The Regional and National Economic Impact of Repealing the Section 199 Tax Deduction and Dual Capacity Tax Credit for Oil and Gas Producers

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Executive Summary

The current White House administration has pledged to put the U.S. economy back on track following severe fiscal and monetary crises. As part of the response, the administration's comprehensive budget proposal for the upcoming 2011 fiscal year includes repeals of Section 199 of the American Jobs Creation Act and Section 1.901-2 of the U.S. Department of the Treasury Regulations ("dual capacity").¹ These prospective changes would eliminate domestic and international tax credits for the U.S. energy sector and other crucial industries. Although regulators are hoping to raise substantial revenues from the repeals, the economic cost of the regressive legislation could cripple the oil and gas sector, which has already suffered severe losses over the last six months.

Section 199 was enacted by President Bush in 2004 to provide taxpayers benefits for production activities in the United States. The provision grants a "deduction equal to a percentage of the lesser of 'qualified production activities income or taxable income."2 Under the provision, laborintensive corporations are particularly favored by being able to deduct a percentage of domestic production activity each year. The repeal would apply solely to oil and gas firms. Dual capacity credit, on the other hand, allows companies to deduct taxes on incomes from abroad, offsetting relatively high U.S. taxes on foreign incomes.³ Hence, the dual capacity regulation is a way for American firms to compete efficiently against foreign competitors. In repealing the dual capacity credit, however, the current administration would effectively double-tax firms conducting business in many foreign countries. Although the change applies to all corporations, the energy sector will be put at a strong disadvantage when competing against state-run oil and gas companies in such countries as China, Russia and Venezuela.

The proposed changes in taxation practices could cripple the U.S. energy sector. Nationally, this could create a cascade effect of job and revenue losses for not only oil and gas firms, but industries that complement oil and gas companies, as well as others that rely more indirectly on oil and gas and related industry earnings.

Regionally, the Gulf of Mexico, which continues to suffer dramatic consequences from Hurricane Katrina and the *Deepwater Horizon* oil spill, could experience even greater employment losses. The six-month moratorium on deepwater exploration and production that the administration enacted following the oil spill has already damaged the region economically. Additional legislation aimed at the energy sector could impede investment and development in the region for years to come.

In this report, Dr. Joseph R. Mason investigates the likely economic effects if both regulations are repealed in 2011. By analyzing the total economic harm associated with the proposed changes to tax credits, Dr. Mason finds that there would be broad economic losses in the national and regional economies. He uses Bureau of Economic Analysis's RIMS II "input-output" analysis models to measure the economic effects associated with a decrease in production. The summary table below presents the results. Dr. Mason concludes that President Obama's proposed repeal of two crucial tax deductions will have grave economic consequences for the national and regional economy.

Summary of the Lost Economic Activity from Repealing the Section 199 and Dual Capacity Tax Credits, 2011-2020

	Gulf of Mexico	Total U.S.
Output (\$ Millions)	\$126,507	\$341,314
Employment (Jobs, 2011)	56,709	154,901
Wages (\$ Millions)	\$24,021	\$67,800
Tax Revenues (\$ Millions)	\$600*	\$83,500

* State and local tax revenues only.

^{1.} Congressional Budget Office. (2011) Budget of the United States Government, Fiscal Year 2011. Washington, D.C.: U.S. Government Office of Management and Budget. Retrieved from ">http://www.whitehouse.gov/omb/budget/Overview/>

Scott Vance. "Final Section 199 regulations clarify application of domestic production incentive," All Business. May 1, 2006 < http://www.allbusiness.com/accounting-reporting/corporate-taxes/1189307-1.html>.

^{3. &}quot;White House Tax Plans Favors Foreign Companies," Forbes. Jul. 21, 2010 < http://blogs.forbes.com/greatspeculations/tag/dual capacity/>.

I. Introduction

As the Obama administration has repeatedly asserted, a crisis is a terrible thing to waste. Hence, as with the financial crisis, many in Congress are using the Gulf of Mexico oil and gas drilling moratorium as a springboard for unrelated policy measures that will hurt the U.S. oil and gas industry. Like the moratorium on deepwater exploration and production, those policy measures will inexorably affect economic activity and employment. Unlike the moratorium, the effects are intended to be permanent, rather than temporary. In both cases, however, policymakers in Washington wish to ignore the economic consequences of their choices. This study, therefore, sheds light on some of the policy proposals under consideration and estimates their economic costs.

A key part included in the 2011 budget proposed by the Obama administration is the increased taxes on the oil and gas sector that could cripple U.S. firms. In particular, the measures do away with two key tax provisions vital to the U.S. oil and gas industry. It is important to note, therefore, that those tax provisions are not subsidies specific to the oil and gas industry, but rather tax credits received by virtually every American company. The proposed changes in tax law, which would apply solely to oil and gas companies, have little to do with the debate over offshore drilling safety or even energy policy. Hence, the changes appear to be merely punitive policies that are now finding a place in the sun in the post-Gulf drilling crisis political environment.

The administration wants to eliminate essential tax credits that all taxpayers are entitled to under Section 199 of the

American Jobs Creation Act ("Section 199") and Section 1.901-2 of the U.S. Treasury Regulations ("dual capacity"). In doing so, it would override legislation "adopted in 1983 after almost a decade of legislative and administrative debate," as well as newer regulations put in place by President George W. Bush in 2004 that help U.S. industries compete on a level playing field with foreign rivals.⁴

Section 199 of the Internal Revenue Code was created under the American Jobs Creation Act to "provide a permanent benefit...to taxpayers in a wide variety of industries."⁵ It allows taxpayers, in particular laborintensive corporations, to deduct from their tax liabilities a percent of domestic production activity each year. In 2005, the Congressional Budget Office estimated that the provision "effectively reduced the United States' highest federal statutory corporate tax rate for income from domestic product from 35 percent to 31.85 percent."⁶ The adjusted rate for U.S. corporations is the same level as the average rate for nations of the Organization of Economic Cooperation and Development, helping U.S. corporations doing business domestically compete against lower-taxed foreign competitors.⁷

Unlike Section 199, which considers domestic production only, the Treasury's dual capacity regulation is a provision meant to assist taxpayers that generate production abroad. The central purpose is for corporations to offset relatively high U.S. taxes on incomes from abroad.⁸ A U.S. oil and gas company that does foreign business may "credit the portion of the levy in the amount of what the generally imposed income tax would be," if the foreign

It is important to note, therefore, that those tax provisions are not subsidies specific to the oil and gas industry, but rather tax credits received by virtually every American company.

8. "White House Tax Plan Favors Foreign Companies," Forbes. Jul. 21, 2010 < http://blogs.forbes.com/greatspeculations/tag/dual capacity/>.

^{4.} Dirk J. J. Suringa. "The Long History of the 2011 Green Book Proposal on Dual capacity Taxpayers, The Credibility of Foreign Taxes – General Issues (Portfolio 901)," BNA Tax & Accounting. Jun. 10, 2010. < http://www.bnatax.com/insightsdetail.aspx?id=2147485035>.

Scott Vance. "Final Section 199 regulations clarify application of domestic production incentive," All Business. 1 May 2006 < http://www.allbusiness. com/accounting-reporting/corporate-taxes/1189307-1.html>.

Congressional Budget Office. (Nov. 2005) Corporate Income Tax Rates: International Comparisons, Washington, DC. Retrieved from http://www.cbo.gov/ftpdocs/69xx/doc6902/11-28-CorporateTax.pdf>.

Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/gang_of_10_energy_study.pdf>.

My estimates suggest that repealing both Section 199 and dual capacity credit would produce extensive economic losses to the U.S. economy for the next decade (the longest period for which budget estimates are prepared), including \$341 billion in decreased economic output, almost \$68 billion in wage cuts, and initial losses of over 154,000 jobs in 2011, trailing to 115,000 for the duration of the tax policy's life.

country "has a generally imposed income tax."⁹ This allows many U.S. energy firms to compete with foreign state-run corporations in such countries as Russia, Venezuela, and China, which enjoy extremely favorable tax treatment in their home countries. Without this regulation, U.S. oil and gas firms would be double-taxed on revenues from their foreign operations in countries such as those listed above that lack standardized taxation laws.¹⁰

Some analysts predict that the repeal of the two regulations for oil and gas companies "would raise some \$210 billion over 10 years."¹¹ The problem is that those analyses do not take into account the inexorable reality that U.S. corporations will respond to higher taxes by restricting domestic production and moving operations elsewhere in the world. If the lost output, jobs, and wages over that 10-year period amount to greater than the total expected tax revenues, the policy does not make sense. In this study, therefore, I estimate the total economic harm associated with the potential repeal of Section 199 and dual capacity credits. I use data from the U.S. Department of the Treasury and the Bureau of Economic Analysis ("RIMS II") to undertake an analysis similar to that of Andrew Chamberlain's 2008 study on tax burden and economic impact of the Section 199 repeal, adjusting the approach and adding to that the impact that would be derived from the dual capacity repeal, as well.¹² My estimates suggest that repealing both Section 199 and dual capacity credit would produce extensive economic losses to the U.S. economy for the next decade (the longest period for which budget estimates are prepared),

including \$341 billion in decreased economic output, almost \$68 billion in wage cuts, and initial losses of over 154,000 jobs in 2011, trailing to 115,000 for the duration of the tax policy's life. Needless to say, it doesn't make sense to pay \$341 billion in lost output and \$68 billion in lost wages for \$210 billion in increased tax revenues (ignoring the \$83.5 billion in tax revenues lost on the decreased production and wages). Texas, California, and Louisiana - already devastated by the Gulf crisis - will be the hardest hit, with Texas alone losing more than 38,000 jobs, Louisiana losing nearly 13,500 jobs, and California more than 23,000 jobs in 2011 if Congress repeals the tax breaks. Even the Midwest is affected, with Illinois losing nearly 4,500 jobs, Ohio losing nearly 4,000 jobs, and Indiana losing more than 3,000 jobs in 2011.

The remaining sections of this study outline background information on Section 199 and dual capacity regulations, and describe the methodology for assessing the economic cost of repealing tax credits for the U.S. energy sector. Section II provides some background on tax provisions that have come under attack in the current administration's proposed budget. Section III assesses the importance of the energy sector to the U.S. economy. Section IV outlines the model and methodology. Section V provides output, employment and revenue estimates within the oil and gas sector, as well as the overall economic impact of the repeal at the regional and national level. Section VI concludes, noting that singling out the U.S. energy industry for punitive taxation would be calamitous for a national economy already in recession.

 [&]quot;Tax Legislation Manufacturing Industry View, 2010 Budget Resolution," *Deloitte.* May 15, 2009. Retrieved from http://www.deloitte.com/assets/Documents/us_tax_ManufacturingBudgetUpdate_051309.pdf>.

 [&]quot;White House Tax Plan Favors Foreign Companies," Forbes. Jul 21, 2010. <http://blogs.forbes.com/greatspeculations/2010/07/21/white-housetax-plans-favor-foreign-competitors//>

^{11. &}quot;Tax Legislation Manufacturing Industry View, 2010 Budget Resolution," *Deloitte.* May 15, 2009. Retrieved from http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_tax_ManufacturingBudgetUpdate_051309.pdf

Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/gang_of_10_energy_study.pdf>.

II. Background On Section 199 Tax Deduction And Dual Capacity Tax Credit

A. Section 199 Tax Deduction

1. Brief History of Section 199

In 2004, the IRS enacted a new tax deduction for U.S. businesses under Section 199 of the tax code. The deduction was initially modified in 2004 under the American Jobs Creation Act and applies to all taxpayers.¹³ The legislation, which was ratified by President Bush, grants taxpayers the right "to receive a deduction based on qualified production activities income resulting from domestic production."¹⁴ According to the stipulations of the law, qualified production for energy firms would include oil and gas that was "manufactured, produced, grown, or extracted by the [firms] in whole or in significant part within the United States."¹⁵

The deduction went into effect on December 31, 2004 and by early 2005 taxpayers were able to use a three percent credit. In 2005, Section 199 was modified under the Tax Increase Prevention and Reconciliation Act such that qualified taxpayers may only include W-2 amount[s] which are allocable to the domestic production gross receipts.¹⁶ According to the U.S. Department of the Treasury, in 2005 the deduction constituted "three percent of the lesser of: (a) taxable income derived from a qualified production activity; or (b) taxable income, for the taxable year."¹⁷ The calculation for a taxable year is capped at 50 percent of the W-2 wages "paid by the taxpayer during the calendar year."¹⁸ The total amount of the deduction is computed by subtracting a percentage of the taxpayer's income that was earned from qualified domestic activities from the total taxable income.¹⁹ The percentage deductable increased incrementally each year and by 2010, the year in which the provision became fully functional, the deduction had increased to nine percent.²⁰

In August of 2008, a group of ten senators, dubbed the "Gang of 10" proposed the New Energy Reform Act of 2008 ("ERA"), to address offshore drilling, nuclear fuel recycling, and energy conservation.²¹ The potential legislation suggested that the "\$84 billion in investments in conservation and efficiency in the New ERA bill will be fully offset with loophole closers and other revenues."²² By excluding energy firms from Section 199, the regulators hoped to raise almost \$30 billion that could be redistributed to favored projects.²³ Critics of that proposal suggested that the change to Section 199 could bring about harmful changes in employment, earnings and economic output throughout the U.S. economy.²⁴

Congress did not pass the proposed legislation, as detractors pointed to the obvious problems that would arise from excluding the U.S. energy sector from such a crucial and universal tax deduction. Andrew Chamberlain presented the "order-of-magnitude calculation" to show the possible effect of the changes initially suggested by

"Fact Sheet: Guidance on Section 199 – Income Attributable to Manufacturing Activities, U.S. Department of the Treasury," *Office of Public Affairs.* Jan. 19, 2005, 1. http://www.ustreas.gov/press/releases/reports/199factsheetjs2200.pdf>.

 Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/gang_of_10_energy_study.pdf>.

- Id. 20. Id. 20. Id. 20. Id. 20. Id. 20. Id. 20. Introduces Bipartisan Energy Proposal: Press Release," Senator Lindsey Graham Official Home Page. Web. Aug. 1, 2008.
- 22. Id.

24. Id. 9.

^{13.} The provision applies to individuals, corporations, farming cooperatives, estates, trusts and their beneficiaries. Moreover, the deduction is "allowed to partners and the owners of S corporations (not to partnerships or the S corporations themselves), and may be passed through by farming cooperatives to their partons." The deduction can also apply to non-exporting taxpayers. Jack C. Butler, Section 199, Internal Revenue Code of 1986, as amended, The 'Domestic Production Deduction,' ROETZEL & ANDRESS, L.P.A, 1 http://www.ralaw.com/resources/documents/Section%20199%20Domestic%20Production%20Deduction.pdf.

Henry V. Singleton. Industry Director Directive on Domestic Production Deduction (DPD), U.S. Internal Revenue Services [2006]. Web. < http:// www.irs.gov/businesses/article/0,,id=164979,00.html>.

 [&]quot;American Jobs Creation Act of 2004." (PL 108-357, Oct. 22, 2004). < http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_ public_laws&docid=f:publ357.108.pdf>.
 "Tax Alert: Brief Summary: Tax Increase Prevention and Reconciliation Act (TIPRA)," Rothgerber Johnson & Lyons LLP. N.p. 1 June 2006. Retrieved

^{16. &}quot;Tax Alert: Brief Summary: Tax Increase Prevention and Reconciliation Act (TIPRA)," Rothgerber Johnson & Lyons LLP. N.p, 1 June 2006. Retrieved ">http://www.rothgerber.com/showarticle.aspx?Show=437<"

^{18.} ld.

Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/gang_of_10_energy_study.pdf.

the "Gang of 10" proposal.²⁵ His calculations, based on 2005 data, show that of the total Section 199 deductions (\$9.34 billion in 2005), approximately 20 percent "was from companies in the petroleum and coal products manufacturing industry."²⁶ He determined that if the income was taxed at the corporate rate of 35 percent, the comprehensive "repeal would increase tax liabilities for these firms by \$652 million per year."²⁷ I have calculated a similar figure for 2007, the latest year available for such data, in which petroleum and coal product manufacturing was approximately 15 percent (\$3.2 billion) of total Section 199 deductions (\$21.1 billion).²⁸ The repeal would imply that this income would be taxed at 35 percent, which would increase tax liabilities for these firms by \$1.12 billion in 2007 and at similar magnitudes in years thereafter.

2. Current Proposal for Repeal of Section 199

Section 199, which expires in 2011, will be renewed in the upcoming budget; however, Obama's fiscal proposal would exclude oil and gas companies from the renewal.²⁹ The Office of Management and Budget estimated that excluding the oil and gas industry from Section 199 would increase the federal government's revenues by \$17.3 billion over the next ten years. The repeal of a tax credit will most likely have an adverse effect on the energy sector, however, as well as industries that support the production and transportation of oil and gas. The current proposal will likely discourage investment in "energy infrastructure and would threaten the production rates of energy companies themselves."³⁰ **The** repeal of a tax credit will most likely have an adverse effect on the energy sector, however, as well as industries that support the production and transportation of oil and gas.

In 2008, the Congressional Research Service published a study that assessed the potential risks in repealing Section 199. The analysis suggested that there will be little to no price effects and other economic effects in the short run. In the long run, however, "all taxes distort resource allocation, and even a corporate profit tax would reduce the rate of return and reduce the flow of capital into the industry."31 In other words, applying this restriction to oil and gas companies could have unfavorable effects on domestic oil and gas production. The report goes further to suggest that the rates of return to investment in oil and gas "would decline, causing a decline in capital flows to this industry, and an increase in capital flowing to other industries, including foreign industries."32 Thus, the current proposed budget could place U.S. corporations at a disadvantage when competing with foreign oil and gas companies.

- 25. Id. 9-10.
- 26. Id.
- 27. Id. 10.
- See Returns of Active Corporations: Table 6 Balance Sheet, Income Statement, Tax, and Selected Other Items, by Major Industry, U.S. Internal Revenue Service [2005]. Web. http://www.irs.gov/taxstats/article/0,,id=170692,00.html.
- Warren Hudak. "Repealing Section 199 Tax Code Will Hurt Economy," The Bulletin. Feb. 28, 2010. Web. < http://thebulletin.us/articles/2010/02/28/ commentary/op-eds/doc4b8ac44abd9ce765327008.txt>.
- "Proposed Energy Taxes Would Kill U.S. Jobs," American Energy Alliance. N.d. http://www.saveusenergyjobs.com/resources-2/proposed-ener-gy-taxes-would-kill-u-s-jobs/#capacity>.
- Salvatore Lazzari. Energy Tax Policy: History and Current Issues. CRS Report for Congress, Congressional Research Service. Nov. 7, 2007. CRS-20. Retrieved from http://italy.usembassy.gov/pdf/other/RL33578.pdf.

32. Id.

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B. Dual Capacity Tax Credit

1. Brief History of the Dual Capacity Tax Credit

Similar to Section 199, the dual capacity credit is particularly important for oil and gas companies, even though it is applicable to all firms. It was enacted 25 years ago, with the express intent of helping U.S. firms compete with foreign companies on a level playing field. The purpose of the regulation was to offset "very high American income taxes on [a company's] foreign

income."33 The rule allows taxpayers who reside or conduct business in a country that has an income tax to credit the portion of the levy in the amount of the income tax.34

The legislation was

introduced in 1983 after significant debates in Congress during both the Carter and Reagan administrations. The new provision was set "to limit the credit to the amount of all [payments to foreign sovereigns] attributable to foreign oil and gas income, multiplied by the U.S. tax rate."35 The regulation also includes "a safe harbor [provision] if the foreign country does not generally impose an income tax."³⁶ The taxpaver residing or conducting business in a country without a specified income tax could utilize a specific formula to "credit the amount that would be produced...by the application of the income tax generally imposed by the foreign sovereign on all taxpayers."³⁷ For any company to claim dual capacity status, it must deal

with "a foreign country as both the sovereign and as the grantor of an economic benefit, such as a concession for developing the country's natural resources."38

Current Proposal for Repeal of the Dual Capacity Tax Credit

In addition to eliminating oil and gas companies from Section 199, the current administration's 2011 fiscal budget also recommends adjusting the dual capacity rules. The change in regulation would "amount to levying a double-tax on domestic oil and gas products, while completely exempting companies headquartered" in

The adjustment to Treasury's dual capacity regulation would put U.S. firms at a significant disadvantage against foreign competitors.

other countries.39 Unlike Section 199, the current administration intends to make the changes to dual capacity applicable to all taxpayers. While the energy sector will be severely affected - since U.S. oil and gas companies often

compete with foreign state-owned corporations - the effects measured here are limited to that industry and do not estimate the broader impact of the repeal.

The adjustment to Treasury's dual capacity regulation would put U.S. firms at a significant disadvantage against foreign competitors. The proposed modifications for dual capacity companies would change how foreign levies would qualify under the provision. The proposed change would "allow the taxpayer to treat as a creditable tax the portion of a foreign levy that does not exceed the foreign levy that the taxpayer would pay if it were not dual capacity taxpayer."⁴⁰ This would reverse the safe-harbor

- 33. "Proposed Energy Taxes Would Kill U.S. Jobs," American Energy Alliance. N.d. http://www.saveusenergyjobs.com/resources-2/proposed-ener- gy-taxes-would-kill-u-s-jobs/#capacity>. "Tax Legislation Manufacturing Industry View, 2010 Budget Resolution," *Deloitte*. May 15, 2009. Retrieved from http://www.deloitte.com/assets/
- 34. DcomUnitedStates/Local%20Assets/Documents/us_tax_ManufacturingBudgetUpdate_051309.pdf>.
- 35. Dirk J. J. Suringa. "The Long History of the 2011 Green Book Proposal on Dual capacity Taxpayers, The Credibility of Foreign Taxes General Issues (Portfolio 901)," BNA Tax &Accounting. Jun. 10, 2010. < http://www.bnatax.com/insightsdetail.aspx?id=2147485035>.
- 36. "Tax Legislation Manufacturing Industry View, 2010 Budget Resolution," Deloitte. May 15, 2009. Retrieved from http://www.deloitte.com/assets/ DcomUnitedStates/Local%20Assets/Documents/us_tax_ManufacturingBudgetUpdate_051309.pdf>.
- 37. Dirk J. J. Suringa. "The Long History of the 2011 Green Book Proposal on Dual capacity Taxpayers, The Credibility of Foreign Taxes General Issues (Portfolio 901)," BNA Tax & Accounting. Jun. 10, 2010. < http://www.bnatax.com/insightsdetail.aspx?id=2147485035>.
- 38. Skadden, Arps, Meagher & Flom LLP and Split Rock International Inc. "Economic and Foreign Policy Implications of the Administration's 'Dual Capacity Taxpayer' Proposals: Letter to Treasury on Implications of Administration's Dual-Capacity Taxpayer Proposals," Jul. 21, 2010. Retrieved http://www.saveusenergyjobs.com/wp-content/uploads/2010/08/Daily_Tax_Report.pdf.
- "Proposed Energy Taxes Would Kill U.S. Jobs," American Energy Alliance. N.d. http://www.saveusenergyjobs.com/resources-2/proposed-ener- gy-taxes-would-kill-u-s-jobs/#capacity>.

provision that was initially put into Treasury's regulation to provide an advantage to U.S. firms against foreign counterparts. Thus, "if a foreign country imposes no other tax to which a dual capacity taxpayer would be subject, it appears that the taxpayer would not be permitted to claim any foreign tax credits for payments to that country."⁴¹ Since the exact changes related to the dual capacity credit are not yet included in the budget proposal it is difficult to ascertain the precise provisions of the new regulation. What proposals to date imply is that a dual capacity oil and gas company would be allowed to claim a foreign tax credit, only if the country has the same applicable tax for non dual capacity taxpayers.⁴²

III. The U.S. Energy Sector And The National Economy

Section 199 and dual capacity credit maintain a level playing field for U.S. and foreign firms and, in turn, benefit the U.S. economy as a whole. Hundreds of both large and small companies in the U.S. oil and gas industry have created nearly 9.2 million jobs "not just in exploring, producing, refining, transporting, and marketing oil and natural gas, but also through the purchases [they make] of other goods and services that support the industry's operations."⁴³ In 2006, the U.S. oil and natural gas industry paid approximately \$90 billion in taxes and \$28 billion in U.S. federal, state and local taxes.⁴⁴ Furthermore, between 2000 and 2007, the U.S. energy sector invested an estimated \$121.3 billion in emerging energy technologies across North America.⁴⁵

Those investments have spillover effects for other industries that support the U.S. energy market and employees in that sector. In my previous study on the offshore drilling moratorium, I addressed how offshore drilling alone contributes to substantial economic growth for onshore and offshore communities.⁴⁶ Offshore drilling, as well as the U.S. oil and gas companies that conduct business onshore, have three distinct phases: (1) the initial exploration and development of offshore facilities; (2) the extraction of reserves; and (3) the refining of raw product. All three phases support numerous local and national industries, such as shipbuilding, food services, and other necessary services. The refining phase, especially, contributes large "spill-over" effects around the country even though capacity is largely concentrated in California, Illinois, New Jersey, Louisiana, Pennsylvania, Texas, and Washington.⁴⁷ Nonetheless, the current administration persists in deliberately targeting the energy sector through proposed punitive legislation in response to the Gulf crisis.

41. ld.

^{42.} Skadden, Arps, Meagher & Flom LLP and Split Rock International Inc. "Economic and Foreign Policy Implications of the Administration's 'Dual Capacity Taxpayer' Proposals: Letter to Treasury on Implications of Administration's Dual-Capacity Taxpayer Proposals," Jul. 21, 2010. Retrieved http://www.saveusenergyjobs.com/wp-content/uploads/2010/08/Daily_Tax_Report.pdf.

 [&]quot;America's oil and natural gas industry supports over 9 million jobs." American Petroleum Institute. Apr. 5, 2010. Web. ">http://www.api.org/aboutoilgas/.

^{44. &}quot;Energy and the Economy," Energy Tomorrow. N.d. < http://www.energytomorrow.org/Energy_and_the_Economy.aspx>.

^{45.} ld.

Joseph R. Mason. "The Economic Cost of a Moratorium on Offshore Oil and Gas Exploration to the Gulf Region," American Energy Alliance. Jul. 2010.

^{47.}

IV. The Rims II Methodology Can Be Used To Estimate The Economic Effect Of Repealing **Proposed Tax Policies**

I use the statistical approach known as "input-output" analysis to measure how losses from repealing the Section 199 and dual capacity tax credits will reverberate throughout the economy. The U.S. Department of Commerce has refined this approach, pioneered by Nobel Prize laureate Wassily Leontief,⁴⁸ into the modern Regional Input-Output Modelling System II, or "RIMS II."49 The model is premised on the idea that when a company has to pay \$1 more in taxes,⁵⁰ it must take that amount from other sources: reducing workers' pay (either through wage cuts or layoffs); reducing the returns on shareholders' investments (through lower share price or dividends); and/ or reducing its purchases of inputs. In turn, the amount is subtracted directly from funds used to pay the company's suppliers, the suppliers' workers, suppliers' capital owners, etc., and trickles down to every member of a company's production chain. In this way, a tax on even just a small number of firms can be felt throughout the economy. The Department of Commerce publishes tables of RIMS II multipliers that indicate how a change in one industry or state can affect the rest of the economy.⁵¹

Andrew Chamberlain published a study in 2008 that uses the RIMS II multipliers to calculate the effects of the repeal of Section 199 on the U.S. economy. Specifically, he estimated that between 2009 and 2018, the United States could lose between 17,000 and 93,000 jobs for the life of the policy, and nearly \$35 billion in wages and \$186 billion in diminished output over the ten-year federal budget planning horizon.52

I adapt Chamberlain's method to analyze the effects of reversing the Section 199 and dual capacity tax credits on the U.S. oil and gas industry. Because the burden of higher taxes trickles down to employee wages and returns on capital, the method assumes that all taxes on firms are paid either by workers or by capital owners.

Chamberlain appropriately cautions that the "uncertainty of the input-output impact of reduced household capital earnings" limits the method's ability to accurately estimate the impact on capital owners-that is, capital gains and dividends—in the analysis.⁵³ To be clear about the discrete effects, therefore, I separate the incidence of higher taxes on workers from the incidence of higher taxes on capital owners.⁵⁴ Data from the U.S. Treasury show that workers would bear close to 70 percent of any corporate tax.55 By ignoring the effects of the tax increases on individual investors in oil and gas companies, however, I bias the estimated economic effects of the policies downward.56

I distribute the tax burden on workers among the fifty states and Washington, D.C. according to each state's share of the nation's wages from the petroleum and coal products manufacturing industry.⁵⁷ The Treasury only projects revenue ten years out, so my estimates only take into consideration the effects of the repeals for the next ten years, even though the effects would last longer for ongoing tax policies. Figure 1 presents the total estimated tax burden on wage-earners in each statethat is, the reduction in earnings for the petroleum and coal products industry-incurred in the ten-year period from 2011 to 2020.58

- Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS II), Bureau of Economic Analysis, U.S. Department 49. of Commerce, 3rd edition, 1997, 1. Economists can use RIMS II to measure the impact of taxes, subsidies, and other kinds of programs since the same logic applies whether the
- 50.
- program increases a company's costs or revenues. See *Id.* Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/ 51. gang_of_10_energy_study.pdf>. Id. 2.

- Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/ 56. gang_of_10_energy_study.pdf>. See Bureau of Economic Analysis, Regional Economic Information System, "Table CA06NCompensationof Employees by NAICS Industry" (avail-
- 57. able at www.bea.gov/regional/reis/). I used 2008 data if available. For Delaware, District of Columbia, Hawaii, and Rhode Island, I used the average proportion of national wages for 2001 through 2008. For areas where no data was present, which includes North Dakota and Vermont, I split the remaining proportion of national industry wages evenly.

Wassily W. Leontief. Input-Output Economics: 2nd edition, 1986. 48

^{52.}

^{53.} ld. 26.

^{54.} Id. 11.

⁵⁵ U.S. Department of the Treasury. (2011). General Explanations of the Administration's Fiscal Year 2011. Feb. 2010, 150-151, Table 1. Retrieved from < http:// www.treas.gov/offices/tax-policy/library/greenbk10.pdf>.

^{58.} Additional details provided in Appendix Table A3.



Figure 1: Total Estimated Wage Burden on Labor from Repealing the Section 199 and Dual Capacity Tax Credits, by State, 2011-2020 (\$ Millions)

To determine the change in the final economic demand derived from petroleum and coal products caused by a reduction in earnings for each year, I multiply the RIMS II direct-effect multiplier for earnings by each state and year's earnings decline. The estimates are then divided by the final-demand multiplier for earnings.⁵⁹ The estimates for the change in final demand are used to calculate the change in all output, earnings, and employment for each of the ten years by state. I also use cross-industry employment multipliers to separate the impact on employment by industry for each state over the ten years.⁶⁰

^{59.} Andrew Chamberlain. "Estimating the Tax Burden and Economic Impact from the Proposed "Gang of Ten" Revenue Offsets Fiscal Economics Policy Study 2008-08," Institute for Energy Research. Sept. 9, 2008. http://www.instituteforenergyresearch.org/wp-content/uploads/2008/09/gang_of_10_energy_study.pdf. This is equivalent to dividing the reduction in earnings by a multiplier that gives "the change in earnings per dollar of final demand," which multiplier is calculated by dividing the final-demand multiplier for earnings by the direct-effect multiplier for earnings.

^{60.} Bureau of Economic Analysis, Department of Commerce, Regional Input-Output Modeling System II. I used type II multipliers for the petroleum and coal products manufacturing industry from 2007 for each state, and the equivalent 2006 multiplier for the U.S., since the Department of Commerce no longer publishes the national multipliers.

V. The Repeal Of These Tax Policies Will Cause Substantial Losses In Wages, Employment, And Output And Will Have Profound Effects On Communities Throughout The Nation

In the following sections the RIMS II multipliers for the petroleum and coal products manufacturing industry (see Appendix Table A1 and A2) are applied to the tax burden estimates (see Figure 1 and Table A3) described in Section IV. Section A explains the effect of the repeals on both regional and national economic output. Section B quantifies the effects on employment. Section C explains the expected depression in wages as a result of the repeals. Section D investigates the effects of the repeals on the Gulf region, which in recent months has suffered from the Deepwater Horizon oil spill, the off-shore drilling moratorium, and now potential additional policies that threaten the economic lifeblood of the region. The substantial economic losses estimated in this study showcase the potential costs of the latest legislation targeted at the energy sector.

These figures are in no way meant to be definitive. Rather, the estimates shown represent a reasonable approach to assessing the economic impact of these repeals, and, because they do not take into account the impact of reduced income to oil and gas industry investors, are likely to be conservative estimates.

A. The Repeals Could Cost More than \$341 Billion in Economic Activity from 2011 through 2020

The broadest measure of the incremental effect of the repeals is the effect on U.S. Gross Domestic Product ("GDP") and State-level Gross State Product ("GSP"). These two measures represent total economic output. The loss in total output due to the two tax policies nationwide can be expected to exceed \$341 billion for the period from 2011 to 2020.

The predicted state-level decrease in economic output based on the estimated tax increase is presented in Figure 2.⁶¹ It is important to note that the multipliers in this table only provide the decrease in output that *is generated at the same location as the decrease in production.* These estimates do not consider "spill-over" effects, or losses that extend from one location to another. Since the U.S. economy is integrated, losses in one region can be felt throughout the country. For example, oil and natural gas produced in the Gulf of Mexico could be used as an input in the Midwest. Comparing the total U.S. results to the sum of each state's estimates suggest that there will be more than \$56 billion in lost spill-over effects from the repeal of tax credits (*see* Appendix Table A4).

The loss in total output due to the two tax policies nationwide can be expected to exceed \$341 billion for the period from 2011 to 2020.

61. Additional detail is provided in Appendix Table A4.



Figure 2: Decrease in Output Resulting from Repealing the Section 199 and Dual Capacity Tax Credits, by State, 2011-2020 (\$ Millions)

B. The Repeals Could Destroy 154,000 Jobs in 2011, with the Effects Persisting for the Duration of the Tax Policy

The employment impact estimates from BEA's RIMS II multipliers are simply one employed position at a firm, as measured by BEA. They are not full-time equivalents. The BEA data does not distinguish between full-time and parttime jobs, however, so the employment figures represent merely an estimate of how reported company payrolls are likely to change in response to changes in demand. Nonetheless, a common mistake in interpreting the RIMS II models is to confuse BEA "jobs" with Full-Time Equivalent (FTE) job impacts and employment statistics.⁶²

^{62.} See, for instance, Zoë O. Ambargis. "RIMS II: Regional Input-Output Modeling System," BEA/PNREAP/University of Nevada Regional Economic Workshop, Reno, NV, September 2009.

1. Total Job Loss Analysis

By the RIMS II measurements, therefore, the repeals would also result in initial losses across the entire U.S. of over 154,000 jobs in 2011, trailing to 115,000 for the duration of the tax policies. Moreover, those job losses are not only in the energy sector but across the whole economy.

Figure 3 illustrates the average annual effects on employment expected from 2011-2020, by state.⁶³ Texas,

California, and Louisiana - already devastated by the Gulf crisis - will be the hardest hit, with Texas alone losing more than 38,000 jobs, Louisiana losing nearly 13,500 jobs, and California more than 23,000 jobs in 2011 if Congress repeals the tax breaks. Even the Midwest is affected, with Illinois losing nearly 4,500 jobs, Ohio losing nearly 4,000 jobs, and Indiana losing more than 3,000 jobs in 2011. Table A5 shows in detail the effect for all states.





63. Additional details provided in Appendix Table A5.

As before, the state-level RIMS II multipliers do not account for decreases in employment outside a particular state. As a result, jobs lost in one state because of lost revenues in another state are omitted from the totals. Comparing the nationwide employment effects to the sum of the state employment effects yields a spill-over effect of more than 23,600 jobs (*see* Appendix Table A5 through 2020).

2. Evaluation of the Types of Lost Employment

The multiplier data can also be used to analyze the types of employment that would be lost as a result of the repeals. While there will undoubtedly be job losses in the energy sector, many job losses will be in ancillary industries that support the oil industry, as well as in seemingly-unrelated industries located in regions where oil and gas industry earnings make up a substantial share of local economic activity. Furthermore, the energy sector can be expected to decrease its investments in local communities as a result of the changes in regulations, increasing the negative economic impact of the tax policies.

For this analysis, the losses are broken down using specific RIMS II multipliers for each industry, as described in Section IV. Those multipliers determine which industries will stand to lose the most from the repeals. Table 1 reports the expected job losses nationally, by industry.⁶⁴

It is interesting to note that a large proportion of job losses (38 percent) occur in professional fields such as health care; real estate; professional, scientific, and technical services; administration; finance; education; the arts; information; and management.⁶⁵ Manufacturing, which includes food and textile manufacturing, is also hard hit, with 21 percent of the total employment losses. Only about one fourth of the losses are in mining manufacturing, which includes oil and gas production and refining.

Table 1: Total U.S. Job Losses from Repealing theSection 199 and Dual Capacity Tax Credits, by Sector,2011-2020 Average

Industry	Jobs
Agriculture, forestry, fishing, and hunting	516
Mining	3,690
Utilities	1,221
Construction	2,822
Manufacturing	20,490
Wholesale trade	4,265
Retail trade	9,537
Transportation and warehousing	4,197
Information	1,572
Finance and insurance	3,856
Real estate and rental and leasing	5,239
Professional, scientific, and technical services	5,079
Management of companies and enterprises Administrative and waste management	2,905
services	6,790
Educational services	1,421
Health care and social assistance	7,808
Arts, entertainment, and recreation	1,371
Accommodation	890
Food services and drinking places	5,842
Other services	4,711

Source U.S. Department of the Treasury; Bureau of Economic Analysis; U.S. Department of Commerce

64. Appendix Table A6 provides state level details for selected industries.

^{65.} For a full listing of the jobs see U.S. Census Bureau's 2007 NAICS Codes and Titles: http://www.census.gov/naics/2007/NAICOD07.HTM>.

C. The Repeals Could Cause a Loss of \$68 Billion in Wages to Workers Hit by Recession, the Gulf Oil Spill, and These Tax Increases

The Section 199 and dual capacity credit repeals will cause substantial wage losses for American workers already coping with adverse economic conditions. To estimate wage losses, I apply the RIMS II's final demand earnings (wage) multipliers to the final demand estimates. Figure 4 and Table A7 present the results. The repeals will result in well over \$68 billion in lost wages nationwide during the decade. The previously discussed caveats regarding spill-over effects remain true for this wage analysis, with spill-over effects of another \$14 billion in wages throughout the nation.⁶⁶





66. Additional details are available in Appendix Table A7.

D. Gulf Communities Will Suffer Severely, Losing \$126 Billion in Output, 56,000 Jobs, and \$24 Billion in Wages

The Gulf of Mexico is already acutely familiar with the harsh reality of economic and natural disasters. The region is still recovering from the lingering effects of Hurricane Katrina, and in recent months has suffered from losses to the fishing industry arising from the *Deepwater Horizon* oil spill and the drilling shutdown mandated by the Obama administration. The proposed tax repeals will cause further harm to the region by targeting the energy sector. Table 2 below illustrates the value of the energy sector to the region in terms of employment, labor, and value added (the additional value created at each stage of production).⁶⁷

Table 3 shows the estimates of lost output, wages, and employment in the Gulf of Mexico region from 2011 to 2020. The region stands to lose 56,000 jobs in 2011, trailing to about 42,000 for the duration of the tax policy, and \$126 billion in economic output, and more than \$24 billion in wages over the ten-year period. These figures alone are catastrophic, but when added to losses from the *Deepwater Horizon* oil spill and the moratorium on deepwater offshore drilling paints a grim picture for the region.

Table 2: Total Operational Impact of the Oil andNatural Gas Industry from Repealing the Section199 and Dual Capacity Tax Credits, by State

	% of Total Employment in State	% of Total Labor in State	% of Total Value Added in State
Alabama	3.7	3.9	4.7
Florida	2.6	2.6	2.8
Louisiana	13.4	16.6	20.6
Mississippi	5.5	6.5	8.4
Texas	13.1	19.5	24.2

Source: National Economics & Statistics, *The Economic Impacts of the Oil and Natural Gas Industry on the U.S. Economy: Employment, Labor Income, and Value Added,* 2009 Table 3a at 14.

Table 3: Summary of Losses to the Gulf of MexicoRegion from Repealing the Section 199 and DualCapacity Tax Credits

	Decrease in Output (2011-2020)	Job Losses (2011)	Decrease in Wages (2011-2020)
Gulf of Mexico	\$126,506,631,899	56,709	\$24,021,312,325
Alabama	\$2,011,714,518	1,145	\$417,464,764
Florida	\$2,252,892,091	1,451	\$535,852,430
Louisiana	\$30,323,937,235	13,479	\$5,505,359,710
Mississippi	\$6,215,746,855	2,453	\$923,962,370
Texas	\$85,702,341,199	38,181	\$16,638,673,051

67. National Economics and Statistics, The Economic Impacts of the Oil and Natural Gas Industry on the U.S. Economy: Employment, Labor Income, and Value Added, 2009 Table 3a at 14.

Table 4: Total Job Losses in the Gulf of MexicoRegion from Repealing the Section 199 and DualCapacity Tax Credits, by Sector and State,2011-2020 Average

	Total					
	Gulf of Mexico	Alabama	Florida	Lauisiana	Minninni	Tavaa
Agriculture, forestry,	Wexico	Alabama	FIORIDA	Louisiana	Mississippi	Texas
fishing, and hunting	270	6.7	5.2	49.4	14.5	194
Mining	2,052	9.3	1.9	511	78.7	1,451
Utilities	612	10.5	8.1	174	32.8	387
Construction	1,632	17.6	11.4	440	77.6	1,085
Manufacturing	7,716	300	412	1,986	449	4,569
Wholesale trade	1,847	42.3	52.6	459	81.1	1,213
Retail trade	4,441	83.8	92	1,093	206	2,966
Transportation and warehousing	1,999	37.2	37.1	457	100	1,368
Information	721	10.2	17.3	134	18.3	542
Finance and insurance	1,863	25.5	40.4	292	57.4	1,448
Real estate and rental and leasing	2,649	31.8	61.7	577	67.3	1,911
Professional, scientific, and technical services	2,335	33.7	50.2	490	69	1,693
Management of companies and enterprises	1,181	21.9	36.9	397	57.9	667
Administrative and waste management	0.470					
services	3,179	57.8	67	647	113	2,294
Educational services	679	14.2	10.6	156	35.1	463
Health care and social assistance	3,864	65.9	78.3	960	159	2,601
Arts, entertainment, and recreation	570	6.1	14.2	115	12	422
Accommodation	402	5	10.4	102	19.9	264
Food services and drinking places	2,776	51.6	50.1	660	122	1,892
Other services	2,282	40.5	45.9	529	90.4	1,576

Table 4 examines the average annual employment decreases in more detail. Several industries stand to lose more than 2,000 jobs, including: healthcare (3,800), retail trade (4,400), and manufacturing (7,700). High skill industries (as defined previously) account for 40 percent of the jobs lost. These job losses could severely impact the region as it attempts to recover from its recent hardships.

Again, higher losses are incurred in 2011, followed by slightly lower losses later in the decade analyzed. Hence, the average over the entire period is a conservative view of the effects by industry. Results for 2011, alone, are available from the author upon request.

E. State and Local Governments will Lose \$18 Billion in Taxes and other Public Revenues and the Federal Government will Lose \$65 Billion from Repealing the Section 199 and Dual Capacity Tax Credits

The economic losses presented in this study will translate into lower tax collections and decreases in public revenues for state, local, and federal governments. The analysis applies a broad measure of the total tax revenues (from all sources) that state, local, and federal governments will lose from the repeals of the Section 199 and dual capacity tax credits. This analysis estimates that \$18 billion will be lost in state and local taxes from 2011-2020,⁶⁸ with an average loss of \$1.87 billion per year. This lack of revenue could result in reduced investments in local economy, schools, hospitals, and other vital public services. Communities clearly benefit from the income that the energy sector provides. Limiting or eliminating this income could hinder the development of necessary community projects.

I follow the approach outlined by the Federal Reserve Bank of Boston to determine annual state and local tax burdens as a share of GSP (*see* Table A8).⁶⁹ For each state and the District of Columbia, the state and local tax burden can be calculated by dividing annual state and local tax revenue by annual GSP. Data for state and local tax revenues are released by the U.S. Census Bureau annually with a two year lag. Therefore, the state and local tax burden

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calculations are based on the most recent available fiscal year, 2008.⁷⁰ Those data produce the *average* state and local tax burden in 2008 in each state. The effective tax burdens are applied to the estimated lost output as a result of the repeals.

Figure 5 presents the estimated losses in tax revenues per year from 2011-2020. As before, the losses in tax revenues presented have the same caveats regarding "spill-over" revenues.⁷¹ The estimates thus represent a lower bound on potential state and local tax revenues lost from the tax credit repeals.

The decrease in economic activity resulting from the repeals will also produce significant losses in federal tax revenues. According to the IRS, the average effective tax rate in the United States in FY2008 was 18.98 percent of GSP.⁷² Applying this rate to the total lost output from the repeals (\$341 billion) suggests that U.S. federal tax receipts would decrease by \$65 billion from 2011 to 2020, or an average of \$6.47 billion a year.⁷³

In total, therefore, the repeals could result in a loss of nearly \$8.35 billion per year. Dividing the loss equally among all U.S. taxpayers yields an immediate cost of about \$57.98 per taxpayer each year.⁷⁴ Increasing tax burdens in current economic conditions would be unwise, and would likely put undue pressure on an already strained tax base.

The economic losses presented in this study will translate into lower tax collections and decreases in public revenues for both state and local and federal governments.

68. Note that this analysis is conservative because it does not consider the state and local taxes produced from "spill-over" effects. These tax revenues cannot be accurately measured because spill-over output cannot be attributed to particular states. Because spill-over output is significant, however, my estimate significantly understates the total incremental state and local taxes that would be produced *annually*.

- 72. U.S. Department of the Treasury, Internal Revenue Service. (2008). *SOI Tax Stats. IRS Data Book*: 2008, Table 5. Washington, DC. Retrieved from < http://www.irs.gov/taxstats/article/0,,id=168593,00.html>.
- 73. GNO Inc. estimated that the moratorium "could cut state and local tax revenue by more \$700 million over four years, accruing at a rate of \$8 million to \$15 million a month." See Groups Struggle to Assess Oil's Impact, supra.
- 74. Internal Revenue Service, Tax Stats at a Glance (available at http://www.irs.gov/taxstats/article/0,,id=168593,00.html).

^{69.} Matthew Nagowski. "Measures of State and Local Tax Burden," New England Public Policy Center, Federal Reserve Bank of Boston. Jul. 13, 2006. Web. http://www.bos.frb.org/economic/neppc/memos/2006/nagowski071306.pdf>.

Data pertain to period July 1, 2005 – June 30, 2006. U.S. Census Bureau, Federal State and Local Governments, State and Local Government Finances, 2005-2006 Estimate. < http://www.census.gov/govs/www/06censustechdoc.html#fiscalyr>.

^{71.} It is impossible to quantify these benefits because state and local taxes differ from state to state and because the BEA does not provide a means to allocate the spill-over revenues to particular states. To be conservative, the analysis estimates only the revenues that can be accurately assigned and measured.



Figure 5: State and Local Tax Revenue Losses from Repealing the Section 199 and Dual Capacity Tax Credits, by State, 2011-2020

This analysis estimates that \$18 billion will be lost in state and local taxes from 2011-2020, with an average loss of \$1.87 billion per year.

VI. Summary And Conclusions

This paper estimates the regional and national economic effects expected to result from the proposed repeal of the Section 199 and dual capacity tax credits beginning in the upcoming fiscal year. The resulting analysis indicates that repealing these tax credits, in yet another targeted action against the U.S. energy sector, will restrict economic activity, cause additional job losses, and decrease aggregate wages well into the future.

The repeal of these two tax credits will cost approximately \$341 billion in economic output, with some \$68 billion to be expected in lost wages to employees, and initial losses across the entire U.S. of over 154,000 jobs in 2011, alone, trailing to 115,000, on average, for the duration of the tax policies. Many of the job losses will occur in fields such as healthcare and manufacturing. One region that stands to be hit the hardest is the Gulf of Mexico. That region, already recovering from numerous recent disasters, could lose another \$126 billion in economic output, more than \$24 billion in wages, 56,709 jobs, and about \$600 million in state and local tax revenues over the ten year period analyzed. Those costs, nationally and regionally, far outweigh the potential benefit of increased government revenues that may be derived from the proposal. The current administration is, again, undertaking important policy alternatives while ignoring the economic costs of those actions, even in the midst of the deepest recession since the Great Depression.

Of course, the figures and tables that I produce are in no way an exact estimate of the economic effects of the repeals of the Section 199 and dual capacity tax credits. Although a debate on the parameters and estimates put forth in my analysis is likely, the point remains that economic costs need to be considered when evaluating policies as potentially costly as these.

One region that stands to be hit the hardest is the Gulf of Mexico. That region, already recovering from numerous recent disasters, could lose another \$126 billion in economic output, more than \$24 billion in wages, 56,709 jobs, and about \$600 million in state and local tax revenues over the ten year period analyzed.

Appendix

Table A1: Total Multipliers for Output, Earnings, Employment by State,Petroleum and Coal Products Manufacturing, 2007

		N	lultiplier	
		Final Demand	(Direct Effect
	Output	Earnings	Employment	Earnings
United States	2.286	0.4541	7.9432	3.745
Alabama	1.7454	0.3622	7.6059	2.202
Alaska	1.8295	0.3075	5.0555	2.6859
Arizona	1.6711	0.3967	7.6367	1.9989
Arkansas	1.6168	0.2893	6.3087	2.1761
California	1.9273	0.3641	5.8849	3.0074
Colorado	2.0869	0.415	7.1275	3.2943
Connecticut	1.7497	0.3895	6.1603	2.1548
Delaware	1.4135	0.1841	2.88	1.9414
District of Columbia	1.1073	0.0556	0.6989	1.1695
Florida	1.6956	0.4033	8.3599	2.063
Georgia	1.8603	0.4289	8.5537	2.312
Hawaii	1.4148	0.231	3.9867	1.9506
Idaho	1.5068	0.3091	6.0273	1.9331
Illinois	1.7405	0.3231	5.5907	2.5717
Indiana	1.6152	0.2575	5.0965	2.3915
lowa	1.5266	0.2969	6.0728	1.8751
Kansas	1.8107	0.3056	5.7575	2.5168
Kentucky	1.6504	0.2579	5.1542	2.5042
Louisiana	2.0121	0.3653	6.8478	3.0799
Maine	1.6164	0.3636	8.5576	2.0025
Maryland	1.6213	0.3444	6.2773	1.984
Massachusetts	1.8359	0.4303	7.1249	2.2318
Michigan	1.6748	0.3479	6.4049	2.279
Minnesota	1.5944	0.2847	4.9824	2.2605
Mississippi	1.665	0.2475	5.03	2.6049
Missouri	1.8454	0.3845	7.9844	2.3268
Montana	1.8606	0.319	6.4847	2.7058
Nebraska	1.4156	0.2771	4.9563	1.7264

			1acturing, 2007 (c	uii. <i>)</i>
Nevada	1.5086	0.3048	5.7059	1.9536
New Hampshire	1.7917	0.4186	7.5926	2.0726
New Jersey	1.6323	0.2709	4.3114	2.3673
New Mexico	1.8544	0.3287	6.4274	2.7703
New York	1.673	0.3458	5.7846	2.0251
North Carolina	1.8366	0.4159	9.0403	2.3515
North Dakota	1.6794	0.2727	5.0733	2.3412
Ohio	1.8776	0.3705	7.3303	2.6533
Oklahoma	2.0588	0.389	8.0324	3.0721
Oregon	1.8715	0.4328	8.8002	2.2677
Pennsylvania	1.8316	0.3366	6.3513	2.7794
Rhode Island	1.7201	0.3723	6.8058	2.0142
South Carolina	1.7658	0.3992	8.9587	2.08
South Dakota	1.3866	0.2744	4.9031	1.6014
Tennessee	1.5693	0.2599	5.1398	2.3559
Texas	2.2442	0.4357	7.6549	3.6538
Utah	2.0201	0.3853	8.0637	3.1822
Vermont	1.5311	0.3453	6.4374	1.6831
Virginia	1.5403	0.2627	5.0872	2.2369
Washington	1.5247	0.2586	4.2535	2.1474
West Virginia	1.8561	0.3073	6.823	2.8023
Wisconsin	1.4703	0.2583	5.1685	2.077
Wyoming	1.7831	0.2949	5.2038	2.5287

Table A1: Total Multipliers for Output, Earnings, Employment by State, Petroleum and Coal Products Manufacturing, 2007 (cont.)

Source: Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis. *Notes*: U.S. multiplier is for 2006, other multipliers are for 2007. The national multiplier is no longer supplied by the BEA, and thus the 2006 multiplier is used as a proxy.

Table A2: Employment Detail Multipliers by State, Petroleum and Coal Products Manufacturing, 2007

	Agriculture, etc.	Mining	Utilities*	Construction	Manufacturing	Wholesale trade	Retail trade	Transportation, etc.	Information	Finance and Insurance	Real estate, etc. Protessional Services,	etc.	Management	Administrative, etc.	Educational Services	Healthcare, etc.	Arts, etc.	Accommodation	Food Places, etc.	Other services*	Households
AL	0.060	0.08	0.09).15	2.60	0.37	0.73	0.32	0.09	0.22	0.280	.290).19	0.50	0.120).57 (0.05	0.04	0.45	0.35	0.04
AK	0.010	0.35	D.11 C).22	1.02	0.14	0.56	0.24	0.07	0.14	0.430	.230	0.08	0.19	0.100	D.41 (0.07	0.08	0.31	0.23	0.04
AZ	0.020).02	0.08	0.08	2.68	0.38	0.65	0.29	0.10	0.27	0.390	.340	0.29	0.46	0.100	0.53 (D.11	0.08	0.39	0.32	0.06
AR	0.040	D. 17 (0.100).13	2.29	0.28	0.54	0.28	0.07	0.16	0.200	.170	0.29	0.30	0.08	0.50	0.04	0.04	0.32	0.28	0.05
CA	0.030	0.28	0.06).17	1.13	0.28	0.59	0.23	0.11	0.24	0.390	.37 (0.20	0.45	0.090).42(0.11	0.07	0.36	0.27	0.04
CO	0.050	0.34(D.08 C).24	1.25	0.30	0.75	0.29	0.14	0.36	0.420	.47 ().24	0.49	0.11(D.56 (0.12	0.09	0.44	0.35	0.05
CT	0.010	0.00	0.08).05	2.24	0.32	0.51	0.18	0.11	0.23 (0.220	.320	0.30	0.35	0.080).48(0.10	0.03	0.26	0.26	0.04
DE	0.010	0.00	0.03).06	0.82	0.13	0.30	0.11	0.04	0.10	0.150	.130	0.13	0.21	0.040).22 (0.03	0.02	0.18	0.16	0.02
DC	0.000	0.00	0.00 0	0.00	0.51	0.01	0.01	0.01	0.01	0.01 (0.010	.030	0.00	0.05	0.000	0.01	0.01	0.01	0.03	0.01	0.00
	0.040																				
GA	0.050	0.02	0.08).10	2.84	0.37	0.79	0.39	0.14	0.29(0.390	.37 (0.35	0.61	0.100	0.61 (0.09	0.07	0.46	0.37	0.07
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Table A2: Employment Detail Multipliers by State, Petroleum and Coal Products Manufacturing, 2007 (cont.)

NJ 0.01 0.00 0.05 0.06 1.18 0.21 0.43 0.21 0.07 0.17 0.19 0.27 0.13 0.33 0.05 0.35 0.06 0.05 0.22 0.22 0.03 NM 0.030.620.110.32 1.21 0.20 0.66 0.29 0.10 0.17 0.27 0.31 0.14 0.38 0.11 0.55 0.10 0.10 0.40 0.34 0.05 NY 0.010.010.070.042.400.240.400.170.090.190.250.280.210.310.070.420.080.040.240.220.04 NC 0.040.020.050.11 3.27 0.45 0.75 0.37 0.12 0.250.340.410.41 0.57 0.110.680.100.06 0.49 0.37 0.08 ND 0.020.610.090.17 1.15 0.27 0.50 0.20 0.06 0.190.150.150.16 0.17 0.090.440.050.04 0.26 0.26 0.04 OH 0.030.190.080.12 2.05 0.36 0.72 0.31 0.11 0.280.250.330.27 0.48 0.100.62 0.100.03 0.47 0.38 0.04 OK 0.050.460.100.27 1.77 0.33 0.78 0.34 0.13 0.300.47 0.38 0.21 0.49 0.12 0.69 0.10 0.05 0.51 0.40 0.07 OR 0.07 0.03 0.07 0.09 3.11 0.42 0.75 0.38 0.13 0.27 0.32 0.37 0.50 0.48 0.13 0.62 0.12 0.10 0.44 0.34 0.07 PA 0.03 0.08 0.08 0.11 1.82 0.29 0.63 0.29 0.10 0.25 0.21 0.34 0.24 0.46 0.07 0.50 0.09 0.05 0.35 0.33 0.04 RI 0.01 0.01 0.06 0.07 2.56 0.29 0.54 0.20 0.10 0.26 0.28 0.25 0.33 0.35 0.07 0.56 0.09 0.04 0.38 0.30 0.05 SC 0.07 0.02 0.07 0.10 3.25 0.39 0.84 0.34 0.11 0.30 0.44 0.30 0.29 0.54 0.13 0.65 0.07 0.10 0.47 0.40 0.07 SD 0.03 0.02 0.09 0.07 1.93 0.26 0.47 0.21 0.06 0.21 0.08 0.09 0.12 0.13 0.06 0.43 0.05 0.07 0.26 0.23 0.05 TN 0.020.020.060.091.590.290.460.230.090.190.200.210.160.350.050.380.070.060.320.280.04 TX 0.050.380.100.28 1.20 0.32 0.78 0.36 0.14 0.380.500.440.17 0.60 0.120.680.11 0.07 0.50 0.41 0.06 UT 0.040.350.090.25 1.49 0.38 0.71 0.34 0.15 0.450.550.480.41 0.54 0.120.600.130.10 0.49 0.36 0.04 VT 0.03 0.03 0.06 0.09 2.56 0.30 0.57 0.24 0.10 0.18 0.24 0.24 0.04 0.28 0.09 0.57 0.07 0.08 0.34 0.28 0.05 VA 0.020.030.050.081.650.220.470.240.070.140.200.240.190.400.060.360.070.050.290.220.03 WA 0.030.000.060.07 1.10 0.23 0.44 0.20 0.07 0.140.21 0.23 0.12 0.30 0.08 0.34 0.08 0.04 0.29 0.21 0.03 WV 0.020.660.120.24 1.82 0.25 0.71 0.28 0.07 0.150.230.230.18 0.33 0.110.530.050.07 0.39 0.32 0.06 WI 0.050.010.060.07 1.66 0.28 0.55 0.20 0.08 0.190.150.190.22 0.30 0.07 0.42 0.08 0.05 0.30 0.23 0.05 WY 0.010.480.120.25 1.41 0.17 0.53 0.23 0.05 0.120.290.200.06 0.19 0.080.350.050.07 0.29 0.20 0.05

Source: Regional Input-Output Modeling System (RIMS II). Regional Product Division. Bureau of Economic Analysis.

State	2011-2012 (\$)	2011-2020 (\$)		
United States	l States 2,364,600,000			
Alabama	24,761,860	189,584,361		
Alaska	8,983,095	68,777,319		
Arizona	2,747,627	21,036,669		
Arkansas	11,696,082	89,548,774		
California	473,975,240	3,628,899,237		
Colorado	23,122,852	177,035,620		
Connecticut	5,329,720	40,805,963		
Delaware	19,076,650	146,056,663		
District of Columbia	1,888,228	14,456,847		
Florida	33,925,536	259,744,270		
Georgia	13,167,994	100,818,185		
Hawaii	9,763,235	74,750,311		
Idaho	156,022	1,194,549		
Illinois	100,673,526	770,787,275		
Indiana	67,285,619	515,159,252		
lowa	3,793,213	29,041,994		
Kansas	31,549,863	241,555,389		
Kentucky	24,155,519	184,942,034		
Louisiana	233,469,326	1,787,512,487		
Maine	3,423,105	26,208,337		
Maryland	10,645,101	81,502,145		
Massachusetts	13,917,863	106,559,411		
Michigan	24,108,812	184,584,430		
Minnesota	42,223,783	323,278,183		
Mississippi	46,328,045	354,701,666		
Missouri	16,092,227	123,207,009		
Montana	20,976,597	160,603,236		
Nebraska	240,492	1,841,279		
Nevada	2,493,222	19,088,869		
New Hampshire	2,857,225	21,875,788		
New Jersey	73,215,148	560,557,544		

Table A3: Total Estimated Wage Burden on Labor from Repealing the Section 199 andDual Capacity Tax Credits, by State

Table A3: Total Estimated Wage Burden on Labor from Repealing the Section 199 andDual Capacity Tax Credits, by State (cont.)

and a standard state of a state of the state		
New Mexico	13,161,747	100,770,360
New York	27,837,572	213,132,952
North Carolina	13,266,661	101,573,610
North Dakota	2,916,331	22,328,323
Ohio	74,126,150	567,532,448
Oklahoma	35,887,376	274,764,717
Oregon	5,372,594	41,134,220
Pennsylvania	101,859,234	779,865,411
Rhode Island	968,874	7,417,992
South Carolina	3,997,361	30,605,016
South Dakota	114,141	873,901
Tennessee	16,109,121	123,336,355
Texas	594,777,679	4,553,799,620
Utah	21,982,148	168,302,044
Vermont	2,916,331	22,328,323
Virginia	11,211,265	85,836,868
Washington	55,719,437	426,605,030
West Virginia	12,290,213	94,097,625
Wisconsin	6,000,939	45,945,023
Wyoming	18,042,000	138,135,066

Source: U.S. Department of the Treasury; Bureau of Economic Analysis; U.S. Department of Commerce

	2011-2012 (\$)	2011-2020 (\$)
United States	44,579,401,282	341,313,515,497
Aggregate State	37,260,256,012	285,275,903,270
Spill-Over	7,319,145,269	56,037,612,226
Alabama	262,752,644	2,011,714,518
Alaska	143,549,976	1,099,062,470
Arizona	23,136,039	177,136,586
Arkansas	142,241,756	1,089,046,343
California	7,545,282,292	57,768,986,359
Colorado	383,052,314	2,932,765,542
Connecticut	51,590,231	394,990,572
Delaware	284,353,886	2,177,100,224
District of Columbia	43,978,971	336,716,436
Florida	294,253,160	2,252,892,091
Georgia	132,048,779	1,011,005,795
Hawaii	116,639,336	893,026,393
Idaho	1,470,265	11,256,797
Illinois	1,394,673,844	10,678,049,029
Indiana	1,009,349,814	7,727,890,541
lowa	36,571,828	280,005,087
Kansas	470,478,014	3,602,123,410
Kentucky	387,100,077	2,963,756,454
Louisiana	3,960,648,803	30,323,937,235
Maine	30,473,175	233,311,934
Maryland	99,424,106	761,221,327
Massachusetts	132,527,347	1,014,669,859
Michigan	264,501,816	2,025,106,711
Minnesota	534,529,246	4,092,519,212
Mississippi	811,846,765	6,215,746,855
Missouri	179,708,818	1,375,905,613
Montana	331,049,597	2,534,616,854
Nebraska	2,121,025	16,239,217
Nevada	24,107,697	184,575,897
New Hampshire	25,346,967	194,064,125
New Jersey	1,044,347,955	7,995,847,000
New Mexico	205,704,632	1,574,937,505
New York	272,739,959	2,088,180,452
North Carolina	137,762,899	1,054,754,844
North Dakota	42,047,906	321,931,613
Ohio	996,718,832	7,631,183,882
Oklahoma	583,501,015	4,467,462,031

Table A4: Decrease in Output from Repealing the Section 199 and Dual Capacity Tax Credits, by State

Table A4: Decrease in Output from Repealing the Section 199 and Dual Capacity Tax Credits, by State (cont.)

Pennsylvania	1,540,522,269	11,794,709,134
Rhode Island	9,016,342	69,031,868
South Carolina	36,777,963	281,583,319
South Dakota	923,655	7,071,787
Tennessee	229,154,507	1,754,476,911
Texas	11,193,694,025	85,702,341,199
Utah	366,751,135	2,807,958,736
Vermont	21,764,753	166,637,598
Virginia	147,043,700	1,125,811,491
Washington	705,465,119	5,401,256,477
West Virginia	208,023,713	1,592,693,102
Wisconsin	70,947,528	543,195,950
Wyoming	275,856,308	2,112,040,171

Source: Bureau of Economic Analysis; U.S. Department of Commerce

Notes: U.S. multiplier is for 2006, other multipliers are for 2007. The national multiplier is no longer supplied by the BEA, and thus the 2006 multiplier is used as a proxy.

	2011-2012 (Jobs)	2011-2020 Average (Jobs)
United States	154,901	118,597
Aggregate State	124,021	94,954
Spill-Over	30,880	23,643
Alabama	1,145	877
Alaska	397	304
Arizona	106	80.9
Arkansas	555	425
California	23,039	17,639
Colorado	1,308	1,002
Connecticut	182	139
Delaware	579	444
District of Columbia	28	21.3
Iorida	1,451	1,111
Georgia	607	465
lawaii	329	252
daho	6	4.5
linois	4,480	3,430
ndiana	3,185	2,438
owa	145	111
Kansas	1,496	1,145
Kentucky	1,209	926
ouisiana	13,479	10,320
laine	161	124
Maryland	385	295
<i>l</i> lassachusetts	514	394
Michigan	1,012	775
vlinnesota	1,670	1,279
Aississippi	2,453	1,878
Aissouri	778	595
Montana	1,154	883
Vebraska	7	5.7
levada	91	69.8
lew Hampshire	107	82.2
lew Jersey	2,758	2,112
lew Mexico	713	546
New York	943	722
North Carolina	678	519
North Dakota	127	97.3

Table A5: Total Job Losses from Repealing the Section 199 and Dual Capacity Tax Credits, by State

Table A5: Total Job Losses from Repealing the Section 199 and Dual Capacity Tax Credits, by State (cont.)

Ohio	3,891	2,979
Oklahoma	2,277	1,743
Oregon	248	190
Pennsylvania	5,342	4,090
Rhode Island	36	27.3
South Carolina	187	143
South Dakota	3	2.5
Tennessee	751	575
Texas	38,181	29,233
Utah	1,464	1,121
Vermont	92	70.1
Virginia	486	372
Washington	1,968	1,507
West Virginia	765	586
Wisconsin	249	191
Wyoming	805	616

Source: Bureau of Economic Analysis; U.S. Department of Commerce

Notes: U.S. multiplier is for 2006, other multipliers are for 2007. The national multiplier is no longer supplied by the BEA, and thus the 2006 multiplier is used as a proxy.

	Manufacturing	Retail trade	Finance and insurance	Professional, scientific, and technical services	Educational services	Health care and social assistance
United States	20,490	9,537	3,856	5,079	1,421	7,808
Alabama	300	84	26	34	14	66
Alaska	61	34	8	14	6	25
Arizona	28	7	3	4	1	6
Arkansas	154	36	11	11	6	33
California	3,388	1,781	723	1,101	267	1,245
Colorado	176	105	50	66	15	78
Connecticut	51	12	5	7	2	11
Delaware	127	46	16	20	6	35
District of Columbia	16	0	0	1	õ	0
Florida	412	92	40	50	11	78
Georgia	155	43	16	20	6	33
Hawaii	64	27	8	13	4	21
Idaho	1	0	Õ	0	o O	0
Illinois	951	324	157	193	46	268
Indiana	671	266	85	86	36	188
lowa	45	11	4	3	2	8
Kansas	312	103	41	40	19	91
Kentucky	233	98	35	36	16	74
Louisiana	1,986	1,093	292	490	156	960
Maine	50	10	4	5	1	9
Maryland	112	25	11	15	3	22
Massachusetts	142	30	15	23	5	31
Michigan	217	94	25	41	14	72
Minnesota	379	121	54	63	19	109
Mississippi	449	206	57	69	35	159
Missouri	200	56	22	27	6	45
Montana	164	96	29	40	14	74
Nebraska	2	1	0	0	0	0
Nevada	27	6	2	3	1	4
New Hampshire	32	7	3	4	1	6
New Jersey	578	212	83	131	25	174
New Mexico	103	56	14	26	10	47
New York	300	50	24	35	9	52
North Carolina	188	43	14	24	6	39
North Dakota	22	10	4	3	2	8

Table A6: Total Job Losses in Selected Industries from Repealing the Section 199 and
Dual Capacity Tax Credits, 2011-2020 Average

North Carolina	188	43	14	24	6	39
North Dakota	22	10	4	3	2	8
Ohio	834	292	113	132	40	253
Oklahoma	384	170	66	84	27	149
Oregon	67	16	6	8	3	13
Pennsylvania	1,172	406	158	220	46	325
Rhode Island	10	2	1	1	0	2
South Carolina	52	13	5	5	2	10
South Dakota	1	0	0	0	0	0
Tennessee	177	51	22	23	6	43
Texas	4,569	2,966	1,448	1,693	463	2,601
Utah	207	99	62	67	17	83
Vermont	28	6	2	3	1	6
Virginia	121	34	10	18	4	26
Washington	390	155	49	80	28	122
West Virginia	157	61	13	20	10	45
Wisconsin	61	20	7	7	3	15
Wyoming	167	63	14	24	9	42

Table A6: Total Job Losses in Selected Industries from Repealing the Section 199 and Dual Capacity Tax Credits, 2011-2020 Average (cont.)

Source: U.S. Department of the Treasury; Bureau of Economic Analysis; U.S. Department of Commerce

	2011-2012	2011-2020 (*)
United States	(\$)	(\$)
	8,855,427,000	67,799,854,500
Aggregate State	6,943,232,203	53,159,506,949
Spill-Over	1,912,194,797	14,640,347,551
Alabama	54,525,615	417,464,764
Alaska	24,127,695	184,729,002
Arizona	5,492,231	42,050,197
Arkansas	25,451,843	194,867,087
California	1,425,433,136	10,913,551,566
Colorado	76,173,612	583,208,443
Connecticut	11,484,480	87,928,689
Delaware	37,035,409	283,554,405
District of Columbia	2,208,282	16,907,282
Florida	69,988,381	535,852,430
Georgia	30,444,402	233,091,644
Hawaii	19,044,166	145,807,956
Idaho	301,605	2,309,182
Illinois	258,902,108	1,982,233,635
Indiana	160,913,557	1,232,003,352
lowa	7,112,653	54,456,642
Kansas	79,404,695	607,946,603
Kentucky	60,490,251	463,131,840
Louisiana	719,062,178	5,505,359,710
Maine	6,854,768	52,482,195
Maryland	21,119,880	161,700,256
Massachusetts	31,061,887	237,819,293
Michigan	54,943,982	420,667,915
Minnesota	95,446,862	730,770,333
Mississippi	120,679,924	923,962,370
Missouri	37,443,395	286,678,069
Montana	56,758,477	434,560,237
Nebraska	415,185	3,178,784
Nevada	4,870,758	37,292,015
New Hampshire	5,921,885	45,339,757
New Jersey	173,322,221	1,327,007,874
New Mexico	36,461,989	279,164,127
New York	56,373,866	431,615,541
North Carolina	31,196,553	238,850,343
North Dakota	6,827,715	52,275,069
NOTITIUAKOIA		

Table A7: Wage Losses from Repealing the Section 199 and Dual Capacity Tax Credits, by State

Table A7: Wage Losses from Repealing the Section 199 and Dual Capacity Tax Credits, by State (cont.)

Oklahoma	110,249,609	844,104,687
Oregon	12,183,431	93,280,070
Pennsylvania	283,107,554	2,167,557,924
Rhode Island	1,951,505	14,941,320
South Carolina	8,314,511	63,658,433
South Dakota	182,786	1,399,465
Tennessee	37,951,479	290,568,119
Texas	2,173,198,684	16,638,673,051
Utah	69,951,593	535,570,764
Vermont	4,908,477	37,580,800
Virginia	25,078,478	192,008,491
Washington	119,651,918	916,091,641
West Virginia	34,440,864	263,689,774
Wisconsin	12,463,951	95,427,813
Wyoming	45,622,806	349,302,140
Services Duracy of Economic Analysis U.S. Department of Commerces		

Source: Bureau of Economic Analysis; U.S. Department of Commerce

Notes: U.S. multiplier is for 2006, other multipliers are for 2007. The national multiplier is no longer supplied by the BEA, and thus the 2006 multiplier is used as a proxy.

	Tax Burden		
State	(Annual Average \$)		
United States	\$1,876,898,815		
Alabama	\$10,554,839		
Alaska	\$21,867,067		
Arizona	\$871,678		
Arkansas	\$8,456,409		
California	\$361,505,404		
Colorado	\$11,312,931		
Connecticut	\$2,407,694		
Delaware	\$10,842,423		
Florida	\$10,330,157		
Georgia	\$4,537,098		
Hawaii	\$7,137,373		
Idaho	\$75,317		
Illinois	\$49,909,390		
Indiana	\$46,230,455		
Iowa	\$1,372,798		
Kansas	\$21,030,562		
Kentucky	\$19,159,275		
Louisiana	\$145,976,479		
Maine	\$1,715,017		
Maryland	\$4,705,861		
Massachusetts	\$6,038,920		
Michigan	\$13,389,253		
Minnesota	\$28,487,307		
Mississippi	\$44,874,601		
Missouri	\$6,330,896		
Montana	\$17,995,829		
Nebraska	\$80,794		
Nevada	\$849,759		
New Hampshire	\$700,621		
New Jersey	\$50,406,272		
New Mexico	\$10,124,524		
New York	\$11,707,221		
North Carolina	\$5,901,804		
North Dakota	\$2,682,923		
Ohio	\$44,476,080		
Oklahoma	\$26,888,168		
Oregon	\$2,120,311		
Pennsylvania	\$67,610,357		
Rhode Island	\$397,819		
South Carolina	\$1,486,038		
South Dakota	\$25,793		
Tennessee	\$7,810,291		

Table A8: Lost State and Local Tax Revenues from Repealing Section 199 and Dual Capacity Tax Credits,
by State, 2011-2020 Annual Average

Table A8: Lost State and Local Tax Revenues from Repealing Section 199 and Dual Capacity Tax Credits,
by State, 2011-2020 Annual Average (cont.)

Texas	\$314,646,757
Utah	\$14,832,781
Vermont	\$1,549,974
Virginia	\$5,130,725
Washington	\$29,266,397
West Virginia	\$12,782,070
Wisconsin	\$3,390,991
Wyoming	\$14,876,640
District of Columbia	\$1,866,703

Source: U.S. Census Bureau, Bureau of Economic Analysis

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Dr. Mason's consulting practice provides firms with advice on financial, political, and legal risks in banking and finance. Dr. Mason has consulted on issues ranging from mortgage, home equity loan, home equity line of credit, auto, and credit card servicing, and securitization, to discrimination and disparate impact in consumer lending and insurance pricing, valuing distressed securities, the investor recoveries and efficient liquidations of bankrupt firms, and economic valuations of complex investment and lending arrangements involving asset-backed securities, collateralized debt obligations, and hedge funds. In litigation, he regularly serves as testifying or non-testifying expert on matters related to a wide variety of financial market-related claims. Dr. Mason has consulted for and advised investment firms, corporations, and research institutions, including The Conference Board, Inc., Coventry First, Deloitte, Fannie Mae, the Federal Deposit Insurance Corporation, the Federal Reserve Bank of Philadelphia, The Group of Thirty, Pricewaterhouse-Coopers, and The World Bank Group.

Dr. Mason's academic research focuses primarily on investigating liquidity in thinly-traded assets and illiquid market conditions. Current academic research projects analyze default risk, including both immediate and cross-default risk, and default resolution costs in the contexts of asset-backed securities, in systemic and non-systemic environments, as well as the efficacy of bailout and resolution policies through the history of financial markets. His research and economic commentary has received hundreds of national and international press citations in publications such as the Wall Street Journal, New York Times, Washington Times, The Economist, Financial Times, Barrons, Business Week, die Zeit, Neue Zürcher Zeitung, Financial Times-Germany, Los Echos, Forbes, Fortune, Portfolio Magazine, Bloomberg Magazine, American Banker, and on press syndicates such as Associated Press, Reuters, Bloomberg, KnightRidder, and MarketWatch-Dow Jones Newswire.

Dr. Mason received a B.S. in economics from Arizona State University in 1990 and a Ph.D. from the University of Illinois in 1996.

