

The Economic Benefits of Tax Reform in Louisiana



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*An Analysis of Gov. Bobby Jindal's
Tax Reform Proposal*

**Beacon Hill Institute
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Summary

Louisiana Governor Bobby Jindal has proposed a tax reform package that would eliminate individual and corporate income taxes. To keep the tax reform revenue neutral, Governor Jindal's proposal would increase the sales tax and tobacco tax, curb exemptions to the state severance tax, and expand the sales tax base to include personal services such as spa treatments and professional services, such as advertising.¹ The plan will retain business competitiveness incentives and targeted tax offsets for households and businesses.

The Beacon Hill Institute (in partnership with the Pelican Institute for Public Policy) used its State Tax Analysis Modeling Program (STAMP) to determine the effects of the proposed tax changes on the Louisiana economy.² Louisiana-STAMP (LA-STAMP) is an economic model that simulates the economic effects of changes in taxes, costs (general and sector specific) and other "exogenous" changes on the state's employment, investment, and real disposable income (among other variables).

This analysis finds that the adoption of the Governor's package would lead to economic growth, without affecting state revenues. The change would create 11,810 additional jobs by 2017, or roughly 3,000 jobs per year directly related to these tax changes. Additionally it would boost real disposable income in the state by \$1.749 billion. That is, on average, an extra \$910 for each of Louisiana's households.

Introduction

Changes in tax rates have numerous effects on taxable activities as well as economic activities. When proposing tax reform, state policymakers should strongly consider the harm taxes inflict on the economy while maintaining a stable flow of tax revenue for government functions. To determine the appropriate tax structure for a particular state, one has to look at how much each tax weighs upon businesses and households.

¹ Jeff Adelson, "Gov. Bobby Jindal calls for elimination of all Louisiana income and corporate taxes," *The Times-Picayune* January 10, 2013.

http://www.nola.com/politics/index.ssf/2013/01/gov_bobby_jindal_calls_for_eli.html.

² For a description about the STAMP model see

http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_HowSTAMPworks.html.

The state sales tax is levied on the costs of producing final goods and services sold in the state, irrespective of where these costs originated. The sales tax does not fall on the goods or services that were produced in the state but sold in other states or countries.

The current Louisiana tax climate shows that the state has the 21st highest personal income tax at six percent—not among the worst in the country, but far from the most competitive. The corporate income tax of 8% is the 15th highest in the country (tied with Indiana and Massachusetts). Sales taxes, on the other hand, are only taxed at 4% -- a rate which is lower than the national median of 6%.³ According to the Louisiana Department of Revenue, the state general sales and use tax is only levied on the following transactions:

1. The sale of tangible personal property in this state;
2. The use, consumption, distribution, or storage for use or consumption in this state of any tangible personal property;
3. The lease or rental within this state of any item or article of tangible personal property;
4. The sales of certain services as defined in Revised Statute 47:301(14);
5. All sale, use, consumption, distribution, storage for use or consumption, leases, and rentals of tangible personal property are taxable, unless an exemption or exclusion is provided by law for a particular transaction. In the case of service transactions, only the particular transactions enumerated in the law are taxable.⁴

It is clear from the list above that Louisiana's sales and use taxes fall primarily on tangible goods and personal property with few services enumerated as taxable. But the prominence of the service sector is growing. According to the U.S. Office of the Trade Representative, service industries account for 68 percent of the U.S. GDP and four out of five U.S. jobs.⁵ Louisiana, however, has not updated its sales tax laws to keep up with the shift in the economy's composition from goods to services.

³ Tax Foundation, Tax Topics, State Tax and Spending Policy, Louisiana, "The Facts on Louisiana's Tax Climate," <http://taxfoundation.org/state-tax-climate/louisiana> .

⁴ Louisiana Department of Revenue, Frequently Asked Questions, <http://www.revenue.louisiana.gov/sections/faq/default.aspx?type=gen&cat=SLS#faq-101>

⁵ Office of the United States Trade Representative, Services, <http://www.ustr.gov/trade-topics/services-investment/services>.

While Louisiana's statutory income tax rates may be relatively high, they are riddled with exemptions and deductions that lower revenue collections and the effective rate. High tax rates on income typically have negative effects on economic activity at the state level. According to a study by Poulson and Kaplan, higher marginal tax rates have a negative impact on economic growth.⁶ Gov. Jindal's tax reform proposal would shift the state tax burden from income and toward consumption which would promote economic growth and provide a better source of government revenue.

Consider the personal income tax. Assume that the personal income tax is paid by individuals working in the state, independently of where they reside. The income tax falls on the labor compensation for products and services rendered by companies and individuals in the state. The personal income tax also falls on the interest, dividends and capital gains earned on investments made by residents of the state, independently of where the source of those flows is located. This means that the personal income tax will fall on the distribution of dividends and interests paid by state companies inasmuch as the stock and debt of those companies is owned by state residents. Income taxes directly decrease people's disposable incomes therefore lowering the incentive for them to work and save. With a lower amount of money for investment, capital formation could slow, thereby hurting future income and employment opportunities.

Louisiana levies the Corporate Income Tax and a State Franchise Tax on businesses that derive income or operate capital in the state. The corporate income tax falls on the net income of corporations that are derived in the state on a graduated scale that tops out at 8 percent on income over \$200,000. The state franchise tax levy directly applies to "capital employed in Louisiana" on a graduated scale that tops out at \$3 per thousand dollars of capital and requires a minimum annual tax payment of \$10.

The corporate income and, more so, the franchise tax reduces the after tax, risk-adjusted return on invested capital. As a result, fewer investment projects would be made under the corporate and franchise taxes than in their absence, thus reducing total investment in the state. The lower level of investment reduces income derived from capital and, to a lesser extent reduces employment and labor income, because businesses need fewer

⁶ Barry W. Poulson and Jules Gordon Kaplan, "State Income Taxes and Economic Growth," *Cato Journal* 28 No. (Winter 2008). <http://www.cato.org/sites/cato.org/files/serials/files/cato-journal/2008/1/cj28n1-4.pdf>

workers to build structures and machines and fewer workers to operate the machines. However, higher capital taxes do make labor relatively cheaper to employ than capital investments.

The Louisiana sales tax and other excise taxes fall on the consumption of goods inside the state and, consequently, the sales tax increases the cost of buying goods in the state. As a result, the sales tax reduces the amount of goods purchased in the state. In-state goods and services become more expensive for both residents and visitors so the quantity of goods and services sold in state drops because of this.

The answer to which tax is more harmful depends on the price elasticity of demand for final consumption in state, on the wage elasticity of the labor supply and on the return elasticity of savings. It also depends on how much of the state's production is consumed finally in state and how much is exported.

Tax Simulation Results

The Beacon Hill Institute (BHI) used its State Tax Analysis Modeling Program (STAMP) to determine the effects of the proposed tax changes on the Louisiana economy.⁷ Louisiana-STAMP (LA-STAMP) is a five-year dynamic Computable General Equilibrium (CGE) model that simulates the economic effects of changes in taxes, costs (general and sector specific) and other "exogenous" changes. As such, it provides a mathematical description of the economic relationships among producers, households, governments and the rest of the world (ROTW).

LA-STAMP is general in the sense that it accounts for all the important markets, such as the capital and labor markets as well as flows. It is an equilibrium model because it assumes that demand equals supply in every market (goods and services, labor and capital). This equilibrium is achieved by allowing prices to adjust within the model. And it is computable because it can be used to generate numeric solutions to policy and tax changes.

⁷ For a description about the STAMP model see http://www.beaconhill.org/STAMP_Web_Brochure/STAMP_HowSTAMPworks.html.

The BHI simulated the elimination of the state personal income tax, corporate income tax and the franchise tax while simultaneously increasing the sales tax rate and tobacco taxes, expanding the sales tax base and curbing severance tax exemptions. In simulating the tax changes, BHI used static revenue estimates from the State Department of Revenue as the starting point.⁸

Static estimates assume that there is no change in underlying economic activity in response to a change in tax law. For example, a static estimate of a cut in the personal income tax, say from 6% to 3%, would cause revenues to fall by 50% $(6 - 3)/6$. A dynamic estimate would show a smaller drop in revenue because it would capture the positive effect on the tax base of the cut in the income tax. The complete elimination of the personal and corporate income taxes would not enable any dynamic revenue effects for the tax itself, since the rate would be zero. However, businesses would have more money to make profitable investments in Louisiana, thus increasing investment and employment, incomes and retail sales which, in turn, boosts sales and other tax collections. One of the principal purposes of STAMP is to capture such dynamic effects.

BHI ran a series of STAMP simulations that account for the effects of the tax changes to achieve a revenue neutral tax swap on a dynamic basis. We assumed these tax changes take place beginning in fiscal year 2014 and report the results for that year and 2017, four years after implementation. The appendix contains the detailed a methodology for each tax change. Table 1 displays the results against a baseline of no tax policy change.

Table 1: Fiscal Effects of Louisiana Tax Reform

	2014	2017
State Taxes	(\$ millions)	
Corporate Income and Franchise Tax	-340	-340
Personal Income Tax	-2,657	-3,178
Tobacco Taxes	281	250
Sales Tax	2,436	2,989
Severance Tax	281	276
Other Revenue	-1	3

⁸ For the cigarette tax changes the Department of Revenue used dynamic results.

In 2014, the state would lose \$2.997 billion in tax revenue due to the elimination of the personal and corporate income taxes and the franchise tax. However, these losses would be offset by higher sales tax rate of 5.88 combined with an expansion of the sales tax base and higher severance and tobacco taxes. Other tax revenues would fall by 1 million in 2014 and climb by 3 million in 2017 under the tax reform proposal.

The tax reform proposal would be revenue neutral and therefore, would not change the amount of money in the private economy of Louisiana. However, the tax reform would provide a powerful incentive for Louisiana’s households and businesses to save and invest, spurring increases in employment and incomes. Table 2 displays the economic results.

Table 2: Economic Effects of Louisiana Tax Reform

Year	Private Employment (Jobs)	Investment (\$ millions)	Real Disposable Income (RDI) (\$ billions)	Real Disposable Income Per Household \$
2014	11,030	158	1.513	730
2017	11,810	183	1.749	910

In general, the adoption of the Governor’s package leads to improvement in the state economy. The change would create 11,030 jobs and boost investment by \$158 million in 2014. Real disposable income would rise by \$1.513 billion, or an extra \$730, on average, for each of Louisiana’s households.

Investment projects take time to plan and build, thus the full amount of new investment, employment and income spurred by switching to the consumed income tax, would take time to fully materialize. Therefore, we also report the effects for 2017 in Table 2. The change would create 11,810 jobs, helping to boost real disposable income by \$1.749 billion, or \$910 per household. Investment would increase by \$183 million in 2017.

LA-STAMP model solves for a new equilibrium in each over the period from 2014 to 2017. Since the tax change takes place in one year and not over a period of several years the model finds the new for 2014 and reports that most of the economic changes take place in the first year. However, the effects would likely take place over a longer period

as households and businesses take time to change their behavior and respond to the new incentives. It is likely that the Louisiana would experience the 2014 economic impacts reported by LA-STAMP over a couple of years. Therefore, Louisiana can expect the Governor's tax reform proposal to increase employment by several thousand jobs each year between 2017 and 2017, and increase disposable income by several hundred million dollars over the same period.

Conclusion

Tax changes do not exist in a vacuum; consumers, investors and taxpayers often change their behavior in response to tax changes. When taxes are increased they spend and work less; when taxes are cut an incentive is created. Taxpayers — responding to the incentive — are likely to work and save more. At the same time, businesses responding to a tax cut are able to channel additional resources to productive use. Economic theory, usually supported by substantial empirical research, favors consumption tax regimes since income taxes by comparison are a disincentive to work and save. Overall, consumption taxes are more efficient, as they are collected only when resources are consumed, not saved or invested.

As we show with LA-STAMP, the mix of taxes also matter. The economic benefits of tax reform — moving from income taxation to consumption taxes under an expanded tax base — would be substantial. The Governor's proposal, which would recalibrate tax policy toward growth, would be an excellent vehicle to drive capital formation and employment in Louisiana.

Methodology

Both the state personal income tax and the state corporate income tax were completely eliminated in our modeling. Additionally, our analysis is based on an annual tobacco tax increase of \$281 million in 2014, falling to \$251 million in 2017. Meanwhile, we eliminated certain exemptions to the state severance tax, resulting in \$289 million additional revenue in 2014 and \$284 million in 2017, compared to a baseline of no policy change. These revenue changes are proportion to the REC projections adopted for 2014 through 2017.⁹

We assume that the statutory sales tax rate increases 1.88 percentage points from 4 percent to 5.88 percent. Combined with this sales tax rate increase, many exemptions were eliminated in the modeling, expanding the tax base for the sales tax. Mainly, tax exemptions for various sectors were eliminated, using sales tax exempt information from the Louisiana Department of Revenue. These exemptions were mapped to one of the 27 commercial sectors in the model, such as “personal, technical and scientific services” or “management, administrative and waste services.” The number of exemptions eliminated was increased until the policy proposal was revenue neutral.

Governor Jindal proposes to retain tax credit and incentive programs currently deducted from the personal and corporate income taxes. We assume that these credits and deductions will be deducted from the sales tax burden of the effected households and businesses. As a result, the sales tax base would fall under these programs.

Some households and businesses may have sales to payments that are too small to accommodate the full value of the tax credits or incentives. Under this circumstance, the state would need to make payment to these households and businesses. As a result, the sales tax base would need to be expanded further than represented here in order to fund the payments.

To identify the economic effects of the tax changes and understand how they operate through a state’s economy, BHI utilized its STAMP (State Tax Analysis Modeling

⁹ State of Louisiana, Legislative Fiscal Office, Official Revenue Estimates, http://lfo.louisiana.gov/files/revenue/REC_Fcsts_12_13_12_FY13_FY17.pdf (December 13, 2012)

Program) model. 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.¹⁰

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

Because it consists of a large number of interrelated equations, a CGE model ordinarily requires the application of a nonlinear computational algorithm, typically some

¹⁰ 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).

variation on Newton's method. STAMP requires the development and application of a sophisticated computer program for the solution of its equations.

About Us

The Pelican Institute is a nonpartisan research and educational organization – a think tank – and the leading voice for free markets in Louisiana. The Institute’s mission is to conduct scholarly research and analysis that advances sound policies based on free enterprise, individual liberty, and constitutionally limited government.

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