

PRO-GROWTH TAX REFORMS AND GEORGIA INTERNET BASED SALES

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Retail Industry Leaders Association

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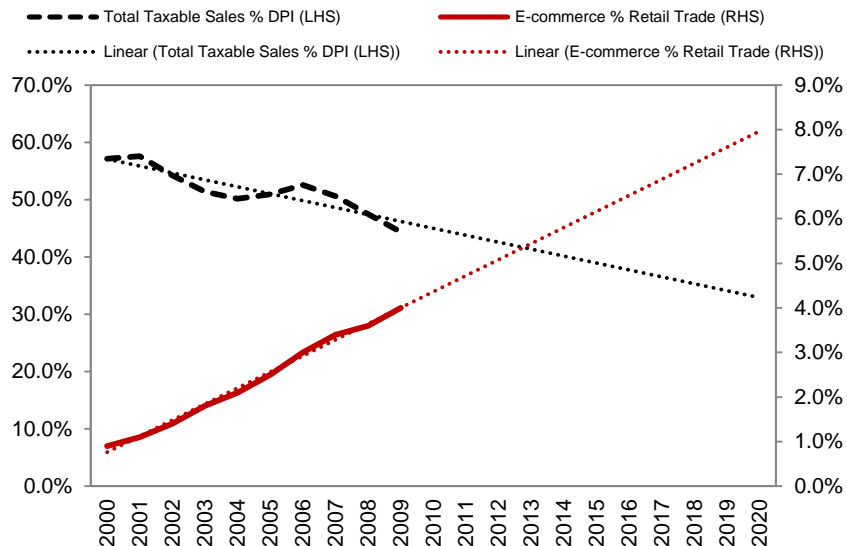
Executive Summary

For many years sales subject to state sales taxes across the country, including Georgia, have not been collected. Due to a 1992 Supreme Court decision, when sales occur over the Internet by a seller whose physical presence is outside of Georgia, that retailer does not need to collect Georgia's state sales tax. The practical impact of this decision has been to leave billions of dollars of sales tax collections uncollected. There have been several consequences from this policy:

- Taxes that are more damaging to growth – such as Georgia's personal income tax – are higher than necessary;
- Georgia has been encouraging residents to purchase goods and services from sellers that are not residents of Georgia, therefore an inefficiently larger amount of goods and services are purchased from out of state sellers; and
- Georgia's sales tax base has been inefficiently narrowed.

As Figure ES1 illustrates, Georgia's sales tax base has been declining over time while, at the same time, the growth in E-Commerce sales have been growing robustly.

Figure ES1
Georgia's Sales Tax Base as a Percentage of Disposable Personal Income (DPI)
Compared to Growth in E-Commerce
2000 – 2009, Linear Projection through 2020¹



¹ Sources: U.S. Census, www.census.gov/qovs; and, U.S. Census, 2009 E-commerce Multi-sector Data Tables (Released May 26, 2011); <http://www.census.gov/econ/estats/2009/all2009tables.html>.

The good news is that states are now finding ways to define physical nexus such that the sales taxes owed on these transactions will be collected. We recommend that the state of Georgia redefine physical nexus such that the higher tax burden that exists elsewhere in Georgia's economy can be lowered and the incentive for Georgia residents to purchase products from non-Georgia businesses can be eliminated. These reforms would entail collecting the same sales tax on products purchased from in-state or out-of-state retailers. This paper illustrates that based on both economic theory and practical considerations, Georgia should ensure that all sales subject to Georgia's sales and use tax pay the tax owed – regardless of the selling venue.

Based on the theory and empirical evidence presented above, there are three key recommendations:

- **Findings:** Tax systems that distort economic decisions create economic inefficiencies that diminish the benefits from otherwise pro-growth tax systems.
 - i. **Recommendations:** Broadening Georgia's sales tax base will increase its efficiency by removing a tax-created distortion favoring one type of retail sale (Internet sale from out-of-state retailers) over another (in-state retailers either over the Internet or from a brick-and-mortar store).
 - ii. Increase Georgia's economic competitiveness increasing the incentives to produce and invest in Georgia.

- **Findings:** Tax systems based on consumption taxes with low marginal tax rates produce better economic results. Georgia is losing its competitive edge due to the eroding sales tax base that has led to rising burdens from less competitive taxes. The overall spending level also matters. Government spending is government taxation; therefore when government spending is too high, economic growth suffers.
 - i. **Recommendations:** Reversing Georgia's trend of a narrowing sales tax base coupled with rising tax rates will produce positive economic results.

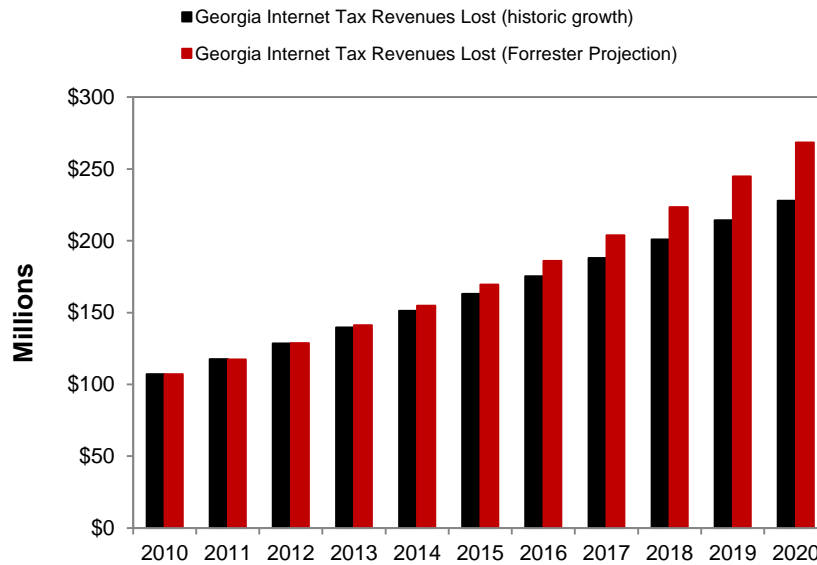
By ensuring that the static tax revenue increase from broadening the sales tax base is fully offset, the overall government tax and expenditure burden is not increased.

- **Findings:** The size of the problem is large and growing. Based on data from the U.S. Census, Forrester Research, and the National Conference of State Legislatures, we estimate that Georgia's estimated e-commerce tax revenue losses were:
 - a. \$107 million in 2010;
 - b. Will be around \$129 million in 2012;
 - c. By 2020 we estimate that the total tax revenue loss will grow to between \$228 million and \$268 million; and,

- d. The total potential tax revenues lost between 2012 and 2020 will be between \$1.6 billion and \$1.7 billion.

Recommendations: Georgia should redefine physical nexus such that the higher tax burden that exists elsewhere in Georgia's economy can be lowered and the incentive for Georgia residents to purchase products from non-Georgia businesses can be eliminated.

Figure ES2
Projected Georgia Retail Internet Sales Tax Revenues Lost
2010 - 2020



Personal income taxes have a larger negative impact on economic growth than sales taxes. Re-arranging the tax burden by broadening the sales tax base, including capturing the legitimate sales tax revenues from e-commerce coupled with a reduction in the personal income tax would increase the overall incentives in Georgia's economy while simultaneously keeping the tax burden constant. The dynamic result should be improved economic performance.

The idea of replacing or eliminating the sales tax on energy in Georgia, an idea that is currently under consideration, is another pro-growth reform. Imposing sales taxes on energy used for production increases the costs of products manufactured in Georgia creating a comparative disadvantage for Georgia based manufacturing. Additionally, sales taxes on production create a "tax-cascading" effect whereby sales taxes on final goods are, in part, taxing the sales tax levied on energy production. Levying taxes on taxes is a sign of a very inefficient and growth retarding tax system.

As an example of the benefits, based on the results in Appendix I, the personal income tax burden has a larger negative and statistically significant impact on personal income growth than the sales tax burden, which has a negative but statistically insignificant impact on personal income growth.

Therefore, if Georgia were to expand its sales tax base to capture the estimated lost Internet sales tax revenues and used these revenues to reduce the personal income tax rate for example, then total personal income would be \$658 million larger by 2020 than otherwise, and total number of jobs in Georgia would be higher by nearly 3,300.

This improved economic performance will be further enhanced by removing a tax incentive for Georgia residents to purchase goods from non-Georgia retailers. This redistribution of the retail market will create positive benefits for total economic activity in Georgia. While the precise amount of revenues that are being reallocated away from Georgia retailers is not known, we do have estimates and projections for the total size of Internet based sales from Georgia. Based on these estimates, for every 10% of Internet sales that is reallocated back to a Georgia retailer (either through an Internet sale or a sale at a physical store) total Georgia retail sales will increase by \$569.8 million to \$671.1 million by 2020 with an expected job impact of an additional 7,900 to 9,300 jobs.

PRO-GROWTH TAX REFORMS & INTERNET BASED SALES

Georgia's tax system is only slightly above average when judged against the requirements for a pro-growth tax system. The requirements for a pro-growth tax system that efficiently provides adequate revenues include:

- Having a broad tax base;
- Being relatively simple to comply with in terms of costs and effort;
- Having a low marginal tax rate on productive activities; and,
- Not discriminating against similarly situated taxpayers.

The benefits from such a tax system include increased economic opportunity at all income levels and greater tax revenue stability such that the revenue boom-bust cycle is reduced. Georgia's tax system is slightly better than average when judged against these criteria.

- Georgia's 6% top marginal personal income tax is the 25th highest compared to all of the states.
- Georgia's 6% top marginal corporate income tax is the 16th highest compared to all of the states.
- Georgia has the 26th most progressive personal income tax system. Progressive income taxes typically violate most of the criteria for a sound pro-growth tax system. Progressive tax systems rely on a narrow part of the tax base for most of its revenues (e.g., California's excessive reliance on capital gains tax revenues), are overly-complicated, and discourage economic activity. Furthermore, the revenue surges and declines created by progressive tax systems exacerbate revenue volatility for the state governments.
- Georgia has the 24th highest property tax burden per \$1,000 of personal income.
- Georgia has the 32nd highest (18th lowest) overall tax burden.

Like many states, Georgia's sales tax base is becoming more and more distorted as Georgia's economy evolves. There are many factors eroding Georgia's sales tax base – as well as the sales tax bases of states across the country.

Part of the explanation for Georgia's recent drop-off in the state sales tax base is that sales taxes are not collected on many purchases made over the Internet. Purchases made over the Internet are part of Georgia's sales and use tax base and legally taxes should be remitted for these transactions. From an economic perspective, these purchases should also be taxable events if Georgia is going to adhere to the principle of treating similar taxpayers similarly.

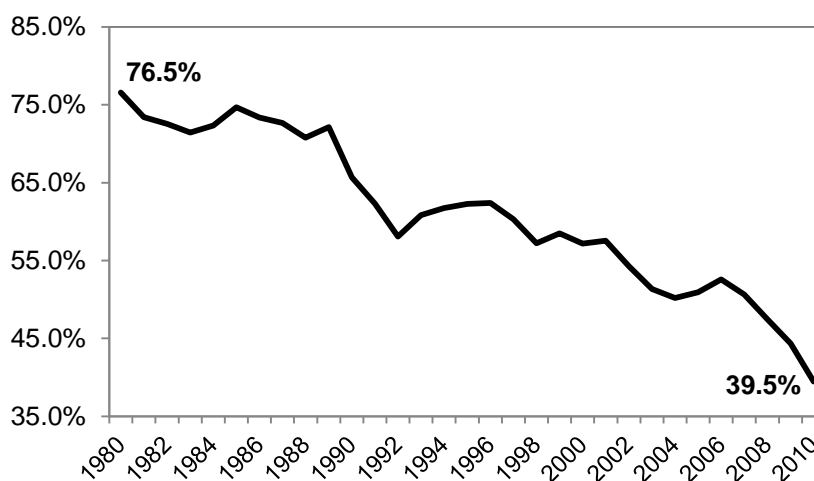
Georgia should implement policy reforms that eliminate the incentive for Georgia residents to purchase products from non-Georgia businesses. These reforms would entail collecting the same sales tax on products purchased from in-state or out-of-state retailers. This paper illustrates both the theoretical and practical justifications for ensuring that all sales subject to Georgia's sales and use tax pay the tax owed – regardless of the selling venue.

THE ECONOMIC CONSEQUENCES OF GEORGIA'S DECLINING SALES TAX BASE – AND ENFORCING THE SALES TAX

Sales taxes are generally designed to tax goods – and legal decisions have made it easier to tax goods at brick and mortar retailers rather than via e-commerce. However, over the past 30 years goods share of transactions has been declining as the U.S. economy has become more services oriented; and, e-commerce's share of transactions have been growing exponentially.

Many state sales tax systems – including Georgia's – has not kept up with these transitions. Consequently, the sales tax bases are becoming inefficiently narrowed. Therefore, whereas 30-years ago Georgia's sales tax base represented more than three-fourths of Georgia's after-tax income (disposable personal income, DPI). By 2010, the sales tax base has eroded to only slightly under 40% of DPI, see Figure 1.

Figure 1
Georgia's Sales Tax Base as a Percentage of Disposable Personal Income
1980 - 2010²

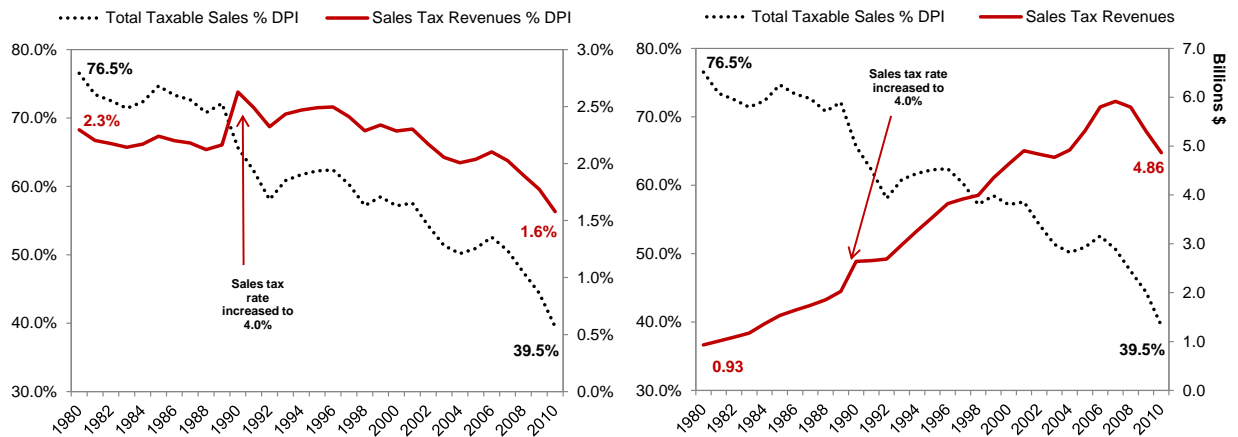


And, there are consequences to Georgia from this eroding sales tax base. Figure 2 compares the sales tax revenues as a percentage of DPI and total sales tax revenues to the changes in Georgia's tax base illustrated in Figure 1. The two parts of Figure 2 illustrates 2 several important trends. By definition of the declining sales tax base, the sales tax burden has been concentrated on a smaller share of Georgia's economy. Furthermore, as recent trends have accelerated the decline in Georgia's sales tax base (which the recession amplified), maintaining adequate tax revenue growth will require either:

- Higher sales tax rates;
- Higher taxes elsewhere in the economy; or,
- Broadening Georgia's sales tax base.

² Sources: U.S. Census, www.census.gov/govs; and, U.S. Bureau of Economic Analysis, <http://www.bea.gov/regional/index.htm>.

Figure 2
Georgia's Sales Tax Base as a Percentage of Disposable Personal Income (DPI)
Compared to Sales Tax Revenues as a Percentage of DPI and Total Sales Tax Revenues
1980 - 2010³



In order to offset the declining sales tax base, Georgia needed to increase the sales tax rate from 3% to 4% in 1989 – see Figure 2. This tax increase explains why Georgia's sales tax revenues as a share of DPI did not fall as quickly as the sales tax base during the early 1990's.

It was during the 2000 - 2009 period (latest e-commerce data available) that retail sales via e-commerce began to grow rapidly – see Figure 3. While other factors are also important, the growth in e-commerce coupled with the Internet tax collection exemption discussed in detail below have been associated with the current steep decline in Georgia's sales tax base.

The steep decline in Georgia's sales tax base has also led to a worsening of the composition of Georgia's tax burden. As discussed in detail below, how taxes are levied matters. States that rely more on sales taxes tend to experience greater economic growth. As Figure 4 illustrates, the recent drop in the sales tax base has been associated with a relatively larger reliance on the more anti-growth personal income taxes and corporate income taxes in Georgia.

³ Sources: U.S. Census, www.census.gov/qovs/; U.S. Bureau of Economic Analysis, <http://www.bea.gov/regional/index.htm>, and U.S. Census, <http://www.census.gov/qovs/>.

Figure 3
Georgia's Sales Tax Base as a Percentage of Disposable Personal Income (DPI)
Compared to Growth in E-Commerce
2000 - 2009⁴

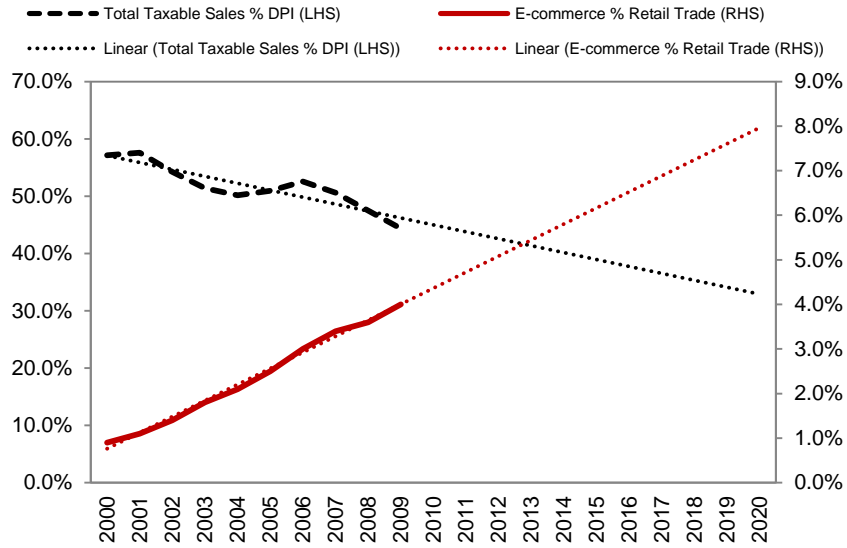
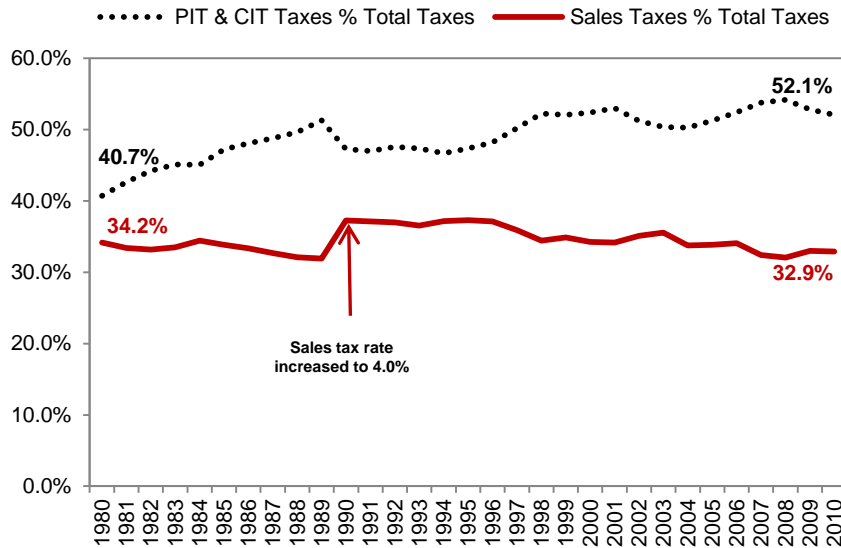


Figure 4
Georgia's Corporate and Personal Income Tax Revenues as a Percentage of Total Tax Revenues
Compared to Georgia's Sales Tax Revenues as a Percentage of Total Tax Revenues
1980 - 2010⁵



The higher reliance on anti-growth corporate and personal income taxes has come at a cost of economic growth to the state. However, broadening Georgia's sales tax base – if done correctly – can enhance the economic

⁴ Sources: U.S. Census, www.census.gov/govs/; and, U.S. Census, 2009 E-commerce Multi-sector Data Tables (Released May 26, 2011); <http://www.census.gov/econ/estats/2009/all2009tables.html>.

⁵ Sources: U.S. Bureau of Economic Analysis, <http://www.bea.gov/regional/index.htm>, and U.S. Census, <http://www.census.gov/govs/>.

competitiveness of the state and help support stronger rates of economic growth. Before we present the evidence illustrating why sales taxes are a less distorting tax, the next two sections provide some more detail regarding how e-commerce has been playing a role in inefficiently narrowing Georgia's sales tax base to the detriment of both state tax revenues and the state's economic growth.

THE INTERNET TAX ADVANTAGE

Georgia's current sales tax system creates an incentive for Georgia residents to purchase goods over the Internet from out-of-state sellers rather than purchase goods from in-state retailers. This incentive arises because many Internet-based retailers do not collect Georgia sales taxes, whereas all Georgia based businesses are required to do so. A Georgia resident that purchases \$100 worth of books at a local Georgia retailer must pay \$104 (plus local sales taxes) for the purchase – the \$100 worth of books plus the \$4 state sales tax (ignoring any local sales tax add-ons). That same Georgia resident can also purchase \$100 worth of books from an online retailer and not pay any sales tax at the time of purchase even though the transaction occurs in Georgia from the Georgia resident's perspective. While the resident is supposed to remit the \$4 tax (in the form of a use tax) to the state, pragmatically speaking this rarely occurs.

For Georgia businesses, these distortions mean tax discrimination. For Georgia's overall economy these distortions mean that taxes elsewhere in Georgia's economy are higher than they would otherwise need to be to support the same level of government expenditures. Due to this tax-created incentive coupled with the higher than necessary taxes in other areas of Georgia's economy, Georgia's economy is smaller than it otherwise would be.

From a theoretical perspective, taxes should conform to the pro-growth tax reform list described above. The current Internet tax distortion inefficiently narrows the tax base and creates economic distortions by taxing similar economic activities (the purchase of the same product or service) differently. The basis of our analysis is the observation that people do not work and invest to pay taxes; they work and invest to earn an after-tax return. With respect to sales taxes, the after-tax rate of return is higher on purchases that do not have a sales tax incorporated compared to purchases that face the sales tax levy.

By allowing Internet-based sales taxes to residents of Georgia to be uncollected at the retail level, Georgia's sales tax base is being inefficiently narrowed as Georgia residents make a greater amount of purchases out of state than they optimally would without the existence of the tax distortion. Simply put, the current Internet tax advantage distorts the retail market against "brick and mortar" retailers located in Georgia and therefore creates additional economic costs. Consequently, from a theoretical perspective, the current tax distortion should be closed.

The ultimate economic impact that would be created by sufficient collections of all consumption taxes crucially depends upon what the state of Georgia does with the extra revenues generated. As Milton Friedman noted, government spending is government taxation. Due to the existence of the Internet tax distortion, taxes elsewhere in Georgia's economy are higher than necessary to support the current expenditure levels. Therefore, the

ideal economic response is to create a dollar for dollar reduction in another Georgia tax – ideally the state income tax – to offset the higher tax burden created by closing the Internet tax distortion.

The benefits from addressing this tax system inefficiency in this manner would be higher rates of economic growth; increased prosperity across all income levels; higher rates of business start-ups; rising property values; and, less government revenue volatility, which enhances the ability of the Legislature to accurately budget. The analysis below illustrates the theoretical and practical justifications for ensuring that all sales subject to Georgia's sales and use tax pay the tax owed – regardless of the selling venue.

SALES TAXES AND THE INTERNET: HOW WE GOT HERE

The current Internet sales tax *exemption* goes back to a 1992 U.S. Supreme Court decision that reaffirmed the principles established in a 1966 case (National Bellas Hess). In that 1992 decision, known as *Quill v. North Dakota*, the U.S. Supreme Court ruled that retailers are not required to collect "sales taxes in states where they have no physical presence, such as a store, office, or warehouse. (The legal term for this physical presence is "nexus.") Although the case dealt with a catalog mail-order company, the ruling has subsequently been applied to all remote sellers, including online retailers. The Court said that requiring these companies to comply with the varied sales tax rules and regulations of 45 states and some 7,500 different local taxing jurisdictions would burden interstate commerce."⁶

"In *Quill*, the Court specifically noted that Congress has the authority to change this policy and could enact legislation requiring all retailers to collect sales taxes without violating of the Constitution.⁷ "Congress," the Court determined, "is ... free to decide whether, when, and to what extent the States may burden interstate mail-order concerns with a duty to collect use taxes."⁸

Ecommerce via the Internet was a fledgling industry back in 1992 when the *Quill* decision was made. In comparison, ecommerce is a major sales and growing sales venue today. According to Forrester Research "US online retail sales grew 12.6% in 2010 to reach \$176.2 billion. With an expected 10% compound annual growth rate (CAGR) from 2010 to 2015, US ecommerce is expected to reach \$278.9 billion in 2015."⁹

In a day when Google supports mobile applications that calculate the best available deal online or in-person for an on-shelf item by scanning its Universal Price Code (UPC), it is safe to say that modern technology has rendered feasible the once seemingly burdensome task of calculating and remitting sales taxes for the country's

⁶ "Internet Sales Tax Fairness" *New Rules Project*, <http://www.newrules.org/retail/rules/internet-sales-tax-fairness>.

⁷ <http://www.newrules.org/retail/rules/internet-sales-tax-fairness>

⁸ "Internet Sales Tax Fairness" *New Rules Project*, <http://www.newrules.org/retail/rules/internet-sales-tax-fairness>.

⁹ Sucharita Mulpuru (2011) "US Online Retail Forecast, 2010 to 2015: eCommerce Growth Accelerates Following "The Great Recession"" *Forrester Research*, February 28; http://www.forrester.com/rb/Research/us_online_retail_forecast%2C_2010_to_2015/q/id/58596/t/2.

many state and local jurisdictions.¹⁰ Moreover, Amazon CEO Jeff Bezos downplayed the possible threat to Amazon's edge against traditional stores if it should be forced to collect sales taxes in more states, noting that Amazon already does at least half of its business in places where it collects sales taxes or something similar, such as Europe's value-added tax.¹¹ Indeed, Amazon.com, which opposes levying sales tax to online retailers on the grounds that it would be "horrendously complicated," collects sales taxes nationwide for Target as part of its management of the chain's online business portal.¹² Consequently, the "burdensome" criterion appears to have been lessened due to technology.

Also important, the Supreme Court decision did not say that these transactions were not subject to the state and local sales tax; only that the companies could not be required to collect the sales tax on behalf of the states and localities. The consequence of this decision, however, is that the sales tax owed on these transactions is rarely collected. Instead, consumers – either knowingly or unknowingly – are being turned into tax cheats as a result of this decision. And, the tax revenue cost of this decision is growing. Yet Congress has so far neglected to address the Quill decision.

Currently, there are several states that require the collection of sales taxes from online retailers. New laws being considered in many states are based on a different definition of what constitutes a presence in the state: as the *New York Times* reports, "it includes any Web site based in the state that earns a referral fee for sending customers to an online retailer. Out of state retailers have hundreds of thousands of affiliates — from big publishers to tiny blogs — that feature links to its products."¹³ In states like New York, where such legislation has been enacted, the laws cite thousands of affiliates providing addresses in-State addresses, although the addresses have not been verified.¹⁴

According to the New York State law, if even one of those affiliates is in New York State, then an out of state retailer must collect sales tax on everything sold in the state, regardless of whether or not it is sold through the affiliate. This is an extension of an existing rule that companies employing independent agents or representatives to solicit business must collect taxes for the state.

Texas and Arkansas recently joined the growing list of state's attempting clarify state law on what constitutes nexus for remote sales. And, then there is California. The California legislature recently passed legislation, signed by Governor Jerry Brown, which required online retailers to collect the state sales tax for online purchases. Amazon led the fight against the legislation and was pursuing a proposed voter referendum to repeal the legislation. However, new legislation provides certainty now on when online retailers – including Amazon – will start collecting and remitting taxes in California (as of September 15, 2012), which appears to have reduced opposition to the bill. The new California legislation also empowers emote sellers to inform customers at the point of sale that sales tax is due. It is

¹⁰ http://download.cnet.com/iSkam-shopping-barcode-scanner-and-reader/3000-2094_4-75291405.html

¹¹ http://www.tulsaworld.com/business/article.aspx?subjectid=52&articleid=20110609_46_E2_CUTLIN799765

¹² <http://www.newrules.org/retail/rules/internet-sales-tax-fairness>

¹³ <http://www.nytimes.com/2008/05/02/nyregion/02amazon.html>

¹⁴ <http://www.nytimes.com/2008/05/02/nyregion/02amazon.html>

thought that this notice will increase the voluntary rate of compliance until the remote sellers begin collecting and remitting the tax themselves in 2012. In addition, Amazon has made statements in support of a federal solution.

States arguably now have a clearer path toward reform, and action on the state level is expected to continue or increase. These events will give momentum to the federal effort to resolve the issue of collecting tax from online purchases.

THE AMOUNT OF SALES TAXES NOT BEING COLLECTED ON THE INTERNET: THE COSTS OF GEORGIA'S NARROW SALES TAX BASE

Bruce et al. have produced a series of papers that estimate state and local sales tax losses arising from e-commerce for 46 states and the District of Columbia using both a baseline forecast and an optimistic forecast for e-commerce growth.¹⁵ In the baseline case, they estimate that annual national state and local sales tax losses on e-commerce would grow to \$11.4 billion by 2012 for a six-year total loss of \$52 billion.¹⁶ In Georgia, the baseline e-commerce tax revenue losses are estimated to reach \$410.3 million in 2012 for a six-year total loss of \$1.9 billion.

Our analysis of the trends in online retailing confirms the Bruce et al. analysis that retail sales over the Internet are posing a large and growing erosion of Georgia's sales tax base projected out through 2020, albeit at a lower current estimate than the Bruce 2012 estimate.

The basis for our estimate is the U.S. Census *EStats*, which the U.S. Census uses to measure the electronic economy.¹⁷ According to the U.S. Census, back in 1998, Internet retail sales held a trivial share of total retail sales in the U.S. However, as Figure 5 illustrates, this share has been growing rapidly. Furthermore, the growth in market share over time has thus far very closely followed a linear growth pattern of around 0.35 percentage points per year.¹⁸ Some estimates are predicting faster growth. The aforementioned Forrester Research is predicting a faster 10% compound annual growth rate, yet still not as fast as the growth in online sales may actually turn out to be.

New technologies often show explosive growth in market share at some point, however. For instance, according to the International Association for the Wireless Telecommunication Industry (CTIA) the percentage of wireless only households – households that only have telephone service through a wireless carrier – has grown exponentially from zero in 2000, to 8.4% in 2005, to 26.6% in 2006

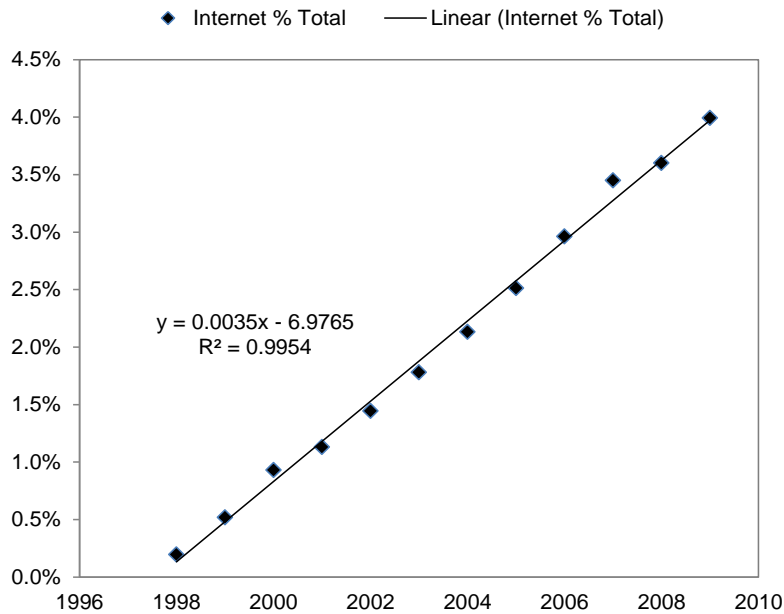
¹⁵ Bruce, Donald, and Fox William F. (2000) "E-Commerce in the Context of Declining State Sales Tax Bases." *National Tax Journal*, Vol. 53, No. 4 (December); Bruce, Donald, and Fox William F. (2001) "State and Local Sales Tax Revenue Losses from E-Commerce: Updated Estimates" *Center for Business and Economic Research*, September; Bruce, Donald and Fox, William (2004) "State and Local Sales Tax Revenue Losses from E-Commerce: Estimates as of July 2004" *Center for Business and Economic Research*, July; Bruce, Donald, Fox, William and Luna LeAnn (2009) "State and Local Sales Tax Revenue Losses from Electronic Commerce" *The University of Tennessee*, April 13.

¹⁶ Bruce, Donald, Fox, William and Luna LeAnn (2009) "State and Local Sales Tax Revenue Losses from Electronic Commerce" *The University of Tennessee*, April 13; <http://cber.utk.edu/ecom/ecom0409.pdf>.

¹⁷ See: <http://www.census.gov/econ/estats/>.

¹⁸ See: CTIA Advocacy, <http://www.ctia.org/advocacy/research/index.cfm/aid/10323>.

Figure 5
Retail Internet Sales as a Percent of Total Retail Sales
1998 - 2009



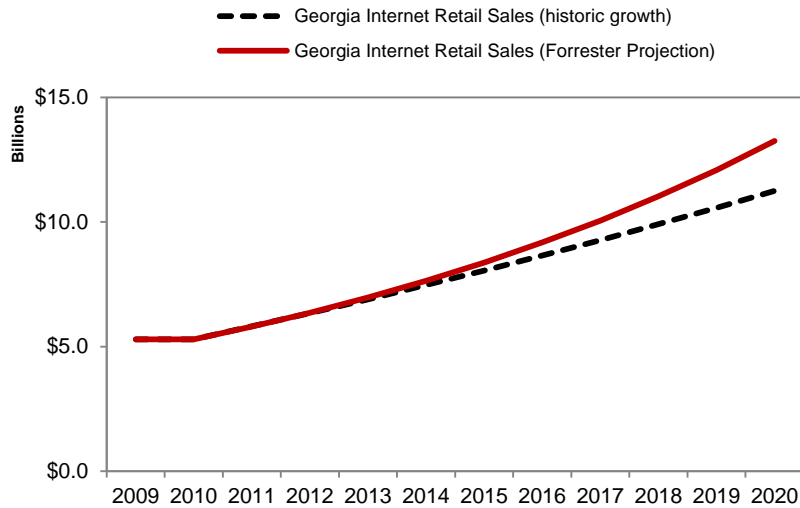
Source: U.S. Census

Georgia's total taxable sales tax base is estimated to be \$121.6 billion in 2010 and \$132.7 billion in 2009 based on data from the U.S. Census. The latest national Internet retail sales data from the U.S. Census is through 2009. As of 2009, the U.S. Census numbers indicate that Internet retail sales comprised 4.0% of total retail sales. Applying this figure to Georgia, total Georgia Internet retail sales were an estimated \$5.3 billion in 2009.

Based on these figures, in order to determine the lost sales tax revenues to Georgia due to taxable sales not being taxed on the Internet through 2020 the analysis needs to estimate the total annual Georgia Internet retail sales through 2020. We estimated the annual size of Georgia's Internet sales tax base between 2011 and 2020 using two different methods that are summarized in Figure 6:

- The average growth rate in Georgia's retail sales between 1998 and 2010 (1.7% per year) coupled with the growth in the retail Internet market share of 0.35 percentage points per year; and,
- The Forrester Research estimated 9.6% average growth in Internet sales applied to Georgia's estimated Internet retail sales through 2020.

Figure 6
Projected Georgia Retail Internet Sales
2009 - 2020



Source: ALME projections based on data from Forrester Research, and U.S. Census. 2009 is estimate and 2010 through 2020 are projections.

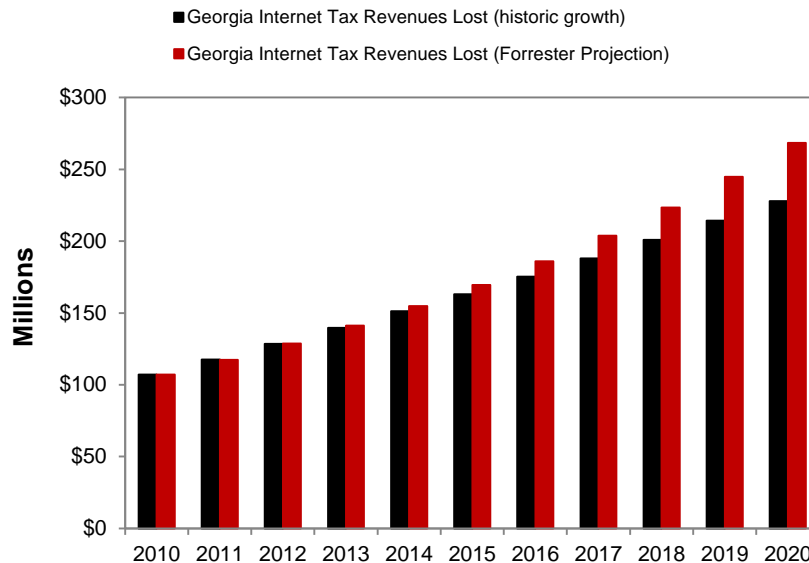
We estimate that based on current market trends and forecasts, total Internet retail sales in Georgia will grow from \$5.3 billion in total sales to a range of \$11.3 billion to \$13.3 billion. While all of these sales are, in theory, subject to the state sales tax the unknown question is (a) how many of these sales are not currently submitting sales tax revenues to the government; and, (b) the proportion of these non-tax submitting taxable sales that can be captured.

According to a National Conference of State Legislatures analysis, total uncollected taxes on goods and services sold via the Internet was \$8.6 billion in 2010.¹⁹ Based on an average state and local sales tax rate of 9.64%, this equates to a national non-taxed Internet sales tax base of \$89.2 billion.²⁰ This represents 50.6% of the total estimated 2010 Internet retail sales base of \$176.2 billion based on the U.S. Census 2009 estimated Internet retail sales base. Applying the 50.6% figure to the estimated Internet sales tax base in Georgia, multiplied by the Georgia state sales tax (4.0%) provides an estimate of revenues that Georgia can capture from retail sales over the Internet, see Figure 7.

¹⁹ As cited from: http://articles.chicagotribune.com/2011-03-10/business/ct-biz-0311-amazon-tax-bill-20110310_1_amazon-and-overstock-main-street-fairness-act-sales-tax

²⁰ Ibid.

Figure 7
Projected Georgia Retail Internet Sales Tax Revenues Lost
2010 - 2020



Overall, in 2010 our estimates show that Georgia lost \$107 million in potential sales tax revenues due to Internet retailers not collecting sales taxes on taxable sales. We estimate that these losses will grow to between \$228 million and \$268 million by 2020. Between 2012 and 2020, Georgia will lose \$1.6 billion to \$1.7 billion in potential sales tax revenues.

Government spending is taxation, pure and simple. Rising tax burdens are detrimental to economic growth. Taxation reduces output, employment and production. It's basic Econ 1. Historically there are many examples of government spending coming down and output growing. After World War II the U.S. cut government spending a lot. In 1945, for example, government spending as a share of GDP peaked at 31.6% and by 1948 it was down to 14.4%. Private real GDP (e.g. GDP less government purchases) for the three years 1946, 1947, and 1948 grew at a 7.5% annual rate. President Clinton also cut government spending as a share of GDP by over four percentage points, from 22.9% in 1992 to 18.8% in 2000—more than the next four best presidents combined. Economic prosperity grew robustly during Clinton's eight years in office. The reason the reduction in government spending has led to increases in economic growth is the simple fact that government spending is government taxation.²¹

And, this maxim holds at the state level too. States that have high and/or increasing taxes relative to the national average experience relative declines in income, housing values, and population as well as rising relative unemployment rates. And, the best way to comprehensively measure the total tax burden is to measure the total

²¹ Many other studies have also found a significant and negative relationship between higher government burdens/taxes and lower rates of economic growth including: Scully, Gerald W. (2006) "Taxes and Economic Growth" *National Center for Policy Analysis*, NCPA Policy Report No. 292, November; Robert J. Barro (1991) "Economic Growth in a Cross Section of Countries," *Quarterly Journal of Economics*, Vol. 106, No. 2 May; Landau, Daniel L. (1983) "Government Expenditure and Economic Growth: A Cross-Country Study" *Southern Economic Journal*, 49: January; Mitchell, Daniel J. (2005) "The Impact of Government Spending on Economic Growth" *Heritage Foundation*, Background Paper #1831, March 15; Gwartney, James, Lawson, Robert and Holcombe, Randall (1998) "The Size and Functions of Government and Economic Growth" *Joint Economic Committee, U.S. Congress*, April.

spending burden. Imagine there are only two farmers who comprise the whole economy—farmer 1 and farmer 2. If farmer 2 receives unemployment benefits, who do you think pays for those unemployment benefits? Farmer 1 is the right answer.

Consequently, broadening Georgia's sales tax base without reducing tax rates elsewhere in the economy would lower Georgia's economic competitiveness. With respect to the Internet sales tax exemption, the conclusion from this evidence is clear: Georgia should ensure that taxable sales that occur via e-commerce are effectively brought into the sales tax base. Simultaneously, Georgia should use the increases revenues, on a static basis, to buy down other taxes that are more anti-growth – ideally Georgia's income tax. The next several sections present the theory and evidence illustrating why this is the case.

THE THEORY BEHIND LOW BROAD-BASED TAXES

Excessive taxation is detrimental to labor and capital, poor and rich, men and women, and old and young. Excessive taxation is an equal opportunity tormentor. In the short run, higher taxes on labor or capital lower after-tax earnings. In the longer run, mobile factors “vote with their feet” and leave the state, leaving immobile factors (such as low wage workers and land) to suffer the tax burden. The principals of ALME have produced decades of research demonstrating that states where taxes are high and/or increasing relative to the national norm experience declining relative income growth, declining relative population growth, rising relative unemployment, and declining housing values.

The mode of taxation is as important as the amount of taxation, as noted by 19th century American Economist Henry George:

*The mode of taxation is, in fact, quite as important as the amount. As a small burden badly placed may distress a horse that could carry with ease a much larger one properly adjusted, so a people may be impoverished and their power of producing wealth destroyed by taxation, which, if levied in any other way, could be borne with ease.*²²

While the world is dynamic and many of its ups and downs are outside the control of state government, there are a number of criteria for judging the efficacy of a state's tax system. These were summarized well by Henry George:

The best tax by which public revenues can be raised is evidently that which will closest conform to the following conditions:

- 1. That it bear as lightly as possible upon production—so as least to check the increase of the general fund from which taxes must be paid and the community maintained.*

²²Henry George, *Progress and Poverty*.

2. *That it be easily and cheaply collected, and fall as directly as may be upon the ultimate payers—so as to take from the people as little as possible in addition to what it yields the government.*
3. *That it be certain—so as to give the least opportunity for tyranny or corruption on the part of officials, and the least temptation to lawbreaking and evasion on the part of the taxpayers.*
4. *That it bear equally—so as to give no citizen an advantage or put any at a disadvantage, as compared with others.*²³

Due to sales tax revenues over the Internet not being collected, Georgia's tax burden has become distorted thus excessively retarding the state's growth potential. The theory of incentives provides the basis for establishing an optimal tax policy. Incentives can be either positive or negative. They are alternately described as carrots and sticks or pleasure and pain. Whatever their form, people seek positive incentives and avoid negative incentives. The principle is simple enough: If an activity should be shunned, a negative incentive is appropriate and vice versa.

In the realm of economics, taxes are negative incentives and government subsidies are positive incentives, subject to all the subtleties and intricacies of the general theory of incentives. People attempt to avoid taxed activities—the higher the tax, the greater their attempt to avoid. As with all negative incentives, no one can be sure how the avoidance will be carried out.

Changes to marginal tax rates are critical for growth because they change incentives to demand, and to supply work effort and capital. Firms base their decisions to employ workers, in part, on the workers' total cost to the firm. Holding all else equal, the greater the cost to the firm of employing each additional worker, the fewer workers the firm will employ. Conversely, the lower the marginal cost per worker, the more workers the firm will hire. For the firm, the decision to employ is based upon gross wages paid, a concept which encompasses all costs borne by the firm.

Workers, on the other hand, care little about the cost to the firm of employing them. Of concern from a worker's standpoint is how much the worker receives for providing work effort, net of all deductions and taxes. Workers concentrate on net wages received. The greater net wages received, the more willing a worker is to work. If wages received fall, workers find work effort less attractive and they will do less of it. The difference between what it costs a firm to employ a worker and what that worker receives net is the tax wedge.

TAX POLICY MATTERS FOR ECONOMIC GROWTH

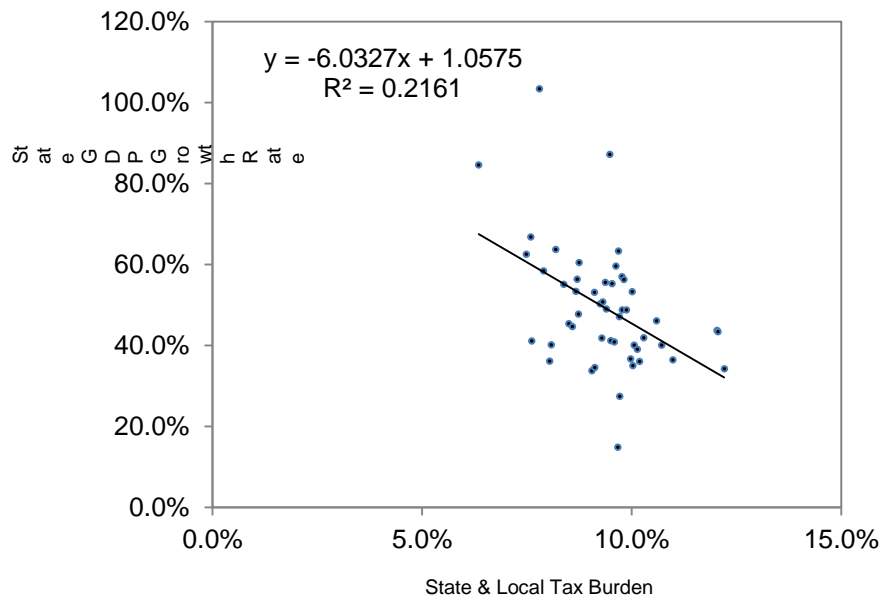
Consistently economic growth rates in the states with the highest government tax and expenditure burdens lags the economic growth rates in the states with the lowest government tax and expenditure burdens. Care must be

²³ Ibid.

taken in measuring a state's actual tax burden. For instance, dividing Alaska's total state tax revenues by total state personal income equals a burden of nearly 15% on average. However, because most of the revenues come from severances taxes, which are not paid by Alaskans, the actual tax burden paid by Alaska's residents is much lower. Similarly, states with a large number of visitors and tourists – such as Florida, Louisiana, or California – export a portion of the state's sales tax burden to these visitors and tourists. The correct tax burden measure for residents in each state, consequently, should adjust the state and local tax revenues for tax “exports” and tax “imports”. The Tax Foundation creates yearly estimates of each state's state and local tax burden that adjust state and local tax burdens for the tax exports and tax imports.²⁴

Figure 8 presents the relationship between the Tax Foundation's estimated state and local tax burden for 2009 (latest year available) compared to the 10 year growth rate in state GDP between 2001 and 2010. Each dot in Figure 5 represents a state. The location in the graph corresponds to that state's combination of its 10-year growth rate in state GDP between 2001 and 2010 and its estimated tax burden in 2009 (the latest data available). The downward sloping pattern to the dots confirms that there is in fact a very strong correlation between each state's state and local tax burden and the expected economic growth rate of the state.

Figure 8
State and Local Tax Burden in 2009 Compared to
State GDP Growth Rate between 2001 and 2010



Comparing just the 9 states with the highest tax burden to the 9 states with the lowest tax burden, the same pattern also holds – those states that imposed the smallest tax burden in 2009 experienced higher rates of economic

²⁴ Prante Gerald (2008) “Tax Foundation State and Local Tax Burden Estimates for 2008: An In-Depth Analysis and Methodological Overview”, *Tax Foundation Working Paper No. 4*, August 7; <http://www.taxfoundation.org/files/wp4.pdf>.

growth than both the average state and those states that imposed the largest tax burden.²⁵ Table 1 presents these results. Table 1 is consistent with the results in Figure 5 – those states that impose a larger tax burden on their population will experience slower economic growth while those states that impose a smaller tax burden on their population experience faster economic growth.

Table 1
The 9 States with the Highest and Lowest Tax Burden
10 Year Economic Performance between 2001 and 2010

State	State & Local Government Spending as % of Personal Income*	Gross State Product Growth	Non-Farm Payroll Employment Growth	Population Growth	Net Domestic In-Migration as a % of Population	State & Local Tax Revenue Growth***
Alaska	6.35%	84.6%	12.2%	12.1%	-2.0%	452.6%
Nevada	7.48%	62.6%	6.1%	28.9%	14.1%	100.1%
South Dakota	7.59%	66.8%	6.4%	7.3%	0.8%	51.2%
Tennessee	7.61%	41.1%	-2.8%	10.3%	4.2%	61.7%
Wyoming	7.80%	103.4%	15.2%	14.3%	4.3%	172.2%
Texas	7.89%	58.4%	8.7%	17.9%	3.4%	75.5%
New Hampshire	8.04%	36.1%	-0.7%	4.7%	2.5%	59.6%
South Carolina	8.07%	40.2%	-1.0%	13.8%	6.4%	45.2%
Louisiana	8.18%	63.7%	-1.6%	1.6%	-6.1%	70.4%
9 States with Lowest Govt. Spending	7.67%	61.89%	4.72%	12.34%	3.05%	120.94%
U.S. Average		49.27%	0.51%	8.63%	0.86%	70.23%
9 States with Highest Govt. Spending	11.02%	40.13%	-2.89%	3.78%	-2.48%	57.46%
New Jersey	12.21%	34.3%	-3.6%	3.6%	-4.8%	70.4%
New York	12.06%	43.4%	-0.4%	1.5%	-8.3%	68.3%
Connecticut	12.03%	43.8%	-4.3%	4.2%	-2.6%	55.3%
Wisconsin	10.98%	36.5%	-2.8%	5.1%	-0.1%	39.9%
Rhode Island	10.72%	40.1%	-4.1%	-0.5%	-3.8%	52.4%
California	10.59%	46.1%	-4.8%	8.0%	-3.9%	77.2%
Minnesota	10.29%	42.0%	-1.9%	6.4%	-0.9%	43.8%
Vermont	10.18%	36.1%	-1.6%	2.2%	-0.1%	64.5%
Maine	10.13%	39.1%	-2.5%	3.4%	2.3%	45.3%

Sources: Census, BEA, Tax Foundation and ALME calculations.

As the Henry George quote above indicates, it is not just the size of the tax burden that matters – although clearly it does. The manner in which the tax burden is levied also matters. The historical economic record clearly illustrates that economic growth is stronger in the states with no personal income tax and weaker in the states with the highest marginal personal income tax rates – in good times and bad (Table 2). It also illustrates that the states without an income tax exhibit less economic volatility given the accelerated rates of economic growth. The result is that, compared to the states with the highest personal income tax rates, the states without a personal income tax exhibit *more tax revenue stability* during bad economic times and *stronger tax revenue growth* during good economic times.

²⁵ 9 states are used for this comparison because below we also compare the states without a personal income tax – there are 9 – to the 9 states with the highest marginal personal income tax rate. For consistency across all of the comparisons, we refer to the top 9 and bottom 9 throughout this paper.

Table 2
Top Marginal Personal Income Tax Rate (State & Local)
The Nine States with the Lowest and the Highest Marginal Personal Income Tax (PIT) Rates
Ten-Year Economic Performance
(Performance between 2001 and 2010)

State	Top PIT Rate*	Gross State Product Growth	Non-Farm Payroll Employment Growth	Population Growth	Net Domestic In-Migration as a % of Population	State & Local Tax Revenue Growth***
Alaska	0.00%	84.6%	15.5%	12.1%	-2.0%	452.6%
Florida	0.00%	50.3%	0.2%	15.0%	6.5%	82.3%
Nevada	0.00%	62.6%	6.1%	28.9%	14.1%	100.1%
New Hampshire	0.00%	36.1%	-0.7%	4.7%	2.5%	59.6%
South Dakota	0.00%	66.8%	6.4%	7.3%	0.8%	51.2%
Tennessee	0.00%	41.1%	-2.8%	10.3%	4.2%	61.7%
Texas	0.00%	58.4%	8.7%	17.9%	3.4%	75.5%
Washington	0.00%	50.8%	3.0%	12.3%	3.4%	57.8%
Wyoming	0.00%	103.4%	15.2%	14.3%	4.3%	172.2%
9 States with no PIT**	0.00%	61.58%	5.73%	13.65%	4.12%	123.66%
U.S. Average		49.27%	0.51%	8.63%	0.86%	70.23%
9 States with Highest Marginal PIT Rate**	9.92%	44.04%	-1.07%	5.49%	-1.91%	61.79%
Ohio	8.24%	27.5%	-9.3%	1.2%	-3.1%	44.5%
Maine	8.50%	39.1%	-2.5%	3.4%	2.3%	45.3%
Maryland	9.30%	53.3%	1.7%	7.4%	-1.5%	67.0%
Vermont	9.40%	36.1%	-1.6%	2.2%	-0.1%	64.5%
New York	10.50%	43.4%	-0.4%	1.5%	-8.3%	68.3%
California	10.55%	46.1%	0.7%	8.0%	-3.9%	77.2%
New Jersey	10.75%	34.3%	-3.6%	3.6%	-4.8%	70.4%
Hawaii	11.00%	59.6%	5.7%	11.7%	-2.2%	72.1%
Oregon	11.00%	57.0%	-0.3%	10.4%	4.5%	46.8%

Sources: U.S. Bureau of Economic Analysis, U.S. Census, U.S. Bureau of Labor Statistics and ALME calculations.

Georgia levies a 6% top marginal personal income tax rate, which is right around the average top income tax rate. The lesson is clear: low personal income tax rates encourage economic growth while high marginal personal income tax rates discourage growth.

The same economic benefits do not accrue to those states with low sales tax burdens (measured as sales tax revenues per \$1,000 of personal income) compared to those states with high sales tax burdens. Table 3 illustrates that the states with the lowest sales tax burdens have lower state GDP growth, lower employment growth, and less population growth than the states with the highest sales tax burdens.

Sales taxes are, by definition, flat taxes on consumption. Consequently, these taxes should be less economically distorting than progressive income taxes. Additionally, several of the states with the highest sales tax burdens (Tennessee, Wyoming, and Washington) have no income tax. Because states need to raise money to provide needed public services, no income tax states rely on the sales tax to a greater extent – hence the higher sales tax burdens.

Table 3
State & Local Sales Tax Burden

**The Nine States with the Lowest and the Highest Sales Tax Burden
Ten-Year Economic Performance**
(Performance between 2001 and 2010)

State	Sales Tax Burden*	Gross State Product Growth	Non-Farm Payroll Employment Growth	Population Growth	Net Domestic In-Migration as a % of Population	Unemployment Rate
Delaware	\$0.00	40.9%	-1.6%	13.0%	5.2%	8.5%
Montana	\$0.00	60.5%	9.4%	9.2%	4.0%	7.2%
New Hampshire	\$0.00	36.1%	-0.7%	4.7%	2.5%	6.1%
Oregon	\$0.00	57.0%	-0.3%	10.4%	4.5%	10.8%
Alaska	\$7.31	84.6%	15.5%	12.1%	-2.0%	8.0%
Massachusetts	\$12.41	35.0%	-4.6%	2.1%	-4.7%	8.5%
Virginia	\$13.79	53.1%	3.2%	11.3%	1.7%	6.9%
Maryland	\$13.89	53.3%	1.7%	7.4%	-1.5%	7.5%
Vermont	\$14.31	36.1%	-1.6%	2.2%	-0.1%	6.2%
9 States with Lowest Sales Tax Burden	\$6.86	50.74%	1.45%	8.06%	1.06%	7.73%
U.S. Average		49.27%	0.51%	8.63%	0.86%	8.75%
9 States with Highest Sales Tax Burden	\$43.03	58.19%	4.25%	10.63%	1.90%	8.56%
Mississippi	\$35.16	47.8%	-3.5%	4.0%	-1.1%	10.4%
Arkansas	\$40.09	48.8%	2.0%	8.4%	2.5%	7.9%
Tennessee	\$40.59	41.1%	-2.8%	10.3%	4.2%	9.7%
Arizona	\$40.89	53.4%	12.3%	20.5%	10.7%	9.9%
New Mexico	\$42.35	55.1%	5.9%	12.6%	1.5%	8.4%
Louisiana	\$43.37	63.7%	-1.6%	1.6%	-6.1%	7.5%
Wyoming	\$47.50	103.4%	15.2%	14.3%	4.3%	7.0%
Hawaii	\$48.56	59.6%	5.7%	11.7%	-2.2%	6.6%
Washington	\$48.73	50.8%	3.0%	12.3%	3.4%	9.6%

Of course, factors other than taxes matter as well. Table 4 accounts for those other factors that also impact growth. Table 4 presents the latest results from the Laffer-ALEC State Competitive Environment Rank. The following 15 policy factors are included in the ALEC-Laffer State Economic Outlook Index:

- Highest Marginal Personal Income Tax Rate
- Highest Marginal Corporate Income Tax Rate
- Personal Income Tax Progressivity
- Property Tax Burden
- Sales Tax Burden
- Tax Burden from All Remaining Taxes
- Estate Tax/Inheritance Tax (Yes or No)
- Recently Legislated Tax Policy Changes
- Debt Service as a Share of Tax Revenue
- Public Employees per 1,000 Residents
- Quality of State Legal System
- State Minimum Wage
- Workers' Compensation Costs

- Right-to-Work State (Yes or No)
- Tax or Expenditure Limits

Table 4
Relationship between Policies and Performance:
Laffer State Competitive Environment Rank vs. 10-Year Economic Performance, 2000 to 2009

	Rank*	Gross State Product Growth	Personal Income Growth	Personal Income per capita Growth***	Population Growth	Net Domestic in-Migration as % of Population	Non-Farm Payroll Employment Growth***	2010 Unemployment Rate
Utah	1	62.2%	59.8%	35.2%	24.1%	2.0%	11.8%	7.7%
South Dakota	2	61.5%	56.1%	49.9%	7.5%	0.8%	7.3%	4.8%
Virginia	3	55.1%	54.5%	46.2%	11.0%	2.2%	4.4%	6.9%
Wyoming	4	19.8%	81.8%	70.7%	10.2%	4.1%	19.4%	7.0%
Idaho	5	48.2%	53.5%	33.4%	18.9%	7.4%	10.7%	9.3%
Colorado	6	45.9%	43.2%	30.8%	16.1%	4.1%	2.6%	8.9%
North Dakota	7	73.3%	60.6%	69.5%	0.9%	-2.9%	12.5%	3.9%
Tennessee	8	36.2%	41.8%	32.7%	10.4%	4.3%	-4.3%	9.7%
Missouri	9	30.8%	38.6%	34.2%	6.8%	0.7%	-2.9%	9.6%
Florida	10	51.6%	54.8%	40.1%	15.5%	6.9%	3.9%	11.5%
10 Highest Ranked States**	-	58.5%	54.5%	44.3%	12.1%	3.0%	6.5%	7.9%
U.S. Average	-	48.8%	47.8%	41.4%	8.6%	0.9%	1.5%	8.8%
10 Lowest Ranked States**	-	41.6%	39.9%	41.2%	4.5%	-2.4%	-0.9%	9.2%
Pennsylvania	41	38.4%	36.9%	40.5%	2.6%	-0.4%	-1.0%	8.7%
Rhode Island	42	42.0%	40.7%	47.1%	0.2%	-4.3%	-3.8%	11.6%
Oregon	43	46.2%	40.5%	30.9%	11.5%	4.6%	-0.6%	10.8%
Illinois	44	30.9%	33.1%	34.8%	3.8%	-5.1%	-7.0%	10.3%
New Jersey	45	36.9%	33.5%	39.4%	3.3%	-5.3%	-1.8%	9.4%
California	46	43.0%	38.0%	34.7%	8.7%	-4.0%	-2.3%	12.4%
Hawaii	46	58.8%	55.0%	50.7%	6.9%	-2.2%	8.6%	6.6%
Maine	48	39.2%	41.3%	44.4%	3.2%	2.0%	-0.7%	7.9%
Vermont	49	39.3%	41.8%	46.8%	1.9%	-0.5%	0.2%	6.2%
New York	50	40.8%	38.2%	42.6%	2.9%	-8.6%	-0.5%	8.5%

The Rank is a forecast based on a state's current standing in these 15 state-policy variables. Each of these factors is influenced directly by state lawmakers through the legislative process. Generally speaking, states that spend less — especially on income-transfer programs — and states that tax less — particularly on productive activities such as working or investing — experience higher growth rates than states which tax and spend more.

Our results illustrate that the states with high marginal income tax rates and highly progressive tax systems will perform worse than the average state. Conversely, the states with no personal income tax will perform better than average. The competitive tax position of each state influences people's behavior.

“VOTING WITH THEIR FEET, AND THEIR POCKETBOOK”: A HYPOTHETICAL EXAMPLE

Each state within the U.S. is analogous to a country with open borders. Just as the U.S. competes with other countries for the location of economic activity, states compete with each other for the location of factories, offices and jobs within the U.S. This competition is seen through tax-cutting battles between neighboring states and targeted tax incentives to encourage corporate relocation. As states seek to hold companies and workers within their borders and attract new ones, the winners and the losers will be separated by their ability to understand the competitive environment in which they exist and take steps to enhance their own state's appeal. Since monetary policy and federal fiscal policy are basically the same for all of the states, and inherent state advantages and disadvantages (such as climate, natural resources, distances to desirable areas, etc.) remain fairly constant over time, state and local fiscal policies are far and away the most important factors determining changes in the competitiveness and, hence, relative economic growth rates among the states.

As Tables 1 – 4 illustrate, the overall level of taxation in a state is also critical: Overtaxed states per se restrain growth, while states—even if they currently aren't overtaxed—that raise taxes inhibit growth. A reduction in tax rates reduces the cost of doing business in a state. This increases demand for the now less-expensive goods and services produced within the state. The higher demand for the state's goods and services will result in an increased profitability for businesses located within the state. Business failures will decrease in states with declining relative tax burdens and business starts will rise. If all else remains the same, a reduction in tax rates increases the return to capital and work effort, leading to increases in the supplies of capital and labor within the state.

Symmetrically, every state that raises its relative tax burden will find it difficult to retain existing facilities and to attract new businesses and workers. In tax-raising states, new business starts will decline and business failures will increase.

Competition among the many states results, in large part, from the ability of mobile factors of production to “vote with their feet” and relocate to political jurisdictions pursuing more favorable economic policies. Changes in tax rates have the greatest impact on the supplies of factors of production that are highly mobile. For example, a worker who is prepared to relocate to achieve a higher standard of living will be extremely sensitive to a change in his state's tax rates. By contrast, the supplies of immobile factors of production and/or real estate will be affected only slightly by tax rate changes. For example, capital in the form of a new manufacturing plant, as in the case of the example below, is highly immobile. Its operating level initially will be relatively unaffected by an increase in a state's tax rates. The major impact of state tax rate changes will be on the plant's after-tax profits and, ultimately, whether to close down or to remain open. The implication of this analysis is that taxes levied on mobile factors will be passed on to the immobile factors located within the state. Thus, the burden of state and local taxes may very well be different from its initial incidence.

Consider two hypothetical manufacturing companies with production plants located within just miles of each other. One is located in Georgia, and the other, virtually identical to the first, is located just across the border in Florida. Since we assume both companies sell virtually identical products in the U.S. market, competition will force them to sell their products at approximately the same price. Because each company's plant is separated by just a thin

and invisible state line, both have to pay the same interest cost on borrowings, the same after-tax wages to their employees and the same prices to their suppliers.

Now, consider what would happen if Georgia were to put through a large corporate income tax increase, while Florida held constant or lowered its corporate income tax rate. Because the market for the companies' product is highly competitive, the Georgia company would not be able to pass the tax hike forward to its customers in the form of higher prices. Likewise, the Georgia company would not be able to pass the tax hike backward onto its suppliers or employees. The Georgia firm would have to absorb the tax increase through lower after-tax profits. This drop in profits would be reflected by a fall in the Georgia company's stock price. Clearly, the identical competitor in Florida would benefit.

Whether the price of a commodity or factor of production is equilibrated across states on a pretax or after-tax basis depends on each item's mobility. This means that changes in tax rates will have two general effects: They will change the quantity and pretax price of mobile factors within the state and leave their after-tax rates of return unchanged; and they will change the rate of return of factors of production that cannot leave the state and leave the quantity within the state unchanged.

As time horizons lengthen following tax increases or tax cuts, the process of adjustment will incorporate the movement of capital and labor into or out of the state. This migration of factors of production will continue until after-tax returns for mobile factors within the state are equalized with after-tax returns for their counterparts elsewhere in the economy. The returns of state-specific immobile factors will reap the benefit or bear the burden of the result of the tax change.

THE DYNAMIC EFFECTS OF LOWER MARGINAL TAX RATES

It is always difficult to project the dynamic effects of supply-side policy changes – such as the elimination of the personal income tax. Estimating what will be as a consequence of a tax increase or tax cut is precarious to say the least. But failing to estimate the dynamic consequences of tax changes will always be wrong. With incredible clarity, none other than John Maynard Keynes described these difficulties:

When, on the contrary, I show, a little elaborately, as in the ensuing chapter, that to create wealth will increase the national income and that a large proportion of any increase in the national income will accrue to an Exchequer, amongst whose largest outgoings is the payment of incomes to those who are unemployed and whose receipts are a proportion of the incomes of those who are occupied, I hope the reader will feel, whether or not he thinks himself competent to criticize the argument in detail, that the answer is just what he would expect—that it agrees with the instinctive promptings of his common sense.

Nor should the argument seem strange that taxation may be so high as to defeat its object, and that, given sufficient time to gather the fruits, a reduction of taxation will run a better chance than an

increase of balancing the budget. For to take the opposite view today is to resemble a manufacturer who, running at a loss, decides to raise his price, and when his declining sales increase the loss, wrapping himself in the rectitude of plain arithmetic, decides that prudence requires him to raise the price still more—and who, when at last his account is balanced with naught on both sides, is still found righteously declaring that it would have been the act of a gambler to reduce the price when you were already making a loss.²⁶

There are several major tax changes that have occurred at the state and federal levels, which include California's Proposition 13, the Harding/Coolidge tax cuts, the Kennedy tax cuts, and the Reagan tax cuts. Each one of these case studies, presented in Appendix II, illustrated the positive economic impact pro-growth tax reform can have and provide further confirmation of the negative relationship between high progressive income tax burdens and economic growth. The real world experiences of California's Proposition 13 or the Harding/Coolidge, Kennedy and Regan tax cuts/reforms at the federal level illustrates the power of reducing marginal income tax rates. In Georgia, reforms to the state tax code should heed the lessons from the previous major tax reforms.

All tax changes create two primary economic effects. Economists deem these the income effect and the substitution effect. The income effect examines the changed behavior that directly arises from changes in income or wealth. For example, people will tend to increase the amount of consumption in response to an increase in income. The substitution effect examines the changed behavior that arises from changes in the relative costs of different goods or activities. For example, a switch in tax policy that reduces the costs of one good compared to another will provide incentives for people to consume more of the former at the expense of the latter.

Any proposed tax reform, will have both income and substitution effects. Pro-growth tax reforms reduce the penalty from additional work, savings, and investment and subsequently encourage increased:

- Work effort
- Work demand (and subsequently wages)
- Savings
- Investment and subsequently, greater capital accumulation

For any economic decision (i.e., work effort, saving, or investing) the marginal tax rate on the next dollar earned is crucial. To see why the marginal tax rate matters, imagine the work or investing incentives a person would face if the marginal tax rate on the next dollar earned was 100.0 percent. Under this scenario, every extra dollar a person earns would go straight to the government. Regardless if the tax rate on the previous dollar earned was zero, there is very little incentive for anyone to work, save or invest under such a punitive tax rate. Now imagine the work or investing incentives a person would face if the marginal tax rate on the next dollar earned was zero. Under this scenario, the investor or worker would get to keep the full value of the income or return that they earn. Obviously, the second scenario is more favorable to the worker or investor than the first.

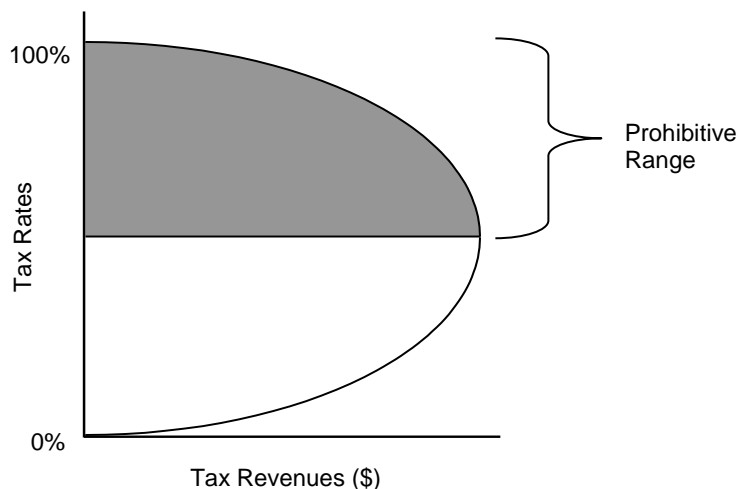
²⁶ Keynes, John Maynard (1972) *The Collected Writings of John Maynard Keynes*. London: Macmillan Cambridge University Press.

The proposed tax reforms should increase the after-tax income for the next dollar earned, raise the reward to work, and thereby increase the cost of leisure – the cost of leisure can be measured by the amount of other consumption goods that people could purchase (e.g., sending the kids to a better school or purchasing a high-definition TV) with the extra work effort. This opportunity cost to leisure increases following a decrease in the marginal income tax rate. Whenever a good’s cost increases, rational people will economize on its use. These incentives are encapsulated by the aforementioned substitution effect that induces people to work more. Because the substitution effect captures the trade-off between work and leisure, it is the marginal tax rate (the amount of extra consumption that a person must give up by not working) that is the appropriate incentive driver.

Government revenues are not immune from the incentive drivers either. Tax collections are a game of cat and mouse: the individual wants to maximize his return on labor (after-tax income) and the government wants to maximize revenues it receives from the working individual. It is clear that the government will raise no revenue by levying a zero percent tax on income; the government takes none of the income earned so government revenues are zero. Similarly, the government can expect to raise no revenue by levying a 100.0 percent tax on income; there is no incentive for anyone to work so taking 100 percent of nothing is still nothing. This effect (i.e. the Laffer Curve Effect) incorporates the economy’s dynamic realities and importantly illustrates that government revenues are not always raised when the marginal tax rate is increased, see Figure 9.

Government revenues can be significantly enhanced when tax reforms lead to positive growth-enhancing incentives that grow the tax base. The government will, consequently, share in the beneficial growth impacts. The resulting growth in the economy and consequently the consumption base will lead to a larger tax base and lead to even larger revenues over the aforementioned static estimates.

Figure 9: The Laffer Curve



APPLYING THE PRO-GROWTH LESSONS TO GEORGIA’S INTERNET SALES TAX

Based on the theory and empirical evidence presented above, there are three key recommendations with respect to how Georgia is currently not collecting the tax revenues owed on sales over the Internet:

- **Findings:** Tax systems that distort economic decisions create economic inefficiencies that diminish the benefits from otherwise pro-growth tax systems.
 - i. **Recommendations:** Broadening Georgia's sales tax base will increase its efficiency by removing a tax-created distortion favoring one type of retail sale (Internet sale from out-of-state retailers) over another (in-state retailers either over the Internet or from a brick-and-mortar store).

- **Findings:** Tax systems based on consumption taxes with low marginal tax rates produce better economic results. Georgia is losing its competitive edge due to the eroding sales tax base that has led to rising burdens from less competitive taxes – the personal income tax. The overall spending level also matters. Government spending is government taxation; therefore when government spending is too high, economic growth suffers.
 - i. **Recommendations:** Reversing Georgia's trend of a narrowing sales tax base coupled with rising tax burdens on personal income will produce positive economic results. Lowering the marginal tax rate on personal income will increase Georgia's economic competitiveness increasing the incentives to produce and invest in Georgia.

By ensuring that the static tax revenue increase from broadening the sales tax base is fully offset, our suggested reform is through a static reduction in Georgia's personal income tax rate, the overall government tax and expenditure burden is not increased.

- **Findings:** The size of the problem is large and growing. Based on data from the U.S. Census, Forrester Research, and the National Conference of State Legislatures, we estimate that Georgia's estimated e-commerce tax revenue losses were:
 - a. \$107 million in 2010;
 - b. Will be around \$129 million in 2012;
 - c. By 2020 we estimate that the total tax revenue loss will grow to between \$228 million and \$268 million; and,
 - d. The total potential tax revenues lost between 2012 and 2020 will be between \$1.6 billion and \$1.7 billion.

Recommendations: Georgia should redefine physical nexus such that the higher tax burden that exists elsewhere in Georgia's economy can be lowered and the incentive for Georgia residents to purchase products from non-Georgia businesses can be eliminated.

Based on the case studies presented above a re-arrangement of the tax burden that eliminates the personal income tax and broadens the sales tax base, including capturing the legitimate sales tax revenues from e-commerce should increase the overall incentives in Georgia's economy while simultaneously keeping the tax burden constant. The dynamic result should be improved economic performance.

Georgia's personal income tax burden, as well as the sales taxes on energy, unnecessarily inhibits economic growth in Georgia. Based on the results in Appendix I, the personal income tax burden has a larger negative and statistically significant impact on personal income growth compared to the sales tax burden, which has a negative but statistically insignificant impact on personal income growth.

Therefore, if Georgia were to expand its sales tax base to capture the estimated lost Internet sales tax revenues and offset these revenues with a reduction in the personal income tax rate, then total personal income would be \$658 million larger by 2020 than otherwise, and total number of jobs in Georgia would be higher by nearly 3,300.

This improved economic performance will be further enhanced by removing a tax incentive for Georgia residents to purchase goods from non-Georgia retailers. This redistribution of the retail market will create positive benefits for total economic activity in Georgia. While the precise amount of revenues that are being reallocated away from Georgia retailers is not known, we do have estimates and projections for the total size of Internet based sales from Georgia. Based on these estimates, for every 10% of Internet sales that is reallocated back to a Georgia retailer (either through an Internet sale or a sale at a physical store) total Georgia retail sales will increase by \$569.8 million to \$671.1 million by 2020 with an expected job impact of an additional 7,900 to 9,300 jobs.

Replacing the sales tax on energy in Georgia with an expansion of the sales tax base to include Internet sales is an idea that is currently under consideration. Imposing sales taxes on energy used for production increases the costs of products manufactured in Georgia creating a comparative disadvantage for Georgia based manufacturing. Additionally, sales taxes on production create a "tax-cascading" effect whereby sales taxes on final goods are, in part, taxing the sales tax levied on energy production. Levying taxes on taxes is a sign of a very inefficient and growth retarding tax system. Replacing the sales tax on energy in Georgia, consequently, is another pro-growth tax reform proposal.

Additionally, e-commerce projected to grow 10% per year through 2015 (see above). It is therefore unlikely that a strong rebound in the sales tax base will occur without ensuring that taxable sales over the Internet pay the sales tax that is legally due. These trends imply that without addressing this problem pressure will exist to raise income taxes even further to "make up" for the lower sales tax revenues. As the above analysis illustrates, these policies would have the opposite effect of the recommendations proposed here – a reduction in Georgia's economic competitiveness creating less personal income and employment growth over the next 10 years.

Georgia's economic landscape, consequently, is improved by a re-arranging the tax burden by eliminating the personal income tax and broadening the sales tax base by capturing the legitimate sales tax revenues from e-commerce that are currently not captured.

APPENDIX I: EMPIRICAL ESTIMATE OF SALES TAXES VERSUS PERSONAL INCOME TAXES

To empirically examine the potential impact from the proposed tax reform, we employed a pooled regression analysis. Pooled regression analyses are based on the use of panel data; a combination of time series and cross-sectional data. There are a couple reasons why we chose to use pooled regression techniques. The first reason is that with the use of panel data, one can better get a feel for the effects that typically cannot be observed using time series or cross-sectional data alone. Additionally, pooled regressions using panel data allows us to understand complicated behavioral models, such as the behavior of an economy in response to various sources of tax revenues.

The panel data set included a cross-section across all 50 states from the years 1978 to 2008. The endogenous variable under this framework was the year over year percent change in real personal income (PI). The exogenous, or independent, variables in the model were the percent change in real GDP (RGDP), the percent change in state population (POP), the corporate income tax burden (CINCB), the sales tax burden (SALESB) and the income tax burden (INCB). The various tax burdens are defined as the appropriate tax revenue source as a share of personal income.²⁷

The basic structure of the model is:

$$PI = \beta_1 + \beta_2RGDP + \beta_3POP + \beta_4CINCB + \beta_5SALESB + \beta_6INCB$$

Where,

$$\beta_{1i} = \beta_1 + \nu_i \quad i = 1, 2, \dots, 50$$

Given that the unobserved heterogeneity seemed to be uncorrelated with the regressors in the model, we ran the model using estimated generalized least squares controlling for random effects.²⁸ The results can be seen in Table A1.

²⁷ Ideally, the relevant marginal tax rate for the sales tax burden, corporate income tax burden, and personal income tax burden would be used. However, practically speaking the appropriate marginal tax rates is not available. Consequently, the analysis uses the average tax burden instead of the marginal tax burden. While, by definition of the average tax burden, personal income appears on both sides of the equation – the dependent variable and in the denominator of the independent variables. However, the corporate income tax revenues, sales tax revenues and personal income tax revenues (the numerator of the independent variables) are all positively related to personal income as well, offsetting these impacts.

²⁸ A Hausman Test was conducted with a Chi-Square statistic being equal to zero. As such, there was a failure to reject the null hypothesis suggesting that a random effects model is appropriate.

Table A1
Pooled Regression Output

Dependent Variable: PI Method: Pooled Least Squares Date: 06/24/11 Time: 09:24 Sample: 1978 2008 Included observations: 31 Cross-sections included: 50 Total pool (balanced) observations: 1550				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
β1	0.024108	0.004438	5.432147	-
RGDP	0.429454	0.013605	31.56675	-
POP	0.844567	0.065559	12.88264	-
SALESB	-0.265609	0.16747	-1.58601	0.11
CINCB	-0.287248	0.120071	-2.39232	0.02
INCB	-0.311789	0.127629	-2.44293	0.01
Fixed Effects (Cross)				
GEORGIA--C	-0.000318			
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.542239	Mean dependent var	0.032448	
Adjusted R-squared	0.525705	S.D. dependent var	0.026133	
S.E. of regression	0.017998	Akaike info criterion	-5.162308	
Sum squared resid	0.484255	Schwarz criterion	-4.972611	
Log likelihood	4055.789	Hannan-Quinn criter.	-5.091755	
F-statistic	32.7944	Durbin-Watson stat	2.090328	
Prob(F-statistic)	0			

APPENDIX II: TAX CUT CASE STUDIES

California's Proposition 13

In 1978, a force that had been building strength for several years finally brought a huge and dramatic change to the California economy. The public's frustration with high and rising state and local (particularly property) taxes found expression in the passage of Proposition 13—an initiative to limit state and local spending and taxation. In June 1978, Proposition 13 rolled the entrenched political establishment. Proposition 13 was a constitutional amendment that (1) set property taxes not to exceed 1% of a property's value (down from the 3.5% rate that existed at the time), (2) rolled assessed property tax values back to their 1976 levels, (3) allowed the base value to grow no more than 2% per year unless the property changed hands, and (4) required that all new or increased taxes be voted in by a supermajority of the electorate. Proposition 13 won in a landslide.

Following on Proposition 13's heels was an elimination of the state's inheritance tax, an indexing of the state's income tax, and an elimination of the state's business inventory tax. In 1979, Proposition 4 passed, locking the tax gains into place by requiring (1) spending to grow no faster than the sum of population growth and inflation and (2) all surplus revenues to be returned to the taxpayers.

Prior to the passage of Proposition 13 in March of 1978, Arthur Laffer wrote an economic analysis which was used by the United Organization of Taxpayers, detailing support for the passage of Prop 13.²⁹ This analysis included forecasts of what the initiative's effects would be, and almost all were spot on. In the aftermath of this tax revolt the previously chronically depressed California enjoyed a remarkable economic resurgence, outperforming the nation in nearly every conceivable measure. Naturally, the state's high tax burden fell like a stone, from \$124.57 to \$95.19 just one year later.³⁰ In 1977, California per capita personal income was 15% above the national average.³¹ Three years later, it was 18% above the national average.³² California's unemployment rate was 1.2 percentage points higher than the U.S. rate in 1977; in 1980 the California rate was lower than the national rate by 0.4 percentage points.³³ Between 1978 and 1988 the number of jobs in California increased by 32%, twice the 16% increase in jobs nationwide.³⁴ The population in California increased 24% from 1978 to 1988, over twice the national increase of 10.7%.³⁵

²⁹ Laffer, Arthur B. (1978) Revitalizing California's Economy: A Discussion of the Impact of Proposition 13. *United Organization of Taxpayers*. March 22.

³⁰ ALME calculation based on data from the U.S. Census, State and Local Government Finances, www.census.gov, and Bureau of Economic Analysis, www.bea.gov.

³¹ Bureau of Economic Analysis, www.bea.gov.

³² Ibid.

³³ Bureau of Labor Statistics, www.bls.gov.

³⁴ Bureau of Labor Statistics, www.bls.gov.

³⁵ U.S. Department of Census, www.census.gov.

And housing prices in the state soared. There is perhaps no better barometer for changes in the after-tax rate of return on assets than the price of the ultimate immobile factor: housing. In the second quarter of 1978, right before Proposition 13's passage, the median home price in California was \$70,677, which was 7.4 times per capita personal income in the state and 21% more expensive relative to the U.S.³⁶ Over the decade of the 1980s absolute and relative housing prices in California took off and never looked back. In the third quarter of 1981, the median home price in California was \$108,455, or 8.1 times per capita personal income and 42% more expensive relative to the U.S.; by the end of the decade, per capita personal income-adjusted housing prices in California were nearly double those for the U.S.³⁷

Prop 13 did what it was advertised to do. The historical record also shows that Proposition 13 did not have any long-term deleterious effect on the finances of the state's various levels of government. The Great California Tax Revolt more than paid for itself.

The private sector of the economy fared beautifully in the aftermath of Proposition 13, but opponents questioned whether this private sector success might have come at the expense of the public sector. They feared that post-Proposition 13 revenues would be absolutely gutted, forcing expenditure cuts well beyond the elimination of wasteful spending. Vital services, they said, would suffer, schools would have to close, and fire and police protection would no longer be adequate. But the fears of citizens concerned about maintaining adequate levels of state and local government services were allayed very soon after the changes were enacted.

First looking at revenues, Proposition 13 passed on June 6, 1978, one month prior to the end of FY1978. State and local property tax revenues fell \$5.0 billion, from \$11.0 billion in FY1978 to \$6.0 billion in FY1979, far short of the static revenue loss forecasts of \$7 billion. In addition, this drop was largely offset by higher revenues in every other major tax category. Total state and local revenues fell by only \$1.1 billion that first year.³⁸

Looking at the bigger picture, the combined state and local tax burden per \$1,000 of personal income fell from \$124.57 in FY1978 to \$94.93 in FY1982, a 24% reduction.³⁹ Yet in spite of the precipitous fall in the state's average tax rate, state and local revenues did not fall proportionately. In fact, total tax revenue grew by 19% from \$27.4 billion in FY1978 to \$32.5 billion in FY1982.⁴⁰ The tax base expanded more than enough to offset the reduction in tax rates. Even after adjusting for inflation, which can distort economic data during this high inflationary period, tax revenues fell much less than the reduction in the state and local tax burden.

³⁶ U.S. Bureau of Economic Analysis; Housing prices from California Association of Realtors, National Association of Realtors and the Office of Federal Housing Enterprise Oversight.

³⁷ Ibid.

³⁸ U.S. Census Bureau, State and Local Government Finances, www.census.gov.

³⁹ Ibid.

⁴⁰ U.S. Census Bureau, State and Local Government Finances, www.census.gov.

Economic expansion and higher property values led to healthy property tax growth over the following years, and by FY1985 property tax collections were back to their FY1978 \$11.0 billion level.⁴¹ The disruptive shortage of funds so widely anticipated never materialized.

Turning our attention to spending, total state and local direct general expenditures were not slashed between FY1978 and FY1979 as skeptics had predicted; in fact, expenditures increased 1.6% from \$36.9 billion to \$37.5 billion over this period.⁴² The tax reduction which had invigorated the state's economy so profoundly did not impose any significant reduction in government services.

The state's balanced budgets during this period reflect the remarkable success of combining lower tax rates and increased output, employment and production with restrained spending. California's experience following Proposition 13 exemplifies the types of pro-growth dynamics that follow sound tax reform. These effects have also been experienced at the federal level as well.

The Harding/Coolidge Tax Cuts

In 1913, the federal progressive income tax was put into place with a top marginal rate of 7%. Thanks in part to World War I, this tax rate was quickly increased significantly and peaked at 77% in 1918. Then, through a series of tax-rate reductions, the Harding/Coolidge tax cuts dropped the top personal marginal income tax rate to 25% in 1925.

While tax collection data for the National Income and Product Accounts (from the U.S. Bureau of Economic Analysis) do not exist for the 1920s, we do have total federal receipts from the U.S. budget tables. During the four years prior to 1925 (the year the tax cut was fully enacted), inflation-adjusted revenues declined by an average of 9.2% per year. Over the four years following the tax-rate cuts, revenues remained volatile but averaged an inflation-adjusted gain of 0.1% per year. The economy responded strongly to the tax cuts, with output nearly doubling and unemployment falling sharply.

Perhaps most illustrative of the power of the Harding/Coolidge tax cuts was the increase in GDP, the fall in unemployment and the improvement in the average American's quality of life over this decade. Table 4 demonstrates the remarkable increase in American quality of life, as reflected by the percentage of Americans owning items in 1930 that previously had only been owned by the wealthy (or by no one at all).

Table 4
Percentage of Americans Owning Selected Items

Item	1920	1930
Autos	26%	60%
Radios	0%	46%
Electric lighting	35%	68%

⁴¹ Ibid.

⁴² Ibid.

Washing machines	8%	24%
Vacuum cleaners	9%	30%
Flush toilets	20%	51%

Source: Stanley Lebergott, *Pursuing Happiness: American Consumers in the Twentieth Century*. (Princeton: Princeton University Press, 1993), p. 102, 113, 130, 137.

The Kennedy Tax Cuts

During the Depression and World War II the top marginal income tax rate rose steadily, peaking at an incredible 94% in 1944 and 1945. The rate remained above 90% well into President John F. Kennedy's term in office, which began in 1961. Kennedy's fiscal policy stance made it clear he was a believer in pro-growth, supply-side tax measures. Kennedy said it all in January of 1963 in the Economic Report of the President:

*Tax reduction thus sets off a process that can bring gains for everyone, gains won by marshaling resources that would otherwise stand idle—workers without jobs and farm and factory capacity without markets. Yet many taxpayers seemed prepared to deny the nation the fruits of tax reduction because they question the financial soundness of reducing taxes when the federal budget is already in deficit. Let me make clear why, in today's economy, fiscal prudence and responsibility call for tax reduction even if it temporarily enlarged the federal deficit—why reducing taxes is the best way open to us to increase revenues.*⁴³

Kennedy further reiterated his beliefs in his Tax Message to Congress on January 24, 1963:

*In short, this tax program will increase our wealth far more than it increases our public debt. The actual burden of that debt—as measured in relation to our total output—will decline. To continue to increase our debt as a result of inadequate earnings is a sign of weakness. But to borrow prudently in order to invest in a tax revision that will greatly increase our earning power can be a source of strength.*⁴⁴

President Kennedy proposed massive tax-rate reductions which passed Congress and went into law after he was assassinated. The 1964 tax cut reduced the top marginal personal income tax rate from 91% to 70% by 1965. The cut reduced lower-bracket rates as well. In the four years prior to the 1965 tax-rate cuts, federal government income tax revenue, adjusted for inflation, had increased at an average annual rate of 2.1%, while total government income tax revenue (federal plus state and local) had increased 2.6% per year.⁴⁵ In the four years following the tax cut these two measures of revenue growth rose to 8.6% and 9.0%, respectively.⁴⁶ Government income tax revenue not only increased in the years following the tax cut, it increased at a much faster rate in spite of the tax cuts.

⁴³ The White House (1963) *Economic Report of the President: Together With the Annual Report of the Council of Economic Advisors*. January.

⁴⁴ Kennedy, John F. (1963) *Special Message to the Congress on Tax Reduction and Reform*. January 24th.

⁴⁵ Bureau of Economic Analysis, National Income and Product Accounts, www.bea.gov.

⁴⁶ Ibid.

The Kennedy tax cut set the example that Reagan would follow some 17 years later. By increasing incentives to work, produce and invest, real GDP growth increased in the years following the tax cuts, more people worked and the tax base expanded. Additionally, the expenditure side of the budget benefited as well because the unemployment rate was significantly reduced.

Testifying before Congress in 1977, Walter Heller, President Kennedy's Chairman of the Council of Economic Advisors, summed it all up:

What happened to the tax cut in 1965 is difficult to pin down, but insofar as we are able to isolate it, it did seem to have a tremendously stimulative effect, a multiplied effect on the economy. It was the major factor that led to our running a \$3 billion surplus by the middle of 1965 before escalation in Vietnam struck us. It was a \$12 billion tax cut, which would be about \$33 or \$34 billion in today's terms, and within one year the revenues into the Federal Treasury were already above what they had been before the tax cut.

Did the tax cut pay for itself in increased revenues? I think the evidence is very strong that it did.⁴⁷

The Reagan Tax Cuts

In August of 1981, Ronald Reagan signed into law the Economic Recovery Tax Act (ERTA, also known as Kemp-Roth). ERTA slashed marginal earned income tax rates by 25% across-the-board over a three-year period. The highest marginal tax rate on unearned income dropped to 50% from 70% immediately (the Broadhead Amendment) and the tax rate on capital gains also fell immediately from 28% to 20%. Five percentage points of the 25% cut went into effect on October 1, 1981. An additional 10 percentage points of the cut then went into effect on July 1, 1982, and the final 10 percentage points of the cut began on July 1, 1983.

Looking at the cumulative effects of ERTA in terms of tax (calendar) years, the tax cut provided a reduction in tax rates of 1.25% through the entirety of 1981, 10% through 1982, 20% through 1983, and the full 25% through 1984.

As a provision of ERTA, Reagan also saw to it that the tax brackets were indexed for inflation beginning in 1985.

To properly discern the effects of the tax-rate cuts on the economy, we use the starting date of January 1, 1983, given that the bulk of the cuts were in place on that date. However, a case could be made for a start date of January 1, 1984, the date the full cut was in effect.

⁴⁷ Heller, Walter (1977) *Testimony before the Joint Economic Committee, U.S. Congress*; quoted in Bartlett Bruce (1978) *The National Review*, October 27.

These across-the-board marginal tax-rate cuts resulted in higher incentives to work, produce and invest, and the economy responded. Between 1978 and 1982 the economy grew at a 0.9% rate in real terms, but from 1983 to 1986 this growth rate increased to 4.8%.⁴⁸

Prior to the tax cut the economy was choking on high inflation, high interest rates and high unemployment. All three of these economic bellwethers dropped sharply after the tax cuts. The unemployment rate, which had peaked at 9.7% in 1982, began a steady decline, reaching 7.0% by 1986 and 5.3% when Reagan left office in January 1989.⁴⁹

Inflation-adjusted revenue growth dramatically improved. Over the four years prior to 1983, federal income tax revenue declined at an average rate of 2.8% per year, and total government income tax revenue declined at an annual rate of 2.6%. Between 1983 and 1986 these figures were a positive 2.7% and 3.5%, respectively.⁵⁰

The most controversial portion of Reagan's tax revolution was the big drop in the highest marginal income tax rate from 70% when he took office to 28% in 1988. However, Internal Revenue Service data reveal that tax collections from the wealthy, as measured by personal income taxes paid by top percentile earners, increased between 1980 and 1988 despite significantly lower tax rates.

⁴⁸ Bureau of Economic Analysis, National Income and Product Accounts, www.bea.gov.

⁴⁹ Bureau of Labor Statistics, www.bls.gov.

⁵⁰ Bureau of Economic Analysis, National Income and Product Accounts, www.bea.gov.