The Economic Impact of Sequestration Budget Cuts to DOD and Non-DOD Agencies as Modified by the American Taxpayer Relief Act of 2012

by

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March 14, 2013

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Summary of Research Findings

The sequester that went into effect on March 1, 2013 has the objective of reducing federal spending during FY 2013 by $85.4 billion from the baseline established by federal spending levels during FY 2012. The terms of the sequester, as specified by the American Taxpayer Relief Act (ATRA) of 2012, provide for an equal reduction in discretionary spending by the Department of Defense and by Non-Defense agencies: $42.7 billion each with the spending reductions from Non-Defense agencies divided further between discretionary accounts, Medicare, and other mandatory programs. These reductions in federal spending will impact federal payroll and federal procurement (contracting) outlays primarily during the final six months of FY 2013 although some anticipatory impacts have already occurred during the first half of the fiscal year.

The consequences and collateral effects of these impacts will be determined by the methods that federal departments and agencies select for achieving the required spending reductions. Reductions in federal payroll will have immediate economic impacts within the economy as a result of reduced take-home income of federal employees, and resultant changes in their spending patterns. Whether these payroll savings are achieved by layoffs, furloughs, or hiring freezes that leave vacant positions gained through retirements or otherwise becoming vacant will not significantly alter the economic impacts of this loss of income by federal employees. As current federal contracts will not be terminated as a consequence of the sequester but could be stretched out, while new contracting will be curtailed, the magnitude of reduced federal procurement outlays will accumulate over the fiscal year and some of the impacts of these reductions in federal contracting will extend into future years, although their origins will track back to the March 1st sequester.

These spending reductions will have economic consequences at the national and local levels that can be measured in terms of equivalent gross domestic product values, labor income, and employment equivalents. Furthermore, the reductions of federal jobs or their equivalent through furloughs and the loss of federal services provided by contractors will have collateral impacts on the economy as a result of the disruptions caused by delays in or cancelation of federally provided services. These collateral impacts can be illustrated at the agency or individual firm level and will have measurable economic impacts.

The analysis reported herein is intended to update the July 17, 2012 report entitled "The Economic Impact of the Budget Control Act of 2011 on DOD and non-DOD Agencies." As the magnitude of the sequester was reduced under the ATRA, as was the timeframe for accomplishing the sequester, the findings presented in this earlier analyses need to be revised to reflect the current federal spending reduction targets. These revised analyses, presented in the following pages, find that reducing federal spending by $85.4 billion in FY 2013 will:

- reduce the nation's GDP by $158.2 billion, an amount equivalent to one percentage point of GDP growth in 2013;

- decrease personal earnings of the workforce by $80.5 billion of which 37 percent would consist of federal payroll losses;

- cost the U.S. economy 1.58 million jobs or their equivalent in lost payroll earnings, a job loss equivalent to a one percentage point increase in the nation's unemployment rate; and,

- significantly impact the private sector with it accounting for 87.2 percent of these job losses (or full-time equivalents) and with small businesses experiencing 59.3 percent of these private sector job losses.

The consequences of these economic impacts in 2013 will lower the full-year's GDP growth rate to a 1.5-2.0% range and reverse the slow decline in the nation's unemployment rate raising it the equivalent of a full percentage point.

The Economic Impact of the Sequester as Directed by the ATRA

This author's July 17, 2012 report entitled "The Economic Impact of the Budget Control Act of 2011 on DOD and Non-DOD Agencies" was based on projected federal spending reductions from FY 2011 levels as required in the Budget Control Act of 2011 and as reported by the Congressional Research Service in May 2012. These federal spending reductions projected for FY 2013 totaled $115.7 billion from actual 2011 federal agency spending levels.

The American Taxpayer Relief Act of 2012 included a sequester amounting to $85.4 billion divided evenly between DOD and Non-DOD agencies. The amount of these federal spending reductions will increase in FY 2014 to $110 billion. The analyses of this revised sequester for FY 2013 employs the same methodology as utilized in the July 17, 2012 report with refinements reflecting new information regarding the implementation approach that DOD and non-DOD agencies have announced as they prepare to execute the required spending reductions.

The most significant refinement in this analysis is the treatment of employment effects. Previously, job losses were treated as terminations or workers separated from their place of employment. Currently, federal agencies, led by DOD, have largely adopted the furlough as their vehicle for achieving payroll savings. Rather than the termination of employees, the furlough would reduce the affected workers' payroll by up to 20 percent (10% annual reduction achieved over a six-month period). While agencies are instituting hiring freezes and in some agencies civilian contract workers are being terminated, furloughs and the resultant payroll savings have been embraced as the primary means of reducing payroll spending. Nevertheless, the estimated total of $29.7 billion in federal payroll savings does represent a loss of labor (work time) and, even if most of these federal workers will not be eligible for unemployment benefits, they will be underemployed (as are the many civilian part-time workers preferring full-time jobs that are not counted in the unemployment rate). For workers whose annual incomes have been reduced by 10 percent (20% for the remainder of FY 2013), this loss of earnings will have economic impacts similar to the impacts of unemployment, and therefore, are counted here as equivalent jobs lost (five workers losing 20% of their work hours and payroll equals one job lost). These federal payroll reductions are converted to lost full-time employment equivalents and unemployed-worker equivalents and included as part of the employment impact in this analysis.

For federal contractors, the loss of jobs will be achieved largely by layoffs once the existing backlog of federal contract work is drawn down and will accumulate and accelerate in the fourth quarter of FY 2013 with the impacts of these cutbacks spreading out across the U.S. economy over the succeeding months. These economic impacts, even though they may extend into a subsequent fiscal year, are credited to the fiscal year in which the federal spending cutback occurred.

The economic impacts generated as a result of the sequester that went into effect on March 1, 2013 have been found to have consequences exceeding the $85.4 billion value of the required federal expenditure reductions. These impacts are summarized in Table 1 and distributed by state in Tables 2, 3, 4, and 5.

The $85.4 billion in federal spending reductions will generate impacts on the performance of the U.S. economy reducing GDP by a total of $158.2 billion 2013, an amount approximating one percentage point of growth (the 2012 GDP was $15.9 tillion in 2013 dollars). IHS Global Insight, in its March 12, 2013 forecast update, projected 1.8% real GDP growth in 2013. By applying this growth rate to 2012 GDP ($15.901 trillion in 2013 dollars), the projected dollar increase in GDP in 2013 would equal $286.2 billion. The loss of $158.2 billion in GDP value to sequestration in 2013, then, would be equivalent to 55.3 percent of this projected annual gain. If these two GDP values were considered to be additive, in the absence of the federal spending reductions under the sequester, GDP would have increased by $445.2 billion (2.8%) rather than only $286.2 billion (1.8%).

While these two GDP values cannot be considered fully additive, the sequester does subtract from the U.S. economy's full growth potential in 2013 and this subtraction can be measured in terms of lost labor income and jobs. As shown in Table 1, a total of 1.58 million jobs or job equivalents would be lost directly, indirectly, or lost due to the decline in consumption outlays (induced job losses) as a result of federal spending reductions required by the sequester. The number of jobs and their types vary depending on whether the spending reductions are generated by DOD or non-DOD agencies. This variation is largely a result of the degree to which the spending reduction is taken from federal payroll outlays or from reduced procurement contracting. This difference is shown in the number of federal workers impacted by the projected federal payroll spending reductions: 36,245 full-time job equivalents as a result of DOD payroll spending reductions and 165,607 full-time job equivalents as a result of payroll spending reductions by non-DOD agencies for a total of 201,852 federal full-time equivalent jobs.

Table 1

Summary of Economic Impacts of Sequestration Budget Cuts
as Modified by the American Taxpayer Relief Act of 2012
(in billions of 2013 dollars)

Sources of Impact	Agency Impacts DOD	Agency Impacts Non-DOD	Total Impacts
Direct Impacts (1)	$42.7	$42.7	$85.4
Total Output (2)	$71.1	$87.1	$158.2
Personal Earnings (3)	$35.0	$45.5	$80.5
Employment (4)	820,825	757,035	1,577,860
Direct	245,205	303,963	549,168
Indirect	212,610	108,820	321,430
Induced	363,010	344,252	707,262
Federal Workers (5)	36,245	165,607	201,852
Contractors (6)	421,548	247,176	668,724
In Small Businesses	412,054	404,257	816,311

Source: GMU Center for Regional Analysis.
(1) Congressional Budget Office, (2) reduction from GDP, (3) lost labor income, (4) direct, indirect and induced jobs lost due to federal spending reductions in FY 2013, (5) actual or equivalent civilian job losses based on reductions in federal payroll in FY 2013, (6) prime and sub-contractors and their vendors and suppliers—the supply-chain effect.

Correspondingly, impacts on federal contractor jobs will be greater from projected spending reductions under the sequester for DOD than for non-DOD agencies. This is reflected in the length and depth of the supply chain (prime and subcontractors and their vendors and suppliers) with DOD-generated job losses accounting for almost two-thirds of the projected direct and indirect private-sector job impacts.

Small businesses were found to account for approximately one-half of all job losses under the initially proposed sequester (BCA of 2011), as reported in this author's testimony on September 20, 2012 before the U.S. House of Representatives Committee on Small Business. This updated analysis confirms the magnitude of impact with the estimated loss of 816,311 jobs (or equivalent full-time positions) accounting for 51.7 percent of all job losses, including federal civilian jobs and 59.3 percent of the 1.376 million private sector job losses linked to the federal spending reductions under the sequester in FY 2013.

State-by-State Employment Impacts Resulting From Sequestration Budget Cuts As Modified by the American Taxpayer Relief Act of 2012

The estimated job losses under the sequester, summarized in Table 1, can be disaggregated to the state-level employment impacts based on their historic distribution of DOD and non-DOD payroll and procurement spending. While actual agency budget reductions may have a different pattern from their historic distribution, depending on how each agency manages these cuts in their operating programs and public service requirements, this state-level distribution of impacts confirms that DOD and non-DOD spending patterns vary considerably across the states and, that in many states, the non-DOD agency spending cuts will be the primary sources of potential employment losses.

Several states stand out as being particularly vulnerable to federal spending cuts. The ten states (including the District of Columbia) shown to have the greatest potential job losses from federal spending cutbacks are listed in Table 2. These ten states account for more than one-half (55.1 percent) of the total potential jobs losses. With California accounting for 10.6 percent and Virginia accounting for 9.8 percent, together they represent a combined 20.4 percent of total job losses based on their historic share of DOD and non-DOD federal payroll and procurement outlays.

These job losses for all states are presented in Table 3 and the state-by-state distribution of federal spending reduction impacts on gross state product and on personal income (labor income) are presented in Tables 4 and 5.

Conclusions

The research presented herein measures the magnitude and significance of economic impacts that will be generated as a result of federal spending reductions totaling $85.4 billion under the sequester that went into effect on March 1, 2013 as specified by the American Taxpayer Relief Act.

These impacts were identified as:
(1) a decline of $158.2 billion in gross domestic product (GDP) in 2013;

(2) a decreased labor income totaling $80.5 billion; and,

(3) a loss of 1.58 million jobs or full-time equivalents.

The significance of these economic impacts can be gauged by their relative magnitudes and consequences given the fragile state of the U.S. economy as its slow recovery begins its fifth year in June. The projected loss of economic activity in 2013, linked to reduced federal spending under the sequester, represents a one percentage point loss of GDP and a one percentage point increase in unemployment. The effects of the disruption to essential federal services required for continuing economic advancement and its negative impacts on consumer confidence that may damped retail sales and undermine the recent positive trends in the housing market will deepen the cost of these federal spending reductions and reduce the public benefits of this indiscriminant policy approach to reducing the federal budget deficit.

Table 2

Ten States with the Largest Employment Impacts from Sequestration Budget Cuts as Modified by the American Taxpayer Relief Act of 2012

State	Job Losses* DOD Cuts	Job Losses* Non-DOD Cuts	Total Job* Losses
California	101,786	65,236	167,022
Virginia	102,525	51,593	154,118
Texas	74,512	43,725	118,237
DC	11,419	81,126	92,545
Maryland	29,657	54,499	84,156
Florida	31,546	27,144	58,690
Pennsylvania	30,068	27,837	57,905
New York	21,687	29,780	51,467
Massachusetts	31,218	13,753	44,971
Georgia	20,784	19,445	40,229
Subtotal	455,202	414,138	869,340
All States	820,825	757,035	1,577,860
Top 10 as % of all States	55.5	54.7	55.1

Source: GMU Center for Regional Analysis.

*Direct, indirect and induced job losses resulting from federal spending reductions from the sequester in FY 2013. Columns and rows may not add up due to rounding.

Table 3

State Employment Impacts of Sequestration Budget Cuts
as Modified by the American Taxpayer Relief Act of 2012

State	Job Losses* DOD Cuts	Job Losses* Non-DOD Cuts	Total Job* Losses
Alabama	20,209	8,625	28,834
Alaska	4,436	3,266	7,702
Arizona	26,535	10,076	36,611
Arkansas	2,711	4,010	6,721
California	101,786	65,236	167,022
Colorado	13,883	17,434	31,317
Connecticut	27,274	4,129	31,403
Delaware	49	1,545	1,594
District of Columbia	11,419	81,126	92,545
Florida	31,546	27,144	58,690
Georgia	20,784	19,445	40,229
Hawaii	5,915	2,046	7,961
Idaho	739	6,815	7,554
Illinois	17,499	21,981	39,480
Indiana	11,254	6,499	17,753
Iowa	3,943	4,249	8,192
Kansas	4,682	5,547	10,229
Kentucky	12,816	8,400	21,216
Louisiana	14,212	6,905	21,117
Maine	3,204	2,177	5,381
Maryland	29,657	54,499	84,156
Massachusetts	31,218	13,753	44,971
Michigan	10,186	12,778	22,964
Minnesota	3,697	8,039	11,736
Mississippi	3,943	4,650	8,593
Missouri	25,302	12,634	37,936
Montana	738	2,937	3,675
Nebraska	1,971	2,898	4,869
Nevada	3,204	4,449	7,653
New Hampshire	2,711	1,955	4,666
New Jersey	19,142	12,833	31,975
New Mexico	3,697	17,001	20,698
New York	21,687	29,780	51,467
North Carolina	8,954	12,601	21,555

Table 3 Continued

State	Job Losses* DOD Cuts	Job Losses* Non-DOD Cuts	Total Job* Losses
North Dakota	739	1,793	2,532
Ohio	16,020	13,822	29,842
Oklahoma	5,998	5,675	11,673
Oregon	2,217	6,523	8,740
Pennsylvania	30,068	27,837	57,905
Rhode Island	1,972	1,352	3,324
South Carolina	11,090	11,292	22,382
South Dakota	1,479	1,979	3,458
Tennessee	7,639	20,941	28,580
Texas	74,512	43,725	118,237
Utah	6,244	5,594	11,838
Vermont	1,725	1,279	3,004
Virginia	102,525	51,593	154,118
Washington	12,816	17,825	30,641
West Virginia	739	6,552	7,291
Wisconsin	20,784	6,466	27,250
Wyoming	492	1,536	2,028
Guam	1,642	355	1,977
Puerto Rico	1,642	2,209	3,851
Undistributed	19,479	31,226	50,705
Totals	820,825	757,035	1,577,860

Source: GMU Center for Regional Analysis.
*Direct, indirect and induced job losses resulting from federal spending reductions from the sequester in FY 2013. Columns and rows may not add up to the totals due to rounding.

Table 4

Gross State Product (GSP) Impacts of Sequestration Budget Cuts
as Modified by the American Taxpayer Relief Act of 2012
(in billions of 2013 dollars)

State	GSP Losses* DOD Cuts	GSP Losses* Non-DOD Cuts	Total GSP* Losses
Alabama	$1.752	$1.137	$2.889
Alaska	0.384	0.388	0.772
Arizona	2.300	1.368	3.668
Arkansas	0.235	0.439	0.674
California	8.822	7.920	16.742
Colorado	1.203	1.939	3.142
Connecticut	2.364	0.779	3.143
Delaware	0.004	0.155	0.159
District of Columbia	0.989	8.312	9.301
Florida	2.734	3.156	5.890
Georgia	1.801	2.233	4.034
Hawaii	0.512	0.286	0.798
Idaho	0.064	0.700	0.764
Illinois	1.517	2.444	3.961
Indiana	0.976	0.804	1.780
Iowa	0.342	0.480	0.822
Kansas	0.406	0.621	1.027
Kentucky	1.110	1.016	2.126
Louisiana	1.232	0.885	2.117
Maine	0.277	0.262	0.539
Maryland	2.570	5.878	8.448
Massachusetts	2.706	1.800	4.506
Michigan	0.883	1.421	2.304
Minnesota	0.320	0.858	1.178
Mississippi	0.342	0.520	0.862
Missouri	2.193	1.608	3.801
Montana	0.064	0.305	0.369
Nebraska	0.171	0.317	0.488
Nevada	0.277	0.491	0.768
New Hampshire	0.235	0.233	0.468
New Jersey	1.658	1.548	3.206
New Mexico	0.320	1.760	2.080
New York	1.880	3.284	5.164
North Carolina	0.770	1.393	2.163

Table 4 Continued

State	GSP Losses* DOD Cuts	GSP Losses* Non-DOD Cuts	Total GSP* Losses
North Dakota	$0.064	$0.190	$0.254
Ohio	1.389	1.604	2.993
Oklahoma	0.520	0.650	1.170
Oregon	0.192	0.686	0.878
Pennsylvania	2.606	3.200	5.806
Rhode Island	0.171	0.163	0.334
South Carolina	0.961	1.284	2.245
South Dakota	0.128	0.219	0.347
Tennessee	0.662	2.208	2.870
Texas	6.458	5.392	11.850
Utah	0.540	0.646	1.186
Vermont	0.149	0.152	0.301
Virginia	8.886	6.557	15.443
Washington	1.110	1.964	3.074
West Virginia	0.064	0.668	0.732
Wisconsin	1.800	0.929	2.729
Wyoming	0.043	0.168	0.211
Guam	0.142	0.058	0.200
Puerto Rico	0.142	0.244	0.386
Undistributed	1.704	3.377	5.081
Totals	$71.144	$87.099	$158.243

Source: GMU Center for Regional Analysis.
*Gross State Product losses resulting from federal spending reductions under the sequester in FY 2013. Columns and rows may not add up to the totals due to rounding.

Table 5

State Labor Income Impacts of Sequestration Budget Cuts
as Modified by the American Taxpayer Relief Act of 2012
(in billions of 2013 dollars)

State	Income Losses* DOD Cuts	Income Losses* Non-DOD Cuts	Total Income* Losses
Alabama	$0.862	$0.607	$1.469
Alaska	0.189	0.204	0.393
Arizona	1.132	0.733	1.865
Arkansas	0.116	0.227	0.343
California	4.342	4.174	8.516
Colorado	0.592	1.006	1.598
Connecticut	1.164	0.434	1.598
Delaware	0.002	0.080	0.082
District of Columbia	0.487	4.247	4.734
Florida	1.346	1.650	2.996
Georgia	0.887	1.166	2.053
Hawaii	0.252	0.153	0.405
Idaho	0.032	0.357	0.389
Illinois	0.747	1.268	2.015
Indiana	0.480	0.425	0.905
Iowa	0.168	0.250	0.418
Kansas	0.199	0.322	0.521
Kentucky	0.546	0.535	1.081
Louisiana	0.606	0.470	1.076
Maine	0.136	0.138	0.274
Maryland	1.265	3.033	4.298
Massachusetts	1.332	0.960	2.292
Michigan	0.434	0.738	1.172
Minnesota	0.157	0.442	0.599
Mississippi	0.168	0.271	0.439
Missouri	1.080	0.854	1.934
Montana	0.032	0.156	0.188
Nebraska	0.084	0.164	0.248
Nevada	0.136	0.254	0.390
New Hampshire	0.116	0.122	0.238
New Jersey	0.816	0.814	1.630
New Mexico	0.157	0.901	1.058
New York	0.925	1.702	2.627
North Carolina	0.379	0.721	1.100

Table 5 Continued

State	Income Losses* DOD Cuts	Income Losses* Non-DOD Cuts	Total Income* Losses
North Dakota	$0.032	$0.098	$0.130
Ohio	0.684	0.838	1.522
Oklahoma	0.256	0.340	0.596
Oregon	0.095	0.352	0.447
Pennsylvania	1.283	1.672	2.955
Rhode Island	0.084	0.085	0.169
South Carolina	0.473	0.669	1.142
South Dakota	0.063	0.113	0.176
Tennessee	0.326	1.135	1.461
Texas	3.179	2.849	6.028
Utah	0.266	0.338	0.604
Vermont	0.074	0.080	0.154
Virginia	4.374	3.482	7.856
Washington	0.546	1.018	1.564
West Virginia	0.032	0.341	0.373
Wisconsin	0.886	0.502	1.388
Wyoming	0.021	0.082	0.103
Guam	0.070	0.032	0.102
Puerto Rico	0.070	0.126	0.196
Undistributed	0.838	1.761	2.599
Totals	$35.018	$45.491	$80.509

Source: GMU Center for Regional Analysis.
*Personal earnings lost due to losses of direct and indirect employment resulting from federal spending reductions from the sequester in FY 2013. Columns and rows may not add up to the totals due to rounding.