Policy Brief
Explanation of Margin Tax Revenue Estimates

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Introduction

Revenue estimates for The Education Initiative or "margin tax" have generated significant public interest. The initiative would impose a 2 percent margin tax on businesses with total revenue exceeding $1 million per year. The Guinn Center for Policy Priorities, a bipartisan policy institute that provides independent, fact-based analysis, has estimated the annual revenue impact of the margin tax to be $460 million. As a follow-up to its *Fact Sheet on The Education Initiative (Margin Tax)*, released in February 2014, this Guinn Center policy brief provides a detailed discussion of the assumptions and methodology used to arrive at the revenue estimates of the margin tax.

How did the Guinn Center Conduct its Analysis?

The Guinn Center on Policy Priorities released its Fact Sheet on The Education Initiative (Margin Tax) on February 7, 2014 in which it reported that the Education Initiative would raise roughly $460 million for the Silver State's coffers. The Guinn Center's revenue estimate is based on an *estimate* of the gross receipts of each business operating in Nevada in 2013. It is important to note that *actual* detailed gross receipts data for businesses in Nevada is not available because Nevada does not currently have a tax based on gross receipts. In addition, Internal Revenue Service (IRS) data on gross receipts is only available at an aggregated national level. To estimate gross receipts, the Guinn Center built a model that estimates gross receipts per employee for each industry and size category and applied that information to the number of employees in each Nevada business. The result of this model is shown in the Appendix.

Step 1: Estimate Gross Receipts per Employee

The Guinn Center examined the United States Economic Census, which provides information on gross receipts of Nevada businesses. This data is collected every five years. The latest data available is from 2007 and new data for 2012 will become available later this year (2014). The Economic Census data is broken down by industry and size classification, which is the range of the number of employees. The size classifications are 0-4 employees, 5-9 employees, 10-19 employees, 20-99 employees, 100-499 employees, and 500+ employees.

The Economic Census data includes gross receipts, number of employees, number of firms/establishments, and payroll. The Guinn Center used this data for two key components of the analysis. First, the Guinn Center calculated gross receipts per firm within each size classification to determine which size classifications within each industry would have gross receipts of more than $1 million and would be subject to the margin tax. Second, to develop a metric to estimate gross receipts in 2013, the Guinn Center calculated the gross receipts per employee for each industry and size classification and then increased these amounts by the change in the consumer price index (CPI) from 2007 to 2013. The Guinn Center chose to use gross receipts per employee instead of gross receipts per firm because it is a more stable metric than gross receipts per firm, which can vary significantly if firms consolidate or break into smaller firms.

Step 2: Estimate the Number of Employees

To estimate the number of employees, the Guinn Center used 2013 data from the Nevada Employer Directory, which is available from the Nevada Department of Employment Training and Rehabilitation. This data includes a list of all businesses in Nevada and shows a range for the number of employees in each business. These ranges increase in size as the number of employees increases. Examples of ranges are: 1-5 employees; 10-19 employees; 100 to 199 employees; and 1,000-1,499 employees. Since the actual number of employees is not available, the Guinn Center estimated the actual number of employees at the midpoint of each range. For businesses with small numbers of employees, the midpoint of each range is a reasonably good estimate because the range is small. For larger businesses where the range of number of employees is larger, it is more difficult to project the number of employees accurately by using the midpoint of the range. In order to ensure that the number of employees per industry matched current data on the number of employees from the U.S Bureau of Labor Statistics, an adjustment factor for each industry was calculated and applied to the estimate of the number of employees.

Step 3: Estimate Gross Receipts for Each Business

To obtain an estimate of gross receipts for each business shown in Column B of the Appendix, the Guinn Center then multiplied the number of employees by the gross receipts per employee for each industry and size classification. A business was exempted from the tax if the average gross receipts per firm for its size classification and industry was less than $1 million in 2013 dollars as calculated in Step 1. The analysis also excluded nonprofit businesses from the tax. Since gaming revenue subject to the gaming percentage fee would be exempt from the margin tax, data from the Gaming Revenue Report was used to estimate this reduction, which is shown in Column C of the Appendix. Column D presents net receipts after the gaming reduction.

Step 4: Estimate Business Deductions

To estimate the deductions businesses would take under the margin tax, the Guinn Center drew from the experience of Texas, which implemented a similar tax in 2007 called the Franchise Tax. In Texas, the following industries typically deduct cost of goods sold: agriculture, mining, utilities, construction, manufacturing, wholesale, and retail. These businesses deduct an average of 83 percent of revenue based on The Business Tax Advisory Committee Report to the 83rd Texas Legislature written by the Texas Comptroller of Public Accounts. Businesses that deduct employee compensation deduct an average of 54 percent of revenue. The Guinn Center analysis assumed that deductions would be 83 percent in industries that typically deduct cost of goods sold and that all other industries would deduct employee compensation costs at a rate of 54 percent as shown in Columns E and F of the Appendix. The Guinn Center did not assume that any businesses would take the lower deduction of 30 percent to create a more conservative revenue estimate. However, businesses that have low employee costs and do not have costs of goods sold would likely fall under the 30 percent deduction.

Step 5: Calculate the Taxable Margin and the Margin Tax

To calculate the taxable margin, the Guinn Center analysis then subtracted the cost of goods sold deduction and employee compensation deduction from the gross receipts as shown in Column G of the Appendix. Under the proposed margin tax, only the Nevada portion of a business' revenue would be taxed. In Texas, the Business Tax Advisory Committee Report to the 83rd Texas Legislature found that 7.65 percent of gross receipts was for activity outside of the state. While the experience in Nevada will likely be different, the Guinn Center utilized this ratio since Nevada-specific information in not available. The Nevada portion of the taxable margin is shown in Column H of the Appendix. The analysis then applied the 2 percent margin tax rate to calculate the total tax as shown in Column I of the Appendix. This yielded total revenue of $769 million, which was rounded up to $800 million.

Step 6: Subtract Modified Business Tax Paid

The proposed margin tax includes a dollar for dollar credit for the amount of Modified Business Tax (MBT) or Modified Business Tax- Financial Institutions (MBT-FI) paid. The estimate for the credit was based on the percentage of wages in each industry paid by businesses that are likely to be subject to the margin tax. The Guinn Center estimated that the overall credit would be approximately 90 percent of annual MBT tax revenue and 72 percent of annual MBT-FI tax revenue. The State revenue projections for 2013-2014 are $359.7 million for the MBT and $23.2 million for MBT-FI. Applying these percentages to the revenue projections yielded an estimated credit of $340 million. The results of these calculations are shown in Columns J and K of the Appendix. The Guinn Center's final margin tax revenue estimate is $800 million from Step 5 minus the $340 million MBT/MBT-FI credit, for a net increase in revenue of $460 million as shown in Column L of the Appendix.

What happens if the assumptions are changed?

The Guinn Center drew from lessons learned in Texas when it implemented a margin tax in 2007. At the outset, the original revenue estimate in Texas was $5.9 billion; however, the actual revenue was $4.5 billion, which amounts to a 24 percent difference in estimated versus realized revenues. The primary reason for this difference was that Texas underestimated the percentage of revenue that businesses would deduct as cost of goods sold. Texas originally estimated that businesses that deduct costs of goods sold would deduct 68 percent of revenue. Actual experience, however, has shown that businesses deduct 83 percent of revenue as cost of goods sold. Drawing on the Texas experience, the Guinn Center's analysis uses the more conservative assumption of 83 percent to obtain a revenue estimate of $460 million. Changing the cost of goods sold deduction assumption to Texas's original assumption of 68 percent results in a revenue estimate of $690 million. Therefore, we note that the annual revenue could range from $460 million to $690 million depending upon the percent of revenue businesses deduct for the cost of goods sold.

Conclusion

In publishing its analysis of the margin tax estimates, the Guinn Center seeks to emphasize that the methodologies and assumptions used in any analysis of the margin tax can have a major impact on the revenue estimates.

Appendix
Guinn Center Margin Tax Estimate

A	B	C	D	E	F	G	H	I	J	K	L
Industry	Total Receipts Estimate	Gaming Reduction	Net Receipts	Cost of Goods Sold Deduction	Compensation Deduction	Taxable Margin	Nevada Apportionment	2% Tax	MBT Credit	MBT-FI Credit	Net Tax
Agriculture, Forestry, Fishing, and Hunting	418,255,225		418,255,225	347,151,837	-	71,103,388	65,663,979	1,313,280	377,225	-	936,055
Mining	6,638,914,642		6,638,914,642	5,510,299,153	-	1,128,615,489	1,042,276,404	20,845,528	12,184,643	-	8,660,885
Utilities	2,517,859,612		2,517,859,612	2,089,823,478	-	428,036,134	395,291,370	7,905,827	3,790,435	-	4,115,392
Construction	11,089,126,432		11,089,126,432	9,203,974,938	-	1,885,151,493	1,740,937,404	34,818,748	22,506,138	-	12,312,610
Manufacturing	10,842,727,831		10,842,727,831	8,999,464,099	-	1,843,263,731	1,702,254,056	34,045,081	20,505,294	-	13,539,787
Wholesale and Retail	20,296,218,630		20,296,218,630	16,845,861,463	-	3,450,357,167	3,186,404,844	63,728,097	16,244,441	-	47,483,656
Retail	40,778,433,629		40,778,433,629	33,846,099,912		6,932,333,717	6,402,010,188	128,040,204	39,204,402	31,512	88,804,290
Transportation and Warehousing	5,604,319,993		5,604,319,993	-	3,026,332,796	2,577,987,197	2,380,771,176	47,615,424	15,700,526	-	31,914,898
Information	2,533,230,203		2,533,230,203	-	1,367,944,310	1,165,285,894	1,076,141,523	21,522,830	8,861,156	81,296	12,580,379
Finance and Insurance	4,881,210,721		4,881,210,721	-	2,635,853,790	2,245,356,932	2,073,587,127	41,471,743	5,002,136	15,721,241	20,748,366
Real Estate and Rental and Leasing	3,457,973,940		3,457,973,940	-	1,867,305,928	1,590,668,012	1,468,981,909	29,379,638	7,178,669	164,785	22,036,185
Professional, Scientific and Technical Svc	4,815,685,623		4,815,685,623	-	2,600,470,237	2,215,215,387	2,045,751,410	40,915,028	22,299,381	132,162	18,483,485
Management of Companies and Enterprises	1,874,723,682		1,874,723,682	-	1,012,350,788	862,372,894	796,401,367	15,928,027	7,631,123	230,658	8,066,246
Admin Support, Waste Mgmt, Remediation	5,302,738,075		5,302,738,075	-	2,863,478,560	2,439,259,514	2,252,656,161	45,053,123	23,761,573	265,349	21,026,202
Education Services	561,124,575		561,124,575	-	303,007,271	258,117,305	238,371,331	4,767,427	1,467,251	-	3,300,176
Health Care and Social Assistance	9,573,351,237		9,573,351,237	-	5,169,609,668	4,403,741,569	4,066,855,339	81,337,107	28,984,645	1,304	52,351,158
Arts, Entertainment and Recreation	2,766,740,953		2,766,740,953	-	1,494,040,115	1,272,700,838	1,175,339,224	23,506,784	7,772,104	2,274	15,732,407
Accomodation and Food Service	24,551,245,010	11,140,220,512	13,411,024,497	-	7,241,953,229	6,169,071,269	5,697,137,317	113,942,746	76,732,800	274	37,209,672
Other Services (except Public Admin)	1,483,977,457		1,483,977,457	-	801,347,827	682,629,630	630,408,463	12,608,169	2,727,680		9,880,489
Unclassified Establishments	3,835,484		3,835,484	-	2,071,161	1,764,322		35,286	-		
Total	**159,991,692,954**	**11,140,220,512**	**148,851,472,441**	**76,842,674,880**	**30,385,765,678**	**41,623,031,883**	**38,437,240,592**	**768,780,098**	**322,931,620**	**16,630,854**	**429,182,337**
Round up 2% Tax to $800 million								**800,000,000**	**322,931,620**	**16,630,854**	**460,437,525**

About the Kenny C. Guinn Center for Policy Priorities

The Kenny C. Guinn Center for Policy Priorities (Guinn Center) is a nonprofit, bipartisan, think-do tank focused on independent, fact-based, relevant, and well-reasoned analysis of critical policy issues facing the state of Nevada. The Guinn Center engages policy-makers, experts, and the public with innovative, fact-based research, ideas, and analysis to advance policy solutions, inform the public debate, and expand public engagement. The Guinn Center is a 501(c)(3) nonprofit organization. The Guinn Center does not take institutional positions on policy issues.

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