

Executive Summary

Beyond the Congressional Budget Office: The Additional Economic Effects of Immediately Opening Federal Lands to Oil and Gas Leasing

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While headlines have reported a boom in US oil and gas production, that boom has been related almost exclusively to exploration and development on private and state lands and waters. Even that limited expansion has had profound effects. Opening up Federal resources — in addition to private and state resources — to exploration and development can accelerate all of those trends. But recent administrations have yet to follow through on promises to allow access to Federal resources, instead proposing to levy increased taxes on oil and gas production.

The Congressional Budget Office (CBO), at the request of the House Budget Committee, recently released an analysis of lease revenues that could be expected to arise from a proposal to open Federal lands and waters to oil and gas leasing (the "CBO Assessment"). Specifically, the proposal aims to open areas that are statutorily or as a matter of administration policy prohibited from leasing. The issue has repeatedly been a hot-button political and economic issue in the last several years, most recently at the beginning of the Obama administration and then again as Republican challengers in the 2012 election placed opening the lands and waters at the center of their energy policy.

But while the Administration cannot shy away from exploring the fiscal benefits of opening Federal lands, the CBO study was restricted to analyzing just one component of those benefits: lease revenues. This paper highlights the larger economic effects, including economic growth, wages, jobs, and both federal and state and local tax revenues, of opening Federal lands and waters to oil and gas leasing, relying solely upon the CBO natural resource and oil and gas price estimates to show these broader economic effects in order to maintain direct comparability with their analysis. This paper also seeks to "complete" the CBO Assessment by taking measurements of output, jobs, wages and tax revenues into consideration.

The findings of this paper demonstrate that opening federal land that is currently closed-off because of statutory or administrative action would lead to broad-based economic stimulus, including increasing GDP, employment, and wages. Specifically:

GDP increase:

- $127 billion annually for the next seven years.
- $450 billion annually in the next thirty years.
- $14.4 trillion cumulative increase in economic activity over the next thirty-seven years.
    - These estimates include "spill-over" effects, or gains that extend from one location to another location. For example, increased oil production in the Gulf of Mexico might lead to more automobile purchases that would increase economic activity in Michigan. Spillover effects would add an estimated $69 billion annually in the next seven years and $250 billion over thirty years.

Jobs increase:

- 552,000 jobs annually over the next seven years.
- Almost 2 million jobs annually over the next thirty years.
    - Jobs gains would be felt in high-wage, high-skill employment like health care, education, professional fields, and the arts.

Wage increase:

- $32 billion increase in annual wages over the next seven years.
- $115 billion annually between seven and thirty years.
- $3.7 trillion cumulative increase over thirty-seven years.

Increase in tax revenue:

- $2.7 trillion increase in federal tax revenues over thirty-seven years.
- $1.1 trillion in state and local tax revenues over thirty-seven years.
- $24 billion annual federal tax revenue over the next seven years, $86 billion annually thereafter.
- $10.3 billion annual state and local tax revenue over the next seven years, $35.5 billion annually thereafter.

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The present analysis illustrates the considerable economic value ignored by the CBO in its analysis, even accepting the CBO's resources estimates which rely upon aged geologic survey data and only tangentially take into account modern deep water and horizontal drilling technology. In addition to the lease revenues established by the CBO, Federal taxes from the increased output could raise as much as $24 billion annually in the short-run, and would continue to produce $86 billion annually in the long-run. The federal benefits, when incorporating the CBO's estimates on leasing revenues, could be as great as $36 billion annually for the next 7 years, and $99 billion annually in the long-run. Per this analysis, opening Federal lands and waters to oil and gas leasing will generate Federal tax revenue far exceeding revenue sought through levying new taxes on exising oil and gas production.

According to the findings of this paper, the effects of the proposal on the larger economy would also be substantial. Output would increase by $127 billion annually over the next 7 years (about 1% of current GDP), and $450 billion annually after that (about 3.2% of current GDP). *This exceeds many estimates for current annualized GDP growth throughout the entire economy.* Over 500 thousand jobs could be created for the next 7 years with almost 2 million jobs after that, aiding economic recovery for workers facing historically high unemployment rates. Wages would increase by $32 billion annually in the short run, with long run annual effects of $115 billion. The economic impulses created by opening Federal lands and waters to oil and gas extraction could therefore help significantly to spur economic growth — and help break the economy out of its sluggish post-recessionary malaise. Importantly, those benefits would be realized without any increase in direct government spending. Rather, increased output would refill national, state, and local government coffers — currently depleted by the current economic crises — without additional government outlays.

Even those findings, however, are conservative, because of Congressional constraints on CBO analyses, the CBO's use of price data that is not generally accepted, and flawed methodologies. More specifically, the CBO Assessment analyzes only production from Federal tracts where (1) leasing is *statutorily* prohibited — for example the Arctic National Wildlife Refuge (ANWR), and (2) onshore and offshore areas that are restricted from oil and natural gas leasing based on the policies of the current administration — including sections of the Outer Continental Shelf (OCS). Areas with less stringent restrictions are left out of the analysis.

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Gas and oil prices are a crucial component of the analysis. Yet gas and oil prices used in the CBO Assessment lie below those used in other independent analyses like that of the World Energy Outlook. For instance, the 2020 oil price used by CBO is $106.9 per bbl (in 2011 prices), while that used by the World Energy Outlook current policy scenario (in 2011 prices) is $128.3. The 2020 World Energy Outlook current policy scenario price for natural gas runs about $5.7, the same as that used by the CBO. The CBO revenue estimates are, therefore, lower than other contemporary studies. Using the CBO's lower oil price and resource estimates necessarily decreases the estimates of expected economic activity, making the estimates in this paper conservative.

Reserve estimates have historically increased over time in areas that have been assessed geologically with each new generation of survey and drilling technology. No geologic assessments have been allowed on the Federal lands and waters subject to the CBO Assessment since the 1970s, when assessment technology was rudimentary by today's standards. Those early geologic assessments did not explore depths or take into account modern drilling technology like hydraulic fracturing that could result in substantial additional resources. Until those geologic assessments are updated, the existing available estimates are properly treated as an extremely conservative lower bound.

Perhaps the most important gains from the proposal, particularly through the lens of the CBO's Assessment, are in state and federal tax revenues. These revenues are substantially larger than the CBO's estimates for bonus payments, royalties, and leasing receipts, and bring the total fiscal revenues expected from opening up Federal lands and waters over the period 2012 – 2022 from roughly zero (because the CBO does not recognize the short-run investment phase of oil and gas projects) to up to $517 billion. Then from 2023-2035, revenues will increase from the roughly $25 to $50 billion predicted by the CBO to well over a trillion when considering effects on the broader economy.

This paper illustrates that Congress has chosen to evaluate only one small piece of the economic effect of opening federal tracts to oil and gas leasing. By ignoring the investment phase, the CBO — upon the instruction of Congress — substantially underestimates the economic effects of current policy choices. Moreover, by focusing on lease revenue and ignoring the potential for increased tax revenue, Congress has doubly downplayed the fiscal effects of such a policy. By failing yet again to analyze jobs, wages, and output, Congress ignores the crucial economic reality that freeing resources can help our economy grow beyond the recent recession and its continuing drag upon economic growth.

As Congress again turns its attention to the means through which our ongoing budget crises – from the debt limit to budget sequesters to the simple act of funding our government beyond the current continuing resolution – there will no doubt be renewed efforts to address revenue concerns by punitively taxing the oil and gas industry in pursuit of modest revenue gains. As this analysis notes, though, the revenue potential inherent to expanding access to resources found on Federal lands and waters is orders of magnitude greater than that which is measured by the CBO.

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