Fossil Fuel Taxation in the President's 2013 Budget

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Introduction

- The Department of the Treasury has stated that the US federal tax code contains tax preferences that favor the production of fossil fuels.
- The President's 2013 budget proposes to make the tax code more neutral by eliminating these tax preferences.

Table 1: List of Proposed Changes

Proposal	Revenue ($million)
Repeal LIFO inventory accounting	66,872
Repeal percentage depletion for oil and gas	12,099
Modify rules for dual capacity tax payers	9,571
Repeal expensing of intangible drilling costs	9,529
Reinstate Superfund excise taxes	6,538
Repeal the domestic manufacturing deduction for fossil fuels	3,662
Repeal percentage depletion for coal	1,310
Increase the geological and geophysical amortization period	957
Repeal capital gains treatment of coal royalties	612
Increase the Oil Spill Liability Trust Fund financing rate	462
Repeal expensing of coal exploration and development	279

Source: Joint Committee on Taxation (2012).

Objectives

1. Does the current tax code favor fossil fuel production?
2. Would this proposal make the tax code more efficient?
3. What effect would this proposal have on fossil fuel prices?

Methods

Does the tax code favor fossil fuel production?

- In order to examine if current law favors fossil fuel production, we calculate the average effective tax rate for fossil fuel producers and other industries. Our data comes from the Input-Output Accounts and the National Income and Product Accounts (NIPA) by the Bureau of Economic Analysis (BEA).
- We include the net effect of all (local, state, and federal) taxes on production, imports, and corporate income, net of subsidies credits and deductions.
- This includes far more taxes, subsidies, credits, and deductions than the marginal effective tax rates typically used by the literature.
- We calculate multiple measures of the average using value added, gross income, and capital as bases.

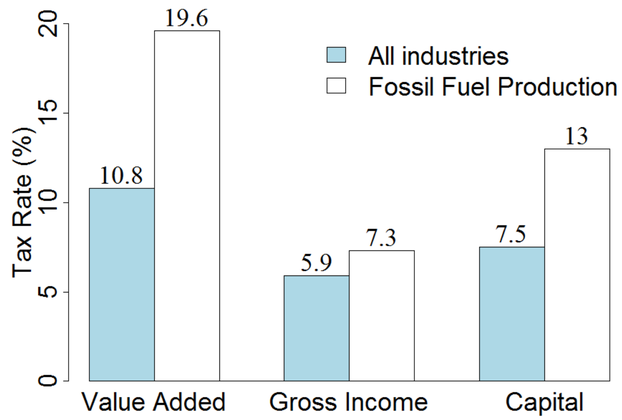
Would this proposal make the tax code more efficient? And what effect would this proposal have on fossil fuel prices?

- In order to determine what effects the tax proposal would have on the price of fossil fuels and their quantity demanded, we construct a computable general equilibrium model of the US economy based on the translog models of Jorgenson and Slesnick (2008) and Wilcoxen (1988).
- Our version has 22 productive sectors which use 22 goods, capital, and labor as inputs. We include final demand from private consumption and investment, government consumption and investment, imports, and exports. We also include the current law taxes on production, capital, and labor by sector.

Results

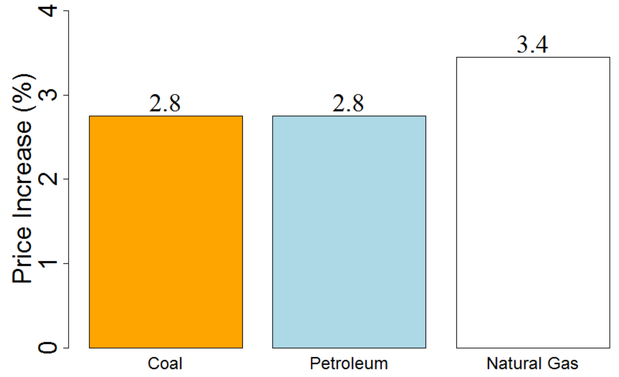
Under all specifications, the effective tax rate on fossil fuel production is higher than the average for other industries.

Figure 1: Average Effective Tax Rate on Different Tax Bases



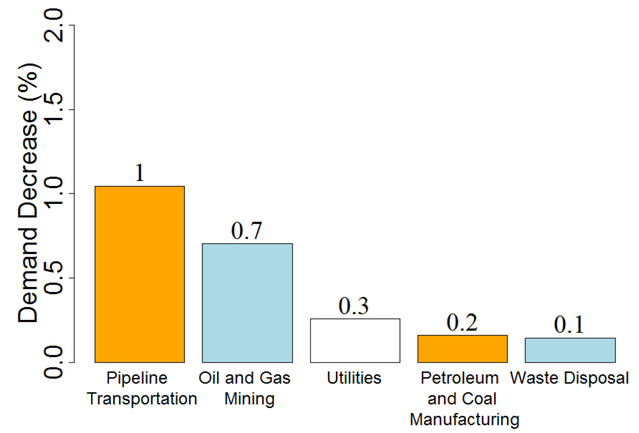
The budget proposal would increase the cost of fossil fuel production.

Figure 2: Price Increase due to Budget Proposal



Sales in sectors that depend on fossil fuels would fall.

Figure 3: Demand Decrease due to Budget Proposal by Industry



Excess Burden

- We measure the efficiency of the tax code using the excess burden of taxation, as is standard in the literature.
- We find the excess burden of the proposal is 18% of its revenue.
- By raising taxes unevenly, the excess burden of the proposal will impose $16.6 billion of additional costs on consumers.
- Expressed in terms of carbon emission reductions, this is a cost of at least $35 per metric ton.

Conclusions

1. Average taxes are currently higher for fossil fuel production than other sectors
2. The proposal would make the tax code less efficient.
3. The proposal would increase fossil fuel prices.

References

Joint Committee on Taxation. 2012. *Description of Revenue Provisions Contained in the President's Fiscal Year 2013 Budget Proposal*. JCS-2-12. Washington, DC: U.S. Government Printing Office.

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