petroleum Products

A	1.248	1.273	1.298	1.297	1.299	1.293	1.286	1.294	1.299	1.315
B	1.258	1.279	1.302	1.323	1.332	1.334	1.335	1.339	1.354	1.369
D	-0.010	-0.005	-0.014	-0.027	-0.033	-0.040	-0.049	-0.055	-0.056	-0.055
%	-0.79	-0.43	-1.06	-2.01	-2.45	-3.01	-3.54	-4.08	-4.11	-4.00

---- CPI Consumer Price Index

A	1.513	1.533	1.554	1.576	1.597	1.719	1.742	1.766	1.790	1.815
B	1.514	1.534	1.556	1.579	1.599	1.721	1.743	1.766	1.799	1.811
D	-0.000	-0.001	-0.002	-0.002	-0.002	-0.002	-0.001	-0.001	0.001	0.003
%	-0.02	-0.06	-0.09	-0.12	-0.13	-0.12	-0.08	-0.03	0.07	0.19

A= NEW.DEC.W/TAX&REB.; BASED ON NO DEREG 7/16
 B= NO DEREG 7/16
 D= A - B
 %= D/B X 100

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- WPI	Wholesale Price Index									
A	1.750	1.764	1.790	1.819	1.845	1.874	1.905	1.935	1.964	1.992
B	1.751	1.769	1.796	1.827	1.853	1.880	1.908	1.934	1.958	1.979
D	-0.001	-0.005	-0.007	-0.008	-0.008	-0.006	-0.003	0.000	0.006	0.013
%	-0.05	-0.26	-0.37	-0.44	-0.43	-0.33	-0.15	0.02	0.31	0.65

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- PGDP	Gross National Product Implicit Price Deflator									
A	1.866	1.890	1.911	1.936	1.958	1.984	2.006	2.028	2.050	2.079
B	1.866	1.892	1.913	1.937	1.959	1.985	2.006	2.027	2.047	2.073
D	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.001	0.003	0.006
%	0.02	-0.07	-0.08	-0.07	-0.07	-0.07	-0.03	0.05	0.16	0.28

-----DRISUMMARY

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- C	Consumption									
A	952.1	973.7	999.9	1026.7	1053.7	1084.2	1111.3	1138.9	1166.3	1190.7
B	951.7	973.8	999.5	1025.4	1051.5	1080.9	1107.6	1133.6	1160.3	1184.2
D	0.4	-0.1	0.4	1.3	2.2	3.2	4.3	5.3	6.0	6.5
%	0.04	-0.01	0.04	0.13	0.21	0.30	0.39	0.47	0.52	0.55

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- IFIXER	Fixed Private Nonresidential Investment									
A	143.5	145.7	149.4	155.6	162.9	171.4	180.4	188.0	193.3	197.2
B	143.5	145.8	149.6	155.8	162.9	171.1	179.6	186.7	191.6	195.0
D	-0.0	-0.0	-0.2	-0.3	-0.1	0.3	0.8	1.3	1.8	2.2
%	-0.01	-0.03	-0.15	-0.16	-0.03	0.19	0.45	0.71	0.93	1.11

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- ICR	Investment in Residential Structures									
A	39.6	45.3	51.6	57.6	64.9	71.5	74.3	74.4	73.0	70.4
B	39.6	45.3	51.6	57.5	64.6	71.2	74.2	74.8	74.1	72.2
D	0.0	-0.0	-0.0	0.1	0.3	0.3	0.1	-0.4	-1.0	-1.8
%	0.03	-0.03	-0.01	0.22	0.46	0.45	0.14	-0.48	-1.41	-2.46

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- JINV	Change in Business Inventories									
A	-11.1	-2.2	1.1	3.7	4.1	5.3	6.1	6.1	6.4	6.2
B	-11.1	-2.3	1.0	3.6	3.7	4.7	5.4	5.3	5.7	5.9
D	-0.0	0.1	0.1	0.1	0.3	0.6	0.8	0.8	0.7	0.5
%	-0.28	3.04	9.29	4.13	9.07	12.15	14.02	15.24	12.95	8.11

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- EXPM	Net Exports of Goods and Services									
A	7.9	4.5	3.9	4.8	5.7	5.4	4.9	5.6	5.7	6.2
B	6.9	4.1	2.9	2.5	2.9	2.8	2.2	2.0	2.1	3.0
D	1.0	0.4	1.0	2.2	2.8	2.6	2.7	3.6	3.6	3.2
%	14.90	10.70	33.96	87.75	95.50	95.79	126.17	182.52	173.21	104.10

A= NEW DEC. W/TAXES; BASED ON NO DEFS 7/16

B= NO DEFS 7/16

D= A - B

%= D/B X 100

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- GF	Federal Government Purchases of Goods and Services									
A	131.7	137.2	138.6	140.1	141.2	146.0	147.7	148.7	149.5	152.6
B	SAME									
---- GSL	State and Local Government Purchases of Goods and Services									
A	215.0	220.3	226.9	234.3	241.1	247.6	254.1	260.6	267.9	274.3
B	215.0	220.3	226.7	234.0	240.9	247.0	253.2	259.4	266.2	272.5
D	0.0	0.0	0.0	0.2	0.3	0.6	0.9	1.2	1.6	1.8
%	0.01	0.00	0.02	0.07	0.14	0.25	0.36	0.47	0.59	0.66
---- GNP	Gross National Product									
A	1478.7	1524.4	1571.3	1622.6	1673.6	1731.5	1779.5	1822.4	1862.1	1997.6
B	1477.3	1524.0	1569.9	1618.9	1667.7	1723.7	1769.9	1810.4	1849.4	1885.3
D	1.4	0.4	1.3	3.7	5.9	7.7	9.6	11.9	12.7	12.3
%	0.10	0.02	0.08	0.23	0.36	0.45	0.54	0.66	0.69	0.66
---- GNP58	GNP In 1958 Dollars									
A	792.3	806.4	822.0	838.3	854.9	872.9	887.2	899.5	908.2	912.9
B	791.7	805.7	820.7	835.8	851.3	869.3	882.1	893.1	903.4	909.4
D	0.6	0.7	1.3	2.5	3.6	4.5	5.0	5.4	4.8	3.4
%	0.08	0.09	0.16	0.30	0.43	0.52	0.57	0.61	0.53	0.37
---- RPNP	Annual Rate of Growth of GNP									
A	5.40	5.21	4.57	5.14	4.62	5.46	4.52	4.54	4.44	5.70
B	5.32	5.57	4.62	5.11	4.62	5.45	4.35	4.20	4.01	5.13
D	0.07	-0.35	-0.04	0.03	0.00	0.00	0.17	0.34	0.44	0.52
%	1.39	-6.37	-0.96	0.60	0.05	0.06	3.87	8.04	10.86	9.97
---- RCPI	Annual Rate of Growth of the CPI									
A	5.55	4.91	5.43	5.34	5.13	5.31	5.45	5.51	5.55	5.70
B	5.62	5.01	5.55	5.44	5.17	5.27	5.30	5.29	5.14	5.20
D	-0.07	-0.20	-0.12	-0.10	-0.04	0.04	0.15	0.22	0.41	0.51
%	-1.22	-4.05	-2.14	-1.93	-0.94	0.72	2.97	4.09	7.91	9.76
---- WPI	Wholesale Price Index									
A	1.750	1.764	1.790	1.819	1.845	1.874	1.905	1.935	1.964	1.992
B	1.751	1.769	1.796	1.827	1.853	1.880	1.908	1.934	1.958	1.979
D	-0.001	-0.005	-0.007	-0.008	-0.008	-0.006	-0.003	0.000	0.006	0.013
%	-0.05	-0.26	-0.37	-0.44	-0.43	-0.33	-0.16	0.02	0.31	0.65
---- JRMSSP	Index of Compensation Per Man Hour - Private Economy									
A	1.811	1.841	1.873	1.906	1.939	1.974	2.009	2.043	2.076	2.109
B	1.811	1.841	1.873	1.906	1.939	1.973	2.008	2.041	2.074	2.106
D	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.002	0.003
%	0.00	0.01	0.00	0.01	0.02	0.03	0.05	0.09	0.10	0.13

A= NEW.DEC.W/TAX&REB.; BASED ON NO DERES 7/16
 B= NO DERES 7/16
 D= A - B
 % = D/B * 100

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- JFRB Federal Reserve Board Production Index										
A	1.113	1.148	1.179	1.211	1.243	1.286	1.317	1.338	1.355	1.391
B	1.117	1.147	1.177	1.208	1.240	1.278	1.307	1.328	1.345	1.355
D	0.000	0.001	0.002	0.003	0.004	0.008	0.010	0.010	0.009	0.006
%	0.04	0.08	0.14	0.26	0.45	0.62	0.73	0.79	0.68	0.48
---- HUSTS Private Housing Starts										
A	1.325	1.545	1.893	1.923	2.059	2.176	2.130	1.979	1.906	1.796
B	1.324	1.545	1.890	1.910	2.040	2.153	2.132	2.003	1.959	1.873
D	0.001	-0.001	0.003	0.013	0.019	0.013	-0.002	-0.025	-0.052	-0.077
%	0.09	-0.06	0.18	0.75	0.95	0.62	-0.11	-1.23	-2.65	-4.11
---- SOTRCARS Total Retail Sales of New Passenger Cars										
A	9.1	9.7	9.1	9.5	9.9	10.3	10.5	10.7	11.0	10.9
B	9.1	9.7	9.1	9.4	9.8	10.2	10.4	10.7	11.0	10.9
D	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	-0.1
%	0.12	0.12	0.44	0.91	1.05	1.11	1.05	0.75	0.12	-0.70
---- RU Unemployment Rate										
A	9.3	9.1	9.3	9.3	7.9	7.5	7.1	6.8	6.6	6.4
B	9.3	9.2	9.3	9.4	9.0	7.6	7.2	7.0	6.8	6.6
D	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
%	-0.11	-0.23	-0.43	-0.91	-1.31	-1.89	-2.42	-2.93	-2.94	-2.66
---- DEFGF Federal Government Surplus - NIA Accounts										
A	-74.7	-78.9	-70.0	-60.6	-50.1	-43.6	-37.5	-32.6	-31.6	-30.4
B	-74.8	-78.6	-70.9	-62.5	-53.1	-47.9	-42.9	-39.0	-39.9	-39.5
D	0.1	-0.1	0.9	1.9	3.0	4.3	5.4	6.5	7.4	9.1
%	0.19	-0.19	1.28	3.04	5.73	8.95	12.55	16.55	18.93	20.98
---- RMPUNEWANS Average Yield on New Issues of AA-Rated Corporate Utility Bonds										
A	9.01	9.75	9.59	9.63	9.66	9.73	9.78	9.97	9.93	9.95
B	9.01	9.74	9.59	9.63	9.65	9.70	9.74	9.89	9.82	9.81
D	0.01	0.00	-0.00	0.00	0.01	0.03	0.04	0.08	0.11	0.14
%	0.06	0.03	-0.03	0.02	0.17	0.30	0.51	0.88	1.24	1.55
---- RMMBCNEUNS Average Yield On New Issues of High Grade Corporate Bonds										
A	9.66	9.43	9.29	9.34	9.37	9.44	9.49	9.67	9.63	9.65
B	9.66	9.43	9.29	9.34	9.36	9.41	9.45	9.60	9.53	9.52
D	0.01	0.00	-0.00	0.00	0.01	0.03	0.04	0.08	0.11	0.13
%	0.06	0.03	-0.03	0.02	0.17	0.30	0.51	0.88	1.24	1.54
---- RMFEDFUNDNS Effective Rate on Federal Funds										
A	5.37	5.53	5.48	5.70	6.01	6.41	7.14	8.39	9.36	9.31
B	5.36	5.50	5.53	5.76	5.99	6.24	6.93	7.99	7.72	7.58
D	0.01	0.03	-0.05	-0.07	0.02	0.16	0.31	0.51	0.64	0.73
%	0.28	0.56	-0.93	-1.17	0.39	2.63	4.56	6.44	8.23	9.69

A= NEW DEC. W/TAXI REB.; BASED ON NO DERES 7/16
 B= NO DERES 7/16
 D= A - B
 %= D/B X 100

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- YP	Personal Income									
A	1257.1	1299.9	1322.2	1355.5	1394.9	1434.7	1469.9	1500.2	1532.4	1550.9
B	1256.1	1290.0	1321.5	1354.7	1391.9	1430.5	1463.1	1492.6	1523.4	1550.9
D	1.0	-0.0	0.7	1.8	3.0	4.2	5.7	7.6	8.9	10.0
%	0.08	-0.00	0.05	0.13	0.22	0.29	0.39	0.51	0.59	0.65

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- YD	Disposable Personal Income									
A	1092.4	1109.7	1137.5	1166.2	1194.6	1227.9	1255.4	1291.1	1307.7	1331.3
B	1091.6	1109.7	1136.7	1164.3	1191.6	1223.5	1249.6	1273.3	1299.3	1320.3
D	0.8	0.0	0.8	1.9	3.0	4.3	5.8	7.7	9.3	10.9
%	0.07	0.00	0.07	0.16	0.25	0.35	0.46	0.61	0.72	0.83

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- SVXYD	Personal Savings As A Percent of Disposable Personal Income									
A	9.5	9.3	9.6	9.5	9.4	9.3	9.1	9.7	9.5	9.3
B	9.5	9.3	9.6	9.5	9.3	9.3	9.0	9.6	9.3	9.1
D	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
%	0.32	0.10	0.26	0.37	0.43	0.56	0.90	1.61	2.37	3.23

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- CCACGRF	Corporate Capital Consumption Allowances									
A	94.9	95.7	99.6	90.5	92.4	94.3	95.3	99.4	100.5	102.7
B	94.9	95.7	99.6	90.5	92.4	94.3	95.3	99.4	100.5	102.7
D	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0
%	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.01

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- ZB	Corporate Profits Before Tax Excluding Inventory Valuation Adjustment									
A	107.5	112.0	121.4	133.3	139.9	150.8	159.2	162.5	166.3	166.9
B	107.6	113.6	122.3	132.9	139.0	147.6	153.9	157.7	160.6	161.3
D	-0.1	-1.5	-0.9	0.4	1.9	3.2	4.4	4.9	5.8	5.5
%	-0.11	-1.34	-0.76	0.31	1.40	2.19	2.85	3.09	3.59	3.41

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- ZR	Corporate Profits After Tax Excluding Inventory Valuation Adjustment									
A	65.1	69.5	73.3	80.3	83.9	99.9	93.6	95.4	96.9	95.5
B	66.1	69.9	75.2	81.7	84.9	90.7	94.5	96.9	99.7	99.2
D	-0.1	-1.3	-1.9	-1.4	-0.9	-0.9	-1.0	-1.5	-1.9	-3.6
%	-0.11	-1.99	-2.42	-1.70	-1.01	-1.00	-1.03	-1.57	-1.93	-3.65

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- RGNP59	Annual Rate of Growth of Real GNP									
A	7.6	7.3	7.9	9.2	9.2	9.6	6.7	5.2	4.4	2.0
B	7.3	7.3	7.6	7.6	7.5	9.2	6.5	5.1	4.7	2.7
D	0.3	0.1	0.3	0.6	0.5	0.4	0.2	0.1	-0.3	-0.6
%	4.51	0.72	4.06	7.75	7.12	4.80	3.53	2.95	-7.04	-23.42

TABLE B

Partial listing of the output of the DRI Quarterly model. Row A gives the values for phased decontrol without a windfall profits tax or rebate; Row B gives these for the DRI solution NO DREG 7/16 (the base case); and Row D is the difference.

OPERATION?SOLVE

DEC:NOTAX/NOREB. DIFFERS FROM THE STANDARD SIMULATION
NO DREG 7/16 FOR THE FOLLOWING VALUES:

----EXOGENOUS VARIABLES

WPI05NSEXD	75:3	2.494	2.542	2.676	2.735	2.777	2.854	2.913
	77:2	2.976	3.044	3.109				

----ADD FACTORS: NET CHANGES RELATIVE TO NO DREG 7/16

JFRB29	75:3	-0.001	-0.004	-0.007	-0.006	-0.005	-0.010	-0.013
	77:2	-0.011	-0.012	-0.017				
TXSF	75:3	-0.1	-0.1	-0.1	-0.2	-0.3	-0.4	-0.5
	77:2	-0.5	-0.5	-0.5				

----THE FOLLOWING ENDOGENOUS VALUES ARE CONSIDERED EXOGENOUS

IMPROVEDOILS67	75:3	1.038	1.061	1.050	1.022	1.015	1.029	1.022
	77:2	0.989	0.996	1.027				
IMPREFINEDOILS	75:3	0.239	0.242	0.238	0.230	0.230	0.236	0.237
7	77:2	0.230	0.233	0.241				

A= DEC:NOTAX/NOEREB.; BASED ON NO DEREG 7/16

B= NO DEREG 7/16

D= A - B

%= D/B X 100

75:3 75:4 76:1 76:2 76:3 76:4 77:1 77:2 77:3 77:4

---- IMPROVEDDIL67 IMPORTS OF CRUDE OIL IN 1967 DOLLARS

A	1.038	1.051	1.050	1.022	1.015	1.029	1.022	0.999	0.996	1.027
B	1.030	1.030	1.030	1.110	1.130	1.150	1.155	1.160	1.165	1.170
D	-0.042	-0.019	-0.040	-0.088	-0.115	-0.121	-0.133	-0.171	-0.169	-0.143
%	-3.99	-1.76	-3.67	-7.93	-10.13	-10.52	-11.52	-14.74	-14.51	-12.22

---- IMPREFINEDDIL67 IMPORTS OF DESTILLATE AND RESIDUAL FUEL OIL IN 1967 DOLLARS

A	0.239	0.242	0.238	0.230	0.230	0.236	0.237	0.230	0.223	0.241
B	0.249	0.247	0.248	0.250	0.257	0.264	0.267	0.270	0.273	0.276
D	-0.010	-0.005	-0.010	-0.020	-0.027	-0.028	-0.030	-0.040	-0.040	-0.035
%	-4.19	-1.98	-4.07	-8.06	-10.57	-10.47	-11.27	-14.67	-14.60	-12.90

---- MPI05NSEXD WHOLESALE PRICE INDEX - FUELS AND RELATED PRODUCTS AND POWER

A	2.494	2.542	2.676	2.735	2.777	2.854	2.913	2.976	3.044	3.119
B	2.504	2.579	2.712	2.769	2.800	2.863	2.902	2.957	2.995	3.032
D	-0.010	-0.037	-0.036	-0.034	-0.024	-0.009	0.011	0.019	0.049	0.077
%	-0.39	-1.43	-1.34	-1.21	-0.84	-0.30	0.37	0.65	1.63	2.53

---- TXSF FEDERAL GOVERNMENT INDIRECT BUSINESS TAX AND NONTAX ACCURALS

A	26.9	27.8	28.5	29.2	29.9	30.7	31.1	31.7	32.3	32.8
B	27.0	27.9	28.6	29.4	30.1	31.0	31.5	32.1	32.7	33.2
D	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4
%	-0.36	-0.24	-0.44	-0.64	-0.77	-1.00	-1.23	-1.20	-1.21	-1.34

---- JFRB29 FEDERAL RESERVE BOARD PRODUCTION INDEX FOR PETROLEUM PRODUCTS

A	1.248	1.273	1.289	1.297	1.299	1.294	1.297	1.294	1.299	1.314
B	1.258	1.279	1.302	1.323	1.332	1.334	1.335	1.339	1.354	1.369
D	-0.010	-0.006	-0.014	-0.026	-0.033	-0.040	-0.048	-0.055	-0.055	-0.055
%	-0.79	-0.43	-1.07	-1.95	-2.45	-3.00	-3.60	-4.09	-4.16	-4.04

---- CPI CONSUMER PRICE INDEX

A	1.613	1.633	1.654	1.676	1.697	1.719	1.742	1.766	1.790	1.814
B	1.614	1.634	1.656	1.678	1.699	1.721	1.743	1.766	1.788	1.811
D	-0.000	-0.001	-0.002	-0.002	-0.002	-0.002	-0.001	-0.000	0.001	0.003
%	-0.02	-0.06	-0.09	-0.11	-0.12	-0.11	-0.08	-0.03	0.06	0.13

---- MPI WHOLESALE PRICE INDEX

A	1.750	1.764	1.790	1.819	1.845	1.874	1.904	1.934	1.963	1.990
B	1.751	1.769	1.796	1.827	1.853	1.880	1.908	1.934	1.959	1.979
D	-0.001	-0.005	-0.007	-0.008	-0.008	-0.007	-0.003	-0.000	0.005	0.011
%	-0.05	-0.26	-0.37	-0.45	-0.44	-0.35	-0.13	-0.02	0.25	0.57

---- PGNP GROSS NATIONAL PRODUCT IMPLICIT PRICE DEFLATOR

A	1.966	1.990	1.912	1.936	1.958	1.984	2.006	2.029	2.051	2.079
B	1.966	1.992	1.913	1.937	1.959	1.985	2.006	2.027	2.047	2.073
D	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.000	0.001	0.003	0.006
%	0.02	-0.07	-0.09	-0.06	-0.06	-0.06	-0.01	0.07	0.17	0.28

A= DEC:NOTAX/NOREB.; BASED ON NO DEREG 7/16
 B= NO DEREG 7/16
 D= A - B
 %= D/B X 100

75:3 75:4 76:1 76:2 76:3 76:4 77:1 77:2 77:3 77:4

-----DRISUMMARY

---- C CONSUMPTION

A	952.1	973.6	999.7	1026.3	1053.1	1083.1	1110.3	1136.3	1163.7	1187.4
B	951.7	973.9	999.5	1025.4	1051.5	1080.9	1107.6	1133.6	1160.3	1184.2
D	0.4	-0.2	0.3	0.9	1.6	2.1	2.7	3.2	3.3	3.3
%	0.04	-0.02	0.03	0.09	0.15	0.20	0.24	0.28	0.29	0.27

---- IFIXER FIXED PRIVATE NONRESIDENTIAL INVESTMENT

A	143.5	145.7	149.4	155.5	162.3	171.2	180.0	187.3	192.4	195.9
B	143.5	145.3	149.6	155.3	162.9	171.1	179.6	186.7	191.6	195.0
D	-0.0	-0.0	-0.2	-0.3	-0.2	0.1	0.4	0.7	0.8	0.9
%	-0.01	-0.03	-0.16	-0.19	-0.10	0.05	0.22	0.36	0.43	0.45

---- ICR INVESTMENT IN RESIDENTIAL STRUCTURES

A	39.6	45.3	51.6	57.6	64.7	71.1	73.7	73.6	72.1	69.4
B	39.6	45.3	51.6	57.5	64.6	71.2	74.2	74.9	74.1	72.2
D	0.0	-0.0	-0.0	0.1	0.1	-0.1	-0.5	-1.2	-2.0	-2.8
%	0.03	-0.04	-0.02	0.14	0.17	-0.10	-0.68	-1.57	-2.70	-3.91

---- JINV CHANGE IN BUSINESS INVENTORIES

A	-11.1	-2.2	1.1	3.7	4.0	5.2	5.9	5.3	6.0	5.7
B	-11.1	-2.3	1.0	3.6	3.7	4.7	5.4	5.3	5.7	5.3
D	-0.0	0.1	0.1	0.1	0.3	0.5	0.6	0.5	0.3	-0.1
%	-0.23	3.06	9.11	3.79	7.39	9.93	10.36	9.43	5.56	-0.66

---- EXPM NET EXPORTS OF GOODS AND SERVICES

A	7.9	4.5	3.9	4.3	5.3	5.6	5.2	6.1	6.3	6.9
B	6.9	4.1	2.9	2.5	2.9	2.3	2.2	2.0	2.1	3.0
D	1.0	0.4	1.0	2.3	2.9	2.3	3.0	4.1	4.2	3.9
%	14.90	10.95	34.40	89.01	98.11	102.07	140.24	205.15	202.24	129.27

---- GF FEDERAL GOVERNMENT PURCHASES OF GOODS AND SERVICES

A	131.7	137.2	138.6	140.1	141.2	146.0	147.7	149.7	149.5	152.6
B	SAME									

---- GSL STATE AND LOCAL GOVERNMENT PURCHASES OF GOODS AND SERVICES

A	215.0	220.3	226.3	234.2	241.1	247.6	254.0	260.5	267.5	274.0
B	215.0	220.3	226.7	234.0	240.3	247.0	253.2	259.4	266.2	272.5
D	0.0	0.0	0.0	0.1	0.3	0.6	0.3	1.0	1.3	1.4
%	0.01	0.00	0.02	0.05	0.13	0.22	0.32	0.40	0.48	0.52

---- GNP GROSS NATIONAL PRODUCT

A	1478.7	1524.3	1571.1	1622.1	1672.6	1729.7	1776.9	1818.3	1857.5	1891.9
B	1477.3	1524.0	1569.9	1619.9	1667.7	1723.7	1769.9	1810.4	1849.4	1885.3
D	1.4	0.3	1.1	3.2	5.0	6.0	7.0	9.3	8.0	6.6
%	0.10	0.02	0.07	0.20	0.30	0.35	0.40	0.46	0.43	0.35

A= DEC:NOTAX/NOREB.; BASED ON NO DEREG 7/16

B= NO DEREG 7/16

D= A - B

%= D/B X 100

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- GNP58	GNP IN 1958 DOLLARS									
A	792.3	806.4	821.9	839.0	854.4	871.9	885.8	896.6	905.8	910.0
B	791.7	805.7	820.7	835.8	851.3	868.3	882.1	893.1	903.4	909.4
D	0.6	0.7	1.2	2.2	3.1	3.5	3.6	3.5	2.4	0.6
%	0.08	0.09	0.15	0.26	0.36	0.41	0.41	0.39	0.27	0.07
---- RPSNP	ANNUAL RATE OF GROWTH OF GNP									
A	5.40	5.22	4.58	5.15	4.63	5.47	4.53	4.54	4.43	5.67
B	5.32	5.57	4.62	5.11	4.62	5.45	4.35	4.20	4.01	5.18
D	0.07	-0.35	-0.04	0.04	0.02	0.02	0.18	0.34	0.42	0.49
%	1.39	-6.32	-0.86	0.82	0.35	0.31	4.05	8.00	10.44	9.46
---- RCPI	ANNUAL RATE OF GROWTH OF THE CPI									
A	5.55	4.81	5.43	5.34	5.13	5.31	5.45	5.50	5.52	5.67
B	5.62	5.01	5.55	5.44	5.17	5.27	5.30	5.29	5.14	5.20
D	-0.07	-0.20	-0.12	-0.09	-0.04	0.04	0.15	0.21	0.38	0.47
%	-1.22	-4.04	-2.12	-1.71	-0.72	0.79	2.95	3.89	7.47	9.10
---- WPI	WHOLESALE PRICE INDEX									
A	1.750	1.764	1.790	1.819	1.845	1.874	1.904	1.934	1.963	1.990
B	1.751	1.759	1.796	1.827	1.853	1.880	1.903	1.934	1.958	1.979
D	-0.001	-0.005	-0.007	-0.008	-0.008	-0.007	-0.003	-0.000	0.005	0.011
%	-0.05	-0.26	-0.37	-0.45	-0.44	-0.35	-0.18	-0.02	0.25	0.57
---- JRWSSP	INDEX OF COMPENSATION PER MAN HOUR - PRIVATE ECONOMY									
A	1.811	1.841	1.873	1.906	1.939	1.973	2.003	2.042	2.075	2.106
B	1.811	1.841	1.873	1.906	1.939	1.973	2.003	2.041	2.074	2.106
D	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
%	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.03
---- JFRB	FEDERAL RESERVE BOARD PRODUCTION INDEX									
A	1.118	1.148	1.179	1.211	1.245	1.284	1.313	1.333	1.349	1.353
B	1.117	1.147	1.177	1.208	1.240	1.278	1.307	1.328	1.346	1.355
D	0.000	0.001	0.001	0.003	0.004	0.006	0.006	0.005	0.003	-0.001
%	0.04	0.08	0.12	0.21	0.34	0.44	0.45	0.40	0.20	-0.10
---- HUSTS	PRIVATE HOUSING STARTS									
A	1.325	1.545	1.592	1.920	2.049	2.159	2.107	1.951	1.378	1.768
B	1.324	1.546	1.590	1.910	2.040	2.153	2.132	2.003	1.958	1.873
D	0.001	-0.001	0.003	0.010	0.009	-0.004	-0.025	-0.052	-0.080	-0.105
%	0.09	-0.06	0.17	0.55	0.43	-0.20	-1.19	-2.57	-4.10	-5.62
---- SQTRCARS	TOTAL RETAIL SALES OF NEW PASSENGER CARS									
A	9.1	9.7	9.1	9.5	9.9	10.3	10.5	10.7	10.9	10.9
B	8.1	8.7	9.1	9.4	9.3	10.2	10.4	10.7	11.0	10.9
D	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	-0.1	-0.2
%	0.12	0.12	0.42	0.68	0.73	0.71	0.49	0.03	-0.61	-1.47

A= DEC:NOTAX/NOREB.; BASED ON NO DEREG 7/16

B= NO DEREG 7/16

D= A - B

%= D/B X 100

	75:3	75:4	76:1	76:2	76:3	76:4	77:1	77:2	77:3	77:4
---- RU	UNEMPLOYMENT RATE									
A	9.3	9.1	8.9	8.3	7.9	7.5	7.1	6.9	6.6	6.5
B	9.3	9.2	8.9	8.4	8.0	7.6	7.2	7.0	6.9	6.6
D	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
%	-0.11	-0.22	-0.41	-0.73	-1.14	-1.56	-1.89	-2.04	-1.96	-1.30

---- DEFGF FEDERAL GOVERNMENT SURPLUS - NIA ACCOUNTS

A	-74.7	-79.1	-71.0	-61.8	-51.7	-46.1	-40.8	-36.7	-36.7	-36.8
B	-74.8	-79.6	-70.9	-62.5	-53.1	-47.9	-42.9	-39.0	-39.9	-39.5
D	0.1	-0.4	-0.1	0.7	1.4	1.9	2.1	2.3	2.3	1.6
%	0.18	-0.54	-0.09	1.06	2.56	3.74	4.93	5.84	5.82	4.22

---- RMPUNEWANS AVERAGE YIELD ON NEW ISSUES OF AA-RATED CORPORATE UTILITY BONDS

A	9.01	8.75	8.59	8.64	8.67	8.73	8.73	8.96	8.92	8.93
B	9.01	8.74	8.59	8.63	8.65	8.70	8.74	8.89	8.92	8.91
D	0.01	0.00	-0.00	0.01	0.02	0.03	0.05	0.07	0.10	0.12
%	0.06	0.03	-0.02	0.09	0.24	0.35	0.52	0.84	1.12	1.35

---- RMMBCNEWNS AVERAGE YIELD ON NEW ISSUES OF HIGH GRADE CORPORATE BONDS

A	8.66	8.43	8.29	8.35	8.38	8.44	8.49	8.67	8.62	8.63
B	8.66	8.43	8.29	8.34	8.36	8.41	8.45	8.60	8.53	8.52
D	0.01	0.00	-0.00	0.01	0.02	0.03	0.04	0.07	0.10	0.11
%	0.06	0.03	-0.02	0.09	0.24	0.35	0.52	0.83	1.12	1.34

---- RMFEDFUNDS EFFECTIVE RATE ON FEDERAL FUNDS

A	5.37	5.52	5.47	5.74	6.09	6.49	7.24	8.49	9.44	9.39
B	5.36	5.50	5.53	5.76	5.99	6.24	6.83	7.89	7.72	7.59
D	0.01	0.02	-0.06	-0.02	0.10	0.24	0.41	0.60	0.72	0.80
%	0.29	0.40	-1.03	-0.35	1.71	3.92	5.96	7.65	9.31	10.49

---- YP PERSONAL INCOME

A	1257.1	1299.9	1322.1	1356.4	1394.6	1434.2	1467.9	1499.9	1530.6	1559.5
B	1256.1	1290.0	1321.5	1354.7	1391.9	1430.5	1463.1	1492.6	1523.4	1550.8
D	1.0	-0.1	0.7	1.7	2.7	3.7	4.8	6.3	7.2	7.7
%	0.08	-0.01	0.05	0.12	0.20	0.26	0.33	0.42	0.47	0.50

---- YD DISPOSABLE PERSONAL INCOME

A	1082.4	1109.6	1137.2	1165.6	1193.7	1226.4	1253.6	1279.6	1304.5	1327.2
B	1091.6	1109.7	1135.7	1164.3	1191.6	1223.5	1249.5	1273.3	1299.3	1320.3
D	0.8	-0.1	0.4	1.2	2.1	2.9	4.0	5.3	6.2	6.9
%	0.07	-0.01	0.04	0.11	0.19	0.24	0.32	0.41	0.49	0.52

---- SV%YD PERSONAL SAVINGS AS A PERCENT OF DISPOSABLE PERSONAL INCOME

A	9.5	9.9	9.6	9.5	9.4	9.3	9.1	9.7	9.4	9.2
B	9.5	9.9	9.6	9.5	9.3	9.3	9.0	9.6	9.3	9.0
D	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2
%	0.32	0.05	0.14	0.21	0.32	0.45	0.79	1.49	2.16	2.92

A= DEC:NOTAX/NOREB.; BASED ON NO DEREG 7/16
 B= NO DEREG 7/16
 D= A - B
 %= D/B X 100

75:3 75:4 76:1 76:2 76:3 76:4 77:1 77:2 77:3 77:4

---- CCACORP CORPORATE CAPITAL CONSUMPTION ALLOWANCES

A	94.9	96.7	98.6	90.5	92.4	94.3	96.3	98.4	100.5	102.7
B	94.9	96.7	98.6	90.5	92.4	94.3	96.3	98.4	100.5	102.7
D	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
%	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00

---- ZB CORPORATE PROFITS BEFORE TAX EXCLUDING INVENTORY VALUATION ADJUSTMENT

A	107.5	112.0	121.3	133.1	139.4	150.0	157.0	160.9	164.4	164.5
B	107.6	113.6	122.3	132.9	138.0	147.6	153.9	157.7	160.6	161.3
D	-0.1	-1.5	-1.0	0.2	1.5	2.4	3.2	3.2	3.8	3.2
%	-0.11	-1.36	-0.83	0.15	1.06	1.62	2.07	2.06	2.35	1.96

---- ZA CORPORATE PROFITS AFTER TAX EXCLUDING INVENTORY VALUATION ADJUSTMENT

A	66.1	68.9	74.5	81.8	85.7	92.2	96.5	98.9	101.0	101.1
B	66.1	69.8	75.2	81.7	84.8	90.7	94.5	96.9	98.7	99.2
D	-0.1	-0.9	-0.6	0.1	0.9	1.5	2.0	2.0	2.3	1.9
%	-0.11	-1.36	-0.83	0.15	1.06	1.62	2.07	2.06	2.35	1.96

---- R5NP59 ANNUAL RATE OF GROWTH OF REAL GNP

A	7.6	7.3	7.9	9.1	9.0	8.4	6.5	5.0	4.2	1.8
B	7.3	7.3	7.6	7.6	7.6	8.2	6.5	5.1	4.7	3.7
D	0.3	0.0	0.3	0.5	0.4	0.2	0.0	-0.1	-0.5	-0.9
%	4.61	0.42	3.57	6.55	5.32	2.46	0.32	-1.33	-11.33	-30.79

OPERATION?DONE

*ET=40:55.4 APPROX CRU= 00527

BYE

*END SESSION 0956 ET=41:19.4

*USER = EDAS CHARGE = LAGACE 10:03:34 07/29/75