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THE ECONOMIC IMPACT OF FORTHCOMING OPEC  
PRICE RISE AND "OLD" OIL DECONTROL

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HEARINGS  
BEFORE THE  
SUBCOMMITTEE ON CONSUMER ECONOMICS  
OF THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES  
NINETY-FOURTH CONGRESS  
FIRST SESSION

—————  
JULY 10 AND 14, 1975  
—————

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1976

63-134

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For sale by the Superintendent of Documents, U.S. Government Printing Office  
Washington, D.C. 20402 - Price \$1.50

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# THE ECONOMIC IMPACT OF FORTHCOMING OPEC PRICE RISE AND "OLD" OIL DECONTROL

THURSDAY, JULY 10, 1975

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON CONSUMER ECONOMICS  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The subcommittee met, pursuant to notice, at 10:10 a.m., in room 1202, Dirksen Senate Office Building, Hon. Hubert H. Humphrey (chairman of the subcommittee) presiding.

Present: Senators Humphrey, Proxmire, Kennedy, and Javits; and Representatives Long, Brown of Ohio, and Heckler.

Also present: William A. Cox, Robert D. Hamrin, Jerry J. Jasinowski, L. Douglas Lee, George R. Tyler, and Larry Yuspeh, professional staff members; Michael J. Runde, administrative assistant; George D. Krumbhaar, Jr., minority counsel; and M. Catherine Miller, minority economist.

## OPENING STATEMENT OF CHAIRMAN HUMPHREY

Chairman HUMPHREY. This hearing is, of course, the first of two to be conducted by the Consumer Economics Subcommittee of the Joint Economic Committee to evaluate the economic impact of the proposal to decontrol so-called old oil, and the widely predicted jump in the month of October of OPEC oil prices.

I recognize that both of these are questions of conjecture or issues of conjecture, and not necessarily ones of certainty.

In combination with the administration's oil import duties, oil decontrol and higher OPEC prices could turn our present recession into an energy depression.

Decontrolling old oil will slash consumer income, according to the estimates of our staff, of around \$15 billion to \$20 billion. A \$2 rise in OPEC prices, which is a figure that has been repeatedly mentioned, will cut consumer incomes another \$10 billion to \$15 billion. Decontrolling old oil, as is being recommended by the administration, will force wholesale prices up almost 100 percent faster next year than would normally otherwise occur with controls. A \$2 OPEC price jump will cut the growth in real domestic production by almost 1 percent next year. And decontrolling old oil will cut its growth back an additional 1 percent, making 1976 a repeat of 1975's slow growth.

Finally, oil decontrol and a \$2 OPEC price jump, if both were to take place this year, will force an additional 400,000 men, women, and

teenagers out of work, forced out by the slash in consumer incomes and resulting drop in industrial production.

These numbers, while estimates, I think are responsible estimates. These numbers are startling, but they are based on statistics developed just 2 days ago by the Joint Economic Committee's staff and the Library of Congress, using mathematical models at Wharton and Data Resources. I mention this because I think the credibility of the statistical information is of the utmost importance.

I have said that these numbers are startling; indeed, they are. They reveal what we face in the next 3 months: Two most difficult choices.

First, on August 31, oil price controls expire. We must decide whether or not to extend them.

Second, on October 1, OPEC, according to the information that is available, will dictate another price rise to us. We do not know the amount, but it is indicated that there will be a price rise. We must decide whether and how to soften the blow of this price jump.

It is my judgment that the majority of Congress feels that we must do everything possible to continue price controls on old oil and to offset the OPEC price rise. We must do so because our national priority should be a speedy economic recovery and all that goes with it, including jobs; restore consumer confidence; and a spiritual uplifting across the land, as economic recovery and prosperity returns.

Energy conservation is important, vitally important. Jobs are important, also. The administration wants oil decontrolled and has pursued, in my judgment, an OPEC-style energy pricing policy—a policy of higher and higher energy prices designed to reduce energy use by slashing consumer incomes and by forcing industrial production down and unemployment up, as consumers pay more for energy and have less income to buy automobiles, appliances, and other articles.

In short, it appears to be a policy where energy conservation through price rationing is to be given top priority regardless of its impact on economic recovery. The administration's brand of conservation, which it believes will work, means higher energy prices.

I believe, Mr. Greenspan, you have said inevitably there are higher prices. I believe I am correct in noting that you have indicated in your statement that prices are going to rise to the world level regardless of what we do—despite the fact that we have substantial amounts of domestically produced energy here in the United States: Oil, gas, and almost unlimited quantities of coal.

There has been some speculation in the media lately that the administration is undergoing a reevaluation of this policy. Maybe we will hear about that today. But as of now, according to my understanding, the administration's objectives are to seek decontrol of old oil over 25 months and not to seek in some fashion—for example, by cutting taxes—to soften the impact of higher OPEC prices.

The Joint Economic Committee staff has projected the effects of this decontrol scheme and a 15 percent OPEC price rise; that is, \$1.57 a barrel. Although uncertainty surrounds the OPEC action, I consider this a likely situation over the next 3 months if the administration is able to achieve its policy objectives.

The Joint Economic Committee staff has prepared three charts comparing consumer prices, using the Consumer Price Index; growth

in production, using real GNP figures; and unemployment. And you will note the charts over there.

First, we have a case where we have a continuation on oil controls and the expected OPEC price increase does not occur or is offset by a matching reduction in the oil tariff; this situation is labeled "Price Controls".

Second, we have a case where we have old oil decontrolled over 25 months and a 15 percent OPEC price rise occurs with your tariff remaining in place; this situation is labeled "Administration policies."

As depicted on these charts, we see that the administration's energy program will cut our growth and output—that is, real GNP—by over one-third by mid-1976. Due to rising energy prices, real GNP, adjusted for inflation, will grow at a rate insufficient to cut unemployment significantly. It is estimated that it will take a real growth rate of around 7 percent to cut unemployment 1 percent in 1976. The result is that the administration's energy plan will hold unemployment at about 8.5 percent in the foreseeable future. In effect, by slashing consumer incomes, the administration allows consumer demand to rise at a rate only sufficient to provide jobs for new labor market entrants. The number of unemployed, as a result, will only fall very gradually. It would not be until 1978 that we could see unemployment drop even as low as 8 percent.

Now, I recognize that these are all predictions, subject to all kinds of adjustments; but these are the projections that are made on the basis of decontrol of old oil and an estimated \$1.57 a barrel increase, or a 15 percent rise, in OPEC prices.

The Joint Economic Committee staff estimates that consumer prices will rise 2 to 3 percent faster over the next seven quarters due to the administration's program.

These results are presented in a committee summary sheet.

Let me add that the administration's program will cost the average American family of four persons about \$800 per year in higher energy prices.

I repeat again to my distinguished friend—the Chairman of the Council of Economic Advisers, who has said that oil prices are going to rise to world levels regardless of what we do—I believe that a country that has at least 65 percent domestic production—maybe larger, if we want to push it—does not have to be completely subservient to a world oil price.

So, we have witnesses today that we are going to comment on these projections, I am sure. I thought they ought to be laid out before you so you can at least test their veracity or credibility and we can hear from you as to what your projections are.

Now, I think I should add that these projections do not include any price increase for natural gas, which the administration recommends be decontrolled as well. In other words, these charts do not include what would be a very substantial hike in natural gas prices if there were total decontrol.

Without objection, the charts I referred to in my opening statement will be placed in the record at this point.

[The charts follow:]

**INFLATION**

CONSUMER PRICE INCREASE

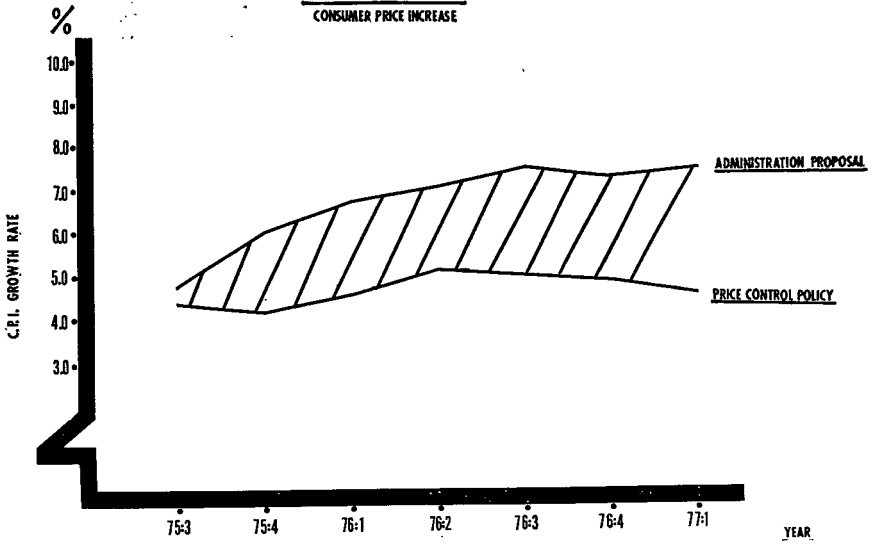


CHART 1

**GROWTH IN PRODUCTION**

(REAL GNP)

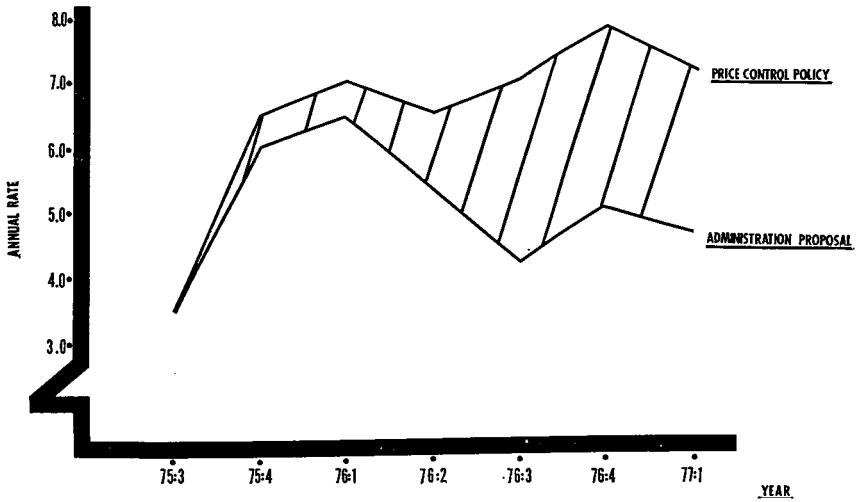


CHART 2



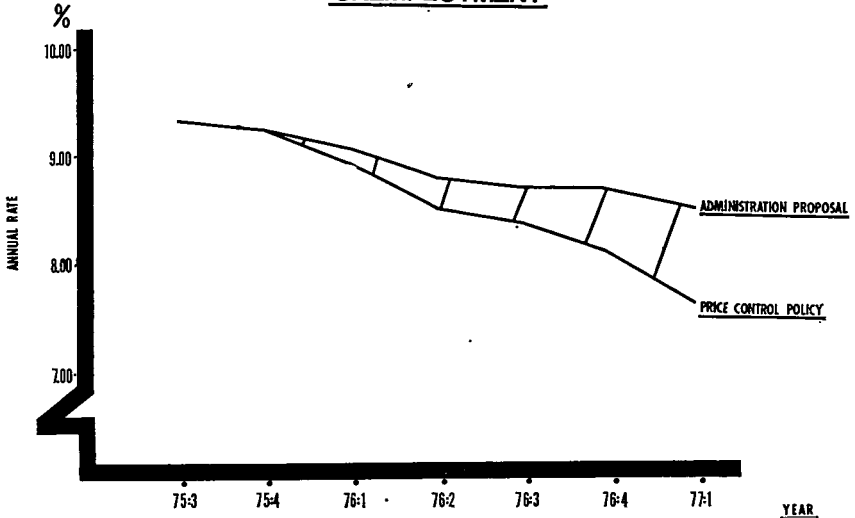
UNEMPLOYMENT

CHART 3

Chairman HUMPHREY. Congressman Brown of Ohio.

OPENING STATEMENT OF REPRESENTATIVE BROWN OF OHIO

Representative BROWN of Ohio. Mr. Chairman, if I may, on behalf of myself and the minority position in this situation, make a statement; I serve as ranking Republican on the Energy and Power Subcommittee of the Commerce Committee in the House, and I would just like to observe that it is my feeling that it is essential that the Congress and administration work together to try to come up with a solution to the problem, which is not only nationwide but worldwide, and which involves not only the question of price but the question of supply of energy in this country. The chairman has quite rightly said that our economy is based on the use of energy, and if we do not have the availability of energy, then our economy is going to suffer.

The thing that concerns me, Mr. Chairman, is that the Democratic Congress has had something like 6 months to come up with an energy program, and has not done so. One of the things proposed in the House, of course, was a 23-cent-a-dollar gasoline tax, which it seems to me would be burdensome to the economy. It finally failed in the Congress, of course, and we seem to have no program emanating from the Congress except a negative one. The thing that also concerns me is that the President presented legislation embraced in 13 titles when he gave his energy message last January. Not one of those titles has found its way into an act, and been placed on his desk for signature.

We are in an energy depression now. From 1971 to 1974, the price of our imported oil went from \$3.2 billion to \$24 billion. That very important source is a major source of our energy—approximately one-third of our oil—in our country. As represented by that price change, we got the same third of our imported from overseas, but we paid \$21 billion additional for it. That money went overseas. It did not go into the pockets of Americans. It did not create jobs for Americans. It cost every one of our 210 million Americans \$100 apiece, or about 4½ percent per family. It is interesting that our unemployment went up essentially the same percentage. If that money had been spent in the United States, we would at least have recycled those dollars into the economy, and not put them into the hands of foreign nations and their citizens. Oil independence depends on our ability to encourage the finding and production of oil in the United States. We are an oil-based economy, and will be until we can figure out ways to convert that economy to whatever the new and exotic methods of energy production are.

The other thing we must do, in the meantime, if we cannot produce that oil immediately in the United States, is to discourage consumption. It is an economic principle that has been well established since the history of man began that price is a proven method for discouraging consumption and encouraging production. The domestic free market price in the United States has run, since we have had price controls, something between \$1 or \$3 below the world OPEC-set price. Controlled old oil prices have resulted in lowering U.S. production of oil. That is no way to solve our supply problem.

Also, to lower prices is no way to solve our consumption problem. It is a way to create a shortage of oil in the United States, and increase our dependence on imported oil at whatever price the OPEC nations wish to set. It seems to me it is an effort by the Congress to move to the same philosophy in oil that has brought us the wonderful natural gas situation in the United States, where we have held the prices down with a shortage of supply that will ultimately cost this country jobs if the good Lord ever gives us a cold winter.

It occurs to me that that is no way to solve our problem. Higher OPEC prices will bring in more U.S. oil if we have a free market in U.S. oil production. They will also bring in other energy sources. It would be my guess that the Arab nations are wise enough in their understanding of economic principles to realize that, and will therefore have some natural restraint on them to keep their prices under control. The Ecuadorans already, I think, within the last 24 hours, have announced that they are going to lower prices.

The reasons for these hearings, I assume, are that the Congress—at least the majority in the Congress—is opposed to price decontrol. The only conclusion I can come to after that is that they also favor energy shortages and more dependence on foreign sources for energy. I think, again, that that is a retarded kind of position with reference to the U.S. domestic economy, because it is the position that we have gotten into with reference to natural gas. It makes no sense to me that we ought to try to import gas from Algeria at \$4 a thousand cubic feet when we can produce it in this country for \$1 or \$1.50 per thousand cubic feet, and see that the funds go to the people in the United States who produce natural gas. The same principle would apply to oil. It makes no sense to pay a higher price for the foreign oil we need, and

then refuse to give a similar price, or something below that, to American producers. I would rather pay Texans to find the oil, Oklahomans to find and produce gas, and Appalachians to find and produce coal, than I would Arabs to produce oil or Algerians to produce gas—or the Russians, for that matter—or even for Arab oil to be converted into propane at \$2 or \$3, to do the same job that we could do at the lower price of American natural gas.

Decontrol of the \$5.25 price of old oil would raise the price of gasoline somewhere between 5 and 8 cents. If we move that decontrol gradually through the economy over a period of 2 to 3 years, that would have all the economic impact of somewhere between 2 and 3 cents a year. It seems to me that that is a relatively cheap price to pay for getting Americans more aggressive in the area of producing oil—and gas, for that matter—than paying the higher price to the OPEC nations and increasing our dependence on the OPEC nations.

Chairman HUMPHREY. Senator Proxmire.

Senator PROXMIRE. I have no statement.

Chairman HUMPHREY. Senator Javits.

#### OPENING STATEMENT OF SENATOR JAVITS

Senator JAVITS. Thank you, Mr. Chairman.

Mr. Chairman, my reason for making a brief statement is because we in the Senate now have this issue. We have a bill from the House, which in my judgment, is inadequate as amended by the House. I thought it was an excellent bill when it came out of Ways and Means and it is now our duty in the Senate to perfect this bill, if we can. I hope very much that we will apply ourselves to that diligently.

This is the opportunity to act rather than discuss theories. Therefore, I hope that the witnesses will address themselves to what in their judgment the Senate ought to do about the House bill. That is a practical approach and will guarantee immediate action to the American people. I for one, Senator, will devote myself to action. Frankly, in this particular case, an answer is more important than what the answer is. The American people ought to know where they stand. This case is unique for putting your ear on the ground to try to get the rumblings is going to get you nowhere. The Congress of the United States has to lead in this matter. We individually have to decide, we have to take the risk of deciding, and then we have to show our own people that we are trying to do the right thing. We are not going to get a consensus on this one. The consensus theory, in my judgment, dismantled a fine bill in the House of Representatives.

Finally, Mr. Chairman, I wish to express another point of view within my party—because I do not believe that what Congressman Brown of Ohio expresses necessarily represents the views of all of us. First, there is no guarantee that decontrol of the price will get us more oil or gas. Let us understand, in the recent recession, prices remained high even though demand was reduced fairly materially. Whatever may be the reason, that is a fact. In view of this, we must couple any decontrol measures with a guaranteed increase in supply. We cannot simply decontrol and believe that the price incentive is going to do the job. It will not necessarily do that.

In addition, the revenues of decontrol must be subjected to regulation. We should implement a capital formation provision, with very

strict regulations as to the plowing back of what is earned in excess earnings into founding new production or the revenues should be handed over to the Government, the Government then using those funds for the necessary rebates to equalize the economic impact, both on business and the individual.

Second, the primary problem to which I would hope the witnesses would address themselves is that the American people have not accepted the fact that we cannot have business as usual. We cannot have "guns and butter" as usual. We simply have to cut consumption of these items. The only way to cut it materially is by saving—by altering the way we live. The tragic fact is that the curve of consumption is going up, not down. Every one of the testimonies of these witnesses, I believe, will show that. We cannot afford it. The Congress has to put a stop to it. I do not believe you are going to get it by the kind of voluntary action which is contemplated by the administration.

Third, the United States has to speak very strongly in diplomatic terms, to minimize the OPEC price increase. We must be willing to do our full part in connection with the work of other nations in the International Energy Agency. There are a lot of things that OPEC looks for to us, including food, and we have an absolute right to use our economic strength, just as they are using theirs, to see that their expected price increases either are not made or are held to the barest minimum. The United States ought to dedicate itself to that purpose diplomatically. As a members of the Foreign Relations Committee, I shall do my best to that end.

Fourth, I do not believe that allocation is necessarily to be completely discarded. It can be a very useful ancillary tool if the first three purposes which I have in mind are full effected. And finally, Mr. Chairman, we should be putting adequate resources into using coal in intelligent ways, into atomic power with consideration toward a reasonable compromise of the environmental laws, into solar energy and into other new Buck Rogers ways of producing energy. I am reminded of the example of Winston Churchill, who, in Britain's darkest hours in 1940, sent one of his two armored divisions to Africa. He had to act and that may have been what turned the tide of World War II, even before we got into it.

We are currently in a similar position. We are in a recession. We have big deficits. But we must make this tremendously constructive expenditure, and we must make it adequate. Mr. Chairman, I thank the Chair for the time, and hope that witnesses will address themselves to this.

Chairman HUMPHREY. I thank you very much, and I thank the witnesses for their patience.

Mr. Greenspan, if you please.

#### STATEMENT OF HON. ALAN GREENSPAN, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. GREENSPAN. Mr. Chairman, as always, it is a pleasure to be here, and I trust that these very complex problems will be somewhat elucidated by this particular panel.

The United States is confronted with a very serious energy problem which is not new, and is not going to go away by itself. The problem

will require exceptionally difficult policy decisions both by the President and by the Congress. They cannot be ignored much longer.

Our once abundant supplies of oil and natural gas are beginning to dwindle, and unless we begin to reverse some of these trends, our growing energy requirements will mean increasing reliance upon unreliable foreign sources for a larger and larger share of our energy needs. As we all know, there are costs involved in trying to resolve the energy problem, as the threat of higher prices by the foreign producers so dramatically illustrates. However, there are also prices involved in doing nothing, or continuing with our present policies.

If we continue to suppress the price of domestic oil and natural gas, we will continue to discourage the development of new domestic energy sources, on the one hand, and the more efficient use of energy in our economy on the other. We will eventually find that we have placed our economy and our society at the mercy of unilateral actions of the foreign oil producers, with respect to both prices and the reliability of supplies. Continued procrastination on this critical issue will surely confront us in the years ahead with a significant embargo threat, and with higher prices.

It is important for us to recognize that there is one option which we do not have. There is no reasonable or credible scenario that will provide this country with both adequate supplies of energy and the prices we experienced prior to the 1973 embargo. To be sure, we can pursue the illusion that energy prices will stay close to present levels, but not for long. Under our current price-suppressing policies, the proportion of our total energy which is supplied by \$5.25 crude oil and low-priced natural gas and liquids will inevitably decline. If we keep these price ceilings in place, the average price of gasoline and other petroleum products will continue to press higher, as higher priced imports make up an increasing proportion of refinery crude oil. This can be illustrated with a simple example.

If there is no change in our price ceiling, and we assume that domestic consumption of oil products rises by, say, 4 percent per year, and that the natural rate of production declines from our price-controlled, old-oil-producing fields at 1 percent per month, the average price of crude oil and natural gas liquids consumed in the United States will rise by about 25 percent by 1958. If there were full decontrol and no increase in OPEC prices, refinery crude prices would increase by 37 percent by 1985.

Alternatively, if we assume that OPEC prices rise by, say, 5 percent per year, the price of oil consumed in the United States will rise by about 90 percent on the price controls by 1985. On the decontrol, they would rise by 110 percent. Similar results occur with assumptions of OPEC price declines, and/or alternate growth patterns of consumption.

I talk about these prices. Remember, I am referring to the refinery input prices. Clearly, product prices, especially prices of gasoline—at retail, of course—will rise by significantly less than the numbers I have given. The relationships, however, will of course remain the same. I see little value, either to the consumer or to the economy, from the temporary, somewhat lower price increase of oil and natural gas, if it is achieved at the cost of drying up domestic supplies, encourag-

ing the extravagant use of energy, and increasing our vulnerability to the actions of foreign oil producers.

Our real choices are not between the high and low price oil. Oil prices are going to rise to close to world levels, regardless of what we do in the short run. Prices will rise either as the result of an increasing mix of higher priced imports, owing to our efforts to hold domestic prices down, or as the result of the President's program of decontrol. There are, however, important and indeed critical differences between the two approaches. The President's program is a managed move toward the use of these inevitably higher prices, in a manner that provides incentive for our economy to adjust to the new energy situation, and to disengage ourselves from the vulnerability and possibility of supply disruption by the foreign oil producers.

I should point out that higher prices for energy are not a value per se. Obviously, lower prices would be better, if we had the choice. Energy price increases which do not act either to create incentives for augmented supply or diminished demand serve little useful purpose. Thus, the increase in the price of coal which would have resulted from the curtailed production in the recently vetoed strip mine bill, in my judgment, would have served no useful purpose. It is important to recognize that every realistic option confronting us has cost as well as benefits. There is no costless way for us to achieve secure sources of energy for the future. We can only choose among those programs which would achieve energy independence at the least cost to the productive capability of our economy.

In constructing our program, we cannot consider our policies and initiatives in isolation from those of either the other consumer countries or the possible future actions of the foreign oil producers. We must, of course, be prepared to adjust our tactics, should the actions taken by others require it. Nonetheless, we should not veer from our basic strategic purpose of obtaining effective energy independence for the United States in a manner consistent with our obligations in international energy needs. Moreover, since energy policy is an integral part of economic policy, it is of course necessary to mesh such policies so as to achieve the broadest benefits for this country, reconciling both short- and long-term objectives. Thank you.

Chairman HUMPHREY. Thank you, Mr. Greenspan, for your statement.

Mr. Zarb, will you please proceed.

**STATEMENT OF HON. FRANK G. ZARB, ADMINISTRATOR,  
FEDERAL ENERGY ADMINISTRATION**

Mr. ZARB. Thank you, Mr. Chairman.

Mr. Chairman, I will make my remarks very brief. I would ask that my prepared statement be submitted for the record. I associate myself with the remarks made this morning suggesting we have an urgent national problem, and we can work toward a solution together. I think we have the capability of working together to arrive at a solution, and that is a part of what we are engaged in now.

Mr. Chairman, we have not had an opportunity to examine the assumption and other issues surrounding the issue this morning. Until

we have an opportunity to do so, I would hold back comment on the specific numbers that you referred to.

Chairman HUMPHREY. Would you do us the service of making an examination of those projections and the economic models?

Mr. ZARB. Yes, sir.

Chairman HUMPHREY. Would you give us your analysis within the week?

Mr. ZARB. We will have it sooner.

Chairman HUMPHREY. Go right ahead.

Mr. ZARB. Mr. Chairman, Alan Greenspan has already referred to what is happening, that our imports are increasing. They are at 37 percent, going toward 40 percent. I anticipate by early next year we will be very close to that 40-percent level. Our domestic production is declining. As we have an economic recovery in the rest of the world, the consumption of oil will increase. It has always been that way and it will be that way in the future as well. We as a Nation simply have not put together a program that accommodates that set of circumstances.

The President's program with respect to import fees and decontrol in 24 months has a price effect and has an effect of reducing our imports. The fee itself, by 1977, can have an effect equal to 300,000 barrels a day in savings, albeit it will increase the average barrel of oil by about \$1.20. The price per gallon of product will increase as a result of the tariff by approximately 3 cents by virtue of that action; and coupled with decontrol over a 2-year period, will have an increase of between 5 and 7 cents more.

Chairman HUMPHREY. 5 and 7 cents; are you talking about gasoline?

Mr. ZARB. Per gallon.

Chairman HUMPHREY. Per gallon.

Over what period of time?

Mr. ZARB. Over a 2-year period.

Mr. Chairman, I ask you to forgive me because I have been singing this song for a long time—many of you have heard this before. We are simply moving in the wrong direction as a Nation. The producing nations are taking advantage of that situation. I referred earlier to the threats of increasing prices this fall by OPEC; the likelihood of the producing nations continuing that kind of thinking which will only be reinforced if we continue to fail to put our energy house in order.

The notion of removing a tariff, or any other change in domestic national policy, to accommodate an arbitrary increase by a set of nations based on no economic rationale leaves us in an untenable position.

Surely if they see us continue to not do anything, to increase our consumption of imported oil, or indeed to dismantle the beginnings of our own program, they will view this as an open license to further increase prices between now and the end of 1977. I will not get into the national security issues of our increased vulnerability. I have talked to that point long and hard over 6 months. It gets to a point where perhaps it is overstated.

The point is that the American consumer is paying a dear price for our inaction. The fact that we have not taken steps to eliminate im-

ported oil to the extent we can, or to bring on domestic supplies, is simply giving the cartel nations an opportunity to increase their prices at will.

The imports from the OPEC nations over the last year have increased from approximately 50 percent to 65 percent of total imports. This is up from some 47 to 48 percent in 1973, so that you can see our increased consumption of OPEC oil, not only imported oil, is moving the wrong way. You know as well as I do, and even better, that the Canadians have indicated that they are withdrawing from our market some 700,000 barrels a day that they are now providing. Thus, we are going to have to run twice as fast just to stay in one place in the next 3 years.

Mr. Chairman, the President's program to conserve oil is indeed based on the price mechanism. We have been through 3 anguished months on the House side. Although we began exploring, I assure you that we did such with an open mind. Together, we looked at allocation and import controls. We are not of a mind to dismiss any other approach simply by virtue of philosophy. We believe that we ought to find the right approach to reduce our consumption. You yourself have said we ought to conserve oil.

The next question is how. The House committees have worked rather quickly on it after talking to their own economists. They found that a quota system and allocation system over a 5- to 10-year period would visit more economic destruction on this country than any price mechanism that we can envision.

The natural gas issue is similar. We are going to begin to pay a more severe penalty this winter and we are going to have to take some very abrupt action to accommodate this winter. If we do not do some things for the long-term situation, 1976 and 1977 are going to be even more serious.

We have three alternatives, Mr. Chairman: the first is to do nothing. Our imports will go over \$30 billion by 1977. The American consumer will pick up that tab. We will be more vulnerable to arbitrary political action. More importantly, we would be a lot more vulnerable to arbitrary price action. Speaking realistically, our ability to bring on additional production over the next 3 years is rather remote. We have asked for authority to bring on an equivalent of 600,000 barrels a day from the Congress. We do not yet have those authorities.

The second alternative is Government controls through allocation and quota control as Senator Javits has indicated. I would ask as we go forward in testimony before the Senate Finance Committee, that we undertake a clear analysis as to what kind of economic disruption this alternative will have on the Nation, not only in the near term but long term.

The President, as a third alternative, has put forward a very tough and comprehensive energy policy. It surely cannot be considered a political policy because it is not easy to talk about raising prices.

Mr. Chairman, I would like to end on this point.

The President, as he put on import tariffs, asked for action by the Congress for a \$2 excise tax to be placed on domestic oil. Under a decontrol situation such a tax would have absolutely zero impact on consumer prices. It would absorb the \$2 which reflects the difference



between oil prices as they were and where they have risen as a result of the \$2 import fee.

We have been collecting a tariff. If we also had the excise tax, and the mechanism that the President asked for to return all these dollars to the American people, between February 1 and July 10 we would have returned approximately \$2½ billion to the American people. If that would not have had a good economic impact, I do not know what would. If we act now, it can result in \$7 billion between now and the end of the year. Very simple steps, Mr. Chairman.

The windfall tax which the President also requested is very controversial. I would like to discuss this separately, but it would also provide more revenues to be returned to the economy.

The point is we have already neglected an opportunity to return to the American people \$2½ billion through the energy program. I think that is something we can do in the next week. We could have legislation before the Congress recesses.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Zarb follows:]

PREPARED STATEMENT OF HON. FRANK G. ZARB

Mr. Chairman, Members of the Committee: I am pleased to have the opportunity to appear before you today to discuss the potential impacts of certain energy actions on the consumer. I will discuss the impacts of three actions: (1) deregulation of old oil; (2) import fees; and (3) the deregulation of natural gas. These, plus a variety of other energy programs, were, of course, included in the President's Energy Independence Act of 1975. All were designed to cut energy demand and to spur the development of domestic energy supplies, while equitably distributing the burdens of the program on the American consumers.

In the numerous appearances that my staff and I have made before the Congress in support of the President's program during the last six months, we have stated and restated the necessity of this approach to solve our short-, mid-, and long-term energy problems. The need for action is clear, and I shall not take up any more of the Committee's time reciting the lengthy litany of where we have been and where we will be, should action not be forthcoming. However, allow me just to briefly outline our current situation:

1. The United States, at present, imports both crude and product at a seasonal low of five million barrels per day (still 32% of our total demand). At the close of this year, we estimate that figure to surpass seven million barrels per day, nearly 41% of total demand.

2. Consumption currently is just over 15 million barrels per day. At the close of this year, we estimate that figure to be approaching the 18 million barrels per day mark. For all of 1975, we estimate average consumption to be 16.9 million barrels of oil per day.

3. Domestic production of crude oil is presently a little over eight million barrels per day, a 6.2 decline from the same period last year, and over a 10% decline from the same period in 1973. And this decline will continue next year.

When these facts are combined with the recent reports that the Organization of Petroleum Exporting Countries (OPEC) is considering additional price increases, the picture clearly emerges that this Nation's dependence is getting worse.

In an effort to stave off this trend while the Congress continued its deliberations on a comprehensive legislative package, the President raised crude oil import fees by one dollar on February 1, as a temporary measure. After a 90-day delay in which he hoped Congress would show some progress, he imposed an additional one dollar per barrel fee on June 1. Moreover, to furnish a substantial incentive to reverse the trend of declining domestic production and to reduce energy demand, the President will propose to the Congress a plan for the phased decontrol of old domestic crude oil.

To provide incentives for increased natural gas production, the President has proposed the deregulation of new supplies of that resource. I understand the Senate will be debating various approaches toward the natural gas problem in the near future.

Each of these actions encompasses tough political decisions, but each is necessary if we are to find a solution to our problems. In considering these actions, we must bear in mind the salient fact that, as there are only a limited number of actions that can increase supply in the short-term, these proposed measures will have the greatest impact in reducing energy consumption. I would now like to address each of these actions and briefly outline their impacts on the market place.

#### IMPORT FEES

Import fees on crude oil were raised one dollar on February 1, and an additional one dollar on June 1. To ease the impact on regions heavily dependent on imported petroleum products, such as the Northeastern States, a lower fee rate of 60 cents per barrel was imposed on imported refined petroleum products.

The effect of these measures on our level of petroleum imports will be both immediate and cumulative over time. By 1977, we estimate that our demand for imported oil will be reduced by approximately 309,000 barrels per day—a short-term goal that no Congressional proposal thus far tendered can match.

The price effects of the import fees will increase the average price of crude petroleum by only \$1.20 per barrel, not two dollars per barrel, because the price controls on old oil will limit both the cost and conservation impacts of the increased fee. Translated into consumer costs, the effects of the June 1 action alone will cause a minimal rise in the Consumer Price Index of .2 percentage points as it increases total expenditures for energy by approximately \$2 per month for each household. The combined effect of the February 1 and June 1 actions will most likely result in an increase in retail gasoline prices of approximately three cents per gallon.

#### DECONTROL OF OLD OIL

The President's plan to decontrol the price of old oil will allow the price of controlled domestic oil, presently at \$5.25 per barrel, to rise gradually to the price level of presently uncontrolled oil over a 25-month period. The effect of this plan will be two-fold. First, industry will be given an impetus to increase the production of our own supplies of petroleum as domestic oil prices are permitted to rise, and secondly, the subsequent increased overall price of oil will reduce demand. In 1977, when the plan is fully implemented, the decontrol of old oil, in conjunction with the increased import fees, will reduce imports by approximately 880,000 barrels per day. Of this amount, approximately 693,000 barrels would be reductions in demand, and 187,000 barrels would be increases in domestic production. By 1985, we estimate that incentives due to decontrol will result in increased production of 1.4 million barrels of oil per day.

However, just as phased decontrol has the greatest effect on reducing petroleum demand, it carries with it the greatest cost in the short run. Phased decontrol over a two-year period, along with the increased import fees, will raise current petroleum-related consumer energy costs by approximately 3% during 1975, 7% in 1976, and 4% in 1977. As a result of decontrol and the increased import fees, the annual range of change of the Consumer Price Index will increase about 1.4 percentage points by 1977.

Gasoline prices can be expected to rise 2.5 cents per gallon per year over the two-year phasing of decontrol, independent of the increase in import fees—a total of five cents. The effect on electricity prices will be slight, less than 2% by the end of 1977.

The effect of phased decontrol on GNP and unemployment will be minimal if implemented in conjunction with a windfall profits tax and a rebate system, as discussed by Secretary Morton. These rebates will maintain consumer purchasing power in the face of the higher petroleum prices, and hence maintain the vital economic activity that ensures economic growth.

#### NATURAL GAS DEREGULATION

Natural gas accounts for about one-third of the Nation's total energy requirements. In addition to being the dominant energy source for U.S. industry, it also

provides heat for 55% of the Nation's homes. The Federal Power Commission (FPC) has been regulating the wellhead price of natural gas sold interstate since 1954. This regulation is the result of a divided Supreme Court interpretation in 1954 of legislative language in the Natural Gas Act of 1938.

During the last decade, a steady decline in real prices in the gas fields has resulted in declining levels of new discoveries, as regulation has failed to provide the incentives to explore for and develop the increasingly costly gas reserves. Unless long-term trends relating to drilling and discovery are reversed, the availability of natural gas is headed for a sharp decline in the years ahead. At the same time, regulated field prices, along with other advantages of gas (e.g., its convenience and clean-burning characteristics), have escalated the demand for this fuel, especially in the industrial and the electric utility markets which account for about 60% of gas consumption. By increasing the demand for gas and decreasing the amount supplied, FPC price ceilings have been instrumental in creating a costly shortage of the Nation's cleanest fuel.

To reverse this trend toward declining natural gas reserves, the President has proposed that the price of new natural gas supplies be deregulated to spur investment in the exploration and development of new reserves. Thus, the deregulation of new natural gas would allow the average wellhead price to increase more rapidly than continued regulation would permit. However, the effect on natural gas prices paid by the residential customer would be small and gradual for two reasons. First, as interstate gas is sold under contracts of 15 to 20 years, it would be a number of years before all gas could be deregulated.

Secondly, less than one-fifth of the residential price can be attributed to the price of gas at the field. If price controls on new natural gas in interstate markets had been lifted at the beginning of this year, the impact on the average annual residential bill would be \$6.38 in 1975, \$10.21 in 1976, and \$13.30 in 1977. In percentage terms, this would mean an increase of 3.9% in 1975, 6.2% in 1976, and 8% in 1977.

If new gas prices for gas sold interstate are not deregulated, the effect on the Nation will be deleterious at the very least: (1) There will be further unemployment and reduced national input as a result of curtailments to industrial customers; (2) as gas will be replaced by oil, and the volume of oil imports needed to replace gas could rise to an estimated four million barrels per day by 1985, and at higher prices; (3) the extent that natural gas is not available, air quality standards will be lowered by the use of oil or coal, and water quality may be adversely affected by increased reliance on nuclear generating plants; and (4) consumers in the interstate market will continue to be disadvantaged, because the interstate pipelines that serve them will be unable to maintain even current sales levels.

We do not pretend that the actions discussed here are easy decisions to accept—either economically or politically. But, coupled with a rebate system, as Secretary Morton has discussed, the President's Program will work and will be equitable.

In conclusion, I would like to review some of the broad choices we have before us. In viewing the scope and consequences of today's energy situation, two facts must be accepted. First, that a severe energy problem does indeed exist, and secondly, that the era of cheap and abundant fossil fuels is over. The alternatives we face must be addressed with these two facts clearly in mind.

First, there is the alternative of doing nothing. But no action only postpones decisions we will eventually have to make. If we do nothing, our bill for imported oil, which was \$3 billion in 1970, \$26 billion last year, could reach \$32 billion in 1977.

The Arab Embargo of 1973 resulted in a significant drop in our gross national product and unemployment of perhaps one-half million members of our labor force. Yet today, even more of our imports are coming from the Middle East than did a year ago. Now over half of our petroleum imports come from sources outside of the Western Hemisphere. And, unless we do something, this dependence on African and Middle Eastern sources will continue to grow. By 1977 imports will reach eight million barrels per day, as compared with six during the last embargo. Because virtually all of the increase will come from insecure sources, in just two years we may well be twice as vulnerable as we were last winter.

Every month we hesitate will make it that much harder to achieve our 1985 goals. Those who say action is too expensive should reflect on the future cost to the Nation if we do not act expeditiously.

Another alternative would be the greater use of government controls—import quotas, allocation systems or rationing, Sunday closings of gasoline stations, no-driving days, etc. All of these actions and others were reviewed during the embargo. We chose some and rejected others. Those actions we chose were designed to help us through a short-term crisis. But we now face a potentially longer term crisis. Each regulatory option would involve some form of self-imposed shortages, burgeoning bureaucracies, and disruptions in the lives of All American citizens. Also, to be effective, these controls, whichever are chosen, must be in place for a long period of time of up to ten years. It is our strong belief that the American people would not be willing to accept, nor should they be subjected to, such long lasting, pervasive controls over almost every aspect of their lives.

The last alternative requires the closest examination—a process we are engaging in today. This alternative is the development of a viable, comprehensive energy program which demonstrates this Nation's willingness to take the difficult and expensive steps to implement an energy conservation program and to develop new energy resources. The President's program remains, after six months' time, the only integrated plan for dealing with our vulnerability to supply interruption and price manipulation by foreign powers. The President's program will set in motion powerful forces to reduce energy consumption and to substitute domestic foreign supplies. The longer we delay action, the longer it will take for these forces to work. The longer it takes for the forces to work, the more vulnerable our economy and our foreign policy become.

The program the President put forward is a comprehensive one. It will reach the goals the President has set forth. Ever since its submission, there has been much talk and criticism on elements of it; but I repeat—still there is no constructive alternative in sight. We all want to take the easiest path to reach our goals. This program does require sacrifice by all, but it is also equitable.

I think this last aspect is what the American people have the right to demand from their President and their Congress.

I again pledge the full force and cooperation of the Agency I represent in working with the Congress in order to implement a comprehensive and timely national energy program.

Chairman HUMPHREY. Would you take a moment to tell me how an excise tax reduces prices? I have trouble with that.

Mr. ZARR. It does not reduce prices, nor does it increase them in this case. Let me describe it. The import tariff adds to the import price of oil. New oil in this Nation has thus far sought the world market price. While it is not there now, it continues to move in that direction. It gets very close to the import level which means that a producer who is now charging \$11 for new oil will begin to move that up to the level of imported oil. That is the way the market operates.

The President's proposal would have taken this \$2 off the top. It would have come into the Treasury. It would not make consumer prices any different than they would be ordinarily, and the money would be returned to the American people. It was a very simple device. It was part of the President's total program to collect \$30 billion in conservation programs and return it all to the American people.

I have not seen your study, but I have one question. Does the study assume that the taxes that we do receive, and have indeed received already, would be returned to the American people in the way that the President had described? The President's program favored those in the middle income and lower brackets, so that they would be getting more back than they would be paying in increased conservation taxes.

Chairman HUMPHREY. Secretary Morton, we welcome you, always welcome you.

**STATEMENT OF HON. ROGERS C. B. MORTON,  
SECRETARY OF COMMERCE**

Secretary MORTON. Thank you very much, Mr. Chairman and members of the committee. I also have a rather complete prepared statement I would like to submit for the record. I will only speak very briefly so that you can get, as soon as possible, into the questions.

I would like to associate myself with what Alan Greenspan and Frank Zarb have said. I would just like to make one or two points.

This is getting to be for me a very frustrating exercise. I have appeared, since the President's message on January 15, on the question of energy and the submission of his legislative package before many committees both on the House and Senate side of the Congress. We have gone over and over and over again some of the elements of the basic situation that we face: First a decline in production of particularly petroleum and natural gas, more so for petroleum than for natural gas, as we have faced a constant increase in demand for these products. We have seen our vulnerability in a quantified way increase from what it was in January to what it is now. These figures have just been enumerated by Frank Zarb.

What is the problem? Where are the answers? The President's program in its scope is very similar to the program that was enunciated by the leadership before the Congress in February of 1975. The leadership said we had to do two things: We had to increase supply; we had to conserve energy, in other words, ameliorate demand. Also, we had to do this at minimum cost.

The President said we should motivate conservation. He recommended that we put a \$2 across-the-board excise tax on petroleum, a 37-cent tax on natural gas. He said that we had to encourage investment in the production effort across this country in order to get ourselves out from under the vulnerability. He also said that the whole package had to be economically neutral and had to have a minimal effect on the well-being of the Nation, on jobs, on productivity, and on the quality of life of the citizen.

He had a fourth element in his plan that I think certainly indicates it was not a politically motivated plan. That was his willingness to sit down and work out the best possible solution with the Congress without being arbitrary as to pride of authorship in the plan that he submitted. There are these four elements in the President's program and there are these same four elements in the congressional plan.

Where have we gotten off the track? I think one of my great sources of pride is that I have served in the House of Representatives and have been a Member of the Congress. I do not think that there is any higher reward that anyone can experience. But I am beginning to be concerned, very frankly, that the Congress is not organized or institutionalized to deal with this problem. This worries me. Frank Zarb just said that there has been an opportunity for over 6 months to distribute back to the American consumer, for economic stimulus or to preserve the neutrality of the energy program, funds in the order of several billion dollars. That opportunity still exists from this point forward.

There is no question about it, that an excise tax does raise the price of gasoline. There is no question about it that the decontrol of prices

or changes in controlled prices will have a price effect. The real question is what happens if you do not decontrol prices. What is the other side of that coin? And unfortunately I think we are comparing a short range situation with a long range situation, and the long range situation could very well spell a disaster and catastrophe for this country.

I come back to how it has been approached. There is no single committee in the House of Representatives that can handle this problem. There is no way to simultaneously make the bread and the butter and the jam come out even.

We have been talking about a windfall profits tax. We see the necessity of a windfall profits tax to be an appropriate counterbalance for decontrol. We see the necessity for reimbursement to the economy. That has to be all tied together. There is no mechanism in the Congress for tying these things together. The people in this country are getting fed up, fed up with Government as a whole and their inability to handle this issue.

I think that the Executive has brought to the Congress a plan that first had equity, that had conservation and that had encouragement for investment in production. It also had the safeguards that the investment would be put in production; it would not result in windfall profits.

I have been around and around the circuit up here with the Interior Committee, with the Commerce Committee, with the Finance Committee, with this committee now and with others. I am really disturbed that we do not have a handle on this problem as a great legislative or representative government should have.

I would be willing to help, day and night, to see if I can in some way be a catalyst to get it all together in away that the Congress itself can deal with the problem. I think the President has been exceedingly patient. We have had legislation that has now expired, that gave the authority to the Executive to convert some installations to coal from other fuels. That has expired. We are now up against another deadline, the expiration of legislation under which we are operating and find ourselves almost in a crash position.

I really do not know, I think we have gone over the members. What the Nation has to face and what the Congress has to face is that this is not a time for band-aid legislation, not a time for short term expedients. This is the time that we are to solve the most pervasive problem that forces our economy and the Nation that has occurred in the history of the Nation. I am just in hopes that we can get the job done.

If it is bogging down because of politics, this is a tragedy. I am unwilling to admit that. The reason I am unwilling to admit that, as Frank Zarb said, any President that puts a \$2 tariff on oil and increases the price of gasoline at the pump is not playing politics. It was a tough economic, statesmanlike position, and I am really concerned. I am concerned as an alumnus of the Congress. I am concerned as a member of the Government trying to solve this problem, and I really feel that the time for resolute action has come and the American people are losing patience.

Thank you.

[The prepared statement of Secretary Morton follows:]

## PREPARED STATEMENT OF HON. ROGERS C. B. MORTON

Mr. Chairman and Members of the Joint Economic Committee: I welcome this opportunity to discuss energy program and problems and their economic ramifications.

The nature of the energy problem we face is complex, but it is so vital that it must demand the attention of the whole government and all the people. A solution must be worked out and soon. We need quickly to get ourselves into a position where our supply/demand balance for oil does not depend to a critical degree on foreign imports, especially OPEC imports.

A significant factor in the development of the energy crisis was the phenomenal growth of energy consumption during the 1960's and 70's. During the 1950 to 1965 period, for example, energy use increased approximately 3.8 percent annually. However, during the 1965-1973 period, that figure jumped to 5.1 percent per year culminating in a 5.4 percent increase in oil demand between 1972 and 1973.

The Arab oil embargo and the realization that America must conserve energy resulted in a 4 percent decline in petroleum use in 1974. When these figures were released earlier this year, many noted hopefully that the country had turned the corner on energy consumption and a return to previous growth patterns was unlikely. Any such optimism, however, has already dissipated. Petroleum consumption has increased over 2 percent during the first five months and indications are that gasoline use may reach record levels this summer. Obviously, the absolute need for conservation has not impressed the American public. Indeed, the resumption of energy growth and dipping domestic oil output only when the gulf we are seeking to close.

Natural gas use has been even more profligate than oil. Under the double impetus of the fuel, natural gas use skyrocketed during the 1960's. In the period, 1961 to 1970, overall natural gas consumption increased 72 percent. Moreover, natural gas' contribution to overall domestic energy supplies climbed from 29 to 33 percent in the same period.

Concurrently, the inefficient use of natural gas as utility boiler was rising. While general gas use was increasing over 70 percent, utility use of gas rose an appalling 113 percent during the 60's. Quite clearly, growth of this nature could not go unabated nor could we long afford to use such a precious fuel in such inefficient fashion.

The curtailments which have increased in severity each winter during the past years represent payment for our past wastefulness. Federal Power Commission studies indicate that demand for natural gas approach 30 trillion cubic feet annually; unfortunately current supplies barely total 23 trillion cubic feet. This gap between demand and supply will continue to plague us until we revalue precious natural gas and provide adequate incentives to increase production. Without such action, natural gas demand will only be constrained by actual shortages.

What has been happening to our production of energy? In May 1975, the U.S. produced 10 million bbl/day of crude oil and natural gas liquids. That's 562,000 bbl/day less than was produced in May 1974. This country experienced a steady increase of production that averaged about 400,000 bbl/day per year through 1970 when production was 11,397,000 bbl/day. Since 1970, production declined at an average annual rate of about a quarter of a million bbl/day.

The number of exploration and production wells drilled has been declining since 1964 at an annual rate of about 2,100 wells per year from 43,486 in 1964 to 26,443 in 1972. This was caused by a variety of reasons, not the least of which was the combination of price controls on old oil and the rising cost of domestic drilling. In 1964, it cost an average of \$12.86 to drill a foot of oil well. In 1972, it cost \$20.76. There has been a tough cost-price squeeze in this industry. During the period 1956 to 1972 the price per barrel went up about 11%, oil field wages advanced 89%, the Wholesale Price Index for oil field machinery went up 50.2%, drilling footage increased 68% in costs. When the price per barrel and total drilling costs per foot are compared in real dollars, between 1956 and 1972 the price per barrel actually declined 21% and the cost of drilling increased 8.6%. There is a very small inducement to risk investment in such a venture as that if prices are going to be controlled by the federal government.

The natural gas situation isn't any rosier—in fact, it's far worse. Significantly higher and more widespread curtailments of natural gas will occur this winter, and next winter too. Unless some action is taken to deregulate wellhead prices promptly, we're going to see the disappearance of gas from general use in the United States before the 1990's. Natural gas production has risen from 15 trillion cubic feet in 1964 to about 22.6 trillion cubic feet in 1973. While production and consumption of gas has risen, exploration has decreased from 4,855 wells drilled in 1964 to 3,830 in 1971. But it is worth noting that exploration has picked up and reached 6,385 wells in 1973. It was the evolution of the free intrastate market that caused this recent upswing in exploration.

The regulation of the interstate market has become an invidious condition for states that do not produce their own complete supply of natural gas and it's a time bomb ticking away under the producer states. It is clear that a free market can stimulate more production in the near term. The producer states are attracting more industry and the nature of that industry is energy intensive. The vast majority of states, all but Louisiana, New Mexico, and Oklahoma, cannot compete for the supplies of new gas that the very recent increased drilling has brought to production. Their industries that require natural gas as a feedstock or as an intrinsic process element stand in real danger of having to move to natural gas producing states.

Our proven natural gas reserves are not inexhaustible—at the 1972 rate of use (22.4 trillion cubic feet a year) we will use up our proven reserves in eleven years. What that means is that unless new interstate gas is deregulated, there will be an accelerated migration of natural gas-using industries to the producing states—a migration that has already started. This is a non-economic and uneconomic migration. It does not relate to the future energy resources that we will rely upon such as gasified coal. Our present gas rich states stand in great danger of being industrial graveyards in little more than a decade because they will be concentrated in regions that have used up their prime energy resource and they are not near the new sources of energy.

What possible logic is there for mandating the sale of our best fuel—our environmentally most acceptable combustible fuel—at a price that has an energy equivalence to a \$3.30 bbl of oil? The original law mandating well-head pricing was designed to cause us to burn up natural gas as fast and as widely as we could because we were flaring it in the oilfields. The times have changed. We need all the conservation of gas we can motivate.

Fuels, especially oil, gas, and coal, have been taken for granted by the American society for so long that many fail to understand the degree to which a shortage of any of them can cripple our economy and weaken our national security. The Arab oil embargo of 1973/74 gave us a taste of what it can be like, but was a light tap compared to what protracted inaction will bring us.

There is no doubt that we can and we should wring waste out of our energy-use system, but that won't by itself be enough. We will have to develop domestic oil and gas resources to provide us economic and political security while we are shifting our center of energy reliance over to domestic coal and nuclear power and performing the research and development functions required to bring us eventually to major reliance on non-depletable energy resources.

To achieve this stimulation we need the increased production of domestic oil and natural gas to get us to a position of independence from capricious foreign manipulation. Our industrial complex uses about 46% of the natural gas, 17% of the petroleum and 42% of the electricity that's marketed in the U.S. This is a most vital sector of the energy use. It drives our industrial complex. It creates the jobs that employ the people.

The steady decline in U.S. oil production has been accompanied by a concurrent increase in the levels of imported petroleum, as foreign petroleum filled the gap between domestic output and demand. Indeed, these imports have reached uncomfortable if not intolerable levels and the prospects are for a continuation of this trend. Although the President's plan cannot eliminate the need for imports, it will begin to limit them, and Congressional inaction on his program serves only to exacerbate this already grave situation.

Imported petroleum now accounts for approximately 40 percent of our daily oil requirements. Moreover, key regions within the country have heavier dependence on foreign sources of oil; the East Coast is over 55% dependent and the West Coast nearly 50% dependent. It was only 16 years ago that the prospect of importing 18 percent of our oil was considered a threat to our national security and led to creation of the Mandatory Import Quota Program. Although



such quotas generated a number of problems and such an approach is no longer an appropriate means of curtailing imports, it is odd that Congress seemingly tolerates a doubling of the role of imports by virtue of its failure to pass stringent energy measures.

Such reliance on foreign oil renders us highly vulnerable to future oil embargoes. We all remember the difficulties and inconveniences suffered during the previous oil boycott. Future embargoes will have greater devastating effects, given the expanded role of imports in the U.S. energy economy.

Embargoes also have shattering consequences for our economy—consequences that affect our standard of living and vital jobs. The Arab oil boycott imposed in 1973-74 is estimated to have reduced national GNP between \$10 and \$20 billion. Many of our current economic woes may be attributable to the oil cut-off. Furthermore, another embargo will probably reduce GNP by more than \$30 billion for each million barrel per day cut-off over a year with concomitant effects on jobs, wages, and prices.

The problem of heavy import levels is compounded by OPEC. The international oil market is dominated by this cartel which has set prices far beyond what economic reason dictates. Accordingly, we have paid the price of this dependence and absorbed oil price increases which have exceeded 400 percent since August 1973. Incidentally, do not construe these remarks as evidence that U.S. domestic oil prices should not go higher. While decontrol will result in higher prices, this is needed not only as a cartel breaking mechanism, but as the cost of increased economic security.

Our dependency levels also pose a threat to our ability to conduct independent foreign relations. Heavy dependency spread among a host of producing countries would be a less precarious situation; our imports, however, both crude oil and refined products, originate largely from OPEC nations. In 1974, for example, approximately 75 percent of imported crude petroleum or over 2.5 million barrels daily came from OPEC sources, compared to 65 percent in 1973. This trend toward OPEC reliance continues as Commerce Department statistics indicate that during the first 4 months of 1975 OPEC supplied us with 77 percent of crude oil imports or 2.7 mm b/d.

Many observers, however, have contended that our position is improving regarding Arab oil dependence. They note that Arab oil imports of over 700,000 b/d accounted for 21 percent of crude imports in 1974 compared to over 26 percent the previous year. We will add two cautionary items. First, the drop in Arab imports during 1974 is attributable to the embargo which prevented Arab crude oil from entering the U.S. during the first three months of the year. The same Commerce data cited earlier also reveals that the Arab component of crude imports has surpassed the 1973 level and reached 28 percent or nearly one mm b/d. Secondly, remember that the leader of the Arab states, Saudi Arabia, possesses the world's greatest oil reserves; these reserves total 146 billion barrels and account for 28 percent of free world oil reserves. Only that country can significantly increase production over the long term. Consequently, should the U.S. fail to curtail the growth of petroleum imports, Saudi oil will play an ever growing role in the future.

Other factors also add to the sense of urgency that surrounds our import situation. Canada, which for years has been our largest supplier of crude oil, has announced that it will terminate crude oil exports to us by 1983. Canada shipped the U.S. over 1 million barrels per day in 1973 but those imports have declined to less than 500,000 b/d in recent weeks. When Canadian oil disappears from our markets, Arab oil is the probable replacement.

A similar situation concerns oil imports from Venezuela. That nation's oil production has been in decline and imports to the U.S. have been dropping steadily since the mid-60's. They now stand at less than 300,000 b/d compared to 450,000 roughly 10 years ago. Oil lost here is also likely to be replaced by Persian Gulf crude.

Lest we seem preoccupied with crude oil, we will note that the bulk of our 2.15 mm b/d of imported refined products—over 85 percent—emanate from Caribbean, European, and Persian Gulf refineries which process OPEC crude oil. In reality, nearly 5 million barrels daily or 80 percent of our imports originate directly or indirectly from OPEC. Allowing a well organized cartel to control roughly 30 percent of vital petroleum supplies is something no sovereign nation should tolerate.

American dependence on OPEC oil has not only diminished national security, but it has burdened our economy. In the simplest terms, oil imports which cost

less than \$4.5 billion in 1972 cost our nation over \$25 billion in 1974. Unless the drift toward greater reliance on foreign oil is arrested, these costs will exceed \$40 billion within 5 years. Dollar drains of this magnitude contribute to capital shortages, weaken our economy, and contribute directly to unemployment. We are courting economic disaster if these dollar outflows go unstemmed.

The growth of petroleum imports which accelerated dramatically during the 70's was not only due to the widening gap between domestic production and demand, but the net result of many complex factors. Indeed, incessant government intervention in the energy economy, beginning with natural gas regulation in 1954, spawned distortions, inequities, and a plethora of unintended consequences which aggravated our energy position. A brief review of some of these Federal actions illuminates the effects of intervention.

Natural gas price regulation is the most cited example of mis-directed Federal regulation. Earlier, the direct consequences of these regulations on natural gas were covered. However, the artificially low price of gas also had a devastating effect on our coal industry. For example, in the 1954 to 1971 period, coal use grew merely 27% while oil consumption increased 89 percent and gas use soared 166%—largely because coal could not compete with cheap gas. During the same period, coal's energy contribution declined to 18 percent from 38 percent in 1950. The coal industry, vital to our goal of energy independence, is only now recovering from the financial blow it suffered from Federal gas price control.

The refining industry also suffered at the hands of the Federal Government. During the late 60's, the Mandatory Import Quota System precluded refiners from lining up assured supplies of crude oil due to the uncertainty over obtaining import tickets.

Accordingly, domestic refiners deferred or cancelled expansion plans: during the 1970-73 period, U.S. oil use climbed 6.8 percent annually while refinery capacity increased but 2.4 percent per year. However, many new refineries were built by U.S. firms—overseas where crude oil could be secured without government licenses. The Interior Department has estimated that we "exported" almost 2 million barrels daily of refining capacity due to the quota program. This "exportation" also diverted \$20 billion in investment from our economy and cost us over 100,000 jobs.

The last example to be cited, although many more are available, concerns the imposition of wage/price controls in summer, 1971. This involves a classic case of unintended results. Prices were frozen during the season when heating oil prices are at their lowest and gasoline prices the highest. Because of the freeze, many refiners did not perform the normal turn around in refinery output to maximize heating oil output during the fall and winter months. Consequently, December 1971 heating oil production was 14 percent below December 1972 output when the freeze had been lifted. The impact of the low 1971 production was a fantastic drain on heating oil reserves—to meet demand—which depleted stocks to such an extent that spot shortages occurred the next year. Accordingly, some of the early fuel oil shortages could not be blamed on OPEC, Arabs, or oil companies, but on the Federal Government.

#### *The President's energy program*

The foregoing review of trends in energy consumption, domestic supplies and imports vividly demonstrates that our dependence on foreign sources of oil has reached intolerable levels and grows greater with every passing day. Both our national security and domestic economy are increasingly vulnerable to the actions of the OPEC nations. We must take steps now to reverse this situation.

We all recognize what these steps are. First, we must limit the consumption of oil to the minimum level required to keep our economy functioning effectively. Every barrel of oil saved by reducing waste is one barrel less than we need to import. Second, we must stimulate domestic oil, gas, coal and nuclear production so that we once again control our own energy supplies. And third, we must accelerate the shift of our major dependence on oil and gas to coal and nuclear in the next decade or so, and eventually to the non-depletable energy sources.

The President has proposed a comprehensive energy program that will accomplish these goals. It employs a traditional American mechanism, price, to get Americans to think about their use of energy. It also provides the economic incentive to develop new domestic energy resources. And it includes a set of mechanisms to insure that no sector of our society is excessively burdened by rapidly increasing energy prices. This is an integrated program—one that will run on its own and can be fine tuned with a minimum of governmental inter-

ference in the lives of individuals. With the windfall profits taxes, no individual or corporation will receive excessive income. It is a program that will work.

The program the President presented on January 15 of this year, with subsequent modifications, has the following major elements:

#### *Crude oil price decontrol*

The President had intended to decontrol the price of controlled domestic crude oil by April 1, 1975, following the provisions of § 4(g) of the Emergency Petroleum Allocation Act of 1973. This action has been held in abeyance to permit Congressional review of our energy situation, but it is still the President's desire to decontrol the price of controlled crude oil in an orderly fashion. This decontrol is required in order to stimulate domestic production and check demand growth.

#### *Deregulation on natural gas*

As noted previously, the most serious immediate energy problem confronting the Nation is the severe shortage of natural gas. The imbalance between supply and demand has been aggravated by many years of price control in the interstate gas market. As a result, industrial and commercial customers, even those with firm contracts, are increasingly unable to obtain the gas supplies they need. Their "protection" from higher natural gas prices has in effect prevented them from bidding on available supplies. To remove these distortions and to ensure that the highest value uses of natural gas receive priority in the marketplace, the President proposed removal of price regulation on new interstate natural gas. This will make the price of natural gas newly dedicated to interstate commerce competitive with the price of intrastate natural gas in order to remove obstacles to obtaining new gas supplies for the interstate market. It will also halt the migration of industry to gas-producing states, which is often occurring counter to sensible economics.

The lesson to be learned from the natural gas situation is that control of prices generally leads to distortions and shortages. An orderly decontrol phase should therefore be incorporated in any comprehensive energy program.

#### *Import fees*

Under the authority of the Trade Expansion Act of 1962 as amended, the import fee on crude oil was increased by \$1 per barrel effective on April 1, 1975. It was the intention of the President to increase the fee to \$3 per barrel in the succeeding two months. This was done as a conservation measure and to encourage the development of alternate energy sources.

At the request of the Congressional leadership, however, further increases were held in abeyance until June 1, 1975, when the fee for crude oil was raised an additional \$1 per barrel and a fee of 60 cents per barrel was imposed on imported refined products. The fees were also modified in the case of products in order to prevent undesirable regional inequities. The final \$1 per barrel increase on crude oil has not been directed by the President. The President remains flexible on further increases and is awaiting action by the Congress.

#### *Petroleum excise tax*

I have discussed the import fees and the desire of the President to return the pricing of domestic petroleum to the free market. Our calculations indicate that the import fee will reduce imports by 500,000 barrels of oil equivalent per day and will generate about \$400 million per month in revenue. Concurrently, imposition of a \$2 per barrel excise tax on domestic crude oil has been requested. The purpose of this levy is to ensure that domestic and imported oils are priced at the same approximate level. Although the precise reduction is unknown, these actions most certainly will curtail demand via the price mechanism, and thereby reduce our dependence on foreign oil.

#### *Natural gas tax*

To conserve our most precious fuel, natural gas, and to keep its price competitive with oil, the Administration has asked for authority to impose a tax of 37 cents per thousand cubic feet on natural gas. On a heat content basis, this is approximately equivalent to the additional tax to be imposed on petroleum.

#### *Windfall profits tax*

To ensure that the end of controls on crude oil prices does not result in one sector of the economy benefiting unfairly at the expense of other sectors, a windfall profits tax has been proposed on the profits realized by producers of domestic

oil. This tax would also recapture excessive profits which would otherwise be realized by producers as a result of increases in international oil prices.

### *Tax reductions*

To ease the burden of higher energy prices resulting from decontrol of oil and gas, import fees and excise taxes, the President proposed permanent tax reductions for individuals and corporations. The higher cost of energy paid by State and local governments would also be offset by additional Federal funds paid through the distribution formulas applicable to general revenue sharing.

This proposal would replace funds taken out of the economy through higher energy costs. Individuals, corporations and State/local governments could then decide whether to conserve energy and spend the refunded money on something else, or to meet the higher energy costs at previous rates of consumption.

In my opinion, this element of the President's energy program has received far too little attention. If the decontrol of oil is considered in isolation, of course it has an undesirable impact on the consumer, unemployment and other economic variables. However, this program is an integrated one and must be considered in its entirety.

I believe it is incumbent upon the Joint Economic Committee to focus on the economic impact of not enacting the President's proposed energy program. The economic consequences of inaction are far graver than any other course we could choose. Without positive action on the President's program, we face the following:

Widespread industry shutdowns due to lack of natural gas, leading to more jobless Americans and reduced national output.

A growing outflow of dollars to pay for imported oil, which weakens our purchasing power abroad and reduces the American standard of living.

Stagnation of economic growth in the energy sector of our economy, since controlled prices will not permit the accumulation of funds needed for new investments.

Reduced economic growth overall, caused by deferrals of capital investment in this continuing climate of energy uncertainty.

In the long run, greater economic vulnerability and higher prices due to increased dependence on the OPEC cartel.

This Committee's concern with potential OPEC price increases in the fall is ample evidence that we must eliminate this dependence.

Finally, let me comment briefly on the various proposals forwarded as alternatives to the President's program. As noted earlier, the majority of these schemes seek to expand the government's role as an energy manager rather than diminish it. Based on this fundamental tenet alone, such proposals should be scrutinized suspiciously—past results have shown that an increase in Federal jurisdiction over energy can only be counter-productive.

Extension of current price regulations on crude oil and even roll-back plans have been offered to counter the President's efforts to lift controls on domestic oil pricing.

The ostensible purposes of these proposals are (1) to lower and/or stabilize domestic fuel prices. (2) prevent the oil industry from reaping windfall profits, and still assure the industry a "fair" price which will stimulate exploration and development.

As desirable as these objectives are, the proposals cannot assure attainment of such goals. For example, rolling back all uncontrolled domestic production would theoretically save consumers approximately 4¢ per gallon on fuels. However, this savings would be illusory for such a cut in U.S. oil prices would merely accelerate the decline in output which would necessitate its replacement with imported oil at nearly three times the cost. The same situation is likely to occur, but in less dramatic fashion, if efforts to continue price controls succeed.

The limitation of oil industry profit is another oft cited objective of crude oil price roll-backs. Two salient observations should be made in this regard. Firstly, the Administration has already proposed a comprehensive windfall profits tax measure which would ensure that the petroleum industry does not profit unduly from our national energy predicament.

The other major alternative to President Ford's comprehensive program is the imposition of import quotas. Again, we encounter a proposal that necessitates massive government intervention in our energy economy. Quotas mean continued allocation so that those regions that rely heavily on foreign petroleum do not bear the brunt of this self-inflicted embargo.

Should quotas continue for a significant period, it means that the government becomes a real energy and economic czar, deciding which firms and which individuals can receive additional fuel allotments for specified purposes. If ever we want to dismantle the free enterprise system full implementation of strict oil import quotas is an extremely efficient tool. Conversely, if such quotas are not strict, and generate no shortages, they are not serving their purpose.

The quota approach also locks us into continuation of price regulation. Creation of fuel shortages without concurrent price limitations would result in massive bidding wars as energy users compete for a finite supply. A lengthy period of pervasive government control of all petroleum prices will be difficult to discontinue, as we are now witnessing, and surely be as fraught with distortions and inequities as existing controls.

Lastly, the imposition of quotas destroys any permanent effort to revalue energy within our economy and to achieve concurrent reduction of energy consumption. The strength the market system is that it enables each individual to determine his appropriate response to revalued energy. Many persons place a higher priority on the use of their autos and gasoline consumption; others would prefer to curtail their electricity use. The essential point, however, is that these choices will be made on an individual basis—not be imposed by Federal fiat. An import quota program, with concurrent price controls, eliminates this needed revaluation of energy and prevents the making of these individual selections. Unless energy conservation is built into our economy on a permanent basis, our only alternative is years of increasing government management of energy use.

Let me conclude with an observation regarding the fundamental nature of our energy policy choices. We can either increase Federal management of the energy economy or move in the direction of permitting individuals to make their choices in responses to new economic ground rules. I am persuaded that extensive Federal management is unacceptable. When we talk energy, we are discussing the lifeblood of this nation's industrial economy. It would be a severe blow to our productive free market system to place control of the basic commodity in the hands of government. Moreover, we have ample evidence that regulation of this complex energy economy has been exceedingly difficult and counter-productive. Witness the history of natural gas price controls and the distortions and inequities engendered by existing regulatory schemes. I am convinced that the debate between more or less energy regulation is not merely a rhetorical exercise but a debate that illuminates the difference between an inefficient energy policy or one that will help the nation meet its energy goals.

Chairman HUMPHREY. Thank you, Mr. Secretary. I appreciate your candor. Might I add that some of us have been equally critical of the structural organization of the Congress in handling this issue. I have long felt that there is a need for a Joint Committee on Energy. I also think that there needs to be if not a joint committee, at least one committee in each House that handles this matter in all of its aspects.

You have been in the Congress long enough to know that Members of Congress guard jurisdiction more than a mother guards her child; it is one of the curses of our system.

Let me get back to the desire to get together.

We sent a letter from this committee to the President on the 25th day of January, signed by all but two or three members of the committee, suggesting that there be an executive staff working with the combined staff of the House and Senate to see if we could not hammer out an energy program. That was the 25th day of January it was signed. As I recall, my colleague, Congressman Brown of Ohio, signed it; most of the members of this committee signed it. I am not blaming anyone on that. I simply want to say that that was made because I sincerely believed at the time that we were on a collision course. I must say in all candor the President has presented a program. I do not agree with all its facets. The Congress has been derelict in not doing its job as it should, even though the Senate itself has passed a

number of bills; and I note that as the hour is underway now, we are having a Democratic caucus on the whole question of energy bills. There are eight of them on the Senate Calendar that will be acted upon very promptly in the Senate. The Petroleum Allocation Extension Act, fuel efficiency for automobiles, the Outer Continental Shelf Act, the Elk Hills measure, the coal leasing and coal conversion legislation, extended authorities for ERDA, the Energy Production Board, and the pricing of natural gas. All of those are on the front burner of the Senate of the United States.

I can assure you that the energy tax bill, which came from the House, we consider to be a minimum effort; there is no doubt but what the Senate will greatly strengthen that measure.

Now I want to get back to just a couple of matters where we apparently have some disagreement. The first thing that I would like to ask of you, Mr. Greenspan, Mr. Zarb, and Secretary Morton, is to take a look at the figures that I presented here, and see whether or not you can give us any figures that are contrary to them. I imagine that you are not unaware of the overall figures that we have mentioned, because the OPEC price figures have been clearly in the news. The administration proposals are well known, and we have taken those administration proposals and the projected OPEC price, not the \$4 a barrel but the \$1.50 which is the minimum price increase, and we have projected it as it affects real GNP, as it affects unemployment, and as it affects the Consumer Price Index.

I am sure these figures are not new to you. I noted an article in the New York Times about a month ago which revealed an FEA report showing that oil decontrol would not lead to significantly higher productions from oilfields now under production. There is no control on new oil. There is no control on stripper wells. In fact, that report, according to Mr. Everett Collins' article, shows without controls that total oil production in 1985 will be 11.7 million barrels a day. It will be 11.2 million barrels a day with the existing price controls.

In short, that report, according to the New York Times article, says that decontrol will not significantly increase production. It will increase price, not production. It will just drive up consumer prices 2 or 3 percent more a year, drive down consumer incomes by \$15 or \$20 million a year, and raise unemployment anywhere from 300,000 to 400,000 per year. It will raise oil company profits from \$10 million to \$20 million a year.

My question, Mr. Zarb, is why has not FEA released this study that in substance disproves the President's contention that higher oil prices mean more production?

I want a copy of that study in the Joint Economic Committee's office this afternoon by 3 o'clock. I want that study.

Mr. ZARB. Whatever study we have, Mr. Chairman.

Chairman HUMPHREY. That study, I want that study, not whatever study, that study.

Mr. ZARB. You will have the study. I do not recall the article. Whatever study you are referring to, you will have it by 3 o'clock.

Chairman HUMPHREY. Do you have a study on the effect of oil price decontrol on production?

Maybe you want to talk this over with Mr. Everett Collins. "Zarb wants Congress to allow gradual decontrolled oil prices." It says:

The unpublished administration figures show that decontrol would have no effect on domestic oil production in 1977. It is projected that 10.4 million barrels a day, including crude oil and natural gas liquids will be produced in 1977, with or without price control. For 1985 the projection is 11.2 million barrels a day, with the present \$5.25 ceiling price, and 11.7 million barrels a day without control.

Do you have that study or not?

Mr. ZARB. We have a study on the effect of decontrol on production, which we will provide you.

[The study was subsequently supplied for the record:]

**THE ECONOMIC EFFECTS OF PHASED DEREGULATION OF OLD OIL, AN ADDITIONAL \$2 INCREASE IN THE CRUDE OIL IMPORT FEE, AND 60-CENT INCREASE IN REFINED PRODUCTS IMPORT FEE**

(Study Prepared by the Office of Economic Impact and Office of Analysis, Federal Energy Administration, June 6, 1975)

**I. DIRECT PRICE EFFECTS ON ENERGY SOURCES**

*A. Energy price effects*

The effects of phased decontrol and the increased import fees on petroleum prices and on other energy sources are shown in Tables 1 and 2. Refined petroleum products prices increase by about 32 percent over the case of continued control and no fees, and electricity prices rise slightly, less than 2 percent by the end of 1977. Coal prices will rise very slightly in 1975 and then readjust as supply responds. Natural gas sold in the intrastate (unregulated) market will increase average natural gas prices by as much as 12% by 1977.

TABLE 1.—CHANGES IN SHORT-RUN ENERGY PRICES (WHOLESALE PRICE PER BARREL)<sup>1</sup>

	1975 (July to December)	1976	1977
Crude petroleum.....	\$1.76	\$2.95	\$3.99
Refined products.....	1.56	2.52	\$3.38

<sup>1</sup> Assumes that all the increased fees are passed through and are reflected in wholesale prices.

TABLE 2.—PERCENT CHANGE IN WHOLESALE ENERGY PRICES RESULTING FROM PHASED DECONTROL AND FEE INCREASE<sup>1</sup>

Type of energy	1975 (July to December)	1976	1977
Refined petroleum.....	15.0	25.0	32.0
Coal.....	.5	0	0
Electricity.....	.4	1.3	1.8
Natural gas.....	7.0	9.0	12.0

<sup>1</sup> Since it is highly unlikely that all of the import fees will be passed through to consumers these estimated changes are the upper limits of the potential changes. For an explanation see: "Analysis of the Congressional Research Service Estimate of the \$2 Import Fee and Phased Decontrol".

*B. Petroleum consumption effects*

Phased decontrol of old oil and the increased import fees will reduce imports by approximately 881,000 barrels per day by 1977 as shown in Table 3 below. Petroleum demand rises between 1975 and 1977 due to the rapid recovery of the economy during this period. However, higher prices caused by decontrol and the fees will offset some of this rise and will induce some domestic supply thus reducing the import requirements.

TABLE 3.—SUMMARY OF THE PETROLEUM SUPPLY-DEMAND SITUATION  
[Thousand barrels per day]

	1975	1976	1977
Demand (all products):			
Base.....	16,982	16,875	17,846
Phased decontrol and fee.....	16,867	16,504	17,152
Supply (domestic):			
Base.....	10,653	10,550	10,400
Phased decontrol and fee.....	10,653	10,550	10,587
Imports:			
Base.....	6,329	6,325	7,446
Phased decontrol and fee.....	6,214	5,954	6,565
Import savings.....	115	371	881

## II. SOCIO-ECONOMIC IMPACT

### A. Direct and indirect consumer costs

Table 4 below shows the effects of decontrol and the increased import fees on the consumer costs of petroleum related energy. The increase in 1975 is approximately 2.5 percent of current petroleum related energy costs; this increase rises rapidly to about 10.5 percent in 1976 and 14.3 percent during 1977. Gasoline and motor oil account for approximately 85 percent of the increase.

TABLE 4.—IMPACT OF PHASED DECONTROL AND IMPORT FEE INCREASES ON DIRECT ENERGY EXPENDITURES<sup>1</sup>  
(IN 1977)

	Costs without increase	Costs due to increase		
		1975	1976	1977
Gasoline and motor oil.....	\$572	\$23	\$77	\$105
Heating oil.....	69	4	11	15
Electricity.....	228	1	3	4
Total.....	869	28	91	124

<sup>1</sup> Less natural gas.

### B. Total costs

The methodology for estimating total and indirect consumer costs of deregulation is the same as the methodology reported in the paper entitled, "The Impact of the President's Proposed Energy and Economics Program on Net Energy Costs to Consumers," page 11. Table 5 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.

Phased decontrol and the increased import fees will cause about a 1.4 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 \$190 and the indirect effects are about \$66 per household. It is important to emphasize that the estimated consumer costs shown here are based upon the assumption that all of the import fees will be passed on to consumers. Recent data show that it is unlikely that all of the increased costs will be passed through (see "Analysis of the Congressional Research Service Estimates of the \$2 Import Fees and Phased Decontrol," FEA).

TABLE 5.—Estimated total and indirect consumer costs—1977

1. Estimated personal consumption per household :		
a. Estimated current personal consumption.....	billion <sup>1</sup>	\$942.8
b. Estimated number of households.....	million	70
c. Consumption per household.....		\$13,469
2. Estimated costs per household :		
Total <sup>2</sup> .....		\$190
Indirect <sup>3</sup> .....		\$66

<sup>1</sup> From DRI Apr. 2, 1975 Control Forecast.

<sup>2</sup> Estimated as 1.4 percent times \$13,469.

<sup>3</sup> Total less direct costs.



*C. Direct consumer costs by income class*

The lowest income class, those with an average income of \$3,000, bear the greatest burden (see Table 6). While the absolute increase in energy costs due to phased decontrol increases as incomes increase, the increases as a percentage of average incomes decrease from about 1.6 percent in the lowest group to about .7 percent for the highest income group.

TABLE 6.—AVERAGE INCREASE IN DIRECT ENERGY COSTS BY INCOME CLASS (IN 1977)

	Lowest income group (\$3,000 average increase)	Lower middle group (\$9,600 average increase)	Upper middle group (\$16,800 average increase)	Highest income group (\$29,400 average increase)
Gasoline.....	\$32	\$79	\$143	\$168
Heating oil.....	14	14	14	18
Electricity.....	3	4	5	6
Total.....	49	97	162	192
Percent of average income.....	1.6	1.0	1.0	0.7

Mr. ZARB. The fact is, Mr. Chairman, we cannot continue to think in terms of how we are going to have 500,000 barrels a day here or there. This recalls to me the recent experience with respect to both the Outer Continental Shelf and the naval petroleum reserves, where each individual area concerned with that piece of turf has asked how it is possible that a million barrels a day can make a difference between now and 1985. Each says why not leave nuclear alone, leave the Outer Continental Shelf alone, leave Elk Hills alone. After all, it is a small part of the pie.

We need every drop of oil we can get if we are going to make an impact on the OPEC group.

Chairman HUMPHREY. I will not dispute that. I am only saying the rhetoric that has been used, Mr. Zarb, and I am saying it very respectfully, that if you decontrol oil all of a sudden it will blossom out all over. I am here to tell you that if you do decontrol oil, it means the Arabs will set the price of American oil; that's what it means. That is exactly what it means, that the world price will set the price of American oil, and they dominate the world market. I am here to tell you that you do not get very much for it except an increase in consumer costs.

What about our coal conversions? What about coal gasification? You have authority for that right now. What about moving actively on some of this research?

You are the Energy Administrator.

Mr. ZARB. I would like to answer one or two of those questions.

Our coal conversion authority expired June 30.

Chairman HUMPHREY. You had it up to June 30 and your authority is continuing. We had an oil shortage all the time.

Mr. ZARB. We have taken advantage of that in the last 6 months by ordering 70 powerplants to convert. We are now in litigation on this matter.

Chairman HUMPHREY. How about coal gasification? You have authority.

Mr. ZARB. The gasification and liquefaction plans came up in the early plan for full development. The President asked for funding in those areas. Bob Seamans indicated in his presentation that liquefaction and gasification were priority items for this Government. We

are not in any way willing to underfund those areas. We want to pursue them, as they are developed, just as fast as we can.

Chairman HUMPHREY. The author of that legislation is Senator Jennings Randolph. Senator Randolph has repeatedly been complaining about the lack of effort made under that legislation. There was not even a request for funds in the first years of the legislation.

Secretary MORTON. This was in the Interior, Mr. Chairman. As soon as the legislation was available, we knew we were going to have the program, we started putting together, we classed four proposals. It is a massive engineering undertaking. This involved perhaps a commitment, a total of nearly a half billion dollars. It took a good many months for the proposals to come in. The proposals are in. They are now in the awarding process. That program is well underway. There was no use in taking down a lot of money until there was an adequate and proper way to spend it.

That is exactly where the proposal was. It was in Interior while I was the Secretary. Now it is in ERDA, the Office of Coal Research, and the program is underway.

Chairman HUMPHREY. My point is the sense of urgency that I think is required here. Just as you have properly spoken of Congress, and I think rightly so, Mr. Secretary, I just do not think that there has been the sense of urgency on what I call alternate sources of fuel and the research that is necessary.

Secretary MORTON. This is certainly a matter of judgment. We felt we were spending money as fast as the state of the art and as fast as the proposals for adequate research facilities and programs were forthcoming.

We can argue the rate. This is a massive undertaking. As you know, we have pilot plants now covering several different processes in the latter stages of completion and operation. The next generation is a demonstration-sized industry which is the forerunner of a massive conversion.

I believe that 10-year timespan, which would be miraculous in terms of the size of this industry, will be accomplished from pilot to commercial production.

Chairman HUMPHREY. My time has come to an end. I merely want to point out the figures that we have thus far indicated that decontrol will not add substantially at all to production. I think it is time that we put that myth to rest. I noticed that Paul McAvoy, a member of CEA, published a study for the American Enterprise Institute in 1974 that showed little output change or price sensitivity between \$7 and \$11 per barrel by 1980; the National Petroleum Council study shows the same.

Whether decontrol comes or not, and Mr. Greenspan thinks in fact that it will come, I do not think we can delude ourselves that decontrol has not brought on much new oil. According to studies, it would not bring in much old oil.

What it does is two things, increases prices and increases profits. It does not add substantially to the supply of oil. I suggest that the same amount of money that you have to expend, that the consumer would have to pay for the decontrol, could be put into a much more fruitful enterprise in the field of alternate supplies of energy and research, and in conservation measures that can be mandated and legislated rather than relying on the price mechanism.

Mr. ZARB. Mr. Chairman, may I respond to that briefly?

Chairman HUMPHREY. Yes.

Mr. ZARB. The author of that document was Paul McAvoy?

Chairman HUMPHREY. That is right. I said that.

Mr. ZARB. He and I talked yesterday. We are both in agreement that decontrol will have the effect of a million barrels a day of additional production. Under existing circumstances, investors, rather than fully developing our old oil wells and associated wells to bring up the additional supply, are more likely to go in and invest their money in Alaska in search of new oil.

From one standpoint, such a situation would benefit the State of Alaska. But from the question of a national standpoint, Mr. McAvoy believes in the decontrol mechanism. Those old oil fields do have the capability of developing more oil. We need to make the incentive lucrative enough to underwrite it.

Beyond that, Mr. Chairman, when you talk about additional profits, I would just reiterate that we have submitted a relatively tough wind-fall tax program. We stand by our desire to move in that direction. As things change, by depletion and what not, there should not be any increased profits if those dollars are put back into the ground. That is the administration's position.

Chairman HUMPHREY. I understand that and I basically support your proposal in that area. My point, and I have to keep battering it, I think there has been a little too much emphasis on the fact that decontrol is the mechanism that gives you the answer. There may have to be some adjustment upward, but decontrol goes too, too far.

Congressman Brown of Ohio.

Representative Brown of Ohio. Thank you, Mr. Chairman.

I would like to pursue the question of decontrol. As the chairman phrased it, if we decontrol, we will not find any more oil. Secretary Morton, you were formerly in the Department of Interior, and the Geological Survey is related to that in some way; and I want to break down this question. Is the oil out there, domestic oil, to be found? Is there new oil to be found, or is their oil in existing fields where, if we use secondary and tertiary recovery methods, we will bring in additional amounts?

Secretary MORTON. First, to answer your question, obviously there is oil out there. There is always speculation as to how much and where. The Geological Survey, for determining reserve, has always used the range type of approach. They have calculated a minimum and maximum, and they are usually pretty far apart.

Representative BROWN of Ohio. Percentage of find chance, as I understand.

Secretary MORTON. Yes. There are odds, of course. It is a gamble; even in the best structures of the marine environment, you are apt to get a ratio of 20 dry holes to 1 producer. You see, the exploration of the North Sea bore that out. I think there were 20 or 35 major exploratory wells dug before the first producer hit. Nonetheless, the industry is willing to take the risk, and the geophysical data would indicate it is worth it.

Representative BROWN of Ohio. Let me ask you—I have been told that we looked at all the easy places in the United States. The day of finding oil a few hundred feet beneath the ground, or a couple of

thousand feet, in east Texas or Oklahoma or California or Ohio, is over. It is going to be much more costly in the future to find oil in the United States or the North American Continent. What are the cost factors involved in bringing about the production of oil from fields in Alaska or Alabama or Oklahoma, where I understand they are now drilling at something like 3 to 4 miles in depth, or the Outer Continental Shelf, where we have to approach the 200-meter line, or in secondary and tertiary recovery from existing wells. We know where the wells are, but we are going to have to invest heavily in those wells to get the material out.

Secretary MORTON. The costs obviously have been escalating from both inflationary characteristics in the business, as well as the geological characteristics. This is not something that has happened overnight. The increase of costs, due to the paucity of favorable geological conditions, have been going on for a long time, particularly in explorations for natural gas, as we have gone into deeper structures. Obviously, the costs are high in the marine environment. The Arctic environment is also high. A single production well might cost as much as \$10 million in the Arctic. A single exploration may cost as much as \$7 million, just to prove the existence of a structure. This is obvious.

I would like to make one point that has not been made clear, as far as old oil and new oil in existing fields is concerned. We are not talking necessarily about tertiary or secondary recovery in the development of an oilfield. An oilfield is unitized or considered to be a single property. Therefore, a new well in an old field is not new oil under the regulation, it is old oil. This is a matter of law. So the capital is not going into the easy areas. There is certainly a real investment judgment to be made as far as drilling for oil, which would be for additional drainage of an old field.

Representative BROWN of Ohio. I want to be sure I understand. You have a \$5.25 price cap on a well in the old field. That is as much as you would get for a barrel of oil.

Secretary MORTON. A new well in an old field would be \$5.25.

Representative BROWN of Ohio. If you produce from that field, you get \$5.25 a barrel. But to bring out new oil, it costs you more than that. You are not going to develop that barrel of oil out of that field unless it is economical to do so. I am told that secondary and tertiary recovery methods will cost anywhere from 50 cents a barrel up to \$4 to \$4.50 a barrel. Is that right?

Secretary MORTON. There is no such thing as tertiary recovery. They are bench model processes that are being worked on. We are thinking of secondary recovery—water flooding. You are in the ballpark as far as the figure is concerned.

Representative BROWN of Ohio. It cannot be more than \$5.25 a barrel. Nobody is going to put more than that in an old field.

Secretary MORTON. They are not doing it. The other thing is the field's production. The field production base period is 1972. You do not get new oil out of that field until the whole field is producing higher than the base period of 1972. If we have a field out here with 40 wells in it, and we can get some more oil by interspersing more wells into the field, we do not get the new price of oil until the whole field produces at a greater rate than it did during the base period 1972.

Representative BROWN of Ohio. I am told that the cost of the drilling platform rig, production platform, in the Gulf of Alaska is approximately \$80 million currently. Can you give us some idea of the escalation of costs of such things as the Alaskan pipeline during this time? I hear the figure went up from an estimate of \$600 million for that pipeline to \$4 billion. Is that within the ballpark?

Secretary MORTON. When I came on board the Department of the Interior, the figure was considered at about \$1.5 billion, which was up, I think, about twice what it originally had been planned. I think the current figure now is something on the order of \$6 billion.

Representative BROWN of Ohio. \$6 billion?

Secretary MORTON. I have lost touch with it in the last several months. It is \$6 billion, maybe it is higher—maybe \$6 billion or \$8 billion. This is a figure we can furnish for the record, the best current estimate.

[The following information was subsequently supplied for the record:]

#### WHAT HAS BEEN THE COST ESCALATION OF THE ALYESKA PIPELINE?

The cost of the Trans-Alaskan Pipeline has increased over 600 percent from the preliminary estimates made in 1969. At that time, the system was estimated to cost approximately \$900 million. Since then the following have been the cost estimates: November 1973—\$4.088 billion; October 1974—\$5.982 billion; April 1975—\$6.375 billion. These figures were supplied by the Alyeska Pipeline Service Co.

Representative BROWN of Ohio. It would be helpful, because the House established what the real costs are, rather than what we would like to hope what the costs are.

Mr. Greenspan, I am told that Mr. Charles Schultze, the former Democratic Director of the Office of Management and Budget, has said that the economic impact of decontrol of oil in the economy would be somewhere between a one-tenth to two-tenths of 1 percent increase in the inflation rate. Also, I am in the possession of a study done by Robert Nathan, former AFL-CIO economist, now operating independently of that body, that states that the economic cost of a barrel of oil in 1974 was something like \$12.73 in the United States. Do you have any figures on what the average cost of bringing in a barrel of oil in the United States in these days?

Mr. GREENSPAN. The underlying cost? I do not, but I assume this will be furnished for the record by FEA.

Secretary MORTON. I could shed a little light on it. One of the things that is not usually figured on here is the dry hole cost. That, you see, as the cost goes up for drilling, the dry hole cost goes up just as much as the cost for a producer; and for example, in the marine environment, 6, 8, 9, 10, to 1 ratios are experienced. So you are up in the multitude as well as the front money just for the privilege of drilling.

Representative BROWN of Ohio. The cost of an Outer Continental Shelf well is going to be higher than the cost of a well in east Texas?

Secretary MORTON. No question about it. If you will look at the facts and figures that have been based on the investments that were made in the past, nobody has made any money out of the marine en-

vironment, as far as production of oil is concerned. There has been no bonanza for anybody.

Representative BROWN of Ohio. Mr. Greenspan, I am in possession of some figures from the energy economics section of the Chase Manhattan Bank, which says, between 1970 and 1985, something like \$400 billion will be needed by the oil industry just for the production of oil alone—the mining and production, the process of locating it and then producing it. Another \$370 million will be needed in additional capital investment for pipelines, tankers, refineries, these types of collateral things that go to converting that oil to the use by the consumer, wherever he may be located in the United States. Is that within the ball park of the cost figure? Where is that capital going to come from, and does it make a difference whether that capital comes from private investment or Government investment? Does it make a difference whether it is invested in the United States or abroad?

Mr. GREENSPAN. Chase Manhattan Bank has been well known, Congressman BROWN, as experts in the field for many, many years. They are very careful in their procedures. We have not done specifically independent estimates to confirm it, but in the past, I have found that they usually tend to be quite reliable in the methods they use in making this kind of judgment.

There is no doubt that the huge amounts of moneys required to fund our total energy industries, particularly our oil industry, is as in the past, are going to have to come largely out of the cash flow of private industry. I think that there really is no significant alternative to that. We must make a judgment. Do we allow sufficient profitability within the industry to finance that type of expansion? Or do we look forward to the very clear possibility that we will not get those required investments and that we would be unable to meet the energy needs required by this country for its long-term growth?

Representative BROWN of Ohio. What is the picture—Jack Anderson told me the other morning in the paper they are retaining huge quantities of capital in their coffers. They are holding onto their capital and not reinvesting it, and simply accumulating it for purposes I am not sure were explained further in the article.

Mr. GREENSPAN. I have no evidence to indicate that is true.

Representative BROWN of Ohio. What are they doing with the funding?

Mr. GREENSPAN. The problems that many of them have had very recently have been inadequate cash flows, and as a consequence, this has curtailed a certain amount of exploration.

Representative BROWN of Ohio. Do the statistics show that the oil industry in this country is investing more annually in finding new oil than the profits they are making annually?

Mr. GREENSPAN. I cannot comment directly on that.

Representative BROWN of Ohio. If you look into it, you will find that is true.

Secretary MORTON. I can give you some light on that, after having talked to the oil companies. One major oil company involved in the Alaskan pipeline uses a formula of 4 to 1. In other words, they can have a capital appropriation within their company of four times their net earnings. If their earnings go down at all, they reduce their

capital appropriation. They are committed to the pipeline. They are committed to certain refinery expenses that they actually have underway, most of which are incurred by changes in environmental regulations. They are committed to the completion of certain drilling rigs, and so on, in the marine environment.

Therefore, they have had to, for the year coming up, drastically curtail—in fact, they spent only a fraction of their money for exploration of new wells.

Representative BROWN of Ohio. I see that is not going to be before the television cameras. Could you give some statistics for the record, so we can use them when the time comes?

Secretary MORTON. This was confidential and proprietary information on the part of this particular company, and another company I talked to yesterday had to take similar action of reducing rather than increasing their plans for capital investments.

Representative BROWN of Ohio. I think it is public information. There are no reports of these companies required by the Securities and Exchange Commission. I think the figures are available. I would like to ask somebody at the witness table to supply those figures for the record.

Secretary MORTON. I am not sure what they are.

Representative BROWN of Ohio. I am talking about the question of investment and finding new oil, as opposed to the dollar inflow and profits of the corporation.

Secretary MORTON. I do not believe they have to disclose the method that they spend their capital, as far as refinery and pipeline rigs versus exploration. I think that shows up in audit. Frank Zarb says that the information is available, I do not know how specific. We will submit a response for the record.

[The following response was subsequently supplied for the record:]

WHAT PROFITS HAVE U.S. OIL COMPANIES POSTED IN RELATION TO INVESTMENTS IN PETROLEUM EXPLORATION AND DEVELOPMENT ACTIVITIES?

The Chase Manhattan Bank preliminary figures for 1974 and first quarter 1975 indicate that petroleum production expenditures exceeded net income. For 1974, aftertax net income is estimated at \$6.1 billion; production expenditures are estimated to be almost 28 percent greater or \$7.8 billion. Early 1975 data yields the same indications: Net income estimates are \$1 billion, production expenditures are approximately \$1.3 billion.

Additionally, the Department of Commerce estimates that total petroleum industry investment will be 30 percent higher in 1975. Some of this increase is attributable to an estimated \$10.4 billion investment in new plants and equipment, the largest increase registered by any manufacturing industry.

Representative BROWN of Ohio. Mr. Chairman, my time is up.

Chairman HUMPHREY. I spent 4 hours with Mr. Lied, with a Norwegian oil development company in Oslo. As you know, there is a consortium of American companies that are working there in the North Sea. He paid high tribute to their technological efficiency, their competency, their expertise. I shall be filing a report on this matter, which I want to share with you. I found that they produce oil from the North Sea, the roughest waters in the world, at \$3 a barrel. That is interesting to me—how placid waters of the gulf coast can be so much higher. These are American companies. By the way, they also have a very heavy tax program on the oil companies. They are up there

competing like blazes to get it, Mobil, Exxon, Conoco, and one other American company.

I want to make it clear that the Norwegian oil authorities said they were receiving the best, finest technology; outstanding work. And as Senator Culver said, we would like to have the same kind of good cooperation in this country, and I hope you can give us, for this record, Secretary Morton, your analysis of this country's exploration. The price was unbelievably low in light of the technological problems they had, including pipeline costs, putting a pipeline in the North Sea. It is like wrestling a python, you know, in a bathtub, and it is no small trick.

Secretary MORTON. Yes, sir, Mr. Chairman.

[The following information was subsequently supplied for the record:]

WHAT IS THE AVERAGE COST OF PRODUCING A BARREL OF OIL WITHIN THE UNITED STATES?

Although average production costs are difficult to calculate, due largely to the great variance in drilling costs and finding rates, two independent analyses provide telling information. Robert Nathan Associates, in testimony before the Senate Finance Committee, estimate that the after-tax cost of exploration, development, and production plus a 15 percent return on investment amounted to \$12.84 per barrel in 1974.

In contrast, the same figure for 1959 was \$3 per barrel. Moreover, the study concluded that since the early 1960's, actual production costs have exceeded the market price. This disparity persists due largely to continued price regulation.

Representative BROWN of Ohio. Mr. Chairman, I have to observe that they are making a lot of money, because gasoline was \$1.90 the last time I was in England.

Chairman HUMPHREY. That is right. That may be true; making money is not unique to Americans. I am simply telling you. By the way, the Norwegian Government is making the most of it.

Secretary MORTON. I can cite something a little sadder; that is, I sold a dry structure to a major company in the Gulf of Mexico for \$200 million. They have five holes in it, and they are dusty.

Chairman HUMPHREY. And they are tax deductible.

Secretary MORTON. Yes, they certainly are, but the cash is gone.

Chairman HUMPHREY. And tax deductible; I am not opposed to that—it is the incentive we need.

Secretary MORTON. I wish you would take a look at that, as well as the other things in this committee. I am not so sure we are using the Outer Continental Shelf in the most efficient and best manner.

Chairman HUMPHREY. Thank you.

Senator PROXMIRE.

Senator PROXMIRE. Thank you, Mr. Chairman.

The issue, really, is whether or not an increased price and relying on price retarding consumption by price increase—whether we should pay that price now, what effect that would have on unemployment, what effect that will have on inflation. I think a part of that was resolved very happily this morning in my mind by the colloquy between the chairman and you gentlemen. It seems to me that you have reached the conclusion that, as far as increasing production is concerned, that increased prices will have no significant effect for the next 5 years, and the hope for that effect is out about 6 to 10 years. Then



it will be moderate, about 1 million barrels a day by 1985, 10 years from now.

What I would like to get into is the effect that this increased price will have on conservation of energy and reducing consumption. The President vetoed legislation suspending the oil tariff on March 4. When he did so, he said, "As an immediate step toward energy conservation." Mr. Zarb, you indicated in a press conference a little later that that would have very little effect on consumption. The extra dollar would translate into a small increase in the price of gasoline, 1 cent per gallon. And you felt it would have little or no effect on consumption. Was the President wrong when he made the observation in his veto message?

Mr. ZARB. No, sir.

Chairman HUMPHREY. You would make a fine Vice President.

[Laughter.]

Senator PROXMIER. Nobody speaks with more authority on what would make a fine Vice President than Senator Humphrey.

Mr. ZARB. Senator, the \$2 tariff itself, as the President indicated, was one part of his total conservation program. His program also contained a deregulation mechanism for natural gas. When we have gone through this recession, and realize that the increase in consumption was less than expected. It will be tough to separate, with any degree of probability, the effects of conservation from the effects of the recession.

The \$2 tariff, in our estimates, represents a quarter of a million barrels a day savings by 1977. That is not very significant compared to our national daily usage of 13 million barrels. With a recovery in the economy we are headed to 20 million barrels a day. This will not happen in the next year or two, but we are certainly headed in that direction. The effects of the \$2 tariff would have a meaningful impact. The rest of the conservation program would add to our savings in consumption. These savings, combined with the additional production in the near term from both new oil and the application of secondary and tertiary methods to old fields; the oil savings from the coal conversion plan, the Elk Hills development, as well as increased usage of gasification and liquefaction processes, will decrease our vulnerability to insecure sources by foreign crude oil by 1985.

Senator PROXMIER. I want to concentrate on the consumption aspect. I would be inclined to challenge that when you look at the overall figures since 1972, the price of gasoline has gone up very much—maybe not doubled, but it has gone up 50, 60 percent or more. The price of oil for heating and so forth has gone up, too. Yet we have a higher demand now, effective demand, than we had in 1972. The huge price increase has not really retarded consumption. It has not worked that way. It is my conclusion that if the price goes up another 10 or 15 cents a gallon, it is not going to reduce consumption very much. It is going to act as a tax on the American people. They will have less money available to spend on other things, and it will increase unemployment. We certainly do not have much evidence that this is going to result in conservation of energy.

Secretary MORRIS. I think you are wrong about that. Senator, in this respect—in the major energy consuming industries, there has been a rather substantial increase in efficiency of energy use per unit of out-

put. We have a 15 percent goal in the selected industries. We are well down the road—we do not have the exact figures—we would like to put those in the record, as to where we are now. Some of them have passed the 7½ percent mark. So there is a real effort going on in the economy, particularly in the industrial economy.

[The following information was subsequently supplied for the record:]

WHAT PROGRESS IS BEING ACHIEVED IN THE FIELD OF INDUSTRIAL ENERGY CONSERVATION?

Under the auspices of the Voluntary Energy Conservation Program, jointly managed by Commerce and FEA, significant increases in energy efficiency within six industries have been achieved. The six industries, their energy efficiency improvement, and the 1980 efficiency goal are outlined below:

(In percent)

Industry	Energy efficiency improvement	1980 goal
Aluminum.....	3.4	10
Cement.....	1.6	10
Chemicals.....	7.5	15
Iron and steel.....	2.7	10
Paper.....	2.5	10
Petroleum.....	7.8	15

In addition to the progress being made by these industries, four other industries—baking, copper, glass, and meat packing—have just begun participation in the program. Similar success is expected from them.

Senator PROXMIRE. I do not question the fact that some businesses are responding very well. But the overall statistics do not show that we are responding to this increase in the price of oil and the price of gasoline by reducing consumption. If they do, I would like to have the statistics.

Mr. ZARB. We would like to provide you with some statistics which, I think, will convince you otherwise. You must consider the effects of the recession that we have had over the last year, and use your judgment in this matter, as we have.

Senator PROXMIRE. It seems to me the recession should indicate that we would have a diminution in demand. Of course, real income is less; on the other hand, the statistics I have here indicate consumption is going up.

Mr. ZARB. Do you have the statistics on gasoline consumption for the month of June, for the years 1972, 1973, 1974, and 1975, in front of you? The month of June consumption of gasoline in the United States?

Senator PROXMIRE. What, sir?

Mr. ZARB. For the month of June, do you have the statistics for the last 3 years?

Senator PROXMIRE. We have the month of June for 1974.

Mr. ZARB. Does that show approximately 7 million barrels a day?

Senator PROXMIRE. 6.9 million.

Mr. ZARB. I would say that the final numbers for June 1975 will be approximately 7 million barrels a day. It is clear that rather than having the normal escalation that represents an insatiable appetite for

energy, now, nationally, we have had some decline because of the recession. I will not be so bold as to say that cost has done it all, as I cannot separate the two.

Senator PROXMIRE. Let me interrupt. I do have the Bureau of Mines' figures. They show only for 1972-74—there you have an increase from 6.8 million barrels per day in June of 1972 to 6.9 million barrels per day in 1974. It has gone up, not much; it has gone up.

Mr. ZARB. With due respect to your position, we had an embargo in that time period. Certainly, you cannot use those numbers. Mr. Chairman, I think the numbers will show some effects of conservation. But we will probably have to look back and demonstrate that, as a Nation, we now use energy more wisely. Energy has a different value in our society today. It has an impact on decisions regarding insulation in attics to decisions on carpooling.

Senator PROXMIRE. I agree with that. I agree eventually we will have to do that. Timing is all important. We are now in the middle of the worst recession we have been in in 30 years. It is a cruel, killing recession, a recession in which we have almost 9 percent unemployment. Do you expect us now to put into effect a program of higher oil and gas prices that is going to aggravate the recession, is going to throw more people out of work, is going to end the progress we have made on inflation? It seems to me the timing is wrong. I think we have to do this, perhaps, but not now, not this year, and perhaps not next year.

Mr. ZARB. Senator, I understand the situation. But I submit, in all honesty, there will never be a right time in this Nation to promote conservation.

Senator PROXMIRE. This is the worst time.

Mr. ZARB. The program we want to put in place can be done with an absolute minimum amount of pain. We must face the situation here, and make sure that the increased prices are recycled to the American economy by enacting the President's excise tax and windfall profits tax. One thing that discourages me is a vision of increasing our consumption in the middle of this recovery by a million to 2 million barrels a day between now and 1977. That happens when GNP grows. All of this increase would come from the Middle Eastern countries. If you share with me the worry I have with respect to national security, and the kind of havoc an embargo can render on us in 1977, and share with me the worry I have about the American consumer you come to the conclusion that a comprehensive program is needed, now.

Senator PROXMIRE. I share all those worries. I do not see any evidence that higher gasoline prices are going to reduce the amount of driving that the American public does, or higher oil prices will reduce the amount of consumption.

Mr. ZARB. I will yield to my colleague.

Mr. GREENSPAN. Senator, you have to look at the historical patterns of gasoline consumption in the United States, not in total, but per vehicle. You will find, prior to 1972, that there were significant increases, year after year, of rather large dimensions. One must measure the impact of price changes in demand, not by looking at it in an absolute sense of what has happened since 1972, but what would consumption have been if the previous patterns of consumption continued under

the old prices? I submit to you, that the levels of consumption would now be significantly higher than they are today.

Senator PROXMIRE. The spectacular reduction was in the fall and especially the winter of 1973, and early 1974, as you know. That is when we had the allout drive, that is when we had the cars lined up at gasoline stations. We had a big drop then. Since then, we have had a recovery in demand, in spite of the recession, and an increase in consumption, in spite of the higher prices.

Mr. GREENSPAN. The decline in consumption during the embargo largely resulted from the fact that people, because they were not certain of their capability of getting gasoline when they took a longer trip, tended to sharply curtail their intercity driving, because they could never be certain they could get back. I think that period is clearly one that cannot be utilized to measure elasticity.

First of all, there are two types of elasticity. One is the immediate impact of higher prices on the utilization per vehicle; the evidence is that that does react in the short run. The major impact is that there is a tendency for a longer term adjustment process to take place by which the car inventory or the number of cars on the road and their miles per gallon, tends to shift very dramatically. We need only look at the comparison of the United States, when gasoline prices were low, compared with Western Europe, where they have always been high. The size of the fleet, the average size of passenger cars and light trucks is very significantly smaller, smaller cars in Europe than in the United States. I submit that is what is happening as a consequence of these higher prices of gasoline that we have seen in the most recent period, which is starting to prompt a very significant shift toward smaller cars. In other words, that is part of the so-called long-term price elasticity response.

I would submit that the evidence we have does in fact very clearly suggest a very important price elasticity element as an important conservation result of higher prices.

Senator PROXMIRE. That may be, but I do not think the evidence is very clear on that. I think there may not be too—

Representative BROWN of Ohio. Will the gentleman yield?

Senator PROXMIRE. Not at this point, since my time is almost up.

At any rate, Mr. Greenspan, would you tell us whether or not, with a sharp increase in price or a higher gasoline tax, or whatever measure we have, or deregulation, the administration would favor a tax cut, and favor that tax cut to coincide with the increased price of gasoline being used?

Mr. GREENSPAN. First of all there are two issues here. First, we are talking about the principle of recycling of funds into the economy, as both Mr. Zarb and Secretary Morton have mentioned. Of course that is the President's program.

If we are talking about a specific tax cut independently of that, or over and above what has been discussed here, then clearly we cannot look at that outside of the full context of overall economic policy.

I might just say quickly and very summarily with respect to some of these numbers which I have looked at, which unfortunately I cannot analyze quickly, that our estimates are nowhere near the size of these.

Senator PROXMIRE. What numbers do you get?

Mr. GREENSPAN. We do not have the same specific assumptions here, so I cannot make a direct comparison. The effects we get on price would be less than these. On some of these particular assumptions, this gets us back to the conversations we have many months ago on the so-called ripple effect. I do not want to get back into that. I would really suggest that these are numbers which I would say are quite debatable. Perhaps some other time we can get into it, after I have had a chance to analyze it.

Senator PROXMIRE. If you think these numbers are debatable, would you give us what you have for the record so we can have some basis for comparison?

Mr. GREENSPAN. I should be glad to.

Mr. ZARB. Mr. Chairman, may I respond to one question that the Senator raised; that is, the notion of a delay, a delay to induce what we both agree needs to occur in the Nation, a more efficient use of energy by virtue of price. A homeowner, a motor vehicle driver, or a manufacturer all need to learn to use energy wisely. The question is when do we begin. If we wait to begin until 2 years from now, with a higher base of imported oil, or a higher price visited on us, we have increased our vulnerability to the price increases of the future. This is the tradeoff we have to consider. Our vulnerability will grow by leaps and bounds if we do not take some meaningful action soon.

Senator PROXMIRE. My time is up, Mr. Chairman.

Chairman HUMPHREY. Congresswoman Heckler.

Representative BROWN of Ohio. Would you yield for one question?

Representative HECKLER. Certainly.

Representative BROWN of Ohio. As I recall, the FEA figures for gasoline consumption increased between 1963 and 1972, and on the average, before the embargo, by 3.9 to 4 percent a year. Since the embargo, and the consequent increases in prices, that increase has been reduced to a total, as of last January, of 2.7 percent. It actually went down for awhile and then came back up, and the total increase over that 18 or 22 months or whatever that period is, was about a 2.7 increase. Which was, of course, considerably lower than 3.9 annual increase.

If the economy picks back up, it may exceed the 4 percent unless there is a discouraging factor like higher prices for gasoline.

Mr. ZARB. Congressman Brown, the way this Nation was headed in terms of its treating the gasoline product at 19.9 cents per gallon, which I believe is what you are talking about, if we had stayed on that path, the reliance of this Nation on energy would be incredible. I can see this in the State-to-State situation with natural gas. In one State the concern is whether to use natural gas to run the boilers and generate electricity or whether to conserve a fuel which presently is abundant and cheap; while two States away, people are going to be unemployed because of lack of that natural gas. This is just an incredible juxtaposition. We can see the effects of price on how people treat a commodity.

In June, after adjusting for the economic recession, we are going to see a flat gasoline consumption for the last 3 years. This should tell us something. In July, we could see something of an upward trend because of summertime vacations. We simply do not have the July numbers yet.

Chairman HUMPHREY. Congresswoman Heckler.

Representative HECKLER. This hearing raises a most basic issue facing the Congress. We are poised between two competing tensions: On one side the need to develop an energy policy which will avoid the crippling effect of an Arab boycott of the future, which we suffered through once and which could have worse effects later. And on the other side we have the tension of an economy which, we are told, is recovering but whose recovery is really not being felt at the grassroots as intensely as we would like.

I find in my own congressional district that the potential recovery is just a ripple in the air. There are few businessmen that report increased activity; nonetheless, the unemployment rate in the two major cities of my district is 12.7 percent.

In view of this, as a fact of life, not just a statistic, we in Congress have a question of how to deal with the potential economic explosion which will arise as a result of an increase of the price of oil, which is the inevitable consequence of decontrol.

We have already seen in New England that our conservation efforts in home heating oil has been effective. We have cut back consumption of home heating oil by 17 percent in Massachusetts. There is virtually nothing more than can be squeezed out, without simply saying that people cannot afford to heat their homes at all.

In terms of gasoline, certainly there are potential conservation efforts that can be effective. Nonetheless, how will the people—how will the consumer—in this section of the country, which is not enjoying a very dynamic economic revival, bear a higher price which this decontrol policy will inevitably provide for them?

Secretary MORTON. As you know, Congresswoman Heckler, the President proposed that these higher prices be generated by the imposition of an excise tax and the excise tax would be refunded with particular emphasis on the low-income groups.

Now we have not gone about this legislation in a consolidated way. It has been a piecemeal effort I think. It has been very disturbing to me that we have not had the institution or mechanism to deal with the whole thing and get it all together.

If we do not do anything, New England is going to be even more dependent on prices set overseas.

Representative HECKLER. We all are. Whenever the OPEC countries raise the price, domestic price raise is equal.

Secretary MORTON. Except for the producing States in the producing areas. They have fuel. For example, Texas has natural gas; Oklahoma has natural gas; Louisiana has natural gas. So the best possible thing we can do is to assure a supply, and get enough oil as soon as possible, so we have our supply competitive. As soon as we get some supply, we will then be able, of course, to control our own price again.

But we are not going to be able to control it by regulating old oil with old oil declining as a percent of new oil. The end point of that is simply a slower rate of speed at which we have new oil, because every time now we get new oil, it comes in at the unregulated price and every month and every day goes by we have less old oil than we had the day before.

It is, as Senator Proxmire hinted, question of timing. By continuing to regulate oil, we would simply be postponing the day, and we would be tending to really inhibit the recovery of the economy because there

would not be the effort there should be to develop new fields and new supplies.

Representative HECKLER. The problem with the suggestion that the administration has been making in terms of recycling the dollars, is the fact that the initial burden is placed on those least able to pay. At the outset, they must carry the cost until they obtain their rebate. In my district, it is a common, predictable occurrence, that when I hold office hours, people come to my office with their utility bills which are higher than their mortgage payments. Utility costs are forcing these people into bankruptcy. The utility bills are, at this point, directly related to the cost of oil. These people cannot afford the enormous increases that have occurred. If we decontrol oil, we can only predict that in the short run this will cause an even greater tension to the same low-income families.

Secretary MORTON. Not so much in New England. You would be less affected by the differential than in other areas of the country.

I would also say I think some of the barriers that you have to supply, mainly the construction of refineries, the development of nuclear plants, which we have been trying to do, and the natural tendency that you had to become totally reliant during the 1950's and 1960's on imported oil, have been policies that have been working against the very people that you are trying to help.

Representative HECKLER. I am happy you brought that up because I think it is very easy in Washington to make New England the villain, to say Massachusetts has not allowed refineries. I would like to bring to your attention that I submitted this issue to my own district in a questionnaire about a year ago in which 80 percent of the people said that they would favor the establishment of a refinery.

And, as a matter of record, we have a nuclear powerplant next to my district. It has been out of operation periodically for reasons other than public support, nevertheless it is there.

People in Washington say that New England won't accept refinery because of a celebrated case in which a giant oil company tried to locate a refinery at a site of its particular selection without consulting the community. That case should not be taken as representing New England's view on refineries. In fact, in Dracut, Mass., there was another case in which a refinery was accepted by a vote of the town's populace.

I do think that it is time to put aside the myth about New England resisting refineries when, in fact, there have only been two test cases. In general there is a broad acceptance and there certainly is in my district. I invite you to bring a suitable interest into the district and find suitable land and I can assure you that there would be a supportive point of view, providing that the environmental safeguards which EPA has established would also be observed in the location of the site and the construction of the facility.

Nonetheless, Secretary Morton, in your term as Interior Secretary, you talked a great deal about coal. We have a potential coal resource in Massachusetts, interestingly enough. The fact is in our existing powerplants, because of EPA regulations, it is impossible for utility companies to gain permission to burn coal. Therefore, the use of coal for electricity generation is not really an effective alternative in New England.

How can you resolve the environmental questions, in terms of the usage of coal, at the same time asserting what we need really is to find coal as an alternative source, when EPA has really been the main stumbling block?

Secretary MORRIS. Let me say this, the proposition amending the Clean Air Act was brought before Congress in January. It was part and parcel of the President's energy message and we have been standing by it ever since. Not only has Interior, but also EPA been in discussion with various appropriate committees of Congress since then.

We have not yet achieved a change in the regulations that would give us an opportunity to convert to coal more expeditiously. The purpose was not to change the standards. The purpose is, frankly, to buy a little time in putting it in. I think it is very necessary for the Nation to do.

Until we are willing, as a total Government, to face this, I think we are going to have great resistance in converting to coal.

Representative HECKLER. I would like to ask Mr. Zarb a question about the recent gasoline price increases. Obviously, in this whole area, we are questioning the substance of the issues and we are discussing the credibility of positions taken.

One of the difficulties in this whole question of oil decontrol, it seems to me, is the lack of credibility on the part of the oil companies in terms of how their extra revenues would be spent and how the public interest would indeed be served.

Just over the 4th of July weekend we all saw a fairly substantial increase in the cost of gasoline—I think across the country, certainly in the Northeast. What is the justification for these increases? What was the reason for the timing of the increases? What is your agency doing in terms of investigating what could be a case of manipulation of the market, or seems to be to many people?

Mr. ZARB. Congresswoman Heckler, I do not want to be in a position of either defending an industry, or flailing out against it, with insufficient data. Under our rules, the refiners have the ability to pass along certain increases once a month, if they remain within a certain profit margin.

They are permitted to pass through either product costs or non-product costs, according to our regulation. We do a normal desk audit of each of these charges each month, so we know what oil company has done what in terms of increases, each and every month. In this particular instance, as we do in most others, we will be doing an onsite audit of each adjustment to insure that the passthrough of these latest price increases was done lawfully.

The timing of a price change is largely concentrated in the early part of the month by most oil companies. I am not going to defend the pre-4th of July move, just for the sake of defending it. I simply say that we do have a law. We do have rules that are being enforced. If there is any evidence that the costs that were passed through were not legal or appropriate, then we would take the necessary action.

Having said that, I want to point out something that Congress can do. An item that I spoke to before you arrived, Congresswoman Heckler. We talked about increasing prices. This is relevant to the people in New England and their inability to come to grips with electric costs which, for the most part, I am sure you will agree, are



largely associated with the massive hike in imported oil prices in that part of the country.

You use more imported oil, per capita, in New England, than any place in the Nation and probably any place in the world, except Japan. We ask, with the President's increase in tariffs, that we have an excise tax on domestic oil and that excise tax be returned to the people. This takes congressional action.

As you know, I have great sympathy for the people in New England because they are in a tough predicament. They could surely use this rebate. New England is in a tough position and they are really trying to do something to meet the long-term situation. We have a long way to go because the Northeast is extremely vulnerable to any OPEC increases. It is the part of the country that is going to be hurt the most.

Representative HECKLER. What we are worried about is not only the OPEC increases, but also the domestic increases. If that is our only alternative, it seems to me that is the common result of this proposal.

Mr. ZARB. It is a difficult discussion and I am sure it is difficult for you in your district. The issue is whether or not we are going to be tough enough as a Nation to put in place programs that will allow us to bargain with the producers in a way that would limit their ability to pass increases on as they have in the last few years.

I suggest that unless we put together some kind of program that begins to limit our imports and bring on production, the producers are not going to listen because they do not believe us.

Representative HECKLER. I want to return to this question of gasoline increases.

Chairman HUMPHREY. Congresswoman Heckler, may I just ask what is the reason why, when Canadian oil is \$1 a barrel more than OPEC oil, that gasoline prices in Minnesota are less—5 or 6 cents less than in Massachusetts? Can you give a justification?

Mr. ZARB. I would have to look at the timing.

Chairman HUMPHREY. It was over the weekend.

Mr. ZARB. Some companies—

Chairman HUMPHREY. Six cents or less, Amoco gasoline, as compared to Minneapolis.

Mr. ZARB. As far as I know, I would really have to compare the individual refinery passthroughs and see what they amount to. As you know we have an entitlements program, a program about which some of your colleagues in the Senate have been complaining. I hope, however, the entitlements program is not working in such a way that you have 5 cent lower gasoline prices.

Chairman HUMPHREY. We have competition. They do not drive out all the independents out there. I can tell you that the gasoline price at home, when I go home and fill up my car, it will be 4 to 5 to 6 cents a gallon less.

Mr. ZARB. I will have an answer to that question in the future. You made a good point in reference to secure sources oil around the world. Our good friends to the north are charging us a little bit more than the rest of the cartel.

Representative HECKLER. I do recognize the need to pass through increased production costs, but the timing of this passthrough and the

size of the increase and the particular circumstances raise doubts. It so happens that on a specific corner in McLean, Va., that I happen to pass frequently, there are two gas stations. Last week, one gas station raised its price by 5 cents a gallon; the other raised its price by 1 cent. Is there that much of a different in basic costs of the oil? I question it.

Mr. ZARB. There are two factors involved, Representative Heckler. Until we have all of the analysis, I cannot answer your question. It takes a while to get the data to clarify the situation.

Keep in mind that individual retailers also have the capability of passing through costs up to a legal margin. Some retailers have remained below their legal margin and when they finally pass through their allowable costs, these increases may be larger than those of other retailers.

The real answer to your question has to come when we look at the refinery passthroughs. We will make sure that they are legal and correct. With respect to the individual retail situation, we will be taking steps this summer, as we did last summer, to look at retail price changes in terms of their legality.

Representative HECKLER. I want to assure you I have great respect for your sense of integrity about this. I would like to know whether you feel you have sufficient personnel and the mechanism and the authority to really look into this and monitor what is happening? I think this is a question that is concerning the Congress, regardless of State or region.

Mr. ZARB. Congresswoman Heckler, I have already testified before the Appropriations Committees that we will be asking for additional resources in this area, not only for this particular program, but for many others that fall into the regulatory and compliance area.

The simple answer to your question is that we expect to be asking for increases in the 1975 budget. For example there are 230,000 service stations in the country. We have to use all kinds of alternative resources to make sure that we police that sector in the summertime. At the refinery level, we are just barely coming up to speed, but we have enough resources to take a look at these particular increases and assure the Congress that they were lawful.

Representative HECKLER. My time is running short. I would just like an answer from you and Secretary Morton. The oil allocation law has been an asset to New England, no doubt. I know both of you have exhibited a concern for our region's problems, which are unduly harsh because we are so dependent on imported oil.

I understand that there is a threat of a veto of the Emergency Allocation Act. I do not know what the President's present thinking is. What I would like to know from each of you gentlemen is what you will advise the President to do.

Mr. ZARB. I will take the first step here. I would like to pass on what my advice will be to the President. There is no need for that point of confrontation to arise. We have ample time between now and August 1 to come to an agreement with Congress on the decontrol program.

And I just do not think we need to have that confrontation. I hope we will do everything possible to avoid it.

Representative HECKLER. You would not advise him not to veto it?

Mr. ZARB. I really would not like to say which way I would advise the President. A lot depends on the circumstances at that point in time.

Secretary MORTON. Obviously I would reserve for direct discussion with the President my advice on this. There is no way you can take a position on whether you would advise a veto on a specific piece of legislation until you see it. You can get into deep trouble doing that. I agree totally with Frank Zarb, let us work together and try to come up with what the best program for the country is for energy all over the 50 States, and try to avoid the kind of legislation on which a veto would be considered.

Representative HECKLER. Mr. Greenspan, our chairman has said during his remarks that he believes, based on past performance, that decontrol will not lead to increased production. How would you counter that?

Mr. GREENSPAN. It is always very difficult to deal with the effects of price on new production, when you are dealing with a complex problem such as this. In my experience over the years, there has always been a tendency to underestimate rather than overestimate the supply response to a price increase. I think that we observe, for example, as a consequence of the very sharp rise in the world oil price, that there has occurred a huge number of newly-found reserves throughout the world, especially in the non-OPEC areas. I would certainly grant that there are difficulties in making these judgments.

I would say that one of them is the likelihood of being too low. And more importantly, the importance to this country to secure supplies of petroleum is so great that I think if we are going to take risks the risks should be in trying to get more, rather than less.

Representative HECKLER. Thank you, Mr. Chairman.

Chairman HUMPHREY. Congressman Long.

Representative LONG. Thank you very much, Mr. Chairman.

Mr. Secretary, by way of comment, I would like to say I share your concern about the ability of this institution to act on this program and this problem in its entirety. I think it has to be treaded in its entirety in order to come up with an adequate solution. That is one of the problems that we had in the House of Representatives.

I would also say that we missed you last November, when we were trying to reorganize the jurisdiction of the House of Representatives. We have 14 committees and subcommittees that deal in one aspect or the other with this whole problem of energy. We ended up with so many people who created their own—what I like to call not so reverently dunghills that we are unable to break them down. As a consequence, we did not succeed in our reorganization. I think if we had we would have been much better able to treat it as one particular problem, which I really think it needs to be treated, in its entirety.

I do say that I recognize some review of the feelings from many of the people that were not in favor of it at the time, as they come before the Rules Committee now enjoying the jurisdictional problems, they say, "We wish we had looked at this thing the other way at that time." I do think that is a part of the problem. I share with you in that regard.

Mr. Zarb, with respect to this question of the recommendation of veto—and I would be particularly interested in your and Secretary Morton's view on this—the Senate is soon coming out with a resolution on S. 1849, which will continue price control over old oil. During the line of questioning of Congresswoman Heckler, if I recall correctly, you said this morning, that the administration is in a mood to coordinate and to compromise and to cooperate with respect to decontrol. While I can recognize, again, that you are reluctant to give us specifics in this regard, I do think in the spirit of cooperation, or in the spirit of compromise—what would you see as an area of compromise, or to use an overworked term, what are the parameters of compromise that you and the Secretary might see between the Congress and the executive branch, with respect to the price and the deregulation of world oil?

Mr. ZARB. Congressman Long, that has been an increasingly difficult question to answer, for a variety of reasons. I am sorry that Congressman Brown is out of the room, since he is an intimate part of what has happened the last 3 months.

The President asked for a program of immediate decontrol, with an appropriate windfall tax, and so on. The mood of Congress was such that the committees thought decontrol should be stretched out over a period of time. We looked at both models. Originally, the President said that he will favor a 2-year, 25-month phased decontrol; a windfall profit with a plow-back feature, and a return of the excess dollars collected to the American economy.

The committee involved—and this was bipartisan as there were both Democrats and Republicans—came up with three different vehicles for decontrol. All were different from the President's program; such as a 3-year decontrol, rather than 2 years. Under those circumstances, it seemed we were getting into an area where there could be some sort of accommodation. It did not work out very well. There was a very, very close vote, and an amendment was attached to that bill that, from our point of view, was contrary to our energy needs.

I might say, Congressman Long, that a 2- or 3-month change, one way or the other, in the President's program, would not be meaningful to anybody as an issue. The program gets us where we need to be in the energy field. I know it is not popular; I know an increase in price is not popular. I have said time and time again that I am in favor of a windfall profits tax program. I think we have gone a long way in terms of where the House was, before the latest breakup. I think we probably had an opportunity to compromise.

Representative LONG. Not looking at the past breakup, we have now got to look at some parameters relative to the length of time of decontrol, what the price of it would be over the different stages of the time period. While you might not have any firm views in that regard yet, what are some parameters with respect to those that might be accepted?

Mr. ZARB. Congressman Long, I do not mean to be evasive here. You are asking a very difficult question. I do not know who we are bargaining with, who represents the other point of view, or what the other point of view is.

Representative LONG. Let me ask you another way. What do you propose to do, to send up in the way of recommending legislation in

that regard? What is your view? It is not a question of who you are bargaining with.

Mr. ZARB. My office has recommended a 25-month decontrol plan of 4 percent a month. That is a compromise in the direction of the spirit of the Congress. There is no one entity within the Congress that we knew had another point of view. We could not say, here is the Congress' point of view; here is the President's point of view; and this gave us the parameters within which to compromise.

I think the 25-month decontrol arrangement was close to the right formula and does represent compromise.

Representative LONG. Mr. Secretary, do you have anything to add to that?

Secretary MORTON. Frank Zarb covered that very well. The problem, as you pointed out, and Frank Zarb pointed out, is that it is a very difficult thing to sit down and talk about with the Congress as a whole. You talk about taxes with one group; you talk about decontrol with another group, programmatically; and you are really, in many respects, talking about supply development and supply policy with another group. It is very difficult to put it together. But this is a good position. I think you get there if you get the 4 percent a month in 25 months.

I wish that we could talk to the same people about the question of reimbursement, as well as the question of decontrol, so that you could get a consistent position against which you could negotiate and compromise. I think we have let this thing get into politics when it should not be in politics. I do not think it is a partisan question. Everybody wants a solution; we are just not institutionalized properly enough to get it.

Representative LONG. What would be the position of you, Mr. Zarb and you, Mr. Secretary, in the event that the Congress enacts legislation to continue the price of old oil at its present level? Would it be a recommendation to the President of the United States that he veto this legislation?

Mr. ZARB. Congressman Long, again, I am not going to frame this answer in responding to what my advice to the President will or will not be. But I will emphasize that, in my view, the time has come to deal with this issue, and to prolong it another 9 months or 2 years or 18 months, as someone suggested, is simply putting off a hard decision. My advice, to all who will listen, is that we have gone too long in the Nation ignoring these kinds of decisions, and we are paying a dear price.

As you can see, I am programmatically and substantively opposed to prolonging this issue. We have had some other people in this area who have come forth with their suggestions. Unfortunately, their suggestions have not been headed. It is a growing point of view that the right thing to do is to face the issue. As you know, my judgment is that we ought to face it, and face it now.

Representative LONG. Well, I recognize the risks that are involved in any delay in the resolution of this problem. I have been one of the ones who think—perhaps the majority view of this committee—that perhaps we ought to treat the economic problems before we treat the specific energy problem, and that that is where the emphasis had

to be. But that is a matter which good willed people could disagree on. I do not argue that.

Going back to that, and related to that, when you appeared on the "Issues and Answers" program on January 19, Mr. Zarb, at the time you were strongly supporting the proposed tax rebate feature, which relates to both of these problems, perhaps more so than a lot of the other things do to the President's energy program. As I recall it, you said that the average family would actually get back more in the way of tax rebates if he conserved enough gasoline than he would have to pay in higher prices in the gasoline that went up at the time. Have you in the administration pulled back from that position, or do you still maintain the position that you maintained in January with respect to that? Do you still maintain the same position in that regard?

MR. ZARB. I do not think my response on "Issues and Answers" in any way changed that position. I think it reinforced it. We have said right along, a tax rebate is the right thing to do. One of the major struggles we had originally with our recommendations on the energy program was the equity problem, Congressman Long. The equity problem is simply this. If we had any vehicle to conserve energy—let us assume an allocation recording system—the people in our society who would have the most problems under those circumstances are the people with the lowest economic force. If you want to see some horror cases, as to what happened during the embargo and what we prevented from happening, I would be glad to go over them with you.

Let me finish my answer. When we look at a solution by way of price mechanisms there also is a potential for inequity to some people in the country. There is already in place a system brought on by the OPEC nations which hurts people on the lower half of the income scale more than others. Because of the worldwide inflation, the tax tables were distorted. Therefore, we proposed a simple tax table, one that could have been modified, and on which we certainly were willing to work. Every single dollar that was raised by windfall, excise taxes, or other conservation taxes was to be returned to the American economy, especially to those people that were hurt more than their fair share. We have not changed that goal.

Representative LONG. You have not?

MR. ZARB. No, sir.

Representative LONG. My time has expired. Let me ask you one other question—it will take me just a minute, and maybe there is a yes or no answer. Did you have any input into the determination by the administration to break up the highway trust fund and move that money, or some recommendation to move that money, into mass transit?

MR. ZARB. Yes, sir.

Representative LONG. That necessarily leaves me in a position where I cannot just rely on a yes or no answer.

MR. ZARB. Could we talk about decontrol, Congressman Long? What particular question would you like me to respond to? I did have input on the decision; I was asked for my views and information with respect to mass transit, its potential contribution, what time frame might

work, and what might not work. There are two schools of thought on that question. There are folks around the country who have studied this question, saying that there will not be as much savings as we have predicted in energy conservation for a lot of reasons. The use of highways to circumvent cities, for cross-country travel and its potential for gas savings, is a science in itself. It has some holes in its argument. I gave facts as I knew them. I was one of many advisers on this question, and in my view, I think I made the wisest and best possible decision.

Representative LONG. Thank you, Mr. Chairman. My time has expired.

Chairman HUMPHREY. Senator Kennedy.

Senator KENNEDY. Thank you very much, Mr. Chairman.

I regret that I was not here to hear your opening statements to the panel. I appreciate very much the chance to explore some of these matters.

Chairman HUMPHREY. May I interrupt to say that Senator Kennedy will be chairman of our new Energy Subcommittee of the Joint Economic Committee, which will be continuing investigation and study of the economics of the petroleum decisions that are made here. The subcommittee has had so many applicants for membership that we have not, as yet, determined who will be on it.

Senator KENNEDY. There is a place for you, Senator, any time.

Chairman HUMPHREY. I thought I would pop in whenever I could. It will be a very active subcommittee.

Secretary MORTON. May I interrupt the proceedings for a moment? First, I wonder if there could be available to us the study from which this is a summary?

Chairman HUMPHREY. Yes; we will see that it is—

Secretary MORTON. Could we have that maybe today?

Chairman HUMPHREY. It will be made available to you today, two or three of you.

Secretary MORTON. This is a matter of logistics. I would like to know what the Chair's plan is here on these hearings? I have some problems as to my own schedule.

Chairman HUMPHREY. Let me ask my colleagues here. I will tell you what we will do. We will try to close off at 1 o'clock. Is that all right?

Senator Kennedy.

Senator KENNEDY. Thank you very much.

At the outset, I would like to applaud the willingness of Secretary Morton and Mr. Zarb to meet with us in the New England area about some of our particular problems. I think this was extremely helpful in making them better aware of some of our particular needs. Mr. Sawhill met with us first some time ago, and it provided us with a much better opportunity to bring some of the facts of the dangerous situation we were facing in New England to the administration's attention. We are hopeful of being able to get some action. We have pointed out to Mr. Zarb on occasion, the fact that the development of any national energy policy, as it affects the importation of oil and gasoline, has a particularly adverse effect on those sections of the country that are most dependent on it. And we in New England are 90 percent dependent on

petroleum products, in terms of our energy needs, unlike the rest of the country, which varies anywhere from 45 to 65 percent.

This has been impressed on us in instance after instance as the part of the country that has the most serious unemployment problem.

I was talking to the owner of a major textile mill the other day, one of the few left, and he was pointing out that his energy bill had doubled in the last year, and now it is  $2\frac{1}{2}$  times as high as it was a year ago. Under the administration's program, he expected that increase to be up anywhere from  $3\frac{1}{2}$  to 4 times as high in the next year.

As we are developing a national program, I think it is important to have the program justified. Quite frankly, because of the oil tariff, I do not think it can be—but if it can be, there should be no section of the country that is more adversely effected than other parts of the country. We are finding that, with all the different considerations that have been made by the development of the administration's program, that this is not the case.

The fact of the matter is, even with the various rebate proposals on home heating oil, you do not heat your homes in Mississippi or Georgia with the same amount of home heating oil that you use in Massachusetts, where 6 percent of the population consumes 22 percent of the heating oil. This is a matter of particular importance and consequence and we have exchanged ideas with Mr. Zarb on it.

I have listened to the administration people tell me: "Senator, if we do not raise these particular rates of the oil import program, we are going to find the Arabs will. We might as well recover our particular resources in this country so the money does not go out of the country." Of course, that argument has another part to it.

The leaders in Saudi Arabia are saying, "Senator, you talk about your economic situation. You talk about the economy—you have a \$1.5 trillion economy, and you try to impress us with the dangers of economic recession. Nonetheless, we see your own President unilaterally raising the price of the oil products to the consumers in your own country. Your economy could not be that bad, if your own President is prepared to raise prices. Why should we listen to Mr. Simon say that we do not have any right to raise the price of oil when your own President is virtually unilaterally going ahead and raising the price upward?"

Quite frankly, I found it a most difficult argument to answer. We were tragically unable to impress on any of the oil-producing states the seriousness of our economic health. I found that they had a very false view of the severity and dimensions of the problem. They were quick to point out that if such a situation existed, you would not have a national policy to keep raising the price of oil and gas to the American consumer, by the action of the President.

What I am interested in finding out, as far as the administration's position is concerned is, if we follow—and I am not sure we will—a further deregulation policy in the area of oil, with all the money and resources that entails, it will significantly reduce the purchasing power to the American consumer. And I believe that one of the major factors affecting our economic difficulties—during the recent years—has been lower purchasing power coupled with the increased price of energy



and food. Now you propose deregulation and the billions of dollars that is going to cost. What do you have to say about this current situation that we are facing?

Some describe it as bottoming out of the economic recession, some define it as getting back on the road upward. But I do not think there is any question, if we go the route you have suggested, that we are going to put the economy through an economic wringer.

I myself feel that it has been the actions of our own leaders who put the economy through the economic wringer, even more dramatically than it has been foreign action. I feel there are many people who disagree with that, but at least that is my observation.

Mr. ZARB. Senator Kennedy, I also acknowledge the particular problems of New England. I think we should realize the unusual problems of that sector of the Nation in any energy policy that we consider.

With respect to the OPEC nations, excuse me for being somewhat skeptical. It was only several months ago when some leaders from that part of the world were saying, with some amount of scorn, that this Nation treated energy so cheaply and used it so unwisely that we ought to have a program in place to create some respect for it.

The OPEC nations used no reason or rationale to increase our oil prices 500 percent in 18 months. The increase was done unilaterally to increase their revenues. No matter what we do they are going to try to maximize their revenues.

With respect to a tax cut, I think that is an important question. We ought to insure that taxes are cut, or that we are returning the money to the economy, whichever way you would like to phrase it. The Congress of the United States had a plan in January that, if accepted, would return \$2.5 billion to the American people. It consisted of a \$2 excise tax that would have no permanent impact on consumer prices and the \$1 and \$2 import fees. I think we ought to get on with that portion of the job.

With respect to the effects of decontrol and other taxes that we may place on the economy, they should, too, be recycled 100 percent, every penny back to the American economy, with a maximum amount given back to the American people. We ought to return it with some care and be sure that we are addressing the equity issue.

Senator KENNEDY. Mr. Zarb, what do you anticipate that the OPEC countries will do, given the fact that Mr. Simon and others think that any kind of increase is completely unjustified for this country?

Mr. ZARB. Senator, I am probably the least informed with respect to background in terms of international politics and international economics. I will give you my judgment.

The OPEC nations have, in our view, withstood a very serious test. The world has gone through a very deep recession which curtailed consumption of energy around the world. The operations were able to shut-in capacity and did not break. If the world economy is recovering, and I think it is, along with ours, the demand on their product is going to increase. In the face of this nation not having a very tough program in place that demonstrates that we are going to change the dimensions of this equation and use less of their product over a period of

time. I think they will feel free to increase prices—how much and when, I am not sure. I do not know whether there will be an increase in September or whether there will be one next February. The point is, as long as we increase our imports, as we are today and, by the fall, increasing more than we did during the summer, as long as we stay in that posture, they are going to feel free to raise their prices.

Secretary MORTON. I would agree, Senator Kennedy. I think they are going to try to do everything they can to make it more difficult to try to anticipate what they are going to do.

Senator KENNEDY. Let me just ask Mr. Greenspan, if I could, one final question on the tax cut.

Are you going to be prepared to recommend that the tax cut be extended for another year? If so, when should the Congress act?

Mr. GREENSPAN. Senator, I think that the benefits to the economy of having advance notice on whether in fact the tax cuts will be extended are small in relation to the issue of what is the appropriate fiscal policy for the next year. I think the latter issue requires that we have in front of us the maximum amount of information about what is going on in the economy at the time the decisions are made. The complexity of what is happening in our economy now and in the world economy as well, limits our capability to forecast what the whole spectrum of those events will be later this year. I think it is clear that we are going to have a far more sensitive and complete assessment of what our options are and what our policies should be later in the year than we do now. So, at this point, I think it is premature to make that judgment and, in fact, I do not think that one should make that judgment at this early stage.

Senator KENNEDY. When do you think it will be made? Obviously, we do not want to wait too long.

Mr. GREENSPAN. I think one works backwards from a legislative calendar and decides by what point specific decisions have to be made within the timeframe, of having as much economic information as is possible when we close the book.

Senator KENNEDY. The real question is, How long do we really have to wait? A number of us—I think the chairman included—introduced a tax cut over a year ago in the summer of 1974 and were criticized about the \$7 billion tax proposal. We were accused at that time that we offered too strong a medicine, and that the economic indicators were not sufficiently depressed to justify it. We found out 6 to 8 months later that a \$23 billion cut passed. It is only appropriate to ask whether we have to go over the cliff before we take any action, or whether we should be prepared to consider the recommendations of the administration about the continuation of the tax cut for next year.

Mr. GREENSPAN. Senator, I think it is clear at this stage, on the basis of the recent data, that the economy is bottoming and the next phase, we believe, is one of a recovery. The evidence that I see in no way suggests that this economy is sputtering along or losing its momentum or anything of that sort.

I would be very surprised to find that the requirement to move up a decision on this should become urgent in the next couple of months or so.

Senator KENNEDY. Thank you.

Chairman HUMPHREY. Gentlemen, for my purposes now, I would like to summarize what I tried to outline here in my dialog and interrogation.

If you would look at the charts,<sup>1</sup> I think that two things would be noted in this projection, based on econometric models; we had the Wharton group, and the Data Resources group. By the way, I believe DRI is used by the executive branch. Two things have been phased in. No. 1, a 25-month decontrol plan; so that is included in the projections we made. No. 2, we included continuation of the tax cut for another year. Even including that, we find that the delay in recovery—in other words, the leveling off and getting things back on the road to some recovery—would be delayed about a year if the administration's proposal of a 25-month decontrol and the OPEC price rise of \$1.50 to \$2 a barrel took place.

On the matter of rate of growth, decontrol cuts the rate of growth—using these econometric models—by approximately a third. Insofar as the unemployment picture is concerned, and even including a continuation of the tax cut for another year, if you would put in the energy program of the tariffs, the decontrol, and the 15-percent increase of OPEC, you would have continuing unemployment of 8.5 to 9 percent next year.

I submit that this kind of evidence—and it is not stacked evidence, it is an honest effort to take a look at what the possibilities of the projections may be—it presents a totally unacceptable economic picture for this country.

What it boils down to is that consumer incomes will be slashed by almost \$40 billion, you will have continuing high rates of unemployment of between 8 and 9 percent, and you will have a drop in your gross national product rate of increase by about one-third. At best, you would be able to absorb only the new entrants into the labor force and leave relatively untouched the existing numbers of unemployed.

These are the things that concern me. I believe Senator Proxmire most effectively outlined these concerns when he asked the question about the timing of whatever energy measures we take that relate to price. There is an honest difference of opinion here as to the matter of decontrol as it relates to increased production. I am not unaware of the fact that any increase in production is desirable. The question is: At what price are you willing to pay for it?

I tend to agree with what you have said, that the price rise has compelled greater efficient use of fuel and energy. In my mind, I think that is substantiated. I am concerned about the fact that the No. 1 issue facing this country today, not just today, but for the foreseeable future, for at least the next 2 or 3 years based on the projections of the Office of Management and Budget and your own office, Mr. Greenspan, is a problem of unemployment. There is not any doubt that the rise of the price of oil, particularly at the crude oil level, will permeate the economy in terms of other increased prices, and it will add to the consumer price index, it will increase wholesale prices, it will increase the cost of living. I do not think anybody can deny that it will have that effect. The question is whether or not that effect is more adverse

<sup>1</sup> See charts, pp. 4-5.

than the problem which has been so well outlined here by Mr. Zarb and Secretary Morton, relating to the long-term energy crisis that we face.

I believe that it is also relevant to keep in mind that when we say you cannot raise the price to the OPEC countries, because you are going to cause great economic dislocation in our country, they turn it around by saying that the administration decided to put on a \$1, \$2 tariff, which is just the same as if the price were raised by the Arabs or by Venezuela or anybody else who belongs to the OPEC cartel.

Regarding decontrol, I think there is a question of timing. If you go into any kind of decontrol, there is a question of the duration of the period of time of decontrol. I understand what Secretary Morton had to say about what we call the oilfield, where you define what you mean by old oil and new oil. Those are the things we need to look at and need to look at very carefully. Everybody has the same objective today, here.

Let me now bring to your attention a matter that is known as Project Speculator, which I believe, Mr. Zarb, you have been involved in.

What have you been doing about the scandalous price of propane, the incredible economic ripoff that affects millions of people in this country? I understand that propane now sells from 25 to 30 cents or more a gallon. Frankly, out our way, it sells for a whole lot more; I can assure you it does. May I say, we heat a home I own with propane. I think I pay 33 cents a gallon for that propane. This is three to four times what it costs to produce. This is just skimming the cream when it comes to your profiteering. What are you doing about that. Mr. Zarb? What penalties, what investigations are you making? Who are you prosecuting? And if you are not, why are you not?

Mr. ZARB. Mr. Chairman, I would like to give you a summary, an update report as to where we are.

As you know, we have not only Project Speculator. But in two other areas we have endeavors underway.

Chairman HUMPHREY. Could you give us a written summary on what you are doing on this?

Mr. ZARB. Yes.

Chairman HUMPHREY. Am I wrong on this? My figures on propane?

Mr. ZARB. I do not have the current numbers in front of me. You seem generally in the right range; I do not have the current price numbers in front of me.

Chairman HUMPHREY. You realize in my part of the country, and throughout the entire agricultural belt, propane is used for drying crops.

Mr. ZARB. Yes, sir.

Chairman HUMPHREY. Yes. When you use natural gas, you have another problem here. This is a very costly item. You know, we had propane prices up here a year and a half ago to 47, 48, 50 cents a gallon. Then it was found out that they were just robbing people, so they dropped the prices. Now, they are doing junior robbery here, a junior Jesse James. I think we ought to take a look at this. Are you looking at it seriously?

MR. ZARB. Yes, sir. I will give you a full report as to our exact status on that program.

[The following information was subsequently supplied for the record:]

PROPANE PROJECT, MONTH ENDING APR. 21, 1975

Region	Cases assigned	Investigations pending	Closed no violation	Closed voluntary compliance	NOPV	Re-medial order	Analy-sis and review	Estimated violation amount	Refunds	Personnel assigned
1.....	2	1	0	0	0	0	1	0	0	2
2.....	3	1	1	0	1	0	0	10,000,000	0	3
3.....	1	1	0	0	0	0	0	0	0	1
4.....	0	0	0	0	0	0	0	0	0	0
5.....	12	3	1	0	1	0	7	569,061	0	16
6.....	53	21	2	5	4	1	20	56,001,400	3,842,557	13
7.....	24	7	5	4	0	3	5	10,762,563	170,838	18
8.....	5	1	1	0	0	2	1	24,146	24,945	2
9.....	4	1	0	0	0	1	2	1,643,897	0	2
10.....	4	2	0	0	0	1	1	838,930	0	2
Total.....	108	38	10	9	6	8	37	79,840,797	4,038,340	59

Chairman HUMPHREY. Now I want to give Mr. Greenspan a real tough question, because this is one that comes in from out in the countryside.

Did you ever hear of anything called jar lids for canning?

Secretary MORTON. I know about them because my wife and I are canners and we are having a hard time getting them this year.

Chairman HUMPHREY. I find out there are all kinds of jars, but they are short of lids.

Secretary MORTON. That is correct.

Chairman HUMPHREY. I found the steel industry is operating at 80 percent of capacity. I want to know why somebody in this administration is not telling that crowd to make some lids. There are millions of housewives across this country that have been encouraged to go into gardening and canning. I can assure you there is no hotter issue. If you want to have somebody really work you over, you meet a group of these housewives who have just been to the local supermarket and cannot get any canning lids.

Secretary MORTON. I could not agree with you more, because I hear it every day, all day long.

Chairman HUMPHREY. It is personal.

Secretary MORTON. Yes; it is. I had a choice once between roof bolts and jar lids. Because life was at stake, we went for roof bolts, but I never heard the end of it.

Actually, Mr. Chairman, one of my former colleagues that worked for Ball jar was in town today; apparently there is some light at the end of the tunnel. There has been a lot of pressure put on the steel industry to make more lids but these have certainly not shown up in the stores yet. I cannot answer why. I know they are under a lot of pressure.

Chairman HUMPHREY. By the way, I am going to ask the staff of this committee to write a letter to every steel company in the United States that is big enough, to ask them to get busy on some jar lids. Between now and September, you are really going to hear about it.

Secretary MORTON. Let us not wait until then.

[The following supplementary information was subsequently supplied for the record by Secretary Morton:]

WHAT IS THE SUPPLY SITUATION REGARDING JAR LIDS USED FOR HOME CANNING?

The following summary, prepared by the Department of Commerce, outlines the problem involving jar lid shortages:

(1) A home canning unit is originally sold as a glass jar, a screw cap and a lid. The jar and screw cap are reusable; the lids are not.

(2) Home canning popularity peaked in World War II when over 3 billion lids were produced. Purchases declined to approximately 1 billion lids by 1972 and all but four suppliers dropped out of the market.

(3) An estimated 10 million new home canners joined the ranks between 1973 and the present.

(4) Many canners could not buy jars or lids in 1974. This brought complaints to White House and Congress.

(5) BDC worked with the Department of Agriculture, the trade associations and manufacturers to increase production. There are no accurate statistics available on the market needs—only educated guesses. It has been estimated that in 1975 there is a market for just under 2 billion replacement lids and 300 million new jars, caps, and lids, and that total production of lids for the 1975 season would approximate 2.5 billion. A tight situation.

(6) Jar manufacturers since 1972 have been upped from two to seven and the supply should be adequate.

(7) Lid manufacturers have increased from four in 1972 to seven at present, with the original four greatly expanding output. One lid maker has cooperated by sending product into areas where dealers have had no supplies.

Re paragraph (5), recent information indicates 410 million new jars with caps and lids will be produced this season to further tighten availability of lids for replacements.

Re paragraph (6), 4 additional manufacturers are now contemplating entry into the field for a total of 11.

Re paragraph (7), the lid maker supplying product on an emergency basis to areas where dealers had no supplies had to cease the practice because he was swamped with requests.

Recent congressional hearings have concluded that manufacturers were doing all possible to help relieve the situation, but the combination of overbuying by some housewives and supply being so close to demand has resulted in an inequitable distribution of the available production. Manufacturers have substantially increased production and distributed output proportionately on the basis of recent years purchases. The question of how the independent distributors were allocating their stocks was not answered.

In an effort to help the manufacturers avoid a similar situation next year, the Bureau of Domestic Commerce is seeking permission to survey the producers in order to get sufficient facts on production capacity and sales to provide better planning for 1976 and 1977.

Chairman HUMPHREY. I do not know, Mr. Zarb, if you have anything to say about this business.

Mr. Greenspan, how about giving some comment on this. Mr. Greenspan, you scare the living daylight out of people every once in awhile.

Mr. GREENSPAN. I have no use for jar lids, so I do not have personal experience.

Chairman HUMPHREY. You, apparently, do not get as much mail as some of us. Please look into it.

Senator PROXMIRE.

Senator PROXMIRE. I will just take a minute.

I want to concur first with the chairman on jar lids. No question about it; I have been out in my State now about 60 days this year. I want to tell you there have been more questions on jar lids than there have been on inflation, unemployment, and gun control combined. Those are the other three big topics. Really, I am serious about that. The housewives are just furious. They cannot understand it. They think

they are being deliberately ripped off, that these could be produced, but they are holding out for higher prices. Of course, the unfortunate aspect of this is that people who are responding to the President's request to hold down the price of food by growing their own food and canning it so they will have a lower price this winter and a little less demand for some of these foods, they cannot comply because the jar lids are not there.

Chairman HUMPHREY. Jars, but no lids.

Senator PROXMIRE. Let me get into something else briefly. But I think this is most fortunate. As you know, within the last few days, the Congressional Budget Office has made a new projection on what we have to do if we are going to do something about this unemployment and inflation, and they have made some very reasonable assumptions on what has changed in the last few months since they made their first projections. What they have found is startling. By far the most devastating effect on both inflation and unemployment are energy prices. In fact, what they say is, if we have an increase in the money supply, it will have a desirable effect—you may not agree with this. Mr. Greenspan—on both inflation, which they say will go down, and unemployment, which will also go down. They say if we have a tax cut, it will have a desirable effect, a slight inflationary effect, but very slight, and a desirable effect on unemployment.

But these are overwhelmingly dwarfed by the impact of the energy policy the administration is pursuing: A continued \$2 a barrel on oil tariff, a general decontrol of old oil, and the OPEC nations raising their international price, which is something beyond any of our control.

What they say is that it will have an effect of reducing production in real terms by \$21 billion; it will increase inflation, from what they otherwise say would be about 7.5 percent to 10 percent; and they say it would increase unemployment by 600,000.

So, this pretty much coincides with the estimates made by the staff of the Joint Economic Committee.

Chairman HUMPHREY. Ours are a little more conservative.

Senator PROXMIRE. That is right.

The Congressional Budget Office is a highly professional, competent, objective group that we are very proud of.

I would like to ask you, Mr. Greenspan, if you could contradict this or tell us where they are off, or confirming.

Mr. GREENSPAN. There are several elements involved in this. In the first instance, it is a projection that estimates the effects of the various oil and energy price increases but does not embody the offsetting effects resulting from the recycling of funds that have been incorporated as an integral part of the President's policy proposals.

The impact that they are getting is correspondingly overstated. It is what I would call a growth impact, an impact largely being inferred from the econometric structure that is built on the type of models they are using.

Senator PROXMIRE. Let me interrupt to say that you have a recycling by \$2.5 billion, which was one of the suggestions of Mr. Zarb, that would do almost nothing. Recycling, to have a balancing effect, would be a tax cut in the area of about \$30 billion to \$40 billion.

Mr. GREENSPAN. Let me say—

Senator PROXMIRE. As far as unemployment is concerned.

Mr. GREENSPAN. The recycling that Mr. Zarb was talking about was not specifically the numbers he was talking about, but the principle that is involved. First of all, I must say it is an excellent report, a very thoughtful document, for which I would like to compliment them. We do disagree on a number of issues involved, but it is an issue of disagreement involving how one reads the areas of uncertainty in economic forecasts.

I would say that I think this is a complex issue that essentially requires a fairly detailed analysis of the various aspects of where the effects are coming from. The degree of recycling that can be done in this economy in order to offset the effects, for example, of decontrol of oil is quite a different type of thing than how one reacts to an increase in OPEC prices. An increase in OPEC prices must be distinguished from the issue of decontrol, which is really a shift of income from one sector of the U.S. economy to another segment of the U.S. economy. It is clearly a recycling concept, as the President has addressed it in his program.

The difficult problem that we have with respect to offsetting an OPEC price increase is that, in the longer run, the economic forces largely will balance out and there is no total employment factor. What happens is that a larger share of what is produced in the United States belongs to foreigners. It is a standard of living, not an employment factor. It is certainly true that in the short run, in the period of transition, that a significant price change in, say, oil products does reduce the total purchasing power for nonoil products by consumers. The effect, I think—

Senator PROXMIRE. I am sorry to interrupt, but there is a rollcall going on, so I am going to have to be as specific on this.

You would agree we have to have recycling. Can you give us some notion of what this means in terms of the size of the tax reduction or the rebate that we would have to have? Do you agree it would be \$25 or \$30 billion? Something of that kind?

Mr. GREENSPAN. In this context, it is very difficult to disassociate it itself from what is going on in the economy. As the report says, these estimates are very inexact and I concur. We are looking at all these various and different scenarios that are being projected not only by the Congressional Budget Office but by others, and at the appropriate time, we will have numbers for presentation.

Senator PROXMIRE. Let me say there is one other element, of course, we cannot escape from, that you will have a very serious inflationary effect. Recycling will not help that; in fact, it might aggravate it. They estimate an inflation increase of 2.4 percent on top of the 7.5 percent we have otherwise. We would get to a 10-percent inflation.

Mr. GREENSPAN. Senator, I think that number is too high. That has a ripple effect concept in it that we do not ascribe to.

Chairman HUMPHREY. May I interrupt to say that I believe an analysis of this report by you, to both the Budget Committee and to us, would be helpful. Whenever we can find the common ground on economic matters and statistical interpretation, it is helpful to the general public and most helpful to the economic community. And you could get an analysis of the Joint Economic Committee study we presented here today in your report too.



Senator PROXMIRE. A corresponding analysis to what the Congressional Budget Office did would be extraordinarily helpful. It is difficult to do this and not politically wise, but without it we do not know what we are talking about. We have to have specific estimates of one kind or another.

Mr. GREENSPAN. We will try to address it in the best way we know how.

Mr. ZARB. I would like to leave the record straight on the \$2.5 billion, before we leave. That was a rough estimate at the taking off of the excise tax and the tariff thus far. We will provide a more precise number for the record. It was an illustrative number as to what we could return to the economy.

[The following information was subsequently supplied for the record:]

The revenues resulting from the excise tax and import fees, in force between February 1 and July 10, approximates \$4 billion.

Chairman HUMPHREY. On behalf of the subcommittee, I want to express our thanks to the three of you, Secretary Morton, Mr. Greenspan, and Mr. Zarb, for your cooperation, your patience and willingness to give us all this time. I hope that this is going to be a helpful dialog even though there are some conflicts.

Thank you very much.

The subcommittee stands in recess.

[Whereupon, at 1:15 p.m., the subcommittee recessed, to reconvene at 10 a.m., Monday, July 14, 1975.]

# THE ECONOMIC IMPACT OF FORTHCOMING OPEC PRICE RISE AND "OLD" OIL DECONTROL

MONDAY, JULY 14, 1975

CONGRESS OF THE UNITED STATES,  
SUBCOMMITTEE ON CONSUMER ECONOMICS  
OF THE JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The subcommittee met, pursuant to recess, at 10:15 a.m., in room 1202, Dirksen Senate Office Building, Hon. Gillis W. Long (member of the subcommittee) presiding.

Present: Representatives Long and Brown of Ohio.

Also present: William A. Cox, Robert D. Hamrin, Jerry J. Jasinowski, L. Douglas Lee, George R. Tyler, and Larry Yuspeh, professional staff members; Michael J. Runde, administrative assistant; George D. Krumbhaar, Jr., minority counsel; and M. Catherine Miller, minority economist.

## OPENING STATEMENT OF REPRESENTATIVE LONG

Representative LONG. The hearing will come to order. This is the second day of hearings before the Consumer Economics Subcommittee of the Joint Economic Committee on the impact of the administration's energy policies.

Our chairman, Senator Humphrey, is caught in Minnesota this morning and, looking at the weather we have had over the last couple of days, he might be on his way swimming back instead of trying to fly back. But maybe he will be in a little later.

In the meantime, I think that we shall proceed. I would like to insert an introductory statement with a constituting review of the position taken by the administration's witnesses last Thursday. Prior to their appearance on Friday, that is, last Thursday, the committee issued a staff evaluation of the impact on real GNP, unemployment, consumer prices, of the administration's energy policy—a policy which to us emphasizes higher and higher energy prices.

This evaluation of the committee was based on staff econometric models. The evaluation compared two cases. First, a situation reflecting the administration's program of the phased, 2-year decontrol of so-called old oil prices accompanied by 15 percent, which is \$1.57 per barrel rise in OPEC oil prices, and a continuation of the President's oil import duties.

Second, this situation was compared with one where price controls on oil continued through 1976, and the President's tariff was reduced to offset any OPEC price hike. The results on real GNP growth and

unemployment in these two cases are presented in the charts<sup>1</sup> that are displayed here again today.

Now let me briefly review these findings. The administration's program will transfer upward of \$40 billion over the next 2 years from consumers to oil, gas, and coal producers and to the oil-producing OPEC nations and prices, as measured by the Consumer Price Index, will rise about 50 percent faster in 1976 under the administration's program than with price controls remaining in place.

More significantly, perhaps, the reduction in consumer disposable income due to the administration's higher energy prices will retard recovery in the real gross national product holding at a growth rate barely sufficient to allow for natural labor force expansion, without giving any consideration to the other problems therein involved.

This low growth rate, which declines to about 4.6 percent in the last half of 1976, will prevent any significant attrition in unemployment. In fact, unemployment is projected to remain essentially at present levels into early 1977. If Congress, however, defeats the administration's price increases, unemployment next year should decline to 8 percent, or slightly less, in the fourth quarter of this year.

In short, the administration's energy scheme will delay our economic recovery for at least 18 months. In addition, it will force consumer prices up to about 7½ percent from the projected 5 percent in the second half of 1976.

Mr. Greenspan, the Chairman of the President's Council of Economic Advisers, testified Friday that no specific tax cut is contemplated now by the administration to soften the impact of oil decontrol, and any OPEC price rise that might occur this fall.

Rather, he spoke of plans to recycle funds from fuel taxes back into consumer hands. Of specific interest to me and the subcommittee are independent evaluations of the economic impact of the administration's energy program.

Some of the questions are: Will it slash the real national product growth by one-third next year? Will it needlessly force 400,000 men and women out of work? Of equal interest are specific evaluations of how the devastating impact of the administration's energy policy can be softened: Can a series of energy taxes be imposed that will prevent the predicted slash in disposable incomes? What sort and size tax cuts should Congress be looking at to complement or substitute for higher energy taxes? For example, taxes on their excess profits. Should Congress pursue an effort to roll back the import duties on foreign oil to soften the blow of the October 1 OPEC price jump that is contemplated?

We have with us today Charles Schultze of the Brookings Institution and Michael Evans of the Chase Econometrics in Philadelphia.

I welcome both of you gentlemen. Mr. Evans, we are glad to see that you could make it. We were worried about you perhaps having to swim, but I do welcome both of you gentlemen and hope you will enlighten us on some of these and any other questions and related items that you have.

Mr. Schultze, if you please.

<sup>1</sup> See charts, pp. 4-5.

**STATEMENT OF CHARLES L. SCHULTZE, SENIOR FELLOW,  
THE BROOKINGS INSTITUTION<sup>1</sup>**

Mr. SCHULTZE. Thank you, Congressman Long. My prepared statement is relatively brief and I think I might as well proceed to read it. If it appears to be getting too long, I might skip some parts.

It is difficult to select temperate language in discussing the problems which developments in oil pricing now pose for the American economy. Unless large-scale fiscal and monetary measures are undertaken to offset the effects on consumer purchasing power of the changes in oil prices that now appear likely to occur, a disastrous blow will be struck at the economy. The gathering forces of recovery from the deepest recession in 30 years will be aborted. The Nation will be condemned to many more years of exceedingly high unemployment and lowered living standards. Yet I see no signs of any effort on the part of either the administration or the Congress to begin designing the necessary fiscal actions to prevent these consequences. If I may interpolate, Congressman Long, the central thrust of my remarks at this stage is that whatever the outcome of the debate between the President and the Congress on oil prices is, it is absolutely critical that whatever happens that carefully laid fiscal plans be made to offset what are bound to be, no matter what the outcome, what are bound to be some deleterious effects on the economy.

If anyone came before the Congress today and urged the adoption of a tax increase designed to siphon off some \$25 to \$45 billion a year in consumer income, even the most conservative and dedicated budget-balancer would find the proposal ludicrous. And yet that kind of drain on consumer purchasing power is exactly what is threatened by the developing pattern of oil price increases that I shall outline in a moment.

The recession which this Nation, and the rest of the industrial world, is now suffering was partly caused by last year's oil price increases. The sudden runup in oil prices drained some \$35 billion in purchasing power from American consumers. As a consequence they had that much less to spend on buying other goods and services. The proceeds of this "oil excise tax," and that is what it was, went principally to two groups of recipients—the OPEC countries and the domestic oil companies. While OPEC purchases from us and investments by domestic oil companies did increase, these increases were only a small fraction of the increased oil receipts. For that reason jobs and output lost in the consumer goods industries because people were not buying so much, were not replaced by new jobs and output in industries producing goods for export and investment.

With hindsight it is clear that early last year, stimulative fiscal and monetary measures should have been taken to restore the purchasing power lost to the "oil excise tax," in order to prevent its recessionary consequences. My colleague, George Perry, has recently estimated that failure to do so was responsible for perhaps one-third of the increased

<sup>1</sup>The views presented in this testimony are those of the author and not necessarily those of the officers, trustees, or other staff members of the Brookings Institution.

unemployment we have experienced in this recession—a matter of some 1½ million jobs.

History may judge lightly last year's failure—it was after all a novel situation. But it will surely judge harshly a President and a Congress who, with benefit of immediately past experience, make exactly the same mistake again—at the expense of 1 million or more unemployed American citizens.

Let us take a look at the future course of oil prices. Between the fall of 1973 and January 1975, the average price of crude oil in the United States rose from \$4 a barrel to about \$9.50 a barrel.

As you know, the domestic price of oil is an average of three different prices. About 40 percent is old oil subject to price control and selling at \$5.25 a barrel. Another 40 percent is imported oil, both crude and refined, selling in January at about \$12.50 a barrel. And about 20 percent is domestic new oil, exempt from price controls, produced domestically, and selling at a price about \$1 less than imported oil, a very high price.

In February the President imposed a \$1 fee on imported oil and in June another \$1 was added. The price of imports and the price of new oil are adjusting upward by the amount of those fees.

The President has also proposed to decontrol old oil over a 2-year period. Old oil prices would move up to equality with new oil. With a \$2 import fee on top of the world oil price, the average price paid for a barrel of crude oil in the United States would rise from about \$9.50 or \$10 to about \$13.50 or \$14, over a 2-year period.

The law under which the price of old oil is controlled expires on August 31. Continued control depends on enacting a new law. The President's demonstrated ability to sustain a veto probability gives him the power to negotiate a compromise extension bill very nearly meeting his own objectives—say gradual decontrol over 3 years instead of the proposed 2 years.

Finally, Mr. Chairman, the OPEC nations have given every indication that they will raise the price of oil this September. No one can now predict the size of that increase. But, barring unexpected problems among the members of OPEC, a rise of \$2 is by no means out of the question. Such an increase in OPEC prices, under a regime of decontrolled oil prices in the United States, would result in a further rise in all U.S. crude oil prices, to an average of \$15.50 or maybe \$16 a barrel.

When oil prices rise the price of competitive fuels—coal and natural gas—also increase. About half of natural gas sales are in the uncontrolled, no price controls, intrastate market. Even if natural gas prices were not deregulated, the price of the unregulated one-half would gradually rise, as old contracts expire or are renegotiated at higher prices. A similar phenomenon would occur in the case of coal. Altogether energy prices across the board would increase sharply and steadily for several years.

What would be the impact of energy price increases? I have calculated the increased costs to all buyers of energy in the United States, of the following price increases:

First: The President's \$1 increase in import fees imposed on June 1. The January import fee I have treated as "water over the dam," and its effects are assumed to have been taken into account in the economic

forecasts underlying the "First Concurrent Budget Resolution." I am only counting the second \$1.

Second: A 3-year phased decontrol of old oil prices beginning in the early fall of this year.

Third: A \$2 increase in world oil prices imposed by OPEC, to take effect on October 1 of this year.

The price of unregulated natural gas is assumed to move up on line with increases in the average price of domestic oil, but only gradually as intrastate sales contracts are revised upward over a 2-year period. Similar assumptions are made about coal prices, except that a 3-year period is allowed for the rollover of existing contracts. Increases in raw fuel prices are assumed to be passed on to consumers and other final buyers of products using energy, on a straight dollars and cents passthrough with no percentage markups. The passthrough takes place not instantaneously, but over a relatively short period of time.

Table 1, attached to my statement, presents the estimated additional energy costs, by half years through 1977. The allocation of costs to consumers is also shown. The remainder of the costs are paid by Federal, State and local governments, and by those buying export and investment goods which themselves use energy in production.

[Table 1 follows:]

TABLE 1.—ESTIMATED INCREASES IN ENERGY COSTS, 1975-77

[In billions of dollars; annual rates]

Source of increase	1975-II	1976		1977	
		I	II	I	II
\$1 import fee.....	2.8	3.5	4.4	4.8	5.3
3-yr decontrol of old oil.....	1.7	4.9	8.5	12.6	17.7
\$2 OPEC price increase.....	2.3	7.1	11.8	13.3	15.4
Total.....	6.8	15.5	23.7	30.7	38.4
Allocated to consumers.....	5.4	12.4	19.0	24.6	30.7

Mr. SCHULTZE. As you can see, the total costs rise steeply, to \$24 billion a year from now, and to \$38 billion in the second half of 1977. That is, consumers of energy and products using energy, by the second half of 1977, will be paying \$38 billion more for the oil and other energy they are buying. Further increases would continue to occur in 1978. If decontrol occurred over a 2-year period, as the President had originally proposed, the cost would have risen even faster to \$30 billion by the end of 1976, and \$45 billion by the end of 1977. Table 2, attached to my statement, reflects these figures in greater detail.

[Table 2 follows:]

TABLE 2

[In billions of dollars; annual rates]

Source of increase	1975-II	1976		1977	
		I	II	I	II
Total costs.....	7.7	18.0	27.9	37.0	44.9
Allocated to consumers.....	6.5	15.3	23.7	31.5	38.2

Mr. SCHULTZE. What are the major routes by which these additional costs would affect the economy, and how large would those effects be?

In the first place, just as in 1974, a very substantial amount of purchasing power would be drained away from consumers. The amounts would be huge compared, for example, with the increase in consumer income made possible by an extension of the 1975 personal tax cut. Table 3, attached to my statement, reflects these figures in greater detail.

[Table 3 follows:]

TABLE 3  
[In billions of dollars; annual rates]

	1976		1977	
	I	II	I	II
Loss to higher oil prices <sup>1</sup> .....	-12.4	-19.0	-24.6	-30.7
Gains from extending tax cut.....	+10.5	+9.5	+10.0	+10.5
Net loss.....	-1.9	-9.5	-14.6	-20.2

<sup>1</sup> Assumes 3-yr decontrol scenario.

Mr. SCHULTZE. You will notice from table 3, for example, that in the first half of 1976, already the drain in consumers from higher oil prices would exceed the gains from extending the tax cut. And, by the end of 1977, the losses from higher oil prices would be triple the gains from extending the tax cut.

While some modest increase in exports to OPEC nations would ultimately occur on account of the higher price, and domestic energy investment might increase above its present path, there would be little offset from these factors in the next several years, given the very large increase in receipts already experienced by foreign and domestic energy producers.

As a consequence, consumer purchases would fall sharply, and would not be significantly offset by higher sales in the export or investment goods industries, certainly not in the next several years.

In addition, State and local governments would be faced with higher energy costs. I have assumed, for purposes of making my estimates, that one-third of the additional State and local costs would be met by cutbacks in existing expenditures and the increases in taxes would give a further downward shock to the economy. Even before taking into account any problems for the money and credit markets created by higher energy prices, these developments alone could result in a rise in unemployment, compared to where it otherwise might be, of 0.4 percent by a year from now and 0.9 percent by the second half of 1977.

Some \$45 billion of national output would be lost and an additional 900,000 people added to the unemployment rolls by the end of 1977. And the losses would still be growing.

The story does not stop there, however. The rise in energy prices will also increase the Consumer Price Index. The direct effect of energy price increases on a straight dollar-and-cent passthrough should raise consumer prices some 2 percent by the end of 1976 and 3 percent by the end of 1977.

Higher consumer prices, in turn, will influence wage bargains and further drive up wages and prices. Given the high rate of unemployment, the wage effect of the initial price increases may be quite moder-

ate. But using very conservative assumptions about wage reactions the overall consumer price rise induced by the increase in oil prices should be some 3.6 percent by the end of 1977 and exceed 4 percent not long thereafter.

Higher prices for energy raise the need for working cash balances, on the part of people throughout the economy, business firms and others. The overall price level in the economy is higher and as a consequence additional money supplies are required in order to prevent the added demand for cash balances from increasing interest rates.

Very roughly, under the developments outlined above, the money supply would have to grow for the next several years by 2 percent a year more than would otherwise be the case. If the Federal Reserve Board does not recognize this fact—as it did not in 1974—an additional depressing element would be felt throughout the economy. While I cannot quantify the results, it is clear that the extra unemployment occasioned by higher oil prices would lie between 1 and 1½ percent by late 1977, or somewhere between 900,000 and 4 million unemployed.

In the absence of a sharp increase in energy prices and given an extension of the 1975 tax cut for the next several years, I think it is likely that the economy would experience a significant, even if somewhat less than desirable, recovery over the next 2 years.

The average annual rate of growth in real GNP might have been between 6½ to 7½ percent a year. By the end of 1977 the unemployment rate could have fallen to somewhere between 6½ and 7 percent, perhaps. As I indicated, my own view is that this rate of recovery would be somewhat less than desirable, and even in the absence of an oil price increase a fiscal stimulus might have been required modestly larger than a mere extension of the 1975 tax cut.

Given an oil price scenario of the kind I have described, however, the situation changes radically. In the best of circumstances, the rate of growth in real output would be cut to something not much above that needed merely to hold unemployment steady. By the end of 1976 the unemployment rate would probably still be above 8 percent, and a year later still above 7½ percent. In addition, the gradual deceleration of inflation we are now witnessing would be halted, and high rates of price increase would persist for some years.

The estimates I have made of the impact of higher oil prices is probably an optimistic one. It does not take account of adverse dynamic reaction, especially with respect to business investment decisions.

As the initial economic recovery begins to limp, when the oil price shock is increasingly felt and the indirect effect of oil development on interest rates begins to occur, business investment plans could be revised down significantly.

It is possible that the recovery could be aborted in late 1976, and turn into a new recession leading to an absolute increase in unemployment above the level we are now experiencing. I do not predict that this will happen, but it has a far from insignificant probability.

Let me turn to policy measures. As I indicated earlier, it is not my purpose to discuss oil pricing policy itself. Should old oil prices be decontrolled, and if so, how fast? Should the President remove his \$2 import fee if OPEC raises the world oil price?



These are very important issues, as is the broader question of developing a national energy policy—a comprehensive policy. My central point is that however these matters turn out, it is absolutely imperative that the loss of consumer purchasing power from whatever oil price increases do occur, be offset by appropriate fiscal actions.

Similarly, it is also critical that monetary policy take into account the effects of oil-induced price increases in raising the required rate of growth in the money supply. Unless this is done, you can almost certainly expect an exceedingly sluggish recovery, a long period of very high unemployment, and a reduced level of real income for American citizens. Moreover, you will be running some risk of the sluggish recovery turning into a renewed recession.

In more specific terms, offsetting the effects of new oil price increases will require substantial tax reductions for next year, over and above an extension of the 1975 tax cuts.

In general, the tax cuts should be slightly less than the purchasing power loss. The higher OPEC prices may lead to some increase in the demand for exports over the next several years and some additional domestic energy investment may be expected. But these offsets will be small in the next 2 years.

The fiscal measures need not anticipate the situation far in advance. That is, the 1976 loss can be estimated later this year after the current debate on energy policy is settled and after the September OPEC meeting. A 1975 tax reduction can then be enacted. As events develop in 1976 further estimates can be made of potential effects in 1977, and further action taken next year if necessary. And I suspect it will be necessary.

Two major obstacles are likely to stand in the way of pursuing the necessary economic measures.

First: The import fees and taxes on the additional corporate profits gained from old oil decontrol as oil company profits rise, will show up as additional Federal revenues.

But a large part of the proceeds from higher oil prices will not. They will go to OPEC and to domestic oil producers. A tax cut large enough to offset them will add to an already large deficit. This deficit addition will not be inflationary, since it merely restores purchasing power and consumer demand destroyed by the energy price rises. But the myth that added deficits during recovery are automatically inflationary may stand in the way of taking appropriate action.

Second: The impact of higher oil prices will as first be small and then gradually increase. On the other hand, the forces making for economic recovery in the next 6 to 9 months are likely to be vigorous, led by a sharp turnaround in inventory investment.

The economic signals in the latter months of this year may be very bullish. There appears to be some tendency on the part of the administration and the Federal Reserve to take the position that once recovery starts no further stimulus is necessary.

The strong economic signals likely to be forthcoming later this year may, therefore, create the worst of all possible worlds. That is, they are likely to be very misleading about the future strength of the economy—given a sharp runup in oil prices—but they may engender an atmosphere in which it will be politically very difficult deliberately to incur an added deficit to ward off an oil-induced calamity.

Somewhat the same scenario occurred in early 1974 and helped get us in today's difficulties. The underlying downward drag on the economy from the 1974 oil price increase was just getting underway. But its effects were temporarily masked by a late spring snapback from the oil embargo and by a general belief that we were experiencing a temporary oil spasm. Unemployment rose very little during the first 6 months of 1974. As a consequence it was impossible to get anyone to take seriously the threat of a substantial oil-induced recession which was then gathering force. Monetary policy was tightened rather than loosened. A large surplus in the full employment budget was allowed to build up. Nothing was done to offset the oil drag on the economy, and when its effects began to be felt they came with a rush.

I realize it is difficult to make fiscal policy on the basis of what is a threat rather than an actually experienced reality. And yet if we do not take seriously last year's hard earned lesson, the American people will surely experience once again last year's economic consequences.

Thank you, Congressman Long.

Representative LONG. Thank you, very much, Mr. Schultze.

Mr. Evans, like Mr. Schultze, you need no introduction into this subcommittee at all, and what we might do at this point in the proceedings is that if you would proceed we will get into a roundtable type of discussion here with respect to some of these very complicated issues and perhaps by doing it that way we can put them in a little better perspective.

If you would proceed, Mr. Evans, thank you.

#### STATEMENT OF MICHAEL K. EVANS, CHASE ECONOMETRIC ASSOCIATES, INC.

Mr. EVANS. Thank you very much, Congressman Long. I am glad to be here this morning. I am sorry for the day in view of the weather conditions. I think if we could only turn oil into water, then we would have all of our problems solved.

First this morning, I would like to discuss several steps which I think would be a more rational energy policy that could be taken, and then I would like to talk about some of the problems which could be involved if these were not taken; and particularly in view of the possible OPEC price increases, and the possible decontrol of oil, it seems to me that any rational energy policy would like to accomplish three things. First of all, it would like to decrease the rate of growth in demand for energy. It would like to increase the domestic supply, and it would like to reduce the effect which we have on imported oil. I think almost everyone can agree with these three items, and yet when the actual task comes as to how we implement these, there is a great deal of disagreement, and rightfully so. Because, as Congressman Long has just mentioned, there are very complicated issues.

I think there are four points which I would like to see as cornerstones to what I have termed the more rational energy policy. First, I think that eventually, we do need to have price controls removed on old oil. I am not suggesting that these be removed immediately. As a matter of fact, I think that would be a serious mistake. On the other hand, I do not think that old oil prices should stay at \$5.25 a barrel indefinitely. I do not know what the equilibrium cost of production of

old oil is. There have been a large number of figures around, none of which can be accurate, because we do not embark on forces determining them; but the essence of qualified opinion appears to put these figures in the range of \$7 to \$7.50 a barrel.

On the basis of these figures and some of my own calculations, I would suggest that we have an increase in the price of old oil of \$2 a barrel on September 1. After that, I suggest that old oil prices continue to be allowed to rise at a rate equal to the overall rate of inflation, plus about 5 percent a year; the additional 5 percent a year figure reflecting the fact that oil extraction is an industry which has long-run increasing costs, because it becomes more expensive to find oil, as we have witnessed in the past 2 years. Just because I think a \$2 a barrel increase in the next month or two is a good idea does not mean I think that old oil prices should be decontrolled immediately and without any restrictions left.

First of all, the supply of labor and capital to the oil-drilling exploration and production industry is fairly inelastic. Therefore, if we triple the price of old oil, we do not necessarily call for an increase in supply in labor and capital in the oil industry, because it does not exist right away. It exists over time. If we have a rational plan to increase prices gradually, then we can expect the increase of supply in labor and capital to the oil industry. But if we take the controls off all at once, we will simply have another rampant round of inflation in oil-producing commodities, such as we did last year, which will serve very little use.

The second factor which I would call a cornerstone to a more rational energy policy includes reducing the demand through an excise tax in gasoline. Last November—that is, November 1973—I proposed that we have an excise tax of 30 cents a gallon for gasoline. This plan has been defeated by various Members of Congress, various House and Senate committees, and I realize the odds for passing it are not great. I think that perhaps the reason for that is, it has not been packaged properly. I think that the excise tax should definitely include rebates to personal and corporate income taxes, should include money for rebuilding our mass transit system, and should include further money for research and development in energy uses. As a rough rule of thumb, we can say that if 1-penny-a-gallon increase in gasoline taxes raises about a billion dollars, so a 30-cent-a-gallon tax might raise as much as \$30 billion, or as little as \$25 billion. But it is not my idea for the Government to impound this money. I think it should be returned in the ways in which I have mentioned. But I think it is an effective measure for reducing the rate of growth and demand for energy products.

A third factor which I would see as a cornerstone to a rational energy policy would be a tax subsidy system of new cars. Again, this is not a new idea. It is one which has been bandied around for many months. But the general idea would be that all cars which had an average miles-per-gallon usage which was greater than some figure would receive a subsidy. All those which have less than that would receive some sort of tax, and the number I propose is that we start at 15 miles per gallon. All cars that have an average miles per gallon above 15 miles a gallon receive a subsidy of \$50 per mile per gallon, and all cars that are less efficient have a tax of \$100 per mile per gallon. In

other words, that would mean that a car that averaged 10 miles per gallon would have a tax of \$500. A car which averaged 25 miles per gallon would have a subsidy of \$500. I think that the 15-mile-per-gallon number should move up 1 mile per gallon per year, until in 10 years, the break-even point, so to speak, was 25 miles a gallon.

Finally, my fourth cornerstone for a rational energy policy would be one which would reduce imports, and here, I think that the rate of reduction should be targeted at about 10 percent per year of the remaining oil imports. This target could be relaxed if necessary for domestic stringencies, but at least it should be a target at which we should aim.

Now, these are my ideas for a rational energy policy, but I realize that there is a guarantee that any such plan would go through, and that is a matter of fact. Various elements of this plan which have been tried have been found to be wanting by both Houses of Congress in many cases. Therefore, I think we need to turn to the more immediate problem of what would happen if we would have immediate decontrol of oil, or if it would have an increase in OPEC prices, both to come later this fall. In my prepared statement, I have prepared a number of tables. If you will turn first to table 1, which describes the economic impact of a \$4 a barrel increase in imported oil. We have also assumed that new oil would also rise to these new levels. In other words, that of the 17 million barrels a day that we use of oil, approximately 10 million would be affected by the \$4 a barrel increase. This means, in the weighted average, assuming that old oil stayed at \$5.25 a barrel, would stay at—would be at \$2.35 a barrel, depending upon exactly how this was loaded on gasoline, we could get different answers. But taking realistic numbers, we have estimated that this amounts to about a 4-cent-a-gallon increase in gasoline.

The effects on the economy are fairly noticeable, as can be seen from this table. By 1977, we find that real GNP and industrial production both declined by about 1 percent. The unemployment rate increased by about 0.2 percent, or about 200,000 workers. New passenger car sales are particularly hard hit, and declined 400,000 in 1976, and somewhat less in 1977. As the shock effect of higher oil prices wears off, we find that the consumer price index increases about 1 percent, the wholesale price increases about 2 percent. Thus, the effects of a \$4-a-barrel increase in imported oil, while they are much less severe than the increases which the OPEC nations have favored us with in the past, still are significant, and have a marked effect upon the economy.

We now turn to table 2 in my prepared statement, in which we compare these effects with the economic impact of the decontrol of old oil. The price of oil is about \$10.50 per barrel at the Persian Gulf. To that we have to add, in order of magnitude of about \$1.50 per barrel for transportation charges, and about \$2 a barrel representing the Presidential tariff. So this comes to about \$14 per barrel. If we were to have the decontrol of old oil without any restrictions, then the price of old oil would rise from \$5.25 a barrel to \$14 per barrel, an increase of almost \$9 per barrel. This would cover seven-sevenths of the total domestic petroleum production, and therefore would work out to an increase of just about \$4 a barrel on a weighted average. This \$4 a barrel is, of course, somewhat higher than the \$2.35-a-barrel figure,

which would occur from the \$4 increase in OPEC prices. In fact, it is about 60 percent more.

As a result, then, at least as a first approximation, we would expect the economic effects to be about 60 percent more severe, and that is what we find in table 2. Thus, GNP and industrial production fall about approximately 1½ percent in 1977. The unemployment rate increases by 0.3 percent, or approximately 300,000 workers. New car sales decline by 640,000 units, and so forth. We find that the increase in the Consumer Price Index is 1.2 percent, and the increase in the Wholesale Price Index is approximately 2 percent. Thus, we find results that are slightly larger in terms of real declines, and are only slightly larger in terms of price increases, because the dollar increase in domestic oil does not have exactly the same effect as the dollar increase in foreign oil, because prices of world trade commodities do not rise as much. In other words, when domestic oil prices go up, the United States pays more. When OPEC oil prices go up, the whole world pays more, and this has a somewhat larger inflationary impact.

Now, I think that we must consider Mr. Schultze also testified to the fact that fiscal and monetary policies can be used to offset these increases, if the Congress so desires, and if the Federal Reserve System so desires. We have estimated what the effects would be, and turning first to fiscal policy, we find that in the first case—which is to say, a \$4 a barrel increase in OPEC prices—this effect could be offset with a \$15 billion reduction in personal income taxes. With respect to the decontrol of old oil, we find that these effects could be offset by a somewhat larger amount of \$25 billion increase in personal income taxes. However, I should make clear that if these tax declines are to occur, they must occur concomitantly with at least a benevolently neutral monetary policy on the part of the Fed. In other words, if the Government has a \$25 billion deficit, larger than would otherwise be the case, and the Fed decides to completely offset this as it can, then of course we would have no gain at all. So we do include here a supposition that the Fed would give the further tax increases its blessing, a fact which of course is quite tenuous, and an assumption which perhaps should not be made. But one gets out of the machine what he puts into the machine. If one wants to assume that the Fed will completely contravene the effect of the tax cut, then of course he gets no effect. We have assumed not the worst for Federal Reserve action, although in view of 1974, that may not be the correct assumption.

Finally, we turn the prepared statement to table 3, in which we have piggybacked, so to speak, the effect of the \$4 a barrel increase in imported oil and the decontrol of old oil. In this case, we find that the results are much more severe, and we find that the decline in GNP and industrial production is about 2½ percent. The increase in the unemployment rate is about one-half of 1 percent, or 500,000 jobs. New passenger car sales drop by 1 million units in 1976, and prices are substantially higher. We add 2 percent to the Consumer Price Index, and 3½ percent to the Wholesale Price Index.

Now, just as we did for the previous results, it is possible to calculate the offsetting tax cut, and here we find that it comes to about \$40 billion. However, a further tax cut of \$40 billion, unless very skillfully done, creates substantial problems in the money capital markets, and represents problems that the economy could not recover from easily. So, I personally do not see any good way out of an impasse

which would be created by both a \$4 a barrel increase in imported oil and a full, immediate decontrol of old oil. Of course, we could always put the pieces back together, but the puzzle would not fit very well. There would be jagged edges all over the place, and the economy for practical purposes would not recover very far from the recession that we are now just emerging from.

Therefore, while I would like to see a rational energy policy pursued, I realize that time is short. The President may not wait for the Congress, and the Arabs certainly will not wait for the Congress. Thus, I have indicated what types of measures, and what amounts, could be taken for fiscal and monetary policy to upset these changes. But I conclude on the note that if we have both decontrol and a \$4 a barrel increase from the OPEC nations, that the situation for the economy does indeed look grim.

[The prepared statement of Mr. Evans follows:]

#### PREPARED STATEMENT OF MICHAEL K. EVANS<sup>1</sup>

When I was teaching Economics 1 many years ago, we sometimes gave multiple choice exams. A typical question today might be the following:

The President and the Congress have both agreed that it is vital to U.S. interests to reduce our dependence on imported oil. The best way to accomplish this is:

(A) Encourage exploration of domestic energy sources by removing price controls

(B) Reduce gasoline consumption by increasing the excise tax on gasoline

(C) Use taxes and subsidies to increase the average miles per gallon of new cars

(D) Place a maximum quota on imported oil

(E) None of the above, but pass a law exhorting Americans to drive more carefully and turn down their air conditioners.

While few concerned observers would choose (E), it is a puzzling but nonetheless undeniable fact that nothing else has yet been done to reduce oil consumption.

My own answer to the above multiple choice question is a combination of all of the first four points given above. However, there is a right way and a wrong way to go about achieving these objectives. An unbalanced plan which affects only demand or only supply does not offer an optimal solution to our energy problems. A plan which is haphazardly thrown together because of the inaction or unwillingness of either the Executive or the Legislative branches of government to develop a comprehensive and balanced approach has very little to recommend it. Changes in income distribution are far better accomplished through alterations in our tax structure rather than by massive changes in energy prices. We should bear these points in mind when trying to formulate what we consider to be an optimal energy policy.

In these remarks I would like to consider three separate but related facets of the energy question. First, we present what could be considered an optimal energy program. Second, we examine the effects of a sudden decontrol or further increases in OPEC oil prices without compensatory fiscal and monetary policy. Third, we indicate what types of policies would offset these substantial increases in oil prices if they were to occur.

#### A SUGGESTION FOR AN OPTIMAL ENERGY PROGRAM

As was mentioned above, any program which deals successfully with the current energy situation must seek answers and solutions to the following three problems. First, it must increase domestic supply. Second, it must decrease the rate of growth if not actually diminish domestic demand. Third, it must at a minimum diminish the proportion of imported petroleum that we use; this would be a sharp departure from previous trends.

We first consider the factors concerning an increase in supply. While there are still a few diehards who believe that somehow we can get more oil and gas out

<sup>1</sup> The views expressed are those of the author and do not necessarily reflect the opinions of The Chase Manhattan Bank, N.A.

of the ground by decreasing the price, this viewpoint is not really worth discussing. Because of the increasing cost nature of all extractive industries, the price of oil and gas will eventually have to rise faster than the overall rate of inflation in order to increase production. This is best done by decontrol of oil and gas prices. However, it does not follow from this that decontrol should all occur immediately on September 1, 1975. The analysis and results that follow indicate that the adverse effects of such a move would far outweigh the benefits which would accrue to the economy.

Increasing the price of old oil from \$5.25/bbl. to the current world price, which is now about \$14.50/bbl. including transportation charges and the \$2/bbl. excise tax, would add little to production in the next year or two because of the lags in exploration and drilling and the limited amount of labor and machinery available in the oil-drilling industry. On the other hand, it is likely that some production of domestic crude petroleum is being restricted because of the artificially low price for old oil. I do not know what the equilibrium production cost of oil is, but most qualified observers have put it in the range of \$7.00–\$7.50/bbl. Thus I favor an immediate increase of \$2.00/bbl. in the price of old oil, to be followed by further annual increases which are equal to the overall rate of inflation plus 5% to take account of the fact that oil production is an extractive industry and hence operates on a long-run increasing cost curve. Such a plan would allow for balanced growth in the supply of labor and capital equipment to the oil industry.

In addition, I strongly recommend that decontrol of oil, whether by the amounts I have given here or by larger amounts, be accompanied by an excess profits tax with a plowback provision for investment in the petroleum industry. It is true that such a set of laws would have the effect of directing more capital into the petroleum industry and away from other sectors, but I do find this to be a worthwhile objective in any case.

Since only about  $\frac{7}{17}$  of percent U.S. oil consumption comes from old oil, an increase of \$2/bbl. in old oil prices would raise the average price of crude oil by only about \$2¢/bbl., or about  $5\frac{1}{2}\%$  at the wholesale level. The effect of this on the economy would be quite modest; the overall CPI would rise 0.3%, real GNP would decline 0.3%, and unemployment would rise less than 0.1%. In my opinion, these magnitudes are small enough so that they are outweighed by the benefits of increasing domestic energy production through an immediate \$2/bbl. increase in the price of old oil.

One of the problems of present energy policy—or perhaps non-policy would be a more accurate description—is that we have been deluding ourselves by trying to live on cheap energy at a time when it is no longer cheap. In general, depreciation reserves against all assets should be valued at replacement rather than original costs. In the case of fixed capital assets, the problem until recently was not too severe because the fairly modest rate of inflation was offset by the fact that tax lives were on average shorter than physical or economic lives. Now, however, with the much more rapid rate of inflation, depreciation reserves have fallen seriously behind the actual cost of new capital, which will result in a push toward increased rates of return and thus more inflation during the next several years. The problem is even more serious for energy: capital goods industries are basically long-run constant cost industries, where extractive industries are long-run increasing cost industries. Hence pricing oil at original cost rather than replacement cost gives a very distorted viewpoint of the true relevant costs of using fuel.

Based on this argument, one might be tempted to argue that energy prices should be even higher than they are now. Such an argument would ignore two major points: the redistribution of income effects stemming from sharply higher oil prices, and the inflationary effects of raising one of the major costs of doing business for many firms.

These problems do not vanish entirely, but become much less severe, if we restrict the major increase in energy prices to the use of gasoline used for private travel—i.e., excluding uses for public transportation and agriculture. Such a plan would mitigate the most severe aspects of income redistribution, and would eliminate the pass-through effects which would otherwise add to inflationary pressures.

Thus the second cornerstone of the energy policy which I would recommend is a 30¢/gallon excise tax on gasoline. Using a useful rule of thumb, we find that a 1¢ increase in gasoline excise taxes would raise about \$1 billion in revenue. Even if we allow for lower levels of demand at these higher prices we would raise revenues of at least \$25 billion.

I am fully aware of the fact that similar types of bills have all met an un-

happy fate at the hands of Congress. Yet this may well be because only the negative aspects were considered of this bill, rather than the positive ones. Besides the reduction in tax rates for lower income individuals, this money could be used to rebuild the mass transportation system of the United States on both an urban and intercity basis, and could also be used to fund research for new methods of production and more efficient uses of energy.

The third facet of my proposed energy plan is a system of subsidies and taxes on new cars which average more than or less than a certain number of miles per gallon. For some reason this subsidy-tax system has been approached as a punitive measure to punish Detroit for not correctly anticipating the consumer response to the energy crisis, rather than a method of reducing gasoline consumption. It has degenerated into a system of all taxes and no subsidies, and as such has been vigorously opposed both by automobile manufacturers and organized labor. What is needed is a plan which provides subsidies to buyers who purchase new cars averaging over a certain mpg, with additional taxes being levied on cars which average under this figure.

This tax-subsidy program should be proportional to the deviation from the average mpg figure. Furthermore, this figure should increase over time as a spur toward development of more efficient fuel technologies for automobiles. However, the supply response cannot occur immediately, and hence measures which set this figure at unrealistically high standards next year will not accomplish anything. I proposed that this figure start at 15 mpg and increase 1 mpg each year for the next ten years, with a subsidy of \$50 for each extra mpg and a tax of \$100 per extra mpg. In other words, a car which averaged 10/mpg in the first year would be taxed an extra \$500; a car which averaged 25/mpg in the first year would be subsidized by \$500. By the tenth year of this program a car which still averaged 10/mpg would be taxed an extra \$1500, while a car which averaged 25/mpg would receive neither tax nor subsidy, although a car averaging 35/mpg would still receive a \$500 subsidy. While some commentators have objected to keeping this plan in effect indefinitely, some control would undoubtedly be needed if the mix of sales were not to shift back toward less efficient cars.

If we can accomplish these steps, we can then incorporate the option of reducing our dependence on imported oil. It could be argued that this would follow naturally from an increase in supply and a decrease in demand, but I think it would be useful to state publicly the amounts by which we will try to reduce foreign oil usage. We now import about 6 million barrels per day; I suggest that this figure be reduced by 10% of the remaining imports each year. In other words, the figure would be set at 5.4 million barrels per day next year; 4.86 the following year, 4.37 the year after that, and so forth. Thus our dependence on imported oil would not drop to zero, which is probably an unrealistic target in any case, but would be significantly reduced, thus saving foreign exchange and also lessening the chances of our succumbing to the blackmail of another oil embargo.

These four points represent my strategy for an optimal energy policy regarding petroleum. Unfortunately, however, we may not have the luxury of considering such a bill at all. For we are faced with the twin problems of total decontrol within two months time and another increase of up to \$4/bbl. in imported oil prices a month later. Thus we next turn to a consideration of how these changes would affect the economy, both in the absence and presence of compensatory fiscal and monetary policy.

#### THE EFFECTS OF HIGHER OIL PRICES

The price of imported oil is currently about \$14.50/bbl: \$11.00 at the Persian gulf, \$1.50/bbl. transportation charges, and a \$2.00/bbl. import tax. A \$4/bbl. increase would raise the price to \$18.50/bbl., a 27.6% increase. We assume that of the 17 MMBD of oil used in the U.S. economy, 10 MMBD would be affected by this increase, as follows: 4 MMBD imports of crude oil; 2 MMBD imports of refined petroleum products; 4 MMBD new domestic oil; 7 MMBD old domestic oil will not be affected. Thus 10/17 of total oil consumption would be increased by \$4/bbl., so on average the price of oil would rise \$2.35/bbl. This works out to a 22% increase in crude oil prices or approximately a 16% increase in the WPI for petroleum products.

If the price elasticity for petroleum products were zero, our oil import bill would be increased by  $0.006 \times 365 \times 4$  billion dollars, or \$8.75 billion. We assume an overall short-term price elasticity of  $-0.1$ , and if this all comes out of imports, total consumption of petroleum products will decline by about  $1\frac{1}{2}\%$ , or 0.09 MMBD which is 0.033 billion barrels per year. This would reduce our oil import bill by about \$0.55 billion, leaving a net increase of \$8.2 billion in oil imports.



It is not immediately clear what the total effect of this would be on our net foreign balance. First, the reduction in real GNP and industrial production would reduce our demand for other imports somewhat. Second, the OPEC nations would be able to purchase more goods and services from the U.S. as well as other nations. Third, the increase in oil prices would lead to an increase in export prices, which would partially offset the gap in current dollars. On balance, we estimate that net exports would decline only about \$3 billion as a result of a \$4/bbl. increase in oil prices. Summary comparisons for other key variables are given in Table 1.

The results of this \$4/bbl. oil increase are significant but not overwhelming. GNP and industrial production are each reduced by about 1%, while the unemployment rate is increased by 0.2%. The WPI for industrial commodities rises almost 4%, but this works out to only a 1% increase in the total CPI. Auto sales are diminished by 400,000 units the first year, but only 230,000 the second year as the shock effect of higher gasoline prices wears off. Housing starts are slightly depressed because a higher rate of inflation leads to higher interest rates.

In this run we have assumed that gasoline prices rise 7.3%, which is equivalent to about 4¢/gallon. By comparison, if all the price increase were loaded onto gasoline, the price would rise \$2.35/42, or 5.6¢/gallon. If the price increase were passed through equally to all petroleum products, the increase would be about 2.3¢/gallon. Thus we have chosen what appears to be a realistic middle estimate. If all the increase were loaded onto gasoline, the initial rise in the CPI would be greater but the eventual increase would be smaller, since the higher costs of petroleum used in business will eventually be passed along to consumers with the normal markups. Hence a move not to penalize gasoline prices would eventually result in a somewhat higher level of inflation.

TABLE 1.—ECONOMIC IMPACT OF A \$4 PER BARREL INCREASE IN IMPORTED OIL

	1st quarter 1976	2d quarter 1976	3d quarter 1976	4th quarter 1976	1st quarter 1977	2d quarter 1977	3d quarter 1977	1976	1977 <sup>1</sup>
<b>GNP, 1958 dollars:</b>									
No increase.....	817.4	832.6	846.7	859.5	868.6	876.2	880.1	839.0	876.8
\$4 per barrel increase.....	811.7	824.7	838.8	850.8	860.1	868.1	872.3	831.3	868.8
Percent change.....	-7	-1.0	-1.0	-1.0	-1.0	-9	-9	-9	-9
<b>Index of industrial production (1967=100.0):</b>									
No increase.....	117.7	121.8	125.8	128.7	131.1	132.6	133.3	123.5	132.7
\$4 per barrel increase.....	117.3	120.8	124.5	127.3	129.8	131.4	132.3	122.5	131.6
Percent change.....	-3	-8	-1.0	-1.1	-1.0	-9	-8	-8	-8
<b>Unemployment rate (percent):</b>									
No increase.....	8.6	8.1	7.8	7.4	7.3	7.2	7.2	8.0	7.2
\$4 per barrel increase.....	8.7	8.3	7.9	7.6	7.5	7.4	7.4	8.1	7.4
Actual change.....	.1	.2	.1	.2	.2	.2	.2	.1	.2
<b>New passenger car sales (millions):</b>									
No increase.....	8.81	9.47	10.05	10.41	10.67	10.82	10.87	9.69	10.81
\$4 per barrel increase.....	8.44	9.05	9.64	10.05	10.37	10.58	10.68	9.29	10.59
Actual change.....	-37	-42	-41	-36	-30	-24	-19	-40	-22
<b>Housing starts (millions):</b>									
No increase.....	1.57	1.65	1.64	1.63	1.53	1.45	1.38	1.63	1.42
\$4 per barrel increase.....	1.52	1.60	1.60	1.58	1.49	1.42	1.35	1.58	1.39
Actual change.....	-0.05	-0.05	-0.04	-0.05	-0.04	-0.03	-0.03	-0.05	-0.03
<b>WPI, industrial commodities (1967=100.0):</b>									
No increase.....	176.9	180.1	182.6	185.6	188.7	191.8	195.9	181.3	194.5
\$4 per barrel increase.....	181.5	186.0	188.9	192.2	195.6	199.1	203.4	187.2	201.7
Percent change.....	2.6	3.3	3.5	3.6	3.7	3.8	3.8	3.2	3.7
<b>WPI, total (1967=100.0):</b>									
No increase.....	182.5	185.2	187.8	190.7	193.7	196.8	200.6	186.5	199.1
\$4 per barrel increase.....	185.1	188.7	191.7	194.8	198.1	201.4	205.4	190.1	203.8
Percent change.....	1.4	1.9	2.1	2.2	2.3	2.3	2.4	1.9	2.4
<b>CPI, gasoline and motor oil (1967=100.0):</b>									
No increase.....	168.0	169.5	169.6	170.6	171.9	172.8	173.2	169.4	172.8
\$4 per barrel increase.....	180.4	181.8	181.9	183.0	184.4	185.3	185.8	181.8	185.4
Percent change.....	7.3	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.3
<b>CPI, nondurable goods (1967=100.0):</b>									
No increase.....	171.0	173.7	176.6	179.8	183.2	185.6	189.0	175.3	187.4
\$4 per barrel increase.....	173.1	175.9	178.8	182.1	184.7	188.1	191.6	177.5	189.9
Percent change.....	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.2	1.3
<b>CPI, total (1967=100.0):</b>									
No increase.....	168.6	171.5	174.4	177.8	180.9	184.6	188.2	173.0	186.4
\$4 per barrel increase.....	169.7	172.7	175.7	179.1	182.4	186.2	189.9	174.3	188.0
Percent change.....	.7	.7	.8	.8	.8	.9	.9	.8	.9

<sup>1</sup> 4th quarter estimates are extrapolated.

We next consider the effect of total deregulation of old oil prices. Under this scenario, we could assume no further increases by OPEC nations, which means that imported and decontrolled oil prices would stay at \$14.50 per barrel. Old oil prices would also rise to \$14.50 per barrels. Thus the average price of crude oil would rise \$3.81 per barrel, for an increase of 35.6 percent. This works out to a 26-percent increase in the WPI for petroleum products, or 1.62 times as large as the previous scenario. The comparable results for key variable are given in table 2.

The results are not exactly analogous, since import prices do not rise; this effects not only oil but prices of all other imported goods. In other words, if the OPEC nations raise their prices, all nations of the world face another increase in prices and another decline in real income; if old oil is deregulated, only the United States faces these consequences. Hence worldwide inflation and the decline in worldwide demand is not as severe under the deregulation case for equal cost increments. However, the much greater cost increment associated with deregulation does in fact lead to more severe effects, although not by the full proportional amount in all cases. Hence GNP and industrial production are each reduced about 1½ percent, while the unemployment rate is increased by 0.3 percent. Auto sales decline by 640,000 units the first year and 330,000 the second year. All these results are approximately 1.6 times those given in table 1.

We find less than proportional increments for price increases primarily because the prices of imported goods do not rise. Thus by 1977 the industrial WPI is 3.1 percent higher and the total WPI is 1.8 percent higher compared to 3.8 percent and 2.3 percent in table 1. In other words, wholesale prices actually rise less even though the increase in oil prices is greater. This reversal does not follow through at the consumer level; the price of gasoline is up 11.6 percent, compared to 7.2 percent in the previous run, and overall CPI is 1.2 percent higher, compared to 0.9 percent. This comparison is instructive in showing the significant degree to which the U.S. WPI is influenced by world commodity prices.

TABLE 2.—ECONOMIC IMPACT OF DECONTROL OF OLD OIL

	1st quarter 1976	2d quarter 1976	3d quarter 1976	4th quarter 1976	1st quarter 1977	2d quarter 1977	3d quarter 1977	1976	1977 <sup>1</sup>
GNP, 1958 dollars:									
No increase.....	817.4	832.6	846.7	859.5	868.6	876.2	880.1	839.0	876.8
Decontrol.....	808.1	819.2	832.1	844.8	854.4	862.9	867.6	826.0	863.9
Percent change.....	-1.1	-1.6	-1.7	-1.7	-1.6	-1.5	-1.4	-1.5	-1.5
Index of industrial production (1967=100.0):									
No increase.....	117.7	121.8	125.8	128.7	131.1	132.6	133.3	123.5	132.7
Decontrol.....	116.9	120.0	123.4	126.2	128.6	130.4	131.4	121.6	130.6
Percent change.....	-.7	-1.5	-1.9	-1.9	-1.9	-1.7	-1.4	-1.6	-1.6
Unemployment rate (percent):									
No increase.....	8.6	8.1	7.8	7.4	7.3	7.2	7.2	8.0	7.2
Decontrol.....	8.7	8.4	8.1	7.8	7.6	7.5	7.5	8.2	7.5
Actual change.....	.1	.3	.3	.4	.3	.3	.3	.2	.3
New passenger car sales (millions):									
No increase.....	8.81	9.47	10.05	10.41	10.67	10.82	10.87	9.69	10.81
Decontrol.....	8.21	8.78	9.39	9.83	10.20	10.45	10.58	9.05	10.48
Actual change.....	-.60	-.69	-.66	-.58	-.47	-.37	-.29	-.64	-.33
Housing Starts (millions):									
No increase.....	1.57	1.65	1.64	1.63	1.53	1.45	1.38	1.63	1.42
Decontrol.....	1.48	1.57	1.60	1.59	1.52	1.46	1.39	1.56	1.42
Actual change.....	-.09	-.08	-.04	-.04	-.01	.01	.01	-.07	0
WPI, industrial commodities (1967=100.0):									
No increase.....	176.9	180.1	182.6	185.6	188.7	191.8	195.9	181.3	194.5
Decontrol.....	181.7	186.0	188.4	191.1	194.4	197.8	202.0	186.8	200.5
Percent change.....	2.7	3.3	3.2	3.0	3.0	3.1	3.1	3.0	3.1
WPI, total (1967=100.0):									
No increase.....	182.5	185.2	187.8	190.7	193.7	196.8	200.6	186.5	199.1
Decontrol.....	185.0	188.5	191.0	193.8	197.0	200.3	204.3	189.6	202.7
Percent change.....	1.4	1.8	1.7	1.6	1.7	1.8	1.8	1.7	1.8
CPI, gasoline and motor oil (1967=100.0):									
No increase.....	168.0	169.5	169.6	170.6	171.9	172.8	173.2	169.4	172.8
Decontrol.....	188.0	189.2	189.2	190.5	191.9	192.8	193.3	189.2	192.9
Percent change.....	11.9	11.6	11.6	11.7	11.6	11.6	11.6	11.7	11.6
CPI, nondurable goods (1967=100.0):									
No increase.....	171.0	173.7	176.6	179.8	182.3	185.6	189.0	175.3	187.4
Decontrol.....	174.3	177.2	180.1	183.5	186.1	189.5	193.0	178.8	191.3
Percent change.....	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.1

TABLE 2.—ECONOMIC IMPACT OF DECONTROL OF OLD OIL—Continued

	1st quarter 1976	2d quarter 1976	3d quarter 1976	4th quarter 1976	1st quarter 1977	2d quarter 1977	3d quarter 1977	1976	1977 <sup>1</sup>
CPI, total (1967=100.0):									
No increase.....	168.6	171.5	174.4	177.6	180.9	184.6	188.2	173.0	186.4
Decontrol.....	170.3	173.4	176.4	179.8	183.1	186.8	190.6	175.0	188.7
Percent change.....	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.2	1.2

<sup>1</sup> 4th quarter estimates are extrapolated.

We now turn to what could be called the worst possible case—a \$4/bbl. increase in imported oil plus total deregulation of domestic old oil. It is hard to believe that this scenario would satisfy anybody, and in fact the lack of knowledge about how much more OPEC nations will raise oil prices in the future is another argument against total decontrol of old oil. In any case, I would like to stress that we consider this worst case to be quite unlikely, and present these calculations in that spirit.

Since imported oil now sells for approximately \$14.50/bbl. including transportation and tariff, a \$4/bbl. increase by OPEC nations would raise the price to \$18.50/bbl. We assume that all domestic oil, both "new" and formerly "old" will also rise to this price. We estimate that the current average price of oil in the U.S. is \$10.69/bbl., so this amounts to an increase of 73% at the crude level, or 53% at the wholesale level.

If such an unlikely sequence of events did in fact transpire, the results on the economy would be quite severe. Real GNP and industrial production would remain near 8% instead of declining near 7%. The auto industry would suffer a decline of 1 million units in 1976 and one-half million in 1977. The rate of inflation would be 4% higher for wholesale prices and 2% higher for consumer prices; the actual rate of inflation in 1976 under these circumstances would approach 10%.

TABLE 3.—ECONOMIC IMPACT OF A \$4 PER BARREL INCREASE IN IMPORTED OIL AND DECONTROL OF OLD OIL

	1st quarter 1976	2d quarter 1976	3d quarter 1976	4th quarter 1976	1st quarter 1977	2d quarter 1977	3d quarter 1977	1976	1977 <sup>1</sup>
GNP, 1958 dollars:									
No increase.....	817.4	832.6	846.7	859.5	868.6	876.2	880.1	839.0	876.8
Decontrol plus \$4 per barrel.....	802.6	811.9	824.4	837.2	847.0	855.9	860.9	819.0	856.9
Percent change.....	-1.8	-2.5	-2.6	-2.6	-2.5	-2.3	-2.2	-2.4	-2.3
Index of industrial production (1967=100.0):									
No increase.....	117.7	121.8	125.8	128.7	131.1	132.6	133.3	123.5	132.7
Decontrol plus \$4 per barrel.....	116.5	119.0	122.3	124.9	127.5	129.4	130.6	120.7	129.7
Percent change.....	-1.0	-2.3	-2.8	-3.0	-2.7	-2.4	-2.0	-2.3	-2.3
Unemployment rate (percent):									
No increase.....	8.6	8.1	7.8	7.4	7.3	7.2	7.2	8.0	7.2
Decontrol plus \$4 per barrel.....	8.8	8.5	8.3	8.0	7.8	7.7	7.7	8.4	7.7
Actual change.....	.2	.4	.5	.6	.5	.5	.5	.4	.5
New passenger car sales (millions):									
No increase.....	8.81	9.47	10.05	10.41	10.67	10.82	10.87	9.69	10.81
Decontrol plus \$4 per barrel.....	7.86	8.40	9.02	9.52	9.94	10.24	10.42	8.70	10.29
Actual change.....	-0.95	-1.07	-1.03	-0.89	-0.73	-0.58	-0.45	-0.99	-0.52
Housing starts (millions):									
No increase.....	1.57	1.65	1.64	1.63	1.53	1.45	1.38	1.63	1.42
Decontrol plus \$4 per barrel.....	1.42	1.51	1.56	1.55	1.48	1.42	1.36	1.51	1.39
Actual change.....	-0.15	-0.14	-0.08	-0.08	-0.05	-0.03	-0.02	-0.12	-0.03
WPI, industrial commodities (1967=100.0):									
No decrease.....	176.9	180.1	182.6	185.6	188.7	191.8	195.9	181.3	194.5
Decontrol plus \$4 per barrel.....	186.3	191.8	194.5	197.5	201.2	204.9	209.4	192.5	207.8
Percent change.....	5.3	6.5	6.5	6.4	6.6	6.8	6.9	6.2	6.8
WPI, total (1967=100.0):									
No increase.....	182.5	185.2	187.8	190.7	193.7	196.8	200.6	186.5	199.1
Decontrol plus \$4 per barrel.....	187.6	191.9	194.6	197.7	201.2	204.8	208.9	192.9	207.2
Percent change.....	2.8	3.6	3.6	3.7	3.9	4.1	4.1	3.4	4.1
CPI, gasoline and motor oil (1967=100.0):									
No increase.....	168.0	169.5	169.6	170.6	171.9	172.8	173.2	169.4	172.8
Decontrol plus \$4 per barrel.....	200.1	200.8	200.7	202.1	203.8	204.5	205.1	200.9	204.7
Percent change.....	19.1	18.5	18.3	18.5	18.6	18.3	18.4	18.6	18.5

TABLE 3.—ECONOMIC IMPACT OF A \$4 PER BARREL INCREASE IN IMPORTED OIL AND DECONTROL OF OLD OIL—Con.

	1st quarter 1976	2d quarter 1976	3d quarter 1976	4th quarter 1976	1st quarter 1977	2d quarter 1977	3d quarter 1977	1976	1977 <sup>1</sup>
CPI, nondurable goods (1967=100.0):									
No increase.....	171.0	173.7	176.6	179.8	182.3	185.6	189.0	175.3	187.4
Decontrol plus \$4 per barrel.....	176.3	179.1	182.1	185.6	188.4	191.8	195.3	180.8	193.6
Percent change.....	3.1	3.1	3.1	3.2	3.3	3.3	3.3	3.1	3.3
CPI, Total (1967=100.0):									
No increase.....	168.6	171.5	174.4	177.6	180.9	184.6	188.2	173.0	186.4
Decontrol plus \$4 per barrel.....	171.4	174.5	177.7	181.2	184.6	188.4	192.2	176.2	190.2
Percent change.....	1.7	1.7	1.9	2.0	2.0	2.1	2.1	1.8	2.0

<sup>1</sup> 4th quarter estimates are extrapolated.

#### MITIGATING THE EFFECTS OF HIGHER OIL PRICES

The results presented in the previous section are all calculated under the assumption that no action is taken by the Federal Government to offset the decline in real income caused by higher oil prices. It is conceivable, of course, that such inaction could continue indefinitely. However, we believe it is more likely that additional legislation would be passed that would return GNP and unemployment to their previous levels.

The best blend of policy should combine monetary and fiscal policy in order to stimulate both consumption and investment. However, this is extremely unlikely to occur, given the predilection of the Federal Reserve System to tighten monetary policy whenever the rate of inflation increases. Thus we have not programmed in a move toward easier money, but have stayed with the same level of unborrowed reserves and other key monetary factors and used fiscal policy exclusively as the offset mechanism.

In performing this last set of simulations, we have decreased personal income taxes by an amount sufficient to return real GNP and unemployment in 1977 to the levels which would have been obtained if no further increases in oil prices were to take place. Under the first scenario, namely the \$4/bbl. OPEC increase, we find that a \$15 billion personal income tax cut would be required. This would solve the problems of growth and employment, but not inflation. The WPI, which was up 2.4%, would be 2.5% higher, and the CPI, which was raised 0.9%, would be 1.1% higher. As might be expected, the slight additional increase in inflation stems from a higher level of economic activity and hence higher wages and prices.

Since the second scenario, decontrol of old oil, reduces GNP by 1.6 times as much as \$4/bbl. increase, it should come as no surprise that the tax cut needed to restore GNP and unemployment to their former levels is approximately \$25 billion. The increases in inflation are also 0.2% to 0.3% higher than they would be without compensatory fiscal policy.

When we move to the worst case scenario, things become somewhat more complicated. It is true that a \$40 billion tax cut could return the economy to its previous position, but the financial markets could not handle a tax cut of that size without undesired side effects, namely a crowding out which would reduce all fixed investment but particularly housing. As a result, the investment/consumption ratio diminishes even further and productivity gains are further eroded. Given the present resources of the economy, we are not able to find any satisfactory method of coping with both a \$4/bbl. increase in imported oil prices and total deregulation of old oil.

#### SUMMARY

Our suggestion for an optimal energy policy includes the following elements:

- (1) An immediate increase of \$2/bbl. in the price of old oil, to be followed by further annual percentage increases equal to the overall rate of inflation plus 5%.
- (2) A 30¢/gallon increase in the excise tax for gasoline, to be offset by a \$25 billion personal and corporate income tax cut and an increase of \$5 billion for expenditures for mass transit and energy research.

(3) A tax on new cars which averaged less than 15 mpg, and a subsidy for new cars which averaged more than 15 mpg, with the 15 mpg to increase 1 mpg per year to a maximum of 25 mpg.

(4) A decrease of 10% per year in imported oil.

In the absence of speedy legislation to accomplish these ends, it is likely that oil prices will rise substantially, either because of an increase in foreign oil prices or total deregulation of domestic old oil prices. A \$4/bbl. increase in foreign oil prices would reduce real GNP and industrial production by 1%, would raise unemployment by 0.2%, and would increase wholesale prices an additional 2.3% and consumer prices an additional 0.9%.

A total deregulation of old oil prices, in which case they would rise to the equilibrium level of approximately \$14.50/bbl., would reduce real GNP and industrial production by 1.5%, would raise unemployment by 0.3%, and would increase wholesale prices an additional 1.8% and consumer prices an additional 1.2%. All of these calculations are based on the assumption that no compensatory fiscal policy would be taken.

A "worst case" scenario in which we had both a \$4/bbl. OPEC increase and complete deregulation of old oil prices would reduce real GNP and industrial production by 2.3%, would raise unemployment by 0.5%, wholesale prices by 4.1%, and consumer prices by 2.0% in the absence of offsetting fiscal or monetary policy.

A personal income tax cut of \$15 billion would be sufficient to offset the negative effects of a \$4/bbl. increase on real GNP and unemployment; under such a policy the consumer price index would rise another 0.2%, for a total increment of 1.1%. A tax cut of \$25 billion would offset the negative effects on real GNP and unemployment of decontrolling old oil prices; the CPI would then rise 0.3% more than otherwise, or a total of 1.5% more. Finally, a \$40 billion tax cut would restore real GNP and unemployment levels to their previous positions in the "worst case" scenario, but only with serious side effects in money and capital markets.

Representative LONG. Thank you very much, Mr. Evans. If it is all right with you, Congressman Brown, what we will do is, rather than pursuing the questioning individually—since there are two of us here—is that any time you feel that you want to add something to the discussion, you just proceed with it.

Mr. Schultze has presented his testimony, and what I gave you is a summary of that, and we could perhaps do it a little more easily that way. Mr. Schultze, I read your statement over the weekend, and also listened to it this morning; and certainly it is a powerful statement, and in many respects very alarming, if your conclusions are correct, and they are hard to argue with, particularly if you rely upon what the Joint Economic Committee staff has done, because in many respects it is very similar to the conclusions that they had reached as to what the effect would be upon this program; and they made theirs, of course, as you know, last Thursday, the Joint Economic Committee did, regarding the impact of oil decontrol and OPEC price increase. I wanted to explore that, but I would like one additional point to be discussed, perhaps if we could, at this time, that perhaps seems to me to have not been given by anyone, and I do not mean necessarily the two of you, or those of us here today. But in the whole consideration of this problem, that if we look at the whole thing of domestic oil production, and then if we look at, rightly or wrongly, the removal of the method of financing that had been used by independent oil producers, particularly over many years, or the limitations of it by the Congress in removing the oil depletion allowance, or limiting it to the extent that it did, that we are going against market considerations. But, not having a realistic incentive for the search for domestic oil production, this seems to me to be a factor that is somewhere down the road going to have to be

given a substantial amount of consideration by everyone. And yet, it seems to have been, to some degree, overlooked.

Mr. Schultze, would you comment on this, what might be a realistic price? Because, as Mr. Evans stated and as you stated, and I think that everyone knows as we go further out into our waters, looking offshore, looking for oil, the price goes up. And finding it, as we go into Alaska to get it out, the price goes up. If we go off the eastern shore of the United States and go into deeper waters, again the price goes up. If we add nothing but the very fact of inflation, the price goes up; and what we have got to do, as I see it, is if we are going to increase domestic production at all, we have got to find some sort of an incentive. I would be interested in both of your views with respect to this: One, as to what might be a realistic price in this regard; and second, the impact that this has, and the necessity for this, if my assumption is correct, in order to put this thing in proper focus as we move into the discussion of the other questions, and the effect of the whole problem on our economic progress or lack of progress or recovery or depression, as we see it coming, starting perhaps in the fall of this year.

Mr. SCHULTZE. Congressman Long, let me talk a bit about the price of oil, the cost of finding oil, and the impact of that on policy. Let me preface my remarks, in case I forget it later, by noting that the estimates which I have made of the impact of the scenario of OPEC increases and decontrol is about the same as the committee's staff. I carried it out another half year. It is also, by the way, about the same as that recently done by the Congressional Budget Office, although again they did not carry it out as long as I did.

With respect to oil pricing, a number of comments. First, I think that nobody really knows what price it is going to take to increase significantly the drilling and production of new domestic oil. I think there is some evidence—not very good, but the only evidence we have—that it is quite high. I have done some work—I do not want to push this very hard, because it is still very tentative—and I have seen other work which would indicate that in 1974, for example, the cost of bringing on new oil in the United States from drilling, not from secondary recovery but from newly drilled oil, probably was, with a reasonable rate of return to investment, somewhere in the neighborhood of \$10 a barrel.

Now, that is an average; some of that oil came in a lot higher than that, and some lower. But \$10 a barrel is a high number.

Representative BROWN of Ohio. Robert Nathan says the economic cost is \$12.73.

Mr. SCHULTZE. That is where I got my \$10. I went through his estimates and made some corrections. I think he is basically in the right direction. I think he is a little high. My only point is, that the necessary price is high, Congressman Brown.

Representative BROWN of Ohio. Can you speak to the reason for that?

Mr. SCHULTZE. Yes, sir. From the point of view of the national economy, the Nathan estimates, as part of the cost of bringing on new oil, include lease bonus payments. They should not. The lease bonus payment is, in effect, the windfall which a producer can expect to get by getting a favorable tract, and comparing his costs with his expected

price. If the costs of drilling for oil go up, that least bonus payment will decrease. So that, for estimating the national resource costs of finding new oil, I do not think you should include the lease bonus payments.

Second, the Nathan estimates assumed a 15 percent after-tax rate of return to be required on all capital expenditures. I would think a 15 percent rate, or even a little bit higher, is probably required for exploration, but not for development expenditures; that is, when you know the oil is there, it is a question of putting down producing wells. You probably should not need to allow for a 15 percent rate of return on that.

Representative BROWN of Ohio. Really, what I was directing myself to, or trying to direct you to, was the fact that we found all the easy oil in the United States, or most of it; and that where we are going to find it in the future is going to be at extreme depths, such as the Alabama field, which I understand is hitting 18,000- to 20,000-foot depths—or on the Outer Continental Shelf, where we are in some difficulty because of the nature of the terrain, or in Alaska, where we are in some difficulty because of weather and other factors that make the work expensive and difficult.

Mr. SCHULTZE. Congressman Brown, fundamentally, I agree with that, in view of which my own policy recommendation would be, No. 1, not to roll back the price of new oil; and No. 2, do not put a windfall tax on new oil. That new oil should not be rolled back. There is a lot of push to roll that back, and I think probably nobody knows but you probably would forfeit some potential domestic production if you did it, or if you left the price the same and put a big windfall tax on new oil. I think the story for old oil is quite different. Old oil is a complicated story, but I think it is worth telling.

The current definition of old oil, used in the regulations, says that old oil is, in effect, your 1972 base from an existing property. Any oil produced up to that base, you get old oil prices for it. Then, on a given property, on anything over that 1972 base, you get barrel for barrel a release of old oil. That is a bad definition, and it discourages secondary recovery.

The way nature works in an oil field is, you get a decline rate. Production from a fully developed oil field naturally declines. As a consequence, if you take account of that, the costs of bringing on that oil are not terribly great. The well has been sunk; it is there. It is the operating cost, fundamentally. Therefore, it seems to me an ideal way to decontrol old oil is to change the current definition, and say that old oil is the 1972 base minus the average decline rate—12 percent a year, or 13 percent a year, or 14 percent a year if you want to bend over backward to make sure you are not discouraging anything. Any oil produced over an amount equal to the 1972 base, minus 12 percent new drilling paid in that old field. You have drilled it up. At the present time, I am convinced that a lot of secondary recovery is not being brought on. Take an old field in 1972 which was all developed. No more new drilling paid in that old field. You have drilled it up. At the present time, that field could be producing, maybe, at 65 percent of its base, 70 percent of its base—secondary recovery cannot get you up to 100 percent, normally. Secondary recovery cannot get you a 30-percent jump. Therefore, if you put in secondary recovery in that field, you

would not get new oil prices. But you read in the newspapers that old oil is going to be decontrolled, so you hold back on secondary recovery. If you defined old oil correctly, they way nature does it—by putting a decline rate on the 1972 base—you would have a very gradual increase in the proportion of oil that is new oil, and a very gradual decrease in the proportion of oil that is old oil. You would stimulate secondary recovery. You would have a new oil price high enough, I think, to do reasonably what is possible in the \$12 neighborhood. Nobody knows.

Do not put a windfall tax on that new oil. My own judgment is, take off the tariff, and then I would follow basically Mr. Evans' recommendations on gasoline taxes and new car taxes. But I realize that has already gone through the mill.

Representative BROWN of Ohio. Why do you say take off the tariff?

Mr. SCHULTZE. The reason I would say to take off the tariff is that, while we do indeed need to slow down the rate of growth of consumption in the United States, raising the price of crude oil across the board is not the way to do it. I will give you several reasons why I think that. Think of crude oil as being used in three major places; for gasoline, for public utilities, and for industrial direct uses of all kinds.

Representative BROWN of Ohio. What about heating?

Mr. SCHULTZE. You are quite right—and heating for consumers. If you look at what has happened first to the price of oil used in those various uses, you will find the price of gasoline has gone up about 35 percent, but the price of oil to industry and heating oil has gone up anywhere from 100 to 200 percent already. Hence, what you have had, because of the structure of the industry—which has nothing to do with good, bad, or indifferent; it is just the way the oil is priced, for a lot of reasons—you have had actually a very small increase in gasoline prices, and already a very large increase in other uses. It seems to me, therefore, that it makes sense to concentrate additional use penalties on gasoline usage. That is point No. 1.

Point No. 2, if you look at the use of oil in public utilities, the central question over the next 5 to 6 years is the conversion from oil to coal, and making sure that new plants coming on are not oil. There are not very many of them, a couple of hundred plants totally involved. The decision is going to be made on environmental regulations, anyway, and you can do that one by regulation. Normally, I believe in the market, but here is a case where I think raising all oil prices to induce a switch in utilities, when the switch is going to be determined by environmental regulations, is an unnecessary penalty on the consumer that does not accomplish anything. Therefore, I would say, you do not want to raise crude oil prices across the board. You do want to decontrol old oil gradually. You do not want a windfall tax on new oil. You do want to put an additional penalty on gasoline and on gas-guzzling new cars, and it seems to me that makes, or gets you, as near as any other mix will toward lowering consumption gradually without unnecessary penalties to the consumer.

Representative BROWN of Ohio. And you do suggest that you do want—I gather from your testimony—I have not gone through it all—that you do want a rebate tax of some kind to equalize those who have against those who have not. Everybody has to use some kind of



fuel and pay a higher price, and the rebate system was proposed initially by the administration, but never enacted by the Congress.

Mr. SCHULTZE. I think this is the essential thrust of my testimony, Congressman Brown, is that however the energy debate comes out, while that is important, it is 20 times as important to make sure that however it comes out you take the necessary fiscal and monetary action to make sure that whatever does happen does not depress the economy as it surely will unless we do something about it.

Representative LONG. Mr. Schultze, the administration's witnesses were here on Friday, and I tried to pursue with them, as did a couple of the other members of the committee, this whole question of tax rebate, or whatever fiscal or monetary policies might be required in order to solve this whole thing upon the economy, and, as I said earlier, you certainly seem to share the view of the committee staff that it is going to be very, very substantial, perhaps, equal to or even as serious as the one that we had last year in the fall of the preceding year.

As I tried to pursue this with Mr. Greenspan and some of the other witnesses, Mr. Morton, they kept talking up the recycling of this, and I could not pin them down or get from them as definitive a position as they had pursued a year or so ago, or a few months ago, when they had presented this as Congressman Brown had said to the Congress, and Congress really never acted upon that particular recommendation. But I gathered from their unwillingness to come to specifics with respect to this, that they had moved back from a position as definitive as the one that they had previously taken and that they are now talking something about recycling. Maybe they are talking about excess profits taxes on oil companies as one of the vehicles. I am not sure, and maybe for political reasons at this stage, justifiable political reasons at this stage, they did not want to discuss that.

But, let me pursue that point a minute, and then I would like to come back to Mr. Evans with respect to this incentive situation which I see running all the way through this. Is this question of incentive for domestic production which, I think, you outlined very well, the fact that there is a substantial need for it, but if we do decontrol oil and OPEC raises its prices by, say, the 15 to 20 percent that has been in the news media and some of the OPEC people have talked about, how much of this higher resulting energy cost that we are going to have will ever show up as domestic purchasing power, that is, as money actually spent in this country. Have you done any thinking along that line?

Mr. SCHULTZE. Yes, sir, although I do not think I could quantify it for you.

Representative LONG. It is very difficult to quantify.

Mr. SCHULTZE. We made some attempts just at this particular set of numbers. I do not remember them exactly. First, to go back to the original point about recycling any funds siphoned off by higher oil prices. Let me make one critical point on that. It is important to recycle not only any additional money we get through taxes; that is, suppose OPEC raises the price of oil. As an initial approximation this all goes to OPEC, not to the U.S. Treasury, and yet you need to have some fiscal action to offset that because it is going to reduce consumer purchasing power and help abort a recovery. So, it is critical in thinking through what kind of "recycling" you do, that you look

at the total drain of consumer purchasing power, not how much does the Government get out of this through windfall taxes or anything else. It is important even if it all goes to OPEC to initially, for the next couple of years, to restore that loss of consumer purchasing power.

Second, of the money going to OPEC, how much is recycled back to the United States for purchases from the United States as imports by the OPEC countries. You know, again, that is a very hard question to answer, but maybe you could think about it this way. You can break the OPEC or the oil-producing countries into, maybe, three groups. There is one group of countries, relatively small, and usually underdeveloped. Some of them are not even in OPEC, like Mexico, who are going to spend every dime of those proceeds, or at least commit it fairly quickly.

Representative LONG, Nigeria.

Mr. SCHULTZE. That is the next group, somewhat larger countries like Nigeria, Indonesia, and Iran. Two things are going to happen. On the one hand, if the price of oil goes up, then gradually over time the world market will shrink a little, and the smaller countries will cut back production. The Iranians may cut some, the Nigerians will not at all. But they will increase their imports from the United States, over a period of time. It may take 3 or 4 years before that catches up. Finally, Saudi Arabia and some of the sheikdoms, they are going to be the ones that have to cut back production to balance the market at a higher price, and if they get more money, they are not going to increase their imports very much from what they already are.

On balance, therefore, we add all of this up and what you find is that over the next several years, an increase in OPEC prices will not mean much more of export industry sales, but as you look at 3, 4, 5, 6 years, there will be a very significant increase in exports from the United States to these countries. Now, that is a complicated answer, but it says the next several years it will all be negative in terms of sales, consumer sales down, not much increase in exports, but then as you go out, 3, 4, 5 years, export sales will really be moving up.

Representative BROWN of Ohio. Why does it move up later?

Mr. SCHULTZE. Take a country like Iran. My assumption would be that any additional revenues the Iranians get, they are ultimately going to spend on development.

Representative BROWN of Ohio. You are just talking about lag times.

Mr. SCHULTZE. Right; there are lags. They are going to buy heavy capital equipment. The orders may be put in a year or so, but the actual work done, the production in the United States, the employment will spread out over a large number of years, so that you will see gradually accelerating increase, but the next couple of years you will not see much at all.

Representative LONG. Mr. Evans, would you like to comment about this whole question we have been talking about, the incentive and then the related question?

Representative BROWN of Ohio. May I just clarify one thing first. Mr. Evans, I gather that you and Mr. Schultze disagree about what an incentive price is. Mr. Schultze has suggested it is \$10.50 or above for domestic new oil, and you have indicated that it is only \$7.50.

Mr. EVANS. That was an old oil price.

Representative BROWN of Ohio. Well, are you in disagreement about the \$7.50? Did I misstate your position, Mr. Schultze?

Mr. SCHULTZE. Let me just repeat it. I would gradually deregulate old oil, very gradually. I would not do anything to new oil. Basically, at least, up to a price of \$12, I would leave it.

Representative BROWN of Ohio. Can you justify your \$7.50 figure for me based on the cost of secondary and tertiary recovery?

Mr. EVANS. Well, as I mentioned, I am not really an expert and I have gathered this from talking to other people and, basically, reading what they have to say. I would point out, however, that if you take Mr. Schultze's 12 percent figure a year over the last 3 years and tack it onto the price of \$5.25, you get about a 40 percent increase, which comes out to approximately the same number.

Representative BROWN of Ohio. No; he is talking about a decline rate, and I am talking about cost on economic costs. I do not want to intrude on the question that Congressman Long asked, but the economic costs of secondary recovery are what it takes to pump that material into the ground to bring out this additional oil from an old well after it has declined, and I am told that rather than getting an average of about 30 to 35 percent of the oil out under natural processes, that you can up that by 50 percent, in other words, 16 percent more of the oil in the well.

However, that depends upon the kind of well, the way the oil is in the well, and those rates run anywhere from 50 cents a barrel, depending upon the size of the field and the nature of all of these technical things, up to \$5 a barrel to get that additional 50 percent of production out of the well. And that is why I am curious about this \$7.50, because it seems to me that that is a figure that is just pulled out of the air, rather than developed by any statistical analyses. That is why I asked for some sort of a justification of the \$7.50.

Mr. EVANS. It is not by figure particularly. It is my impression of what I thought was a reasonable price. I do not have detailed statistics to back that up.

Representative LONG. Let us go back, if you would, Mr. Evans, to the question that I asked with respect to the views on the incentive situation on both primary and secondary recovery domestically, that is.

Mr. EVANS. I think the incentive question is a very important one. I think it is really, in fact, the single most important aspect of future energy policy, and that is why I put it first in my remarks this morning. I think that we are going to have to have incentives, and I think that these incentives are mainly going to come in the area of new oil, and for that reason I would not support any rollback of new oil prices. However, I would be in favor of an excess profits tax, which contained a plowback provision. I see nothing wrong with that, and I think that that would give the oil industry the capital which it needed for developing new oil, while, on the other hand, it would not have this capital available for areas outside of the petroleum industry. So, I think that the price of new oil should be allowed to be deregulated, continue to be deregulated, as it is, and I do not know exactly at what level we would get to either, but I would not support any rollbacks or any ceilings on that price.

Representative LONG. Do you think that recycling would work without a tax cut?

Mr. EVANS. What do you mean by the recycling?

Representative LONG. Well, the recycling of the money, for example, in the plowback provisions? The recycling of the money in an excess profits tax. What effect is that going to have upon the overall economic picture, and is it going to have enough effect to mitigate the harm that is going to be done by this overall increase that Mr. Schultze and the committee staff, for example, feel, and I think that you feel, is going to result.

Mr. EVANS. Well, if we have a complete deregulation of old oil prices, then I would certainly support a tax cut. Under my plan, where we have a \$2 barrel increase in old oil prices, immediately and gradual increases thereafter. I do not think the effects are large enough that it is necessary to have an overall tax cut, but if deregulation occurs all at once, then I certainly would support a further tax cut because I do not think that recycling mechanism within the domestic economy would work fully.

Representative LONG. Basically, the problem is one of getting the money back in the hands of consumers to keep the economy from continuing to decline as it did for such an extended period, and that really does not treat this specific problem, does it?

Mr. EVANS. Well, a lot of this recession that we had last year, in my opinion, was due to a very stringent monetary policy that we had, and I would disagree slightly with Mr. Schultze, perhaps, on the balance that he puts on this. He puts, as I read his testimony, and perhaps he would want to correct me, but he points in large part to the higher oil prices, and I do not point to the higher oil prices. I point to the very stringent monetary policy that we had as the major reason for the recession.

I am not saying the oil prices had nothing to do with it. They did. They had a fair amount to do with it, but I think that the monetary policy aspects of the recession were preeminent last year. Of course, this year as well. So, I think it is very important to see that we have a monetary policy which does not allow interest rates to increase very much and does not lead to another credit crunch, and I think that is equally as important, if not more so, than having a tax cut, although I would also support a tax cut for a recycling, but as I said earlier, you have a tax cut and then the Fed comes along and says, we did not like the idea of a tax cut in the first place and so, therefore, we are not going to support it, and then you have a tax with a zero multiplier, which means you put it in the consumers' hands and you take it out with the other hand, and you have accomplished very little.

Representative LONG. Mr. Schultze, as I indicated before, the recycling talk and the emphasis, I guess, rather than just the talk of it, because we have always been speaking to some degree of it, but the emphasis that the administration's witnesses last week put on the recycling without going really this step further, caused me some concern. What is your view about this? Is that, in itself, going to be adequate, or does it require something more than that, and, if so, what in your opinion, how far do you have to go?

Mr. SCHULTZE. I think it might be useful in thinking about this to break recycling down into two parts. One, let me call it natural re-

cycling; if you raise the price of oil in various ways, decontrol, OPEC, whatever, what do the private recipients do with that money? To the extent the private recipients, the nongovernmental recipients of that money, spend it on buying investment goods, drilling equipment, whatever, in the United States, that is natural recycling. There will be some but it will in the next 2 years be very small, just looking at the limitations involved.

Representative BROWN of Ohio. That is a boom in the oil industry. That is buying the Alaskan pipeline and all that stuff.

Mr. SCHULTZE. And I think you have to ask yourself how much more than what we are now getting will an additional price increase do by way of that kind of natural recycling, and I would say that will, in the next several years, be quite small. Then you can think of fiscal policy recycling, in which the Federal Government deliberately steps in and reduces taxes, and I agree fully with Mr. Evans, hopefully, the Federal Reserve easing monetary policy so that you can stimulate the consumer purchases that will be lost and other purchases.

Two kinds of recycling exist, therefore, the natural recycling; if you are counting on that, it will not be very large, and that is not to say that ultimately 3, 4, or 5 years down the pipe it will not grow. It will. We have to adjust fiscal policy to it, but initially the natural recycling will not be very large and, therefore, you need deliberate governmental policy for recycling, and I think that is what is so critical.

Representative LONG. And what kind of figures are you speaking of there, in general?

Mr. SCHULTZE. Well, it depends upon scenario. Let me summarize the impact of the combination of the last dollar import fee, a 3-year decontrol, and \$2 OPEC increase.

Representative BROWN of Ohio. Leave out the \$2 OPEC increase for a minute, or at least separate that out in your thinking.

Mr. SCHULTZE. Let's look at it as kind of a target by the end of 1977, because this is going to occur gradually. If I leave out the \$2 OPEC price increase, I have an approximate \$20 billion impact—that is the \$1 import fee, the 3-year decontrol of old oil, and the associated events, several things—approximately a \$20 billion extra oil bill, of which \$15 billion, in round numbers, would be from consumers and \$5 billion spread through other buyers, State and local governments, and the like. In addition, there will be a price increase, because of this, taking into account secondary effects of about 1.5 to 2 percent, again, by the end of 1977, through wages and other effects—

Representative BROWN of Ohio. But this is the ripple effect?

Mr. SCHULTZE. May I come back to that in a moment, and talk about ripple, because there is a problem about what ripple means, but let's say ripple, and I want to explain what I mean by ripple.

So, \$15 to \$20 billion that you have to offset, I think, with fiscal policy. And the Federal Reserve is going to have to grow the money supply about 1 percent a year faster than it otherwise would have had to, if you want to neutralize.

I would also agree with Mr. Evans, that if that comes gradually, the economy can handle it. If you try to do it all at once, there would be a problem.

With respect to ripple effects—

Representative BROWN of Ohio. Before you go to that, is that not essentially what the administration proposed? Did they not propose a \$16 million rebate that would come out of the excise tax, the \$2 excise tax on foreign oil, and that that was the money that was to be recycled, and this is the action that the Congress never took, and so you are not getting a recycling?

Mr. SCHULTZE. If you look at the original administration bill, I would quarrel with some parts of the recycling, but fundamentally, it was an attempt to recycle it all, because the original proposal would have taken in taxes, roughly just about everything that happened. That is, the Treasury would have captured all of the price rise in one kind of tax or another, and by recycling it you would not basically affect the deficit; take it back in taxes and pass it out again. That is no longer true. I do not know exactly what the plan is, but it does not appear to have some kind of a windfall or other taxes, which then could be recycled, if you see what I am driving at. So I do not quite know what the Administration current proposals are, with respect to how that would be decided. We just do not know. My only point is that it has got to be done.

Representative BROWN of Ohio. Well, I gather from what the President has said, in groups that met on the energy problem, is that he still feels there is a need for this recycling, because he has mentioned the fact that the Congress failed to act upon the recycling proposal that made last January, when this whole program was laid out for decontrol, the excise tax and the return of that as a rebate to consumers. And also, you remember, there was a return to municipals for their costs—of States and municipalities for their additional costs. And that is why, in your testimony, I was a little confused by the sudden runup in oil prices during some \$35 billion in purchasing power for consumers, on the second page of your testimony, because it ran in my mind that those recycled figures were something less than that. Was that the original proposal?

Mr. SCHULTZE. Whatever the President had in mind was something on top of the \$35 billion cost last year. That is what happened a year ago with no new energy policy. That is, that has already happened. It has nothing to do with the President's new program. It happened in 1974 and took full effect. And what we are now talking about is the President's proposals on top of that.

Representative BROWN of Ohio. But I am still confused by the \$35, because I was under the impression that the figures were roughly these; that our foreign oil cost was \$3.2 billion prior to the runup of Arab oil prices, if that is the 1971 figure, and that in 1974, our costs for foreign oil were about \$24, \$25 billion. And that the increase is about \$21 billion. Am I off on my figures?

Mr. SCHULTZE. So far, you are right. You just left something out. What you left out is the very large increase in the flow of funds to domestic energy industries with no corresponding, anything like a corresponding increase in spending upon investment by them, as a consequence of which, there was a drain from consumers, reducing consumer purchases not recycled back because for all kinds of reasons, investment did not increase by anything like that take. So you have to add not just the drain to OPEC but the internal shift away from consumers not offset by additional purchases of other goods.

Representative BROWN of Ohio. Now, am I wrong in thinking that the oil companies are investing more than the profits they are making over the last 2 or 3 years?

Mr. SCHULTZE. That is a great puzzle, Congressman Brown, in the sense that if you look at the national data on investments in the energy industry, and if you look, for example, at the intentions to invest by oil, gas, coal, and electric utilities in the energy sector, pre-oil price increase and then look at them as they actually happened in 1974, it nets out to a zero change. There was some increase on the part of oil and gas, roughly offset by a decrease on the part of electric utilities. And the oil increase was \$2 billion or \$1.5 billion, offset by an equivalent amount of reduction by utilities. So net energy investment in 1974 did not increase on account of all of this. This will happen again. There will be some oil and gas increases. My hunch is it will hit electric the other way.

Representative BROWN of Ohio. Well, I was not putting electric utilities in the picture. I was trying to speak to the question of profits in the oil companies and whether or not their investments exceeded the profits made over that period in which the increases in the price of oil occurred. And I was under the impression that the investments did exceed the income, or the profit increase in the oil companies.

Mr. SCHULTZE. To tell the truth, I do not know where it went. That is, if I look at the numbers on increase in oil and gas investment in 1974, it is about on the order of magnitude of about \$1.5 to \$2 billion. If I look first at the gross increase in the price of oil, times the number of barrels and make an allowance for some cost increases, I get a much larger figure. Now, some of that was taken in higher corporate profit taxes by the Government; some of it is in lease bonus payments to the Government, but I cannot quite account for it all.

All I know is, that from the point of view of employment and aggregate demand effects of that big increase in domestic oil prices, I can find maybe \$1.5 billion showing up in additional purchases and investments.

Now, at this stage, I have not tried to match profits up with this. All I know is, that has been the result so far.

Representative LONG. Mr. Schultze, we have been discussing here—and of course, as everybody knows, we had all hoped that thing last year would be a one-time sort of thing and maybe adequately described as a one-time real income penalty, I guess is what it would be, in the transferring of a sizable chunk of our income to OPEC and into the oil companies. However, the President's plan to de-control oil prices would impose, I think, a new glut in real income, upon the consumer. \$1 billion in additional figures are again, transferred to the oil producers, in the absence of a sharp oil price boost. And let's just assume we do not have that, and if we take the extension of the 1975 tax cut, even assuming that, the extension of the 1975 tax cut, do you foresee unemployment in late 1977 lingering even then and under those circumstances at between 6.5 and about 7 percent, somewhere in that field. And with our oil prices, do you foresee close to 8 percent unemployment at that time, which is 2 years from now?

Mr. SCHULTZE. Yes.

Representative LONG. The social effects of a scenario of such as that, if we look at the social effects of what has already happened, that what we thought was going to be a one-time thing concerns me greatly.

Going from your role as an economist, and coupling it with your roles that you have played as a public servant in other fields, what is your feeling about this? Is my concern there justified?

Mr. SCHULTZE. Yes, sir. First, let me immediately say that I have no insight into predicting the social consequences in terms of social unrest and that sort of thing. I cannot do it. I will say that it is, to use the right word, a disgraceful performance, however one looks at this. An economy which is the leading economy of the world, and after all the adjustments for the nature of unemployment and who is suffering it, to have had 9 percent unemployment and then to look forward to a period in which that rate of unemployment at the end of 2 years get down to maybe  $7\frac{1}{2}$  or 8 percent is disgraceful.

Now, in addition to being disgraceful, it has certain technical consequences that worry me. I am not sure whether Mr. Evans would want to agree with this, but I think it is probably true that if you have a period of very sluggish recovery—my own judgment is you are going to get pretty good recovery for 6 months, regardless of what happens to oil—but over the next 2 years if you got a very sluggish recovery, I am fairly sure that business investment in plant and equipment because of what that sluggish recovery would do, first to profits on the one hand, and second, to sales, is also going to be very sluggish. I am then worried that 2 years from now, even if we did decide to really increase employment and to bring down the unemployment rate very rapidly, we then went into a lot of bottlenecks.

Representative BROWN of Ohio. By bottlenecks, you mean shortages?

Mr. SCHULTZE. Shortages, that is, instead of running into bottlenecks when the rate of unemployment is 4 or 5 percent, you will run into bottlenecks when the rate of unemployment is 6 to 7, because the rate of capacity expansion has been so small. If I were really worried about business investment, it seems to me paradoxically, in the short run, not over the very long run, but in the next 3 to 4 years, a vigorous recovery is the most important thing to promote business investment. A big recovery in consumer sales and confidence is going to do more than any kind of tax incentives.

Now, in the long run, there is a legitimate argument, how do you adjust your tax structure out in the late 1970's, but in the next couple of years, the disgraceful performance is not going to be just disgraceful socially; it may condemn us to years of disgraceful performance because of that.

Representative LONG. Now, that necessarily involves substantial risks with respect to inflation and a lot of other related things, but I have been of the view that that is a risk that we have got to run, and I basically agree with you. I think it is a risk we have got to run, because of the fact that we cannot, in view of the strain on the viability of many business concerns in this country already, that if we allow another recession, nearly depression, to come after we have been through what, now, 8 years and already two fairly substantial ones



in 8 years without really any sustained period of economic recovery at all, that if we allow another one to come right away, that we are really going to do great harm and run a great risk of doing very, very substantial harm to the fiber of the American economic system and of the American social system. Would you agree with that?

Mr. SCHULTZE. Yes, sir.

Representative LONG. Now, I am willing to run that risk, and I do think it is a risk, and I do not underestimate the risk, and I am greatly concerned about it.

Representative BROWN of Ohio. But, your proposal, as I understand, would call for a tax deduction so as to make these economic decisions more attractive, that is, the economic decisions for expansion more attractive to the private sector, so that there is more wealth in the hands of individual business and private undertaking to encourage expansion in the market. Is that correct?

Mr. SCHULTZE. Well, I am not exactly sure of that. Let me just say a little bit more carefully. I said, almost paradoxically, I think that in the next several years the best thing that could happen to business investment is a consumer tax cut leading to a rapid recovery in consumer sales, at least for the next 18 months. Easy money is also important; that is, an expansion in the total economy, and an ability to finance that at reasonable interest rates, I think, is most important.

If you look, for example, at how much profits are down because of the recession versus how much you might give back in tax incentives that anybody is talking about, there is no comparison between the two. It is the recession and the lack of sales and the lack of output that is really clobbering profits.

Representative BROWN of Ohio. The problem, however, of expanding the Federal debt, which must be handled by the private sector, is in that picture some place. Now, short-run interest rates have been down. They seem to have bottomed out, along with the predictions that we have bottomed out in the economy. Long-range interest rates have never really fallen substantially. They have stopped increasing, but they have not turned down the same way short-range interest rates did.

Now, while they are still up there, I would agree with you. If we can get our tax cuts to stimulate private expansion—and I mean by that consumer confidence expansion so that the consumer goes out and buys a new appliance or decides to put a room on the house or may want to upgrade his household expenditures. But the thing that still worries me, is that people who are looking at this long-range picture do not seem to have much confidence that the Federal Government can restrain itself and restrain the tendency that has existed for the last two or three generations to expand a proportion of the economic decisionmaking in the country, and so they are keeping those interest rates up there on the theory that Uncle Sam is going to come in and have to finance extensively a very large amount of Federal debt.

Is this to be coupled with some fiscal stability or some effort to control our Federal spending, or are we to go hell bent for election, as we have been—and I do not use that term casually because the election seems to have some part of that—hell bent for election in terms of the addition to the Federal debt.

Mr. SCHULTZE. Let us see. How do I best respond?

Representative BROWN of Ohio. You say if you could cut the taxes, you cut your Federal revenues. But then you tend to increase the debt if you continue to spend on the same escalating expenditure rate that we have had in the past, and that presents some real problems about how you finance that debt out there in the future someplace.

Mr. EVANS. I think the long-term interest rates have not come down very far because of the fear of the investment community that there is going to be another round of double-digit inflation. You talk to most people in the investment community and you get almost the unanimous viewpoint of this.

Representative BROWN of Ohio. Well, what causes double-digit inflation if it is not (a) the increase in the money supply, or (b) the increase in the pressure that the Federal Government puts in the private market to finance Federal debt over the private debt; in other words, the competition is squeezing out what exists when the Federal Government comes in and says we have got to finance \$100 billion worth of debt, and we set the interest rate. We will pay any interest rate we have to in order to get it financed, and General Motors, when it comes in with its \$600 million debt float that it did here a few months ago, the next day the Federal Government comes in with \$1.8 billion and people sell their General Motors debt to buy Federal debt because the Federal Government will pay whatever interest rate. They may feel that the Federal Government will fiddle around with the money supply, or the interest rate, and General Motors, unfortunately, cannot do that. So, is that not part of the problem? Fearing that double-digit inflation?

Mr. EVANS. That is one factor, but I would not call it the major factor. After all, we have a deficit for fiscal 1976 which is going to be between \$60 and \$80 billion. Nobody knows for sure yet, and of that, let us take a conservative estimate, \$60 billion, about \$20 billion is mostly tax cuts, and the other \$40 billion is because the economy collapsed, in other words, the deficit itself did not come from huge tax cuts. The deficit came from the fact that corporate income and personal income were down so far.

Representative BROWN of Ohio. Yet, in the fact of all that we expand our Federal spending rather sharply.

Mr. EVANS. Rather sharply is a hard to define term. I think that if we keep Federal spending growing at the same rate as GNP in current prices, both in current prices, I would not personally consider that to be fairly sharp.

Representative BROWN of Ohio. Federal spending has been growing, though, over the last generation at a rate much in excess of the GNP because of the Federal spending—well, now, wait a minute, I should not say, Federal spending, Government spending.

Mr. EVANS. Including State and local, yes.

Representative BROWN of Ohio. Because Government spending has taken a sharper or an increased amount of the average citizen's decisionmaking in the economic field. Now, what do we do?

Mr. EVANS. That is true enough, but I still think we should have Federal spending first, if Federal spending continues to grow at the same rate as GNP. I now consider that a sharp increase as far as State and local spending. I think a lot of the demographic factors which led to such a sharp increase in State and local spending are now begin-

ning to turn around. I do not think we will see the same rate of increase over the next 5 years.

Representative BROWN of Ohio. Let me just make one point there. I think that one of the reasons for the increase in State and local spending has been Federal policy in many of these areas because we have required that State and local governments to do certain things in order to qualify for whatever the Federal program is in which they participate. Many of our Federal laws have expanded the obligations of State and local governments to the extent that that growth has been caused by Federal policy. Is that not true?

Mr. EVANS. To a certain extent, that is true. I would have to go item by item. Certainly, in a large number of cases.

Representative BROWN of Ohio. Well, let us just pick up the Law Enforcement Assistance Administration. Provided you have the following requirements in your local law enforcement operation, we will provide from funds from the Federal Government for law enforcement assistance, and so in order to get a little bit of Federal money, the State and local government levels have been expanding their expenditures in law enforcement assistance. That is not to say that the expansion was not necessary or that it is undesirable. It is just that the Federal policy has stimulated it.

Representative LONG. Mr. Schultze, would you pursue the other side of this question a moment?

Mr. SCHULTZE. Let me look at the numbers with respect to Federal spending, including its grants to State and local governments. The easiest way to describe it is that it has roughly fluctuated between 18 and 20 percent of a gross national product and has not risen as a percentage. Moreover, Federal debt as a percentage of total debt in the economy has come down steadily.

Point No. 2, State and local spending has increased relative to the size of the economy, and part of that indeed has been engendered by Federal programs. But that has not been financed by deficit. State and local governments on balance are not financing this through deficits.

Representative BROWN of Ohio. Many of them are prohibited by law.

Mr. SCHULTZE. That is correct. So what you have had then is the Federal Government keeping approximately the same proportion of GNP except during the Vietnam War. Second, the Federal debt as a percentage of total debt in the economy has come down dramatically and steadily.

Representative LONG. Mr. Schultze, just to emphasize a point, from 1954 as a percent of the gross national product, the Federal debt in 1954 was 74.8 percent and in 1974 it was down to 36 percent.

Mr. SCHULTZE. My only point is that whatever has been involved in the business of long-term interest rates and the crowding out, et cetera by the Federal deficits, that whatever is involved it is much more likely in the long-term interest rate case to be expectations of inflation, not Federal deficits or governmental deficits in general. It is indeed true that State and local governments and total Government, therefore, may have increased their share of the pie but it has not been done by increasing their share of total debt in the economy that has been coming down and down and down.

Mr. EVANS. I think the main reason to get back to the point raised a minute ago, the main reason for the inflationary expectations has

to do in other areas. The first major areas in the rate of productivity growth in this economy has come virtually to a standstill, and that means that we cannot have wages going up faster than prices if we have no productivity gains, and so this leads to more pressures on the view of labor to catch up because their real income is down but because there is no increase in productivity.

This is fully passed along in prices.

Representative BROWN of Ohio. Would you accept that productivity may be a function of our tax policy because we do not allow for accelerated depreciation as much as other industrial nations of the world do?

In other words, it is impossible in this country to write off in 1 year the bulk of your research and development costs. In many of the other nations of the world, for example, West Germany or Great Britain, which are not in such hot shape, this is not so. Even the Canadians allow industry to write off much more quickly than we do. The investments that they make in capital improvements of their plant, research and development and a lot of other things that we used to pride ourselves in, can be written off more quickly elsewhere. Now we really run pretty far behind other nations.

Mr. EVANS. I think so. I think this is one of the major factors and I think our tax structure is not inducive to high investment as a portion of GNP and therefore high productivity. I think this is a major factor. I think that in my opinion affects the thinking of the community quite a bit and their inflation expectations.

Representative LONG. Mr. Schultze, how would you look at that vehicle as a method of encouraigng domestic oil production in the United States with respect to those things actually used in exploration and in the completing of oil wells once a well is found, that same method of tax write-off?

Mr. EVANS. Of faster tax writeoff, I would certainly be in favor of having the oil industry use it as well as other industries. I would see no reason to discriminate against the oil industry in this respect.

Representative LONG. What about that as a substitute for the old, old question of the treatment being given to oil companies in trying to incite them to move forward more domestic production?

Mr. SCHULTZE. I myself do not think that is terribly important because of the expensing intangible drilling expenses already. I do not know what the proportions are but the actual depreciation as opposed to the writing off of intangible drilling expenses is pretty small.

So I do not think the oil industry gains a hell of a lot from faster depreciation. Some but not much.

Representative LONG. It really does not amount to much of them because it is already available to them with respect to the refineries and this type of operation.

Mr. SCHULTZE. Well, in the refinery side, that is another matter but on the drilling side the intangibles already account for a very large part of their capital expenditure.

Representative LONG. Let's see if we can conclude this by perhaps both of you giving us a view as to what appears to be taking shape as the administration's proposal with respect to decontrol and approach to this problem, and I do not think any of us quite know what that is

going to be, probably including the administration because I understand that they are meeting today and trying to put their final touches on it. The attitude that Secretary Morton and Mr. Zarb and Mr. Greenspan had on their last appearance before this committee indicated to me that they were trying to reformulate their policy because of their even more than usual reluctance to be pinned down with respect to specific recommendations.

But let's examine the case for a 2-year decontrol program which is the one that they seem to talk more of than anyone else, a 2-year decontrol program, and I think the unrealistic, a \$2 OPEC rise, that seems to be somewhere within the ball park. And as I gather you would all generally agree that this would increase energy costs about \$45 billion over the next 2 years if we did this.

Three or four questions in that regard. How much of that energy cost rise would be captured by the Government as higher energy company taxes under the present law?

Not really a substantial amount, is that not correct?

Mr. Evans.

Mr. EVANS. Mr. Schultze, you are scribbling.

Mr. SCHULTZE. With the understanding that these are hand scribbles. With a 2-year decontrol by the end of 1977, my guess would be that the Federal Government would recapture in the form of higher profits taxes on oil companies, even if you had no excess profits tax simply by the normal operation of the corporate tax, about \$8 billion.

Representative LONG. Then let me ask the next question. Of course \$45 billion is taken from the American consumer, \$8 billion under the existing loss is not much of a recovery.

Using both of your expert judgments and expertise in this, how much really to keep us from having dire consequences, how much should be recovered? And to rephrase the question, how much should we cut taxes over the next 2 years in order to offset this loss of purchasing power due to the \$45 billion jump in energy costs in order to keep things within some equilibrium?

Mr. EVANS. This is \$2 OPEC and 2-year decontrol.

Representative LONG. Right. That seems to be the direction in which the administration is moving.

Mr. EVANS. I would say between \$25 billion and \$30 billion.

Representative LONG. Between \$25 billion and \$30 billion.

Mr. EVANS. Yes.

Representative LONG. And that would be added to the \$8 billion roundhouse figure of which Mr. Schultze is speaking?

Mr. EVANS. Yes. I came up with \$10 billion using the same figures he did.

Representative LONG. What is your figure on this line, Mr. Schultze?

Mr. SCHULTZE. I would do it slightly differently to minimize making mistakes. I think what you would need at the beginning of 1976 is a tax cut of about \$15 billion. Then if events proceed the way they now look they are proceeding then you would need to raise that to \$25 billion in the first part of 1977. My own judgment is, if this were an ideal world, you would not need to commit yourself fully to the \$25 billion right away but you would certainly need \$15 billion as of early next year and then probably \$25 billion—raising that by \$10 billion,

in other words—early in 1977, but you could take a look during 1976 and see how things were happening.

My own view, by the way, as an aside is that if OPEC raises prices by \$2 they might find that it might not stick all the way through 1977. They might find that. And so I guess I would be a little bit cautious and have a good sizable \$15 billion tax cut and be prepared to raise it if that OPEC price sticks.

Representative LONG. There is some talk, of course, that the OPEC cartel might break up every now and then. You see this. I really have not seen any indications of it that give me any reason for hope at all and the production increases for these more or less independent nations that we were discussing before, Mr. Schultze, might give you some reason for hope in this regard. But I think that you are probably more likely right with respect to even an additional increase rather than looking at a break up of the cartel and a reduction in prices.

Mr. SCHULTZE. I am not suggesting a break up of the cartel. I guess I am suggesting some possibility that you might get some concessional pricing and so on by the end of 1976.

But I do not want to predict that. I am simply saying that I am not sure, and therefore I would want to do my tax cut in two stages, that is all.

Representative LONG. On our hearing on the subject on July 10, Mr. Zarb alluded to an assessment that his agency made of the differing oil price in areas, including the one that we just went through in round terms and the effect that they would have between now and 1985, stretching those out over a period of time.

In the meantime, we received a copy of the assessment that he alluded to and we find that it was carried out at the request of the House Interstate and Foreign Commerce Subcommittee that has now written their energy bill and I think we are probably going to take it up on the floor of the House in the next day or so.

We have asked the Joint Economic Committee to make a staff evaluation of the scenario with that assessment that Mr. Zarb alluded to, and I am going to order that that be made a part of the record at this stage.

[The staff evaluation referred to follows:]

#### ECONOMIC IMPACT OF OIL DECONTROL AND OPEC PRICE INCREASE

(Joint Economic Committee Staff Evaluation, July 10, 1975)

The Mandatory Petroleum Allocation Act, including price controls on domestic oil, is scheduled to expire on August 31st. It is widely predicted that a further OPEC price increase will occur on October 1st. The staff of the Joint Economic Committee was asked to evaluate the economic impact of these two events, in the context of the Administrations energy program.

As part of the analysis, a price control or Baseline Case was developed for comparison with an Administration Case. It was assumed in the Administration Case that so-called "old" domestic oil is de-controlled, that the present duties or imported petroleum are retained, and that a 15 percent (\$1.56 per barrel) OPEC price hike occurs on October 1, 1975.

The Baseline Case was developed assuming retention of the existing price controls on old oil and that an OPEC price increase did not impact the domestic economy.

Evaluations were conducted by the Committee staff using the Wharton Econometric Model and by the Congressional Research Service of the Library of

Congress using the Data Resources Model. These various simulations produced a reasonable range within which the probable impact of these policies would lie.

The actual levels of Gross National Product, unemployment, inflation, etc., displayed in the three tables accompanying this document depend upon the underlying forecast of the respective models; they should not be interpreted rigorously as forecasts by either the Joint Economic Committee or the modeling agency. Rather, the difference between these variables under each case as illustrated in the third table can be interpreted as an estimate by the Joint Economic Committee staff of the change in the examined variables which would occur from any reasonable level that the economy might attain over the forecast horizon.

The assumption that the predicated OPEC price increase will be 15 percent of the Saudi Benchmark Crude price, currently \$10.46 per barrel, is arbitrary. 15 percent is a reasonable mid-point figure of numerous predictions; it is not a Committee estimate of the magnitude of the oil price rise to be dictated by OPEC.

Because the policies recommended by the Administration appear to be undergoing some reevaluation at the present time, the assumptions built into the simulations discussed in this document may be slightly different from the policy proposals that eventually emerge. The most obvious potential difference lies in tax policy. The Administration has proposed that there be some "recycling" of the increased taxes that might be collected on petroleum products through the tax system. This proposal is not well defined at the present time, but presumably refers to revenues received from a possible "excess profit" tax on oil producers. As an exaggerated proxy for this proposal, it was assumed in the simulations that the 1975 Tax Reduction Act will be extended throughout the forecast horizon. That extension, of course, is not part of the Administration's present recommendations.

A second consideration in examining the potential impact of large increases in energy prices is the role of monetary policy. If large increases in energy prices are allowed to become effective, the inevitable result will be higher rates of inflation throughout the forecast horizon. If the adverse impact on real output and unemployment is offset by tax changes, regardless of whether they represent "recycling tax" changes or just extensions of previous tax reductions, it will be necessary to allow the money supply to grow fast enough to accommodate the increased inflation if the rate of economic growth is to be maximized. The Administration's recommendation on monetary policy appropriate to accompany energy price increases is unknown. The simulations described below assume a reasonably accommodating policy which produces rates of monetary growth well outside the 5½ to 7 percent range announced by the Federal Reserve Board. Clearly, if monetary policy is less accommodating, the adverse impacts of the assumed energy price increases would be worse.

#### *Simulation Using Wharton Econometric Model:*

The following changes were made to assumptions built into the Wharton model.

The first step in preparing this evaluation was to prepare an econometric forecast which assumes no policy changes. The projection referred to as "Baseline" assumes that the Mandatory Petroleum Allocation Act is extended throughout 1976 and that the price of imported petroleum remains at approximately \$13.50 per barrel, with the OPEC oil price increase matched by a reduction in the present duties on imported petroleum.

The alternative simulation, which is intended to approximately the Administration's recommendations, incorporates the following assumptions: The present duties on imported oil remain in effect. Regulated domestic oil is assumed to be decontrolled starting in September, 1975, at the rate of four percent a month; complete decontrol occurs over a 25-month period. This decontrol is imposed on a base production level of 5.5 million barrels per day. The OPEC price of oil is assumed to increase approximately 15 percent, effective October 1, 1975. This increase is applied to a base level of imports of 6.5 million barrels per day, and a short-run price elasticity of  $-.2$  is assumed. The price of a portion of natural gas (7.2 trillion c.f) and coal (275 million tons) production is assumed to rise in response to the OPEC price increase and the decontrol of domestic oil. The gas and coal price increase is also phased, and is tied to increases in the average price of domestically consumed oil. The impact of these two price rises increases gradually from a \$1.4 billion annual rate in the fourth quarter of 1975 to an \$8.5 billion annual rate in the first quarter of 1977.

In incorporating oil price increases, the assumption is made that the increase occurs at the wellhead. The price increase is assumed to be passed through the manufacturing sector dollar-for-dollar with no percentage add-on.

The only other change in the Wharton model is the assumption that Federal purchases of goods and services will be \$3 billion per year higher than they would otherwise have been due to the increased energy prices. This has been divided \$2 billion for defense purchases and \$1 billion for civilian purchases.

The attached table shows the difference between the "Baseline" simulation and the Administration's alternative. It should be reemphasized that the most important part of this table is not the absolute level of the projected variables, but the shortfall in output or the increase in unemployment and prices which are revealed. Annual rates of increase in  $M_1$  are also listed.

SUMMARY TABLE USING WHARTON MODEL—IMPACT OF OIL DECONTROL AND OPEC PRICE INCREASE

Annual rate of growth	75:4	76:1	76:2	76:3	76:4	77:1	Annual average 1975:4- 1976:4
<b>Real GNP:</b>							
Baseline.....	5.4	6.6	5.3	5.0	6.1	6.0	5.8
Administration.....	5.3	5.7	4.5	3.2	4.3	4.1	4.4
Difference.....	.1	.9	.8	1.8	1.8	1.9	1.4
<b>Unemployment Rate*</b>							
Baseline.....	9.2	9.0	8.9	8.9	8.7	8.6	.....
Administration.....	9.2	9.1	9.1	9.1	9.1	9.1	.....
Difference.....	0	.1	.2	.2	.4	.5	.....
<b>Consumer Price Index:</b>							
Baseline.....	3.9	4.4	5.1	5.1	4.8	4.3	4.9
Administration.....	5.8	6.9	7.2	8.2	7.4	5.9	7.5
Difference.....	1.9	2.5	2.1	3.1	2.6	1.6	2.6
<b>Money supply—<math>M_1</math></b>							
Baseline.....	7.9	9.1	8.5	9.2	9.4	9.1	9.0
Administration.....	8.5	9.6	8.7	9.7	9.5	9.1	9.4

\*JEC staff estimates consistent with real growth rates.

The simulations using the DRI model incorporated basically the same alternatives as those discussed above. A more complete discussion is contained in the attached analysis provided by the Congressional Research Service. The second summary table shows the reduction in GNP and the increase in unemployment and consumer prices that is produced by the DRI simulations.

SUMMARY TABLE USING DRI MODEL—IMPACT OF OIL DECONTROL AND OPEC PRICE INCREASE

Annual rate of growth	75:4	76:1	76:2	76:3	76:4	77:1	Annual average 1975:4- 1976:4
<b>Real GNP:</b>							
Baseline.....	7.7	8.0	8.0	9.0	9.7	8.4	8.7
Administration.....	6.7	7.0	6.1	5.5	5.8	3.7	6.1
Difference.....	1.0	1.0	1.9	3.5	3.9	4.7	2.6
<b>Unemployment rate:</b>							
Baseline.....	9.1	8.8	8.3	7.9	7.4	6.9	.....
Administration.....	9.2	8.9	8.5	8.3	8.0	7.9	.....
Difference.....	.1	.1	.2	.4	.6	1.0	.....
<b>Consumer Price Index:</b>							
Baseline.....	4.3	4.6	4.7	4.5	4.3	4.4	4.5
Administration.....	5.9	6.0	6.4	6.5	6.6	6.8	6.4
Difference.....	1.6	1.4	1.7	2.0	2.3	2.4	1.9
<b>Money supply—<math>M_1</math>:</b>							
Baseline.....	6.1	8.3	9.4	10.3	9.5	8.5	.....
Administration.....	6.9	8.6	9.2	9.5	9.2	8.2	.....



The third summary table shows the probable range of the economic impact of the Administration's energy program. As this table shows, the JEC staff estimates that by the end of 1976, the economy would be growing at an annual rate of almost three percentage points below that which might otherwise be expected. The unemployment rate would be over one-half percentage point higher—indicating an additional one-half million people out of work. And, the rate of inflation might be about 2½ percentage points higher than might otherwise be expected.

PROBABLE RANGE OF ECONOMIC IMPACT

	75:4	76:1	76:2	76:3	76:4	77:1
Reduction in real economic growth (percentage points):						
Wharton.....	0.1	0.9	0.8	1.8	1.8	1.9
DRI.....	1.0	1.0	1.9	3.5	3.9	4.7
JEC staff.....	.5	.9	1.2	2.7	2.8	3.0
Increase in unemployment rate:						
Wharton.....	.0	.1	.2	.2	.4	.5
DRI.....	.1	.1	.2	.4	.6	1.0
JEC staff.....	.0	.1	.2	.3	.6	.7
Increase in Consumer Price Index (percentage points):						
Wharton.....	1.9	2.5	2.1	3.1	2.6	1.6
DRI.....	1.6	1.4	1.7	2.0	2.3	2.4
JEC staff.....	1.7	1.9	1.8	2.5	2.4	2.4

Attachment.

#### THE IMPACT OF CRUDE OIL PRICES ON THE U.S. ECONOMY

(By Warren E. Farb, Economist, and Lawrence Kumins, Analyst in Energy Economics, Economics Division, Congressional Research Service, Library of Congress, July 10, 1975)

Now that it is becoming increasingly evident that the U.S. economy is recovering from its worst post war recession it must gird itself for a new round of depressant shocks. This report will investigate the likely impact on the economy of those shocks that are likely to emanate from the energy sector of the economy, in particular the impact of an increase in the price of OPEC supplied crude oil, and an increase in the price of domestic crude resulting from the decontrol of "old oil."

In general either of these actions alone would tend to slow the incipient economic recovery and to slow and possibly stop the rate of decline in the unemployment rate. Moreover, the rate of inflation would be increased. The extent to which these dire effects are realized, however, depends on numerous factors. Obviously, most important is the size of the OPEC price rise and rate at which domestic crude oil is decontrolled. Also, of prime importance, however, are the accompanying monetary and fiscal policies, both of which can attenuate a major portion of the impact.

As a starting point in the analysis, the Data Resources, Inc. (DRI) June 1975 quarterly forecast of the economy was used. This simulation assumes that OPEC prices will increase by 15 percent or \$1.50 per barrel, and that domestic crude will be deregulated at the rate of 1.6 percent per month which would provide full deregulation only after five years.

#### *Sudden Deregulation*

The first CRS alternative to this control solution assumes sudden deregulation of all domestic crude oil as of September 1, 1975 coupled with a 15 percent increase in the price of OPEC crude. Assuming no fiscal or monetary policy changes it is estimated that this would lead to a decline in real GNP of more than 4 percent by the end of 1977 (see attached table labeled "DEREG & 15% OPEC"). This decline in production would be consistent with an unemployment rate more than 1.5 percentage points higher than the DRI control solution which assumes a more gradual deregulation. In absolute terms the unemployment rate would apparently not go below about 8.8 percent, in the absence of offsetting fiscal or monetary policies.

As would be expected from the sharp price increases in all crude oil prices occurring at the end of the third quarter of 1975, the inflationary impact is greatest in the beginning and then tapers off. The rate of increase in the CPI

is expected to be greater than 8 percent in the fourth quarter compared with 5.4 percent in the DRI control. By the end of 1977 it is expected that the rate of increase in the CPI will have decreased to about 5.7 percent per year under the CRS assumptions and about 5.4 percent with the DRI assumptions. The same impact pattern can be observed in the WPI, however, at a substantially higher level. Since the greatest impact of crude oil price increases is on wholesale prices it is expected that the WPI would be the most sensitive measure of inflation to these type of shocks. In any event by 1977 the rate of increase of the WPI is rapidly falling back toward 5 percent from a high of an annual rate of increase of more than 13 percent immediately following the price increases.

If monetary policy, which is primarily under the control of the Federal Reserve Board, is allowed to accommodate the price increase the rate of real growth of GNP will not be as low as would otherwise be the case. In fact in 1976 real GNP would be likely to increase at a rate in excess of 5 percent per year compared with less than 3.5 percent if monetary policy is not accommodative (see "WITH MONEY" in following tables). The faster rate of growth in productivity would be accompanied by a steadily declining unemployment rate, declining to 7.8 percent by the end of 1977. This is nearly a full percentage point lower than without accommodation, but still higher than if deregulation is spread over five years as in the DRI control.

The cost of achieving the stronger economy is an increase in the rate of inflation. In terms of the CPI the added inflationary pressures are not felt until the end of 1976, but in the WPI the rate of increase would be somewhat higher almost immediately. With an expansionary monetary policy interest rates can be held down allowing purchasing power to keep pace with the inflation and thereby encouraging continued investment. While inflationary pressures would be more severe with accommodation, it is unlikely that the annual rate would be as high as in the recent past. So long as unemployment remains high the probability of renewed general inflation throughout the economy at rates in excess of 10 percent per year are slight. Even in the case of the WPI it should be noted that while it is increasing at a rate of more than 12 percent per year in 1976, the rate of increase in one of its major components—petroleum and fuel products—is about 35 percent. As a result the GNP deflator, the most broadly based inflation measure, rises at about the same rate with and without accommodating monetary policy, but accommodation encourages a much greater level of real production.

#### NO CHANGE

The results labeled "No Change" of the attached tables (p. 13) are based on the assumption that domestic crude oil will continue to be regulated and that there will be no increase in OPEC prices. This leads to what can be viewed as the "best case" since it leads to the highest rates of growth in real GNP, the lowest unemployment rates, and the lowest rates of inflation. These results, however, do not take into consideration any political problems that may result from these assumptions. The stronger performance of the economy given these assumptions can be traced to the higher levels of consumption that would be forthcoming, the higher levels of investment, and the lower interest rates.

#### TWO YEAR PHASED DEREGULATION

A more realistic set of assumptions is that (1) OPEC prices increase by 15 percent, and (2) domestic crude oil is deregulated over a 2 year period. As would be expected this would lead to economic results "better" than if deregulation were more rapid, but "not as good" as slower or no deregulation.

The rate of growth of real GNP would be 7 percent in the 1st quarter of 1976, but would fall sharply as the cumulative impact of the increasing energy prices is felt. Consequently the unemployment rate would fall to about 8 percent by the end of 1976, but then level off, as inflation steadily increased toward an annual rate of about 7 percent. (The rate of increase in the WPI would peak at an annual rate of about 12 percent.)

It is also likely, however, that because of the gradual impact of these assumed price increases, monetary policy would be quite effective in attenuating the negative impacts. Instead of the sharp increases in reserve creation and money growth necessary under the sudden deregulation, assumptions a more gradual increase would be called for. This would permit the monetary authorities more latitude in their actions and provide an opportunity to readjust to changing conditions.

DATA RESOURCES FORECAST OF THE U.S. ECONOMY  
[Billions of dollars—SAAR \*]

	1975— 4th quarter	1976 quarters		
		1st	2d	3d
Total consumption.....	974.8	1,000.2	1,025.8	1,051.6
Deregulation and 15 percent OPEC.....	979.9	1,005.5	1,028.4	1,051.7
With money.....	980.3	1,007.2	1,034.0	1,062.7
Durables, total.....	133.0	137.7	142.5	148.2
Deregulation and 15 percent OPEC.....	132.9	136.0	138.2	141.2
With money.....	133.2	137.2	141.7	147.7
Nondurables.....	422.6	432.2	442.1	451.9
Deregulation and 15 percent OPEC.....	426.0	437.4	447.1	456.8
With money.....	426.0	437.6	448.3	459.4
Services.....	419.2	430.3	441.2	451.4
Deregulation and 15 percent OPEC.....	421.0	432.2	443.1	453.7
With money.....	421.0	432.4	444.0	455.5
Business fixed investment.....	146.2	150.3	156.2	163.0
Deregulation and 15 percent OPEC.....	146.5	152.9	159.4	165.1
With money.....	146.6	153.3	160.7	168.3
Equipment.....	93.8	96.8	101.5	107.0
Deregulation and 15 percent OPEC.....	94.1	98.5	103.6	108.5
With money.....	94.2	98.8	104.5	110.6
Nonresidential construction.....	52.3	53.4	54.8	56.0
Deregulation and 15 percent OPEC.....	52.4	54.3	55.8	56.6
With money.....	52.4	54.5	56.3	57.6
Residential construction.....	45.3	51.2	56.2	62.2
Deregulation and 15 percent OPEC.....	45.4	50.0	51.7	53.7
With money.....	45.6	51.1	54.9	60.3
Inventory investment.....	-2.4	.8	3.1	2.7
Deregulation and 15 percent OPEC.....	-2.8	-.2	1.1	-1.0
With money.....	-2.8	-.0	1.7	.5
Net exports.....	4.1	3.0	2.8	3.7
Deregulation and 15 percent OPEC.....	2.3	3.1	3.8	6.8
With money.....	2.3	3.0	3.1	4.8
Federal military.....	90.9	91.4	92.5	93.4
Deregulation and 15 percent OPEC.....	90.9	91.4	92.5	93.4
With money.....	90.9	91.4	92.5	93.4
Federal civilian.....	46.3	47.2	47.6	47.8
Deregulation and 15 percent OPEC.....	46.3	47.2	47.6	47.8
With money.....	46.3	47.2	47.6	47.8
State and local.....	220.5	226.9	234.3	241.0
Deregulation and 15 percent OPEC.....	221.4	228.1	232.4	236.4
With money.....	221.4	228.2	235.8	242.8
Gross national product.....	1,525.6	1,570.9	1,618.5	1,665.5
Deregulation and 15 percent OPEC.....	1,529.9	1,578.1	1,616.9	1,653.8
With money.....	1,530.7	1,581.5	1,630.5	1,680.5
Annual rate of change.....	NA	12.4	12.7	12.1
Deregulation and 15 percent OPEC.....	NA	13.2	10.2	9.5
With money.....	NA	13.9	13.0	12.8
Real GNP (1958 dollars).....	805.1	819.1	832.5	845.9
Deregulation and 15 percent OPEC.....	802.4	813.1	818.4	822.5
With money.....	802.9	815.1	825.8	836.3
Annual rate of change.....	NA	7.1	6.7	6.6
Deregulation and 15 percent OPEC.....	NA	5.4	2.7	2.0
With money.....	NA	6.2	5.3	5.2
Implicit price deflator (58=1).....	1.8949	1.9178	1.9442	1.9690
Deregulation and 15 percent OPEC.....	1.9067	1.9409	1.9756	2.0109
With money.....	1.9065	1.9402	1.9745	2.0094
Annual rate of change.....	NA	4.9	5.6	5.2
Deregulation and 15 percent OPEC.....	NA	7.4	7.3	7.3
With money.....	NA	7.3	7.3	7.3
Consumer Price Index (67=1).....	1.636	1.659	1.683	1.706
Deregulation and 15 percent OPEC.....	1.647	1.676	1.706	1.737
With money.....	1.647	1.676	1.705	1.735
Annual rate of change.....	NA	5.8	5.9	5.6
Deregulation and 15 percent OPEC.....	NA	7.3	7.3	7.4
With money.....	NA	7.2	7.1	7.2
Wholesale price index (67=1).....	1.780	1.811	1.847	1.879
Deregulation and 15 percent OPEC.....	1.830	1.888	1.946	1.996
With money.....	1.830	1.889	1.949	2.001
Annual rate of change.....	NA	7.1	8.3	7.0
Deregulation and 15 percent OPEC.....	NA	13.4	12.9	10.6
With money.....	NA	13.6	13.2	11.2
Industrial production (67=1).....	1.146	1.175	1.201	1.228
Deregulation and 15 percent OPEC.....	1.140	1.165	1.176	1.181
With money.....	1.141	1.169	1.191	1.211
Annual rate of change.....	NA	10.3	9.3	9.2
Deregulation and 15 percent OPEC.....	NA	9.1	3.9	1.7
With money.....	NA	10.4	7.6	6.8
Housing starts (million units).....	1.541	1.652	1.726	1.923
Deregulation and 15 percent OPEC.....	1.532	1.530	1.410	1.481
With money.....	1.546	1.601	1.591	1.777
Unemployment rate (percent).....	9.2	8.8	8.5	8.1
Deregulation and 15 percent OPEC.....	9.2	9.0	8.8	8.8
With money.....	9.2	8.9	8.6	8.4

See footnote at end of table.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY—Continued

[Billions of dollars—SAAR \*]

	1975— 4th quarter	1976 quarters		
		1st	2d	3d
Federal surplus (NIA).....	-77.5	-70.6	-62.6	-54.2
Deregulation and 15 percent OPEC.....	-69.7	-65.6	-62.8	-59.7
With money.....	-69.4	-64.4	-58.2	-50.7
New AA Corp. Utility rate (percent).....	8.76	8.64	8.69	8.71
Deregulation and 15 percent OPEC.....	8.80	8.88	8.96	8.93
With money.....	8.77	8.79	8.82	8.83
New high-grade corporation bond rate (percent).....	8.44	8.34	8.40	8.42
Deregulation and 15 percent OPEC.....	8.48	8.57	8.65	8.63
With money.....	8.45	8.48	8.53	8.54
Treasury bill rate (percent).....	5.42	5.71	5.92	6.04
Deregulation and 15 percent OPEC.....	5.74	7.21	7.79	7.64
With money.....	5.53	6.50	6.56	6.24
Personal income.....	1,291.6	1,323.4	1,357.1	1,394.4
Deregulation and 15 percent OPEC.....	1,297.7	1,333.0	1,366.0	1,402.8
With money.....	1,298.1	1,334.2	1,372.1	1,415.0
Disposable income.....	1,111.2	1,138.6	1,166.7	1,194.3
Deregulation and 15 percent OPEC.....	1,117.1	1,147.8	1,176.0	1,204.0
With money.....	1,117.3	1,148.8	1,180.9	1,213.7
Savings rate (percent).....	9.8	9.7	9.6	9.5
Deregulation and 15 percent OPEC.....	9.8	10.0	10.1	10.3
With money.....	9.8	9.9	10.0	10.1
Corporation capital consolidation allowance.....	86.7	88.6	90.5	92.4
Deregulation and 15 percent OPEC.....	86.7	88.6	90.5	92.4
With money.....	86.7	88.6	90.5	92.4
Profits before tax.....	116.9	123.8	134.2	138.2
Deregulation and 15 percent OPEC.....	140.7	140.6	141.9	137.7
With money.....	141.1	141.8	148.1	149.6
Profits after tax.....	71.9	76.1	82.5	84.9
Deregulation and 15 percent OPEC.....	86.5	86.1	87.2	84.6
With money.....	86.7	87.2	91.0	92.0
Annual rate of change.....	NA	25.6	38.1	12.5
Deregulation and 15 percent OPEC.....	NA	-1.9	5.4	-11.2
With money.....	NA	2.1	18.9	4.1
4th quarter percent change.....	-9.6	22.1	NA	NA
Deregulation and 15 percent OPEC.....	NA	NA	NA	NA
With money.....	NA	NA	NA	NA
Ret. unit car sales, total.....	8.6	8.9	9.2	9.5
Deregulation and 15 percent OPEC.....	8.5	8.5	8.5	8.4
With money.....	8.6	8.7	8.9	9.1

	1976—4th quarter	1977 quarters		
		1st	2d	3d
Total consumption.....	1,080.4	1,106.8	1,132.7	1,159.9
Deregulation and 15 percent OPEC.....	1,078.3	1,104.0	1,131.3	1,161.1
With money.....	1,094.4	1,124.0	1,153.3	1,183.2
Durables (total).....	154.7	159.2	164.3	169.8
Deregulation and 15 percent OPEC.....	145.0	148.0	153.0	159.6
With money.....	154.6	159.6	165.3	171.2
Nondurables.....	462.7	472.3	481.1	490.3
Deregulation and 15 percent OPEC.....	467.5	477.4	486.9	497.0
With money.....	471.4	482.4	492.7	503.1
Services.....	463.0	475.2	487.3	499.8
Deregulation and 15 percent OPEC.....	465.7	478.6	491.4	504.6
With money.....	466.4	482.0	495.3	508.8
Business fixed investment.....	170.6	178.4	184.6	188.6
Deregulation and 15 percent OPEC.....	170.1	174.4	177.1	177.9
With money.....	175.9	183.0	188.3	191.0
Equipment.....	113.1	119.9	125.5	129.0
Deregulation and 15 percent OPEC.....	112.9	117.4	120.8	122.3
With money.....	117.0	123.5	128.7	131.6
Nonresidential construction.....	57.4	58.5	59.1	59.6
Deregulation and 15 percent OPEC.....	57.1	57.0	56.3	55.6
With money.....	58.9	59.5	59.6	59.5
Residential construction.....	68.1	70.8	71.6	71.7
Deregulation and 15 percent OPEC.....	57.0	59.8	63.0	66.8
With money.....	67.0	71.7	74.7	76.3
Inventory investment.....	3.1	3.2	2.6	2.8
Deregulation and 15 percent OPEC.....	-3.0	-5.1	-7.1	-7.4
With money.....	-3	-1.1	-2.2	-2.3
Net exports.....	4.2	4.3	4.6	4.9
Deregulation and 15 percent OPEC.....	10.0	12.2	14.0	15.1
With money.....	6.2	6.6	7.0	7.8
Federal military.....	97.2	98.0	98.5	99.0
Deregulation and 15 percent OPEC.....	97.2	98.0	98.5	99.0
With money.....	97.2	98.0	98.5	99.0
Federal civilian.....	48.8	49.7	50.2	50.5
Deregulation and 15 percent OPEC.....	48.8	49.7	50.2	50.5
With money.....	48.8	49.7	50.2	50.5

See footnote at end of table.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY—Continued

	1976—4th quarter	1977 quarters		
		1st	2d	3d
State and local.....	247.1	253.1	259.0	265.6
Deregulation and 15 percent OPEC.....	243.1	249.6	256.3	263.4
With money.....	249.0	255.1	261.0	267.7
Gross national product.....	1,719.5	1,764.2	1,803.8	1,843.0
Deregulation and 15 percent OPEC.....	1,701.5	1,742.6	1,788.3	1,826.4
With money.....	1,738.1	1,786.9	1,830.8	1,873.2
Annual rate of change.....	13.6	10.8	9.3	9.0
Deregulation and 15 percent OPEC.....	12.0	10.0	9.7	10.0
With money.....	14.4	11.7	10.2	9.6
Federal GNP (1958 dollars).....	860.0	872.5	882.2	891.8
Deregulation and 15 percent OPEC.....	829.8	836.3	843.7	853.1
With money.....	848.6	858.5	866.4	874.2
Annual rate of change.....	7.2	5.7	4.5	4.4
Deregulation and 15 percent OPEC.....	3.6	3.2	3.6	4.6
With money.....	6.0	4.7	3.7	3.6
Implicit price deflator (58=1).....	1.9980	2.0219	2.0446	2.0666
Deregulation and 15 percent OPEC.....	2.0504	2.0836	2.1138	2.1409
With money.....	2.0481	2.0815	2.1131	2.1429
Annual rate of change.....	6.0	4.9	4.6	4.4
Deregulation and 15 percent OPEC.....	8.1	6.6	5.9	5.2
With money.....	7.9	6.7	6.2	5.8
Consumer Price Index (67=1).....	1.730	1.754	1.778	1.801
Deregulation and 15 percent OPEC.....	1.767	1.797	1.824	1.850
With money.....	1.766	1.796	1.825	1.853
Annual rate of change.....	5.7	5.7	5.5	5.4
Deregulation and 15 percent OPEC.....	7.2	6.9	6.3	5.7
With money.....	7.2	7.0	6.7	6.3
Wholesale Price Index (67=1).....	1.911	1.943	1.973	2.001
Deregulation and 15 percent OPEC.....	2.039	2.083	2.124	2.162
With money.....	2.047	2.094	2.138	2.176
Annual rate of change.....	7.0	6.9	6.3	5.8
Deregulation and 15 percent OPEC.....	8.9	8.9	8.2	7.2
With money.....	9.5	9.5	8.7	7.5
Industrial production (67=1).....	1.259	1.283	1.300	1.316
Deregulation and 15 percent OPEC.....	1.191	1.198	1.207	1.220
With money.....	1.235	1.253	1.266	1.278
Annual rate of change.....	10.7	7.8	5.4	4.9
Deregulation and 15 percent OPEC.....	3.4	2.5	2.9	4.7
With money.....	8.4	6.1	4.1	3.7
Housing starts (million units).....	2.033	2.010	1.903	1.892
Deregulation and 15 percent OPEC.....	1.583	1.635	1.646	1.761
With money.....	1.943	1.975	1.893	1.885
Unemployment rate (percent).....	7.8	7.6	7.2	7.2
Deregulation and 15 percent OPEC.....	8.2	8.8	8.3	8.8
With money.....	8.2	8.0	7.9	7.8
Federal surplus (NIA).....	-50.0	-45.8	-42.7	-42.7
Deregulation and 15 percent OPEC.....	-60.1	-58.1	-55.3	-55.3
With money.....	-47.9	-43.6	-40.4	-41.2
New AA corporation utility rate (percent).....	8.77	8.80	8.95	8.86
Deregulation and 15 percent OPEC.....	8.96	9.05	9.03	8.87
With money.....	8.93	9.05	9.25	9.18
New high-grade corporation bond rate (percent).....	8.48	8.51	8.65	8.57
Deregulation and 15 percent OPEC.....	8.66	8.65	8.73	8.58
With money.....	8.64	8.75	8.94	8.88
Treasury bill rate (percent).....	6.13	6.40	6.91	6.67
Deregulation and 15 percent OPEC.....	7.24	7.03	7.24	6.88
With money.....	6.02	6.31	6.90	6.75
Personal income.....	1,433.1	1,465.8	1,495.3	1,526.8
Deregulation and 15 percent OPEC.....	1,441.4	1,474.8	1,506.5	1,541.1
With money.....	1,458.6	1,496.7	1,531.1	1,566.9
Disposable income.....	1,226.4	1,252.8	1,276.6	1,302.1
Deregulation and 15 percent OPEC.....	1,236.2	1,263.6	1,289.5	1,317.7
With money.....	1,249.9	1,281.1	1,309.2	1,338.5
Saving rate (percent).....	9.5	9.3	8.9	8.6
Deregulation and 15 percent OPEC.....	10.4	10.0	9.9	9.6
With money.....	10.4	9.9	9.6	9.3
Corporation capital construction allowance.....	94.3	96.4	98.4	100.5
Deregulation and 15 percent OPEC.....	94.4	96.4	98.5	100.6
With money.....	94.4	96.4	98.5	100.7
Profits before tax.....	146.3	151.5	154.0	157.2
Deregulation and 15 percent OPEC.....	138.2	141.5	144.2	147.0
With money.....	153.8	158.7	161.0	161.8
Profits after tax.....	89.9	93.1	94.7	96.6
Deregulation and 15 percent OPEC.....	84.9	87.0	88.7	90.4
With money.....	94.5	97.5	99.0	99.4
Annual rate of change.....	25.7	15.0	6.7	8.6
Deregulation and 15 percent OPEC.....	1.3	10.0	8.0	8.0
With money.....	11.6	13.4	6.0	1.9
4th quarter percent change.....	25.1	22.4	14.8	13.8
Deregulation and 15 percent OPEC.....	-1.8	1.1	1.7	6.8
With money.....	9.0	11.9	8.7	8.1
Ret. unit car sales, total.....	9.8	10.0	10.2	10.5
Deregulation and 15 percent OPEC.....	8.4	8.4	8.6	9.0
With money.....	9.3	9.4	9.6	9.9

\*ET=4:30.4, approximately, CRU=.00151.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY

[In billions of dollars—SAAR\*]

	1975	1976	1977	1977:4
Total consumption	942.632	1,039.486	1,145.982	1,184.6
Deregulation and 15 percent OPEC	943.901	1,040.987	1,146.441	1,189.4
With money	944.018	1,049.566	1,167.547	1,209.7
Durables (total)	128.684	145.797	166.675	173.3
Deregulation and 15 percent OPEC	128.661	140.119	156.343	164.8
With money	128.746	145.302	167.700	174.7
Nondurables	410.489	447.232	485.682	499.0
Deregulation and 15 percent OPEC	411.326	452.199	491.936	506.5
With money	411.343	454.210	497.727	512.6
Services	403.459	446.457	493.620	518.1
Deregulation and 15 percent OPEC	403.930	448.669	498.162	518.1
With money	403.930	450.054	502.121	522.4
Business fixed investment	144.672	160.017	185.772	191.4
Deregulation and 15 percent OPEC	144.757	161.851	176.914	178.2
With money	144.782	164.554	188.649	192.3
Equipment	93.151	104.625	126.310	130.9
Deregulation and 15 percent OPEC	93.228	105.897	120.798	122.7
With money	93.242	107.720	129.069	132.5
Nonresidential construction	51.546	55.391	59.461	60.6
Deregulation and 15 percent OPEC	51.554	55.954	56.116	55.6
With money	51.565	56.834	59.580	59.8
Residential construction	38.982	59.411	71.274	70.9
Deregulation and 15 percent OPEC	39.002	53.103	64.922	70.1
With money	39.052	58.332	74.758	76.3
Inventory investment	-13.750	2.425	2.855	2.8
Deregulation and 15 percent OPEC	-13.844	-0.757	-6.636	-6.9
With money	-13.838	0.469	-1.994	-2.3
Net exports	6.738	3.441	4.931	6.0
Deregulation and 15 percent OPEC	6.299	5.895	14.352	16.1
With money	6.295	4.291	7.745	9.6
Federal military	87.375	93.625	99.100	100.9
Deregulation and 15 percent OPEC	87.375	93.625	99.100	100.9
With money	87.375	93.625	99.100	100.9
Federal civilian	43.900	47.850	50.525	51.7
Deregulation and 15 percent OPEC	43.900	47.850	50.525	51.7
With money	43.900	47.850	50.525	51.7
State and local	212.737	237.343	262.328	271.7
Deregulation and 15 percent OPEC	212.973	235.020	259.703	269.5
With money	212.974	238.945	264.410	273.9
Gross national product	1,463.283	1,643.596	1,822.761	1,880.0
Deregulation and 15 percent OPEC	1,464.365	1,637.575	1,805.316	1,869.0
With money	1,464.562	1,657.633	1,850.739	1,912.0
Annual rate of change	4.7	12.3	10.9	8.3
Deregulation and 15 percent OPEC	NA	11.8	10.2	9.7
With money	NA	13.2	11.6	8.6
Real GNP (1958 dollars)	788.6	839.5	886.0	897.6
Deregulation and 15 percent OPEC	787.9	820.9	848.3	860.2
With money	788.0	831.5	869.1	877.5
Annual rate of change	-4.0	6.5	5.5	2.6
Deregulation and 15 percent OPEC	NA	4.2	3.3	3.3
With money	NA	5.5	4.5	1.6
Implicit price deflator (58=1)	1.8552	1.9572	2.0569	2.0945
Deregulation and 15 percent OPEC	1.8582	1.9944	2.1278	2.1728
With money	1.8581	1.9931	2.1291	2.1789
Annual rate of change	9.0	5.5	5.1	5.5
Deregulation and 15 percent OPEC	NA	7.3	6.7	6.1
With money	NA	7.3	6.8	6.9
Consumer price index (67=1)	1.604	1.695	1.790	1.825
Deregulation and 15 percent OPEC	1.606	1.722	1.837	1.876
With money	1.606	1.720	1.839	1.881
Annual rate of change	8.6	5.7	5.6	5.4
Deregulation and 15 percent OPEC	NA	7.2	6.7	5.7
With money	NA	7.1	6.9	6.3
Wholesale price index (67=1)	1.743	1.862	1.986	2.026
Deregulation and 15 percent OPEC	1.756	1.967	2.141	2.195
With money	1.756	1.971	2.155	2.211
Annual rate of change	8.9	6.8	6.6	5.1
Deregulation and 15 percent OPEC	NA	12.1	8.8	6.3
With money	NA	12.3	9.3	6.6
Industrial production (67=1)	1.119	1.216	1.306	1.324
Deregulation and 15 percent OPEC	1.117	1.178	1.214	1.232
With money	1.117	1.201	1.269	1.281
Annual rate of change	-10.4	8.7	7.4	2.5
Deregulation and 15 percent OPEC	NA	5.5	3.1	3.8
With money	NA	7.5	5.7	1.0
Housing starts (mil. units)	1.2	1.8	1.9	1.840
Deregulation and 15 percent OPEC	1.2	1.5	1.7	1.819
With money	1.2	1.7	1.9	1.824
Unemployment rate (percent)	9.0	8.3	7.3	7.1
Deregulation and 15 percent OPEC	9.0	8.8	8.8	8.7
With money	9.0	8.6	7.9	7.8

See footnote at end of table.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY—Continued

[In billions of dollars—SAAR\*]

	1975	1976	1977	1977:4
Federal surplus (NIA).....	-77.469	-59.355	-43.318	-42.0
Deregulation and 15 percent OPEC.....	-75.514	-62.045	-55.563	-53.6
With money.....	-75.445	-55.278	-41.624	-41.4
New AA Corp. utility rate (percent).....	9.10	8.70	8.86	8.84
Deregulation and 15 percent OPEC.....	9.11	8.93	8.91	8.79
With money.....	9.10	8.84	9.17	9.18
New high-grade Corp. Bond rate (percent).....	8.71	8.41	8.57	8.55
Deregulation and 15 percent OPEC.....	8.72	8.63	8.61	8.49
With money.....	8.72	8.55	8.86	8.87
Treasury bill rate (percent).....	5.46	5.95	6.64	6.57
Deregulation and 15 percent OPEC.....	5.54	7.47	6.97	6.74
With money.....	5.49	6.33	6.66	6.68
Personal income.....	1,239.767	1,376.980	1,510.736	1,555.0
Deregulation and 15 percent OPEC.....	1,241.925	1,385.795	1,523.864	1,573.1
With money.....	1,241.371	1,394.951	1,548.348	1,598.6
Disposable income.....	1,071.373	1,181.509	1,289.105	1,324.9
Deregulation and 15 percent OPEC.....	1,072.829	1,191.020	1,303.587	1,343.5
With money.....	1,072.887	1,198.314	1,323.223	1,364.2
Saving rate (percent).....	9.5	9.6	8.8	8.2
Deregulation and 15 percent OPEC.....	9.5	10.2	9.7	9.2
With money.....	9.5	10.0	9.5	9.0
Corp. Cap. Cors. allow.....	83.938	91.442	99.499	102.7
Deregulation and 15 percent OPEC.....	83.938	91.455	99.530	102.7
With money.....	83.938	91.460	99.625	102.9
Profits before tax.....	170.513	135.597	155.325	158.6
Deregulation and 15 percent OPEC.....	113.459	139.440	145.576	149.5
With money.....	118.566	148.355	160.700	161.3
Profits after tax.....	66.105	83.341	95.467	97.5
Deregulation and 15 percent OPEC.....	69.760	85.703	89.474	91.9
With money.....	69.825	91.183	98.770	99.1
Annual rate of change.....	-22.2	26.1	14.5	3.5
Deregulation and 15 percent OPEC.....	NA	22.9	4.4	6.9
With money.....	NA	30.6	8.3	-1.3
4 quarters percent change.....	-22.2	26.1	14.5	8.4
Deregulation and 15 percent OPEC.....	NA	22.9	4.4	8.2
With money.....	NA	30.6	8.3	4.9
Ret. unit car sales—Total.....	8.2	9.4	10.3	10.5
Deregulation and 15 percent OPEC.....	8.2	8.5	8.8	9.2
With money.....	8.2	9.0	9.7	9.9

\*ET=4:30.4, approximately, CRU=.00151.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY

[Billions of dollars—SAAR\*]

	1975 quarters		1976 quarters	
	3d	4th	1st	2d
Total consumption.....	952.6	973.2	997.4	1,022.5
Durables (total).....	130.0	133.2	138.5	144.1
Nondurables.....	414.8	421.5	429.6	438.6
Services.....	407.8	418.5	429.3	439.7
Business fixed investment.....	143.6	146.1	149.0	154.1
Equipment.....	92.5	93.8	96.1	100.1
Nonresidential construction.....	51.0	52.3	53.0	54.0
Residential construction.....	39.6	45.2	51.3	57.3
Inventories.....	-11.1	-2.3	1.2	3.9
Net exports.....	7.9	5.1	4.3	3.7
Federal military.....	87.6	90.9	91.4	92.5
Federal civilian.....	44.1	46.3	47.2	47.6
State and local.....	215.1	220.2	226.5	233.6
Gross national product.....	1,479.4	1,524.7	1,568.2	1,615.3
Annual rate of change.....	NA	12.8	11.9	12.6
Real GNP (1958 dollars).....	791.8	806.6	822.3	838.3
Annual rate of change.....	NA	7.7	8.0	8.0
Implicit price deflator (58=1).....	1.8683	1.8904	1.9072	1.9269
Annual rate of change.....	NA	4.8	3.6	4.2
Consumer price index (67=1).....	1.615	1.632	1.650	1.670
Annual rate of change.....	NA	4.3	4.6	4.7
Wholesale price index (67=1).....	1.757	1.762	1.773	1.790
Annual rate of change.....	NA	1.2	2.5	4.0

See footnote at end of table.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY—Continued

[Billions of dollars—SAAR\*]

	1975 quarters		1976 quarters	
	3d	4th	1st	2d
Industrial production (67=1).....	1.117	1.149	1.179	1.211
Annual rate of change.....	NA	11.9	11.0	11.0
Housing starts (mil. units).....	1.328	1.539	1.678	1.828
Unemployment rate (percent).....	9.3	9.1	8.8	8.3
Federal surplus (NIA).....	-73.5	-80.2	-73.7	-64.8
New AA Corp. utility rate (percent).....	9.02	8.76	8.57	8.57
New high-grade corp. bond rate (percent).....	8.67	8.44	8.28	8.28
Treasury bill rate (percent).....	5.28	5.40	5.27	5.16
Personal income.....	1,257.8	1,289.8	1,319.5	1,350.5
Disposable income.....	1,083.1	1,109.4	1,134.7	1,160.2
Saving rate (percent).....	9.5	9.8	9.6	9.4
Corp. cap. cons. allow.....	84.8	86.7	88.6	90.5
Profits before tax.....	110.6	108.3	113.2	125.1
Profits after tax.....	68.0	66.6	69.6	76.9
Annual rate of change.....	NA	-8.1	19.5	49.2
4th qtr. percent change.....	-27.9	-16.3	11.7	NA
Ret. unit car sales—Total.....	8.1	8.7	9.1	9.6

\*ET=4:30.4, approximately, CRU=.00151.

## DATA RESOURCES FORECAST OF THE U.S. ECONOMY

[Billions of dollars—SAAR\*]

	1976 quarters		1977 quarters	
	3d	4th	1st	2d
Total consumption.....	1,049.2	1,078.2	1,105.7	1,132.4
Durables (total).....	151.5	159.5	166.0	172.4
Nondurables.....	448.1	458.1	467.3	475.9
Services.....	449.7	460.6	472.4	484.2
Business fixed investment.....	160.6	168.9	178.1	186.5
Equipment.....	105.5	112.0	119.5	126.5
Nonresidential construction.....	55.2	56.9	58.6	60.1
Residential construction.....	65.1	72.9	77.2	78.8
Inventory investment.....	4.3	6.1	7.8	8.8
Net exports.....	5.8	4.7	3.1	2.0
Federal military.....	93.4	97.2	98.0	98.5
Federal civilian.....	47.8	48.8	49.7	50.2
State and local.....	240.3	246.5	252.9	259.4
Gross national product.....	1,666.6	1,723.4	1,772.6	1,816.6
Annual rate of change.....	13.3	14.3	11.9	10.3
Real GNP (1958 dollars).....	856.4	876.5	894.5	909.4
Annual rate of change.....	9.0	9.7	8.4	6.8
Implicit price deflator (58-1).....	1.9460	1.9661	1.9817	1.9976
Annual rate of change.....	4.0	4.2	3.2	3.3
Consumer price index (67-1).....	1.688	1.706	1.725	1.744
Annual rate of change.....	4.5	4.3	4.4	4.6
Wholesale price index (67-1).....	1.806	1.822	1.842	1.863
Annual rate of change.....	3.5	3.7	4.5	4.5
Industrial production (67-1).....	1.248	1.294	1.335	1.367
Annual rate of change.....	12.7	15.8	13.2	9.9
Housing starts (mil. units).....	2.116	2.298	2.316	2.209
Unemployment rate (percent).....	7.9	7.4	6.9	6.5
Federal surplus (NIA).....	-53.7	-47.3	-40.2	-34.2
New AA Corp. utility rate (%).....	8.54	8.56	8.55	8.68
New high-grade corp. bond rate (%).....	8.26	8.27	8.26	8.40
Treasury bill rate (percent).....	5.09	5.15	5.48	6.19
Personal income.....	1,387.5	1,423.8	1,455.9	1,485.2
Disposable income.....	1,187.0	1,216.7	1,242.2	1,265.4
Saving rate (percent).....	9.2	9.0	8.6	8.1
Corp. cap cons. allow.....	92.4	94.3	96.3	98.4
Profits before tax.....	133.4	145.0	155.0	162.3
Profits after tax.....	82.0	89.1	95.3	99.7
Annual rate of change.....	28.9	39.9	30.5	20.2
4 qtr. percent change.....	20.6	33.9	36.9	29.7
Ret. unit car sales—total.....	10.1	10.6	11.0	11.4

\*ET=4:30.4, approximately, CRU=.00151.



## DATA RESOURCES FORECAST OF THE U.S. ECONOMY

[Billions of dollars—SAAR\*]

	1977 quarters	
	3d	4th
Total consumption.....	1,159.8	1,183.7
Durables (total).....	178.6	182.1
Nondurables.....	484.8	493.2
Services.....	496.3	508.4
Business fixed investment.....	193.2	198.4
Equipment.....	131.6	135.1
Nonresidential construction.....	61.6	63.4
Residential construction.....	78.3	75.6
Inventory investment.....	10.2	11.0
Net exports.....	1.3	1.7
Federal military.....	99.0	100.9
Federal civilian.....	50.5	51.7
State and local.....	266.6	273.5
Gross national product.....	1,858.9	1,896.6
Annual rate of change.....	9.6	8.4
Real GNP (1958 dollars).....	923.0	931.1
Annual rate of change.....	6.1	3.5
Implicit price deflator (58=1).....	2,0139	2,0370
Annual rate of change.....	3.3	4.7
Consumer price index (67=1).....	1,764	1,785
Annual rate of change.....	4.7	4.9
Wholesale price index (67=1).....	1,882	1,899
Annual rate of change.....	4.2	3.7
Industrial production (67=1).....	1,395	1,410
Annual rate of change.....	8.4	4.4
Housing starts (million units).....	2,147	2,014
Unemployment rate (percent).....	6.1	5.9
Federal surplus (NIA).....	-32.3	-30.7
New AA corporate utility rate (percent).....	8.61	8.62
New High-grad corporate bond rate (percent).....	8.33	8.34
Treasury bill rate (percent).....	6.23	6.35
Personal income.....	1,516.3	1,544.0
Disposable income.....	1,290.5	1,312.8
Saving rate (percent).....	7.8	7.5
Corporate capital consolidated allowance.....	100.5	102.7
Profits before tax.....	168.0	170.2
Profits after tax.....	103.3	104.6
Annual rate of change.....	14.8	5.3
4th quarter percent change.....	26.0	17.3
Ret. unit car sales, total.....	11.8	11.8

\*ET=4:30.4, approximately, CRU=.00151.

DATA RESOURCES FORECAST OF THE U.S. ECONOMY

[In billions of dollars—SAAR \*]

	1975 quarters		1976 quarters				1977 quarters			
	3d	4th	1st	2d	3d	4th	1st	2d	3d	4d
Total consumption.....	952.2	975.3	1,001.1	1,027.2	1,053.7	1,082.5	1,108.7	1,134.2	1,159.8	1,184.8
Durables (total).....	129.9	132.9	137.5	141.9	147.0	152.3	155.4	158.5	162.0	164.3
Nondurables.....	414.6	423.0	433.0	443.5	454.2	465.7	476.1	486.1	495.5	505.0
Services.....	407.7	419.4	430.6	441.8	452.5	464.5	477.2	489.7	502.3	515.5
Business fixed investment.....	143.6	146.2	150.7	156.9	163.9	171.5	178.9	184.5	187.6	188.5
Equipment.....	92.5	93.9	97.1	101.9	107.6	113.8	120.3	125.6	128.5	129.1
Nonresidential construction.....	51.0	52.4	53.6	55.0	56.2	57.7	58.6	58.9	59.2	59.4
Residential construction.....	39.6	45.3	51.1	55.7	60.9	65.5	66.7	66.0	64.8	63.5
Inventory investment.....	-11.1	-2.4	.6	2.7	2.0	1.7	.9	-1.0	-2.3	-3.6
Net exports.....	7.0	2.4	2.8	3.1	4.3	5.4	6.2	7.6	10.0	12.3
Federal military.....	87.6	90.9	91.4	92.5	93.4	97.2	98.0	98.5	99.0	100.9
Federal civilian.....	44.1	46.3	47.2	47.6	47.8	48.8	49.7	50.2	50.5	51.7
State and local.....	215.1	220.6	227.1	234.6	241.4	247.7	253.7	256.2	263.2	269.6
Gross national product.....	1,478.0	1,524.6	1,571.9	1,620.2	1,667.5	1,720.2	1,762.7	1,796.2	1,832.5	1,867.6
Annual rate of change.....	NA	13.2	13.0	12.9	12.2	13.3	10.2	7.8	8.3	7.9
Real GNP (1958 dollars).....	791.3	804.3	818.0	830.2	841.4	853.2	861.0	863.6	868.2	869.6
Annual rate of change.....	NA	6.7	7.0	6.1	5.5	5.8	3.7	1.2	2.2	.6
Implicit price deflator (58=1).....	1.8678	1.8955	1.9217	1.9515	1.9819	2.0162	2.0473	2.0800	2.1106	2.1475
Annual rate of change.....	NA	6.1	5.7	6.4	6.4	7.1	6.3	6.5	6.0	7.2
Consumer price index (67=1).....	1.615	1.638	1.662	1.688	1.715	1.743	1.771	1.803	1.831	1.861
Annual rate of change.....	NA	5.9	6.0	6.4	6.5	6.6	6.8	7.3	6.4	6.7
Wholesale price index (67=1).....	1.756	1.789	1.824	1.870	1.915	1.961	2.010	2.067	2.113	2.154
Annual rate of change.....	NA	7.5	8.3	10.4	10.0	9.9	10.3	12.0	9.2	7.8
Industrial production (67=1).....	1.117	1.145	1.173	1.197	1.219	1.243	1.257	1.258	1.262	1.259
Annual rate of change.....	NA	10.4	10.1	8.3	7.6	8.2	4.6	.4	1.2	-1.1
Housing starts (mil. units).....	1.327	1.540	1.639	1.684	1.835	1.887	1.805	1.645	1.607	1.549
Unemployment rate (percent).....	9.3	9.2	8.9	8.5	8.3	8.0	7.9	7.9	7.9	8.0
Federal surplus (NIA).....	-73.9	-76.6	-69.8	-61.3	-52.7	-49.5	-46.5	-44.2	-47.7	-49.4
New AA Corp. utility rate (percent).....	9.01	8.75	8.67	8.75	8.81	8.91	8.98	9.14	9.07	9.05
New High-grade corp. bond rate (percent).....	8.66	8.43	8.37	8.46	8.52	8.61	8.68	8.84	8.77	8.75
Treasury bill rate (percent).....	5.27	5.44	5.87	6.27	6.62	6.91	7.34	7.96	7.66	7.55
Federal income.....	1,256.9	1,291.5	1,324.9	1,359.9	1,399.4	1,439.6	1,473.9	1,503.7	1,536.2	1,566.0
Disposable income.....	1,082.3	1,111.3	1,140.0	1,169.5	1,199.2	1,232.8	1,261.0	1,285.7	1,312.6	1,337.1
Saving rate (percent).....	9.5	9.8	9.7	9.7	9.7	9.8	9.7	9.4	9.3	9.1
Corp. cap. cons. allow.....	84.8	86.7	88.6	90.5	92.4	94.4	96.4	98.4	100.5	102.7
Profits before tax.....	110.3	120.7	126.5	138.9	144.1	151.2	155.7	161.3	157.5	155.4
Profits after tax.....	67.8	74.2	77.8	85.4	88.6	93.0	95.7	99.1	96.8	95.5
Annual rate of change.....	NA	43.3	21.0	45.2	15.9	21.2	12.4	15.1	-9.0	-5.2
4th quarter percent change.....	-28.1	-6.7	24.8	NA	30.7	25.3	23.1	16.1	9.3	2.8
Ret. unit car sales-total.....	8.1	8.6	8.9	9.1	9.2	9.4	9.3	9.3	9.4	9.2

\*ET=4:30.4, approximately, CRU=.00151.

Representative LONG. Gentlemen, on behalf of the subcommittee I am most appreciative of your coming. I think you have contributed materially in this regard. We are going to continue our hearings on this entire subject, and if either of you would have something that you would like to contribute either verbally at this time or in writing subsequent to the closing of these hearings, we would be most pleased to have them because I know that I have the view of the other members of the subcommittee and as a members of the full Joint Economic Committee and having respect for your views, they come as a result of the expertise that you had in this over many years, and we do appreciate your coming.

Do either of you have any further comments you would like to make?

Mr. SCHULTZE. I just wanted to nail down one quick point just to make sure when you asked about the size of the tax cut, that it is on top of extending the 1975 cut, not including it.

Representative LONG. Right, it would be added to it. Certainly it is not overall a very optimistic picture and as you and I were discussing before, Mr. Schultze, that if we take the lack of confidence in the general questioning that the American people are doing about the ability of our government to function and to handle these very complicated economic problems that are arising in the world today and what has happened over the past 8 years and each one in turn, each recession, is seemingly getting deeper as it comes up on us, that if we flirt with the risk of another one as a consequence of these things that appear to be taking shape now, including the administration's policy in this regard, I think it is a matter to cause us a great deal of concern.

Thank you very much. The subcommittee stands adjourned.

[Whereupon, at 12:10 p.m., the subcommittee adjourned, subject to the call of the Chair.]

