

PRO-GROWTH TAX REFORM AND E-FAIRNESS

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Foreword

By Colin Hanna

President, Let Freedom Ring

We believe that one of the economic fairness issues of our day is the fundamental imbalance embedded in our tax system that benefits online retailers at the expense of small, brick-and-mortar store owners who serve our communities by creating jobs and supporting the local economy. Our conservative principles inform our belief that the concept of e-fairness and the Marketplace Fairness Act is the right way to close a punitive tax loophole created by a Supreme Court decision handed down before Internet commerce became a part of Americans' everyday lives.

Dr. Arthur Laffer is one of the undisputed giants of conservative economic thought and the father of supply-side economics. He argues in *Pro Growth Tax Reform and e-fairness*—a study released in conjunction with our organizations—closing the online sales tax loophole is not only necessary to address a fundamental inequity in the free market, but also could help drive us back to the kind of economic growth we saw between 1960 and 1999.

Dr. Laffer and his co-author, Donna Arduin, point out that online sales are in fact already subject to state and local sales and use taxes. However, the vast majority of taxpayers fail to remit the tax owed with their income tax returns. Today's system is confusing and inefficient, and ultimately amounts to government's thumb on the free market scale.

The online loophole is economically destructive because "sales taxes and other broad-based tax regimes with fewer loopholes and lower rates are the least damaging taxes" to state and local economies

and to job creation. Furthermore, the collection of owed but uncollected taxes would allow states to use the additional revenue collected to lower the rates of a far more economically damaging tax, the personal income tax.

This approach will have tangible, positive economic effects for states that choose to pass the legislation into law. Predictably, savvy conservative governors are already charting the correct course.

In Wisconsin, Governor Scott Walker has signed into state law a provision that would dedicate any revenues from e-fairness legislation—including the Marketplace Fairness Act—and invest them in income tax reductions. Dr. Laffer finds that such legislation would increase Wisconsin's Gross State Product (GSP) by 2.17 percent over the next ten years, while creating 23,701 jobs for Wisconsinites over the same period.

Not to be outdone, Governor John Kasich of Ohio signed similar legislation—on the same day! Laffer projects an increase of 46,660 jobs in Ohio if Congress enacts e-fairness legislation to trigger the Ohio income tax reduction. There is no doubt that e-fairness combined with tax reform is a path to economic growth and job creation.

While Dr. Laffer finds that closing loopholes and lowering tax rates could finally help us recover from the economic turbulence suffered from the 2008 financial collapse, there are other reasons this issue is critical for our economy. It addresses a fundamental unfairness to small businesses around the country.

Currently, Americans who buy goods online are legally required to self-report their purchases and remit the sales taxes owed on their tax return. As noted earlier,

few do, giving online sellers a virtual subsidy of almost ten percent in some states. This special treatment runs counter to traditional free-market thinking, and does significant damage to our Main Street stores that employ millions of workers across the country.

Although we oppose plans to increase government revenues by raising taxes, we fully support efforts to fairly and uniformly enforce taxes already on the books. Compliance with tax law is not an unnecessary government intrusion; it is a fundamental principle of fairness and pro-growth economics, as Dr. Laffer's study proves with hard data. Most importantly, government shouldn't be picking winners and losers in the economy with the tax code—ending this practice will restore the basic tenets of the free market where retailers compete on price and service, not on government tax policy.

Many influential conservative leaders and thinkers are as convinced as we are by the argument in favor of e-fairness. Here's what some of those leaders have said:

"If the advantage of tax-free Internet commerce marginally closes out local industry, reforms are required... The mattress maker in Connecticut is willing to compete with the company in Massachusetts, but does not like it if out-of-state businesses are, in practical terms, subsidized; that's what the non-tax amounts to. Local concerns are complaining about traffic in mattresses and books and records and computer equipment which, ordered through the Internet, come in, so to speak, duty free." (William F. Buckley, "Get That Internet Tax Right," National Review Online, 10/19/01)

"Unfortunately, due to a loophole caused by the 1992 Quill Supreme Court decision, our independent

Christian retailers are put at disadvantage because Internet-only companies are not required to collect sales taxes. This un-level playing field has resulted in staffing reductions and the closing of many of our independent Christian retailers over the past few years, threatening the very existence of our membership and their ability to serve our Christian communities... As the saying goes, a sale, is a sale, is a sale, and our sales tax collection policies should be the same regardless if an item was purchased online or through one of our members' store fronts. Local independent businesses are a more important economic generator for our communities than out-of-state businesses seeking tax avoidance." (Curtis Risky, President of The Association of Christian Retail, in a letter to Senator Roy Blunt, April 2012)

"Current policy gives remote sellers a price advantage, allowing them to sell their goods and services without collecting the sales tax owed by the purchaser. This price difference functions like a subsidy. It distorts the allocation between the two forms of selling. The subsidy from not collecting tax due means a larger share of sales will take place remotely than would occur in a free, undistorted market." (Hans Kuttner, The Hudson Institute, "Future Marketplace: Free and Fair," May 2012.)

The arguments in favor of this legislation are overwhelming. It is not only fair to level the playing field for our local small businesses, but Dr. Laffer's study proves the concept is a crucial step towards greater growth and job creation through lower tax rates across the board. We hope the House will follow the Senate's lead and pass e-fairness legislation that corrects the current inequity and allows forward-thinking governors the opportunity to lower tax rates and jumpstart economic growth in their states.



Colin Hanna



Pro-Growth Tax Reform & E-Fairness

Summary and Conclusion

The principles behind addressing the online sales tax loophole and enacting policies that will jumpstart economic growth are straightforward:

- ▶ While online and other remote sales are subject to state and local sales and use taxes, they are often inaccurately perceived as “tax free” because the taxes legally owed on these purchases go largely uncollected by remote sellers due to a Supreme Court ruling that pre-dates the Internet.
- ▶ Sales taxes and other broad-based tax regimes with fewer loopholes and lower rates are the least damaging taxes to state economies and state employment.

- ▶ The 45 states with sales taxes could use the additional revenues from the collection of taxes on remote sales already in the sales tax base to lower other tax rates and reduce far more burdensome taxes. This more efficient system and lower taxes would, in turn:
 - ▶ Increase state prosperity and employment on a dollar-for-dollar basis resulting in the following increases in gross state product (GSP) and state employment over a decade based upon Internet sales as a percent of projected state retail sales in 2022.

Table 1
**Impact to Gross State Product and Employment of Wisely Using
 Additional Revenues from Taxing Internet and Remote Sales**

State	2022 Percentage Point Increase in 10-year GSP Growth by Wisely Using Additional Revenues from Taxing Internet and Remote Sales	Additional GDP in 2022, \$ billions	2022 Percentage Point Increase in 10-year Employment Growth by Wisely Using Additional Revenues from Taxing Internet and Remote Sales	Additional Employment in 2022
WA	4.63%	\$24.5	1.48%	59,599
HI	4.59%	\$4.9	1.47%	13,417
WY	4.17%	\$3.3	1.33%	6,020
NM	4.13%	\$5.0	1.32%	15,070
AR	4.13%	\$6.5	1.32%	20,600
LA	4.02%	\$17.6	1.29%	35,513
TN	3.98%	\$15.3	1.27%	45,891
SD	3.51%	\$2.2	1.12%	6,578
MS	3.44%	\$4.9	1.10%	16,266
AZ	3.38%	\$13.5	1.08%	39,344
NV	3.25%	\$7.0	1.04%	18,388
FL	3.03%	\$34.9	0.97%	107,474
MI	3.02%	\$12.7	0.96%	44,109
OK	2.98%	\$7.5	0.95%	21,348

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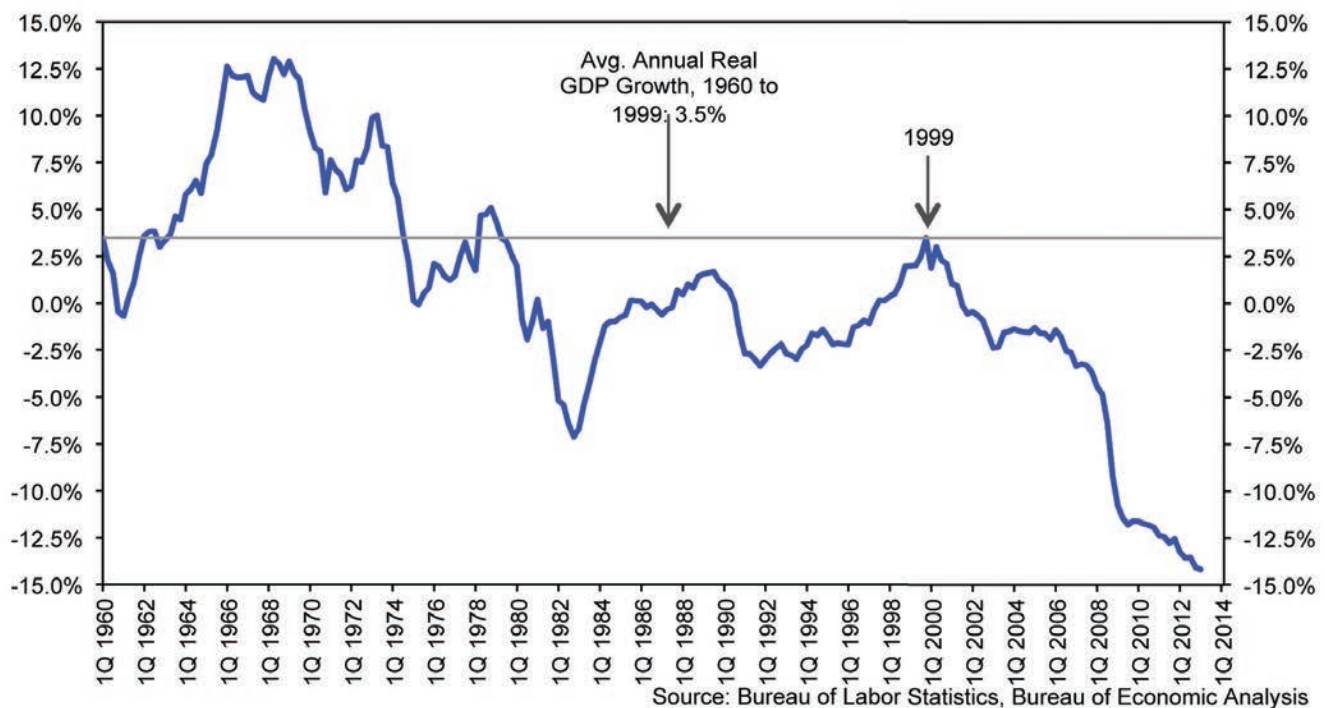
Table 1 cont.

State	2022 Percentage Point Increase in 10-year GSP Growth by Wisely Using Additional Revenues from Taxing Internet and Remote Sales	Additional GDP in 2022, \$ billions	2022 Percentage Point Increase in 10-year Employment Growth by Wisely Using Additional Revenues from Taxing Internet and Remote Sales	Additional Employment in 2022
IN	2.97%	\$11.2	0.95%	32,388
KS	2.91%	\$5.6	0.93%	16,956
TX	2.87%	\$62.9	0.92%	155,882
CA	2.82%	\$78.5	0.90%	180,974
ND	2.76%	\$2.2	0.88%	5,073
GA	2.75%	\$15.8	0.88%	50,642
UT	2.74%	\$5.9	0.88%	16,961
AL	2.66%	\$6.8	0.85%	21,732
NC	2.66%	\$17.6	0.85%	47,206
IA	2.62%	\$5.9	0.84%	16,155
CO	2.60%	\$10.1	0.83%	28,200
NY	2.58%	\$43.8	0.82%	97,297
ID	2.51%	\$2.3	0.80%	7,633
NE	2.45%	\$3.6	0.78%	9,760
MO	2.44%	\$8.2	0.78%	26,612
OH	2.38%	\$14.1	0.76%	46,660
SC	2.33%	\$5.4	0.75%	19,757
ME	2.25%	\$1.6	0.72%	5,756
MN	2.22%	\$9.0	0.71%	24,760
KY	2.19%	\$5.1	0.70%	16,313
WV	2.17%	\$2.2	0.69%	6,414
WI	2.17%	\$7.6	0.69%	23,701
RI	2.00%	\$1.5	0.64%	3,790
NJ	1.97%	\$13.2	0.63%	32,933
PA	1.85%	\$15.1	0.59%	43,803
CT	1.76%	\$5.5	0.56%	12,791
IL	1.75%	\$16.0	0.56%	40,223
MA	1.53%	\$8.3	0.49%	20,570
MD	1.48%	\$7.1	0.47%	17,476
VT	1.43%	\$0.5	0.46%	1,970
VA	1.43%	\$9.8	0.46%	23,582
AK	1.21%	\$1.1	0.39%	1,995
MT	0.00%	\$0.0	0.00%	0
OR	0.00%	\$0.0	0.00%	0
DE	0.00%	\$0.0	0.00%	0
NH	0.00%	\$0.0	0.00%	0
U.S. Total:		\$563.2		1,505,583

Reinvigorating the U.S. economy should be the top priority for federal and state leaders. After experiencing amazing real economic growth of 3.5% per year between 1960 and 1999, the economy's average annual growth rate has been only 2.2% since 2000. Without fundamental economic reforms both large and small, the consequences of subpar economic growth will be dramatic. The simple arithmetic tells it all. Due to the drop in the country's

economic growth rate, we are currently close to 15% poorer than we would have been had the pre-2000 growth rate persisted. And, less national income compounds the federal and state governments' fiscal problems. Slow growth leads to reduced tax revenues and more poverty, which, in turn, leads to greater need for government support programs. And deficits can't go on forever.

Figure 1
Percent Difference between Real GDP per Adult and Real GDP per Adult 1960 to 1999 Trend¹
(quarterly, 1Q-60 to 1Q-13, trend is 1960 to 1999)



Tax reforms that broaden the tax base and use the estimated increase in revenues (on a static basis) to lower marginal tax rates can help revitalize the U.S. economy and increase overall national wealth.² Lower tax rates reduce the economic distortions and inefficiencies created by the current outdated tax

system. Broad tax bases reduce people's opportunity to engage in tax evasion and tax avoidance. When used in tandem, tax reforms that reduce marginal tax rates while broadening the tax base encourage economic growth while ensuring that the government receives the necessary tax revenues.

1. Real GDP per adult is \$ per civilian non-institutional population 16 years old or over.
 2. Arthur B. Laffer, "The Complete Flat Tax," A. B. Laffer Associates, February 22, 1984. Arthur B. Laffer and Wayne Winegarden, EUREKA!, Pacific Research Institute, 2012.

Federal legislation can also empower states to implement pro-growth tax reform. States that rely on a low rate, broad-based consumption tax have been struggling with the problem of a declining sales tax base for many years. For states like Texas, Florida and Tennessee that have eschewed an income tax, this declining base is particularly troubling. There are several drivers behind this trend including inequities in the application of state sales taxes (e-fairness); certain states offering special exemptions to certain goods; and the bias toward taxing goods and not services, despite the service sector's growing share of the national economy.

E-fairness legislation addresses the inequitable treatment of different types of retailers based on whether the retailer is a.) located in the state (either a traditional brick and mortar store or an Internet/remote retailer with a physical presence in the state) or b.) an Internet retailer/remote seller that is solely located in another state. In-state retailers collect the sales tax that is owed at the time of purchase. Out-of-state retailers without in-state nexus are not obliged to collect the sales tax.

When in-state residents purchase from out-of-state retailers, they are legally required to report these purchases and pay the sales taxes owed—typically referred to as a use tax. As you can imagine, few people do. And just so you don't go away surprised, there are some in-state retailers who also evade their collection obligations and some out-of-state retailers that do collect taxes. You may recall the story of former Tyco International Chairman Dennis Kozlowski, who, among other things, evaded \$2+ million in state and local sales taxes owed to New York by having over \$10 million of paintings shipped to New Hampshire instead of to his home in Manhattan.³

This narrowing of the sales tax base has led to several inefficiencies that, on balance, diminish potential job growth and growth in gross state product (GSP). This Internet exemption creates a tax-based price advantage that encourages consumers to make

purchases from out-of-state retailers. Worse, the tax distortion incentivizes consumers to use in-state retailers as a showroom to evaluate purchases prior to ultimately buying the product from out-of-state Internet retailers. Such a practice reduces the need and costs for Internet sellers to put forth the effort to display products. Thus, states are incentivizing residents to burden in-state businesses with retailing costs, but ultimately purchase their goods from out-of-state businesses. Such incentives increase overall in-state retail costs and reduce overall in-state sales. It's a lose/lose situation for in-state retailers.

The practice of treating in-state and Internet retailers differently has also accelerated the decline in states' sales tax bases, particularly in light of the explosive growth of Internet-based sales. As opposed to effectively controlling government spending, however, the narrowing of the state sales tax base (as a result of Internet sales estimated to be in the hundreds of billions of dollars), has led to higher tax rates in some instances.

As with any pro-growth tax reform, the effective sales tax base should be broadened by treating out-of-state retailers on the same level playing field as in-state retailers, and the marginal tax rate should be reduced such that the total static revenues for the government are held constant or reduced. If done properly, expanding the state sales tax base by including Internet sales could reinvigorate economic growth.

Addressing the e-fairness problem from a pro-growth perspective creates several benefits for the economy. An inequity is addressed—all retailers would be treated equally under state law.⁴ It also provides states with the opportunity to make their tax systems more efficient and to increase competition amongst all retailers. May the best business plan win, without government picking winners and losers. As a consequence of more state by state efficiencies, the overall economic growth incentives of the U.S. economy will be improved.

3. Anemona Hartocollis, "Ex-Tyco Chief to Settle Tax Evasion Charges," *The New York Times*, May 13, 2006.

http://www.nytimes.com/2006/05/13/business/13tyco.html?_r=0

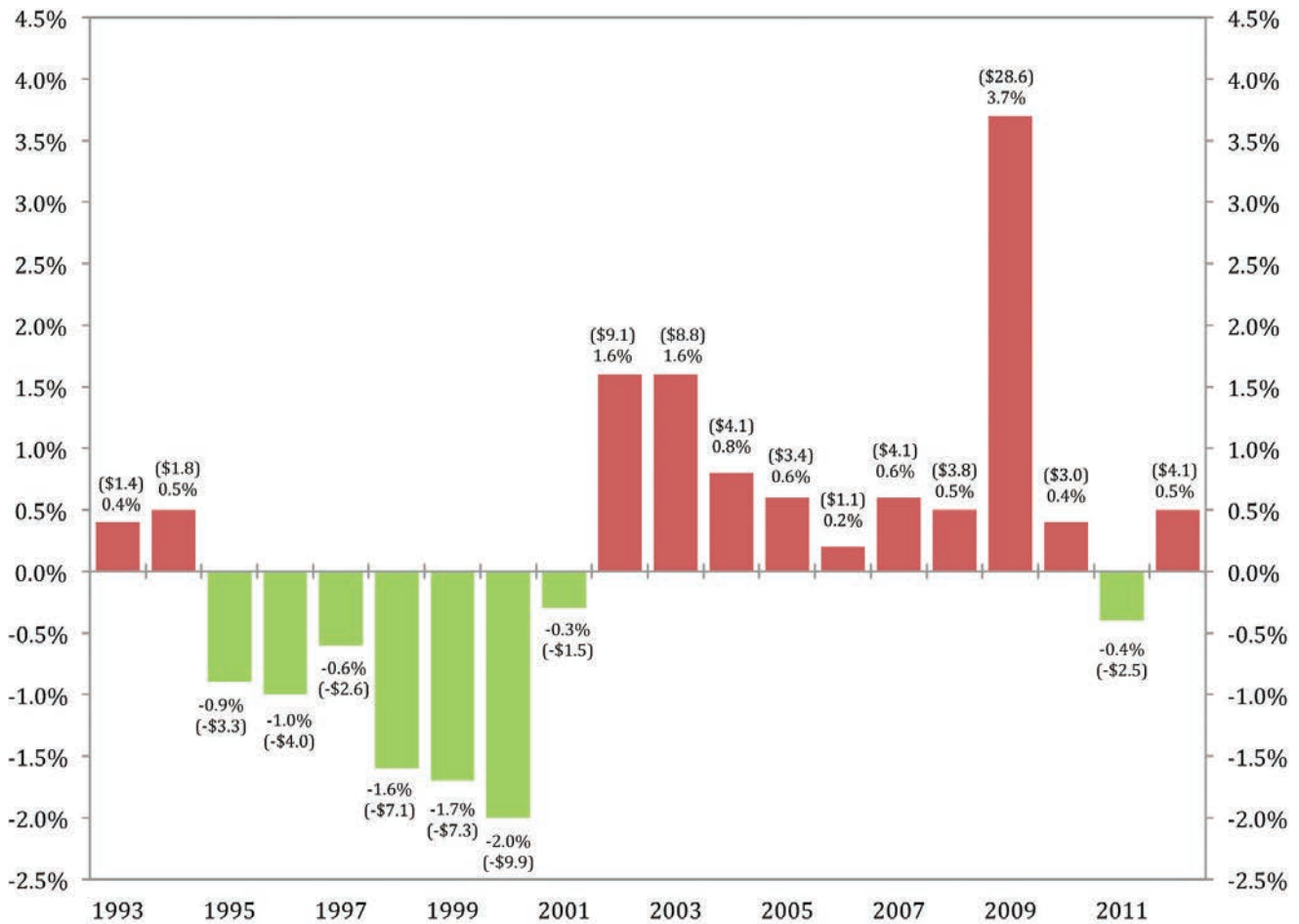
4. This has nothing to do with whether a sales tax or value-added tax (VAT) should be used.

E-Fairness and Fiscal Federalism

Many of our closest friends believe that treating all retail sales within a state—whether in-state or out-of-state, such as Internet based—as part of the appropriate sales tax base constitutes an overall tax increase. It is clear from the data that the declining

state sales tax base, some of which comes from Internet sales, has not been a means to control government spending or taxes (Figure 2). The chart below shows that states have increased taxes during the very time periods when non-taxed Internet sales were expanding.

Figure 2
State Tax Changes as a Percentage of Prior FY Tax Revenues⁵
 Annual, Period: 1993 to 2012, \$billions, calendar year changes to take effect the following fiscal year



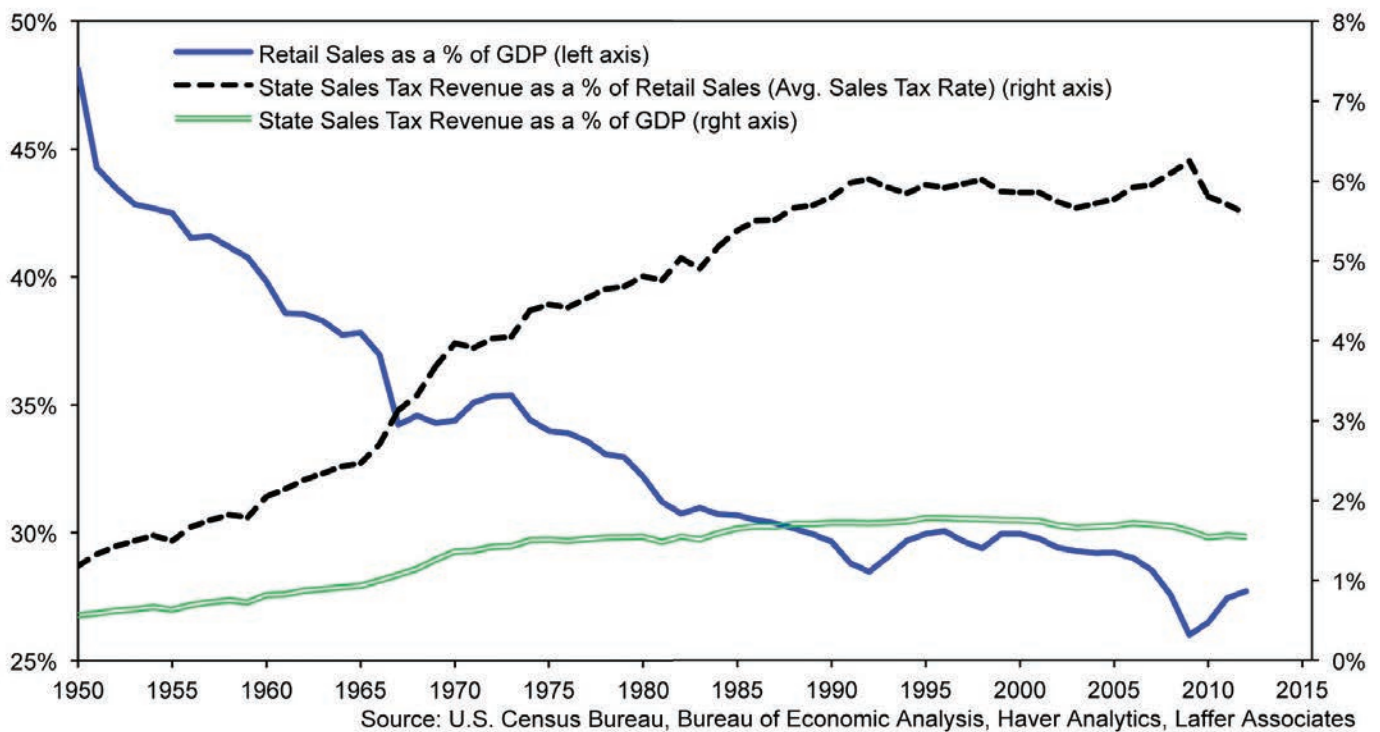
5. This chart shows the static effect of calendar year net state legislated tax changes on the following fiscal year's revenues. For example, the net tax increase of \$3.8 billion shown for calendar year 2008 is the static effect on FY2009 revenues (July 2009 through June 2010 for most states). Source: National Conference of State Legislatures.

Declining sales tax bases have been exerting constant pressure to raise marginal tax rates (see Figure 3). As Figure 3 illustrates, the total state sales tax base has been in decline for many years. However, the declining sales tax base has been more than offset by rising sales tax rates (e.g. higher marginal tax rates), which have had the effect of increasing sales tax revenues as a share of gross state product. In fact, based on our estimates of the states' sales tax bases (retail sales as a percent of GDP), the total state sales tax base is down 19.4% from 1970 to the present, while the average state sales tax rate (state sales tax revenue as a percent of retail sales) has increased 40.7% over the same time period. In other words, states have been increasing the marginal sales tax rate to offset the declining sales tax base and to increase total sales tax revenues to around 1.5% of gross state product.

Rising tax rates, whether at the federal or state level, are detrimental to national economic growth.

With respect to the economic impact of the e-fairness proposal, states should not use an expansion of the total sales tax base as an excuse to raise the overall tax burden. In fact, as Figure 3 illustrates, the declining sales tax base has already encouraged larger percentage rises in the state sales tax rates; consequently, the correct economic policy would be to expand the states' sales tax bases, but reduce marginal tax rates elsewhere to keep total state government revenues flat as a share of GSP. Simply put, fixing inequities in the tax system, through such measures as broadening the tax base, should not be used to justify an expansion of the size of government.

Figure 3
The Decline in the Estimated Sales Tax Base as a Percentage of Gross State Product
Has Encouraged Rising Average State Sales Tax Rates In Order to Increase Total Sales Tax
Revenues as a Share of Gross State Product
(All States, 1950 to 2012)ⁱ



Opposition to addressing the inequities inherent in Internet taxes has arisen because some states may use the problem of e-fairness as an excuse to raise their state's overall tax burden. However, the states do not need Washington D.C.'s permission to change their tax rates. Just look at recent tax increases in Illinois (an increase of the state's income tax rate from 3% to 5% and an increase in the state's corporate income tax rate as well), Minnesota (new personal income tax bracket above \$150,000 with a rate of 9.85% starting in 2014), California (Governor Jerry Brown's new 13.3% top personal income tax rate retroactive to Jan 1, 2012 from Proposition 30), New York (raised top income tax rates), Maryland (raised top income tax rates), Vermont, Massachusetts (Governor Deval Patrick has proposed higher tax rates on high income earners) or Connecticut (raised top income tax rates) if you don't believe us. These states know how to raise taxes, believe you me. Some states—such as North Carolina, Kansas (cut the top state income tax rate from 6.45% to 4.9%), Oklahoma (will cut the top personal income tax rate from 5.25% to 5% effective 2015), and Ohio (which recently repealed its estate tax),—have been proposing pro-growth tax reforms. More importantly, governors in Wisconsin and Ohio recently signed into law budgets that earmark all revenue from e-fairness legislation towards reducing income taxes in their state, a win-win scenario. Implementing different tax policies in different states is the essence of fiscal federalism—states should have the power to experiment with alternative approaches to fiscal policy. In other words, states should have the right to be wrong.

The value of fiscal federalism does not diminish simply because some states may implement policies that are detrimental to economic growth, or in this case, use the need to address an inequity in the application of the sales tax as an excuse to expand the size and scope of government. Additionally, mistakes at the federal level should not be justified because states might exercise the freedom of fiscal federalism and, in so doing, implement the right policy in the wrong way.

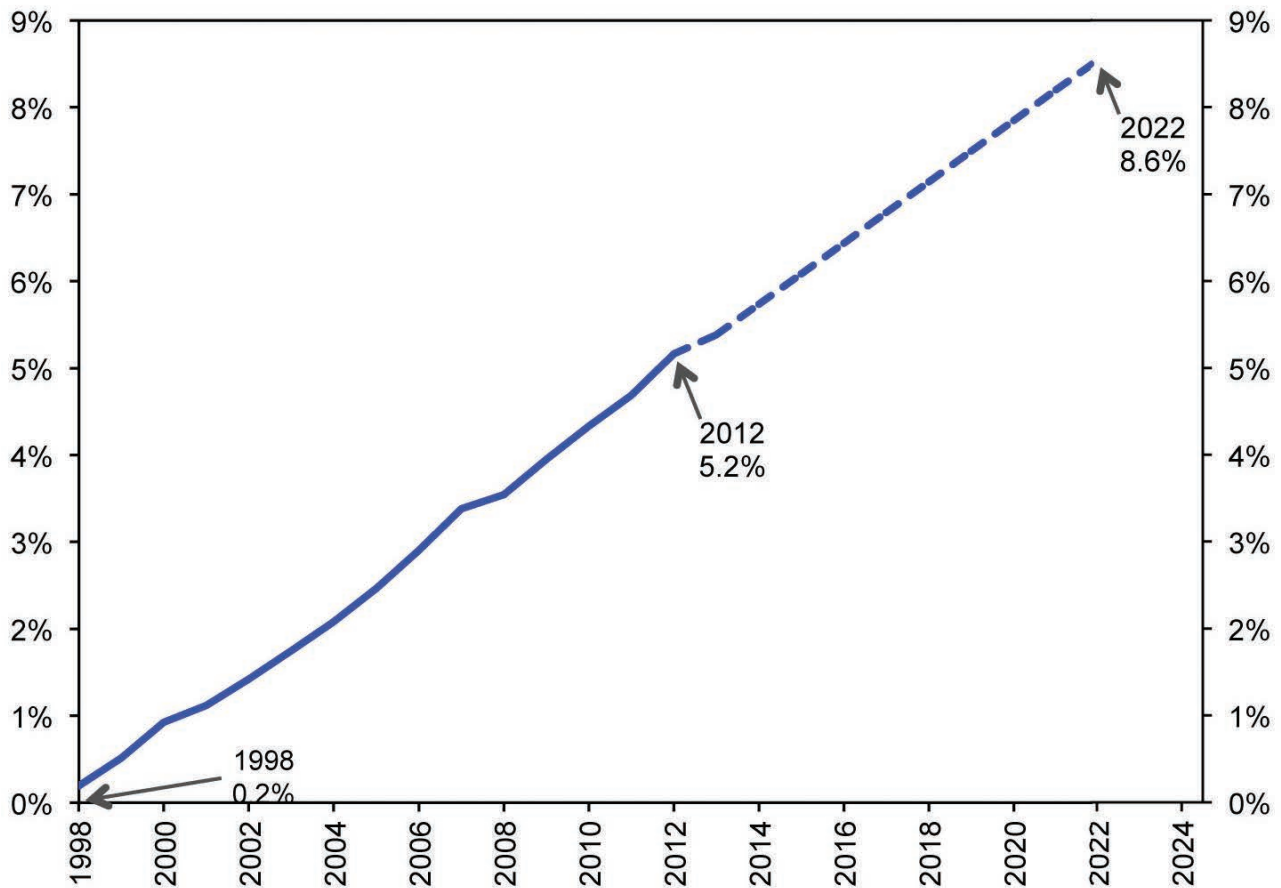
As we describe below, states are already using Internet sellers to collect sales taxes where the retailers have a nexus in the state. Furthermore, costs have been an important justification for exempting out-of-state retailers. These costs have declined significantly due to advances in technology. Legislation under consideration in Congress would lower the compliance costs further due to the requirement that states provide the necessary tax compliance software for Internet retailers. Due to the declining costs of compliance coupled with the large economic consequences created by the current Internet tax exemption, there is a strong case for out-of-state retailers to collect the state sales taxes that are owed on purchases in the same manner as local retailers.

The Economic Consequences of a Declining Sales Tax Base and Rising Tax Rates

The state sales tax burden, i.e. sales tax revenues as a share of GDP (see Figure 3), has been concentrated on a declining sales tax base—retail sales as a percentage of GDP (see Figure 3). Current purchasing trends (e.g. the growing market share of Internet sales versus brick and mortar retail sales) will for sure continue if Internet sales remain effectively tax exempt. Figure 4 shows the growth in e-commerce's share of the retail trade as estimated by the U.S. Census.

Over the past 13 years, while the sales tax base has been shrinking, e-commerce has been steadily growing. But clearly, factors other than e-commerce sales are at work as well. E-commerce sales account for only a portion of the loss of taxable retail sales. Linearly projecting out the current growth path of e-commerce, by 2022, 8.6% of all retail trade sales will be conducted via e-commerce, which is almost 60% larger than total sales a decade prior.

Figure 4
Rising E-Commerce Share of Retail Trade: E-Commerce as a % of Retail Trade
(All States, 1998 to 2012 actual, linear projection for 2013-2022)



Bruce et al. have produced a series of papers that estimate state and local sales tax losses arising from e-commerce for the District of Columbia and 45 states (remember there are five states without general state sales tax: Alaska—which does have local sales taxes—Oregon, Delaware, New Hampshire and Montana).ⁱⁱ Bruce et al. use both a baseline forecast and an optimistic forecast for e-commerce growth. 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 cumulative loss of \$52 billion.ⁱⁱⁱ According to Forrester Research, U.S. online retail sales grew 12.6% in 2010, reaching \$176.2 billion. With an expected 9.6% compound annual growth rate from 2010 to 2022, U.S.

e-commerce is expected to reach \$530 billion in 2022.^{iv} Second, our analysis of trends in online retailing confirms the Bruce et al. and Forrester Research assessments, albeit at a lower 2012 estimate than the Bruce 2012 estimate. Retail sales over the Internet represent a growing erosion of states' sales tax base projected out through 2022 (see Figure 4).

The basis for our estimate is the U.S. Census E-Stats, which the U.S. Census uses to measure the electronic economy.^v According to the U.S. Census, back in 1998, Internet retail sales held a trivial share of total retail sales in the U.S. (around 0.2%). However, as Figure 4 illustrated, 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.^{vi} While a constant percentage linear growth can't last forever, it sure fits well over the recent past. Some estimates are predicting faster growth. The aforementioned Forrester Research estimates predict a faster 9.6% compound annual growth rate, yet this is still not as fast as the growth in online sales may actually turn out to be.

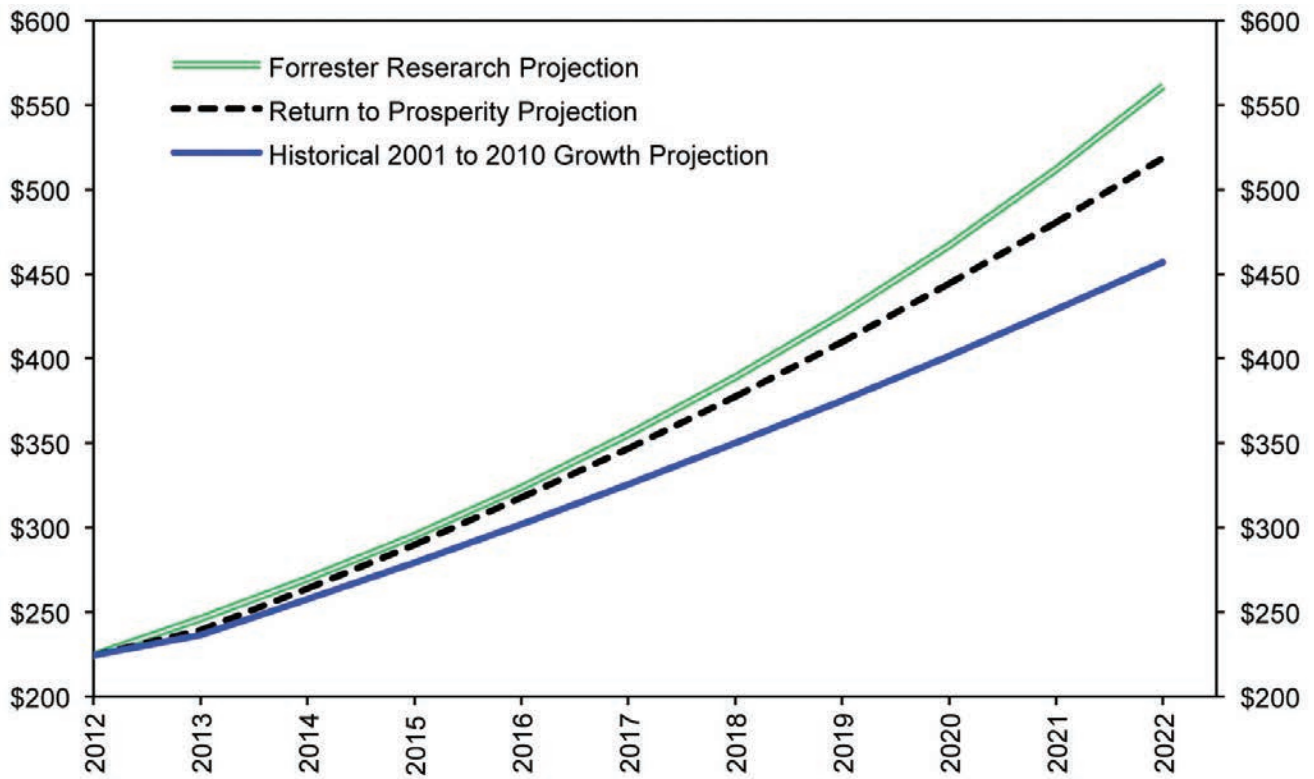
There is also another estimate that we feel is both important and realistic. Since 2000, the U.S. has gone through a period of decidedly bad economics—tax increases, out-of-control government spending, regulatory overreach, damaged trade relations and wildly expansive money creation. The consequence of these policy aberrations has been the decade plus-long underperformance of the U.S. economy.

With the political changes reflected in the states and critical elections in 2014 and, of course, in 2016 as well, there is a significant possibility that the U.S. will return to sound economic policies, and, as a result, economic growth will return to its pre-2000 rate. We will use a growth rate of 3.5%, which reflects the growth between 1960 and 1999 (see Figure 1) as an alternative projection of retail sales over the coming years.

Total state taxable sales are estimated to be \$4.3 trillion in 2012, based on quarterly data from the U.S. Census.^{vii} Of these total sales, 5.2% (see Figure 4), or \$224.4 billion were categorized as e-commerce. In order to determine the lost state sales tax revenues through 2022 due to Internet taxable sales not being taxed, we need to estimate the total Internet retail sales through 2022. We estimated the total U.S. Internet sales tax base between 2013 and 2022 using three different methods that are summarized in Figure 5:

- ▶ The average growth rate in total taxable retail sales (\$4.3 trillion) between 2001 and 2010 (2.2% per year) coupled with the growth in the retail Internet market share of 0.35 percentage points per year (2022 number is 8.6%) yields taxable Internet retail sales in 2022 of \$460 billion,
- ▶ Forrester Research estimated 9.6% average growth in Internet sales applied to estimated Internet retail sales through 2022, yielding additional taxable retail sales in 2022 of \$560 billion, and
- ▶ An additional estimate based on a return to prosperity being achieved in the U.S. economy over the period 2013 to 2022 (3.5% growth) yielding \$520 billion in additional retail sales in 2022.

Figure 5
Projected Retail Internet Sales
(\$ billions, 2012 Estimate, Projection from 2013 to 2022)



Based on current market trends and forecasts, we estimate that total Internet retail sales will grow from \$224.4 billion to a range of \$460 billion to \$560 billion by 2022. While these sales are potentially subject to the state sales tax, the questions are (a) how many of these sales are intended to be part of the sales tax base, i.e. do they or do they not fit into categories that are exempted even for in-state sales?; (b) how many of these sales that are intended to be part of the sales tax base are not currently paying sales tax to the government; and, (c) what proportion of these non-tax submitting taxable sales can be captured. There is also the question of how these sales would change if their tax status changes.

Third, according to a National Conference of State Legislatures analysis, total uncollected taxes on goods

and services sold via the Internet were \$8.6 billion in 2010.^{ix} Based on an average state sales tax rate (state sales tax revenues ÷ retail sales) of 5.81%, this equates to a national non-taxed Internet sales tax base of \$150 billion.^x The \$150 billion represents close to 100% of the total estimated 2010 Internet retail sales base of \$166 billion, based on the U.S. Census 2010 estimated Internet retail sales base.

As an aside, it should be noted that Internet sales are not the only category of remote sales leading to the gap between theoretically taxable sales and actual sales taxes paid. It is often the case that non-electronic sales between states also go untaxed—remember our Dennis Kozlowski story on page four. In a study by Fox et al.,^{xi} estimated uncollected taxes

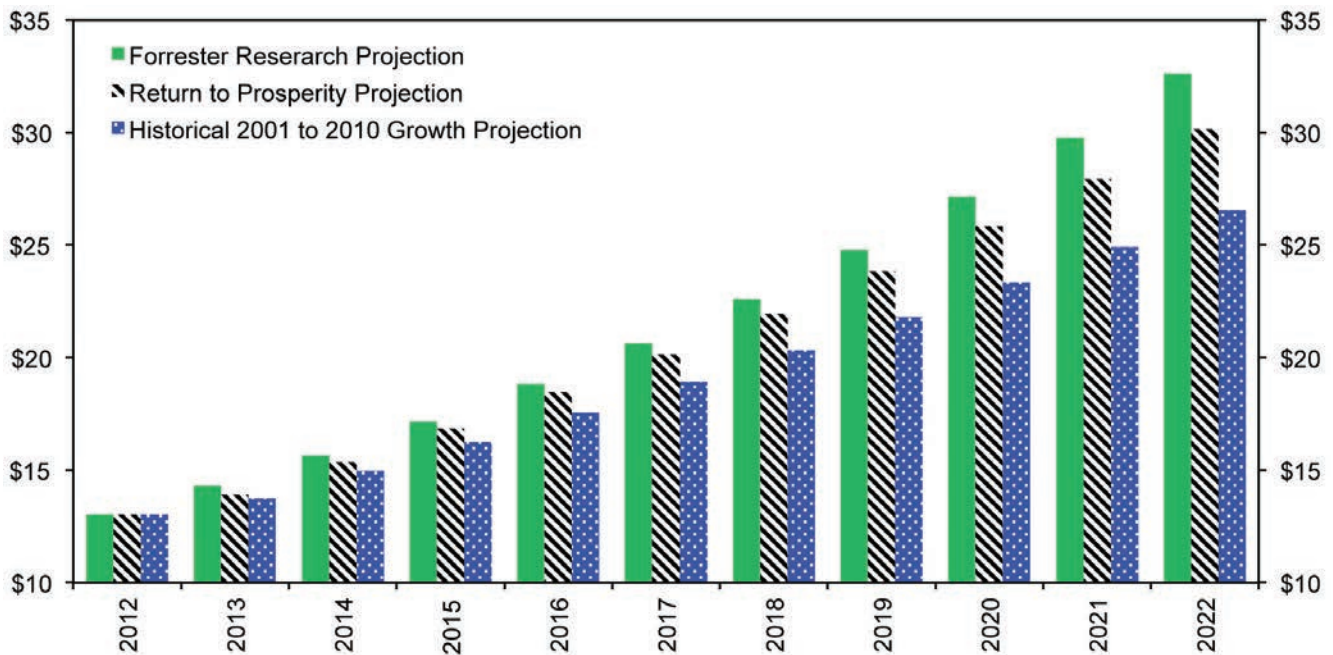
on non-electronic sales add up to \$11.9 billion for 2012 alone.

Apportioning total e-commerce sales to each state by its share of national retail sales, the estimated Internet sales tax base multiplied by the appropriate state sales tax rate provides an estimate of revenues that each state can capture (see Figure 6.) To state the obvious, the actual implementation of taxing Internet sales is far more complicated and less certain than our estimates imply.

Overall, in 2012 our estimates show that states are currently losing \$13 billion 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 \$27 billion and \$33 billion by 2022 without corrective action.

As mentioned, there is an also enormous amount of taxes due, but not paid, on non-electronic remote sales. By our estimates of U.S. retail sales growth, according

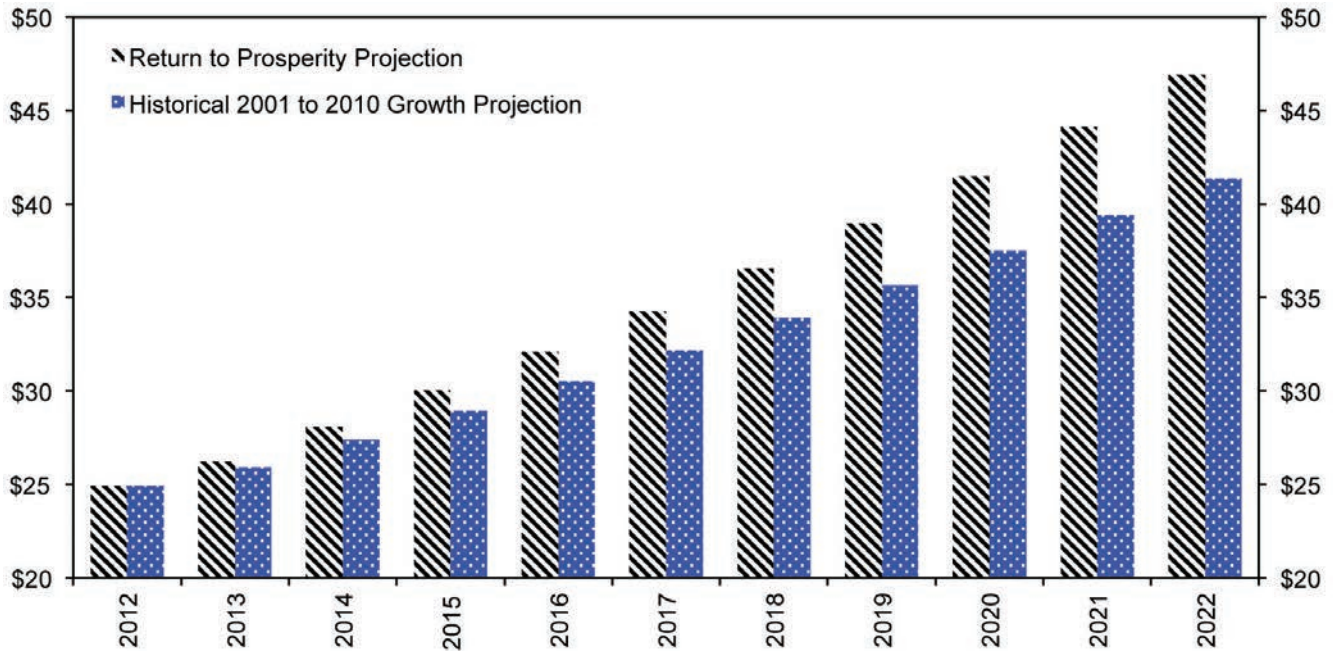
Figure 6
Projected Retail Internet Sales Tax Revenues Lost
(\$ billions, 2012 Estimate, Projection from 2013 to 2022)^{xii}



to the 2001 to 2010 average growth and the 1960 to 1999 return to prosperity projections, we are currently losing a total of \$25 billion in potential sales tax revenue due to both Internet retail sales taxes going uncollected and unpaid use taxes on non-electronic

remote sales. Without changes being made, we estimate total uncollected sales taxes on e-commerce sales and non-electronic remote sales to grow to between \$41 and \$47 billion by 2022 (Figure 7.)

Figure 7
Projected Retail Internet and Remote Non-Electronic Sales Tax Revenues Lost
(\$ billions, 2012 Estimate, Projection from 2013 to 2022)^{xiii}



Sales Taxes and the Internet: How We Got Here

The current sales tax system creates an incentive for 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 state sales taxes, whereas all in-state based businesses are required to do so. Therefore, a resident who purchases \$100 worth of books at a local retailer must pay \$106 for the purchase—the \$100 worth of books plus a \$6 state sales tax (assuming an average state sales tax rate of 6% and ignoring any local sales tax add-ons.) That same 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 the same state from the resident's perspective. While the resident is supposed to remit the \$6 tax (in the form of a use tax) to the state, pragmatically speaking this rarely occurs.

While we use the example of Internet sales, there are other circumstances where a state loses its sales tax. If someone buys something from an out-of-state seller and has the product shipped to his domicile, the out-of-state seller will often forgo the sales tax. There are even some circumstances where an in-state buyer from an in-state seller asks to have the product shipped to an out-of-state location. All of these should fall under the Internet provisions.

For local businesses, these distortions mean tax discrimination. And, there is evidence that these distortions change consumer behavior. For instance, Anderson et al (2009) found "...that the obligation to collect sales taxes has a significant effect on customer behavior."^{xiv} For the overall economy, these distortions mean that other state taxes 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, total economic efficiency is less than it should be.

Sales taxes modify behavior amongst the many counties in California. In evaluating Propositions A and B in Orange County following its bankruptcy in 1994, we found that counties that raised their sales tax rates even by as little as ½¢ were documented to lose retail sales to neighboring counties where rates did not rise.

A study of Delaware by one of the authors back in the late 1970s found that Delaware's high income tax and no sales tax policy combined with Pennsylvania's high sales tax and no income tax policy led to the not-so-surprising conclusion that Delaware had the highest retail sales ratio to state gross state product in the nation and Pennsylvania had the lowest ratio. It wasn't until 1971 that Pennsylvania adopted the progressive income tax it now has.

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.^{xv}

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 the Constitution. "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."^{xvii}

E-commerce via the Internet was a fledgling industry back in 1992 when the *Quill* decision was made. In comparison, e-commerce is a major and growing sales venue today. 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 many state and local jurisdictions.^{xviii} 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.^{xix}

Importantly, 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, based on the burdens on interstate commerce at a time when computers were not deployed throughout the economy, 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 evaders as a result of this decision. Whenever tax laws lead to widespread evasion, the very fabric of voluntary compliance weakens. And, the tax revenue cost of this decision is growing. Yet Congress has so far chosen not to change 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."^{xx} In states like New York, where such legislation has been enacted, the laws cite thousands of affiliates providing in-State addresses, although the addresses have not been verified.^{xxi}

According to 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.

States arguably now have a clearer path toward reform, and action on the state level is expected to continue or increase. These events have given momentum to the federal effort to resolve the issue of collecting tax from online purchases, which is currently moving through Congress as of this writing.

The Internet Tax Advantage and a Pro-Growth Tax Reform

Taxes should be guided by the following principles as expounded by economist Henry George well over 100 years ago:⁶

THE BEST MEANS of raising public revenues will be one that meets these conditions:

1. *It should bear as lightly as possible on production—least impeding the growth of the general fund, from which taxes must be paid and the community maintained.*
2. *It should be easily and cheaply collected, and it should fall as directly as possible on the ultimate payers—taking as little as possible from the people beyond what it yields the government.*
3. *It should be certain—offering the least opportunity for abuse and corruption, and the least temptation for evasion.*
4. *It should bear equally—giving no one an advantage, nor putting another at a disadvantage.*

Such a tax system is a roadmap to improving the economic incentives created by state tax systems.

The benefits of a pro-growth tax system include increased economic opportunity at all income levels

6. Henry George, *Progress and Poverty*, New York: Robert Schalkenbach Foundation, 1998 (1879 repr.).

and greater tax revenue stability such that the revenue boom-bust cycle is reduced. Tax systems that have high tax rates or narrow tax bases or are overly-complicated discourage economic activity, and don't collect much money either.

Excluding e-commerce sales or a myriad of other exclusions adopted by so many states inefficiently narrows the sales tax base and creates economic distortions by taxing similar economic activities 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 without a sales tax than it is on purchases with a sales tax.

By allowing Internet-based sales taxes to be uncollected at the retail level, the states' sales tax base is being inefficiently narrowed as residents make a greater amount of purchases from online retailers to avoid the tax 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, and therefore creates additional economic costs. As long as closing the loopholes in the sales tax base is offset by lower rates, it's a win-win for the economy.

Ending discrimination against local retailers and creating a playing field void of government interference will have a noticeable benefit for retailers struggling with the current inequity. But the ultimate economic impact of closing loopholes in the sales tax base depends upon what is done with the extra static revenues generated. As Milton Friedman noted, government spending is taxation, pure and simple. Rising tax burdens are detrimental to economic growth. Taxation reduces output, employment and production. It's basic Economics 101. 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 1944, for example, defense spending as a

share of GDP peaked at 43%, fell to 11% in 1946, and by 1948 it was down to 6.8%. Private real GDP (e.g. GDP less government purchases) for the three years 1946, 1947, and 1948 grew at a 7.5% annual rate and the unemployment rate stayed below 4%. Federal government spending as a share of GDP was also cut by over four percentage points in the 1990s, from 22.9% in 1992 to 18.8% in 2000. Prosperity was everywhere. The reason that reduction in government spending has led to increases in economic growth is the simple fact that government spending is government taxation and lower taxes increase growth.^{xvii} The government doesn't create resources, it redistributes resources. To spend, the government first has to take.

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 falling relative employment. Total spending is total taxation; therefore, broadening the state sales tax base without reducing tax rates elsewhere would not provide the same economic impact to a state's business climate as would broadening the sales tax base and then lowering rates.

With respect to the Internet sales tax exemption, the conclusion from this evidence is clear: the states should ensure that taxable sales that occur via e-commerce as well as other exemptions are effectively brought into the sales tax base. Simultaneously, they should use the increased tax revenues to reduce other taxes that are more anti-growth.

Due to the existence of the Internet tax distortion, taxes elsewhere are higher than necessary to support current expenditure levels. Therefore, the ideal economic response is to create a dollar for dollar reduction in the marginal rate of another tax to offset the higher tax burden created by closing the retail sales tax distortions.

The benefits of 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 budget accurately. Before estimating the potential economic benefits from this proposed tax reform, it is important to review the theory behind why reforms that move state tax systems closer to a pro-growth tax system are beneficial.

The Theory and Evidence Supporting The Implementation of Pro-Growth Tax Systems

High marginal taxes diminish the incentive for people to work and for investors to invest, thereby reducing the economy's rate of growth. The current Internet tax exemption is anti-growth. Higher marginal tax rates are problematic because the driving force of the economy is the incentive to engage in market activities. In both the long and short run, individuals and groups of individuals allocate resources according to the after-tax rate of return—after all taxes, including income taxes, general sales taxes, excise taxes, property taxes, and other taxes. If market activities are profitable, the economy will concentrate on ever-increasing market successes. A similar dynamic holds for the overall tax burden. Excessive tax burdens transfer too many resources from the private sector to the government sector, diminishing the overall efficiency of the economy. Imagine, if you can, an economy comprised solely of a collection of businesses run like the Post Office or the Department of Motor Vehicles. It's scary.

All transfer payments and tax rate changes are composed of two economic effects. Economists call these two effects the income effect and the substitution effect. Changes in behavior that directly arise from changes in income or wealth are a result of the income effect. The income effect of a transfer payment, for example, is positive for the recipient and negative for the payer. For a tax rate change, the income effect for the seller and buyer is positive when the rate is lowered and negative when the rate is raised. For example, people will tend to increase the

amount of consumption in response to an increase in income. With a static revenue tax change, there's always a higher rate somewhere for any lower rate. The substitution effect causes 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 good A compared to good B will provide incentives for people to consume more of good A than good B. Those tax changes will also incentivize producers to produce more of good A and less of good B. For good A, it's a win/win; for good B, it's a lose/lose.

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 were 100 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 no 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 were 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 is the first.

Any tax reform 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., a new car or 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 to the incentive drivers either. Individuals want to maximize their after-tax income. 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 percent tax on income; there is no incentive for anyone to work, so taking 100 percent of nothing is still nothing. The higher tax rates are, the less taxable activity there is, and going from zero tax to a 100 percent tax rate maps out total tax revenues. This effect (i.e. the Laffer Curve Effect) incorporates the economy's dynamic realities and importantly illustrates that government revenues are never raised by as much as the marginal tax rate is increased, and sometimes are even reduced when tax rates rise.

Government revenues can be significantly enhanced when tax reforms lead to positive growth-enhancing

incentives that expand 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 even larger revenues. Growing revenues resulting from higher economic growth will enable future lawmakers to lower tax rates and encourage still greater economic growth.

Tax policies that increase the incentive to produce, invest and innovate will attract industries and entrepreneurs. Increased economic growth, income and employment follow. Tax reform should reduce the penalty for additional work, savings, and investment and subsequently encourage increased economic activity.

Real world illustrations of this theory can be seen in the relative economic performance of those states with a lower overall tax burden, as estimated by the Tax Foundation, compared to those states with a higher overall tax burden. Those states that imposed a lower overall tax burden in 2010 experienced higher rates of economic growth between 2001 and 2010 (see Table 2).

Table 2

Nine States with Lowest 2010 State & Local Tax Burdens as a Share of Personal Income vs. Nine States with Highest 2010 State & Local Tax Burdens as a Share of Personal Income
(Growth in Performance Metrics from 2000 to 2010)

State	State & Local Tax Burden as a % of Personal Income*	Gross State Product	Population	Nonfarm Payroll Employment	State & Local Tax Revenue
Alaska	7.0%	84.1%	13.7%	13.9%	166.8%
South Dakota	7.6%	59.0%	8.0%	10.2%	48.9%
Tennessee	7.7%	44.3%	11.5%	2.8%	46.8%
Louisiana	7.8%	77.0%	1.6%	8.0%	48.4%
Wyoming	7.8%	110.2%	14.2%	19.2%	131.3%
Texas	7.9%	67.3%	20.6%	18.3%	65.6%
New Hampshire	8.1%	39.6%	6.2%	4.7%	53.1%
Alabama	8.2%	46.7%	7.5%	4.3%	41.1%
Nevada	8.2%	66.3%	34.0%	18.7%	74.0%
9 States with Lowest State & Local Tax Burden**	7.8%	66.1%	13.0%	11.1%	75.1%
U.S. Average**	9.5%	51.1%	9.8%	6.5%	49.8%
9 States with Highest State & Local Tax Burden**	11.3%	40.7%	4.7%	3.0%	41.8%
Maine	10.3%	39.1%	3.9%	1.5%	37.0%
Massachusetts	10.4%	38.4%	3.1%	1.5%	39.2%
Minnesota	10.8%	43.4%	7.6%	3.3%	34.1%
Rhode Island	10.9%	45.4%	0.2%	1.2%	41.0%
Wisconsin	11.1%	38.5%	5.9%	1.3%	31.5%
California	11.2%	42.3%	9.9%	1.9%	43.8%
Connecticut	12.3%	35.4%	4.8%	4.0%	36.8%
New Jersey	12.4%	37.2%	4.4%	5.4%	55.6%
New York	12.8%	46.7%	2.1%	6.5%	56.8%

* State & Local Tax Burden is 2010 from the Tax Foundation and is tax burden as a share of personal income

** equal-weighted averages, D.C. not included

Source: Tax Foundation, Bureau of Economic Analysis, U.S. Census Bureau, Laffer Associates

In other words, the states with lower tax burdens gained a growth advantage vis-à-vis all other states. Such findings substantiate the theory presented above and are consistent with the studies that have examined the impact of income taxes on economic growth. In fact, many studies have found a negative relationship between government spending and economic growth, including: Barro (1991), Gwartney, Lawson, and Holcombe (1998), Laffer (1971), Laffer (1979), Landau (1983), Mitchell (2005), and Scully (2006).^{xxiii}

Reviewing a few of these studies in detail, Poulson and Kaplan (2008) directly examined the impact of higher average marginal state taxes on economic growth, and found that:

...differences in tax policy pursued by the states can lead to different paths of long-run equilibrium growth. Regression analysis is used to estimate the impact of taxes on economic growth in the states.

The analysis reveals that higher marginal tax rates had a negative impact on economic growth in the states. The analysis also shows that greater regressivity had a positive impact on economic growth. States that held the rate of growth in revenue below the rate of growth in income achieved higher rates of economic growth.

The analysis underscores the negative impact of income taxes on economic growth in the states. Most states introduced an income tax and came to rely on the income tax as the primary source of revenue. Jurisdictions that imposed an income tax to generate a given level of revenue experienced lower rates of economic growth relative to jurisdictions that relied on alternative taxes to generate the same revenue^{xxiv}

Nobel Laureate Edward Prescott used a Growth Accounting framework to measure the impact of taxes on the economy.^{xxv} Growth Accounting decomposes the drivers of growth into three primary factors: labor, capital and technology. Prescott used this decomposition to evaluate the impact of taxes on labor, capital and technology on economic growth

from a national perspective—particularly the causes of economic depressions. For instance, Prescott (2002) found:

The United States is prosperous relative to France because the U.S. intratemporal tax wedge that distorts the tradeoff between consumption and leisure is much smaller than the French wedge. I will show that if France modified its intratemporal tax wedge so that its value was the same as the U.S. value, French welfare in consumption equivalents would increase by 19%. Consumption would have to increase by 19% now and in all future periods to achieve as large a welfare gain as that resulting from this tax reform.

The United States is prosperous relative to Japan because production efficiency is higher in the United States. In the United States, total factor productivity is approximately 20% higher than in Japan. If Japan suddenly became as efficient in production as the United States, its welfare gain in consumption equivalents would be 39%.

Prescott found that tax policies matter because taxes impact the incentive to work, innovate, and accumulate capital. Countries whose tax policies discriminate against any of these factors of production discriminate against economic growth. Countries that impose significantly onerous tax policies (such as the labor taxes in France or the tax discrimination against productivity in Japan) risk “economic depressions,” according to Prescott. States should certainly learn a lesson from Prescott’s findings.

A series of studies on the impact of differential levels of taxation on the growth rates of various states illustrates that states with relatively uncompetitive state tax systems experience slower economic growth. Becsi’s (1996) analysis also focused on whether state and local taxes affect relative state economic growth.

The study finds that relative marginal tax rates have a statistically significant negative relationship with relative state growth averaged for the period from 1961 to 1992...Reestimating the regressions

when the sample period is split in half shows that the tax effects grow even stronger when compared with the convergence effect, which is insignificant in the latter half of the sample. Thus, it appears that state and local taxes have temporary growth effects that are stronger over shorter intervals and a permanent growth effect that does not die out over time, at least for the sample considered. This finding also supports the inference that part of growth is endogenous and susceptible to policy influence.^{xxvi}

Applying Pro-Growth Lessons to the Problem of E-Fairness

There are many other analyses that have linked uncompetitive tax rates at the federal and state level to slower economic growth; a selection of these are summarized in Appendix I. The empirical tax literature substantiates the theory presented in the previous section: when the profitability of market activities is reduced, the quantity of that market activity diminishes and the rate of economic growth suffers. The overall level of taxation (tax burden) also matters. As the tax burden rises as a share of the economy, the rate of economic growth diminishes. With respect to the problem of e-fairness, the correct pro-growth tax policy would address the problem by maintaining the current tax burden while reducing the marginal tax rate to incentivize greater economic activity. There are four key takeaways with respect to states' current revenue collection failure, in terms of Internet sales:

1. **Finding:** Tax systems that distort economic decisions create economic inefficiencies that diminish benefits from pro-growth tax systems.

Recommendation: Broadening the state sales tax base by collecting taxes already on the books will increase its efficiency by removing exemptions, deductions and exclusions favoring different types of retail sales, including Internet and remote sales from out-of-state retailers over other in-state retailers who are taxed.

2. **Finding:** Broad-based tax systems with low marginal tax rates produce better economic results than do narrow tax bases with correspondingly higher tax rates. The narrowing sales tax base due to exclusions, omissions and exemptions has led to rising marginal tax rates—to the detriment of economic incentives.

3. **Finding:** Government spending is taxation and, in order to ensure prosperity, should be kept under strict control. No matter how well-designed a tax system may be, out-of-control government spending will ultimately crush the economy.

Recommendation: Reversing the trend of narrowing state sales tax bases coupled with rising tax rates will produce positive economic results. Lowering marginal tax rates will increase overall economic competitiveness, increasing the incentives to produce and invest.

By ensuring that the static tax revenue increase from broadening the sales tax base is fully offset, our suggested reform is through a reduction in states' marginal tax rates, holding the overall government tax and expenditure burden constant.

4. **Finding:** The importance of the e-commerce exemption from state and local sales taxes is large and growing. Based on historical data for two periods from the U.S. Census, Forrester Research, and the National Conference of State Legislatures, we estimate that total estimated e-commerce tax revenue losses were:

- a. \$13 billion in 2012, and
- b. By 2022, we estimate that the total tax revenue loss will grow to between \$27 billion and \$33 billion

Recommendation: Congress should pass legislation such that the states are empowered to broaden their sales tax bases by requiring sellers to collect already owed sales and use taxes on Internet/remote based retail sales. States should not use the additional revenues to expand total

government spending. Instead, states should use the expanded sales tax base to lower marginal tax rates.

A re-arrangement of the tax burden that broadens the sales tax base, including capturing the legitimate sales tax revenues from e-commerce coupled with lowering marginal tax rates to keep the tax burden constant, should increase the overall economic incentives in the states. The dynamic result should be improved economic performance, as supported by the scholarship examining the relationship between state tax rates and economic growth.

Giertz (2004) reviewed the studies examining the sensitivity of income to changes in tax rates—what is referred to as the elasticity of taxable income.^{xxvii} The elasticity of taxable income (ETI) measures how changes in tax rates affect the amount of taxable income. An ETI of 0.5 indicates that a 10 percent reduction in the marginal rate of income after tax (due to an increase in the marginal tax rate) would reduce taxable income by 5 percent. The reverse would be true for an increase in the marginal rate of income after tax.

According to Giertz, “Despite the complexities inherent in the estimation, several recent articles suggest a consensus value of about 0.40...Carroll (1998), Saez (2003) and Gruber and Saez (2000) all find an overall elasticity of around 0.40.”^{xxviii} Giertz continues to document that a universal consensus around 0.40 may be too early because the specific taxpayer response will vary depending upon the proposals under consideration and the specific taxpayers impacted. In fact, several estimates found income elasticities that were well above 1.00, which means that a 10% reduction in the marginal rate of income after tax due to an increase in marginal tax rates would reduce taxable income by more than 10%.^{xxix} All tax rate increases would lead to no additional revenue.

To estimate the benefits to each state, we use the degree to which the inclusion of e-commerce in the sales tax base would allow that state to reduce other more damaging tax rates. Thus, our focus is on each state’s sales tax rate and the share of total retail sales included in their tax base. To shorten the linkage, we

are focused on state sales tax revenues as a share of gross state product.

To estimate the impact of the proposed tax swap, we estimate the change in state income generated by the increase in the marginal rate of after-tax income by state. The increase in the marginal rate of after-tax income is calculated based on the static revenue gain from expanding the sales tax base to include Internet sales relative to the total income or sales tax revenues raised by the state according to the U.S. Census state tax revenue data as of 2012.^{xxx}

On average, expanding the sales tax base provides enough revenues to reduce the average marginal state tax burden by 14 basis points (0.14%). This would, of course, imply some growth in total U.S. GDP, but its primary effect will be on the relative performance of the individual states. Given the ambiguous nature of the impact by state, we will raise overall U.S. GDP growth by 0.05% per annum. The effects by states, of course, will be far different. When estimating state-by-state GDP and employment impact, we do not include this overall U.S. effect.

Some states like Oregon, Alaska, Delaware, Montana and New Hampshire, which don’t currently have a state sales tax, won’t be advantaged whereas high sales tax states could be heavily advantaged.

But given the politics of state economics, we worry that a number of the states will squander the opportunity afforded by including e-commerce retail sales in the tax bases of their respective states. Therefore, even though we’ll assume each state uses their windfall wisely, we should warn that states like California, Minnesota, Illinois, New York, Maryland, Massachusetts, Vermont and Connecticut are fraught with risk. Ultimately, part of federalism and the concept of state’s rights include giving states the right to be wrong. The federal government should not hamstring the policies of governors and state legislatures that are willing to enact pro-growth policies because other states may make poor decisions. The choice of whether to use additional

revenues wisely to improve a state's business climate should be up to each state's elected representatives, and it should be up to the voters in those states to hold said lawmakers accountable.

To close the circle, we now need to show that while tax burden has a large impact on both gross state product and employment, sales tax burden does not. Therefore, any tax swap lowering any other tax for an increase

in sales taxes will have positive effects on the states' employment. In Table 3 below, we have listed the nine highest sales tax burden states and the nine lowest sales tax burden states and their respective economic metrics.

After reviewing overall tax burden and sales tax burden effects across all states, it becomes clear that, of all the taxes, sales taxes (when properly administered) are the least damaging to a state's economy and

Table 3

Nine States with Lowest 2010 State & Local Sales Tax Burdens per \$1,000 of Personal Income vs. Nine States with Highest 2010 State & Local Sales Tax Burdens per \$1,000 of Personal Income
(Growth in Performance Metrics from 2000 to 2010)

State	State & Local Sales Tax Burden per \$1,000 of Personal Income*	Gross State Product	Population	Nonfarm Payroll Employment	State & Local Tax Revenue
New Hampshire	\$0.00	39.6%	6.2%	4.7%	53.1%
Montana	\$0.00	68.9%	9.6%	13.7%	51.0%
Delaware	\$0.00	57.6%	14.4%	5.0%	36.7%
Oregon	\$0.00	63.6%	11.9%	4.8%	39.5%
Alaska	\$10.94	84.1%	13.7%	13.9%	166.8%
Virginia	\$12.89	60.2%	12.9%	9.0%	47.9%
Vermont	\$12.89	40.1%	2.7%	4.7%	57.5%
Maryland	\$13.34	60.4%	8.9%	9.7%	53.5%
Massachusetts	\$13.80	38.4%	3.1%	1.5%	39.2%
9 States with Lowest State & Local Tax Burden**	\$7.10	57.0%	9.3%	7.4%	
U.S. Average**	\$22.55	51.1%	9.8%	6.5%	49.8%
9 States with Highest State & Local Tax Burden**	\$36.78	60.7%	9.8%	8.2%	
Mississippi	\$31.10	45.5%	4.3%	1.7%	42.4%
South Dakota	\$31.72	59.0%	8.0%	10.2%	48.9%
Tennessee	\$35.98	44.3%	11.5%	2.8%	46.8%
Louisiana	\$36.38	77.0%	1.6%	8.0%	48.4%
Arkansas	\$37.35	49.6%	9.1%	4.2%	59.3%
New Mexico	\$37.37	53.3%	13.4%	9.8%	36.4%
Wyoming	\$37.74	110.2%	14.2%	19.2%	131.3%
Hawaii	\$41.49	58.3%	12.3%	10.2%	60.9%
Washington	\$41.88	49.2%	14.1%	7.5%	42.9%

* State & Local Sales Tax Burden is 2010 state & local sales taxes per \$1,000 of personal income

** equal-weighted averages, D.C. not included

Source: Bureau of Economic Analysis, U.S. Census Bureau, Laffer Associates

employment. Using additional sales tax revenue resulting from federal e-fairness language to lower other taxes is a distinctly pro-growth policy. It's a win/win for states.

Using our measures as shown in Table 3, every one percentage point reduction in a state's tax burden will, over a decade, correspond to roughly a 7.2 percentage point increase in the decade's growth in gross state product in nominal terms and a 2.3 percentage point increase in decadal growth in total state employment. Therefore, if states choose to use the enhanced sales tax revenues resulting from the application of state sales tax to e-commerce to reduce other more damaging taxes, those states can enhance their growth quite handsomely. Of course, if states squander this once-in-a-lifetime opportunity on anti-growth policies, they should not expect the same benefits from taxing Internet retail sales as those states that use the revenue wisely to lower rates.

For purposes of estimation, we are going to assume that each and every state takes full advantage of taxing Internet retail sales to promote growth. Thus, states with the heaviest current reliance on retail sales taxes stand the best chance of enhancing growth. In Table 4 below, we have listed for each state i.) GSP growth

from 2000 to 2010, ii.) employment growth (2000 to 2010), iii.) total tax burden as of 2010, iv.) sales tax burden as of 2010, v.) increased sales tax burden if Internet sales were taxed in 2012, vi.) increased sales tax burden if Internet sales were taxed in 2022, projecting growth from column i., vii.) increase in GSP growth from wisely using vi., and viii.) increase in employment growth from using vi. wisely. Table 5 shows the same metrics, but for taxation of Internet sales as well as other non-electronic remote sales.

While we know we don't know what is actually going to happen to the overall U.S. economy in the coming years, we are quite hopeful that the next ten years will be a lot better than the last ten years were. And these benefits, we believe, will infuse states with all sorts of opportunities to make their economies better. Some states will most likely squander these opportunities, but others will not only use these opportunities for bettering the lives of their citizens, but will also create new opportunities out of the full cloth.

Here then, by state, are the current opportunities afforded us by e-fairness to enhance output and employment in 2022 (see following page):

Table 4
Potential Increase in Gross State Product (in 2012 dollars) and Employment
in 2022 from Taxing Internet Sales

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.
State	Gross State Product Growth, 2000 to 2010	Nonfarm Payroll Employment Growth, 2000 to 2010	State & Local Tax Burden, 2010*	State & Local Sales Tax Burden, 2010*	2012 Additional State & Local Sales Tax Burden if Internet Sales are Taxed	2022 Additional State & Local Sales Tax Burden if Internet Sales are Taxed	2022 Percentage Point Increase in GSP Growth by Wisely Using vi.	2022 Percentage Point Increase in Employment Growth by Wisely Using vi.	Additional GDP in 2022, \$ billions	Additional Employment in 2022
Washington	49.2%	7.5%	9.3%	4.19%	0.228%	0.392%	2.820%	0.901%	\$14.9	36,285
Hawaii	58.3%	10.2%	10.1%	4.15%	0.226%	0.388%	2.794%	0.892%	\$3.0	8,168
Wyoming	110.2%	19.2%	7.8%	3.77%	0.206%	0.353%	2.541%	0.812%	\$2.0	3,665
New Mexico	53.3%	9.8%	8.4%	3.74%	0.203%	0.349%	2.516%	0.804%	\$3.1	9,175
Arkansas	49.6%	4.2%	10.0%	3.74%	0.203%	0.349%	2.515%	0.803%	\$4.0	12,541
Louisiana	77.0%	8.0%	7.8%	3.64%	0.198%	0.340%	2.450%	0.783%	\$10.7	21,621
Tennessee	44.3%	2.8%	7.7%	3.60%	0.196%	0.336%	2.423%	0.774%	\$9.3	27,940
South Dakota	59.0%	10.2%	7.6%	3.17%	0.173%	0.297%	2.136%	0.682%	\$1.4	4,005
Mississippi	45.5%	1.7%	8.7%	3.11%	0.169%	0.291%	2.094%	0.669%	\$3.0	9,903
Arizona	54.4%	13.9%	8.4%	3.05%	0.166%	0.286%	2.057%	0.657%	\$8.2	23,953
Nevada	66.3%	18.7%	8.2%	2.94%	0.160%	0.274%	1.976%	0.631%	\$4.3	11,195
Florida	53.0%	12.0%	9.3%	2.74%	0.149%	0.256%	1.842%	0.588%	\$21.3	65,432
Michigan	9.2%	-9.9%	9.8%	2.73%	0.149%	0.255%	1.839%	0.587%	\$7.7	26,855
Oklahoma	61.7%	7.7%	8.7%	2.69%	0.147%	0.252%	1.814%	0.580%	\$4.5	12,997
Indiana	34.8%	-3.0%	9.6%	2.69%	0.146%	0.252%	1.811%	0.579%	\$6.8	19,718
Kansas	47.1%	3.7%	9.7%	2.63%	0.143%	0.246%	1.773%	0.566%	\$3.4	10,323
Texas	67.3%	18.3%	7.9%	2.60%	0.142%	0.243%	1.750%	0.559%	\$38.3	94,904
California	42.3%	1.9%	11.2%	2.55%	0.139%	0.238%	1.715%	0.548%	\$47.8	110,180
North Dakota	95.2%	16.2%	8.9%	2.50%	0.136%	0.233%	1.681%	0.537%	\$1.3	3,089
Georgia	37.2%	9.2%	9.0%	2.49%	0.135%	0.232%	1.674%	0.535%	\$9.6	30,832
Utah	71.6%	18.2%	9.3%	2.48%	0.135%	0.232%	1.668%	0.533%	\$3.6	10,326
Alabama	46.7%	4.3%	8.2%	2.41%	0.131%	0.225%	1.621%	0.518%	\$4.1	13,231
North Carolina	50.8%	6.9%	9.9%	2.40%	0.131%	0.225%	1.619%	0.517%	\$10.7	28,740
Iowa	51.0%	2.7%	9.6%	2.37%	0.129%	0.222%	1.596%	0.510%	\$3.6	9,835
Colorado	47.1%	7.7%	9.1%	2.35%	0.128%	0.220%	1.582%	0.505%	\$6.2	17,169
New York	46.7%	6.5%	12.8%	2.33%	0.127%	0.218%	1.568%	0.501%	\$26.6	59,236
Idaho	55.0%	13.1%	9.4%	2.27%	0.124%	0.213%	1.530%	0.489%	\$1.4	4,647
Nebraska	57.1%	5.7%	9.7%	2.22%	0.121%	0.207%	1.492%	0.477%	\$2.2	5,942
Missouri	34.5%	0.8%	9.0%	2.20%	0.120%	0.206%	1.483%	0.474%	\$5.0	16,202
Ohio	22.6%	-4.7%	9.7%	2.15%	0.117%	0.201%	1.448%	0.463%	\$8.6	28,407
South Carolina	38.9%	8.0%	8.4%	2.11%	0.115%	0.197%	1.421%	0.454%	\$3.3	12,028
Maine	39.1%	1.5%	10.3%	2.04%	0.111%	0.190%	1.371%	0.438%	\$1.0	3,504
Minnesota	43.4%	3.3%	10.8%	2.01%	0.109%	0.188%	1.352%	0.432%	\$5.5	15,075
Kentucky	40.7%	2.3%	9.4%	1.98%	0.108%	0.185%	1.331%	0.425%	\$3.1	9,931
West Virginia	49.6%	3.2%	9.7%	1.96%	0.107%	0.183%	1.320%	0.422%	\$1.3	3,905
Wisconsin	38.5%	1.3%	11.1%	1.96%	0.107%	0.183%	1.319%	0.421%	\$4.7	14,430

continued

Table 4 cont.

	i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.
State	Gross State Product Growth, 2000 to 2010	Nonfarm Payroll Employment Growth, 2000 to 2010	State & Local Tax Burden, 2010*	State & Local Sales Tax Burden, 2010*	2012 Additional State & Local Sales Tax Burden if Internet Sales are Taxed	2022 Additional State & Local Sales Tax Burden if Internet Sales are Taxed	2022 Percentage Point Increase in GSP Growth by Wisely Using vi.	2022 Percentage Point Increase in Employment Growth by Wisely Using vi.	Additional GDP in 2022, \$ billions	Additional Employment in 2022
Rhode Island	45.4%	1.2%	10.9%	1.81%	0.098%	0.169%	1.216%	0.389%	\$0.9	2,307
New Jersey	37.2%	5.4%	12.4%	1.78%	0.097%	0.166%	1.198%	0.383%	\$8.0	20,050
Pennsylvania	41.3%	3.5%	10.2%	1.67%	0.091%	0.157%	1.128%	0.360%	\$9.2	26,668
Connecticut	35.4%	4.0%	12.3%	1.59%	0.086%	0.148%	1.069%	0.341%	\$3.3	7,787
Illinois	36.3%	-1.0%	10.2%	1.58%	0.086%	0.148%	1.065%	0.340%	\$9.7	24,488
Massachusetts	38.4%	1.5%	10.4%	1.38%	0.075%	0.129%	0.929%	0.297%	\$5.0	12,523
Maryland	60.4%	9.7%	10.2%	1.33%	0.073%	0.125%	0.899%	0.287%	\$4.3	10,639
Vermont	40.1%	4.7%	10.1%	1.29%	0.070%	0.121%	0.868%	0.277%	\$0.3	1,199
Virginia	60.2%	9.0%	9.3%	1.29%	0.070%	0.121%	0.868%	0.277%	\$6.0	14,357
Alaska	84.1%	13.9%	7.0%	1.09%	0.060%	0.102%	0.736%	0.235%	\$0.7	1,215
Montana	68.9%	13.7%	8.6%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0
Oregon	63.6%	4.8%	10.0%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0
Delaware	57.6%	5.0%	9.2%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0
New Hampshire	39.6%	4.7%	8.1%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0
U.S. Total:									\$342.9	916,627

* Tax burden is taxes as a share of personal income

Table 5
Potential Increase in Gross State Product (in 2012 dollars) and Employment
in 2022 from Taxing Internet and Remote Sales

State	i. Gross State Product Growth, 2000 to 2010	ii. Nonfarm Payroll Employment Growth, 2000 to 2010	iii. State & Local Tax Burden, 2010*	iv. State & Local Sales Tax Burden, 2010*	v. 2012 Additional State & Local Sales Tax Burden if Internet and Remote Sales are Taxed	2022 Additional State & Local Sales Tax Burden if Internet and Remote Sales are Taxed	2022 Percentage Point Increase in GSP Growth by Wisely Using vi.	2022 Percentage Point Increase in Employment Growth by Wisely Using vi.	Additional GDP in 2022, \$ billions	Additional Employment in 2022
Washington	49.2%	7.5%	9.3%	4.19%	0.462%	0.643%	4.632%	1.480%	\$24.5	59,599
Hawaii	58.3%	10.2%	10.1%	4.15%	0.457%	0.637%	4.589%	1.466%	\$4.9	13,417
Wyoming	110.2%	19.2%	7.8%	3.77%	0.416%	0.580%	4.174%	1.333%	\$3.3	6,020
New Mexico	53.3%	9.8%	8.4%	3.74%	0.412%	0.574%	4.133%	1.320%	\$5.0	15,070
Arkansas	49.6%	4.2%	10.0%	3.74%	0.412%	0.574%	4.131%	1.320%	\$6.5	20,600
Louisiana	77.0%	8.0%	7.8%	3.64%	0.401%	0.559%	4.024%	1.285%	\$17.6	35,513
Tennessee	44.3%	2.8%	7.7%	3.60%	0.397%	0.553%	3.979%	1.271%	\$15.3	45,891
South Dakota	59.0%	10.2%	7.6%	3.17%	0.350%	0.487%	3.508%	1.121%	\$2.2	6,578
Mississippi	45.5%	1.7%	8.7%	3.11%	0.343%	0.478%	3.440%	1.099%	\$4.9	16,266
Arizona	54.4%	13.9%	8.4%	3.05%	0.337%	0.469%	3.378%	1.079%	\$13.5	39,344
Nevada	66.3%	18.7%	8.2%	2.94%	0.323%	0.451%	3.246%	1.037%	\$7.0	18,388
Florida	53.0%	12.0%	9.3%	2.74%	0.302%	0.420%	3.026%	0.966%	\$34.9	107,474
Michigan	9.2%	-9.9%	9.8%	2.73%	0.301%	0.419%	3.020%	0.965%	\$12.7	44,109
Oklahoma	61.7%	7.7%	8.7%	2.69%	0.297%	0.414%	2.980%	0.952%	\$7.5	21,348
Indiana	34.8%	-3.0%	9.6%	2.69%	0.296%	0.413%	2.975%	0.950%	\$11.2	32,388
Kansas	47.1%	3.7%	9.7%	2.63%	0.290%	0.404%	2.912%	0.930%	\$5.6	16,956
Texas	67.3%	18.3%	7.9%	2.60%	0.287%	0.399%	2.875%	0.918%	\$62.9	155,882
California	42.3%	1.9%	11.2%	2.55%	0.281%	0.391%	2.818%	0.900%	\$78.5	180,974
North Dakota	95.2%	16.2%	8.9%	2.50%	0.275%	0.383%	2.761%	0.882%	\$2.2	5,073
Georgia	37.2%	9.2%	9.0%	2.49%	0.274%	0.382%	2.749%	0.878%	\$15.8	50,642
Utah	71.6%	18.2%	9.3%	2.48%	0.273%	0.381%	2.740%	0.875%	\$5.9	16,961
Alabama	46.7%	4.3%	8.2%	2.41%	0.265%	0.370%	2.662%	0.850%	\$6.8	21,732
North Carolina	50.8%	6.9%	9.9%	2.40%	0.265%	0.369%	2.659%	0.849%	\$17.6	47,206
Iowa	51.0%	2.7%	9.6%	2.37%	0.261%	0.364%	2.622%	0.837%	\$5.9	16,155
Colorado	47.1%	7.7%	9.1%	2.35%	0.259%	0.361%	2.599%	0.830%	\$10.1	28,200
New York	46.7%	6.5%	12.8%	2.33%	0.257%	0.358%	2.575%	0.823%	\$43.8	97,297
Idaho	55.0%	13.1%	9.4%	2.27%	0.250%	0.349%	2.513%	0.803%	\$2.3	7,633
Nebraska	57.1%	5.7%	9.7%	2.22%	0.244%	0.340%	2.451%	0.783%	\$3.6	9,760
Missouri	34.5%	0.8%	9.0%	2.20%	0.243%	0.338%	2.436%	0.778%	\$8.2	26,612
Ohio	22.6%	-4.7%	9.7%	2.15%	0.237%	0.330%	2.379%	0.760%	\$14.1	46,660
South Carolina	38.9%	8.0%	8.4%	2.11%	0.233%	0.324%	2.334%	0.746%	\$5.4	19,757
Maine	39.1%	1.5%	10.3%	2.04%	0.224%	0.313%	2.251%	0.719%	\$1.6	5,756
Minnesota	43.4%	3.3%	10.8%	2.01%	0.221%	0.308%	2.221%	0.709%	\$9.0	24,760
Kentucky	40.7%	2.3%	9.4%	1.98%	0.218%	0.304%	2.187%	0.699%	\$5.1	16,313
West Virginia	49.6%	3.2%	9.7%	1.96%	0.216%	0.301%	2.169%	0.693%	\$2.2	6,414

continued

Table 5 cont.

	i.	ii.	iii.	iv.	v.						
State	Gross State Product Growth, 2000 to 2010	Nonfarm Payroll Employment Growth, 2000 to 2010	State & Local Tax Burden, 2010*	State & Local Sales Tax Burden, 2010*	2012 Additional State & Local Sales Tax Burden if Internet and Remote Sales are Taxed	2022 Additional State & Local Sales Tax Burden if Internet and Remote Sales are Taxed	2022 Percentage Point Increase in GSP by Wisely Using vi.	2022 Percentage Point Increase in Employment Growth by Wisely Using vi.	Additional GDP in 2022, \$ billions	Additional Employment in 2022	
Wisconsin	38.5%	1.3%	11.1%	1.96%	0.216%	0.301%	2.166%	0.692%	\$7.6	23,701	
Rhode Island	45.4%	1.2%	10.9%	1.81%	0.199%	0.277%	1.998%	0.638%	\$1.5	3,790	
New Jersey	37.2%	5.4%	12.4%	1.78%	0.196%	0.273%	1.969%	0.629%	\$13.2	32,933	
Pennsylvania	41.3%	3.5%	10.2%	1.67%	0.185%	0.257%	1.852%	0.592%	\$15.1	43,803	
Connecticut	35.4%	4.0%	12.3%	1.59%	0.175%	0.244%	1.755%	0.561%	\$5.5	12,791	
Illinois	36.3%	-1.0%	10.2%	1.58%	0.174%	0.243%	1.749%	0.559%	\$16.0	40,223	
Massachusetts	38.4%	1.5%	10.4%	1.38%	0.152%	0.212%	1.526%	0.487%	\$8.3	20,570	
Maryland	60.4%	9.7%	10.2%	1.33%	0.147%	0.205%	1.476%	0.471%	\$7.1	17,476	
Vermont	40.1%	4.7%	10.1%	1.29%	0.142%	0.198%	1.426%	0.455%	\$0.5	1,970	
Virginia	60.2%	9.0%	9.3%	1.29%	0.142%	0.198%	1.426%	0.455%	\$9.8	23,582	
Alaska	84.1%	13.9%	7.0%	1.09%	0.121%	0.168%	1.209%	0.386%	\$1.1	1,995	
Montana	68.9%	13.7%	8.6%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0	
Oregon	63.6%	4.8%	10.0%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0	
Delaware	57.6%	5.0%	9.2%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0	
New Hampshire	39.6%	4.7%	8.1%	0.00%	0.000%	0.000%	0.000%	0.000%	\$0.0	0	
U.S. Total:									\$563.2	1,505,583	

* Tax burden is taxes as a share of personal income

Table 6
State Sales Tax Rates and Estimated Taxable Sales, 2011

State	State Statutory Sales Tax Rate, as of Jan 1, 2011	General Sales and Gross Receipts Taxes (\$ millions), 2011	Est Taxable Sales (\$ millions), 2011	2011 GSP (\$ millions)	Est. Taxable Sales as a % of GSP, 2011
California	7.25%	30,996.4	427,536.2	1,958,904	21.8%
Indiana	7.00%	6,269.7	89,567.4	278,128	32.2%
Mississippi	7.00%	2,932.9	41,898.0	97,810	42.8%
New Jersey	7.00%	8,144.4	116,348.5	486,989	23.9%
Rhode Island	7.00%	824.5	11,778.7	50,091	23.5%
Tennessee	7.00%	6,186.3	88,376.2	266,527	33.2%
Minnesota	6.88%	4,657.4	67,743.9	281,712	24.0%
Nevada	6.85%	2,931.5	42,796.3	130,366	32.8%
Arizona	6.60%	4,462.6	67,614.5	258,447	26.2%
Washington	6.50%	10,580.4	162,775.3	355,083	45.8%
Kansas	6.30%	2,487.5	39,484.1	130,923	30.2%
Illinois	6.25%	7,420.8	118,733.3	670,727	17.7%
Massachusetts	6.25%	4,920.5	78,728.3	391,771	20.1%
Texas	6.25%	21,793.9	348,701.7	1,308,132	26.7%
Arkansas	6.00%	2,736.9	45,615.8	105,846	43.1%
Connecticut	6.00%	3,252.1	54,202.1	230,090	23.6%
Florida	6.00%	19,353.0	322,550.0	754,255	42.8%
Idaho	6.00%	1,187.1	19,784.5	57,927	34.2%
Iowa	6.00%	2,232.0	37,200.5	148,986	25.0%
Kentucky	6.00%	2,896.3	48,270.9	164,799	29.3%
Maryland	6.00%	3,896.7	64,945.0	301,100	21.6%
Michigan	6.00%	9,477.2	157,952.6	385,248	41.0%
Pennsylvania	6.00%	8,951.8	149,196.0	578,839	25.8%
South Carolina	6.00%	2,793.7	46,561.4	165,785	28.1%
Vermont	6.00%	325.6	5,427.0	25,905	20.9%
West Virginia	6.00%	1,210.3	20,170.9	66,821	30.2%
North Carolina	5.75%	6,185.0	107,565.4	439,862	24.5%
Nebraska	5.50%	1,385.4	25,188.4	94,160	26.8%
Ohio	5.50%	7,767.7	141,231.1	483,962	29.2%
New Mexico	5.13%	1,880.4	36,690.7	79,414	46.2%
Maine	5.00%	1,010.2	20,204.8	51,585	39.2%
North Dakota	5.00%	776.4	15,527.6	40,328	38.5%
Wisconsin	5.00%	4,109.0	82,180.4	254,818	32.3%
Utah	4.70%	1,843.9	39,231.0	124,483	31.5%
Oklahoma	4.50%	2,177.5	48,388.0	154,966	31.2%
Missouri	4.23%	2,972.7	70,358.7	249,525	28.2%
Alabama	4.00%	2,174.6	54,366.0	173,122	31.4%
Georgia	4.00%	5,080.8	127,019.4	418,943	30.3%
Hawaii	4.00%	2,495.8	62,395.2	66,991	93.1%
Louisiana	4.00%	2,812.8	70,320.1	247,720	28.4%

continued

Table 6 cont.

State	State Statutory Sales Tax Rate, as of Jan 1, 2011	General Sales and Gross Receipts Taxes (\$ millions), 2011	Est Taxable Sales (\$ millions), 2011	2011 GSP (\$ millions)	Est. Taxable Sales as a % of GSP, 2011
New York	4.00%	11,581.0	289,525.5	1,157,969	25.0%
South Dakota	4.00%	808.1	20,202.3	40,117	50.4%
Virginia	4.00%	3,460.7	86,518.5	428,909	20.2%
Wyoming	4.00%	862.8	21,570.1	37,617	57.3%
Colorado	2.90%	2,173.9	74,961.4	264,308	28.4%
Alaska	0.00%	0.0	0.0	51,376	0.0%
Delaware	0.00%	0.0	0.0	65,755	0.0%
Montana	0.00%	0.0	0.0	37,990	0.0%
New Hampshire	0.00%	0.0	0.0	63,556	0.0%
Oregon	0.00%	0.0	0.0	194,742	0.0%

The national economic landscape, consequently, is improved by re-arranging the tax burden by broadening the sales tax base, including the capture of legitimate sales tax revenues from e-commerce that are currently not captured, and using these revenues to lower marginal tax rates.

APPENDIX I: A Review of The Literature on Taxes and Economic Growth

The tax reform proposed in this paper is premised on the evidence that high marginal tax rates crowd out the private economy, diminishing its rate of growth. The effect of fiscal policies—especially with regard to taxation—and relative economic growth rates is of paramount concern to legislators, businessmen, economists, and the general public. Not surprisingly, extensive literature examining taxes' impact on relative economic growth has emerged. In fact, taxes' impact on the economy has been a core part of economic analysis beginning with Adam Smith in 1776. This appendix provides a selective overview of several studies linking higher marginal tax rates to slower rates of economic growth.

Poulson and Kaplan (2008) directly examined the impact of higher average marginal state taxes on economic growth, finding that:

...differences in tax policy pursued by the states can lead to different paths of long-run equilibrium growth. Regression analysis is used to estimate the impact of taxes on economic growth in the states.

The analysis reveals that higher marginal tax rates had a negative impact on economic growth in the states. The analysis also shows that greater regressivity had a positive impact on economic growth. States that held the rate of growth in revenue below the rate of growth in income achieved higher rates of economic growth.

The analysis underscores the negative impact of income taxes on economic growth in the states. Most states introduced an income tax and came to rely on the income tax as the primary source of revenue. Jurisdictions that imposed an income tax

to generate a given level of revenue experienced lower rates of economic growth relative to jurisdictions that relied on alternative taxes to generate the same revenue^{xxxi}

Poulson and Kaplan (2008) defined their methodology as follows:

Koester and Kormendi (1989) have suggested a method for estimating average marginal tax rates, using a linear approximation. If we assume a linear flat tax, then tax revenues can be divided into two parts. One part is independent of behavioral changes, while the other part is dependent on those changes:

$$(1) \text{ Revenue} = a + \text{MTR} (\text{Income})$$

where the constant term (a) is that portion of revenue not dependent on income. The marginal tax rate (MTR) captures the effect on revenue of small changes in income.

The constant term in equation (1) can be thought of as a lump sum tax. Because lump sum taxes do not influence behavior, they are considered nondistorting. Such lump sum taxes are implicit in all tax schedules. If the lump sum tax is positive, the tax schedule is considered to be regressive. If the lump sum tax is negative, the tax schedule is progressive. If the lump sum tax is zero, the tax schedule is proportional.

There are a number of assumptions in using this equation to estimate average marginal tax rates in the states. The marginal tax rate is estimated over all taxed units in the state. The assumption is that this is the marginal tax rate for a representative

taxpayer in the state. It is also assumed that the tax base is proportional to income.^{xxxii}

Mankiw and Weinzierl (2005), N. Gregory Mankiw and Matthew Weinzierl examined the dynamic impact of tax cuts in a 2005 paper.^{xxxiii} They found that in nearly all cases, tax cuts are partly self-financing due to the economies' dynamic responses. Robbins and Robbins, in a series of papers, illustrated that there is an elastic response between taxes and labor supply and capital accumulation.^{xxxiv} In this series of papers, Robbins and Robbins examine the relationship between taxes and savings, capital accumulation, and overall economic growth. The initial paper, Report #131, updates an analysis by Boskin (1978). Boskin found that the elasticity of savings between 1929 and 1969 was 0.4—a 10 percent increase in the return to savings would cause a 4 percent increase in savings.

Robbins and Robbins estimate the return to savings as the return to all capital, which includes the returns to both equity and debt. Between 1947 and 1994, the average after-tax return to capital was 5.4% according to Robbins and Robbins. Perhaps just as important, the private savings rate over this time period moves in lock-step with changes in the after-tax return to capital; when the after-tax return to capital rises, the savings rate rises, and when the after-tax return to capital falls, the savings rate falls. In fact, Robbins and Robbins found that the elasticity of savings between 1949 and 1994 was 2.5 times greater than the Boskin's (1978) estimates—between 0.7 and 1.1.

In the TaxAction Analysis Policy Report #134, Robbins and Robbins used their earlier results to link savings sensitivity to changes in the after-tax rate of return (i.e. tax policy) and investment. However, since investment is driven by the marginal after-tax rate of return (not the average), Robbins and Robbins estimated the marginal after-tax rate of return from 1954 to 1995. They found that changes in the capital stock are very sensitive to changes in after-tax rate of return. On average, the long run marginal after-tax rate of return to capital has been 3.4%. Furthermore, the capital stock adjusts

quickly in response to tax policy changes, bringing the marginal after-tax rate of return back to the long-run average. Typically, this process is completed within 5 years according to Robbins and Robbins.

Robbins and Robbins (1996) leverage the estimates from Policy Report #131 & #134 to derive a dynamic macroeconomic model of the U.S. economy. This model is predicated on changes in savings, investment and capital formation being significantly more sensitive to their after-tax returns than in the papers summarized above. Consequently, Robbins and Robbins (1996) found that tax reforms that reduced the disincentives to savings would have a large and positive impact on economic growth.

Barber and Odean (2003) examined investors' responsiveness to tax policies.^{xxxv} Specifically, Barber and Odean examined whether "individual investors consider taxes when making asset allocation decisions", finding evidence that investors are sensitive to the tax implications of asset allocations. For instance, investors tend to locate assets that tend to provide annual taxable income distributions (such as taxable bonds and mutual funds) in tax-free retirement accounts.

Desai and Gentry (2003) examined whether corporations respond to capital gains tax rates.^{xxxvi} They establish that capital gains taxes impact the incentives of companies.

The taxation of corporate capital gains affects incentives in three broad categories. First, it affects 'real' decisions that impact investment and financing decisions and the allocation of capital across firms and throughout the economy. Second, taxes can affect the timing of corporate decisions. Third, tax policy towards corporate capital gains can affect corporate tax planning activities.

Desai and Gentry concluded that:

Corporate capital gain realizations are a significant component of corporate cash flow and increasingly so. Net long-term capital gains are significant compared to individual capital gains and are

gaining in relative importance. As this paper outlines, the distortionary effects of such taxes largely subsume those associated with individual capital gains. Specifically, lock-in effects at the corporate level may alter productivity levels by changing the patterns of corporate and asset ownership in a manner that taxes on individual capital gains do not.

The time series analysis of this paper suggests that the elasticities of corporate realizations to tax costs is higher than those derived in similar equations used to estimate the elasticities of individual capital gains. Micro analysis further suggests that firms time their sales and magnitudes of investments and PPE opportunistically. Moreover, the micro analysis suggests that the realization of gains appears to be particularly shaped by tax incentives. In sum, the corporate capital gains tax regime appears to significantly influence the decisions of firms to dispose of assets and realize gains and losses.

Desai and Hines (2003) examined the implications of taxing business income in a manner that is not consistent with international norms.^{xxxvii} Desai and Hines posited that alternative tax treatments across countries impact the level and ownership of foreign direct investment (FDI). Specifically,

Home-country taxation has the potential to affect the ownership of foreign assets by changing after-tax returns and thereby inducing the substitution of one investment for another. As a general matter, investors from countries that exempt foreign income from taxation have the most to gain from locating their foreign investments in low-tax countries, since such investors benefit in full from any foreign tax savings. Investors from countries (such as the United States) that tax foreign profits while providing foreign tax credits may benefit very little (in some cases not at all) from lower foreign tax rates, since foreign tax savings are offset by higher home-country taxation. These relative tax

incentives therefore create incentives for investors from countries that exempt foreign income from taxation to concentrate their investments in low-tax countries, while investors from countries that tax foreign income while providing foreign tax credits have incentives to concentrate investments in high-tax countries.

However, such incentives can lead to allocations of capital and investment that are not consistent with global economic efficiency. Desai and Hines introduced two principles to guide tax policy: “capital ownership neutrality (CON), the principle that world welfare is maximized if the identities of capital owners are unaffected by tax rate differences, and national ownership neutrality (NON), the principle that national welfare is maximized by exempting foreign income from taxation.” Desai and Hines suggested the ideals of CON and NON to ensure that the goals of national and global economic efficiency are met.

Viard (2009) illustrated the importance, when evaluating the economic consequences of income taxes, of comprehensively measuring the adverse impacts on all forms of income, what is termed the elasticity of taxable income (ETI). Comprehensive measures of income revealed the significant and negative impacts from income taxes on economic growth:

Some analyses of the behavioral effects of income taxation examine only the effect on hours worked and often find little impact. As Martin Feldstein observed, however, income taxes can induce people to reduce their taxable income through means other than a reduction in hours worked. People can reduce taxable income by holding tax-exempt municipal bonds rather than taxable bonds, receiving fringe benefits rather than cash wages, engaging in tax shelters, and spending more money on tax-deductible items. Economists could investigate each of these behavioral changes, one by one. Or, as Feldstein suggested, they can simply investigate the overall change in taxable income prompted by changes in tax rates.[5]

Recent studies have therefore focused on the overall elasticity of taxable income, which roughly equals the percentage change in taxable income that results from a 1 percent change in $(1 - t)$, where t is the tax rate. Suppose, for example, that the elasticity is 0.5, the estimate that I use below. Consider an increase in the marginal income tax rate from 25% to 26%, which reduces $(1 - t)$ from 0.75 to 0.74, a decline of 1.33 percent. With a 0.5 elasticity, the rate increase reduces taxable income by roughly 0.67 percent (0.5 times 1.33 percent). [6]

Two recent papers, one by Seth Giertz and one by Emmanuel Saez, Joel Slemrod, and Giertz, provide surveys of the numerous statistical studies that have used tax return data to estimate the elasticity of taxable income.[7] As these papers describe, early estimates were very high, often well above 1. Recent estimates have been more modest, with considerable variation across studies. There is strong evidence that the elasticity is higher for high-income groups. A recent Tax Foundation analysis assumes that the elasticity for taxpayers with incomes above \$100,000 is 0.6.[8] The 0.6 value for high-income taxpayers appears to represent a reasonable middle ground, as some studies have estimated much higher values while others have estimated lower values.[9]^{xxxviii}

Directly citing the Saez, Slemrod and Gertz (2009) study regarding the importance the elasticity of taxable income (ETI):

Nevertheless, the essential insight underlying the ETI remains valid: that income tax rates cause taxpayers to respond on a wide range of margins and, under some conditions, all of these responses reflect inefficiency, because they would not have been undertaken absent the tax rates. This is especially true of high-income, financially savvy taxpayers who in most countries have access to sophisticated tax avoidance techniques. There is clear evidence of responses that would fall in the first two tiers of the Slemrod (1995) hierarchy/

timing, shifting, avoidance/based on U.S. evidence since 1980, but only at the top end of the income distribution.^{xxxix}

Of course, the actual response of taxpayers varies. Gruber and Saez (2002) examined this issue.^{xi} A larger share of higher-income groups income can be altered for tax purposes—the size, timing and location of the income. The income of lower-income taxpayers, on the other hand, is primarily from wages. Consequently, you would expect the ETI for higher income taxpayers to be more sensitive to tax rates than lower income taxpayers. And, this is what Gruber and Saez found. The elasticity for those with incomes above \$100,000 was around 0.6, while other taxpayers had an elasticity of approximately 0.2. Taxes will affect the behavior of all taxpayers; however, the impact on higher income taxpayers is the most sensitive.

And, the changes in behavior create additional economic costs on taxpayers beyond the revenues raised. Carroll (2009) estimated the economic costs created by income taxes, or what is called the excess burden of the income tax (in this case the federal income tax), finding these costs to be very large:

The excess burden of the current individual income tax is not inconsequential, amounting to roughly 11 to 15 percent of total income tax revenues.

This means that in the course of raising roughly \$1 trillion in revenue through the individual income tax, an additional burden of \$110 to \$150 billion is imposed on taxpayers and the economy.

Increased tax rates on higher-income households impose very large excess burdens that, under reasonable assumptions, nearly equal the revenue collected.

The combined effect in 2011 of increasing the top two tax rates and the health care surtax is an additional excess burden of \$76 billion. When combined with the \$88 billion in additional revenue, the total burden of these higher tax rates is \$164 billion.

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The economic impact estimated above relied on the literature on the Elasticity of Taxable Income (ETI) as summarized in Giertz (2004). Giertz summarized the results of several studies including:

- ▶ Lindsey (1987): estimated an overall ETI between 1.60 and 1.80
- ▶ Feldstein (1995): estimated an overall ETI between 1.10 to 3.05 for AGI and 1.04 to 1.48 for AGI plus gross losses.
- ▶ Auten and Carroll (1995): estimated an overall ETI between 0.46 to 3.04, but usually 2 or greater.
- ▶ Auten and Carroll (1999): estimated an overall ETI of 0.55 ETI, with respect to the net-of-tax rate, but excluding all non-tax factors raises the elasticity to 0.75.
- ▶ Gruber and Saez (2000): estimated an overall ETI of 0.40.
- ▶ Kopczuk (2003): estimated an overall ETI of 1.44.
- ▶ Saez (2004): estimated an overall ETI of 0.62
- ▶ Carroll (1998): estimated an overall ETI of 0.38
- ▶ Goolsbee (2000): estimated an overall ETI between 0.0 and 0.4

End Notes

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