Beacon Hill Institute

BHI *P*olicy *S*tudy

May 2012

The Economic Impacts of the Wisconsin Budget Repair Act

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Executive Summary

In February 2011, the Governor of Wisconsin, Scott Walker, introduced the Budget Repair Act, which aimed to close a $3.6 billion state budget deficit by curtailing the benefits and collective bargaining rights of state workers. Through increased public employee contributions to pension and health insurance plans, the Governor succeeded in bringing about a reduction of $309 million in state spending and, according to our estimate, between $464 million and $886 million in local spending.

The Budget Repair Act has produced a backlash from government unions, which succeeded in getting a recall measure aimed at Governor Walker on the ballot for June 5. Most of the discussion over the recall has centered on the question whether the unions were treated fairly in the process of reducing the state budget gap. Ignored so far are the consequences for the state economy of an action that indirectly relieved Wisconsinites of the need to pay nearly a billion in new taxes that would they would have had to pay had the Act not been adopted. Here we estimate those effects, as summarized in the table below:

Annual Economic Effects of the Budget Repair Act

Employment (jobs)	Low	High
Private	11,500	14,000
Public	3,900	6,500
Total	15,400	20,500
Investment, ($ million)	185	350
Real Disposable Income ($ million)	760	1,030

By reducing the budget gap, the Act has saved between 15,400 and 20,500 public and private jobs that would otherwise have been lost, along with between $185 million and $350 million annually in private investment and between $760 and $1.030 billion in real disposable income. As the voters go to the polls on June 5, it would behoove them to take into account the economic losses, as well as the budgetary losses, the Governor was able to avoid by taking the action he took.

Introduction

Like the rest of the nation, Wisconsin has suffered growing budgetary problems as a result of the recession that began in December 2007. At the start of the recession, the unemployment rate in Wisconsin stood at 4.6 percent. By February 2011, the unemployment rate had risen to 8.6 percent.

As the recession took hold, Wisconsin's fiscal situation deteriorated. In May 2009, the state was projected to have a budgetary shortfall of $5 billion.[1] Revenue growth slowed to just 0.2 percent. Spending rose modestly, from $12.744 billion in fiscal year 2009 to $12.824 billion in fiscal year 2010.[2] Although Wisconsin has added 47,000 jobs since December 2009, the most recent data for March 2012 shows that the state remains 102,600 jobs below the previous economic expansion high mark.[3]

The state budget continues to show signs of stress. In February 2012, the state Legislative Fiscal Bureau projected that the state general fund would be $143.2 million in deficit at the end of the 2011-13 Biennium.[4] Municipalities in Wisconsin have also faced budget deficits as increasing costs — especially in the form of employee benefits —and lower revenues from property taxes exerted pressures on budgets.

As with most state-level deficits, the budget must be balanced in one of three ways: by imposing spending cuts, tax increases, or a combination of the two. In order to close the gap in the 2009-11 Budget, then-governor Jim Doyle enacted a plethora of tax increases and the postponement of tax reduction measures. However, state and local budgets continued to hemorrhage red ink.

Early in 2011, newly-elected Governor Scott Walker took a novel approach to closing the state and local government budget deficit. Facing a $3.6 billion deficit, he proposed Act 10, the Wisconsin Budget Repair Act. The Act made major reforms to the relationship between the public employers and employees by limiting collective

[1] Associated Press. Janesville Gazette. Wisconsin Film Industry Backers Applaud Deal. http://gazettextra.com/weblogs/latest-news/2009/may/01/wisconsin-film-industry-backers-applaud-deal/.
[2] Annual Fiscal Report: Budgetary Basis http://www.doa.state.wi.us/docview.asp?docid=8317&locid=3.
[3] Bureau of Labor Statistics. Local Area Unemployment Statistics. http://www.bls.gov/lau/.
[4] Wisconsin Legislative Fiscal Bureau. Comparative Summary of Budget Adjustment Provisions. February 2012. http://legis.wisconsin.gov/lfb/publications/Revenue-Estimates/Documents/2012_02_09_Darling_Vos_Revenue%20estimates.pdf.

bargaining to only wages and salaries. In addition, it limited wage increases to a cap based on inflation (unless the cap was raised by referendum). It limited union contracts to one year and froze wages until a new contract is settled. Law enforcement and fire control employees were exempted from the changes.

The law also required employees who pay into the Wisconsin Retirement System to contribute 50% of their annual pension payment. Public employees were required to pay at least 12.6% of the average cost of annual premiums for their health insurance plans. The law required changes to the plan design - such as higher co-payments and deductibles — necessary to reduce current premiums by 5%. Local employers participating in the Public Employers Group Health Insurance plan were prohibited from paying more than 88% of the lowest cost plan.[5]

In conjunction with these changes, the Governor's budget made significant cuts to local aid and education. As a result, the law caused controversy among segments of the electorate throughout Wisconsin. Opponents of the law, mostly public service unions and their allies, launched a recall of several legislators last fall and have collected enough signatures for a recall vote of Governor Walker scheduled for June 5th.

The one question that remains unanswered is: how well has Act 10 worked? The state has taken great pains to maintain a responsible fiscal position. Given the uproar among labor interests determined to recall the Governor, it is important to assess the effectiveness of the Act for helping to rescue Wisconsin from the economic downturn.

Budget Repair Act: Savings Calculations

The early returns indicate that Act 10 has worked as designed. We estimate combined savings of $773 million and $1.195 billion in state and local expenditures.

This is only a preliminary estimate: Because of the small time frame since passage of Act 10, the data remain incomplete. But most estimates show cost savings attributable to the law. The Governor's office provides detailed calculations of savings for

[5] Wisconsin State Journal. Highlights of Gov. Walker's budget repair bill. February 11, 2011. http://host.madison.com/wsj/news/local/govt-and-politics/highlights-of-gov-walker-s-budget-repair-bill/article_3d93e6aa-363a-11e0-8493-001cc4c002e0.html?mode=story.

municipalities (cities and villages), counties, technical colleges and school districts.[6] The League of Wisconsin Municipalities also provides estimates of cost savings for 36 municipalities.[7] The market-oriented health care group HCTrends estimates that the state will save over $155 million this year due to the changes to health insurance plan design, such as co- payments for state employees.[8]

The Governor's reform website provides the most complete data for school districts and technical colleges, accounting for 16 of the 17 technical colleges, and 409 of 440 school districts.[9] The Governor's office estimates that the 16 technical colleges will save $19.9 million and the 409 school districts will save $324.8 million dollars under the law. We can extrapolate the existing savings data for technical colleges and school districts to provide an estimate for the entire population of each. We do this by transforming the savings data into savings per person using county population and school district population data to calculate a weighted average per person savings each category, using population as a weight. We multiply the weighted average savings per person by the population of each school district and technical college (using county population as a proxy for technical college population for which we do not have data). As a result, we calculate the savings of $21 million for all technical colleges and $376 million for all school districts. The combined total is $397 million.

The Governor's data for municipalities and counties are less robust, providing estimates for 45 of 593 municipalities and 23 of 72 counties. The League of Wisconsin Municipalities also provides data for 36 municipalities. We use the same extrapolation method as above, which yields a savings estimate of $165 million for municipalities and $113 million for counties.

The Governor also projects savings of $309 million to the state budget from increased state employee contributions to their pensions and health insurance plans.[10]

However, the lack of data poses challenges to our estimates of the whole population of municipalities and counties. The county and municipal data represent a small fraction of the total populations, therefore providing a much higher degree of uncertainty that

[6] Governor Scott Walker. Reforms and Results. http://www.reforms.wi.gov/
[7] League of Wisconsin Municipalities. Cuts in state funding v. Potential Savings under Act 10. http://www.lwm-info.org/index.asp?Type=B_BASIC&SEC={EA19C60E-7DF9-45DE-9E61-36307C0C75F3}&DE=
[8] MacIver Institute, HCTrends Highlights Additional Act 10 Savings. December 2, 2011. http://maciverinstitute.com/2011/12/hctrends-highlights-additional-act-10-savings/
[9] "Reforms and Results", http://www.reforms.wi.gov/
[10] Governor Scott Walker, "Governor Scott Walker's budget reforms: Just the FACTS" http://www.reforms.wi.gov/section.asp?linkid=1784&locid=185,

the samples represent the total population. In addition, there are discrepancies between the estimates provided by the Governor and the League of Wisconsin Municipalities for the same municipality.

In light of the wide divergence of cost estimates from the Governor's website and the League of Wisconsin Municipalities as well as the small sample size for municipalities and counties, we provide a sensitivity analysis of the estimates for the municipalities and counties in the Appendix. Sensitivity analysis is a useful method that isolates uncertainty to better predict a range of possible outcomes that are reflected in our low and high estimates. Table 1 displays our calculations.[11]

Table 1: Savings Calculation for Local Governments

Government	Mean Savings per capita ($)	Population	Savings ($ millions)	
			Low	High
School District	63.65	5,904,239	376	376
Technical College	3.30	Na	21	21
Municipality	28.96	5,686,986	50	279
County	19.90	5,686,986	17	210
Total			464	886

The sensitivity analysis allows us to be 90% confident that the actual savings for municipalities and counties will fall between our low and high estimates. We estimate that municipalities will save between $50 million and $279 million and that counties will save between $17 million and $210 million. Our total savings estimate for local governments is between $464 million and $886 million.

Economic Effects of the Budget Repair Act

The economic effects of the Budget Repair Act derive from the savings that government entities have been able to realize from the changes to public employee benefits. The savings at the local level have been offset by cuts to the state budget for education and local aid. On their own, the savings only serve to help balance state and local government agency budgets and therefore have little economic impact. However, the savings that derive from the Act allow for two outcomes: (1) the preservation of other

[11] Only Northeast Technical College data was missing. Therefore we multiplied the mean savings per capita (3.30) by the population of the county it servers (419,880) to obtain savings of $1.4 million. We add this to the total for the other colleges ($19.9 million) to obtain our estimate of $21.3 million.

government spending programs and (2) the ability to avoid tax increases. In this analysis, we utilize the Institute's WI-STAMP model and limit our scope to the effect of the Act on preventing increases in state and local taxes.

BHI developed and used its Wisconsin State Tax Analysis Modeling Program (WI-STAMP®) to estimate the effects that this ballot measure would have on the state economy.[12] WI-STAMP is a five-year dynamic Computable General Equilibirum (CGE) model that simulates changes in taxes, costs (general and sector specific) and other economic inputs. As such, it provides a mathematical description of the economic relationships among producers, households, governments and the rest of the world. It is general in the sense that it takes all the important markets such as the capital and labor markets, and flows into account. It is an equilibrium model because it assumes that demand equals supply in every market (goods and services, labor and capital). This equilibrium is achieved by allowing prices to adjust within the model. It is computable because it can be used to generate numeric solutions to concrete policy and tax changes. In the following section, we report the results as measured against a 'baseline economy' without the Budget Relief Act in place.

The ability to avoid increases in state income or local property taxes permitted the state to preserve jobs that would otherwise have been lost. More broadly, it prevented losses in private employment, disposable income and investment. We simulated an increase in local property taxes by distributing estimated savings to residential property taxes and businesses property taxes, based on their current portion of total local residential property taxes.

For the state, we simulate a $309 million increase in personal income tax distributed across all income brackets in proportion to their current share of the total income tax revenues. Table 2 displays the results.

The simulation shows that the Act prevented the loss of between 11,500 to 14,000 private sector jobs and 3,900 and 6,500 public sector jobs, as state and local governments avoided layoffs that would have been necessary in the absence of the Budget Repair Act. The total employment gains range between 15,400 and 20,500 jobs saved.

[12] For a description about the STAMP model see http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_HowSTAMPworks.html.

Table 2: Annual Economic Effects of the Budget Repair Act

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The Act also prevented negative effects on other economic indicators. The Act saves between $760 million and $1.030 billion in real disposable income, even taking into consideration the increased payments by public sector workers for their benefits. Investment under the Act is higher by $185 million to $350 million than it would have been without the Act.

Conclusion

The passage of Act 10 prompted shrill protests from organized labor in Wisconsin and around the country. Nevertheless, Wisconsin's local governments wasted no time in implementing it provisions, reaping annual cost savings of between $775 million and almost $1.2 billion. The cost savings measures prevented painful tax increases that would have damaged the state's private economy —resulting in slower job and income growth. Moreover, the provisions avoided further painful layoffs of school teachers and other public employees.

Other states should pay heed to Wisconsin's early evidence of success. Institutional rules which push public sector fringe benefits into the realm of collective bargaining make benefit changes nearly impossible, squeezing state and local budgets at a time when the national economy is struggling to recover. Even at this preliminary stage, that fact is already clear.

Appendix

Sensitivity Analysis

In light of the uncertainty of our estimates for county and municipal savings due to the Act, we provide sensitivity analysis. We utilize a Monte Carlo analysis to provide range of estimates that fall within a 90 percent confidence interval. To perform that Monte Carlo analysis, we utilize a specific computer software package used for predictive modeling: Crystal Ball.[13] We control for possible variations in savings for municipalities and counties by allowing the cost per person to vary within a normal distribution, based on the mean and standard deviation of our sample of available savings per person estimates.

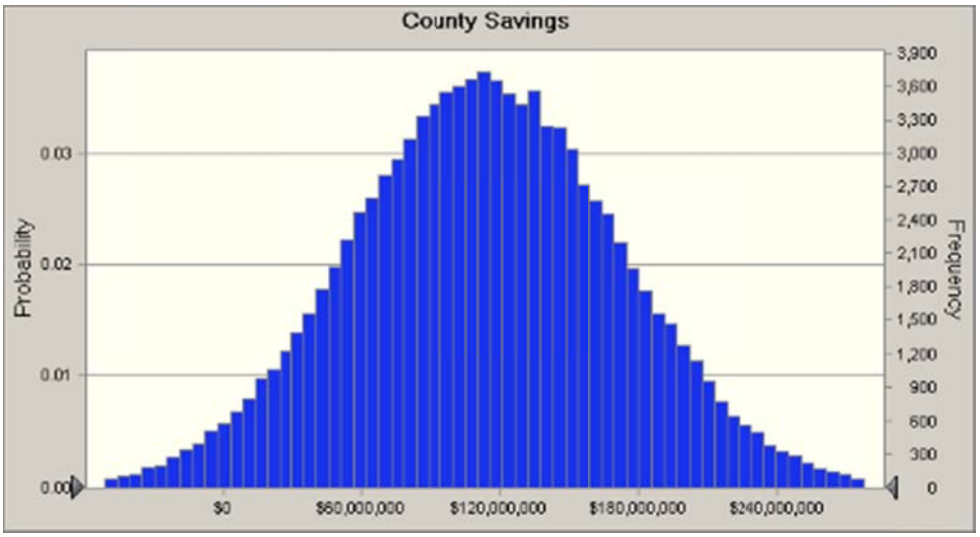
Crystal Ball Report: County Savings

Trials	100,000
Base Case	$113,046,476
Mean	$113,251,710
Median	$113,196,014
Standard Deviation	$58,663,538
Percentiles:	Forecast values
0%	($141,975,013)
10%	$38,151,518
20%	$63,895,794
30%	$82,589,595
40%	$98,443,892
50%	$113,196,012
60%	$128,227,114
70%	$143,925,188
80%	$162,454,076
90%	$188,551,737
100%	$352,313,944

We then set the cost savings per person as our dependent variable or the variable that would be tracked across trials with these distributions in place. At this point, Crystal Ball was instructed to run 100,000 random trials. Each trial selected a value for each independent variable, such that the aforementioned statistical rules were followed. The

[13] For a product overview of Oracle Crystal Ball seehttp://www.oracle.com/us/products/applications/crystalball.

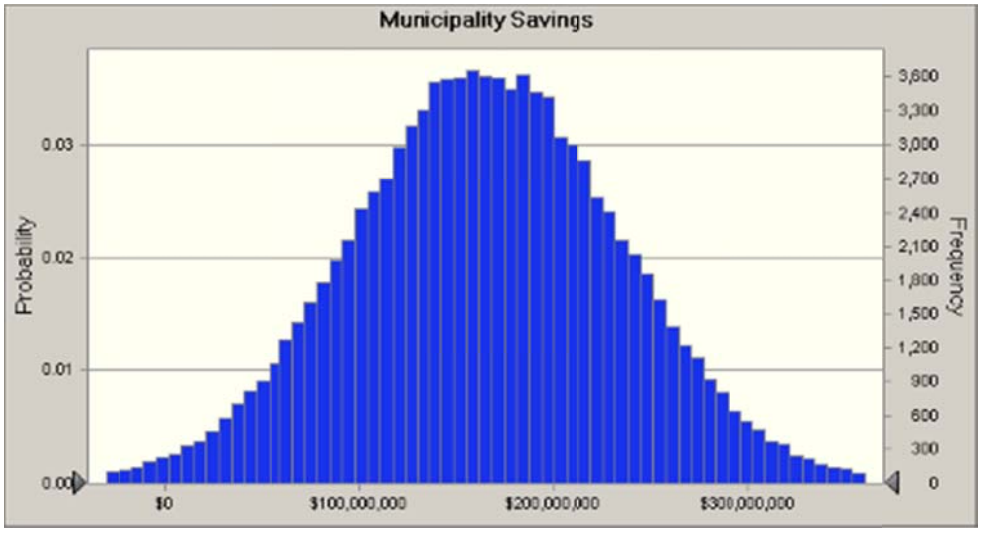
resulting standard deviation was multiplied by 1.645 and added to, and subtracted from, the mean to obtain estimates within 90% confidence intervals. The results of the Monte Carlo simulations allow us to show that the Act will save Wisconsin municipalities between $50 million and $279 million and county government estimates fall between $17 million and $210 million.



Crystal Ball Report Municipality Savings

Trials	100,000
Base Case	$164,703,925
Mean	$164,706,115
Median	$164,756,538
Standard Deviation	$69,550,782
Percentiles:	Forecast values
0%	($120,217,932)
10%	$75,589,865
20%	$106,165,924
30%	$128,456,381
40%	$146,953,302
50%	$164,756,276
60%	$182,628,763
70%	$201,069,992
80%	$223,031,086
90%	$253,496,038

100%	$479,532,568



About WI-STAMP

WI-STAMP is a computable general equilibrium (CGE) tax model that is a computerized method of accounting for the economic effects of tax policy changes. A CGE model is specified in terms of supply and demand for each economic variable included in the model, where the quantity supplied or demanded of each variable depends on the price of each variable. Tax policy changes are shown to affect economic activity through their effects on the prices of outputs and of the factors of production (principally, labor and capital) that enter into those outputs.

A CGE model is in "equilibrium," in the sense that supply is assumed to equal demand for the individual markets in the model. For this to be true, prices are allowed to adjust within the model (i.e., they are "endogenous"). For instance, if the demand for labor rises, while the supply remains unchanged, then the wage rate must rise to bring the labor market into equilibrium. A CGE model quantifies this effect.

Finally, a CGE model is numerically specified ("computable"), which is to say it incorporates parameters that are believed to be descriptive of the actual relationships between quantities and prices. It produces estimates of changes in quantities (such as employment, the capital stock, gross state product and personal consumption expenditures) that result from changes in prices (such as the price of labor or the cost of capital) that result from changes in tax policy (such as the substitution of an income tax for a sales tax).

Because it consists of a large number of interrelated equations STAMP requires the development and application of a sophisticated computer program for the solution of its equations.

Data is compiled on economic indicators, including data from published sources, and data generated or estimated where published data are not immediately available. Among the variables incorporated in STAMP, for which the model requires data, is:

- household disposable incomes
- household saving
- labor supply
- population
- trade
- investment
- private consumption
- various consumer price indexes
- migration
- households
- net capital inflow
- capital stock

- gross investment by sector
- government income
- government savings
- gross state product
- tax collections
- government purchases
- state personal income

Data is stored in three computer files: a social accounting matrix, a capital coefficients matrix and a miscellaneous data file that has information including employment, tax incidence and transfer payments. The social accounting matrix maps the main economic and fiscal flows in the economy. The capital coefficient matrix accounts for investments by industry.

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The authors thank Benjamin Powell, Senior Economist at the Beacon Hill Institute, for guidance, and Frank Conte, Director of Communications at the Beacon Hill Institute, for editorial assistance.

The Beacon Hill Institute at Suffolk University in Boston focuses on federal, state and local economic policies as they affect citizens and businesses. The institute conducts research and educational programs to provide timely, concise and readable analyses that help voters, policymakers and opinion leaders understand today's leading public policy issues.

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