

**MEMORANDUM**

May 11, 2011

**To:** Honorable Harry M. Reid

**Subject:** Tax Policy and Gasoline Prices

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This memorandum is written in response to your request for an analysis of the extent to which proposed tax changes on the oil industry are likely to affect domestic gasoline prices. The specific tax proposals that you requested be considered are the Section 199 deduction for domestic production, the repeal of the current expensing of intangible drilling costs provision, revision of the dual capacity taxpayer rules, percentage depletion, and the tertiary injectants deduction.

## **Background**

The oil and natural gas industries benefit from existing tax policies. These provisions of the tax code, which many identify as tax subsidies, reduce the tax liability of the industries, and/or result in tax treatment that differs from that applied to other industries. As a result, these tax provisions encourage related activities to a greater extent than under a more neutral tax system, possibly altering the decisions made by affected firms with respect to investment, output, and pricing. If these provisions are repealed, it is likely that the economic behavior of the industries might be altered to an extent related to the size of the tax changes.

The economic theory of taxation takes the point of view that corporations do not have an independent capability to pay taxes, only people can pay taxes. The implication of this viewpoint is that corporate income tax payments will ultimately be shifted to shareholders, owners of the factors of production, or consumers.<sup>1</sup> Using this framework, the question of whether the tax provisions identified in your request will affect gasoline prices is one of whether the nature of the tax provision is such that forward shifting of the burden of the tax to consumers is likely, or whether the tax burden will fall on the shareholders in the form of reduced profit.

The price of gasoline is composed of four components. The largest component of the price is crude oil, 67%, followed by federal, state, and local excise and sales taxes on gasoline sales, 13%, refining expenses, 11%, and distribution and marketing expenses, 9%.<sup>2</sup> If the proposed changes in tax policy result

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<sup>1</sup> Harvey S. Rosen, *Public Finance*, 7<sup>th</sup> ed. McGraw Hill Irwin, New York, 2005, p.274.

<sup>2</sup> Energy Information Administration, *Gasoline and Diesel Fuel Update*, available at [www.eia.doe.gov](http://www.eia.doe.gov). Percentages are current for January 2011, and based on the price of a gallon of regular gas at \$3.10 per gallon.

in increases in the price of gasoline, it would generally be through an increase in the price of oil. However, the price of oil is determined on world markets and tends not to be sensitive to small cost variations experienced in regional production areas. In the recent market environment, with the price of oil averaging approximately \$90 per barrel over the period December 2010 through February 2011, and the current price over \$100 per barrel, prices are well in excess of costs and a small increase in taxes would be less likely to reduce oil output, and hence increase petroleum product (gasoline) prices.<sup>3</sup>

## Section 199

The Section 199 deduction for the oil industry is a 6% deduction from net income, capped by limitations of payroll size. For the purpose of economic analysis, the repeal of the Section 199 deduction is equivalent to an increase in the tax on corporate profit. It is widely accepted that a proportional change in taxes on profit affects neither the firm's incremental costs or revenues, and therefore does not change its behavior with respect to output. Since output does not change, there is little reason to believe that the price of oil, or gasoline, consumers face will increase.<sup>4</sup>

Because Section 199 provides an incentive for domestic production compared to foreign production, some have claimed that the result of repeal would be greater dependence on foreign sourced oil and natural gas. In the short-run it is unlikely that this would occur due to the nature of oil and natural gas production. Once a well is in the producing phase, production tends to be maximized, within the limits of sound oil field management techniques. With current oil prices at, or near, \$100 per barrel in the United States, it is unlikely that firms will slow production, or close wells as the result of the loss of the Section 199 deduction.

## Intangible Drilling Costs

Repeal of the immediate expensing of intangible drilling costs provision and replacement with a form of cost amortization more consistent with depreciation methods common in other industries likely will have no effect on current U.S. oil production, and hence no effect on current gasoline prices. The purpose of the expensing provision is to enhance the investment returns for investors in what has historically been a risky activity: exploring for, and developing hydrocarbon resources. Since the provision has little effect on wells already in production, available output and prices should be unaffected if the provision is repealed and replaced with less favorable amortization procedures.

Wood MacKenzie, a consultancy, determined that the sum effect of eliminating the Section 199 deduction and the repeal of the expensing of intangible drilling expenses would have an effect on the rate of return to exploration, lowering the return of marginal projects, and reducing over-all domestic exploration and development activity by U.S. firms. However, the conclusion is sensitive to the level of oil and natural gas prices. High prices can raise rates of return substantially. Natural gas projects are more likely than oil projects to be affected by the tax changes because they are experiencing low market prices due to the volume of non-conventional gas production that has entered the market in the past several years. The Wood MacKenzie study did not conclude that U.S. gasoline prices would be affected by the tax changes.<sup>5</sup>

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<sup>3</sup> Energy Information Administration, *WTI Spot Price*, available at [www.eia.doe.gov](http://www.eia.doe.gov).

<sup>4</sup> Harvey S. Rosen, *Public Finance*, 7<sup>th</sup> ed., McGraw Hill Irwin, New York, 2005, p.290.

<sup>5</sup> Wood MacKenzie, *Evaluation of Proposed Tax Changes on the U.S. Oil & Gas Industries*, August 2010.

## Dual Capacity Rules

The oil industry has benefited from the ability to deduct very broadly defined foreign income tax payments from their U.S. tax liability since the 1950s. If the definition of what constituted an actual income tax payment were tightened and foreign governments did not reduce their charges correspondingly, the industries' domestic, as well as total income tax burden would likely increase. However, this provision again is a tax on profit, and in line with the economic theory of taxation, should have no effect on the firms output or pricing decisions, and therefore no effect on the price of gasoline. The incidence of the tax would appear to be on shareholders. The change in the dual capacity tax payer rules might make overseas investment that leads to foreign profits less attractive to the companies than investment in the United States. This could lead the firms to enhance domestic capital spending leading to increased domestic production and reduced oil dependency.

## Percentage Depletion

The percentage depletion allowance was repealed for the major oil companies by the Tax Reduction Act of 1975 (Pub.L. No. 94-12). Percentage depletion remains generally in effect only for the independent oil companies. As a result the percentage depletion allowance should no longer be a factor in investment, output and pricing decisions by the five major oil companies

## Tertiary Injectants Deduction

Costs associated with the use of tertiary injectants are currently treated as deductible expenses. Expensing of these costs encourages their use and enhances oil production levels. For smaller, independent exploration and development firms the cost incentive could be important. However, the five major oil companies, to which repeal would apply, earned over \$32 billion in net income in the first quarter of 2011. Repeal of the deduction for the industry is estimated by the Obama administration to yield only \$6 million in revenue in 2012. Only a part of the \$6 million revenue estimate would be paid by the five major oil companies. As a result, it is likely that repeal of the deduction, with a change to capitalization, or amortization, of these costs, would have only a small effect on oil production or pricing, especially in a market where oil returns over \$100 per barrel. In periods of low oil prices the repeal of the deduction could have a larger effect. The effect on domestic gasoline prices is likely to be small.

## General Considerations

The magnitude of the revenue effects of these tax changes might be important in evaluating their effects on the oil industry. The five provisions, taken together, are expected to raise approximately \$1.2 billion in 2012. For the calendar year 2010, the revenues of the five largest oil companies were approximately \$1.5 trillion with additional revenues accruing to the non-majors. The net incomes, after tax, of these five companies totaled over \$76 billion with additional earnings accruing to the non-majors. The total expected tax revenues are only 5% of the earnings of the five largest firms in the industry and a smaller percentage of the total industry.

Even if the changes in taxes did impact domestic, or overseas exploration and development activity, that does not necessarily imply that less oil would be available in the U.S. market. More might be imported, with little or no effect on gasoline prices.

Political unrest, expectations effects on financial markets, macroeconomic growth trends, the value of the dollar and a host other factors have contributed to fluctuations in the price of oil and gasoline. Any effect

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due to changes in the tax treatment of the oil industry would be hard to separate from the changes due to other factors, given the size of the relative magnitudes.