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Tax Collections on Online Retail Sales: The Rest of the Story

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Robert A. Robicheaux is a professor and Marshall Scholar at the University of Alabama at Birmingham's Collat School of Business. In 2012 he wrote a report for the Alabama Retail Association, "Estimates of Alabama Losses Due to E-Commerce," in which he analyzed that state's economic losses resulting from retail purchases by Alabama consumers from out-of-state sellers that do not collect and remit sales or use taxes owed.

In this report, Robicheaux says that revenue losses resulting from remote sales will affect not only state and local sales and use tax collections, but also jobs and income tax revenue — which in turn will lead to decreased consumer spending and further sales tax losses. Sales tax losses may then result in higher rates, driving more commerce to the Internet, according to Robicheaux.

The rapid growth of U.S. business-to-consumer (B2C) online sales is expected to continue as technology makes buying easier and safer, and as Generation X and millennials reach middle age, have more disposable income, and are more comfortable buying online. Many have analyzed or predicted the impact of lost sales or use taxes on online purchases from remote sellers without nexus. Following *National Bellas Hess* and *Quill*, states and localities have been unable to compel remote retailers to collect and remit owed taxes.

Annual uncollected and unremitted state and local sales or use taxes on business-to-business (B2B) and B2C online purchases were predicted by professor Donald Bruce and others at the University of Tennessee in 2009 to grow to between $11.4 billion and $12.65 billion by 2012. They forecast national B2C sales to grow to a range of $264 billion to $293 billion by 2012.[1] Though the economy faltered in 2008 and 2009 and has not yet fully recovered, those estimates turned out to be very close.

The University of Tennessee experts also estimated state and local sales and use taxes owed and collected in all states through 2012. Their estimate of tax losses on e-commerce in Alabama during 2012, for example, ranged from a baseline low of $170.4 million to a high of $189.2 million on all B2B and B2C e-commerce. They did not estimate the losses from B2B and B2C sales separately. Finally, because B2C sales represented only 7 percent of their sales forecasts, many may not comprehend the effects that the high growth of B2C e-commerce is having on both state and local economies. Buyer compliance with state use tax obligations is very high in B2B commerce, but not so in B2C except for auto sales.

Unfortunately, most revenue-loss estimates are incomplete. Use tax losses flow directly from the loss of local retail sales revenue; however, more than use tax dollars are lost to states and localities when consumers buy from remote sellers and owed use taxes are not collected. Sales revenue losses also cost jobs to each municipality, county, and state.[2] Retail sales and support workers are laid off or new workers are not employed when local sales decline or fail to rise. The lost jobs translate directly into lost state income tax revenue on lost household income in the states that levy a net income tax on individuals. Less household income also means less household retail spending. The lost income then leads to additional lost retail sales through all channels and related lost sales or use tax revenue. Finally, the problem can be exacerbated when local governments increase their sales and use tax levies in response to stagnant sales and use tax revenue, which then drives some consumers to purchase more goods and services online.

I. Background

The U.S. Census Bureau estimate of total e-commerce retail sales in 2013 was $263.4 billion — an amount very close to the Bruce et al. estimate for 2012.[3] That total represents sales made to consumers by pure-play online sellers and by brick-and-click sellers who sell both in traditional stores and online. Amazon.com and eBay exemplify pure-play sellers, while Wal-Mart, Barnes & Noble, and Toys R Us are examples of brick-and-click. A third category,

[1] *See* Bruce et al., "State and Local Government Sales Tax Revenue Losses From Electronic Commerce," University of Tennessee Center for Business and Economic Research (Apr. 13, 2009).

[2] *See* Robert A. Robicheaux, "Estimates of Alabama Losses Due to E-Commerce," Alabama Retail Association (Mar. 2012).

[3] U.S. Bureau of the Census, "Quarterly Retail E-Commerce Sales" (1st Quarter 2014).

brick-and-mortar retailers, are those who sell out of traditional stores and not online. Many of the latter should be concerned about their economic well-being.

According to the Census Bureau, total retail sales for 2013 exceeded $4.5 trillion, with e-commerce sales accounting for slightly more than 5.8 percent of all retail sales. The Census Bureau also reported in 2012 that only 15.4 percent of all e-commerce sales were online sales made by brick-and-click sellers. Electronic shopping and mail-order houses (North American Industry Classification System (NAICS) code 4541) — including all pure-play online retailers — accounted for 84.6 percent of the online sales. Census data for total and e-commerce retail sales by retail sectors for 2013 have not yet been released. It is reasonable to assume, however, that the pure-players' share of the 2013 e-commerce total has not changed considerably and that pure-players continue to dominate the B2C online marketplace.

No pure-player is anywhere near as large as Amazon, but there are many sizable "niche" sellers such as independently owned RacingUSA.com, the world's most successful store for officially licensed NASCAR merchandise. State "Amazon" laws ensnare Amazon and others who operate with affiliates or affiliate websites in the respective states, but they do not affect pure-play sellers without downstream affiliates (a term that has been defined broadly by some states) representing them in remote states.

With 131,447 enterprises that employ 266,052 persons in that sector, the pure-play market exhibits a very low level of economic "concentration."[4] The four largest pure-play firms account for only about 19.5 percent of industry sales, which are spread across a wide variety of product lines. While all but four companies in the industry have market shares of 1 percent or less, a 1 percent share of industry sales amounts to $2.8 million.

The Marketplace Fairness Act of 2013 (MFA) was introduced in the 113th Congress to address the competitive advantage remote sellers enjoy by not collecting use taxes owed by remote buyers.[5] The bill was approved by the U.S. Senate in May 2013 and is now awaiting action in the U.S. House of Representatives. Should the House pass the bill in its current form (looking more doubtful by the day) or, more likely, the two chambers work out a compromise and the president sign it, the playing field would be leveled considerably.

The House version of the MFA does contain a small-seller exception that exempts sellers with gross annual remote sales of $1 million or less from tax collection requirements. Bruce and William F. Fox estimated that the largest 974 online retailers in the United States all have sales in excess of $1 million — collectively accounting for more than 57 percent of all national online sales.[6] Many of the industry's 119,280 firms would be exempt from the MFA, but a large number of the major players would be covered.

Pure-play sellers are estimated to have averaged annual sales revenue growth of 10.3 percent from 2009 to 2014. Growth through 2019 is expected to average 5.9 percent.[7] Because the brands are established and the products are commodities, the largest product sector is computers and televisions, which account for 24.5 percent of all pure-play sales. Clothing, footwear, accessories, and jewelry account for 14.8 percent, while sporting goods, toys, hobby items, and games account for another 13.8 percent. Those are 2013 estimates of buyers' online purchases from pure-play sellers. Once a buyer knows what he wants, he views the risk of buying through a secure online site as minimal.

Table 1

Product Category	**2013 Percent of Pure-Play Sector Sales**
Computers and Televisions	24.5%
Clothing, Footwear, Accessories, and Jewelry	14.8%
Sporting Goods, Toys, Hobby, and Games	13.8%
Furniture and Home Appliances	7.2%
Medication and Cosmetics	6.5%
Office Equipment and Supplies	5.5%
Food, Beverages, and Pet Food	4.5%
Other Miscellaneous Merchandise	23.2%
Total Pure-Play Online Sales	**100%**

Source: Lerman, *supra* note 4, at 14.

Major brick-and-click sellers are found in only a small number of retail sectors. Of the 12 retail sectors (NAICS codes 441 through 454) for which total and e-commerce sales are reported by the Census Bureau, five have no published findings because the quality of the estimate was questionable or the total amount of commerce was less than $500,000.[8] The leading sector for online sales revenue is motor vehicles and parts retailers. Of $895 billion in that sector's sales in 2012, 10.2 percent were made online. No other group of brick-and-mortar sellers had a large percentage of its sector's sales made online by brick-and-click sellers.

The Census Bureau recently estimated that $71.2 billion of B2C online retail commerce occurred in the first quarter

[4]*See* Sally Lerman, "E-Commerce & Online Auctions in the US," IBISWorld Report 45411a (Mar. 2014) at 24.

[5]S. 743, 103rd Cong. (2013).

[6]*See* Bruce and Fox, "An Analysis of Internet Sales Taxation and the Small Seller Exemption," University of Tennessee Center for Business and Economic Research (Nov. 2013).

[7]*Supra* note 4, at 4.

[8]U.S. Census, "2012 Annual Retail Trade Survey."

Table 2	
2012 Share of NAICS Description	All E-Commerce
441 Motor Vehicles and Parts Dealers	10.2%
448 Clothing and Clothing Accessory Stores	1.3%
451 Sporting Goods, Hobby, Book, and Music Stores	0.8%
453 Miscellaneous Store Retailers	1.0%

of 2014,[9] which amounted to 6.2 percent of all retail sales and is 15 percent greater than the e-commerce retail sales reported in the first quarter of 2013. First-quarter retail sales are historically the lowest of the year, so the Census Bureau's report of online B2C sales in 2014 could top $285 billion.

Other reliable sources support the Census Bureau estimates and offer forecasts of future online sales. For example, eMarketer's April 2014 retail e-commerce sales estimate of $263.3 billion in 2013 mirrored the Census Bureau estimate. The eMarketer estimate included all products and services ordered using the Internet regardless of the payment or fulfillment method. The organization forecasts U.S. e-commerce retail sales in 2014 to grow by 15.5 percent and to top $304 billion. Growth forecasts by eMarketer expect B2C e-commerce to total $440 billion and to account for almost 9 percent of all U.S. retail sales in 2017.[10]

Forrester Research offered higher estimates of current and future B2C e-commerce sales on May 12, forecasting online retail sales in 2014 to reach $294 billion. Forrester predicted a 9.5 percent compound annual growth rate of online retail sales through 2018, when they will account for 11 percent of all U.S. retail sales.[11]

Finally, citing the above reports, the March 2014 IBISWorld report stated that industry sales grew an average of 10.3 percent annually from 2009 to 2014 and will grow by 5.9 percent annually from 2014 to 2019.[12] B2C e-commerce will continue to grow at the expense of traditional brick-and-mortar retailers, according to IBISWorld.

Online B2C retailing is growing at a considerably higher rate than expected for total retail sales and national output. Therefore, remote sellers' resistance to collecting and remitting taxes that are legally owed will continue to hurt states and localities that depend on sales and use tax revenue to fund schools, highway maintenance, police, and fire protection. General sales taxes — which accounted for 11 percent of the total of states' revenue in fiscal 2011 — are vital revenue sources in many communities.[13] The sales and use tax share of individual state and local governments' revenue varies, of course. In Alabama, for example, general sales tax receipts totaled 15.9 percent of state and local revenue — which is exclusive of federal government funds.

II. The Sales Tax Advantage

Billy Hamilton recently described Amazon's long-standing opposition to collecting and remitting use taxes on online purchases.[14] He cited comments by Jeff Bezos and other Amazon executives that Amazon could not collect and remit those taxes because the process is "horrendously complicated" and that Amazon "didn't consider tax a competitive advantage." Hamilton concluded, however, that much of Amazon's success has been because of an apparently conscious strategy of using sales tax as a competitive advantage. And in 2011, IBISWorld reported that the ability of B2C e-commerce sellers to avoid collecting sales taxes had "been a point of significant cost savings for online retailers since they have been able to reduce prices and attract customers by dodging sales tax."[15]

Some brick-and-click sellers' dependence on a sales tax advantage has led them to bypass opportunities to establish stores in states that would result in sales tax obligations. Eric T. Anderson, Nathan M. Fong, Duncan I. Simester, and Catherine E. Tucker reported that brick-and-click retailers who earn a large proportion of their revenue from online sales avoid opening a first store in high sales tax states.[16] In other words, online sellers' tax advantage is important enough to cause some to ignore the sales and profit potential regarding additional store investments. States and localities that offer sales and profit potential to those retailers lose not only sales tax revenue, but also jobs, household income, income tax, and other revenue from brick-and-mortar investments.

Can the sales tax advantage to online sellers be quantified? Hamilton referenced a working paper produced by the Dice Center in the Fisher College of Business at the Ohio State University, in which Brian Baugh and his colleagues reported the effects of Amazon's imposition of taxes on consumer purchases during 2012 and 2013 in five states

[9]U.S. Census Bureau, Retail Indicators Branch, "Estimated Quarterly U.S. Retail Sales (Adjusted): Total and E-commerce" (May 15, 2014).

[10]"Total US Retail Sales Top $4.5 Trillion in 2013, Outpace GDP Growth," eMarketer (Apr. 10, 2014).

[11]Sucharita Mulpuru, "US e-Commerce Forecast: 2013 to 2018," Forrester Research (May 12, 2014).

[12]*Supra* note 4, at 4.

[13]*See* https://www.census.gov/govs/local/.

[14]Billy Hamilton, "Amazon's 'Dirty Little Secret,'" *State Tax Notes*, June 2, 2014, p. 531.

[15]Janet Shim, "E-Commerce & Online Auctions in the US," IBISWorld Industry Report on 45411a (Dec. 2011).

[16]Eric T. Anderson et al., "How Sales Taxes Affect Customer and Firm Behavior: The Role of Search on the Internet," *J Marketing Res.* (Apr. 2010).

where it began collecting and remitting use taxes: California, New Jersey, Pennsylvania, Texas, and Virginia.[17] Households in those states reportedly reduced their Amazon purchases by 9.5 percent after the laws or revised collection practices took effect. Significantly, local brick-and-mortar retailers in those five states without an online sales presence experienced only a 2 percent increase in purchases by those households. However, those households increased by 19.8 percent their purchases at other online competitors of Amazon. Those other competing retailers were not required to collect taxes.

Not surprisingly, the incidence of switching from Amazon when sales tax was imposed on other sellers correlated directly to the dollar amount of purchases. On purchases of nominal amounts, the tax apparently was of little consequence on buying decisions. On purchases above $300, however, buyers increased their purchases 23.7 percent from other online sellers and 6.5 percent from local brick-and-click retailers. Clearly, the sales tax advantage significantly influences buying decisions. It is reasonable to wonder how the sellers' tax collections would influence online shoppers if the MFA is enacted and many sellers are compelled to collect and remit owed taxes.

III. Will Fairness Come to Pass, and What Next?

We know that consumer online purchases are growing and that sellers' ability to avoid collecting taxes is a competitive advantage for pure-play and brick-and-click retailers. This produces a competitive disadvantage for brick-and-mortar retailers and undermines vital sales tax revenue for states, counties, and municipalities. But there is much more to this story. First, MFA critics oppose what they argue is an imposition of a "new tax," which of course is untrue — yet the argument is used when pressuring federal lawmakers to avoid new taxes and throw the act under the bus.

Second, as any good marketer knows, competing on price is risky because all competitors have to do to eliminate a price advantage is reduce their prices. Yes, Wal-Mart and Lowe's have low prices and they have sustained a competitive advantage. But they are able to offer low prices because of other significant competitive advantages, including their ability to source products at lower costs of goods sold. Their real advantage is the ability to offer better value to value-conscious consumers. Most competitors cannot match their prices because mega-retailers have a product cost advantage.

Many pure-play online retailers, especially larger ones, have a major and sustainable advantage in that their fixed costs and operating expenses as a percentage of sales are significantly lower than their brick-and-mortar and brick-and-click competitors. Pure-play sellers enjoy uncharacteristically low wage costs for a retail industry, as they don't have to staff and maintain stores throughout the markets they serve. Industry wages total only 6.2 percent of revenue. In contrast, wages average 13 percent in department stores. In 2013 eBay Inc.'s revenue in the United States totaled $7.7 billion as it enjoyed operating income of $1.37 billion — a 17.8 percent return on sales.[18]

If forced to collect and remit taxes, many pure-play sellers will be in a good position to lower their gross margin at least a bit to retain customers' loyalty. More will pick up shipping costs and offer other incentives, such as bundle pricing options, to keep customers buying online. And as their target customers age and develop even greater desires to buy online for the convenience and broad selection, they will get over the disappointment of tax collection. A new normal will result and sales tax concerns will wither.

This brings the need to understand what that new normal will be. Eventually, most online sellers will be required to collect and remit use taxes in all states. But the online sellers will not go away — and their significant impacts on states and localities will persist.

The Baugh study cited above found that consumers shifted away from Amazon when taxes were imposed on purchases. Customers who shifted away from Amazon easily found other online sellers that did not apply any sales tax to their purchases, however. With a federal remote sales tax collection law in effect, only smaller online sellers would benefit from the sales tax advantage — some of which would grow and eventually become subject to the new law.

Larger online sellers will not allow their market share to drop dramatically. They will cut prices to curb the tax obligation's impact and offer a broad selection to buyers who prefer to shop online even if they have to pay taxes. Many prefer online shopping for its convenience, and it will become even easier in the near future. The number of online retailers will continue to grow, as will the number of consumers with Internet access and confidence in online shopping. Faster Internet speeds, greater bandwidth, better connection stability, more sophisticated mobile and desktop applications (apps), and more buyers who prefer Internet purchasing will increase B2C market penetration. Within a few years, few will think about or be concerned about paying sales taxes on Internet purchases.

IV. Who Is Winning Now?

Only a few states are major players in the pure-play online sales business. States winning the battle to attract online retail dollars feature large and small entrepreneurs whose retail trade areas encompass a large share of U.S. shoppers. Nearly everyone can access Amazon, eBay, Newegg, Groupon, and other online retailers within a matter of seconds.

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[17] Brian Baugh et al., "The 'Amazon Tax': Empirical Evidence From Amazon and Main Street Retailers," Social Science Research Network (Apr. 8, 2014).

[18] *Supra* note 4, at 21 and 25.

Delivery times can be problematic. Shipments from far-away sellers can be troublesome. They may take as much as two days or more! And delivery may be only 98 percent reliable within the promised time. But shoppers can sit in a comfortable chair at any time of day and shop. Their attire need not be uncomfortable, and they will encounter few unsavory characters that cause them any concern. In a matter of minutes, consumers can peruse scores of online sellers' offers of products and their availability for next-day, two-day, or some other days' delivery. Online shoppers will continue to fork over sizable dollars buying computers, TVs, clothing, footwear, wine, specialty food products, and everything imaginable.

As noted, all but four of the 131,447 sellers account for less than 1 percent of the pure-play market share each. Eight states lead in terms of their share of the nation's population of pure-play online retailing establishments. Those states collectively account for 45 percent of the U.S. population, but enjoy 52.9 percent of the nation's population of pure-play establishments. They likely account for far more than 53 percent of the sector's sales revenue. The eight states are benefiting from online sellers whose sales to out-of-state buyers generate jobs, household income, local retail spending, local sales tax revenue, and state income tax receipts.

Table 3

State	2013 Population (in millions)	Share of Industry Establishments
California	38.3	17.2%
Florida	19.6	8.4%
New York	19.7	7.8%
Texas	26.5	5.7%
Illinois	12.9	4.4%
Pennsylvania	12.8	3.3%
Washington	7.0	3.1%
Colorado	5.3	3.0%
Total for Top 8	**142.1**	**52.9%**

Source: Lerman, *supra* note 4, at 18.

When shoppers buy products in a local store, they contribute to the local community in a variety of ways. First, buyers support the retail sellers whose families depend on their business for their economic well-being. Second, local retailers employ workers whose families depend on that enterprise's well-being. Employment provides many full-time workers with benefits such as healthcare and retirement security that are vital to their quality of life. Third, the retailers buy everything from basic utility services to a variety of business products (goods and services) from other local businesses. Fourth, the retailers pay applicable municipal, county, and state taxes and fees. Fifth, many local business employees are also leaders who deliver community services and offer financial support to local organizations such as youth athletic organizations and churches.

How many signs lining the outfield fences of local baseball parks represent out-of-state retailers without nexus in your community? When consumers buy today from remote sellers without nexus, the community loses all of the aforementioned economic outcomes. Many celebrate the opportunity to avoid some of the third category, sales taxes, but they are not cognizant of the community's loss of the other four community benefits.

V. Sample Estimation of Losses

It is possible to quantify the losses that accrue to municipal, county, and state budgets from remote sales without nexus. Others have done that for the nation and all states with sales taxes.[19] Most state and local sales and use tax codes are complex and cumbersome. However, general estimates of tax losses can be conducted using some simple procedures that yield reasonable tax revenue loss estimates. Many citizens and public leaders do not realize — even in general terms — how our growing reliance on remote sellers for products is affecting state and local economies.

Other losses, including jobs and income tax revenue, can also be estimated with some reasonable degree of precision. Economists and retailers know that retail sales revenue drives employment. In Alabama, for example, every $1 million of retail sales creates 21.86 jobs. Employed workers usually spend about 30 percent of their gross income on retail purchases. Hence, for every $1,000 per year of household income lost, $300 of retail sales cannot be made. That produces another indirect hit to municipal, county, and state sales or use tax revenue. Finally, if state income tax is collected, the state loses income tax revenue as a result of the lost retail sales.

Alabama's losses were determined to illustrate state, metropolitan statistical area (MSA), and county effects of its loss in 2013 of its share of the $263.4 billion of national online retail sales. We begin by estimating the state's likely share of the nation's total online retail purchases. With 316.1 million people in the United States, online retail buying of $264.4 billion amounts to an average of $837 per person. Alabama's population in 2013 was about 4.83 million and represented about 1.5 percent of the U.S. total. However, the median household income in Alabama in 2013 was $43,160, or 81.4 percent of the U.S. median income of $53,046. We reduced the estimated per person spending to 81.4 percent of $837 to derive an estimate of $681 per Alabamian. Implicitly, it was assumed that other states with higher household income and retail buying potential would account for a larger share of the nation's online purchases. That yielded a $3.3 billion estimate for Alabama's online purchases in 2013.

A second approach was used to test that $3.3 billion estimate's reasonableness. The Census Bureau reported that

[19]*See* Bruce et al., *supra* note 1.

the 2013 U.S. retail and food services sales were $5.07 trillion. Alabama's state sales and use tax receipts in fiscal 2013 totaled $2.33 billion. Because the state's general sales tax rate on most purchases is 4 percent, the total taxable and compliant retail purchases by consumers can be estimated to have been about $58.33 billion ($2.33 billion / 0.04). This estimate of Alabama's total retail sales amounted to about 1.15 percent of the nation's total in 2013. Alabama's share of the nation's GDP in 2013 was determined to be 1.16 percent. This allows Alabama's share of the national total online retail sales of $263.4 billion to be estimated as 1.15 percent of the nation's total online sales, or $3.03 billion based on the state's share of national GDP. This amount is 8 percent less than the first estimate; however, since the second was based on Alabama's collected sales and use tax dollars, one should expect that number to be somewhat lower. To be conservative, we adopted the lower estimate ($3.03 billion) of Alabama online retail sales in 2013.

Alabama's average sales tax rate — including state, county, and municipal taxes — is 8.4 percent. Because about 50 percent of the taxes owed on remote sales are collected by sellers with nexus and voluntary remission by consumers, the 2013 sales tax loss was $127.3 million (50% x 8.4% x $3.03 billion). Of the total 8.4 percent tax rate, 4 percent goes to the state and, on average, 2 percent goes to the counties and 2.4 percent goes to municipalities. Of course, the precise rates vary by county and municipality, so more specific calculations can be made for each subdivision. The state loss amounted to 4 percent of the total 8.4 percent or 47.6 percent of the total, or $60 million. Counties and municipalities lost $30 million and $36 million, respectively.

A frequently overlooked but predictable consequence of consumers buying from remote sellers is job losses in states and localities. Non-nexus remote sales made to our state create jobs, income, and retail spending in the remote communities but not locally. As about 50 percent of those sales by remote retailers had nexus, we assume that the retailers doing business in our state enjoyed some of the benefits associated with online sales to Alabama residents. That leaves a loss of $1.5 billion, half of $3.03 billion, in sales. The applicable economic impact multiplier obtained from the University of Alabama Center for Business and Economic Research (CBER) is 21.862 jobs per $1 million of retail sales revenue. The application of that multiplier to the loss of $1.5 billion in sales would estimate the total number of jobs lost since online remote sales were first made in the 1990s.

To determine the impact made in 2013, we must first estimate the amount of additional online sales made in 2013 over 2012. If online sales in Alabama grew at the national average rate of 16.5 percent, then the base of remote sales in 2012 without compliance is $1.5 billion divided by 1.165, or $1.29 billion. The growth in noncompliant lost sales in Alabama in 2013 was estimated to be $210 million. At 21.862 jobs per million, it is estimated that 4,591 jobs were lost in 2013.

The loss of nearly 5,000 jobs caused household income losses and the loss of the applicable individual income tax in Alabama. The national rate of compensation for retail salespersons in the United States reported by the Bureau of Labor Statistics for May 2013 was $25,370 annually, or $12.20 per hour.[20] The University of Alabama CBER estimates that the relevant compensation rate for workers in Alabama is $24,500. Alabama has a state income tax rate that is 4 percent on all net income above $1,000 and 5 percent for income above $6,000. The average state income tax paid on a gross income of $24,500 ranges from 2.8 percent of gross income for a married person to 3.7 percent of gross income for a single person. The loss of — or more precisely the failure to add — 4,591 jobs in 2013 cost Alabama gross income of about $112.5 million. The Alabama income tax on a $24,500 salary amounts to 3 to 3.25 percent of gross income, which amounts to lost state income tax revenue of $3.4 million to $3.7 million.

If Alabama residents lost gross income of $112.5 million in 2013, then retail sales in the state were reduced further because a share of income could not be spent by the displaced workers on taxable goods and services. The average person nets or takes home about 70 percent of his individual gross income of $24,500. Persons spend on average 42 percent of their net income on taxable retail purchases. Thus, in addition to the state's tax revenue losses on direct sales amounts, the state lost taxes owed on indirect sales revenue losses equal to 42 percent of 70 percent of the $112.5 million. That totals an additional loss of $33.1 million in retail sales and at 8.4 percent sales tax another $2.8 million in lost tax revenue.

To demonstrate the high and growing level of taxable and noncompliant sales by remote sellers on our communities, it is helpful to provide local estimates of losses. The total loss to each metro area or county can be estimated in a variety of ways. One might determine each area's share of the state's total output and household income and apply those to determine local losses. The latest estimate of the Alabama GDP provided by the U.S. Department of Commerce Bureau of Economic Analysis for 2013 was $180.7 billion.[21] The Birmingham-Hoover GDP in 2012 was $58.99 billion.[22] The Bureau of Economic Analysis has yet to publish 2013 estimates for MSAs but it is reasonable to assume that the county's share of state GDP has not changed significantly. The state's GDP grew by 0.8 percent from 2012 to

[20]U.S. Bureau of Labor Statistics, "Occupational Employment and Wages" (May 2013).

[21]U.S. Bureau of the Census, "Advance 2013 and Revised 1997-2012 Statistics of GDP by State" (June 11, 2014).

[22]U.S. Bureau of the Census, "Current-Dollar Gross Domestic Product (GDP) by Metropolitan Area" (Sept. 13, 2013).

2013, so the Birmingham-Hoover MSA 2012 GDP value was inflated by that amount to determine a 2013 estimate of $59.5 billion. That allows the MSA's share of state GDP to be estimated at 32.9 percent — and that ratio has held steady for the last several years. The MSA's loss of the county's and municipalities' retail sales is estimated at 32.9 percent of $3.03 billion in state sales, or $997 million. If general sales or use taxes were not collected on 50 percent of those, then the MSA lost general sales and use taxes on $498.5 million of retail sales.

Lost tax revenue may be determined at the county levels. While the Census Bureau does not provide GDP estimates at the county level, individual county losses can be estimated as a share of a state's total losses based on each county's share of the state's total personal income. The Census Bureau's quick facts site provides estimates of per capita personal income and population for each county and state. For example, Jefferson County in the Birmingham-Hoover MSA had a 2013 population that was 13.5 percent of the state total. The county had a per capita personal income that is 13.45 percent above the state average. The county's share of the total state income is 15.3 percent. If 15.3 percent of the sales by remote sellers without compliance occurred in Jefferson County, the county lost use taxes that are 2 percent on half of about 15.3 percent of the state total online sales. That is half of 15.3 percent of 2 percent of $3.03 billion, or a $4.64 million loss to the county in 2013.

VI. Conclusions

Online retail sales will continue to grow and states, counties, and municipalities will continue to lose tax revenue until some form of marketplace fairness or equity is implemented. That will likely happen in the near future. But while tax fairness will address one key problem, state and local use tax collection, it will do nothing to affect other and more abiding problems. That is, online retail commerce will continue to drain jobs, household income, state income tax revenue, and indirect retail sales dollars from states and localities.

Pure-play and brick-and-click competitors should be applauded. Competition is celebrated in a free market and should drive all sellers to higher levels of performance. Thus, the online sellers are not criticized for their marketplace success. Indeed, they are saluted for their ingenuity that enhances consumers' access to products and the ease of the online purchasing process they provide. I hope and predict that the competition will in the long run drive some stale and outdated retailers to rise to the challenges created by the online competitors.

It is important that the brick-and-mortar and the brick-and-click retailers respond to the ongoing growth of online retail spending. All retailers need to "step it up" and offer consumers more compelling reasons to shop in their stores. They need to offer more value, more shopping convenience, and more service to attract shoppers. They also must determine how to use the Internet and its capabilities to serve their customers better and to win back and maintain customer loyalty. Social media campaigns are a must for contemporary marketing. The MFA would level the playing field, but it would not equalize online sellers' competitive ferocity and skill.

The retail landscape has changed significantly in the last 20 years, and the Internet has had at least as big an impact as suburban subdivisions and shopping centers did in the 1960s. In many cities, vibrant downtowns have lost their retailers to the suburbs. The economic impacts of those losses have been devastating in many urban communities. The same effects are beginning to be experienced because of B2C e-commerce. The retailers are not just leaving our downtowns and moving to neighboring communities where their customers live and play. They are now leaving our states. ✰