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January 21, 2014

Representative Luciano Varela  
Chair Interim Legislative Finance Committee  
325 Don Gaspar  
Suite 101  
Santa Fe, NM 87501

Dear Chairman Varela:

Attached please find a copy of BBER's final report, *Estimating the Impacts of the Elective Single Sales Factor and Marginal CIT Rate Provisions of HB-641*. The report was prepared in response to a request from staff from the NM Department of Taxation and Revenue and the Legislative Finance Committee, with each agency contributing \$5,000 through an amendment to our State Forecasting Contract to have BBER do the research and analysis reported in the attached document. The analysis and conclusions reported here are those of the authors and do not necessarily reflect the views of the sponsoring agencies.

The report is concerned with the possible behavioral effects of two changes that were made to NM's corporate income tax (CIT), the phased in reduction to the marginal corporate income tax rate, which over 5-years will lower the maximum corporate rate from 7.6% down to 5.9%, and a phased in option for manufacturers operating in other states to apportion their corporate income tax liability to New Mexico using a single sales factor in preference to a formula that equally weights their sales, employment and assets in the state. From the FIR on HB-641, it is clear that the motivation for both of the changes to the CIT was that of increasing New Mexico's competitiveness vis-a-vis other states. The FIR makes explicit reference to a 2011 study by Ernst and Young, commissioned by the Council on State Taxation, that ranked New Mexico last as having the highest tax burden on business among the states.

Assuming no change in business behavior -- i.e., no new investment nor employment incentivized by the tax changes -- the FIR estimated that by FY 17 the reduction in marginal CIT rates would lower general fund revenues by \$70 million, while providing manufacturers with the option to allocate tax liability based on the single sales factor would cost the general fund some \$45 million in CIT revenues. BBER's task was to try to estimate the additional employment and income that might be expected as a result of the tax changes. In the course of

our research, we interviewed tax professionals in a number of states that have made changes to their CIT rates or allocation procedures, and we did an extensive search of the literature. The research on the effects of changing the corporate income tax rate is inconclusive and does not provide a sound basis for estimating the potential job gains in NM. By contrast, we found some very credible empirical work that looked at a sample of states over time and explored the impacts on employment of increasing the weight given the sales factor in allocating the CIT for manufacturing firms. The model was applied to NM data. The results show a small but positive gain in employment and income.

We appreciate the opportunity to do this research and will make ourselves available to present our results and answer questions at the pleasure of the committee.

Sincerely,



Lee A. Reynolds and Michael O'Donnell

Estimating the Impacts  
of the Elective Single  
Sales Factor and  
Marginal CIT Rate  
Provisions of  
HB-641

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Bureau of Business &  
Economic Research



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Economic Research

# Estimating the Impacts of the Elective Single Sales Factor and Marginal CIT Rate Provisions of HB-641

21 January 2014

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## I. INTRODUCTION

The 2013 Legislature considered a number of tax bills and ultimately passed HB-641 in the waning hours of the Session. While Fiscal Impact Reports (FIRs) had been done for a number of the pieces of the final HB-641, a comprehensive report was not released until after the session, with the final update occurring on April 15. This report is concerned with two changes that were made to NM's corporate income tax, the phased in reduction to the marginal corporate income tax rate, which over 5-years will lower the maximum corporate rate from 6.7% down to 5.9%, and a phased in option for manufacturers to apportion their corporate tax liability using a single sales factor in preference to a formula that equally weights sales, employment and assets.

From the FIR it is clear that the motivation for both of the changes was that of increasing New Mexico's competitiveness vis-a-vis other states. The FIR references a 2011 study by Ernst and Young, commissioned by the Council on State Taxation, which ranked states in terms of tax burden on business as measured by their effective tax rates.<sup>1</sup> Going beyond applicable statutory rates, the study compared "the tax liabilities that new investments in selected industries would incur, taking into consideration state and local statutory tax provisions and the financial and economic characteristics of the new investments." **New Mexico was ranked last with the highest effective tax rate of 16.6%.** As the FIR notes, the Ernst and Young study "found that tax rates and a complex tax credit incentive system are a burden on firms considering investment in New Mexico and are almost certainly impeding economic growth."

The Fiscal Impact Report summarized the significant issues addressed by the reduction in the marginal corporate income tax rate: "New Mexico's top corporate income tax rate of 7.6 percent is high, compared with the national average of 6.4 percent."<sup>2</sup> BBER would add, per Table A.1 in the appendix, that **as of January 1, 2013, New Mexico's marginal corporate income tax rate of 7.6 percent was the highest in the region** including the surrounding states of Arizona (6.982%), Colorado (4.63%), Kansas (4.0%), Nevada (N/A), Oklahoma (6.0%), Texas (N/A) and Utah (5.0%). In terms both of the statutory marginal corporate income tax rate and Ernst and Young's measure of the tax burden on business, NM found itself in the unattractive position of being the high outlier. According to NM Tax Research Institute, "a reduction in the top corporate rate would make New Mexico more appealing to business investment."

Compared with the three factor apportionment formula, the single sales factor can dramatically lower corporate income taxes for a manufacturing firm that sells most (or all) of its product out-of-state. Moreover, as pointed out by the NM Tax Research Institute, unlike the three factor formula, the single sales factor "does not punish firms for investing or employing workers within a state."

**Table 1** is reproduced from that FIR and indicates the estimated impact of different sections of the Legislation on the State's General Fund. According to the FIR, by FY17, the reduction in the corporate income tax rate has an estimated negative impact on the General Fund of \$70.5 million, while the Single Sales Factor Option for manufacturers is estimated to reduce revenues by \$45.3 million. These adverse

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<sup>1</sup> Ernst and Young, *Competitiveness of state and local business taxes on new investment: Ranking states by tax burden on new investment*, April 2011.

<sup>2</sup> FIR House Bill 182 and 507/HTRCS and HB-641, Significant Issues. The FIR also noted "New Mexico's CIT rate is especially high when considering a corporation can be taxed at the 4.9 percent personal income tax rate simply by organizing under another section of the IRS code. This violates the principal of tax equity."

impacts were calculated by looking only at the changes in tax liability before and after the tax changes **assuming the level of economic activity was unaffected by the changes in taxation.** No effort was made in the FIR to estimate the dynamic effects of making New Mexico more competitive for existing and new businesses.

**Table 1. Estimated General Fund Revenue Impacts, HB-641**

Estimated General Fund Revenue Impacts					Bill Component
FY13	FY14	FY15	FY16	FY17	
\$0	(\$8,368,000)	(\$28,833,000)	(\$48,832,000)	(\$70,496,000)	CIT Rate Reduction
\$0	(\$80,000)	(\$10,949,000)	(\$28,761,000)	(\$45,313,000)	Optional SSF Apportioning
\$0	\$1,200,000	\$7,500,000	\$5,800,000	\$4,200,000	Combined Reporting for Certain Retailers
\$0	\$6,447,000	\$19,572,000	(\$9,520,000)	(\$9,711,000)	HWJTC Changes
\$0	\$10,457,000	\$18,179,000	\$26,265,000	\$34,796,000	GRT Manufacturing Changes
\$0	\$0	\$0	\$7,726,300	\$15,737,600	Repeal Local Hold Harmless
<b>\$0</b>	<b>\$9,656,000</b>	<b>\$5,469,000</b>	<b>(\$47,321,700)</b>	<b>(\$70,786,400)</b>	<b>Total General Fund</b>

Source: New Mexico Legislative Finance Committee Fiscal Impact Report, updated 4/15/13 (CS/641/aSFI#1)

This report is an effort to measure the potential dynamic effects on employment and earnings of the corporate income tax changes over 5 years to reduce the marginal corporate income tax rate to 5.9% and to provide a single sales factor option for manufacturers. **However, because the empirical research is inconclusive concerning the impact of corporate tax rate changes on employment and provides no sound basis for estimating the impacts, the present study does not attempt to estimate how changes in the marginal tax rate will impact employment and investment.**

Two types of models might seem well suited for capturing the dynamic impacts of tax changes on economic activity: the REMI model and a Computerized General Equilibrium (CGE) model, but neither of these options were feasible given time and budgetary constraints. BBER delved into the literature and explored alternative types of models. In the end, and with encouragement of State finance staff, BBER decided on a strategy of talking with tax professionals in states that had recently made changes in their corporate income tax rates and/or moved toward the use of a single sales factor so as to benefit from their states' experiences. As is elaborated in **Appendix A**, it turned out that very few of the many states contacted had really undertaken the kind of before and after analysis that might inform as to the dynamic impacts of the corporate tax changes. Some, like Oregon, had made some use of a CGE model. Others, like Arizona, had explored using REMI but had found their version of the model inadequate to the task of examining complicated tax changes. A much simpler approach, at least in terms of trying to estimate the effect of providing a single sales factor option, was discovered in a panel regression model of state corporate tax apportionment developed for the State of Wisconsin by a faculty member working with a team of students. Their model was an update of a similar model originally presented in a refereed journal article by Goolsbee and Maydew.

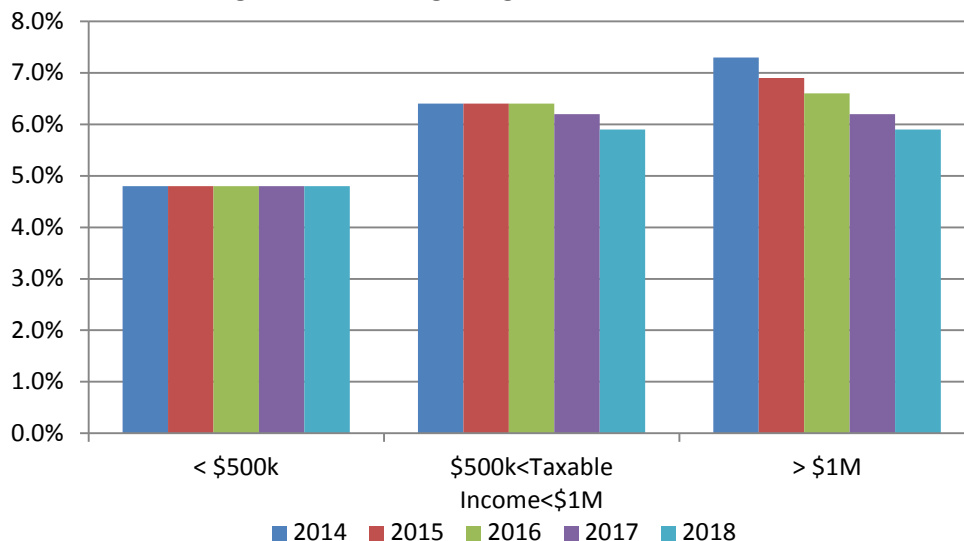
## **II. REDUCED MARGINAL CORPORATE INCOME TAX**

**Figure 1** illustrates the legislated changes to corporate income tax rates from 2014 to 2018. The current range (2013) is 4.8% to 7.6%. Note that these changes are most dramatic for large firms while there are no changes for businesses with taxable income of less than \$500 thousand.

Lower marginal corporate income tax rates might be expected to stimulate job growth by essentially making it less costly to do business. The theory is then extended to imply that businesses that retain a

larger share of their profits will be more likely to add workers, build new facilities and spend money in the local economy. William McBride (2012) from the Tax Foundation conducted a review of the literature and determined that there was broad consensus from which to conclude that reducing marginal corporate income tax rates did stimulate additional investment which led to more rapid economic and employment growth. On the other hand, as Michael Mazerov (2010) from the Center on Budget and Policy Priorities points out, state balanced budget requirements mean that spending (appropriations) may need to be cut unless the projected revenue shortfall can be covered, for example by new revenue sources, by growth in revenues from existing sources, possibly by dipping into reserves temporarily, or by some combination of the above. Reductions in government spending and/or increases in taxes may each be expected to impinge on economic growth.

**Figure 1. Declining Marginal Income Tax Rates**



In a comprehensive study of the effect of taxes (and specifically business taxes), Timothy Bartik (1991) describes that although from the 1950's, 60's and 70's the majority of studies found no statistically significant relationship between taxes and business activity, the majority of studies by the 1980's found a statistically significant negative relationship. Building on that premise, Ferede and Dahlby (2012) found that higher statutory corporate income tax rates are associated with slower economic growth in the **Canadian provinces**. This study estimated that a reduction in the corporate income tax rate of one percentage point led to an economic growth of 0.1-0.2 percentage points. Lee and Gordon (2005) find, on a **national** level and using a cross sectional approach, that from 1970 to 1997, higher corporate tax rates are negatively correlated with economic growth rates. They estimate that a corporate tax rate reduction of ten percentage points will raise annual (national) growth by one to two percentage points. In addition, an earlier study, using a pooled time series with cross sectional data, found that state and local tax increases generally reduce economic growth; however, when the tax revenue is used to finance public services such as education, highways, public health and the like, the favorable impacts of expanding these services can counterbalance the effects of the tax increase (Helms 1985).

Other literature and analyses, however, have cast doubt on the relationship between corporate taxes and economic growth. For instance, Deskins and Hill (2010) found that firms have become even less sensitive to changes in state corporate tax rates of late – to a point where tax changes have effectively been found to have no measurable impact on employment. Related literature by Gius and Frese (2002)



found that while a state's personal income tax rate was negatively correlated with firm location, the state's corporate tax rate had no statistically significant effect on firm location. Continuing that theme, Goff, et al. (2011) found that while lower tax burdens tend to lead to higher levels of economic growth, "individual tax rates...appear to matter," while "...while corporate tax rates... do not in our estimates." In addition, Chris Allonak, from the Oregon Legislative Revenue Office used a Computable General Equilibrium model to analyze the potential impacts of a tax change in 2009-10, in which the legislature increased the rate and imposed a larger minimum tax. Allonak reported that the model did not show significant negative impacts as a result of the effective tax increase. He has since run annual comparisons with actual revenues that validate his pre-tax change estimates. Allonak did note, however, that it may be potentially important how the additional money is spent (Allonak 2013, and see *also* Helms 1985).

In our survey of tax practitioners, we found states doing very well with both higher and lower marginal corporate income tax rates than New Mexico. The literature hints at the importance of other variables, such as state spending on education, infrastructure and personal income tax rates. That said, a lower marginal corporate income tax rate should lower the overall tax burden; i.e., New Mexico's effective tax rate, as measured by Ernst and Young. However, and at least to our knowledge, the analysis of how states' overall economic performance correlate with effective tax rates has yet to be done, nor has there been an estimation of how changes in the ranking might affect employment and economic growth.

### **III. SINGLE SALES FACTOR ELECTION FOR MANUFACTURERS**

The seminal article for assessing the impact of moving toward the use of a sales factor tax apportionment formula is an article published in a refereed journal by Goolsbee and Maydew (G&M) out of the University of Chicago (Goolsbee and Maydew, 2000). In their analysis, G&M used panel data from various states on apportionment formulae and corporate tax rates from 1978 to 1994. G&M indicated that over the study period, there had been approximately 20 different apportionment changes, which allowed them to develop a model of manufacturing employment variation of the "average state" resulting from apportionment change. In their study, the authors found that by moving from equal weighted (1/3) sales apportionment to double weighted (1/2) sales apportionment, states effectively increased manufacturing employment by 1.1%, and that this growth in employment and income increased personal income tax revenues. The authors cautioned that because the various states compete for manufacturing employees, gains in one state due to a tax change may come at another state's expense.<sup>3</sup>

Armed with the G&M study, but with a desire to update the results (since the G&M dataset only extended to 1994), researchers at the University of Wisconsin attempted to replicate and extend that study ("Wisconsin study," Bernthal, et al. 2012). The Wisconsin researchers pulled together and compiled the data used in the original G&M study and tried to replicate the G&M model results.<sup>4</sup> However, they found that moving from a regular equal weighted taxation system to double weighted

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<sup>3</sup> In fact, G&M found that tax apportionment changes have a national aggregate effect on total manufacturing employment of approximately zero.

<sup>4</sup> Because the authors in the G&M study did not still have available their original data, the Wisconsin researchers attempted to pull together the relevant data based on the descriptions provided by the G&M authors. It is important to note that the two data sets were not identical (the Wisconsin researchers had 759 observations versus 732 observations in G&M). However, a comparison of means and standard deviations of important key variables showed that the data were largely similar.

sales apportionment produced only a 0.09% increase in a state's manufacturing employment. Moreover, the Wisconsin team found that the parameter corresponding to increasing the sales factor weight was insignificant at the 10% level in their model (whereas G&M found that parameter to be significant at the 5% level).

Undaunted by the different econometric results, the Wisconsin researchers extended the G&M study by updating the time-series so that it included observations from 1978 through 2010. The additional years nearly doubled the number of included observations (to  $n = 1,463$ ). With the longer data series, and running essentially the same model, the Wisconsin researchers found that a state's move from a regular sales weight (1/3) to double weighted sales (1/2) produced an estimated 0.3% increase in that state's manufacturing employment (significant at a 5% level). While the researchers established that there was a positive relationship between moving toward an increased sales factor weight and manufacturing employment, their greater interest was in what happens when a state moves from a regular sales weight to a single sales factor tax because Wisconsin had phased in single sales factor between 2006 and 2008. Using the multi-state model and applying Wisconsin's changing payroll factor, the researchers estimated that the move produced a 1.2% increase in manufacturing employment. Actual results were slightly higher at 1.7%. Because the Wisconsin study presents the most recent and comprehensive analysis of the manufacturing employment impacts that are expected to occur as a result of movement to single factor sales apportionment, the findings in that study are applied in the present analysis.

It is important to point out that the New Mexico situation is somewhat different from the situation described in the Wisconsin study for at least three reasons. First, New Mexico is phasing-in the move toward single factor sales over 5 years, which is a long time and may affect the applicability of the Wisconsin study parameters. Second, New Mexico has allowed manufacturers to elect whether or not to use the increased sales factor apportionment. While with this option, manufacturers should always end of "winners," the data used in the Wisconsin analysis include losers as well as winners. Applying the coefficient to NM may thus under-estimate employment impacts. Finally, some manufactures are already using the allowed double weighted sales election and the marginal impact of the change on them should be different (lower) than the assumed movement from an equal weight system to single factor sales. These biases obviously cut both ways.

### **Data**

Historical employment and wage data were provided by the US Department of Labor's Quarterly Census of Employment and Wages (QCEW). It is important to point out that manufacturing employment and average annual wage vary greatly from one manufacturing subsector to another. For instance, leather and allied product manufacturing (NAICS 316) only employed 30 with an average annual wage of \$24,301, whereas computer and electronic product manufacturing employed 7,702 with an average annual wage of \$89,739. In total, the state had 29,625 manufacturing workers in 2012, with an average annual wage of \$55,517.

Economic forecast data are provided by the FOR-UNM economic forecasting service. In particular, this analysis utilizes employment and wage forecasts from the October 2013 FOR-UNM forecast.

### **Analysis and Discussion**

In order to quantify the employment change in the face of a movement toward a single sales factor apportionment system, relevant parameters from the Wisconsin study were applied to New Mexico forecast data. The Wisconsin study statistically measured the employment impacts of all states that changed their apportionment methodology over time. **Therefore, the regression parameters from the**

**Wisconsin study essentially correspond to what happens to the average state that changes its sales factor weight.** It is, of course, possible that New Mexico is more (or less) sensitive than the average state; however, there is no way to quantify the actual sensitivity absent data after the implementation of the New Mexico policy change.

The Wisconsin study found that moving from equal weighting apportionment to double weighted sales apportionment produces approximately 0.3% higher manufacturing employment levels for the average state. Therefore, by 2014 when the double weighted sales apportionment option is available in New Mexico, and after applying the Wisconsin study parameter, manufacturing employment is expected to be 0.3% higher than the FOR-UNM baseline scenario. As New Mexico continues to phase-in single sales factor apportionment (and consistent with the results of the Wisconsin study), manufacturing employment is expected to be above the FOR-UNM baseline scenario by 0.5%, 0.6%, 0.8% and 1.2% for 2015 to 2018, respectively.

As noted above, because other states generally have a compulsory system (and hence some manufacturers within the state are made better off while other manufacturers are made worse off), it could be argued that the estimated parameter from the Wisconsin study may not be large enough for the New Mexico case. To counterbalance this criticism, we treat each manufacturer as being positively impacted by the apportionment change, even though it is unlikely that each manufacturer will avail itself of the election. In addition, under current apportionment rules for manufactures, some businesses already use double weighted sales, so the marginal impact on their employment levels will be relatively lower than for businesses that use equal weighted apportionment. Nevertheless, because of the difficulty that many manufacturers have with using the current double-weighted sales option on a consistent basis, and because the parameter from the Wisconsin study may be relatively small, this analysis treats each manufacturer as currently using equal weighted apportionment. Finally, because the impacts will resonate throughout the entire economy, and not just the manufacturing sector, we apply a employment multiplier of 2.0. In other words, for each manufacturing job added, another job is added elsewhere in the economy.

**Tables 2** shows the direct manufacturing and total additional jobs added as a result of moving toward a single factor sales apportionment as well as total additional wage & salary income. Assumed is that each manufacturer is currently using equal weighted apportionment and that each takes the election toward single sales factor apportionment and is benefited from doing so. The calculation also assumes an employment multiplier of 2.0.

Under the scenario articulated in **Table 2**, and by 2018, 357 additional manufacturing jobs are expected to be added with another 357 jobs added elsewhere in the economy; these together result in a \$40.0 million boost to wage and salary income. As can be seen in **Figure 2**, the impacts on NM manufacturing employment are relatively modest and well within the error on BBER's forecast for this sector.

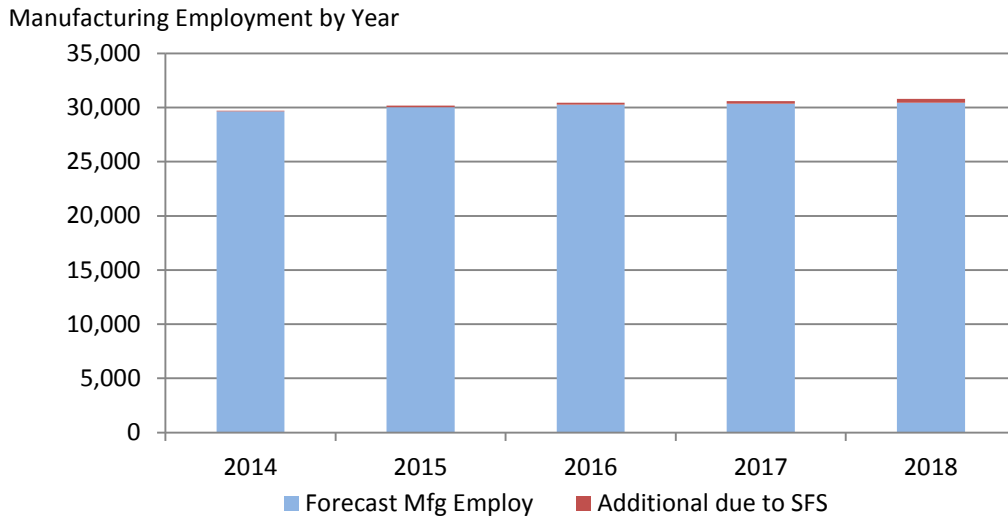
**Table 2. Additional Manufacturing Jobs, Total Jobs, Wage & Salary Income**

Year	New Manufacturing Jobs	Total Additional Jobs *	Total Add'l Wage & Salary Income (\$Millions)**
2014	87	174	\$ 8.6
2015	141	282	\$ 14.3
2016	195	390	\$ 20.5
2017	249	498	\$ 27.0
2018	357	714	\$ 40.0

\* Assuming employment multiplier of 2.0. Implicitly, since some indirect jobs are counted in mfg, the multiplier is > 2.

\*\* Ave mfg wage as forecast by BBER; Ave additional wages equal BBER forecast total Wages & Salaries less Mfg.

**Figure 2. Forecast NM Manufacturing Employment during phase-in of single sales factor apportionment for the corporate income tax**



Based on the additional (estimated) jobs, we estimate that the increase in wage and salary income could translate into additional personal income tax revenues to the state of \$1.3 million by 2018, with an addition \$2.5 million in gross receipts and excise taxes.<sup>5</sup>

<sup>5</sup>Personal income tax estimates assume 3.2% of wage and salary earnings. This estimate is based on NM personal income tax payments as a percent of total wage and salary earnings. Both series are available on line from the US Bureau of Economic Analysis. Gross receipts and excise tax receipt estimate is based on the latest study by the Institute on Taxation and Economic Policy, *Who Pays, A Distributional Analysis of the Tax Systems in All 50 States*, 2013. p. 88

Had BBER extrapolated the parameter estimates from the original G&M study, the impacts by 2018 would have been larger – 2,610 total additional jobs versus 714. Given the relatively larger parameter, and using the same assumptions discussed above, the additional jobs would correspond to an estimated \$13.7 million in personal income and sales and excise tax revenues in that year). However, applying the G&M study to New Mexico raises its own set of problems. That study was conducted on a data series from the years 1978 to 1994; it is questionable whether those parameters continue to reflect the business reality of 2013. Relatedly, and as discussed both by G&M and in the Wisconsin study, there is some evidence that early adopters of the single sales factor may have enjoyed a first-mover advantage while those who enter the game belatedly will see much smaller rewards.

Ernst and Young has been commissioned to undertake another study of how the business tax burden in New Mexico has been affected by legislation in 2012 and 2013. With these results, it may be possible to analyze how the overall tax burden has changed. However, looking at all the states, BBER has as yet been unable to find a significant relationship between the Ernst and Young effective tax rates and various measures of economic performance, including growth in real GDP, growth in employment, growth in manufacturing employment and average annual wages. While high tax rates or an anticipated heavy tax burden are of concern, other factors may be of equal or greater importance. **However, none of this is to suggest that New Mexico was well served by the complicated and burdensome system of business taxation that existed before the passage of HB 641.**

#### **IV. CONCLUSION**

While HB-641 made a number of interrelated changes to New Mexico's tax code, BBER was asked to evaluate only two of those changes: 1) reduction in the corporate income tax, and 2) creating a single sales factor election for manufacturers. With respect to the corporate income tax rate reduction, we found no definitive evidence that employment and income are positively (or negatively) impacted by marginal changes in the corporate income tax rate. With regard to the single sales factor apportionment for manufacturing firms, we found that there are likely to be modest, but positive employment and income effects. However, it is important to note that the parameters used in this study describe the "average" state that changed its tax apportionment system. Giving New Mexico manufacturers the option to apply a single sales factor could well encourage more investment and employment growth than has been estimated for the "average" state; it could also have a more limited impact.

Finally, it is important to reiterate that the purpose of this analysis was to attempt to identify and estimate independently the expected contributions associated with a move to single sales factor apportionment and to relatively lower marginal corporate income tax rates. With these changes New Mexico has surely made strides in the direction of becoming more "competitive." The joint or synergistic effects of these and other changes, such as the reduction of pyramiding in the gross receipts tax, are surely positive. These combined effects, however, were not the subject of our analysis.

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## **APPENDIX: NOTES ON THE EXPERIENCES OF OTHER STATES AFTER CHANGING THEIR CORPORATE INCOME TAX**

Before interviewing tax professionals in other states, we assembled data on tax rates over time as well as changes in the apportionment formula to provide additional weight to in-state sales. **Table A1** was compiled in January 2013 by the Federation of Tax Administrators (FTA). It provides a snapshot of corporate income tax rates for all the state. Note that New Mexico's marginal corporate income tax exceeded that for many but not all of the states in the west that have a corporate income tax.

**Table A2** provides a similar snap shot on the use of different apportionment formulas for corporate income tax. The source is once again the FTA. New Mexico is here treated as giving equal weight to three factors, assets (property), employment, and sales.<sup>6</sup> The table indicates that there are a number of states, many of them in the West that had by 2013 adopted a single sales factor apportionment formula, including California, Colorado, Oregon, Texas, and Utah, while others, like Arizona and Idaho, allowed an 80% weight to in-state sales. It is important to note that eligible NM businesses, under both previous law and that enacted by the 2013 Legislature, have the option of choosing an apportionment formula that best meets their needs. Other states that have adopted the single sales factor have made that apportionment formula mandatory – for manufacturers but more typically for all businesses subject to the corporate income tax.<sup>7</sup> Unlike NM, which absorbs any reductions in tax revenue, in other states there are corporations that win, paying less tax, but the impacts on state revenues are partially offset by the fact that some corporations lose and must now pay more taxes.

### **Arizona**

According to a tax professional who works for the Joint Legislative Budget Committee (JLBC), Arizona's corporate tax rate is currently scheduled to decrease from 6.968%, where has been for some time, to 6.5% in 2014. The apportionment formula used to give employers a double-weighted (50%) sales option, dating perhaps since 2000-2003 but now allows an 80% sales weight if the corporation will provide data for economic impact and if meets some investment criteria (\$1b), which Intel, the "recipient of many tax favors," meets. Arizona is phasing in and will be a Single Sales Factor state by 2017. His office did a paper on the experience with the corporate income tax, noting a \$3 billion investment by Intel for plant expansion and improvements but also explaining that "JLBC Staff did not attempt to gather additional information on capital investments and related economic activity. Such a large scale study of 183 corporations would have required considerable resources and would have produced questionable results."<sup>8</sup> JLBC provided dynamic scoring using REMI if requested, although the professional with whom we spoke views the REMI model as better suited for economic development than tax policy since the fiscal component of model is not strong and required lots of work up front to calibrate, e.g., inaccurate

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<sup>6</sup>NM is typically not counted among the states providing a double-weighted sales factor for manufacturers because of restrictions on eligibility and use. Thus, any company wishing to use this alternative weighting system must "notify the department of the election, in writing", and be prepared to use this same method for 3 tax years and at least 36 calendar months. Furthermore, they may begin using the alternative formula only if their tax liability under the 3 equal factor formula or if the combination of the payroll and property factors has grown since their first taxable year. This latter requirement can cause businesses to bounce in and out of eligibility.

<sup>7</sup> Making the single sales factor mandatory conflicts with the equal weights given to sales, employment, and assets as a basis for apportionment of corporate income tax liability in the Multi-State Tax Compact and has been challenged in the Gillette case (*Gillette Co. v. Cal. Franch. Tax Bd.*).

<sup>8</sup> Arizona Joint Legislative Budgetary Committee, *Corporate Sales Factor Report*, June 21, 2011.



tax data. He noted that REMI now has a new model, and may have made some improvements in the fiscal component.

**Table A1**

**RANGE OF STATE CORPORATE INCOME TAX RATES**

(For tax year 2013 -- as of January 1, 2013)

STATE	TAX RATE (percent)	TAX BRACKETS		NUMBER OF BRACKETS	TAX RATE (a) (percent) FINANCIAL INST.	FEDERAL INCOME TAX DEDUCTIBLE
		LOWEST	HIGHEST			
ALABAMA	6.5	---Flat Rate---		1	6.5	Yes
ALASKA	1.0 - 9.4	9,999	90,000	10	1.0 - 9.4	
ARIZONA	6.968 (b)	---Flat Rate---		1	6.968 (b)	
ARKANSAS	1.0 - 6.5	3,000	100,001	6	1.0 - 6.5	
CALIFORNIA	8.84 (c)	---Flat Rate---		1	10.84 (c)	
COLORADO	4.63	---Flat Rate---		1	4.63	
CONNECTICUT	7.5 (d)	---Flat Rate---		1	7.5 (d)	
DELAWARE	8.7	---Flat Rate---		1	8.7-1.7 (e)	
FLORIDA	5.5 (f)	---Flat Rate---		1	5.5 (f)	
GEORGIA	6.0	---Flat Rate---		1	6.0	
HAWAII	4.4 - 6.4 (g)	25,000	100,001	3	7.92 (g)	
IDAHO	7.4 (h)	---Flat Rate---		1	7.4 (h)	
ILLINOIS	9.5 (i)	---Flat Rate---		1	9.5 (i)	
INDIANA	8.0 (j)	---Flat Rate---		1	8.5	
IOWA	6.0 - 12.0	25,000	250,001	4	5.0	Yes (k)
KANSAS	4.0 (l)	---Flat Rate---		1	2.25 (l)	
KENTUCKY	4.0 - 6.0	50,000	100,001	3	--- (a)	
LOUISIANA	4.0 - 8.0	25,000	200,001	5	4.0 - 8.0	Yes
MAINE	3.5 - 8.93	25,000	250,000	4	1.0 (m)	
MARYLAND	8.25	---Flat Rate---		1	8.25	
MASSACHUSETTS	8.0 (n)	---Flat Rate---		1	9.0 (n)	
MICHIGAN	6.0	---Flat Rate---		1	--- (a)	
MINNESOTA	9.8 (o)	---Flat Rate---		1	9.8 (o)	
MISSISSIPPI	3.0 - 5.0	5,000	10,001	3	3.0 - 5.0	
MISSOURI	6.25	---Flat Rate---		1	7.0	Yes (k)
MONTANA	6.75 (p)	---Flat Rate---		1	6.75 (p)	
NEBRASKA	5.58 - 7.81	100,000		2	--- (a)	
NEVADA	--	No corporate income tax				
NEW HAMPSHIRE	8.5 (q)	---Flat Rate---		1	8.5 (q)	
NEW JERSEY	9.0 (r)	---Flat Rate---		1	9.0 (r)	
NEW MEXICO	4.8 - 7.6	500,000	1 million	3	4.8 - 7.6	
NEW YORK	7.1 (s)	---Flat Rate---		1	7.1 (s)	
NORTH CAROLINA	6.9	---Flat Rate---		1	6.9 (t)	
NORTH DAKOTA	1.68 - 5.15	25,000	50,001	3	7 (b)	Yes
OHIO	(u)	---Flat Rate---		1	--- (u)	
OKLAHOMA	6.0	10 million		1	6.0	
OREGON	6.6 - 7.6 (v)	10 million		2	6.6 - 7.6 (v)	
PENNSYLVANIA	9.99	---Flat Rate---		1	--- (a)	
RHODE ISLAND	9.0 (b)	---Flat Rate---		1	9.0 (b)	
SOUTH CAROLINA	5.0	---Flat Rate---		1	4.5 (w)	
SOUTH DAKOTA	--	No corporate income tax			6.0-0.25% (b)	
TENNESSEE	6.5	---Flat Rate---		1	6.5	
TEXAS	(x)	---Flat Rate---		1	(x)	
UTAH	5.0 (b)	---Flat Rate---		1	5.0 (b)	
VERMONT	6.0 - 8.5 (b)	10,000	25,000	3	--- (a)	
VIRGINIA	6.0	---Flat Rate---		1	6.0	
WASHINGTON	--	No corporate income tax				
WEST VIRGINIA	7.0 (y)	---Flat Rate---		1	7.0 (y)	
WISCONSIN	7.9	---Flat Rate---		1	7.9	
WYOMING	--	No corporate income tax				
DIST. OF COLUMBIA	9.975 (b)	---Flat Rate---		1	9.975 (b)	

Source: Compiled by FTA from various sources.

**Table A2**

**STATE APPORTIONMENT OF CORPORATE INCOME**

(Formulas for tax year 2013 -- as of January 1, 2013)

ALABAMA *	Double wtd Sales	NEBRASKA	Sales
ALASKA *	3 Factor	NEVADA	No State Income Tax
ARIZONA *	Double wtd Sales/80% Sales, 10% Property & 10% Payroll	NEW HAMPSHIRE	Double wtd Sales
ARKANSAS *	Double wtd Sales	NEW JERSEY	90% Sales, 5% Payroll, & 5% Property (1)
CALIFORNIA *	Sales	NEW MEXICO *	3 Factor
COLORADO *	Sales	NEW YORK	Sales
CONNECTICUT	Double wtd Sales/Sales	NORTH CAROLINA *	Double wtd Sales
DELAWARE	3 Factor	NORTH DAKOTA *	3 Factor
FLORIDA	Double wtd Sales	OHIO	Triple Weighted Sales (3)
GEORGIA	Sales	OKLAHOMA	3 Factor
HAWAII *	3 Factor	OREGON	Sales
IDAHO *	Double wtd Sales	PENNSYLVANIA	Sales
ILLINOIS *	Sales	RHODE ISLAND	3 Factor
INDIANA	Sales	SOUTH CAROLINA	Sales
IOWA	Sales	SOUTH DAKOTA	No State Income Tax
KANSAS *	3 Factor	TENNESSEE	Double wtd Sales
KENTUCKY *	Double wtd Sales	TEXAS	Sales
LOUISIANA	Sales/3 Factor	UTAH	Sales
MAINE *	Sales	VERMONT	Double wtd Sales
MARYLAND	Sales/Double wtd Sales	VIRGINIA	Double wtd Sales/Triple wtd Sales (1)
MASSACHUSETTS	Sales/Double wtd Sales	WASHINGTON	No State Income Tax
MICHIGAN	Sales	WEST VIRGINIA *	Double wtd Sales
MINNESOTA	96% Sales, 2% Property, & 2% Payroll (1)	WISCONSIN *	Sales
MISSISSIPPI	Sales/Other (2)	WYOMING	No State Income Tax
MISSOURI *	3 Factor/Sales	DIST. OF COLUMBIA	Double wtd Sales
MONTANA *	3 Factor		

Source: Compiled by FTA from state sources.

Notes:

The formulas listed are for general manufacturing businesses. Some industries have a special formula different from the one shown.

\* State has adopted substantial portions of the UDITPA (Uniform Division of Income Tax Purposes Act).

Slash (/) separating two formulas indicates taxpayer option or specified by state rules.

3 Factor = sales, property, and payroll equally weighted.

Double wtd Sales = 3 factors with sales double-weighted

Sales = single sales factor

(1) Minnesota, New Jersey and Virginia (certain manufactures) are phasing in a single sales factor which will reach 100% in 2014.

(2) Mississippi provides different apportionment formulas based on specific type of business. A single sales factor formula is required if no specific business formula is specified.

(3) Formula for franchise tax shown. Department publishes specific rules for situs of receipts under the CAT tax.

A tax professional at the Arizona Department of Revenue Office of Economic Research and Analysis was able to provide additional details. Intel had “strong-armed” to get 80%. Chandler, where Intel has its major operations, has had “unbelievable growth” since then. The 80% Sales Factor was supposed to require data for fiscal impact report but has not happened. JLBC was supposed to report impacts but not willing to go after businesses to get the data and businesses not forthcoming so no substantive report. JLBC provides fiscal notes but only if requested. According to analysis conducted by the Department, there is no evidence that other firms beside Intel have expanded in the state. The professional provided estimates of the gains and losses associated with moving toward a higher weight on sales, but these are based on current activity levels.

## **Arkansas**

Corporate tax rates in Arkansas range from 1% to 6.5%. According to a tax professional from the Arkansas Corporate Income Tax program, Arkansas has had a 3 factor double-weighted sales apportionment since 1995, for all businesses except financial institutions which have special rules. The state experienced a boom until 2011 but hard to say how much tax related. Has a number of manufacturing businesses but has been losing to Mexico, although less than to China. The basis of these corporate decisions seems to be labor costs, possibly environment, but the state has managed to maintain a lot of manufacturing activity and he mentioned food in particular. Arkansas did just get the second largest steel mill in the US and has "lots of diverse types of businesses."

Arkansas, like New Mexico, is adopting a single sales factor. This will not be optional as NM's and staff are projecting big winners and losers as the state moves from double-weighted to single sales.

## **California**

Rate 8.84% and has not changed since 2001. Min tax is \$800. 6.65% alternative minimum tax. Double weighted sales/optional single sales factor. No specific details as contact person was out during the period in which we were conducting the survey.

## **Colorado**

Rate is 4.63% at least since 2001, no brackets, Single Sales Factor applicable on all. After discussing the situation with a tax professional in Colorado, it was discovered that Colorado had a (taxpayer) elective apportionment between 2-factor equally weighted sales and property and 3-factor equally weighted. Removing the election would be expected to have a positive fiscal impact in and of itself, but he could provide no data on economic activity, nor could the statistical analyst from the Dept of Revenue. Colorado with its flat personal and corporate income taxes and a single sales factor applicable to all has been doing fine.

## **Iowa**

First state in the country to have single factor sales. Their manufacturing sector is not even broken out separately in the CES so impossible to get detailed historical series. Quarterly Census of Employment and Wages shows employment in manufacturing had declined continuously from 2001 forward until 2011 and 2012, when gained perhaps 4,000 jobs. It does not appear that their economy benefited from the single sale factor in terms of manufacturing activity after implementation. Their action did provoke a response in neighboring states which according to the people surveyed felt some pressure to adopt single factor sales.

## **Minnesota**

9.8% on corporate income above \$0, the same rate as in 2001. Currently three-factors, but state has a 93% weight for sales.

According to a Minnesota tax professional, Minnesota has been phasing in single factor since maybe 2007 and will achieve full implementation in 2014. Feels such a phase in introduces uncertainty that state may not go to 100%. Tax expenditure report has estimates for MN similar to those developed by

TRD with no dynamic analysis. He noted it would be difficult to see impact since other major things happening, e.g., treatment of foreign operations, change in research credit from non-refundable to refundable; also imposing sales tax on some business services, e.g., warehousing, telecommunications).

### **Montana**

6.25% since 2009, before 6.75%, 3 factor. Phone calls not returned.

### **Nebraska**

5.58%, 7.81% over \$100k, was over 50k until 2008. Many smaller corps (S, LLCs) file under personal since lower rate.

According to a Nebraska tax professional, Nebraska has had single sales factor since Iowa changed (1987?). No data, since the change to single sales factor happened a while ago. Now moving to market based apportionment for services.

Nebraska has been doing well. The tax professional cited their Advantage program, which is analyzed on website. He also noted that other states give NM as the example of what not to do with pyramiding (gross receipts).

### **Oklahoma**

Flat 6%, 3 factor throwback.

### **Oregon**

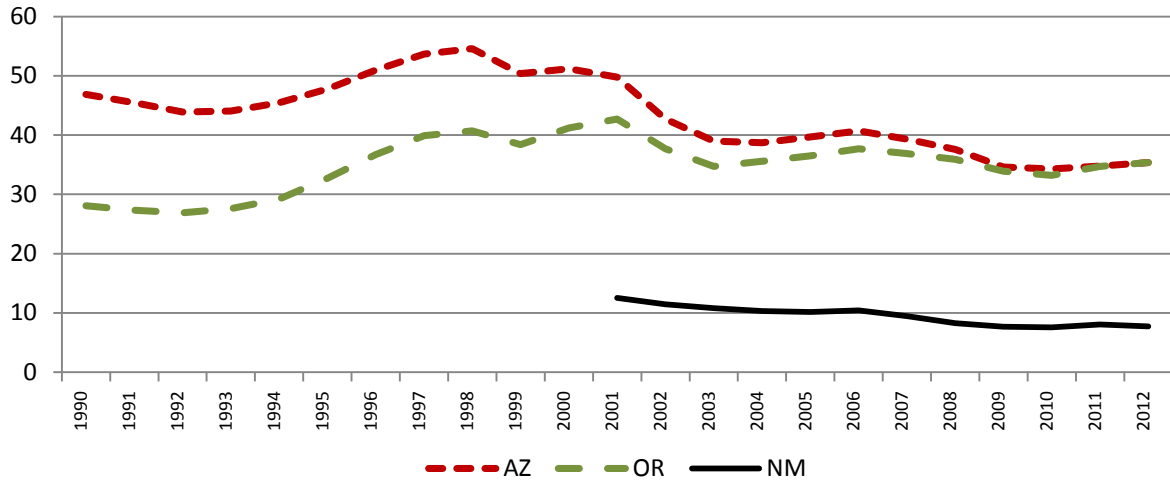
Made changes in brackets in 2013: now 6.6% on every business if less than \$10 million, and 7.6% if greater than \$10 million. Effectively this is a tax increase. Oregon is going the opposite direction. According to a tax professional in state government, Oregon has had the single sales factor, mandatory on all since 2005; before than they had double-weighted since 1991; and, 3 factor before 1991. They now have an alternative minimum tax that is substantial – \$100,000 if corporate income is \$100 million or more.

The tax professional suggested we talk with Chris Allonak at Legislative Revenue Office, which produces a tax expenditure report. Chris Allonak reported the change in 2009-10, in which the legislature increased the rate and imposed a larger minimum tax. Chris used a CGE model (based on California model) to analyze potential impacts: the model did not show significant negative impacts. He has been running annual comparisons of actual revenues – 95-100% of what was estimated. No evidence of negative impacts from recent tax increases. He does note potential importance of how money spent.

CGE model was used to analyze prospective impacts of movement to single factor sales. Oregon, where Intel has had a major presence, has been doing very well.

**Figure A1** looks at the changes in employment in the computer and electronic product industry from the Quarterly Census of Employment and Wages in Arizona, Oregon and New Mexico – three states in which Intel has had a major presence.

**Figure A1. Computer and Electronic Product Manufacturing Employment in Arizona, Oregon and New Mexico, in thousands**



**Texas**

No corporate income tax; has gross receipts tax with rates comparable. Gross receipts tax is apportioned 100% based on a single sales factor.

**Utah**

Corporate income tax has been 5% since at least 2001, with 3 factors equal weight. According to a Utah tax professional in state government, the corporate tax rate is still 5%; however, Utah has partially drifted away from the three factor apportionment formula. Utah historically used an equally weighted three factor apportionment formula for corporate tax (and was a member of the Multistate Tax Compact). Subsequently, Utah allowed taxpayers the ability to elect a double-weighted sales factor for taxable years 2006 and later. Although most corporations can still elect to use the equally weighted three factor apportionment formula, the state began requiring taxpayers in certain specified industries (mining, manufacturing, transportation and warehousing, finance and insurance and most information sectors) to use a more heavily weighted sales factor for taxable years beginning in 2011 and 2012, eventually requiring single sales factor for these specific taxpayers for taxable years beginning in 2013. Utah passed legislation this year which withdrew them from the Multistate Tax Compact and allowed the state simultaneously to re-adopt portions of the compact excluding articles (III, IV and IX) which allowed taxpayers to elect a three factor apportionment formula. Utah’s economy has performed well, with private employment now about 98% of where was before the recession. Manufacturing is over 90%.

**Wisconsin**

State has had a 7.9% corporate income tax rate at least since 2001. They now have a single sale factor, which was phased in over three years. Wisconsin was included because the state has a large computer and electronics industry and also because the state revenue department, under chief economist John Koskinen had undertaken a very interesting empirical study of the economic impacts of the state adopting the single sales factor. This study is a basis for the estimates presented above.