An Economic Analysis of the Repeal of Selected Sales and Use Tax Exclusions, Exemptions, Deductions and Credits

Bottled Water

**Research Conducted Jointly by the Center for Economic Forecasting and Analysis, Florida State University,
and the Florida Center for Fiscal and Economic Policy**

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Foreword

As Florida's Legislature responds to the state's fiscal crisis, the Florida Center for Economic and Fiscal Policy (FCEFP) urges legislators to employ a balanced approach: examining opportunities for cost savings and modernizing our tax policy to make it fairer while generating additional revenue. We published a report recommending a review of sales tax exemptions, exclusions and subsidies and suggested a number of items that should be repealed. Both the House and the Senate have held workshops to consider the 246 exemptions and subsidies in transactions currently removed from the sales and use tax base. Neither chamber has looked at the 121 services that are excluded.

Our recommendations called for an empirical analysis to be utilized in the process. We believe that an approach that uses scientific data based on clearly defined policy preferences and economic principles would prove valuable to the process. Our observations are that those representing the industry affected by the potential repeal of exemptions give testimony about the likelihood of job losses and economic damage that is usually anecdotal and speculative in nature. Although such perspectives are of value, they leave many legislators with nagging questions about their validity. Legislators have voiced a desire for information that is more concrete and explicative.

Through collaboration with the Center for Economic Forecasting and Analysis at Florida State University, the Center plans to build upon our earlier work and expand our capability to fill the gap in information regarding the economic impact of repealing various exemptions, exclusions and subsidies.[1] The following report is the first in a series that will apply a proven economic forecasting model based on sound economic principles to the questions surrounding the impact of repealing selected items. Questions that are addressed include:

1. How will the repeal impact Florida's Gross State Product over time?
2. How will the repeal impact personal income of Floridians over time?

[1] The Center for Fiscal and Economic Analysis is solely responsible for the selection of items for analysis. The Center for Economic Forecasting and Analysis at Florida State University administers the REMI forecasting model and supplies the results generated by the model; it does not necessarily endorse recommendations for repeal or retention. FCFEP bears responsibility for formulating conclusions and recommendations.

3. How will the repeal impact State Revenues over time?
4. How will the repeal impact employment over time?

Our approach follows two scenarios. First, we allocate the projected sales tax revenue from the repeal to general revenue in the state budget. In the second scenario, we allocate the projected sales tax revenue from the repeal to a specific area of state government, such as education or health. Results are acquired under both scenarios to answer the four questions listed above.

The impact of repealing the exemption of bottled water is considered in this first publication of the series and up to twenty others will be examined in the next two weeks. Our hope is that this series will prove useful to the Legislature in its review of sales and use tax exemptions and subsidies, influence a desire to broaden the review to include exclusions, and act to better support the development of effective public policy for our state on sales and use tax.

Table of Contents

1. Methodology

The REMI Model

The researchers used the Regional Economic Model, Inc. (REMI Policy Insight v9.5.26, 2007), a widely accepted and used dynamic integrated input-output and econometric model for this study. REMI is used extensively to measure proposed legislative and other program and policy economic impacts across the private and public sectors of the state by the Florida Joint Legislative Management Committee, Division of Economic & Demographic Research, The Florida Department of Labor and other state and local government agencies. In addition, it is the chosen tool to measure these impacts by a number of other leading universities and private research groups that evaluate economic impacts across the state and nation.

There are several advantages to using REMI:

1) It is calibrated to local conditions using a relatively large amount of local data.
2) It is based on a strong theoretical foundation.
3) It combines several different kinds of analytical tools (including economic base, input-output, and econometric models).
4) It allows the user to generate forecasts for any combination of future years, allowing the user special flexibility in analyzing the timing of economic impacts.

The REMI model used for this analysis was specifically developed for the state of Florida, and includes 169 sectors. REMI's principal advantage is that it may be used to forecast direct, indirect and induced economic effects over multiple-year time frames. Other input-output models primarily model for a single year time horizon.

The Model Design

To measure the economic impacts of the selected exemptions, exclusions and subsidies in Florida's sales and use tax, estimates for projected revenues are entered into the REMI model, which includes cross linkages between every sector of the Florida economy. Conceptually, the model consists of five basic blocks: (1) output, (2) labor and capital demands, (3) population and labor supply, (4) wages, prices, and profits, and (5) market shares. All of these blocks

have been calibrated to the Florida economy using state specific data. The policy variables were chosen within the five basic blocks as policy variables, for the years 2009 – 2010 (i.e., $42.3 million for bottled water).

The Assumptions

For this analysis, two alternatives, or scenarios, were examined. The first scenario, assumed that all additional sales tax revenues (i.e. $42.3 million for bottled water) were allocated to the state government for general revenue appropriation purposes. The second scenario assumed that all additional sales tax revenues (i.e. $42.3 million for bottled water) were allocated to the state government, to be appropriated for education purposes. Each scenario was modeled for a 15-year period (i.e., to Year 2025), with specific detail provided for the 1, 3, 5 and 10^{th} years. The economic model was run in REMI and their associated impacts are outlined below.

2. An Economic Impact Study: Repeal of the Bottled Water Sales Tax Exemption

<u>The exemption</u>:

Bottled (except carbonated) Water. Adopted 1949 (s. 212.08(4) (a)1, Florida Statutes).

> *"Water delivered to the purchaser through pipes or conduits or delivered for irrigation purposes. The sale of drinking water in bottles, cans, or other containers, including water that contains minerals or carbonation in its natural state or water to which minerals have been added at a water treatment facility regulated by the Department of Environmental Protection or the Department of Health, is exempt. This exemption does not apply to the sale of drinking water in bottles, cans, or other containers if carbonation or flavorings, except those added at a water treatment facility, have been added. Water that has been enhanced by the addition of minerals and that does not contain any added carbonation or flavorings is also exempt."*

Data

Data for the economic analysis was provided to Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) by the Florida Center for Economic and Fiscal Policy (FCEFP). The data was based on projected revenues of $42.3 million for Fiscal Year 2009-2010[2]. The estimates provided the Florida Revenue Estimating Conference were the approved and/or validated numbers by the state of Florida, and hence were determined to best approximate the projected 2009-2010 fiscal year's bottled water revenues.

3. Results and Conclusions

The tables show the net present value of economic impacts[3] from years 2010 – 2019 on gross state product, employment, real disposable income and state revenues. Figures One - Four depict the two scenarios: bottled water revenues allocated to general revenue and to education, respectively, for years 1, 3, 5, and 10 of the forecast. Table One presents the net present value of economic impacts from years 2010 – 2019. Gross State Product (GSP) is the dollar value of final goods and services produced across the Florida economy. Increases in real personal disposable income (average annual personal income minus taxes) translate into more economic activities and local and state tax revenues. The employment results are expressed in terms of jobs[4].

It is important to understand that the economic outcomes forecasted for years 3, 5, and 10 are based on only one year of the tax revenue as estimated and verified by the Florida Revenue Estimating Conference for 2009. The tax revenue is not included in the years modeled after year 1. The economic outcomes reported are therefore

[2] Florida Revenue Estimating Conference. Data source of cost of sales and use tax exclusions, exemptions, deductions and credits is the "2009 Florida State Handbook." http://edr.state.fl.us/taxhandbooks/taxhandbook2009.pdf

[3] Economic impacts include: direct, indirect and induced impacts. Direct impacts measure the immediate effects caused by the repeal of the bottled water exemption; i.e., in employment and income. Indirect impacts are those that include changes to production, employment, income, etc., that occur as a result of the direct effects. Induced impacts are those further impacts of spending derived from direct and indirect activities – i.e., household purchases of consumer goods and services.

[4] Note: Full time and part-time jobs are not distinguished in REMI, i.e, they are viewed as one job.

conservative and would actually be higher in the forecasted years if the tax revenue was allocated in the model in subsequent years.

Figure 1. Projected GSP Impacts of Bottled Water for Years 1, 3, 5 and 10.

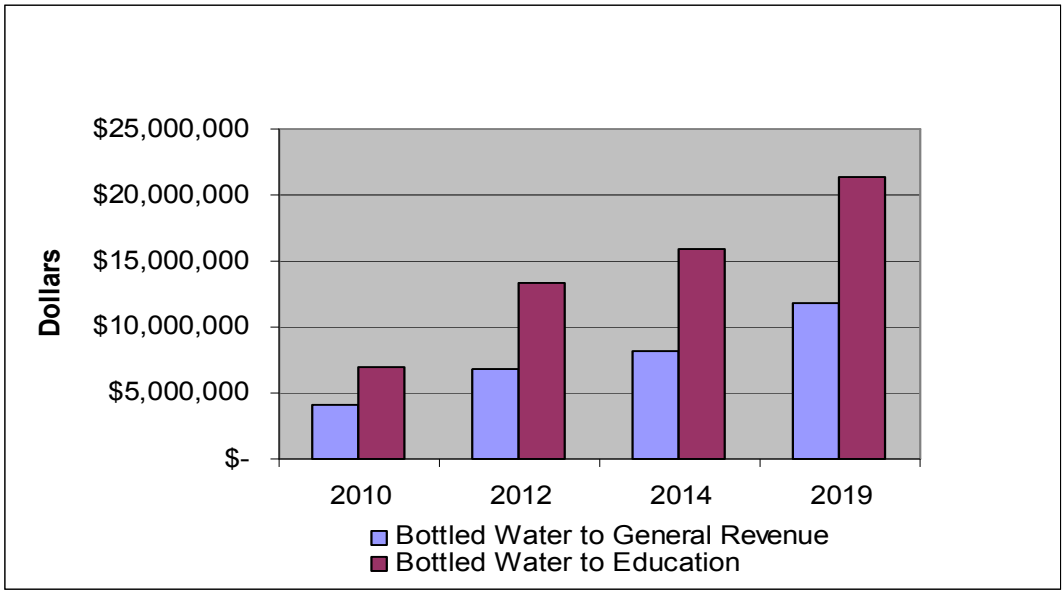

Figure 2. Projected Income Impacts of Bottled Water for Years 1, 3, 5 and 10.

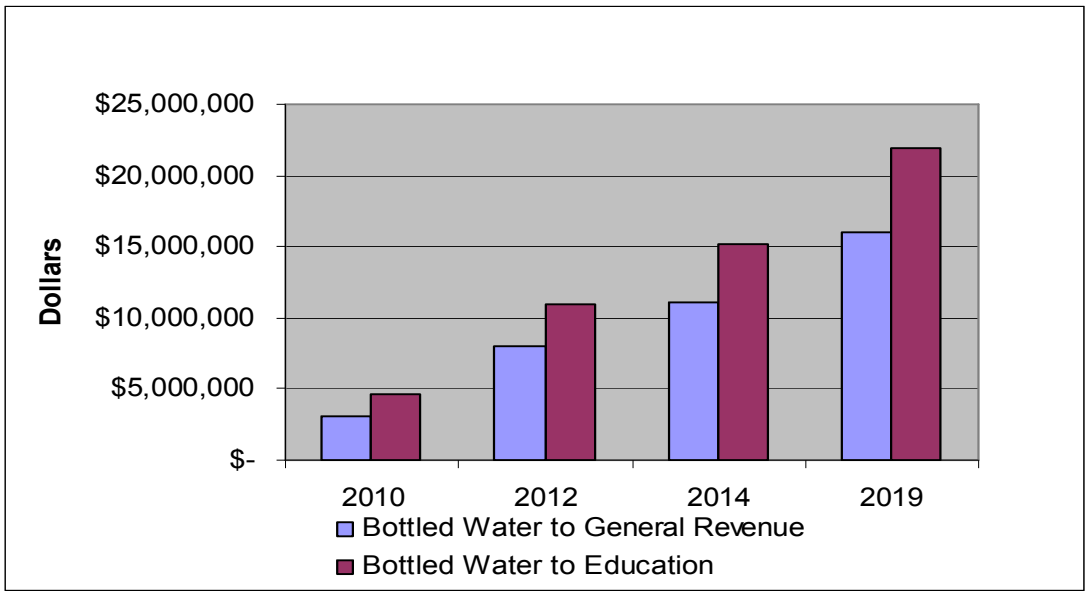

Figure 3. Projected State Revenue Impacts of Bottled Water for Years 1, 3, 5 and 10.

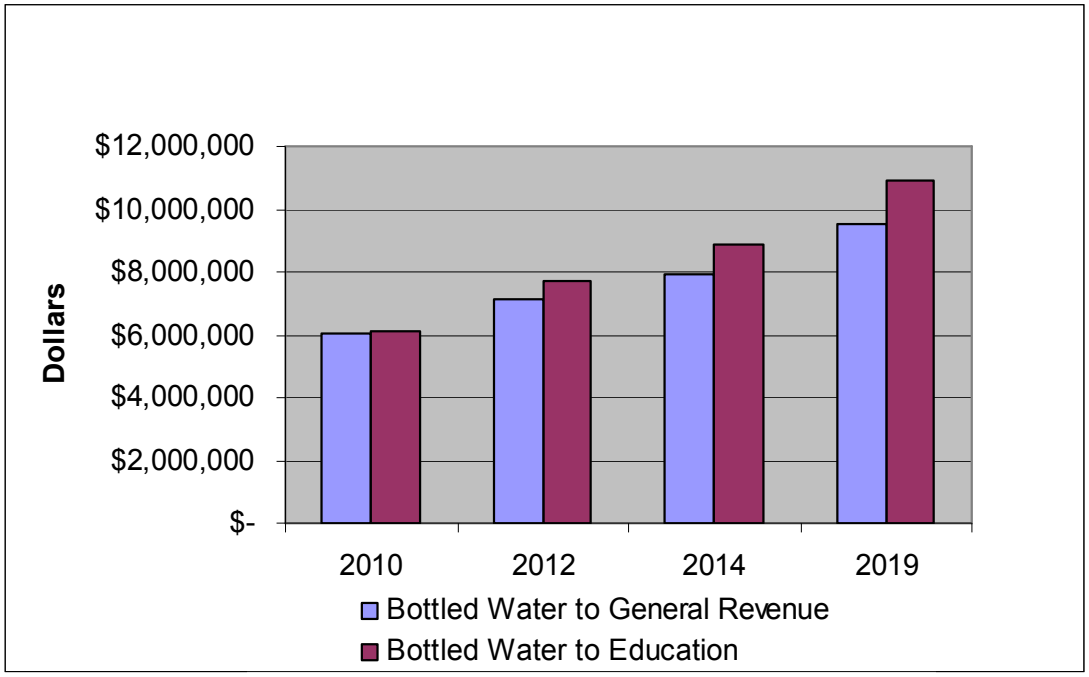

Figure 4. Projected Employment Impacts of Bottled Water for Years 1, 3, 5 and 10.

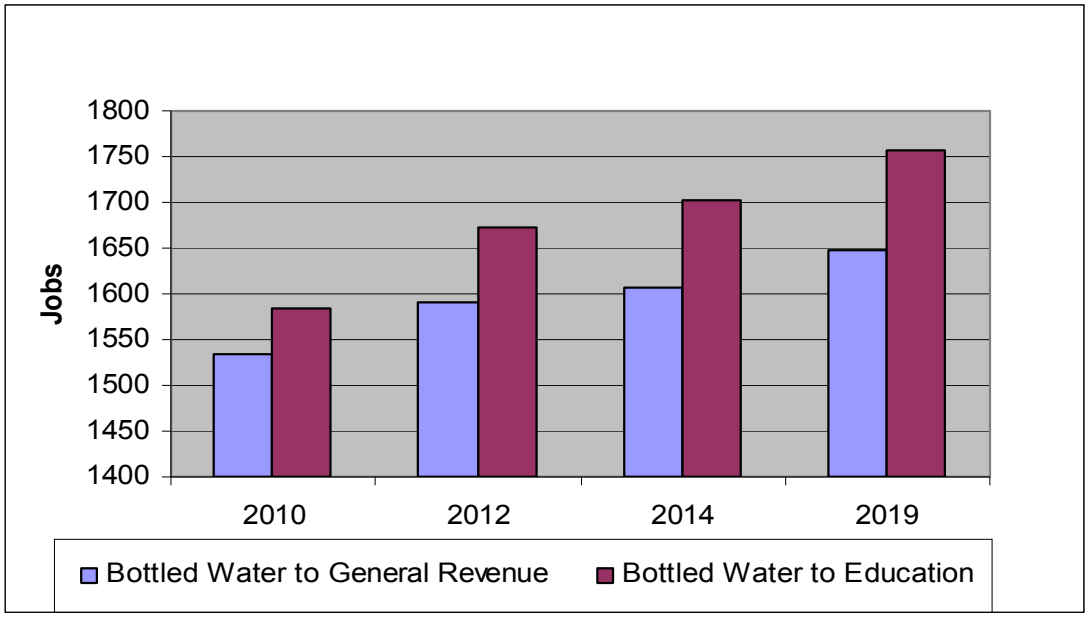

Table 1. Economic Impact(s) of Project Bottled Water for Years (2009-2025).

Economic Impact of Bottled Water Project for Florida for March 2009			
	GSP*	Employment	Income*
Bottled Water to General Revenue	$16,007,897	1,646	$21,677,399
Bottled Water to Education	$26,883,739	1,752	$27,573,902

*** in Feb. 2009 $**

The results of the economic impact analysis show that Project Bottled Water will have a positive economic impact for the State of Florida for years 2009-2025. The economic benefits extend to job creation, GSP and personal income for Floridians. In terms of GSP, $16 million and $26.9 million, is projected to be generated based on the revenues being allocated to general revenue or education, respectively. Personal income is projected to be $21.7 million if allocated to general revenue as in Scenario One, and $27.6 million if allocated to education as in Scenario Two. Overall, the repeal of the bottled water sales tax exemption is projected to support the creation of between 1,646 and 1,752 jobs, depending on the revenues being appropriated to general revenue or education, respectively. Clearly, the overall economic impact to the State of Florida is greater if state revenues were allocated to the education area (rather than general revenue) in terms of GSP, income, state revenues and employment.

4. Retention/Deletion Policy Matrix

In the Center's earlier report on Sales and Use Tax, we devised a basic typology or matrix for considering the repeal or retention of exemptions based on selected policy questions. We applied this matrix as an initial filter to generate items that should be considered for repeal. Table 2 summarizes the results from this analysis for the bottled water exemption.

Table 2. Application of Policy Question Matrix: Bottled Water Sales Tax Exemption

(Information in red signifies FCFEP's response to each policy question as indicated in the **Net Score** column.)

Policy Question	**Eliminate Exemption (weight)**	**Retain Exemption (weight)**	**Net Score**
Is it a necessity-to-life item?	No + 20	Yes - 20	+20
Does it create a Florida advantage vs. non-Florida entities?	No + 5	Yes - 5	+5
Does it create jobs?	No + 20	Yes - 20	+20
Does it create above state average salary jobs?	No + 5	Yes - 5	+5
Does it prevent tax pyramiding?	No + 5	Yes - 5	-5
Are taxpayers with similar characteristics treated the same?	No + 10	Yes – 10	+10
Do other states tax it?	No + 5	Yes – 5	n/a
Is it used to produce a final consumption item?	No + 5	Yes – 5	+5
Does the exemption target more than 10 taxpayers?	No + 5	Yes – 5	-5
Is it fair to all taxpayers?	No + 10	Yes – 10	n/a
Total	+65	-10	+55

Further definition of the Policy Matrix and the substance of the policy questions we apply follows:

- **Is it a necessity to life item?**
  Does the item improve the health and well-being of Floridians? Are there alternatives that provide a similar benefit, or is this unique and not substitutable?

- **Does it create a Florida advantage vs. non-Florida entities?**
  Is the item unique to Florida? Are there limited numbers of states that offer this item?

- **Does the item encourage the creation of jobs in Florida?**
  Is the item in a growing sector of Florida's economy, or is it in a declining sector/industry?

- **Does it create above state average salary jobs?**
  The creation of high wage vs. low wage/minimum wage jobs in Florida should be encouraged.

- **Does it prevent tax pyramiding?**
  If the item is subject to other Florida taxes would its taxation for sales and use tax compound total cost?

- **Are taxpayers with similar characteristics treated the same?**
  Is the exemption unique to a limited number of taxpayers (businesses) in a broader industry that is taxed?

- **Do other states tax it?**
  If the general tax policy is to tax the item, why should it be exempt in Florida?

- **Is it used to produce a final consumption item?**
  Whenever possible, only final consumption items should be taxed for sales and use tax purposes.

- **Does the exemption target more than 10 taxpayers?**
  Exemptions that affect a very limited number of taxpayers may provide an undue competitive advantage.

- **Is it fair to all taxpayers?**
  Does the exemption unduly benefit selected taxpayers?

This report was researched and written by Michael Walsh, Senior Analyst, and John Hall, Executive Director, both with the Florida Center for Fiscal and Economic Policy, and Julie Harrington, Ph.D., Director, Center for Economic Forecasting and Analysis (CEFA), The Florida State University. Dr. Harrington is the Director of the FSU Center for Economic Forecasting and Analysis (CEFA). She holds a doctorate in Economics and an M.S. in Fisheries/Water Quality from Auburn University, and a Bachelor's degree in Fish and Wildlife Management from Montana State University. She has an extensive background in economic, econometric and statistical analysis. Her primary research efforts are in the areas of environmental/natural resources, energy, aerospace, education economics and economic development. She is the Director of the FSU Economic Opportunities Office within the FSU Florida Center for Advanced Aero-propulsion (FCAAP) Center of Excellence, and is a member of the FSU Institute of Energy Systems, Economics and Sustainability (IESES).

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