

Economic Impact Report

Idaho Tax Reform Proposal by the Idaho Association of Commerce and Industry



Prepared By:

**Dr. Geoffrey Black
Professor, Department of Economics
Boise State University**

**Dr. Donald Holley
Professor Emeritus, Department of Economics
Boise State University**

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Section 1: Executive Summary

Summary

The Idaho Association of Commerce and Industry (IACI) has completed a comprehensive review of Idaho's tax structure and is proposing a comprehensive reform of Idaho's individual and corporate income taxes. The proposed reforms focus on three elements of income taxation in the State: 1) a threefold increase in the individual income tax brackets, 2) a reduction in the top individual tax rate from 7.4% to 6.4%, and 3) a reduction in the corporate income tax rate, also from 7.4% to 6.4%. This study estimates the economic impacts of these changes to the State in terms of tax revenue streams of these two taxes and the impact of the increased household and corporate spending on employment and output in the State.

For the individual income tax, there are two dimensions to the proposed changes. The first is a significant widening of the income tax brackets, making the individual income tax structure much more progressive than the current system. For all tax brackets, the applicable income levels under the proposed system are three times the amounts of the current tax structure. For example, under the current system, the lowest tax bracket, taxed at 1.6%, ranges from \$1 to \$2,908. In IACI's proposal the bracket would range from \$1 to \$8,724 with the tax rate remaining at 1.6%. The second part of the proposal is a reduction in the top income tax rate from 7.4% to 6.4%. This would also involve a reduction in the second highest tax bracket from the current 7.1% to 6.1%. The third component of the IACI tax reform proposal consists of a reduction in the tax rate for corporate income from the current 7.4% to 6.4%. In order to minimize the disruptions associated with changes of this magnitude, it is anticipated that these changes will be phased in over the three-year period, 2019-2021.

This analysis finds that the expansion of the individual income tax brackets results in substantial tax savings across all income levels but especially for lower income Idahoans. For example, married taxpayers at the \$30,000 annual income level realize a nearly 42% reduction in income taxes. At higher income levels, the tax savings are also large but smaller on a percentage basis. This stems from the dramatic increase in the overall progressivity of the Idaho tax system resulting from the proposed change. The amount tax savings are even greater under the combined proposal of expanding tax brackets and reducing the top individual income tax rate for every income level although the overall progressivity of the system, while still much greater than the current system, is somewhat less than under bracket expansion alone.

In addition to the increased tax savings and progressivity, the proposed tax reform will stimulate increased economic activity in the state. This study estimates that under the combined policy of bracket expansion and rate reduction, the increase in spendable income by Idaho households will lead to an annual increase of 3,000 jobs, \$121 million in labor income, and increased production of goods and services of just over \$400 million. This increased activity will also lead

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to increased tax revenues for the state, helping to mitigate some of the revenue loss due to the proposed tax reductions. Even without these additional revenues, however, it is estimated that recovery to the 2018 level of tax revenues will occur relatively rapidly with full recovery taking place within 2 - 4 years.

This study also finds that the proposed reduction in Idaho's corporate income tax rate will maintain parity with the top individual income tax rate and therefore not contribute to the problems created when there is a significant tax differential between business income for corporations and for pass-through businesses. In addition, it will increase the competitiveness of Idaho's corporate income tax system relative to surrounding states. Further, the reduction in corporate income tax, coupled with the reforms to Idaho's individual income tax system, will likely lead to higher rates of growth for corporate income tax revenue in Idaho, enabling the likely recovery of tax revenues to their 2018 level within one or two years after the implementation of the proposed changes.

Organization of this Report

The report is organized as follows:

- Section 2 contains an overview of the tax reform proposals analyzed for this report - the expansion of the individual income tax brackets, the reduction in the top marginal tax rates, and the reduction in the state's corporate income tax rate.
- Section 3 examines the effects of the changes in the individual income tax structure in Idaho in terms of the tax savings for Idaho households, the increased progressivity of the income tax structure, and the broader impacts on the Idaho economy.
- Section 4 discusses the estimated effects and rationale of the reduction in the state's corporate income tax rates.
- Appendix A provides brief biographies of the authors of this report and Appendix B describes the methodology used to calculate the economic impacts provided in this report.

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Section 2: Summary of Tax Reform Proposal

Introduction

In 2016, the membership of IACI was challenged by the leadership of the Idaho Legislature to formulate a multi-year tax reform proposal to provide tax relief for Idaho taxpayers. In addition to tax relief, desirable outcomes of such a tax reform proposal include positive economic impacts in both the short and long-term as well as fostering overall growth of the State's economy. During the summer of 2017, IACI's Tax Policy Committee undertook an examination of four key areas of Idaho's tax code: sales taxes, property taxes, employment tax, and income taxes. This report focuses on the tax proposal regarding the State's income tax structure, i.e. both the individual income tax and the corporate income tax.

The IACI recommendation for income tax reform is limited to changes to the tax rates and income brackets for the individual income tax and a reduction in the corporate income tax rate. Although good arguments can be made for changing the system of exemptions and deductions contained in the State's income taxes, IACI's Tax Policy Committee recommended that these issues not be addressed at this time. In the opinion of the authors of this report, this was likely a useful recommendation as these important issues are more easily dealt with one at a time. By focusing on the broader issues of tax rates and tax brackets, the IACI proposals are confronting the more comprehensive question, as it affects all taxpayers. The issues that arise in the discussion of exemptions and deductions are equally important but more divisive, and the comparable analysis would be more complex requiring analysis, sector-by-sector. The latter approach would more likely pit different interests, sectors, and constituents against each other and result in much less progress in effective tax reform for the State.

The three components of the IACI tax reform proposal will be phased in over a three-year period. Two of these pertain to Idaho's individual income tax and the third involves the state's corporate income tax. As mentioned above, the reform proposals to the individual income tax include recommended changes to the income tax brackets as well as changes to the some of the attendant tax rates. In order to better understand the recommended changes to the individual income tax structure, Table 2-1, below, shows the current tax brackets and tax rates for Idaho for Single Taxpayers and those Married Filing Separately with Table 2-2 showing the current tax brackets and tax rates for Married Filing Jointly, Head of Household, and Widow or Widower.

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Table 2-1: Current Tax Brackets and Marginal Tax Rates (Single and Married Filing Separately, 2017)

Income		Rate
At Least	Less Than	
\$1	\$1,472	1.60%
\$1,472	\$2,945	3.60%
\$2,945	\$4,417	4.10%
\$4,417	\$5,890	5.10%
\$5,890	\$7,362	6.10%
\$7,362	\$11,043	7.10%
\$11,043 +		7.40%

Table 2-2: Current Tax Brackets and Marginal Tax Rates (Married Filing Jointly, Head of Household, and Widow or Widower, 2017)

Income		Rate
At Least	Less Than	
\$1	\$2,944	1.60%
\$2,944	\$5,890	3.60%
\$5,890	\$8,834	4.10%
\$8,834	\$11,780	5.10%
\$11,780	\$14,724	6.10%
\$14,724	\$22,086	7.10%
\$22,086 +		7.40%

Expansion of Idaho Individual Income Tax Brackets

A critical component of the IACI tax reform proposal is an expansion of the current income levels for the individual income tax brackets. The proposed tax brackets would be increased to three times the current income levels. For example, in the lowest bracket for single taxpayers, the upper limit would be increased from \$1,472 to \$4,416. The proposed brackets for all groups are shown in Tables 2-3 and 2-4, below.

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Table 2-3: Proposed Tax Brackets Expansion Only with Current Marginal Tax Rates (Single and Married Filing Separately)

Income		Rate
At Least	Less Than	
\$1	\$4,416	1.60%
\$4,416	\$8,835	3.60%
\$8,835	\$13,251	4.10%
\$13,251	\$17,670	5.10%
\$17,670	\$22,086	6.10%
\$22,086	\$33,129	7.10%
\$33,129 +		7.40%

Table 2-4: Proposed Tax Bracket Expansion Only with Current Marginal Tax Rates (Married Filing Jointly, Head of Household, and Widow or Widower)

Income		Rate
At Least	Less Than	
\$1	\$8,832	1.60%
\$8,832	\$17,670	3.60%
\$17,670	\$26,502	4.10%
\$26,502	\$35,340	5.10%
\$35,340	\$44,172	6.10%
\$44,172	\$66,258	7.10%
\$66,258 +		7.40%

Reduction of Top Rates of Idaho Individual Income Tax

The second component of the tax reform proposal recommended by IACI is a reduction of the top tax rate for individual income from 7.4% to 6.4% over a three-year period. This means a reduction in the marginal tax rate for the top two income brackets that currently exist in the individual income tax structure. For taxpayers filing as a single person, the top rate of 6.4% will apply to income above \$33,129. For married couples filing jointly, the highest tax rate of 6.4% will apply to income above \$66,258. The current and proposed tax rates and associated income brackets under the current system and the proposed tax reform system are shown in Table 2-5 for single taxpayers and in Table 2-6 for married filing jointly.

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Table 2-5: Current and Proposed Tax Rates and Tax Brackets (Single and Married Filing Separately)

Current System (2017)			Proposed System		
Income		Rate	Income		Rate
Income			At Least	Less Than	
\$1	\$1,472	1.60%	\$1	\$4,416	1.60%
\$1,472	\$2,945	3.60%	\$4,416	\$8,835	3.60%
\$2,945	\$4,417	4.10%	\$8,835	\$13,251	4.10%
\$4,417	\$5,890	5.10%	\$13,251	\$17,670	5.10%
\$5,890	\$7,362	6.10%	\$17,670	\$33,129	6.10%
\$7,362	\$11,043	7.10%	\$33,129 +		6.40%
\$11,043 +		7.40%			

Table 2-6: Current and Proposed Tax Rates and Tax Brackets (Married Filing Jointly, Head of Household, and Widow or Widower)

Current System			Proposed System		
Income		Rate	Income		Rate
At Least	Less Than		At Least	Less Than	
\$1	\$2,944	1.60%	\$1	\$8,832	1.60%
\$2,944	\$5,890	3.60%	\$8,832	\$17,670	3.60%
\$5,890	\$8,834	4.10%	\$17,670	\$26,502	4.10%
\$8,834	\$11,780	5.10%	\$26,502	\$35,340	5.10%
\$11,780	\$14,724	6.10%	\$35,340	\$66,258	6.10%
\$14,724	\$22,086	7.10%	\$66,258 +		6.40%
\$22,086 +		7.40%			

The brackets for the individual income tax are indexed each year for inflation but neither the tax rates nor the basic definition of the brackets have changed since 2001.

Reduction of Idaho Corporate Income Tax Rate

The third component of the IACI tax reform proposal consists of a reduction in the corporate income tax rate from 7.4% to 6.4%. This would be a 13.5% reduction in the corporate tax rate. In recent decades, the Idaho corporate income tax rate was increased from 7.7% to 8.0% in 1987, then decreased to 7.6% in 2001 and to 7.4% in 2012.

In the following section, the effects of the proposed tax reforms are presented. We examine the tax savings and increased progressivity of the proposed changes to the individual income tax. This is followed by an analysis of the estimated economic impact of these changes in terms of employment, overall economic activity, personal income and tax revenues to the state. In

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Section 4, we examine the rationale and estimated effects of the reduction in the corporate income tax rate and the impacts on tax revenue in the state.

Section 3: Economic Analysis of the Reform Proposals for Idaho's Individual Income Tax

Introduction

This section provides an economic analysis of the proposed changes to Idaho's individual income tax structure recommended by IACI. The analysis here focuses on several key dimensions of these recommended changes. These are 1) the tax savings garnered by Idaho taxpayers from these reforms, 2) the resulting increase in the progressivity of the individual income tax structure in Idaho, 3) the estimated economic impacts of these changes on employment and overall economic activity in the state, and 4) the anticipated effects on the state's tax revenues. Following this examination of the effects stemming from the changes in Idaho's individual income tax, we examine the rationale and anticipated effects of the proposed reduction in Idaho's corporate income tax below in Section 4.

Expansion of Idaho Individual Income Tax Brackets

Section 2 of this report, above, summarizes the reform proposals for Idaho's individual income tax structure. In this section, we begin with an analysis of the tax savings for Idaho taxpayers. We focus on three different income levels for both single taxpayers as well as married couples filing jointly. As we will see, the expansion of the individual income tax brackets results in significant tax savings as well as dramatically increasing the degree of progressivity in the individual income tax in Idaho.

Tax Savings

The proposed expansion of Idaho's individual income tax brackets represent significant tax savings for Idaho taxpayers across every income level compared to the current system. These are shown by Tables 3-1 through 3-6 below. Tables 3-1 and 3-2 show the taxes paid under the current system and the proposed combined reform for individuals and married couples at the \$30,000 income level. Tables 3-3 and 3-4 illustrate the savings for single and married taxpayers at the \$60,000 income level. Finally, Tables 3-5 and 3-6 show the taxes paid by taxpayers at the \$120,000 income level.

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Table 3-1: Taxes Paid Under Current and Proposed Tax Brackets for \$30,000 Annual Income (Single and Married Filing Separately)

Current System				Proposed System: Bracket Expansion			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$1,472	1.6%	\$23.55	\$1	\$4,416	1.60%	\$70.64
\$1,472	\$2,945	3.6%	\$53.03	\$4,416	\$8,835	3.60%	\$159.08
\$2,945	\$4,417	4.1%	\$60.35	\$8,835	\$13,251	4.10%	\$181.06
\$4,417	\$5,890	5.1%	\$75.12	\$13,251	\$17,670	5.10%	\$225.37
\$5,890	\$7,362	6.1%	\$89.79	\$17,670	\$22,086	6.10%	\$269.38
\$7,362	\$11,043	7.1%	\$261.35	\$22,086	\$33,129	7.10%	\$561.89
\$11,043 +		7.4%	\$1,402.82	\$33,129 +		7.40%	
Total Tax Paid			\$1,966.00	Total Tax Paid			\$1,467.42

As shown by Table 3-1, single taxpayers with \$30,000 annual incomes pay \$1,467.42 under the proposed income tax system compared to \$1,966.00 under the current system. Thus, the proposed system results in tax savings of \$498.58 for these Idahoans, amounting to a 25.36% tax savings. For married taxpayers making \$30,000 in annual income, the tax savings are even greater, with tax savings of \$712.04. This amounts to 41.59% tax reduction for these taxpayers. These results are shown below in Table 3-2.

Table 3-2: Taxes Paid Under Current and Proposed Tax Brackets for \$30,000 Annual Income (Married Filing Jointly, Head of Household, and Widow or Widower)

Current System				Proposed System: Bracket Expansion			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$2,944	1.60%	\$47.09	\$1	\$8,832	1.60%	\$141.30
\$2,944	\$5,890	3.60%	\$106.06	\$8,832	\$17,670	3.60%	\$318.17
\$5,890	\$8,834	4.10%	\$120.70	\$17,670	\$26,502	4.10%	\$362.11
\$8,834	\$11,780	5.10%	\$150.25	\$26,502	\$35,340	5.10%	\$178.40
\$11,780	\$14,724	6.10%	\$179.58	\$35,340	\$44,172	6.10%	
\$14,724	\$22,086	7.10%	\$522.70	\$44,172	\$66,258	7.10%	
\$22,086 +		7.40%	\$585.64	\$66,258 +		7.40%	
Total Tax Paid			\$1,712.02	Total Tax Paid			\$999.97

Tax savings also accrue to higher income taxpayers but the savings are not as dramatic as those for lower income levels. At an income level of \$60,000, single taxpayers realize tax savings of \$507.97, amounting to a reduction of 12.13%. Married taxpayers with an annual income of \$60,000 pay \$997.16 less under the proposed tax system. This amounts to a 25.36% tax savings

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for these taxpayers. Although these tax savings are smaller on a percentage basis than those at lower income levels, they still amount to significant reductions in the amount of state income taxes paid by Idaho taxpayers at higher income levels.

Table 3-3: Taxes Paid Under Current and Proposed Tax Brackets for \$60,000 Annual Income (Single and Married Filing Separately)

Current System				Proposed System: Bracket Expansion			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$1,472	1.60%	\$23.54	\$1	\$4,416	1.60%	\$70.64
\$1,472	\$2,945	3.60%	\$53.03	\$4,416	\$8,835	3.60%	\$159.08
\$2,945	\$4,417	4.10%	\$60.35	\$8,835	\$13,251	4.10%	\$181.06
\$4,417	\$5,890	5.10%	\$75.12	\$13,251	\$17,670	5.10%	\$225.37
\$5,890	\$7,362	6.10%	\$89.79	\$17,670	\$22,086	6.10%	\$269.38
\$7,362	\$11,043	7.10%	\$261.35	\$22,086	\$33,129	7.10%	\$784.05
\$11,043 +		7.40%	\$3622.82	\$33,129 +		7.40%	\$1,988.45
Total Tax Paid			\$4,186.00	Total Tax Paid			\$3,678.03

Table 3-4: Taxes Paid Under Current and Proposed Tax Brackets for \$60,000 Annual Income (Married Filing Jointly, Head of Household, and Widow or Widower)

Current System				Proposed System: Bracket Expansion			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$2,944	1.60%	\$47.09	\$1	\$8,832	1.60%	\$141.30
\$2,944	\$5,890	3.60%	\$106.06	\$8,832	\$17,670	3.60%	\$318.17
\$5,890	\$8,834	4.10%	\$120.70	\$17,670	\$26,502	4.10%	\$362.11
\$8,834	\$11,780	5.10%	\$150.25	\$26,502	\$35,340	5.10%	\$450.74
\$11,780	\$14,724	6.10%	\$179.58	\$35,340	\$44,172	6.10%	\$538.75
\$14,724	\$22,086	7.10%	\$522.70	\$44,172	\$66,258	7.10%	\$1,123.79
\$22,086 +		7.40%	\$2805.64	\$66,258 +		7.40%	
Total Tax Paid			\$3,932.02	Total Tax Paid			\$2,934.85

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Table 3-5: Taxes Paid Under Current and Proposed Tax Brackets for \$120,000 Annual Income (Single and Married Filing Separately)

Current System				Proposed System: Bracket Expansion			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$1,472	1.60%	\$23.54	\$1	\$4,416	1.60%	\$70.64
\$1,472	\$2,945	3.60%	\$53.03	\$4,416	\$8,835	3.60%	\$159.08
\$2,945	\$4,417	4.10%	\$60.35	\$8,835	\$13,251	4.10%	\$181.06
\$4,417	\$5,890	5.10%	\$75.12	\$13,251	\$17,670	5.10%	\$225.37
\$5,890	\$7,362	6.10%	\$89.79	\$17,670	\$22,086	6.10%	\$269.38
\$7,362	\$11,043	7.10%	\$261.35	\$22,086	\$33,129	7.10%	\$784.05
\$11,043 +		7.40%	\$8062.82	\$33,129 +		7.40%	\$6,428.45
Total Tax Paid			\$8,626.00	Total Tax Paid			\$8,118.03

Table 3-6: Taxes Paid Under Current and Proposed Tax Brackets for \$120,000 Annual Income (Married Filing Jointly, Head of Household, and Widow or Widower)

Current System				Proposed System: Bracket Expansion			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$2,944	1.60%	\$47.09	\$1	\$8,832	1.60%	\$141.30
\$2,944	\$5,890	3.60%	106.06	\$8,832	\$17,670	3.60%	\$318.17
\$5,890	\$8,834	4.10%	120.70	\$17,670	\$26,502	4.10%	\$362.11
\$8,834	\$11,780	5.10%	150.25	\$26,502	\$35,340	5.10%	\$450.74
\$11,780	\$14,724	6.10%	179.58	\$35,340	\$44,172	6.10%	\$538.75
\$14,724	\$22,086	7.10%	522.70	\$44,172	\$66,258	7.10%	\$1,568.11
\$22,086 +		7.40%	7245.64	\$66,258 +		7.40%	\$3,976.91
Total Tax Paid			\$8,372.02	Total Tax Paid			\$7,356.08

As shown above, the proposed expansion of the income tax brackets for Idaho's individual income tax system generates significant savings for the state's taxpayers. These savings are greatest in percentage terms for lower income taxpayers and especially for married taxpayers filing jointly. At the \$30,000 income level, single taxpayers garner tax relief of just over 25% over the current system. For married taxpayers at this income level, the tax savings exceed 41%. While tax savings are also large for married couples at the \$60,000 income level, the percentage savings fall as income rises but are significant in terms of nominal dollars. Overall, the tax savings generated by the proposed reform are substantial and, in addition to increasing the level of disposable income, will also create increased economic activity for the state, as detailed below in the discussion about the economic impacts stemming from these tax reforms.

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As described, the tax savings are largest for low income Idahoans than for higher income taxpayers. This stems from the increased level of progressivity resulting from the proposed tax reforms. The following discussion deals explicitly with this important feature of the reform policy - a dramatic increase in the progressivity of Idaho's tax system.

Increase in Progressivity

In addition to the tax savings generated by the proposed tax reform, the expansion of tax brackets represents a dramatic increase in the level of progressivity of Idaho's individual income tax system. It should be noted that the definitions of progressive and regressive taxation are not clear-cut and are subject to confusion due to an unfounded emphasis on marginal tax rates in general discussions of tax progressivity. The most accepted concept of the progressive or regressive nature of a tax system is defined in terms of average tax rates, the ratio of taxes paid to income, rather than marginal tax rates. One reason is that a system without increasing marginal tax rates can be coincident with a progressive tax structure. For example, a flat tax system, with constant marginal tax rates, can readily be made progressive with appropriate rebates at low income levels. As a result, the concept of progressivity relies on changes in average tax rates, rather than marginal tax rates, as income changes. Under a progressive tax system, the average tax rate increases with income and vice versa for regressive taxes.

While there is general agreement as to this concept of progressivity, the issue of measuring the degree of progressivity is problematic and a widely accepted measure is lacking. This is because a precise measure of progressivity must account for not only the income tax shares borne across income levels but also the distribution of income within a society across time. For the purposes of this study, we can assume that the distribution of income within Idaho remains relatively constant over the across society. In this case, a simple measure of progressivity is that of the change in average tax rates across income levels from one tax structure to another. Using this measure, the proposed tax reform makes Idaho's increasing significantly more progressive.

Under the current system, the average tax rate for a married couple earning \$30,000 per year is 5.71% and is 6.55% for a married couple earning \$60,000 per year. Thus, there is a 12.65% increase in the average tax rate as income doubles. Under the proposed tax structure, the commensurate average tax rates are 3.33% and 4.89%, for annual income levels of \$30,000 and \$60,000, respectively. This amounts to a 30.58% increase in the average tax rate across these income levels under the proposed system. In fact, under the proposed system, the average tax rate for married couples is approximately the same for married couples making \$120,000 as it is for married couples earning \$30,000 per year under the current system. Similar results are found for the average tax rates for single taxpayers. This represents a measurable and significant increase in the degree of progressivity of the proposed system compared to the current tax structure for individual income in Idaho.

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Reduction of Top Tax Rates and Expansion of Income Tax Brackets of Idaho Individual Income Tax

In addition to broadening the tax brackets, the second dimension of the proposed reform to Idaho's individual income tax is a reduction in the top marginal tax rate from 7.4% to 6.4%. This reduction in the top rate will affect both the tax savings and progressivity compared to the earlier discussion of broadening the tax brackets alone. Taxpayers at every income level will receive greater tax relief under the combined tax rate and tax bracket proposed reform than under the current system. Further, they will receive even greater savings than under the proposal to reform tax brackets alone.¹ For example, for single taxpayers at the \$30,000 income level, the tax savings are nearly 30% relative to the current system, just over 21% at the \$60,000 income level, and just over 17% at the \$120,000 income level. Married couples filing jointly realize even larger tax savings at every income level. For example, these savings are nearly 42% for married couples with an annual income of \$30,000.

The taxes paid under the current system as well as the taxes paid under the combined reform proposal for income levels of \$30,000, \$60,000 and \$120,000 for single and married taxpayers filing jointly are presented in Tables 3-7 through 3-12 below.

Table 3-7: Taxes Paid Under Current and Proposed Rate and Bracket Changes for \$30,000 Annual Income (Single and Married Filing Separately)

Current System				Proposed System: Combined Policy of Bracket Expansion and Rate Reduction			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$1,472	1.6%	\$23.55	\$1	\$4,416	1.60%	\$70.64
\$1,472	\$2,945	3.6%	\$53.03	\$4,416	\$8,835	3.60%	\$159.08
\$2,945	\$4,417	4.1%	\$60.35	\$8,835	\$13,251	4.10%	\$181.06
\$4,417	\$5,890	5.1%	\$75.12	\$13,251	\$17,670	5.10%	\$225.37
\$5,890	\$7,362	6.1%	\$89.79	\$17,670	\$33,129	6.10%	\$752.13
\$7,362	\$11,043	7.1%	\$261.35	\$33,129 +		6.40%	
\$11,043 +		7.4%	\$1,402.82				
Total Tax Paid			\$1,966.00	Total Tax Paid			\$1,388.28

¹ The only exception is married couples filing jointly at the \$30,000 annual income level, for whom the tax savings are the same as for the reform proposal to broaden tax brackets alone.

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Table 3-8: Taxes Paid Under Current and Proposed Rate and Bracket Changes for \$30,000 Annual Income (Married Filing Jointly)

Current System				Proposed System: Combined Policy of Bracket Expansion and Rate Reduction			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$2,944	1.60%	\$47.09	\$1	\$8,832	1.60%	\$141.30
\$2,944	\$5,890	3.60%	\$106.06	\$8,832	\$17,670	3.60%	\$318.17
\$5,890	\$8,834	4.10%	\$120.70	\$17,670	\$26,502	4.10%	\$362.11
\$8,834	\$11,780	5.10%	\$150.25	\$26,502	\$35,340	5.10%	\$178.40
\$11,780	\$14,724	6.10%	\$179.58	\$35,340	\$66,258	6.10%	
\$14,724	\$22,086	7.10%	\$522.70	\$66,258 +		6.40%	
\$22,086 +		7.40%	\$585.64				
Total Tax Paid			\$1,712.02	Total Tax Paid			\$999.97

Table 3-9: Taxes Paid Under Current and Proposed Rate and Bracket Changes for \$60,000 Annual Income (Single and Married Filing Separately)

Current System				Proposed System: Combined Policy of Bracket Expansion and Rate Reduction			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$1,472	1.60%	\$23.54	\$1	\$4,416	1.60%	\$70.64
\$1,472	\$2,945	3.60%	\$53.03	\$4,416	\$8,835	3.60%	\$159.08
\$2,945	\$4,417	4.10%	\$60.35	\$8,835	\$13,251	4.10%	\$181.06
\$4,417	\$5,890	5.10%	\$75.12	\$13,251	\$17,670	5.10%	\$225.37
\$5,890	\$7,362	6.10%	\$89.79	\$17,670	\$33,129	6.10%	\$943.00
\$7,362	\$11,043	7.10%	\$261.35	\$33,129 +		6.40%	\$1,719.74
\$11,043 +		7.40%	\$3622.82				
Total Tax Paid			\$4,186.00	Total Tax Paid			\$3,298.89

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Table 3-10: Taxes Paid Under Current and Proposed Rate and Bracket Changes for \$60,000 Annual Income (Married Filing Jointly, Head of Household, and Widow or Widower)

Current System				Proposed System: Combined Policy of Bracket Expansion and Rate Reduction			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$2,944	1.60%	\$47.09	\$1	\$8,832	1.60%	\$141.30
\$2,944	\$5,890	3.60%	\$106.06	\$8,832	\$17,670	3.60%	\$318.17
\$5,890	\$8,834	4.10%	\$120.70	\$17,670	\$26,502	4.10%	\$362.11
\$8,834	\$11,780	5.10%	\$150.25	\$26,502	\$35,340	5.10%	\$450.74
\$11,780	\$14,724	6.10%	\$179.58	\$35,340	\$66,258	6.10%	\$1,504.26
\$14,724	\$22,086	7.10%	\$522.70	\$66,258 +		6.40%	
\$22,086 +		7.40%	\$2805.64				
Total Tax Paid			\$3,932.02	Total Tax Paid			\$2,776.57

Table 3-11: Taxes Paid Under Current and Proposed Rate and Bracket Changes for \$120,000 Annual Income (Single and Married Filing Separately)

Current System				Proposed System: Combined Policy of Bracket Expansion and Rate Reduction			
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$1,472	1.60%	\$23.54	\$1	\$4,416	1.60%	\$70.64
\$1,472	\$2,945	3.60%	\$53.03	\$4,416	\$8,835	3.60%	\$159.08
\$2,945	\$4,417	4.10%	\$60.35	\$8,835	\$13,251	4.10%	\$181.06
\$4,417	\$5,890	5.10%	\$75.12	\$13,251	\$17,670	5.10%	\$225.37
\$5,890	\$7,362	6.10%	\$89.79	\$17,670	\$33,129	6.10%	\$943.00
\$7,362	\$11,043	7.10%	\$261.35	\$33,129 +		6.40%	\$5,559.74
\$11,043 +		7.40%	\$8062.82				
Total Tax Paid			\$8,626.00	Total Tax Paid			\$7,138.89

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Table 3-12: Taxes Paid Under Current and Proposed Rate and Bracket Changes for \$120,000 Annual Income (Married Filing Jointly, Head of Household, and Widow or Widower)

Current System			Proposed System: Combined Policy of Bracket Expansion and Rate Reduction				
Income		Rate	Tax Paid	Income		Rate	Tax Paid
At Least	Less Than			At Least	Less Than		
\$1	\$2,944	1.60%	\$47.09	\$1	\$8,832	1.60%	\$141.30
\$2,944	\$5,890	3.60%	106.06	\$8,832	\$17,670	3.60%	\$318.17
\$5,890	\$8,834	4.10%	120.70	\$17,670	\$26,502	4.10%	\$362.11
\$8,834	\$11,780	5.10%	150.25	\$26,502	\$35,340	5.10%	\$450.74
\$11,780	\$14,724	6.10%	179.58	\$35,340	\$66,258	6.10%	\$1,886.00
\$14,724	\$22,086	7.10%	522.70	\$66,258 +		6.40%	\$3,439.49
\$22,086 +		7.40%	7245.64				
Total Tax Paid			\$8,372.02	Total Tax Paid			\$6,597.80

As described above, the tax savings for single taxpayers at every income level are greater under the combined reform proposal than under the proposal of expanding tax brackets alone. The tax savings for single taxpayers making \$30,000 annually now increase to \$577.72 compared to the current system, amounting to a nearly 30% savings. Single taxpayers at the \$60,000 annual income level will now garner \$887.11 in tax savings, or 21.19% less than under the current system. At the \$120,000 income level, single taxpayers will pay \$1,487.11 less than under the current system, for a tax savings of 17.24%. For married couples filing jointly, the tax savings are even greater at every income level. For example, those at the \$30,000 income level will pay 41.59% less than under the current system (the same as with the expansion of tax brackets alone). Married couples at the \$60,000 income level receive a nearly 30% savings compared to the current system and those at the \$120,000 income level pay just over 21% less than under the current system.

Increase in Progressivity

Recall that the appropriate measure to determine the progressivity or regressivity of a tax is the average tax rate. As discussed above, the expansion of the income brackets alone has a large impact on increasing the progressivity of the state's individual income tax system. It not only lowers the average tax rate across the income spectrum but also increases the degree of progressivity of the overall tax individual income tax system by increasing the rate at which the average tax rate increases with income. With the added measure of lowering the top marginal tax rate, the average tax rates are reduced for those at the higher income levels. As described in the previous section, the combined proposal of expanded brackets and lowered rates result in greater tax savings and lowered average tax rates across the board. It should be noted, however, that the degree of increased progressivity compared to the current system is somewhat less for the combined policy than for the proposal of expanded tax brackets alone. This is seen in the rate at which average tax rates increase with increased income. With the proposal to expand brackets alone, average tax rates increase 38.45% for single taxpayers as

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income increases from \$30,000 to \$120,000 annually with a commensurate increase of 28.51% under the combined policy. For married taxpayers, the analogous rates of increase are 84.04% under the expanded brackets proposal and 65.71% under the combined policy.

Summary of Tax Savings and Progressivity of Individual Income Tax Proposals

In sum, both the single policy of expanding tax brackets and the combined policy of expanding brackets and lowering the top marginal tax rate policies lead to significant tax savings for Idaho taxpayers across the income spectrum. In addition, both policies dramatically increase the progressivity of the tax structure for individual income in Idaho. The slightly less progressive nature of the combined policy is offset by a greater degree of tax savings for Idaho taxpayers. This is shown in the following tables. The average tax rates under both policies, as well as the current tax structure, are summarized in Table 3-13. Table 3-14 illustrates the tax savings over the current system for both of the proposal to expand tax brackets as well as the combined proposal that entails both the expansion of tax brackets as well as the reduction in the top marginal tax rates.

Table 3-13: Average Tax Rates Under Current Structure and Policy Proposals

Income Level	Status	Average Tax Rate: Current Structure	Average Tax Rate: Bracket Expansion Only	Average Tax Rate: Combined Policy of Bracket Expansion and Rate Reduction
\$30,000	Single	6.55%	4.89%	4.63%
\$60,000	Single	6.98%	6.13%	5.50%
\$120,000	Single	7.19%	6.77%	5.95%
\$30,000	Married Jointly	5.71%	3.33%	3.33%
\$60,000	Married Jointly	6.55%	4.89%	4.63%
\$120,000	Married Jointly	6.98%	6.13%	5.50%

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Table 3-14: Tax Savings of Bracket Expansion and Combined Policy Compared to Current Individual Income Tax System

Income Level	Status	Tax Reduction: Bracket Expansion		Tax Reduction: Combined Policy of Bracket Expansion and Rate Reduction	
		Savings Amount	Savings Percentage	Savings Amount	Savings Percentage
\$30,000	Single	\$498.58	25.36%	\$577.72	29.39%
\$60,000	Single	\$507.97	12.13%	\$887.11	21.19%
\$120,000	Single	\$507.97	5.89%	\$1,487.11	17.24%
\$30,000	Married Jointly	\$712.04	41.59%	\$712.04	41.59%
\$60,000	Married Jointly	\$997.16	25.36%	\$1,155.44	29.39%
\$120,000	Married Jointly	\$1,015.94	12.13%	\$1,774.22	21.19%

The following describes the analysis of the reform proposals for Idaho’s individual income tax on key elements of the Idaho economy - employment, income, economic activity, and tax revenues.

Economic Analysis of the Idaho Individual Income Tax Reform Proposals

The tax savings described above important in that they increase the disposable income for Idaho households, resulting in an increase in economic well-being and prosperity. While this is beneficial in itself, it is also important because these savings will stimulate increased economic activity in the state. If households perceive that these tax reforms are long-lived and that their tax savings are likely to be forthcoming over several years, they will spend the greater part of these savings on additional consumption.² It is important to realize that this additional spending by households will generate a ripple effect throughout Idaho’s economy, causing gains in personal income, economic activity, and tax revenues. A standard economic technique known as Input-Output (I-O) Analysis can be used to objectively assess the potential economic impacts of various changes in a region’s economy. The results of this analysis is described in the following section.

² Both economic theory and evidence show that if households receive short-lived tax breaks, they will choose to save much of their increased income. If, however, the tax reductions are more permanent in nature, they will likely spend well over 90% of their additional income on increased consumption, depending on the marginal propensity to consume and other factors described below.

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Economic Impacts

In order to estimate the economic impacts stemming from the tax reform proposal of a combined expansion of Idaho's income tax brackets and a reduction in the top marginal tax rate,³ the tax savings across income brackets for all Idaho taxpayers must be estimated. These tax savings are aggregated for all Idaho taxpayers across selected income brackets in Table 3-15 below for the three-year implementation period of the proposed tax structure.

Table 3-15: Tax Savings by Income Bracket During Implementation Period of Idaho Individual Income Tax Reform

Income	2019	2020	2021
\$0 - \$10,000	\$7,174,149	\$2,347,542	\$1,674,952
\$10,001 - \$15,000	\$10,074,153	\$2,982,734	\$2,088,317
\$15,001 - \$25,000	\$23,401,091	\$13,478,194	\$7,776,464
\$25,001 - \$35,000	\$20,125,237	\$15,889,283	\$12,298,880
\$35,001 - \$50,000	\$23,721,351	\$20,322,112	\$16,453,595
\$50,001 - \$75,000	\$28,516,793	\$23,827,103	\$22,831,391
\$75,001 - \$100,000	\$17,780,756	\$15,479,191	\$13,896,920
\$100,001 - \$150,000	\$17,028,245	\$15,333,496	\$14,086,932
\$150,001 and above	\$36,500,534	\$34,323,266	\$33,516,573
Total	\$184,322,309	\$143,982,920	\$124,624,024

These tax savings are equivalent to an increase in disposable or spendable income by Idahoans during the years over which the tax reform policy is to be implemented and beyond, resulting in increased spending by Idaho taxpayers. This increased spending on the part of households will trigger a multiplier effect on the Idaho economy. There are four dimensions of the economy that will be impacted by the increases in disposable income: (1) employment, (2) labor income, (3) production, and (4) taxes. Increased employment is measured by the increase in the number of jobs. Labor income includes wages, salaries, and fringe benefits. Production is the increase in the production of goods and services in the State. Finally, the increase in taxes measures the amount by which state tax revenues increase as a result of the increased spending by Idaho households. The impact of these tax saving were estimated using IMPLAN, the most widely used Input-Output program in the United States with recent data for every county in Idaho as well as for the state as a whole.⁴ The IMPLAN program inputs the increase in disposable income by the income brackets shown above in Table 3-15. This is because the amount of additional spending caused by additional income, known as the marginal propensity to consume, as well

³ Due to time constraints, the combined proposal of expanded tax brackets and lower top tax rate was analyzed rather than also including a separate analysis for the policy of expanded brackets only.

⁴ More details about IMPLAN and about the Input-Output methodology used in this study are provided in Appendix B.

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as spending patterns themselves, vary from bracket to bracket. These factors are incorporated into the IMPLAN estimation model.

The I-O Analysis conducted for this study estimates that the overall effect on the Idaho economy will be significant. In terms of increased employment, it is estimated that the increased spending by Idaho households will add over 3,000 jobs. Further, the proposed tax cut will increase labor income by \$120.7 million per year and increase the production of goods and services in Idaho by \$401.3 million per year. These increases will occur every year commencing with the beginning of the implementation period and thereafter. The increase in spending, with attendant increases sales, production, and personal income will generate additional tax revenues for the state, which will help to partially mitigate the reduced revenues from the tax cuts. For example, these effects will lead to \$2.2 million in annual collections of the individual income tax, \$9.9 million in sales tax revenues, and \$824,000 in corporate income tax revenues. As with the increases in income, production, and employment, these will accrue to the state on an annual basis.

Effects on Tax Revenues

After the broadening of the brackets and the reduction of the highest marginal rates, gross receipts for the individual income tax will fall. One question is: When will gross receipts return to their previous level?

The new brackets and rates are assumed to be phased in over a period of three years, calendar years 2019-2021. To show how long it will take to regain the level of gross collections that existed before the changes in brackets and rates, we begin with an estimate of gross collections for 2018 and assume that one-third of the bracket change and one third of the rate change is made in each of the following three years. While revenues will be reduced as the brackets and rates are changed, we must also account for the increase in tax collections that would have occurred with or without the changes in brackets and rates.

Idaho income tax collections are positively related to Idaho income and Idaho income is positively related to U.S. GDP. The logic is that Idaho production and income is dependent on the strength of its largest market, the U.S. economy. So, increases in GDP trigger increases in Idaho income, which trigger increases in Idaho income tax collections. Historically, Idaho income rises 1-2% faster than the rate at which GDP is growing and gross collections of the Idaho income tax grow 1% faster than Idaho income. For example, if GDP in the U.S. grows at an annual rate of 4%, Idaho personal and taxable income will grow at an annual rate of 5%, and Idaho individual income tax collections will grow at the annual rate of 6%. Table 3-16 shows how growth in GDP impacts the growth of Idaho Income and Idaho Individual Income Tax collections.

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Table 3-16: Relationship of Idaho Personal Income and Individual Income Tax Collections to the Growth Rate of U.S. GDP

Growth Rate of US GDP	Growth Rate of Idaho Income	Growth Rate of Idaho Individual Income Tax
1%	2%	3%
2%	3%	4%
3%	4%	5%
4%	5%	6%

We begin with an estimate of \$2.035 billion in individual income tax collections for calendar year 2018. Then we provide four alternative growth rates for these collections of 3%, 4%, 5%, and 6%. Then we phase in the new brackets and rates, account for the corresponding growth rates, and observe how long it will take for collections to rise back to \$2,035 billion.

Table 3-17: Projected Idaho Individual Tax Revenues for Different Rates of Revenue Growth

Year	Gross Collections of Individual Income Taxes With No change in Brackets or Rates		Gross Collections of Individual Income Taxes After Broadening the Brackets and Lowering the Rates		Gross Collections of Individual Income Taxes With No change in Brackets or Rates		Gross Collections of Individual Income Taxes After Broadening the Brackets and Lowering the Rates		Gross Collections of Individual Income Taxes With No change in Brackets or Rates		Gross Collections of Individual Income Taxes After Broadening the Brackets and Lowering the Rates	
	Gross collections Grow at 3% Per Year (in millions of \$)	Gross collections Grow at 3% Per Year (in millions of \$)	Gross collections Grow at 4% Per Year (in millions of \$)	Gross collections Grow at 4% Per Year (in millions of \$)	Gross collections Grow at 5% Per Year (in millions of \$)	Gross collections Grow at 5% Per Year (in millions of \$)	Gross collections Grow at 6% Per Year (in millions of \$)	Gross collections Grow at 6% Per Year (in millions of \$)	Gross collections Grow at 6% Per Year (in millions of \$)	Gross collections Grow at 6% Per Year (in millions of \$)	Gross collections Grow at 6% Per Year (in millions of \$)	Gross collections Grow at 6% Per Year (in millions of \$)
2018	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035	\$2,035
2019	\$2,096	\$1,886	\$2,116	\$1,905	\$2,137	\$1,923	\$2,157	\$1,941	\$2,177	\$1,959	\$2,197	\$1,959
2020	\$2,159	\$1,826	\$2,201	\$1,862	\$2,244	\$1,898	\$2,287	\$1,934	\$2,329	\$1,970	\$2,371	\$1,970
2021	\$2,224	\$1,750	\$2,289	\$1,801	\$2,356	\$1,853	\$2,424	\$1,907	\$2,491	\$1,960	\$2,558	\$1,960
2022	\$2,290	\$1,802	\$2,381	\$1,873	\$2,474	\$1,946	\$2,569	\$2,021	\$2,641	\$2,043	\$2,723	\$2,043
2023	\$2,359	\$1,856	\$2,476	\$1,948	\$2,597	\$2,043	\$2,723	\$2,143	\$2,805	\$2,165	\$2,883	\$2,165
2024	\$2,430	\$1,912	\$2,575	\$2,026	\$2,727	\$2,146	\$2,887	\$2,271	\$2,965	\$2,268	\$3,065	\$2,271
2025	\$2,503	\$1,936	\$2,678	\$2,107	\$2,863	\$2,253	\$3,060	\$2,407	\$3,143	\$2,366	\$3,243	\$2,407
2026	\$2,578	\$2,028	\$2,785	\$2,191	\$3,007	\$2,366	\$3,243	\$2,552	\$3,331	\$2,469	\$3,423	\$2,552

As shown in the table above, individual income tax revenues recover quickly and return to their 2018 levels in less than two years after the tax reductions are fully implemented. At low growth rates, recovery could take much longer. For example, at a 3% growth rate of revenues, recovery to the 2018 level will not occur until just over five years after full implementation. The most reasonable assumption is that the underlying growth in gross collections is between 4 - 5% and that recovery to the 2018 level will occur between 2023 and 2025, i.e. 2-4 years after full implementation of the new brackets and rates. The estimated year of recovery at different rates of growth in US GDP, Idaho Personal Income, and Idaho Individual Income Tax Revenues are shown in Table 3-18 below.

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Table 3-18: Years in Which Gross Collections Reach Their Pre-Bracket Change Levels

Growth Rate of US GDP	Growth Rate of Idaho Income	Growth Rate of Idaho Individual Income Tax	Year of Tax Recovery
1%	2%	3%	2026
2%	3%	4%	2024
3%	4%	5%	2023
4%	5%	6%	2022-23

Section 4: Reduction of Tax Rate for Idaho Corporate Income Tax

Introduction

The third dimension of the tax reform proposal is to lower the Idaho corporate income tax rate from 7.4% to 6.4%. This 13.51% reduction in the tax rate would result in significant tax savings for corporations in Idaho, make Idaho more competitive with surrounding states, achieve rate parity between the top individual income, pass-through business income, and income from C corporations, and stimulate business investment and increased economic activity. The following sections of this report examine each of these dimensions.

Economic Analysis of the Proposed Reduction in the Idaho Corporate Income Tax Rate

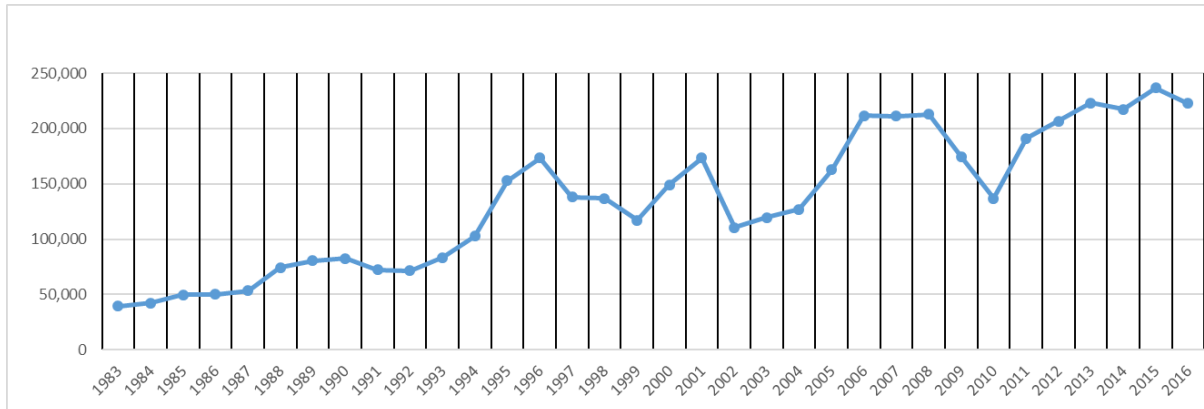
The first issue examined here is the tax savings resulting from the reduction in Idaho's corporate income tax rate. As described below, this will reduce taxes paid by C corporations in the state and, as a result, lead to an initial lowering of tax revenues. The following provides an estimate of these effects pertaining to C corporation tax revenues. The subsequent sections discuss the issues of tax parity and competitiveness with other states, and potential effects on economic activity in the state.

Tax Savings and Effects on Revenues

As with the proposed reduction in the top rate for individual income tax, the suggested reduction in the state's corporate income tax rate represents a 13.5% decrease in the tax rate. Unlike the state's individual income tax, however, the corporate income tax represents the most volatile component of Idaho's major sources of tax revenue. The figure below shows the revenues and changes in revenues since over the past three decades.

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Figure 4-1: Idaho Corporate Income Tax Revenues



It is noteworthy that, while there are the expected declines in corporate income tax revenues during economic downturns in the US, these tax revenues continue to be volatile even during periods of growth in the overall economy. The volatility in corporate income tax revenues in Idaho stems from the fact for these revenues, unlike individual income tax revenues, there is not a consistent relationship with Idaho personal income, US GDP, or other predictable variables. Rather, these revenues are subject to changes within individual sectors of the economy that are subject to national and global factors. For example, the dependence of Idaho's high-tech sector on global exports means that factors such as changes in GDP in other countries, exchange rates, and international trade agreements can have dramatic effects on this part of Idaho's businesses.

As a result of these and other factors, the use of trend analysis similar to what was done in estimating the effects on individual income tax revenues, is less certain in the case of corporate income tax revenues. Using the assumption that these tax revenues will grow in a predictable fashion with projected growth rates of specific economic variables, such as US GDP, is not justified, especially in the short to medium term. Over the long run, however, there is growth in Idaho's corporate income tax revenues. Hence, this analysis projects anticipated revenues under two scenarios that can then be used to compare revenues with and without the proposed rate reduction. One scenario projects corporate income tax revenues with no reduction in the corporate income tax rate to grow at an average annual rate of 3%. This rate was chosen based on the projected growth rates in these revenues by the Idaho Tax Commission (5%) and the growth rate projected by the Idaho Division of Financial Management (2.6%). In the results that follow, this 3% growth rate is maintained through 2021. In the second scenario, the reduction in the corporate tax rate is implemented over a three-year period from 2019 through 2021, with a reduction in the first year from 7.4% to 7.07% in 2019, to 6.64% in 2020, and full implementation to the 6.4% in 2021. In this second scenario, tax revenues are also assumed to have an annual growth rate of 3%. Under these assumptions, corporate income tax revenues recover to their 2018 level in 2021, two years after full implementation. However, it is likely that with the implementation of the entire tax reduction proposal, including the changes to

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the individual income tax structure discussed in the previous section, that the resulting increase in economic activity will cause tax revenues to grow at a slightly higher rate than if no tax cut was put into effect. Under this assumption, tax revenues recover more quickly to their 2018 levels in 2022, only one year after full implementation. With slightly higher projected growth rates under the tax rate reduction scenario, tax revenues recover even more quickly and will surpass the projected rates without the proposed reduction. For example, under the assumption that revenues grow at a 5% rate with the tax rate reduction, full recover of 2018 levels of revenue occurs at the end of the third year of the phased-in implementation period and surpass the projected revenues without the tax reduction in year 2026. It is important to note here, however, that there is so much variability in the growth rate of Idaho corporate income tax revenues that recovery to 2018 levels may occur much sooner or much later than the dates estimated above.

Table 4-1: Years in Which Corporate Income Tax Revenues Reach Their Pre-Change Levels

Growth Rate of Revenues Without Tax Rate Reduction	Growth Rate of Revenues With Tax Rate Reduction	Year of Tax Recovery
3%	3%	2023
3%	4%	2022
3%	5%	2021

Rate Parity Between Individual and Corporate Income Tax Rates

An important issue with regard to the proposed tax reforms is that of parity between business income earned by corporations and by pass-through businesses. Pass-through businesses include partnerships, sole proprietorships, most LLCs, and S-corporations. It is a common misconception that pass-through businesses are small and C-corporations are large. In the US, almost all business entities, nearly 99% percent, are small with annual sales of \$10 million or less. Further, most net income is earned by pass-through businesses with a small number of these firms earning the majority of the pass-through profits. There are sound business reasons for firms to choose one form of business organization or the other and there is general agreement that federal and state tax codes should be neutral with regard to the organizational structure of business.

All business decisions, whether on the part of C-corporations or pass-through businesses, are affected by both the corporate and individual income tax structures in the states in which they operate. However, there are distinct differences in the taxation of business income for pass-through businesses and C-corporations. Under the current federal and state tax systems, pass-through businesses are not subject to corporate income tax. Instead, these businesses pass through their business income to their owners who are then taxed under federal and state individual income tax systems. Income earned by C-corporations, on the other hand, is subject to two layers of taxation. First is the firm's income is taxed under state and federal

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corporate income tax and the second occurs when C-corporations distribute their income to shareholders, who are then subject to individual income tax.

In addition to the issue of having different layers of taxation, another important difference between pass-through businesses and C-corporations revolves around the timing of required tax payments. For both income earned by pass-through businesses and C-corporations, individual and corporate income taxes are based on the year in which they are earned. For the second layer of taxation for C-corporations, however, shareholders can delay paying taxes on dividends until the corporation distributes dividends to shareholders or until shareholders realize capital gains through the sale of stock. As with the corresponding ability for corporations to choose the form in which to distribute income, as dividends, wages, etc., these decisions are often made with the primary goal of tax avoidance rather than long-term growth. This results in an efficiency loss to the general economy.

Of more importance than these inefficiencies associated with the timing of taxes, however, is the effect that differences in the tax structures contribute to changes in business structure. The substantial differential between higher taxes on business income for C-corporations and the lower tax rate on business income for pass-through businesses results in a major incentive for corporations to un-incorporate and to reorganize as pass-through businesses and for pass-through businesses to forego organizing as C-corporations. Indeed, the tax penalty for income earned by corporations is one reason for the tripling in the number of pass-through businesses in the US since the early 1980s, with pass-through businesses accounting for over 95% of all businesses in most states, including Idaho. In addition, pass-through businesses now earn over half of all business net income, with most of this net income being earned by relatively large firms.⁵ Further, the majority of pass-through business income is taxed at the top individual income tax rates. Therefore, an advantage of the proposed reform to both the individual and corporate income tax structures in Idaho is that it maintains parity between the top individual and corporate tax rates. Lowering the top individual rate to 6.4% while maintaining the corporate rate at 7.4% would create a tax differential between corporate and pass-through business income and exacerbate the problems discussed above.

Competitiveness With Surrounding States

Given the complexity of the issue of rate parity, it is an open question as to the overall effect of the proposed corporate income tax rate on the relative number of C corporations or other business entities in the state. In addition to the benefits of the rate cut for corporations in Idaho, a possibly more compelling argument for the proposed rate reduction stems from the fact that the rate cut would increase the attractiveness of Idaho in locational decisions for firms. Idaho's current rate of 7.4% is higher than all surrounding states.⁶ For example,

⁵ While pass-through earn more in net revenue, C-corporations earn more in total business receipts.

⁶ It should be noted that this discussion focuses on the corporate income tax rates alone. The actual tax liability must be addressed on a case-by-case basis in each state. For example, multistate businesses in Idaho must apportion their income using a three-factor formula made up of property, payroll, and sales factors.

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Wyoming, Washington, and Nevada have no corporate income taxes.⁷ Oregon's rate is 6.6% on corporate income less than \$1,000,000.⁸ The rates are 5.00% in Utah and 6.75% in Montana. By lowering the tax rate in Idaho, the incentive for corporations to pursue business opportunities in the state is increased.

⁷ Washington and Nevada have no corporate income taxes but, instead, have gross receipts taxes. These are not explicitly comparable to corporate income taxes.

⁸ Oregon's rate is 7.6% on corporate income over \$1,000,000.

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Appendices

Appendix A - Resume of Economic Team

Dr. Geoffrey Black, PhD

Dr. Geoffrey Black is a professor in the Department of Economics at Boise State University and a research associate of the Center for Advanced Energy Studies. He obtained his PhD from the University of Washington with fields in Natural Resource Economics, Public Finance and Public Policy Economics. He performs research on economic development, public policy and energy strategy. Dr. Black also performs analyses on the economic impacts of public and private research and development activities, deployment strategies for new energy technologies, and fiscal implications of state and national economic policy proposals. These include impact analyses for private clients, the Idaho National Lab and the Idaho Department of Parks and Recreation at the state level and for the International Atomic Energy Agency and the Organisation for Economic Development and Cooperation at the international level. Recent projects include the fiscal and economic effects of both renewable and nuclear energy projects, the role of federal research facilities in regional economic development, economic impacts of urban and rural development projects and others. Dr. Black works with both domestic and international entities on these issues and has given numerous presentations to industry and legislative groups, academic conferences, research institutions and development agencies across the United States and internationally.

Dr. Donald Holley, PhD

Dr. Donald Holley is an emeritus faculty member in the Department of Economics. He taught at Boise State University from 1973-1982 and then spent 17 years as an economist for Ore-Ida Foods. He returned to Boise State in 1999 and retired in 2016. Other than potato markets, he has done much research on the local economy. Every year since 1974 he has participated in presenting forecasts of the Idaho General Fund Revenue to the state legislature and forecasts of Idaho Personal Income to the State Tax Commission since the late 1970's. He has done economic impact studies for the INL, the Idaho Dairy Industry, the Idaho Air National Guard, the Idaho Department of Parks and Recreation, downtown Boise, a proposed sports facility in Star, and is working on one for Micron.

General & Limiting Conditions

Every reasonable effort has been made to ensure that the data contained in this report are accurate as of the date of this study. Factors may, however, exist that are outside the control of the authors and that may affect the estimates noted herein.

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This study is based on estimates, assumptions and other information developed by the authors through their own research, general economic methodology and modeling knowledge, as well as information developed and provided by and consultations with the client and the client's representatives. No responsibility is assumed for inaccuracies in reporting by the client, the client's agent and representatives, or any other data source used in preparing or presenting this study.

This report is based on information that was current as of October, 2016 and the authors have not undertaken any update of its research effort since such date.

Because future events and circumstances, many of which are not known as of the date of this study, may affect the estimates contained therein, no warranty or representation is made by the authors that any of the projected values or results contained in this study will actually be achieved.

Appendix B - Input-Output and Economic Impact Calculation Methodologies

The tax savings described above important in that they increase the disposable income for Idaho households, resulting in an increase in economic well-being and prosperity. While this is beneficial in itself, it is also important because these savings will stimulate increased economic activity in the state. If households perceive that these tax reforms are long-lived and that their tax savings are likely to be forthcoming over several years, they will spend the greater part of these savings on additional consumption.⁹ It is important to realize that this additional spending by households will generate a ripple effect throughout Idaho's economy, causing gains in personal income, economic activity, and tax revenues. These can be estimated through a standard economic technique known as Input-Output (I-O) Analysis, developed to objectively assess the potential economic impacts of various changes in a region's economy. This type of analysis is briefly described in the following section.

Methodology

The idea behind I-O Analysis is that an initial change in economic activity results in other rounds of activity. For example, in the case of increased income due to lower taxes, households will increase spending, perhaps by buying more consumer goods, housing, clothing, groceries, eating out more, entertainment, etc. These initial increased expenditures by households cause economic impacts in the sectors of the economy that service these demands. For example, households going out to eat more at local restaurants will increase sales, employment, and incomes in the restaurant sector of the economy. These are known as the direct economic effects. In addition to these direct effects, there are indirect effects generated when these industries demand more goods and services from those sectors of the economy that supply their inputs. To continue the example, the increased demand for restaurant meals will increase the demand on the part of restaurant owners for more food, beverage, and other items from their suppliers. The increased sales, employment, and incomes in these sectors of the economy are known as the indirect economic effects of the initial addition to household income. The increase in direct and indirect economic activity will also generate additional effects due to increased demand and incomes in other sectors of the economy. For example, more employment and incomes in the food industries will lead to more spending on clothing, housing, haircuts, and other sectors not related to food. These types of changes are known as the induced effects. Overall, these comprise the direct, indirect, and induced economic impacts of the initial increase in household income.

⁹ Both economic theory and evidence show that if households receive short-lived tax breaks, they will choose to save much of their increased income. If, however, the tax reductions are more permanent in nature, they will likely spend well over 90% of their additional income on increased consumption, depending on the marginal propensity to consume and other factors described below.

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The direct, indirect and induced effects are well known to economists and cumulatively constitute the total impacts on employment, personal income and total output. The presence of indirect and induced economic effects means that an initial increase in demand for a given industry's output will get multiplied in the economy. Input-Output Analysis is based on a set of accounts that show the goods and services produced by each industry as well as the use of these goods and services by other industries and final users. These are described both for the national level as well as for regional supply conditions. As such, the I-O accounts can estimate the overall change in the economy resulting from the direct, indirect, and induced effects and can estimate the multiplier effects stemming from changes in the economy. The size of the multiplier effects is of primary concern in I-O Analysis and is an important component in determining the overall economic impacts of industry changes. In essence, multipliers determine how the direct change in final demand of a single industry ripples throughout all the other industries in an economy and are the key component of I-O Analysis. These types of analyses are used to study the economic impacts of a wide range of projects in both the private and public sectors. Businesses use of this type of analysis to study issues such as the local impacts of a wide range of investment projects, such as the construction of a new hotel or the expansion of an existing factory. Economic development organizations, such as chambers of commerce and economic development corporations, use them to study the local impacts of economic events in their area, such as long-term increases in tourism. federal, state and local government agencies often employ these types of analyses to study the local impacts of government regulation on specific industries, assess the local impacts of transportation projects, and changes in tax policy.

There are a variety of I-O programs and data systems that are available for economic impact studies. They include programs from REMI *Economic Modeling Inc*, EMSI *-Economic Modeling Specialists, Inc.*, RIMS II- *Regional Input-Output Modeling System*, and IMPLAN-*Impact Analysis for Planning*. IMPLAN is one of the most tested and most widely used programs, being originally developed for the United States Department of Agriculture Forest Service in the late 1970s and early 1980s. IMPLAN has been refined and used for a wide variety of economic activity assessment by both the private and public sectors. In addition, the IMPLAN model has great flexibility, robustness, and transparency and, unlike some I-O models, the IMPLAN model itself and the economic data used are updated frequently. Further, IMPLAN data is available for every county in Idaho as well as for the state as a whole. For these reasons, IMPLAN was chosen as the software platform and data system for this analysis. The IMPLAN analysis used here employs a model of inter-industry linkages from 2013 and economic data from 2015. This is the most recent model for the 44 counties in Idaho in order to obtain multipliers for economic output, employment, and tax revenues. The model provides multipliers for 536 different industrial sectors, each with an industry-specific indirect multiplier for itself and each of the other 535 industries.