The Economic Impact of the Budget Control Act of 2011 on DOD & non-DOD Agencies

Stephen S. Fuller, Ph.D.
Dwight Schar Faculty Chair and University Professor
Director, Center for Regional Analysis
George Mason University
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Stephen S. Fuller, Ph.D.
Dwight Schar Faculty Chair and University Professor
Director, Center of Regional Analysis
George Mason University
Arlington, Virginia

with

Chmura Economics & Analytics
Richmond, Virginia

prepared for

Aerospace Industries Association
Arlington, Virginia

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Summary of Research Findings

There is a broad consensus that implementation of the automatic federal spending reductions provided for in the Budget Control Act (BCA) of 2011 would have significant negative impacts on the U.S. economy in 2013. The Congressional Budget Office (May 2012) released its analyses of these impacts confirming what other independent organizations had already concluded—that if the provisions of the BCA of 2011 are implemented beginning January 2, 2013, the U.S. economy, which is still struggling to sustain its recovery more than three years after the end of the 2008-2009 recession, could be pushed into recession during the first half of 2013. The International Monetary Fund (IMF) released a report on July 3, 2012 with the same conclusion. Other analyses have reported on the impacts of these federal spending reductions or sequestration on specific industries and their conclusions are the same: that implementing BCA of 2011 would severely impact the economy in 2013 with these losses reflected in reduced Gross Domestic Product (GDP) and a broad based loss of jobs that could add an estimated 1.5 percentage points to the current U.S. unemployment rate.

This author released a report entitled "The U.S. Economic Impact of Approved and Projected DOD Spending Reductions on Equipment in 2013" on October 24, 2011 in which the economic effects of reduced spending for military equipment were calculated. This analysis determined that a combined $45.1 billion reduction in the purchase of military equipment and in Research and Development funding (BCA I and II) by the Department of Defense would reduce GDP by $86.5 billion and result in the loss of 1,006,320 direct, indirect and induced jobs across all sectors of the U.S. economy impacting every state and representing a decline of personal income (salaries and wages) totaling $59.4 billion. This analysis was restricted to the procurement of military equipment and R&D spending and excluded reductions in DOD civilian payroll and DOD outlays for operations and maintenance. It also excluded the projected spending reductions in the BCA of 2011 impacting non-DOD agencies and therefore only provided a partial assessment of the potential consequences of federal spending reductions under sequestration.

The economic impact assessment presented in this report includes all discretionary spending subject to cutbacks under the BCA of 2011 (both the effects of statutory limits and automatic reductions) for DOD and non-DOD agencies (e.g., Agriculture, Commerce, Education, EPA, Energy, Health and Human Services, Homeland Security, Housing and Urban Department, Interior, Justice, Labor, NASA, State, and Transportation). However, it excludes spending reductions for all federal mandatory programs such as Medicare. The Congressional Research Service report, "The

Budget Control Act of 2011: The Effects on Spending and the Budget Deficit When the Automatic Spending Cuts Are Implemented" (CRS Report) dated April 23, 2012, was relied upon for the magnitude and timing of these federal spending reductions. However, the spending reductions used herein vary slightly from those reported by CRS. Rather than using spending reductions from the baseline budget forecast, year-over-year changes in spending were used as these provide a more realistic measure of the actual reductions for calculating associated economic impacts.

The identified economic impacts occurring in 2013 constitute the greatest one-year reductions in GDP, personal earnings and employment. The post-2013 schedule of federal spending trends through 2021 moderate these first-year losses, resulting in overall ten-year economic impacts that are smaller than the impacts occurring in 2013, although these are still negative for the full period. As the initial impacts of the BCA of 2011 are so damaging to the U.S. economy, the focus of this report will be on 2013.

As currently formulated, the automatic spending cuts affecting DOD and non-DOD agencies' discretionary spending authorities beginning January 2, 2013 will:

- Reduce the nation's GDP by $215 billion;
- Decrease personal earnings of the workforce by $109.4 billion; and,
- Cost the U.S. economy 2.14 million jobs.

As a consequence of sequestration, GDP growth in 2013 will be reduced by two-thirds and unemployment will increase by as much as 1.5 percentage points raising the current national rate above 9 percent. These are the easily measured impacts.

Other collateral impacts will be driven by behavioral factors. The loss of consumer confidence may suppress spending, especially spending requiring credit such as for autos and housing. Personal saving may increase taking further spending out of the economy. Business investment and private sector hiring may be dampened as a result of increased uncertainty—contributing to further erosion of the national economy. These and other collateral impacts will enlarge the negative consequences of the initial federal spending reductions and contribute to further deepening of the economic contraction in 2013, thereby extending its duration and increasing its magnitude.

Other costs will occur over a longer timeframe resulting from deferred or foregone innovation by both federal agencies and private entrepreneurs. These disruptions to the U.S. economy will have cumulative impacts with far-reaching and potentially more significant consequences than these initial first-year impacts. While these are beyond the scope of this analysis they need to be recognized and understood.

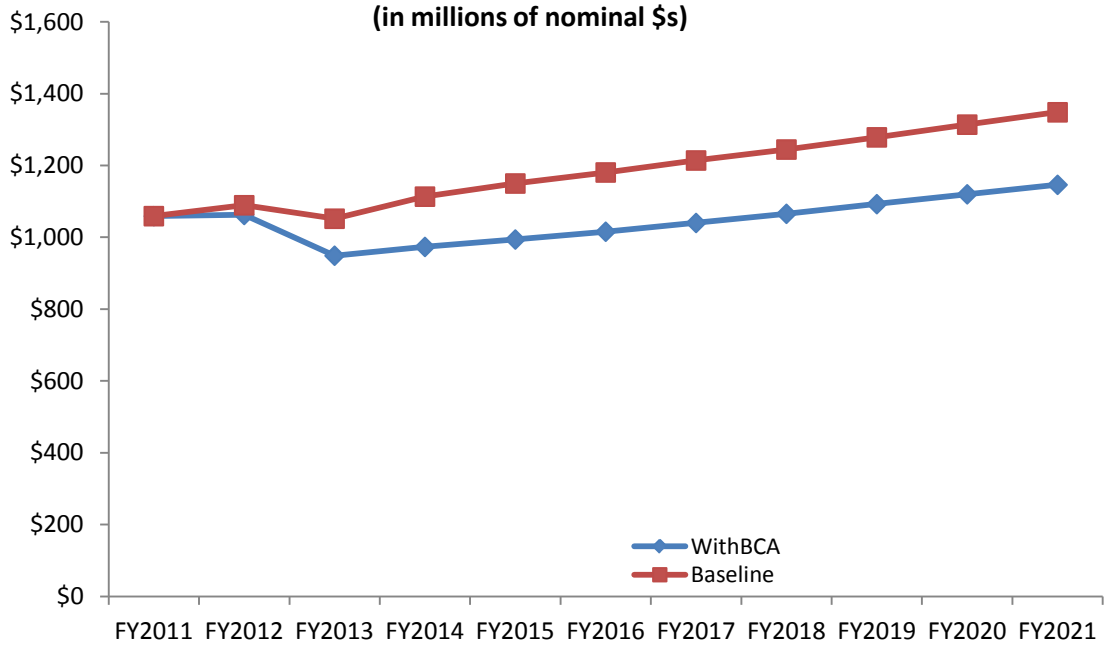
Still, these initial economic impacts—the loss of GDP, personal income and jobs—are real and have measurable consequences. If they are allowed to occur as currently scheduled, the long-term consequences will permanently alter the course of the U.S. economy's performance, changing its competitive position in the global economy.

Automatic Federal Spending Reductions Provided For in the Budget Control Act of 2011

The BCA of 2011 was signed into law on August 2, 2011. Among other provisions, this Act provided for two major categories of federal spending reductions: (1) discretionary spending caps that became effective in FY 2012 and (2) automatic spending reductions that now will become effective January 2, 2013. This reduction in budget authority would result in decreased discretionary spending by DOD totaling $800 billion and by non-DOD agencies totaling $700 billion with a roughly $200 billion reduction in mandatory programs (mainly from Medicare) over this ten-year period.

The CRS Report has analyzed the federal spending reductions mandated by the BCA. This analysis confirms that these cutbacks result in a significant reduction in federal spending beginning in FY 2013. Under the BCA, the federal budget reductions reduce spending levels from a "baseline" trajectory as shown in Figure 1.

Figure 1: BCA Total Spending Reductions (DOD and Non-DOD) (in millions of nominal $s)

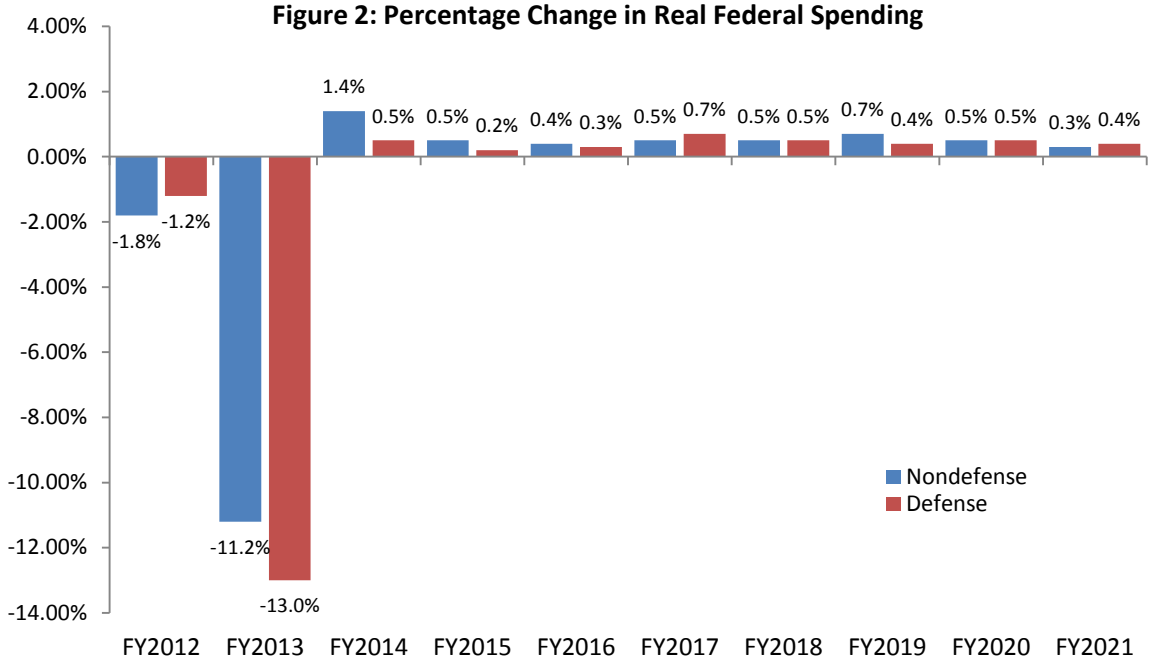


Source: Congressional Research Service

The largest year-over-year spending reduction would occur in FY 2013 due to the implementation of the automatic spending cuts with spending levels reduced 12.1 percent (in nominal terms) from FY 2012 levels (in FY 2012 spending will reflect a nominal increase over FY 2011). For DOD, this will represent a 11.5 percent reduction in spending in FY 2013 following a small (0.6 percent) nominal increase in FY 2012. For non-DOD agencies, their FY 2013 spending levels would decline by 9.8 percent following a year with no change in spending authority from FY 2011 (in nominal terms).

In subsequent fiscal years, the projected spending reductions from the baseline forecast would result in nominal increases in federal spending subject to BCA caps averaging 2.4 percent over the FY 2014-FY 2021 period. This rate of increase would also result in small "real" increases in spending although the actual gain in inflation-adjusted dollars will depend on the inflation rates over this period. Congressional Research Service calculations of spending levels by fiscal year for DOD and non-DOD for the FY 2012-FY 2021 period are shown in Figure 2.

Figure 2: Percentage Change in Real Federal Spending



Source: Congressional Research Service

The Economic Impact of the BCA of 2011 in 2013

This author's October 24, 2011 report entitled "The U.S. Economic Impact of Approved and Projected DOD Spending Reductions on Equipment in 2013" was limited to BCA reductions affecting DOD spending for military equipment and R&D and excluded reductions in DOD civilian payroll and DOD outlays for operations and maintenance. It also excluded the projected spending reductions in the BCA of 2011 impacting non-DOD agencies and therefore only provided a partial assessment of the potential consequences of sequestration-mandated federal spending reductions. The analyses presented herein include both DOD and non-DOD agencies subject to BCA required federal spending reductions.

The CRS Report presents estimates for the discretionary budget authority subject to BCA limits. This schedule of potential discretionary spending—the combined effects of statutory limits and automatic spending reductions—provides the inputs to the economic impact analysis presented herein. The annual changes in federal spending—year-to-year changes—provide the measure of direct federal spending reductions for DOD and non-DOD agencies.

Reductions in procurement spending are distributed across the primary sectors of the U.S. economy based on the General Services Administration (GSA) procurement database differentiating DOD and non-DOD purchasing patterns as reported in Tables 4 and 6. Reductions in federal payroll outlays are shown in a single-line item as a change in "federal payroll" on these tables.

Impacts of DOD Spending Reductions Under BCA

The estimated decrease in federal spending with the implementation of the Budget Control Act of 2011 (spending for FY 2012 and FY 2013) will reduce DOD spending by a total of $56.7 billion (see Table 4). This reduction in DOD spending is composed of payroll reductions totaling $7.1 billion and procurement reductions totaling $49.6 billion. These spending reductions would reduce U.S. gross domestic product by $94.5 billion.

These spending reductions and lost GDP would result in the loss of 325,693 direct jobs, including 48,147 civilian DOD employees. As shown in Table 4, the Professional and Business Services (PBS) sector would account for the largest direct job losses from DOD budget reductions. The sector would account for 133,883 direct jobs lost or 41.1 percent of the total direct job loss. This concentration of direct job losses reflects the impacts of DOD procurement spending reductions on contractors providing scientific, engineering and technical services.

These direct jobs losses would be accompanied by the further loss of 282,426 jobs among the suppliers and vendors that depend on DOD's primary contractors (indirect job losses) and 482,240 jobs that are dependent on the payroll spending

(induced job losses) of the workers whose jobs depended on DOD's procurement and payroll spending that was reduced as a result of the BCA of 2011.

A total of 1,090,359 jobs with a total labor income of $46.5 billion would be lost due to DOD budget cuts in FY 2012-FY 2013. Of these total job losses, almost 70 percent would come from two high-value added sectors: 37.1 percent (404,507) would be manufacturing jobs and 32.2 percent (351,311 jobs) would consist of professional and business service jobs. The federal sector job losses would account for 9.8 percent of the total (107,220 jobs). Although representing smaller percentages, all of the remaining sectors would experience job losses as the impacts from DOD spending reductions spread across the national economy.

Impacts of Non-DOD Agency Spending Reductions Under BCA

Budget cuts impacting non-DOD agencies (FY 2012-FY 2013) are estimated at $59.0 billion including $33.8 billion in reduced federal payroll (see Table 6). These non-DOD spending reductions would reduce U.S. GDP by $120.5 billion. Non-DOD cutbacks would have a much greater direct impact on federal employment than DOD budget reductions due to the respective differences in procurement and payroll distributions.

Non-DOD agency budget cuts would generate direct employment reductions of 420,529 jobs with an estimated 229,116 jobs or 54.5 percent of these direct job losses consisting of federal workers. Professional and Business Services would lose 125,012 direct jobs (29.7 percent of the total direct jobs losses), reflecting the impacts on federal contractors providing scientific, engineering and technical services. Additionally, suppliers and vendors of primary federal contractors would lose 150,552 jobs. This loss of direct and indirect jobs would contribute to the loss of an additional 476,268 jobs dependent on the payroll spending (induced jobs) foregone due to these spending reductions experienced by non-DOD agencies.

In total, non-DOD agency budget reductions for the FY 2012- FY 2013 period would generate job losses of 1,047,349 with almost half of these (510,229) consisting of federal jobs and 31 percent coming from the professional and business services sector. These two sectors would account for 80 percent of the direct, indirect and induced job losses attributable to non-DOD agency budget reductions.

Total Economic Impacts Under BCA in 2013

These economic impacts are summarized in Table 1 below for DOD and non-DOD agencies. Combined, the budget reductions (statutory discretionary spending limits and automatic spending reductions) would result in the loss of 2.14 million jobs in 2013 and the loss of $215 billion in GDP. This job loss would add as much as 1.5 percentage points to the current unemployment rate and this sharp decline in GDP would erase two-thirds of the gains in GDP currently projected for 2013. The distribution of these job losses are shown in Table 3 and the state-level losses of gross state product and labor income (personal earnings) are presented in Tables 10 and 11.

Table 1

Summary of U.S. Economic Impacts of the Budget Control Act of 2011
Fiscal Year 2012 and 2013
(in billions of current year dollars)

Sources of Impact	Spending Reductions* DOD	Spending Reductions* Non-DOD	Total Impacts
Direct Impacts (1)	$56.7	$59.0	$115.7
Total Output (2)	$94.5	$120.5	$215.0
Personal Earnings (3)	$46.5	$62.9	$109.4
Employment (4)	1,090,359	1,047,349	2,137,708
Direct	325,693	420,529	746,222
Indirect	282,426	150,552	432,978
Induced	482,240	476,268	958,508

Sources: GMU Center for Regional Analysis; Chmura Economics & Analysis
*Direct, indirect and induced impacts resulting from BCA-mandated federal spending reductions during FY 2012 and FY 2013; excludes impacts from cuts in entitlement programs. (1) Congressional Research Service, (2) reduction from GDP, (3) lost labor income, (4) direct, indirect and induced jobs lost due to BCA spending reductions in FY 2012 and FY 2013.

Employment Impacts by State Impact of the BCA of 2011 in 2013

The estimated job losses under BCA, summarized in Table 1, can be disaggregated to the state level employment impacts based on the historic distribution of DOD and non-DOD payroll and procurement spending. By using the most recent state-level distribution (FY 2010) of federal spending for payroll and procurement disbursements for DOD and non-DOD agencies the potential state-level vulnerabilities can be identified. Actual agency budget reductions will have a different pattern depending on how each agency chooses to absorb these cuts in their operating programs and public service requirements. Still, 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 (55.3 percent) of the total potential jobs losses,

with California accounting for 10.5 percent and Virginia accounting for 9.7 percent representing a combined 20.2 percent of the job losses based on their FY 2010 share of DOD and non-DOD federal payroll and procurement outlays.

Table 2

Top Ten State Employment Impacts of the Budget Control Act of 2011
Fiscal Years 2012 and 2013

State	Job Losses* DOD Cuts	Job Losses* Non-DOD Cuts	Total Job* Losses
California	135,209	90,255	225,464
Virginia	136,191	71,380	207,571
Texas	98,979	60,494	159,473
DC	15,169	112,238	127,407
Maryland	39,395	75,400	114,795
Florida	41,905	37,554	79,459
Pennsylvania	39,941	38,513	78,454
New York	28,809	41,201	70,010
Massachusetts	41,469	19,028	60,497
Georgia	27,609	26,903	54,512

Sources: GMU Center for Regional Analysis, Chmura Economics & Analysis. *Direct, indirect and induced job losses resulting from BCA-mandated federal spending reductions during FY 2012 and FY 2013; excludes impacts from cuts in entitlement programs.

The full potential job loss distribution across all states is presented in Table 3.

Table 3

State Employment Impacts of the Budget Control Act of 2011
Fiscal Years 2012 and 2013

State	Job Losses* DOD Cuts	Job Losses* Non-DOD Cuts	Total Job* Losses
Alabama	26,845	11,933	38,778
Alaska	5,893	4,518	10,411
Arizona	35,248	13,941	49,189
Arkansas	3,601	5,548	9,149
California	135,209	90,255	225,464
Colorado	18,442	24,120	42,562
Connecticut	36,230	5,712	41,942
Delaware	65	2,137	2,202
District of Columbia	15,169	112,238	127,407
Florida	41,905	37,554	79,459
Georgia	27,609	26,903	54,512
Hawaii	7,857	2,831	10,688
Idaho	982	9,429	10,411
Illinois	23,245	30,411	53,656
Indiana	14,950	8,992	23,942
Iowa	5,238	5,878	11,116
Kansas	6,220	7,675	13,895
Kentucky	17,024	11,621	28,645
Louisiana	18,879	9,553	28,432
Maine	4,256	3,012	7,268
Maryland	39,395	75,400	114,795
Massachusetts	41,469	19,028	60,497
Michigan	13,531	17,679	31,210
Minnesota	4,911	11,122	16,033
Mississippi	5,238	6,434	11,672
Missouri	33,611	17,480	51,091
Montana	981	4,064	5,045
Nebraska	2,618	4,009	6,627
Nevada	4,256	6,155	10,411
New Hampshire	3,601	2,705	6,306
New Jersey	25,427	17,755	43,182
New Mexico	4,911	23,521	28,432
New York	28,809	41,201	70,010
North Carolina	11,895	17,434	29,329

Table 3 Continued

State	Job Losses* DOD Cuts	Job Losses* Non-DOD Cuts	Total Job* Losses
North Dakota	982	2,481	3,463
Ohio	21,280	19,123	40,403
Oklahoma	7,967	7,852	15,819
Oregon	2,946	9,025	11,971
Pennsylvania	39,941	38,513	78,454
Rhode Island	2,619	1,870	4,489
South Carolina	14,732	15,623	30,355
South Dakota	1,965	2,738	4,703
Tennessee	10,148	28,972	39,120
Texas	98,979	60,494	159,473
Utah	8,294	7,739	16,033
Vermont	2,292	1,770	4,062
Virginia	136,191	71,380	207,571
Washington	17,024	24,661	41,685
West Virginia	982	9,065	10,047
Wisconsin	27,609	8,946	36,555
Wyoming	654	2,125	2,779
Guam	2,181	491	2,672
Puerto Rico	2,181	3,056	5,237
Undistributed	25,872	43,177	69,049
Totals	1,090,359	1,047,349	2,137,708

Sources: GMU Center for Regional Analysis; Chmura Economics & Analysis. *Direct, indirect and induced job losses resulting from BCA-mandated federal spending reductions during FY 2012 and FY 2013; excludes impacts from cuts in entitlement programs. Columns and rows may not add up to the totals due to rounding.

Measuring Economic Impact: How To Read The Tables

The CRS report is the principal source for the distribution of budget reductions to DOD and non-DOD agencies and their magnitudes and schedule over the FY 2011-FY 2021 period. It is assumed that all non-DOD agencies will experience the same percentage cutback with the distribution between salaries and wages (payroll) and procurement being proportional to non-DOD agency's budget split between payroll and procurement as reported for FY 2010 (U.S. Census, Consolidated Federal Funds Report). The DOD cutback is assumed to be the same as reported in the CRS report.

Cutbacks from procurement were distributed across twelve major industry sectors based on the North American Industrial Classification System (NAICS). The distribution is based on the purchasing matrix from the GSA procurement database that reflects historic procurement data (2000-2010) for each agency reported by NAICS Industries. These federal budget reductions, distributed by industry sector, are shown in Tables 4, 6, 8 and 9. Reductions affecting federal payroll and their economic impacts are shown under the heading "federal payroll." Impacts affecting state and local government sectors are combined under the heading "Government." Other headings include: TWU – Transportation, Wholesale Trade and Utilities; FIRE – Finance, Insurance and Real Estate; PBS – Professional and Business Services; Trade – Retail Trade; Information – Information Services; Leisure – Leisure and Hospitality.

The IMPLAN Pro model was used to estimate the GDP impact, the direct labor income or personal earnings effects and the indirect and induced employment impacts of these budget cutbacks by industry sector.

The impacts of the budget cutbacks reported by NAICS Industry sectors were converted to occupational categories by using the national industry-occupation matrix. These are presented in Tables 5 and 7 for the direct employment effects for budget cuts affecting DOD and non-DOD agencies respectively for the FY 2012-FY 2013 period.

Direct federal spending reductions are the estimated changes in federal spending on a year-to-year basis; that is, budget levels in FY 2012 are compared to budget outlays in FY 2011 and for FY 2013 the value of cutbacks are the differences between FY 2012 and proposed budget levels for FY 2013 (with BCA). These differences vary slightly from the values presented in the CRS report that represent the difference between the proposed reduced budget level and the hypothetical baseline budget for FY 2013 rather than the year-to-year spending comparison.

Direct impact is the measure of the output value lost directly as a consequence of the federal budget cutback. For procurement, this value is equal to the value of the reduction in federal purchases. For payroll, however, direct impact measures the estimated value of the services that will be lost due to reductions in federal employment. As a result, the direct impact of reductions in federal payroll outlays is larger than the value of the direct payroll cutback. This difference explains why the total Direct Impact value is larger than the total value of the Direct Federal Spending Cut.

Total Impact is the sum of the Direct Impact and its indirect (impacts on suppliers and vendors) and induced (household income benefits) effects. It is the accumulated value of the direct spending lost and the lost monetary value that would have been achieved as these dollars where recycled through the economy being spent and re-spent with business and consumer outlays spreading out across all sectors of the national economy.

The GDP impact from this direct, indirect and induced spending—or the absence of this spending—accounts only for the non-duplicative, value-added portion of this economic activity and therefore is smaller than the Total Impact.

As shown in Table 4, the Total Impact of direct federal spending cuts affecting DOD over the FY 2012-FY 2013 period is projected to total $157.6 billion and will reduce GDP by $94.5 billion. Similarly, as shown in Table 6, non-DOD agency cutbacks for the same period would generate a Total Impact of $173.5 billion and reduce GDP by a total of $120.5 billion.

In addition, this loss of GDP as a result of federal spending cuts can be expressed in terms of lost jobs and labor income. Employment impacts include: (1) those resulting directly from the reduction in procurement and federal payroll spending, (2) the loss of employment by suppliers and vendors associated with the prime contractors and (3) the lost jobs dependent on the payroll spending of employees of the prime contractors and their suppliers and vendors. This payroll effect associated with DOD cutbacks during FY 2012 and FY 2013 would total $46.5 billion and would total $62.9 billion as a result of cutbacks impacting non-DOD agencies.

Conclusions

The research presented herein measures the magnitude and significance of economic impacts that will be generated as a result of the Budget Control Act (BCA) of 2011. These impacts can be identified as: (1) a decline in gross domestic product (GDP), (2) a decreased labor income and (3) a loss of jobs. While these impacts will extend over a planned ten-year period, their incidence has been shown to impact FY 2013 to the greatest extent, with the result that economic losses would reverse the positive GDP trend occurring since the recovery began in June 2009 and push the U.S. economy towards recession with the associated job loss raising the unemployment rate by as much as 1.5 percentage points above the current level.

The magnitude of economic impacts resulting from BCA over the combined FY 2012-FY 2013 period have been shown to be large and their impact on the U.S. economy to be significant:

- Combined DOD and non-DOD agency spending reductions totaling $115.7 billion in FY 2013 would reduce the 2013 U.S. GDP by $215.0 billion.

- These spending reductions would result in the loss of 746,222 direct jobs including cutbacks in the federal workforce totaling 277,263 and decreases in the federal contractor workforce totaling 468,959 jobs, thus affecting all sectors of the national economy.

- The loss of these 746,222 direct jobs and 432,978 jobs of suppliers and vendors (indirect jobs) dependent on the prime contractors would reduce total labor income in the U.S. by $109.4 billion.

- The loss of this labor income and the resultant impacts of reduced consumer spending in the economy would generate an additional loss of 958,508 jobs dependent on the spending and re-spending of payroll dollars associated with the direct and indirect jobs lost as a result of BCA.

- This loss of $215.0 billion in GDP and 2.14 million jobs in 2013 would erase two-thirds of the GDP gains projected for the year and raise the national unemployment rate by 1.5 percentage points by the end of 2013.

- These economic impacts would affect every state with their respective vulnerabilities to projected DOD and non-DOD spending reductions being determined by their agency mix and relative magnitudes of federal payroll and procurement. Based on current patterns of federal spending by state, ten states account for more than half of total federal payroll and procurement outlays. This significant concentration of federal spending represents a major threat to these states' economies in 2013. While other states may appear less vulnerable to federal spending reductions, these may also suffer significant impacts due to their smaller sizes or more specialized economic structures.

Table 4

Effect of DOD Spending Reductions on the National Economy, FY2012-13 Cumulative

	Total GDP (Direct+Ripple)	Labor Income (Direct+Ripple)	Employment Impact			
Sector	($Million)	($Million)	Direct	Indirect	Induced	Total
Natural Resource	$109.1	$49.0	359	421	531	1,311
Construction	$6,080.9	$3,048.3	25,949	16,906	26,493	69,348
Manufacturing	$31,534.6	$14,339.9	55,410	167,301	181,796	404,507
Trade	$3,620.6	$1,660.9	24,343	7,097	18,672	50,112
TWU	$2,424.4	$1,071.4	8,964	6,521	14,280	29,765
Information	$3,050.3	$1,333.7	7,383	10,210	12,963	30,556
FIRE	$127.9	$21.9	648	433	446	1,527
PBS	$28,102.9	$14,576.1	133,883	58,527	158,900	351,311
Education/Health	$1,113.9	$600.0	6,995	2,680	6,397	16,072
Leisure	$285.1	$132.2	2,909	778	1,203	4,890
Other Service	$729.3	$385.3	5,701	2,602	4,296	12,599
Government	$943.3	$506.2	5,003	842	5,295	11,140
Federal Payroll	$16,383.8	$8,791.9	48,147	8,107	50,966	107,220
Total	**$94,506.1**	**$46,517.0**	**325,693**	**282,426**	**482,240**	**1,090,359**

Effect of BCA of 2011 (DOD FY2012-FY2013)

	Direct Federal Spending Cut	Direct Impact	Total Impact (Direct+ Ripple)	Total GDP (Direct+Ripple)
Sector	($Million)	($Million)	($Million)	($Million)
Natural Resource	$70.1	$70.1	$186.0	$109.1
Construction	$3,693.5	$3,693.5	$10,654.4	$6,080.9
Manufacturing	$22,523.1	$22,523.1	$62,193.1	$31,534.6
Trade	$2,274.0	$2,274.0	$5,432.1	$3,620.6
TWU	$1,654.5	$1,654.5	$3,814.4	$2,424.4
Information	$2,008.7	$2,008.7	$5,144.7	$3,050.3
FIRE	$111.1	$111.1	$167.9	$127.9
PBS	$15,474.7	$15,474.7	$43,160.3	$28,102.9
Education/Health	$634.2	$634.2	$1,785.7	$1,113.9
Leisure	$179.3	$179.3	$472.7	$285.1
Other Service	$419.5	$419.5	$1,223.0	$729.3
Government	$534.7	$534.7	$1,272.4	$943.3
Federal Payroll	$7,099.5	$9,286.3	$22,099.7	$16,383.8
Total	**$56,676.9**	**$58,863.7**	**$157,606.3**	**$94,506.1**

Note: Columns and rows may not add up to the totals due to rounding.

Table 5

Direct Employment Impacts of DOD Cutbacks
By Occupation, FY 2013

Occupation Group	Jobs Impacted	Percent
Architecture and Engineering	40,036	12.3
Arts, Design, Entertainment, Sports, and Media	3,908	1.2
Building and Grounds Cleaning and Maintenance	5,862	1.8
Business and Finance	32,569	10.0
Community and Social Service	1,628	0.5
Computer and Mathematics	22,799	7.0
Construction and Extraction	24,101	7.4
Education, Training and Library	2,931	0.9
Farming, Fishing and Forestry	489	0.2
Food Preparation and Service	3,257	1.0
Health Care Practitioners and Technicians	8,142	2.5
Health Care Support	1,954	0.6
Installation, Maintenance and Repair	14,005	4.3
Legal	2,467	0.8
Life, Physical and Social Science	14,982	4.6
Management	23,776	7.3
Office and Administrative Support	41,689	12.8
Personal Care and Service	1,303	0.4
Production	30,615	9.4
Protective Service	22,147	6.8
Sales and Related	12,051	3.7
Transportation and Material Moving	14,982	4.6
Total	325,693	100.0

Note: Columns and rows may not add up to the totals due to rounding.

Table 6

Effect of Non-DOD Spending Reductions on the National Economy, FY2012-13 Cumulative

	Total GDP (Direct+Ripple)	Labor Income (Direct+Ripple)	Employment Impact			
Sector	($Million)	($Million)	Direct	Indirect	Induced	Total
Natural Resource	$169.0	$76.0	556	653	823	2,032
Construction	$2,561.9	$1,284.3	10,943	7,129	11,172	29,245
Manufacturing	$5,353.8	$2,434.6	9,416	28,431	30,895	68,743
Trade	$2,366.4	$1,085.6	15,926	4,643	12,216	32,786
TWU	$886.4	$391.7	3,280	2,386	5,226	10,892
Information	$1,281.9	$560.5	3,106	4,295	5,453	12,854
FIRE	$871.3	$149.3	4,417	2,952	3,037	10,406
PBS	$26,215.1	$13,597.0	125,012	54,649	148,371	328,033
Education/Health	$2,214.7	$1,193.0	13,922	5,334	12,731	31,987
Leisure	$105.5	$48.9	1,077	288	445	1,811
Other Service	$257.1	$135.8	2,012	918	1,516	4,446
Government	$328.7	$176.4	1,745	294	1,847	3,885
Federal Payroll	$77,889.6	$41,797.2	229,116	38,577	242,535	510,229
Total	**$120,501.4**	**$62,930.2**	**420,529**	**150,552**	**476,268**	**1,047,349**

Effect of BCA of 2011, Non Defense (FY2012-FY2013)

	Direct Federal Spending Cut	Direct Impact	Total Impact (Direct+ Ripple)	Total GDP (Direct+Ripple)
Sector	($Million)	($Million)	($Million)	($Million)
Natural Resource	$108.6	$108.6	$288.1	$169.0
Construction	$1,556.1	$1,556.1	$4,488.7	$2,561.9
Manufacturing	$3,823.9	$3,823.9	$10,558.9	$5,353.8
Trade	$1,486.3	$1,486.3	$3,550.4	$2,366.4
TWU	$604.9	$604.9	$1,394.5	$886.4
Information	$844.2	$844.2	$2,162.1	$1,281.9
FIRE	$756.6	$756.6	$1,143.2	$871.3
PBS	$14,435.2	$14,435.2	$40,261.1	$26,215.1
Education/Health	$1,260.9	$1,260.9	$3,550.4	$2,214.7
Leisure	$66.3	$66.3	$174.9	$105.5
Other Service	$147.9	$147.9	$431.1	$257.1
Government	$186.3	$186.3	$443.3	$328.7
Federal Payroll	$33,751.5	$44,147.8	$105,063.3	$77,889.6
Total	**$59,028.6**	**$69,424.9**	**$173,510.1**	**$120,501.4**

Note: Columns and rows may not add up to the totals due to rounding.

Table 7

Direct Employment Impact of Non-DOD Agency Cutbacks
By Occupation, 2013

Occupation Group	Jobs Impacted	Percent
Architecture and Engineering	21,447	5.1
Arts, Design, Entertainment, Sports, and Media	3,785	0.9
Building and Grounds Cleaning and Maintenance	10,093	2.4
Business and Finance	40,371	9.6
Community and Social Service	10,093	2.4
Computer and Mathematics	23,550	5.6
Construction and Extraction	15,139	3.6
Education, Training and Library	6,728	1.6
Farming, Fishing and Forestry	1,682	0.4
Food Preparation and Service	2,944	0.7
Health Care Practitioners and Technicians	13,877	3.3
Health Care Support	4,205	1.0
Installation, Maintenance and Repair	14,298	3.4
Legal	6,728	1.6
Life, Physical and Social Science	15,980	3.8
Management	24,811	5.9
Office and Administrative Support	103,030	24.5
Personal Care and Service	4,626	1.1
Production	8,831	2.1
Protective Service	62,238	14.8
Sales and Related	11,775	2.8
Transportation and Material Moving	14,298	3.4
Total	420,529	100.0

Note: Columns and rows may not add up to the totals due to rounding.

Table 8

Effect of DOD Spending Reductions on the National Economy, FY2012-21 Cumulative

Sector	Total GDP (Direct+Ripple) ($Million)	Labor Income (Direct+Ripple) ($Million)	Employment Impact Direct	Indirect	Induced	Total
Natural Resource	$83.3	$37.4	281	330	416	1,026
Construction	$4,640.7	$2,326.4	20,306	13,229	20,731	54,267
Manufacturing	$24,066.2	$10,943.7	43,360	130,917	142,260	316,536
Trade	$2,763.1	$1,267.6	19,049	5,554	14,612	39,214
TWU	$1,850.3	$817.6	7,014	5,103	11,175	23,292
Information	$2,327.9	$1,017.9	5,777	7,990	10,144	23,911
FIRE	$97.6	$16.7	507	339	349	1,195
PBS	$21,447.2	$11,124.1	104,767	45,799	124,343	274,909
Education/Health	$850.1	$457.9	5,474	2,097	5,006	12,577
Leisure	$217.6	$100.9	2,277	609	941	3,827
Other Service	$556.6	$294.1	4,461	2,036	3,362	9,859
Government	$719.9	$386.3	3,915	659	4,144	8,718
Federal Payroll	$12,503.6	$6,709.7	37,676	6,344	39,882	83,902
Total	**$72,124.1**	**$35,500.3**	**254,862**	**221,005**	**377,364**	**853,232**

Effect of BCA of 2011 (DOD FY2012-FY2021)

Sector	Direct Federal Spending Cut ($Million)	Direct Impact ($Million)	Total Impact (Direct+ Ripple) ($Million)	Total GDP (Direct+Ripple) ($Million)
Natural Resource	$53.5	$53.5	$141.9	$83.3
Construction	$2,818.8	$2,818.8	$8,131.1	$4,640.7
Manufacturing	$17,188.9	$17,188.9	$47,463.8	$24,066.2
Trade	$1,735.4	$1,735.4	$4,145.6	$2,763.1
TWU	$1,262.7	$1,262.7	$2,911.0	$1,850.3
Information	$1,533.0	$1,533.0	$3,926.2	$2,327.9
FIRE	$84.8	$84.8	$128.1	$97.6
PBS	$11,809.8	$11,809.8	$32,938.6	$21,447.2
Education/Health	$484.0	$484.0	$1,362.8	$850.1
Leisure	$136.9	$136.9	$360.8	$217.6
Other Service	$320.1	$320.1	$933.3	$556.6
Government	$408.0	$408.0	$971.1	$719.9
Federal Payroll	$5,418.1	$7,087.0	$16,865.8	$12,503.6
Total	**$43,254.0**	**$44,922.9**	**$120,280.3**	**$72,124.1**

Note: Columns and rows may not add up to the totals due to rounding.

Table 9

Effect of Non-DOD Spending Reductions on the National Economy, FY2012-21 Cumulative

	Total GDP (Direct+Ripple)	Labor Income (Direct+Ripple)	Employment Impact			
Sector	($Million)	($Million)	Direct	Indirect	Induced	Total
Natural Resource	$108.4	$48.7	371	435	549	1,354
Construction	$1,643.4	$823.8	7,291	4,750	7,444	19,486
Manufacturing	$3,434.4	$1,561.7	6,274	18,944	20,585	45,803
Trade	$1,518.0	$696.4	10,611	3,094	8,140	21,845
TWU	$568.6	$251.3	2,186	1,590	3,482	7,258
Information	$822.3	$359.6	2,069	2,862	3,633	8,565
FIRE	$558.9	$95.8	2,943	1,967	2,023	6,933
PBS	$16,816.7	$8,722.4	83,294	36,412	98,858	218,565
Education/Health	$1,420.7	$765.3	9,276	3,554	8,482	21,312
Leisure	$67.7	$31.4	718	192	297	1,207
Other Service	$164.9	$87.1	1,340	612	1,010	2,962
Government	$210.8	$113.1	1,162	196	1,230	2,589
Federal Payroll	$49,965.5	$26,812.5	152,658	25,704	161,599	339,960
Total	**$77,300.5**	**$40,369.1**	**280,194**	**100,311**	**317,333**	**697,839**

Effect of BCA of 2011, Non Defense (FY2012-FY2021)

	Direct Federal Spending Cut	Direct Impact	Total Impact (Direct+ Ripple)	Total GDP (Direct+Ripple)
Source	($Million)	($Million)	($Million)	($Million)
Natural Resource	$69.7	$69.7	$184.8	$108.4
Construction	$998.2	$998.2	$2,879.5	$1,643.4
Manufacturing	$2,453.0	$2,453.0	$6,773.4	$3,434.4
Trade	$953.4	$953.4	$2,277.6	$1,518.0
TWU	$388.0	$388.0	$894.6	$568.6
Information	$541.5	$541.5	$1,387.0	$822.3
FIRE	$485.4	$485.4	$733.4	$558.9
PBS	$9,260.0	$9,260.0	$25,827.1	$16,816.7
Education/Health	$808.9	$808.9	$2,277.5	$1,420.7
Leisure	$42.6	$42.6	$112.2	$67.7
Other Service	$94.9	$94.9	$276.6	$164.9
Government	$119.5	$119.5	$284.4	$210.8
Federal Payroll	$21,651.2	$28,320.4	$67,397.1	$49,965.5
Total	$37,866.3	$44,535.4	$111,305.1	$77,300.5

Note: Columns and rows may not add up to the totals due to rounding.

Table 10

Gross State Product (GSP) Impacts of the Budget Control Act of 2011
Fiscal Years 2012 and 2013
(in billions of current year dollars)

State	GSP Losses* DOD Cuts	GSP Losses* Non-DOD Cuts	Total GSP* Losses
Alabama	$2.327	$1.573	$3.900
Alaska	0.510	0.537	1.047
Arizona	3.055	1.892	4.947
Arkansas	0.312	0.608	0.920
California	11.719	10.957	22.676
Colorado	1.598	2.683	4.281
Connecticut	3.140	1.078	4.218
Delaware	0.006	0.215	0.221
District of Columbia	1.314	11.500	12.814
Florida	3.632	4.366	7.998
Georgia	2.393	3.089	5.482
Hawaii	0.680	0.395	1.075
Idaho	0.085	0.969	1.054
Illinois	2.015	3.381	5.396
Indiana	1.296	1.112	2.408
Iowa	0.454	0.664	1.118
Kansas	0.539	0.859	1.398
Kentucky	1.475	1.406	2.881
Louisiana	1.636	1.224	2.860
Maine	0.368	0.363	0.731
Maryland	3.414	8.132	11.546
Massachusetts	3.594	2.491	6.085
Michigan	1.173	1.966	3.139
Minnesota	0.425	1.187	1.612
Mississippi	0.454	0.720	1.174
Missouri	2.913	2.225	5.138
Montana	0.085	0.422	0.507
Nebraska	0.227	0.439	0.666
Nevada	0.368	0.679	1.047
New Hampshire	0.312	0.322	0.634
New Jersey	2.202	2.141	4.343
New Mexico	0.425	2.435	2.860
New York	2.497	4.544	7.041
North Carolina	1.023	1.927	2.950

Table 10 Continued

State	GSP Losses* DOD Cuts	GSP Losses* Non-DOD Cuts	Total GSP* Losses
North Dakota	$0.085	$0.263	$0.348
Ohio	1.845	2.219	4.064
Oklahoma	0.691	0.900	1.591
Oregon	0.255	0.949	1.204
Pennsylvania	3.462	4.428	7.890
Rhode Island	0.227	0.225	0.452
South Carolina	1.277	1.776	3.053
South Dakota	0.170	0.303	0.473
Tennessee	0.879	3.055	3.934
Texas	8.579	7.460	16.039
Utah	0.718	0.894	1.612
Vermont	0.198	0.210	0.408
Virginia	11.804	9.072	20.876
Washington	1.475	2.717	4.192
West Virginia	0.085	0.925	1.010
Wisconsin	2.391	1.285	3.676
Wyoming	0.057	0.223	0.280
Guam	0.189	0.080	0.269
Puerto Rico	0.189	0.338	0.527
Undistributed	2.243	4.701	6.944
Totals	$94.506	$120.502	$215.008

Sources: GMU Center for Regional Analysis; Chmura Economics & Analysis. *Gross state product losses resulting from BCA-mandated federal spending reductions during FY 2012 and FY 2013; excludes impacts from cuts in entitlement programs. Columns and rows may not add up to the totals due to rounding.

Table 11

State Labor Income Impacts of the Budget Control Act of 2011
Fiscal Years 2012 and 2013
(in billions of current year dollars)

State	Income Losses* DOD Cuts	Income Losses* Non-DOD Cuts	Total Income* Losses
Alabama	$1.145	$0.840	$1.985
Alaska	0.251	0.282	0.533
Arizona	1.504	1.014	2.518
Arkansas	0.154	0.314	0.468
California	5.768	5.775	11.543
Colorado	0.787	1.392	2.179
Connecticut	1.546	0.601	2.147
Delaware	0.003	0.110	0.113
District of Columbia	0.647	5.876	6.523
Florida	1.788	2.283	4.071
Georgia	1.178	1.613	2.791
Hawaii	0.335	0.212	0.547
Idaho	0.042	0.494	0.536
Illinois	0.992	1.755	2.747
Indiana	0.638	0.588	1.226
Iowa	0.223	0.346	0.569
Kansas	0.265	0.446	0.711
Kentucky	0.726	0.740	1.466
Louisiana	0.805	0.651	1.456
Maine	0.181	0.191	0.372
Maryland	1.681	4.196	5.877
Massachusetts	1.769	1.328	3.097
Michigan	0.577	1.021	1.598
Minnesota	0.209	0.612	0.821
Mississippi	0.223	0.375	0.598
Missouri	1.434	1.182	2.616
Montana	0.042	0.216	0.258
Nebraska	0.112	0.227	0.339
Nevada	0.181	0.352	0.533
New Hampshire	0.154	0.169	0.323
New Jersey	1.084	1.127	2.211
New Mexico	0.209	1.247	1.456
New York	1.229	2.355	3.584
North Carolina	0.504	0.998	1.502

Table 11 Continued

State	Income Losses* DOD Cuts	Income Losses* Non-DOD Cuts	Total Income* Losses
North Dakota	$0.042	$0.135	$0.177
Ohio	0.908	1.160	2.068
Oklahoma	0.340	0.470	0.810
Oregon	0.126	0.487	0.613
Pennsylvania	1.704	2.313	4.017
Rhode Island	0.112	0.118	0.230
South Carolina	0.628	0.926	1.554
South Dakota	0.084	0.157	0.241
Tennessee	0.433	1.570	2.003
Texas	4.223	3.942	8.165
Utah	0.354	0.467	0.821
Vermont	0.098	0.110	0.208
Virginia	5.810	4.817	10.627
Washington	0.726	1.408	2.134
West Virginia	0.042	0.472	0.514
Wisconsin	1.177	0.695	1.872
Wyoming	0.028	0.114	0.142
Guam	0.093	0.044	0.137
Puerto Rico	0.093	0.175	0.268
Undistributed	1.104	2.431	3.535
Totals	$46.517	$62.937	$109.447

Sources: GMU Center for Regional Analysis; Chmura Economics & Analysis. * Personal earnings lost due to losses of direct and indirect employment resulting from BCA-mandated federal spending reductions during FY 2012 and FY 2013; excludes impacts from cuts in entitlement programs. Columns and rows may not add up to the totals due to rounding.