Effects of Tax Cuts and Jobs Act in Upstream Oil and Gas Industry

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Tax Cuts and Jobs Act

Business income marginal tax rate from 35 to 21%
Tax Cuts and Jobs Act

- Business income marginal tax rate from 35 to 21%
- Limits to interest deduction
Tax Cuts and Jobs Act

- Business income marginal tax rate from 35 to 21%
- Repeal of interest deduction
Tax Cuts and Jobs Act

- Full expensing of new investment in the first year, gradually decreasing afterwards
- Business income marginal tax rate from 35 to
Tax Cuts and Jobs Act

- Full expensing of new investment instead of depreciation allowances
- Business income marginal tax rate from 35 to 21 percent
- Interest deduction
Results

- Overall positive effect in the value of companies.
- Optimal capital (and production) levels are lower after reform, regardless of debt ratio.
- Equity financing is lower due to increased value - despite debt financing becoming more expensive.

<table>
<thead>
<tr>
<th>Debt financing</th>
<th>Value</th>
<th>Capital</th>
<th>Production</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>35%</td>
<td>20.7%</td>
<td>-3.6%</td>
<td>-1.6%</td>
<td>-24.5%</td>
</tr>
<tr>
<td>50%</td>
<td>17.0%</td>
<td>-4.9%</td>
<td>-2.3%</td>
<td>-17.0%</td>
</tr>
<tr>
<td>20%</td>
<td>19.6%</td>
<td>-2.2%</td>
<td>-1.0%</td>
<td>-20.4%</td>
</tr>
</tbody>
</table>
The Model

• Max value of company, controlling capital

\[ K^{\beta - 1} = \phi(\tau^\pi) \left[ \rho(\tau^\pi, 1_D, \theta r) + \chi(\tau^\pi, 1_K, 1_I, \delta) \right] \]
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Discussion

• Assumptions on depreciation and incorporating short term dynamics.

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• General equilibrium effects: other industries, macro variables, demand.
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• General equilibrium effects: other industries, macro variables, demand.
• Is reasonable to assume a fixed debt to capital ratio in a long term model?

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