

Congress of the United States  
JOINT COMMITTEE ON TAXATION  
Washington, D.C. 20515

MEMORANDUM

February 20, 1981

TO: Members of the House Ways and Means Committee and  
Senate Finance Committee

FROM: Mark McConaghy

SUBJECT: Windfall profit tax revenue estimates

The staff has completed revised estimates of the revenue effects of the crude oil windfall profit tax and of various proposals to reduce that tax. The estimates are based on new assumptions about oil production, the classification of taxable oil into the three tiers of the tax, and oil prices.

The staff's estimates are made with a computer model which was originally built by the Joint Committee staff and the Treasury staff. This model takes account of "feedback" effects of the tax, by assuming changes in oil drilling in response to changes in the tax rate on newly discovered oil.

Table 1 presents estimates of the total net revenue expected from the tax in calendar years 1980 to 1990. The net windfall profit tax revenue equals the increase in total federal revenues resulting from the windfall profit tax. This is the revenue collected from the tax itself (the gross windfall profit tax) minus the reduction in corporate and individual income taxes assumed to result from the imposition of the windfall profit tax. Table 1 also shows the revenue raised by each of the three tiers of the tax and shows separately the amount raised from independent producers.

Table 2 shows the revenue loss from 14 proposals to reduce the windfall profit tax. Table 3 shows estimates of the effects of President Reagan's order decontrolling oil prices. This includes the increase in gross revenues of oil producers and royalty owners, the gross and net windfall profit tax, the additional income tax paid by oil producers and royalty owners, and the additional federal royalties.

Table 4 shows some of the assumptions about oil prices and quantities on which the estimates are based.

Calendar Year Estimated Net Windfall Profit Tax Revenues by Tax Tier and Economic Interest<sup>1/</sup>

(billions of dollars)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1980-1990 Total <sup>2/</sup>
Total Revenues:	5.7	18.0	19.6	20.7	21.8	22.9	23.8	24.7	25.5	26.2	26.9	235.9 <sup>2/</sup>
Tier 1	3.5	14.8	15.6	15.9	16.1	16.2	16.2	15.9	15.5	15.1	14.6	159.2
Major & Royalty	3.3	14.0	14.7	15.0	15.3	15.4	15.4	15.1	14.8	14.4	14.0	151.2
Independent <sup>3/</sup>	.2	.8	.9	.9	.8	.8	.8	.8	.7	.7	.6	8.0
Tier 2	1.7	2.3	2.6	3.0	3.3	3.6	3.9	4.1	4.4	4.6	4.7	38.2
Major & Royalty	1.3	1.8	2.0	2.4	2.7	2.9	3.2	3.4	3.6	3.8	3.9	31.0
Independent <sup>3/</sup>	.4	.5	.6	.6	.6	.7	.7	.7	.8	.8	.8	7.2
Tier 3	.6	.9	1.4	1.9	2.4	3.0	3.8	4.7	5.6	6.6	7.6	38.5 <sup>2/</sup>
Major & Royalty	.5	.7	1.2	1.6	2.0	2.5	3.2	3.9	4.7	5.6	6.4	32.3
Independent <sup>3/</sup>	.1	.2	.2	.3	.4	.5	.6	.8	.9	1.0	1.2	6.2
Total Major & Royalty	5.0	16.5	17.9	18.9	20.0	20.9	21.7	22.4	23.1	23.7	24.3	214.5
Total Independent <sup>3/</sup>	.7	1.5	1.7	1.8	1.8	2.0	2.1	2.3	2.4	2.5	2.6	21.4

Detail may not add to total due to rounding.

<sup>1/</sup> Revenues were estimated without regard to the phase-out of the tax, which under current assumptions would begin in September 1990 and have a minor impact on total revenues in 1990.

<sup>2/</sup> Includes a small amount of income tax revenue in 1979 because the estimates assume that the tax on newly discovered oil reduced intangible drilling deductions in that year.

<sup>3/</sup> Independent economic interests as defined in the Crude Oil Windfall Profit Tax Act of 1980.

Calendar Year Estimates of Reduction in Net Windfall Profit Tax Revenues from Various Proposals

(billions of dollars)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1981-1990 Total
Exempt Independent Producers <sup>2/</sup>	1.5	1.7	1.8	1.8	2.0	2.1	2.3	2.4	2.5	2.6	20.7
Tier 1	.8	.9	.9	.8	.8	.8	.8	.7	.7	.6	7.8
Tier 2	.5	.6	.6	.6	.7	.7	.7	.8	.8	.8	6.7
Tier 3	.2	.2	.3	.4	.5	.6	.8	.9	1.0	1.2	6.1
Exempt Private Royalty Owners	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.3	3.4	30.2
Include 16-20 Degree Heavy											
Oil in Tier 3	.2	.2	.2	.2	.1	.1	.1	.1	.1	.1	1.2
Exempt Tier 3	.9	1.4	1.9	2.4	3.0	3.8	4.7	5.6	6.6	7.6	37.9
Exempt New	.7	1.1	1.6	2.0	2.4	2.9	3.5	4.1	4.6	5.2	28.1
Exempt Tertiary	.1	.1	.2	.3	.6	.8	1.1	1.5	1.9	2.3	8.9
Exempt Heavy <sup>3/</sup>	.2	.2	.2	.2	.3	.3	.4	.4	.5	.6	3.3
Exempt Tier 2	2.3	2.6	3.0	3.3	3.6	3.9	4.1	4.4	4.6	4.7	36.5
Exempt Alaska North Slope	2.3	2.8	3.3	3.8	4.4	4.8	5.1	5.4	5.7	6.0	43.5
Exempt State Share of Federal Royalty Oil	-	.1	.1	.1	.1	.1	.1	.1	.1	.1	1.2
Continue Percentage Depletion Rate at 22% for Independent Oil & Gas Production <sup>4/</sup>	.2	.5	.8	1.1	1.5	1.7	(estimates not available after 1986)				

Detail may not add to total due to rounding.

1/ Revenues were estimated without regard to phase-out of the tax which under current assumptions would begin in September 1990 and have a minor impact on total revenues in 1990. If certain production is exempted from the tax, Congress may decide to modify the phase-out level of \$227.3 billion to avoid shifting the burden of the tax to other production.

2/ Independent economic interests as defined in the Crude Oil Windfall Profit Tax Act of 1980.

3/ Represents a total exemption for heavy oil, including heavy oil which is also new or tertiary production. If heavy oil were to be exempted along with new and tertiary production, the cost of the heavy oil exemption would be reduced to \$0.9 billion for 1981-1990.

4/ While percentage depletion is not part of the windfall profit tax this estimate is included because it affects the same economic interests.

Table 3

Estimated Revenue Impact of Executive  
Order Immediately Decontrolling Crude Oil  
(billions of dollars)

	Calendar Year		Fiscal Years	
	1981		1981	1982
<u>Increase in receipts</u>				
Gross Increase in Producer Revenues Before Tax	7.6			
Gross Windfall Profit Tax	4.2		4.0	0.2
Income Tax Offset	2.2		1.1	1.1
Net Windfall Profit Tax	2.0		2.9	-0.9
Income Tax Before Deduction of Gross Windfall Profit Tax <u>1/</u>	2.8		1.3	1.5
Federal Royalties	.1		.1	
Total Increase in Federal Receipts Before Offsets <u>2/</u>	4.9		4.3	0.6

/ Increase in income taxes paid solely by crude oil producers without estimating possible reduction in receipts from other sectors of the economy.

/ Various offsets should be taken into account which either reduce receipts or increase outlays. Significant outlays would include on-budget funding of the Strategic Petroleum Reserve, which was to be filled with price-controlled oil; increased expenditures for energy by the federal government; and increased outlays for federal programs linked to the consumer price index. Receipts may be reduced to the extent that firms do not immediately pass on all increased energy costs in the form of higher prices and consequently have reduced profits. Receipts will also be reduced to the extent that the inflationary impact reduces overall economic activity in the short-run

Table 4  
Principal Assumptions Used in Estimating  
Net Windfall Profit Tax

	<u>1981</u>	<u>1985</u>	<u>1990</u>
<u>Volumes by tax tier (mmb/d)</u> <sup>1/</sup>			
Tier 1 <sup>2/</sup>	6.0	4.2	2.4
Tier 2	1.3	1.2	.9
Tier 3	<u>.9</u>	<u>2.1</u>	<u>3.4</u>
	8.2	7.5	6.7
<u>Uncontrolled price per barrel</u> <sup>3/</sup>	\$38.63	\$58.51	\$90.44
<u>Annual change in GNP deflator</u> <sup>4/</sup>	9.8%	8.2%	6.2%
<u>Tax rates</u>			
Severance tax (excluding Alaska)	5.4%		
Alaskan severance tax (effective rate)	11.5%		
Marginal federal income tax rate	45.0%		

1/ Excludes oil used on the lease and nontaxable Alaskan production. Volumes measured in millions of barrels per day.

2/ Includes Naval Petroleum Reserve production taxable in tier 1.

3/ Market price of non-Alaskan crude oil with gravity greater than 20 degrees API. Prices of Alaskan North Slope oil are computed with an adjustment for pipeline and tanker transportation costs. The price projections are computed from a base of \$36 per barrel in December 1980 with increases at a rate of 2 percent annually in excess of the GNP deflator.

4/ The rate of increase of the GNP deflator is assumed to decline at a rate of 0.1 percent per quarter on an annualized basis.

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