



*Iowa Tax Reform Legislation
Will Boost the State Economy*

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TABLE OF CONTENTS

Executive Summary	1
Introduction	2
SF 2417	7
Economics of Income and Sales Taxes	9
Estimates and Results	11
Conclusion	14
About the Authors	17

Executive Summary

Under Senate File (SF) 2417 (Income and Sales Tax Modification), the state of Iowa will reduce individual and corporate income tax rates, extend or eliminate certain tax credits and expand the sales tax base. The measure will also make certain changes in the franchise tax, the hotel and automobile excise taxes and the Iowa Education Savings Plan Trust. A portion of the tax changes would be effective immediately, while other portions would be effective in 2023 if certain tax revenue collection thresholds are met.¹

The passing of the federal Tax Cuts and Jobs Act in December 2017 made it necessary to bring the Iowa tax code into conformity with the new federal code. With SF 2417, the Iowa legislature used the new federal law as an opportunity to simplify the state tax code and to cut the state's marginal income tax rates.

The Beacon Hill Institute for Public Policy Research (BHI) estimated the effects on the state economy of SF 2417, using its Iowa STAMP (State Tax Analysis Modeling Program).² We found that the legislation will bring about a growing economy that produces higher private employment and disposable income and, ultimately, higher investment. It will initially, in 2019, create 4,840 jobs, and increase inflation-adjusted disposable income by \$351 million. Investment will initially decrease by \$12 million due to the increases in the sales tax and corporate income taxes.

However, because the reduction in income tax rates and consolidation of the tax brackets would not be fully implemented until 2023 at the earliest, the ultimate economic effects will be much higher – almost double the initial effects. In 2024, the legislation will

¹ Senate File 2417, <https://www.legis.iowa.gov/legislation/BillBook?ga=87&ba=SF2417>.

² For a description of the model see http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_EconofSTAMP.html.

lead to the creation of 8,270 jobs, an increase in investment of \$100 million and an increase in real disposable income of \$673 million.

The increase in economic activity will mitigate the loss in tax revenue. Whereas, the Fiscal Note produced by the legislature's Fiscal Services Division predicts that the state will lose \$642 million, we predict a loss of only \$543 million when increases in revenue from other state taxes are taken into consideration.³

Introduction

Getting state tax policy right is critical to economic growth. A viable state tax system must be able to raise the revenue that government needs in order to provide public services, while imposing the smallest possible burden on work, saving and investment.

Driven by interstate competition that has intensified over the past 30 years, states have embarked upon reforms across the nation, including tax and expenditure limitations and targeted tax cuts. States have also considered tax swaps, under which they would eliminate or lower income taxes and raise sales taxes. On the other side of the spectrum, supporters of activist-oriented government maintain that spending on education and transportation enable growth based on the importance of human capital and infrastructure "investment."

³ Jeff Robinson, "Fiscal Note: SF 2417 Income and Sales Tax Modification (LSB5613SV)" Legislative Services Agency, Fiscal Services Division, (May 5, 2018), <https://www.legis.iowa.gov/docs/publications/FN/965637.pdf>.

The key challenge for Iowa policymakers is to improve the state's competitive advantage. According to the Beacon Hill Institute's State Competitiveness Index, Iowa ranks 11th out of 50 for its ability to promote economic growth and increase personal income.⁴ This is down from a ranking of 3rd just a few years ago.⁵ Iowa scores high on the "human resource" sub-index, ranking 5th in the nation. A large portion of its workforce has more than a high school education, and a significant number of students enter science and engineering programs.⁶

On the downside, Iowa scores 32nd for the size of its technology sector, 33rd for business incubation, and 36th for openness to trading and travel with other countries. According to the Tax Foundation, Iowa ranks among the 11 worst states for its overall business climate.⁷

In terms of tax policy, Iowa scores a middling 26th on the "fiscal policy" sub-index on the BHI Competitiveness Index. Digging deeper into the elements that make up the fiscal policy sub-index, Iowa ranks 14th in state and local taxes per capita. Iowa also ranks 40th among state and local government employees per 100 residents.⁸

While it is but one determinant of a state's ability to generate jobs and investment, a state's tax system can exert a negative influence on economic growth. A growing body

⁴ The Beacon Hill Institute at Suffolk University, *State Competitiveness Report*, 16th Edition, (August 2016), <http://www.beaconhill.org/CompetitivenessHomePage.html>.

⁵ The Beacon Hill Institute at Suffolk University, *State Competitiveness Report*, 14th Edition, (March 2014), <http://www.beaconhill.org/CompetitivenessHomePage.html>.

⁶ State Competitiveness Report 16th edition.

⁷ Tax Foundation, 2018 State Business Climate Index, <https://taxfoundation.org/publications/state-business-tax-climate-index/>.

⁸ State Competitiveness Report 16th edition.

of literature suggests that taxes impede economic growth.⁹ Over the last decade, states have turned to reform their tax systems to make themselves more attractive to business.

In short, Iowa cannot afford to rest on its laurels. With other states working to improve their tax competitiveness, Iowa is compelled to consider the options available in order to compete with other states for jobs and investment.

Iowans can look to examples from other states to see the effects of both tax policy changes that produce positive economic results and other tax changes that are destructive to the state economy.

Connecticut presents a case study in harmful tax policy choices. The State of Connecticut has struggled to balance its budget over the last several years. In 2011, the state imposed \$1.5 billion in tax increases to close a multi-billion dollar budget deficit. The state increased the income tax, estate tax, and sales tax. It also expanded the sales tax base to include services, such as yoga lessons and plastic surgery.¹⁰

Despite these tax increases, the state faced another multi-billion-dollar budget deficit in 2015. This time state leaders moved its corporate income tax to a unitary system, which hurt some of its largest employers. Middle and low-income households did not escape unharmed, as the state also reduced the residential property tax credit on the state income tax and increased the cigarette tax.¹¹

⁹ Jed Kolko, David Neumark, Marisol Cuellar Mejia, "What do Business Climate Indexes Teach Us About State Policy and Economic Growth," *Journal of Regional Science*, 53(2)236-251, <http://dx.doi.org/10.1111/j.1467-9787.2012.00782.x> Certain sub-indexes tracking lower corporate income taxes were found to have a positive relationship with wage and GDP-State growth.

¹⁰ Peter Applebome, "Bucking Trend, Connecticut Budget Deal Raises Taxes, Gasoline Excepted," *The New York Times*, N.Y. / Region, (May 2, 2011), <http://www.nytimes.com/2011/05/03/nyregion/tax-increases-stand-out-in-connecticut-budget-deal.html>.

¹¹ Christopher Keating, "State Budget Finalized; \$178M In Proposed Tax Increases Rescinded,

The tax increases have been a factor in the state's slow economic growth rate over the current expansion and have led high-profile firms, such as General Electric, to flee the state.¹² The state's high-income households are also fleeing, with over 2,000 households with incomes over \$200,000 moving to other states between 2015 and 2016.¹³ Connecticut's political leaders fail to see the connection between tax policy and economic growth.

Connecticut ranked 43rd (down from 33rd in 2012) out of the 50 states in the 2016 BHI *Competitiveness Index*. It scored 47th for fiscal policy which held steady over the same period. Its fiscal policy ranking has suffered from the pattern of increasing taxes to close a budget shortfall, and then, when the expected revenues don't materialize, continuing to increase taxes further, with further subsequent budget shortfalls.¹⁴

However, Connecticut's tax increases provided no improvements in its rankings in other sub-indexes. The state's ranking in the Security sub-index decreased from 5th to 10th, its ranking in the Infrastructure sub-index decreased from 43rd to 50th, and its rankings in the Environmental sub-index decreased from 27th to 38th. According to the Tax Foundation, Connecticut ranks 44th among of the 50 states for its overall business climate, down from 40th in 2012.¹⁵

¹² <http://www.courant.com/business/hc-biz-connecticut-economy-20171121-story.html>.

¹³ Marc E. Fitch, "Connecticut lost \$2.6 billion in 2015 as high-wealth residents moved out," Yankee Institute for Public Policy, Economy, Taxes, (December 6, 2017), <http://www.yankeeinstitute.org/2017/12/connecticut-lost-2-6-billion-in-2015-as-high-wealth-residents-moved-out/>.

¹⁴ The Beacon Hill Institute at Suffolk University, *State Competitiveness Report*, 16th Edition, (August 2016), <http://www.beaconhill.org/CompetitivenessHomePage.html>

¹⁵ Tax Foundation, 2018 State Business Climate Index, <https://taxfoundation.org/publications/state-business-tax-climate-index/>.

In contrast, North Carolina implemented fundamental tax reform in 2013. The state moved from a graduated personal income tax with a top tax rate of 7.75 percent to a flat tax rate of 5.75 percent in 2015, while broadening the tax base.¹⁶

The corporate income tax received similar treatment with a new flat rate of 5 percent in 2015, also with a broadened the tax base. The law made a decrease in the rate to 3 percent in 2017 conditional meeting a revenue target. The reform package left the sales tax rate unchanged and expanded the base to include some services.¹⁷

Strong economic growth propelled by the tax changes led to strong tax revenue collections that met the revenue target and triggered a reduction in the corporate tax to 3 percent.¹⁸

The tax reform package helped the North Carolina economy become more competitive. The state shot up the rankings in the BHI Competitiveness Index from a ranking of 26th overall in the 2012 report to raking 14th overall in 2016 report. North Carolina's ranking in the Government and Fiscal policy sub-index rose from 24th to 14th.

More impressive is that North Carolina's tax cuts were accompanied by an improvement in its rankings in other sub-indexes. The state's ranking in the Security sub-index increased from 43rd to 26th, at the same time it's ranking in the Infrastructure sub-index increased from 22nd place to 10th place. The state's rankings in the other sub-indexes essentially held steady.

¹⁶ Roy Cordato, "Tax Reform 2013: Setting the Stage for Economic Growth" Spotlight Report, John Locke Foundation, (September 23, 2013) <https://www.johnlocke.org/research/tax-reform-2013-setting-the-stage-for-economic-growth/>.

¹⁷ Cordato.

¹⁸ David Kall, David Ebersole, "North Carolina: Corporate Income Tax Rate Set to Drop to 3 Percent Next Year," Business Advocate, Tax and Benefit Challenges, (August 14, 2016) <https://mcdonaldhopkins.com/Insights/Blog/Tax-and-Benefits-Challenges/2016/08/14/North-Carolina-Corporate-income-tax-rate-set-to-drop-to-3-percent-next-year>.

The changes in North Carolina improved its overall business climate. According to the Tax Foundation, North Carolina ranks 11th among of the 50 states for its overall business climate, a dramatic increase from 44th in 2012.¹⁹

Opponents of tax reform often predict that tax cuts will lead to layoffs of first responders and crumbling infrastructure. Yet the North Carolina experience bellies those claims. Conversely, the experience of Connecticut provides a cautionary tale that tax increases can lead to diminished competitiveness, causing businesses and citizens to flee the state and to subsequent budget deficits and poor economic performance.

SF 2417

This study examines the economic effects of SF 2417, which passed both chambers of the Iowa legislature and was signed by the Governor on May 30, 2018. The enactment of the federal Tax Cuts and Jobs Act provided the initial impetus for Iowa policymakers to consider tax changes to align the Iowa tax code with the new federal code. The legislature has seized on the federal act as an opportunity to pass comprehensive tax reform legislation.²⁰

SF 2417 completely rewrites the Iowa state tax code, making significant changes to the individual and corporate income taxes and the sales tax, as well as smaller changes to other taxes.²¹ SF 2417 aligns the state individual income tax with the federal tax law and cuts the tax rates by 0.03 to 0.52 percentage points in 2019.²²

¹⁹ Tax Foundation, 2018 State Business Climate Index, <https://taxfoundation.org/publications/state-business-tax-climate-index/>.

²⁰ Senate File 2417, <https://www.legis.iowa.gov/legislation/BillBook?ga=87&ba=SF2417>

²¹ Ibid

²² Ibid

The law will eventually reduce the number of individual income tax brackets from nine to four, depending on revenue collections. The new rates would then start at 4.4 percent for income under \$6,001, increase to 4.82 percent for income above \$6,000 and below \$30,001, and increase to 5.7 percent for income above \$30,000 and below \$75,001. The highest marginal tax rate would be cut to 6.5 percent for income over \$75,000.²³

These changes are contingent upon meeting tax revenue thresholds: (1) net general fund revenue must total at least \$8.3146 billion in the previous fiscal year, and (2) net general fund revenue must grow by at least 4 percent over the previous fiscal year. The bracket reductions are eligible for implementation in 2023 if these thresholds are met. If they are not met, the changes can be made the year after they are met.²⁴

SF 2417 expands the Iowa sales tax base in 2019 to include many new services whose growth has been enabled by the digital revolution. The sales tax will apply to digital goods (such as downloads), ride-sharing services, subscription services, online sellers, online marketplaces, and online travel companies (such as Orbitz). The base expansion will also apply to the local options sales tax.²⁵

SF 2417 changes the state corporate income tax beginning in 2019. It aligns Iowa's corporate income tax laws to the federal tax code.²⁶

In 2021, the corporate income tax rates are reduced to 5.5 percent for income under \$100,001, 9.0 percent for income between \$100,000 and \$250,001, and 9.8 percent for

²³ Ibid

²⁴ Ibid

²⁵ Ibid

²⁶ Ibid

income over \$250,000. The corporate alternative minimum tax is abolished as is the deductibility of federal income taxes paid on the state corporate income tax return.²⁷

SF 2417 also makes changes to existing tax credits. It extends the Innovation Fund Tax Credit to June 30, and extends the Targeted Jobs Pilot Project and associated Targeted Jobs Withholding Tax Credit to June 30, 2019. The annual cap for the School Tuition Organization Tax Credit increases to \$13 million. The income threshold for grant eligibility increases from 300 percent to 400 percent of federal poverty. The measure eliminates two tax credits for geothermal energy systems and the Taxpayer Trust Fund Tax Credit in 2019 and 2018 respectfully. Finally, it retroactively restricts the types of industries eligible for the Research Activities Tax Credit and requires that the taxpayer also claim a federal research tax credit for the same research and the same tax year, effective in 2017.²⁸

Finally, SF 2417 extends the local hotel and motel tax to casual rentals such as Airbnb and the automobile rental excise tax to rideshare firms, such as Uber.²⁹

Economics of Income and Sales Taxes

An evaluation of the reductions in individual and corporate tax rates begins with an understanding of how these tax rates affect business incentives to invest and individual incentives to work. The corporate income tax reduces the after-tax, risk-adjusted return on invested capital. The higher the tax, the lower this return and the

²⁷ Ibid

²⁸ Ibid

²⁹ Ibid

fewer the investment projects that a corporation will undertake. The reduced level of investment reduces income derived from capital and reduces employment and labor income, as businesses hire fewer workers to create and operate capital equipment.

The individual income tax increases the cost of using labor and capital. At the same time, it decreases the incentive for state residents to work and save. These two effects reduce the supply of labor and capital and reduce disposable income. The reduction in disposable income, in turn, impacts business through reduced demand for goods and services.

A sales or consumption tax does not have some of the negative features of the income taxes. Consumption taxes eliminate the burden on saving and investment that is imposed by an income tax.

However, a consumption tax creates a wedge between the price paid by the consumer and the price received by the seller. It thus negatively affects the incentive to consume and to produce.

A sales tax taxes only goods and services that are sold within the state's borders. Therefore, goods and services that are produced in-state and sold out-of-state are free of taxation, making them more competitive in national markets. By freeing labor and capital from taxation, a consumption tax provides a powerful incentive for firms to locate production in-state irrespective of where the final sales take place. In other words, a consumption tax rewards exports and penalizes imports. The higher levels of in-state production boost investment, employment, and economic growth, at the expense of current consumption of goods and services.

Estimates and Results

BHI used its Iowa State Tax Analysis Modeling Program (IA-STAMP) to determine the effects of SF 2417 on the state economy.³⁰ IA-STAMP is a five-year dynamic Computable General Equilibrium model that simulates the economic effects of changes in taxes, costs (general and sector-specific) and other "exogenous" variable changes. As such, it provides a mathematical description of the economic relationships among producers, households, governments and the rest of the world.

While SF 2417 becomes effective immediately, the more dramatic changes are contingent upon meeting tax revenue growth targets and become effective in 2023 at the earliest. We assume that all growth targets will be met and that all tax changes will be implemented in the first year of eligibility. Therefore, we report the changes to the economic variables compared to a scenario of no tax policy change in 2019 and 2024. Table 1 displays the results.

SF 2014 will provide a boost to the state economy in 2019. The measure will generate an additional 4,840 private sector jobs. Iowa households will see their incomes increase by \$351 million as measured by inflation-adjusted, or real disposable income.

Initially, the changes to the corporate income tax increase the effective tax rate and will provide a disincentive for firms to invest, leading to a decrease investment by \$12 million in 2019. However, when the corporate income tax rate cut is fully implemented, it will provide an increase to the return on investment and thus ignite a surge in capital investment, which would increase by \$100 million in 2024.

³⁰ For a description about the STAMP model see http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_HowSTAMPworks.html.

Table 1: The Fiscal and Economic Effects of SF 2419

Economic Effects	2019	2024
Private Employment (jobs)	4,840	8,270
Investment (\$ millions)	(12)	100
Real Disposable Income(\$ millions)	351	673
Fiscal Effects (\$ millions)		
Personal Income Tax	(336)	(606)
Corporate Income Tax	26	(125)
Sales Tax	70	178
Other Taxes	4	10
Total State Tax Change	(236)	(543)
Local Tax Changes	10	30
Total State and Local Tax Change	(226)	(513)

The full implementation of SF 2417 will provide an additional economic boost to the Iowa economy in 2024. It will create a total of 8,270 private sector jobs. Iowa households will enjoy a real disposable income increase of \$673 million.

Table 1 also illustrates the dynamic fiscal effects of SF 2417. In 2019, the state will lose \$336 million in individual income tax revenues. This loss will be partially offset by increases in the corporate income tax by \$26 million and the sales tax by \$70 million. The increase in economic activity will increase other revenues by \$4 million, bringing the total state tax revenue loss to \$236 million in 2019. Local governments will see a modest revenue gain of \$10 million, mostly due to the expansion of the local options sales tax base.

In 2024, after the bulk of the tax cuts kick in, the state revenue loss will increase. Personal income tax revenues will drop by \$606 million and corporate income tax revenue by \$125 million. These losses will be offset by gains of \$178 million in sales tax

revenues and \$10 million in other tax revenues for a total state tax revenue loss of \$543 million. Local governments will gain \$30 million in tax revenues. When all new state and local tax revenues are taken into account, the “cost” in lost revenues to state and local government combined is \$513 million.

Conclusion

Tax policies matter significantly in determining a state's ability to provide an environment conducive to economic growth.³¹ SF 2014 will help improve Iowa's competitive advantage and provide a significant expansion of the state economy. As a result, Iowa will see an increase in private sector employment and its households will enjoy higher incomes.

However, Iowa could miss out on a substantial portion of the economic benefits if the second round of tax changes is delayed. The state economy would forfeit the creation of over 3,400 private sector jobs and \$321 million in real disposable income. More important, failure to enact the corporate income tax reductions would cause investment to fall, which, in turn, would reduce future labor productivity and economic growth.

Iowa's policymakers should keep this in mind if the tax revenue targets are not met in time to preserve the scheduled tax cuts.

³¹ Pavel A. Yakovlev, *State Economic Prosperity, and Taxation*, Working Paper 14-19, Mercatus Center, George Mason University (July 2014) <http://mercatus.org/sites/default/files/Yakovlev-State-Economic-Prosperity.pdf>.

Methodology

To identify the economic and dynamic revenue effects of eliminating the CIT and understand how they operate through a state's economy, we applied its IA-STAMP® (State Tax Analysis Modeling Program) model.³² STAMP is a five-year dynamic CGE (computable general equilibrium) model that has been programmed to simulate 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.³³

A CGE tax model 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 on 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

³² For more details see http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_IntroductionMS.html.

³³ For a clear introduction to CGE tax models, see John B. Shoven and John Whalley, "Applied General-Equilibrium Models of Taxation and International Trade: An Introduction and Survey," *Journal of Economic Literature* 22 (September, 1984): 1008. Shoven and Whalley have also written a useful book on the practice of CGE modeling entitled *Applying General Equilibrium* (Cambridge: Cambridge University Press, 1992). See also Roberta Piermartini and Robert Teh *Demystifying Modelling Methods for Trade Policy* (Geneva, Switzerland: World Trade Organization, 2005) http://www.wto.org/english/res_e/booksp_e/discussion_papers10_e.pdf (accessed June 18, 2010).

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) arising from changes in tax policy (such as the substitution of an income tax for a sales tax).

In modeling SF 2417, BHI used two approaches. First, BHI input any tax rate changes directly into the Iowa STAMP model. Second, for tax changes that involved changes to tax credits or a tax base change, such as the sales tax, BHI utilized the static revenue estimates provided by the “Fiscal Note” produced by the Fiscal Services Division of the Iowa Legislative Services Division as an input to the STAMP model.³⁴

³⁴ Jeff Robinson, “Fiscal Note: SF 2417 Income and Sales Tax Modification (LSB5613SV)” Legislative Services Agency, Fiscal Services Division, (May 5, 2018), <https://www.legis.iowa.gov/docs/publications/FN/965637.pdf>.

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