



IHS Study on the Economic Impact of Proposed Restrictions on Tax Exempt Bonds for Nonprofit Organizations

Prepared For:



National Association of Health and Educational Facilities Finance Authorities

Submitted By:

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October 2013

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Tax-exempt bonds provide a critical source of capital investment funding for nonprofits. According to data from Thomson Reuters and other sources, from 2003 to 2012 501(c)(3) bonds totaled \$450-billion in financing through public offerings and private placements, largely sourced to health care and education projects. Private placement issuance is estimated to add 23% to the public offering total (this figure is derived from a sampling among a selection of state non-profit issuers). The federal tax savings awarded to investors allows nonprofits to sell bonds at lower interest rates.

If a 28-percent benefit cap on tax exempt interest had been in place for projects financed over the last decade, it would have cost nonprofits an additional \$58.2 billion in interest expenses (an average of \$5.8 billion per year). Interest expenses would balloon to \$166.3 billion, or \$16 billion per year, under a complete elimination of the tax exemption. These additional costs would profoundly impact nonprofits ability to fund new projects.

There would be wide ranging economic effects if nonprofits reduced their capital expenditures. For the scope of this study, it is assumed that nonprofits reduce their spending by the extra interest costs that would have been incurred if 501(c)(3) financing was reduced or eliminated altogether. These potential impacts are modeled using IMPLAN's economic impact software, which uses national inter-industry purchasing relationships to study changes on regional economic activity resulting from direct expenditures on goods and services. When a direct change in regional spending occurs, indirect and induced impacts are generated through the supply chain linkages and consumer spending that result from fulfillment and completion of the activity. In this study, the economic impacts can be considered understated because they only account for the activity generated from capital projects themselves and not the long-term economic value added by the new/renovated hospitals, schools, and all other projects financed through tax exempt bonds. We find that 18,000 jobs are created from each billion dollars of financed capital spending.

The study is framed as a look back at the bond financing supported over the 2002-2012 period. Two scenarios were analyzed: first, a 28-percent benefit cap on tax exempt interest assumes a decrease in capital spending of \$5.8 billion, or the annual average of the \$58.2 billion of estimated extra borrowing costs. The second scenario is a reduction of capital spending of \$16.6 billion per year under the assumption that the tax exemption was eliminated entirely. The mix of infrastructure spending is patterned following the broad spending category distribution of the \$554-billion in 501(c)(3) projects financed over 2003-2012. Chart 1 illustrates the economic losses which would have occurred in 2012 if the interest exemption had been eliminated for that year. Alternatively the chart illustrates the economic gains of the exemption for 2012. Going forward the chart indicates the approximate annual losses which would result upon repeal.

**Chart 1
Overall Impacts in 2012**

(Jobs, Million \$)

	28% Cap		Full Repeal	
	Direct	Total	Direct	Total
Employment	41,134	104,651	117,526	299,003
Output	5,819	16,060	16,627	45,885
Gross Domestic Product	2,650	8,256	7,570	23,590
Labor Income	2,154	5,483	6,153	15,664
State/Local Taxes		603		1,723
Federal Taxes		1,146		3,275

IMPACTS BY SECTOR

In addition to the broad economic impacts described above, we can analyze the distribution of those annual impacts across the various sectors of the economy.

**Chart 2
Employment Impacts By Industry**
(Jobs)

INDUSTRY	28% Cap	Full Repeal
TOTAL	104,651	299,003
Construction	41,758	119,309
Professional & Business Services	12,131	34,661
Trade, Transportation, & Utilities	11,919	34,055
Manufacturing	8,395	23,986
Education & Health Services	8,144	23,268
Financial Services	7,895	22,558
Leisure & Hospitality Services	6,475	18,500
Other Services	4,308	12,309
Information Services	1,229	3,512
Agriculture, Forestry, Fishing	1,173	3,353
Government	729	2,084
Natural Resources & Mining	493	1,409

The construction sector is the top beneficiary of capital dollars and thus jobs, but many other sectors benefit as the spending flows through the economy as a whole. Through the multiplier effect, most sectors of the economy are affected as the spending put towards capital projects has positive ripple effects on other industries. The construction sector is the top sector directly impacted, while the professional and business services and manufacturing sectors benefit the most indirectly. Jobs that are induced as a result

of higher incomes stemming from direct/indirect employment gains are far-reaching, however the greatest number are in the trade, transportation and utilities and education and health services sector.

Charts 3 and 4 summarize the annual indirect and induced job losses for both the 28% and full repeal scenarios per sector. The \$5.8 billion loss in capital spending would have resulted in over 7,696 fewer indirect jobs in the professional and business services sector (Chart 3). Further, the \$16.6 billion in spending would have resulted in over 21,989 jobs lost in this sector (Chart 4). These services, such as architectural and engineering, accounting and tax preparation, and legal services, are used for the planning and implementation of capital projects and are all indirectly tied to capital spending.

The direct and indirect jobs supported by capital spending provides further stimulus through the increase in wages flowing through the economy. These induced impacts affected the trade, transportation and utilities, and education and health services sectors the most. A \$5.8 billion shock in capital spending is associated with over 8,132 jobs in the education and health services sector, while \$16.6 billion contributes to nearly 23,234 jobs. Many of these induced jobs are in private hospitals and the offices of physicians, dentists and health practitioners as employees seek out general healthcare services. Private colleges, universities, and trade schools also are affected as with new economic growth comes a demand for educational services. The trade, transportation, and utilities sector meanwhile could see over 8,800 induced jobs lost due to a \$5.8 billion reduction and over 25,143 jobs with a \$16.6 billion cut. Retail stores and wholesale trade businesses are greatly impacted by the changes in disposable income that result from fluctuations in employment due to spending cuts in other areas of the economy.

**Chart 3
28% Exemption Cap**

Industry	Total	Direct	Indirect	Induced
Construction	41,758	41,134	279	345
Professional & Business Services	12,131	-	7,696	4,435
Trade, Transportation, & Utilities	11,919	-	3,119	8,800
Manufacturing	8,395	-	6,547	1,848
Education & Health Services	8,144	-	12	8,132
Financial Services	7,895	-	2,170	5,725
Leisure & Hospitality Services	6,475	-	1,219	5,255
Other Services	4,308	-	1,002	3,306
Information Services	1,229	-	484	745
Agriculture, Forestry, Fishing	1,173	-	327	846
Government	729	-	195	534
Natural Resources & Mining	493	-	299	194

Chart 4
Full Repeal

Industry	Total	Direct	Indirect	Induced
Construction	119,309	117,526	798	985
Professional & Business Services	34,661	-	21,989	12,673
Trade, Transportation, & Utilities	34,055	-	8,912	25,143
Manufacturing	23,986	-	18,705	5,281
Education & Health Services	23,268	-	34	23,234
Financial Services	22,558	-	6,199	16,358
Leisure & Hospitality Services	18,500	-	3,484	15,016
Other Services	12,309	-	2,863	9,446
Information Services	3,512	-	1,384	2,129
Agriculture, Forestry, Fishing	3,353	-	935	2,418
Government	2,084	-	557	1,527
Natural Resources & Mining	1,409	-	854	555

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IHS (NYSE: IHS) is the leading source of information, insight and analytics in critical areas that shape today's business landscape. Businesses and governments in more than 165 countries around the globe rely on the comprehensive content, expert independent analysis and flexible delivery methods of IHS to make high-impact decisions and develop strategies with speed and confidence. IHS has been in business since 1959 and became a publicly traded company on the New York Stock Exchange in 2005. Headquartered in Englewood, Colorado, USA, IHS is committed to sustainable, profitable growth and employs approximately 8,000 people in 31 countries around the world.

BIOGRAPHY

Contributing to this report are researchers Karl Kuykendall, Senior Economist and Charlie Dougherty, Economist as well as IHS Chief Economist of US Regional Services, Jim Diffley. Mr. Diffley's biography is provided below.

James Diffley is Vice President and Chief Economist of IHS Global Inc.'s U.S. Regional Services, with overall responsibility for US Regional Services, including the Regional Core Macroeconomic Service and the IHS Real Estate and Construction Service. Since 1998, Mr. Diffley has supervised the quarterly economic forecast of the 50 states and over 300 metropolitan areas of the United States. He regularly makes presentations of these regional economic forecasts and analysis to clients, conferences, governmental bodies, and the press. Mr. Diffley is also responsible for customized consulting projects. These have included long-term projections of cigarette consumption, forecasts of capital gains realizations, analysis of the economic impact of the securities industry on New York State, analysis of the impact of changing oil prices on local economies, and the economic impact of various facilities locations.

Mr. Diffley holds a BA in Mathematics and Economics from State University of New York at Buffalo, and an MA in Economics from State University of New York at Stony Brook.