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PROJECT

## **Missouri Sales Tax Erosion: State Losing As Much as \$600 million from Untaxed E-Commerce Sales**

## Executive Summary

Since 2007, Missouri sales tax revenue growth has not kept pace with the income growth of Missouri residents. Sales taxes paid as a percentage of personal income in 2018 were far less than sales taxes paid as a percentage of personal income in the last decade. If Missouri residents paid the same percentage of personal income in sales tax in 2018 as they did late in the last decade (after adjustments discussed in the report), then Missouri would have had an additional \$800 million in 2018 sales tax revenue.

A large portion of Missouri's sales tax erosion is the result of changing consumer behavior which has shifted spending habits to e-commerce sales that have gone untaxed. An estimated \$575 million to over \$600 million a year is being lost in sales taxes because of untaxed e-commerce sales that otherwise would have been taxable if purchased in a store with a physical presence in the State of Missouri. If the growth of e-commerce sales continues at a similar pace, then Missouri e-commerce sales tax losses could soon easily exceed \$800 million.

Missouri enacted an e-commerce click-through nexus law in 2003, but it is the only state in the country that has not enacted a more stringent law to collect more e-commerce-oriented sales tax via the United States Supreme Court's Wayfair decision. Missouri could capture a significant portion of this lost revenue if it updates its treatment of e-commerce and other remote seller sales.

Walmart, which is the state's largest employer and the state's largest retail collector of sales tax, is estimated to not be collecting \$54 million in Missouri sales tax on Walmart.com sales by its third-party sellers – independent businesses that sell their products on Walmart.com. This report asserts that almost all of these untaxed sales would be taxable if sold in local Walmart stores. In addition, by reviewing the sales and tax exemptions available to Walmart, the state's largest retail collector of sales tax, it is estimated that Walmart is under-collecting sales tax for in-store sales by \$35 million to \$63 million. In total, Walmart may be responsible for \$89 million to \$117 million in lost sales tax revenue annually. This value was calculated via analysis of Walmart estimated revenue, its tax-exempt sales, and sales tax revenue that Walmart remits to the state.

Both the statewide and Walmart sales tax potential loss figures are substantial. These ranges of uncollected sales taxes represent significant dollars that Missouri and local governments could be receiving in additional revenue if further state review is conducted and attention to e-commerce rules and laws are examined as to apparent leakage.

Further attention to e-commerce and sales tax compliance issues are warranted if Missouri leaders wish to receive more sales tax revenue that is apparently due. An estimated \$800 million is being lost every year, and addressing e-commerce issues, as other states have worked toward, could address much of the tax shortcoming and avoid further tax erosion of hundreds of millions of more dollars in the near future.

## Introduction

It is estimated in this report that Missouri is losing \$800 million from sales tax erosion. Further, this report estimates that Missouri is losing \$575 million to over \$600 million a year from untaxed e-commerce and other remote seller sales to Missouri residents.

Since 2007, Missouri sales tax revenue growth has not kept pace with the income growth of Missouri residents. Missouri state and local governments collected an estimated \$800 million less in sales tax revenue in 2018 as compared to late in the last decade. This is based upon the following:

1. Missouri residents pay sales tax.
2. Sales taxes paid are a portion of Missouri residents personal income.
3. Sales taxes paid as a percent of personal income in 2018 were far less than sales taxes paid as a percentage of personal income in the last decade.
4. If Missouri residents paid the same percentage of personal income in sales tax in 2018 as they did late in the last decade (after adjustments discussed later), then Missouri would have had an additional \$800 million in 2018 sales tax revenue.

Non-taxed services spending has increased and as income has risen so have income taxes. Even after taking into consideration the growth in services spending and income tax cost, Missouri is still collecting an estimated \$800 million less a year in sales tax as compared to the last decade considering sales tax revenue as opposed to personal income then versus now.

A large portion of the Missouri's sales tax erosion is thanks to e-commerce sales growth that has gone untaxed in the state. An estimated \$575 million to over \$600 million a year is being lost in sales taxes because of untaxed e-commerce sales that otherwise would have been taxable if purchased in a store in St. Louis or Independence. Considering the rapid growth of national e-commerce sales, if growth continues at a similar pace, then Missouri e-commerce sales tax losses could soon easily exceed \$800 million. Missouri enacted an e-commerce click-through nexus law in 2003, but it is the only state in the country that has not enacted a more stringent law to collect more e-commerce-oriented sales tax. The U.S. Supreme Court in 2018 in it's Wayfair decision opened the door for states to collect much in terms of e-commerce sales taxes previously off-limits. Numerous states, as shown later in the report, have followed the lead of the Supreme Court.

Walmart is the state's largest private sector employer.<sup>1</sup> Walmart e-commerce and other sales tax issues are analyzed for this report. Doing so provides another layer concerning the analysis of the state's sales tax erosion issue considering e-commerce and other issues related to sales tax erosion.<sup>2</sup>

Walmart is estimated to be under-remitting \$35 million to \$63 million a year concerning Missouri in-store sales. This is determined for the report via analysis of Walmart estimated revenue, its tax exempt sales, and sales tax revenue that Walmart remits to the state. Considering e-commerce sales, Walmart is estimated to not be collecting \$54 million in Missouri sales tax on Walmart.com sales by its third-party sellers — independent businesses that sell their wares on Walmart.com. This report asserts that almost all of these untaxed sales would be taxable if sold in local Walmart stores.

Two sales tax erosion segments are discussed in this report. First, the e-commerce issue is discussed and related state and local sales tax losses are estimated. Second, an overall sales tax erosion amount is estimated based upon sales tax growth versus income growth of Missouri residents over time. This \$800 million amount is believed to include e-commerce losses. Within each segment, analyses of Walmart tax remittance is also discussed. The report finds that Walmart is estimated to be under-remitting up to \$117 million regarding e-commerce and other issues.

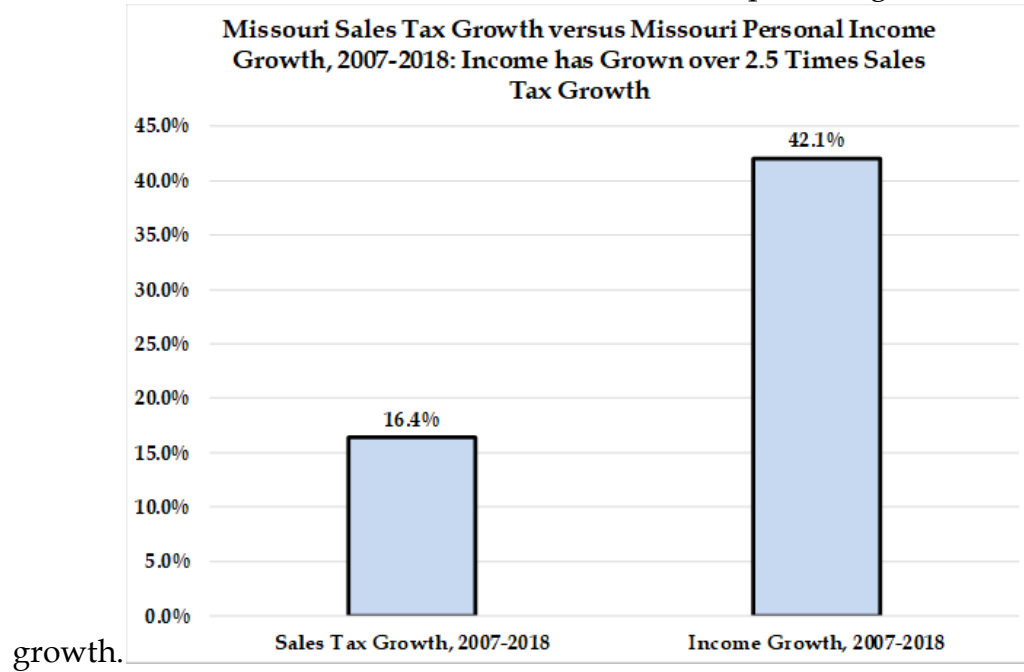
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<sup>1</sup> State of Missouri Comprehensive Annual Financial Report, 2018, & Walmart is the Largest Private Sector Employer in 19 States, Quartz.com, March 7, 2017, <https://qz.com/924056/walmart-wmt-is-the-largest-private-employer-in-19-states/>

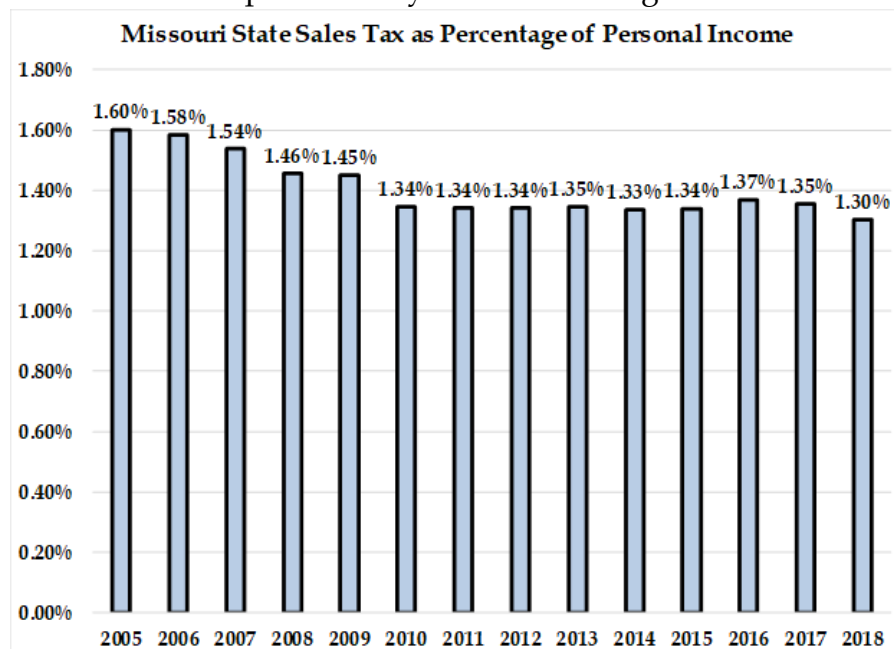
<sup>2</sup> Etsy is another company noted concerning Missouri e-commerce sales tax erosion; however, Etsy is not used as a case study because of limited data. Walmart is studied in detail: there is unique Walmart corporate data available concerning revenues, sales, and sales taxes the company remits to Missouri. Other large retail companies doing business in Missouri have not been identified that publicly provide such data.

## State sales tax erosion charts:

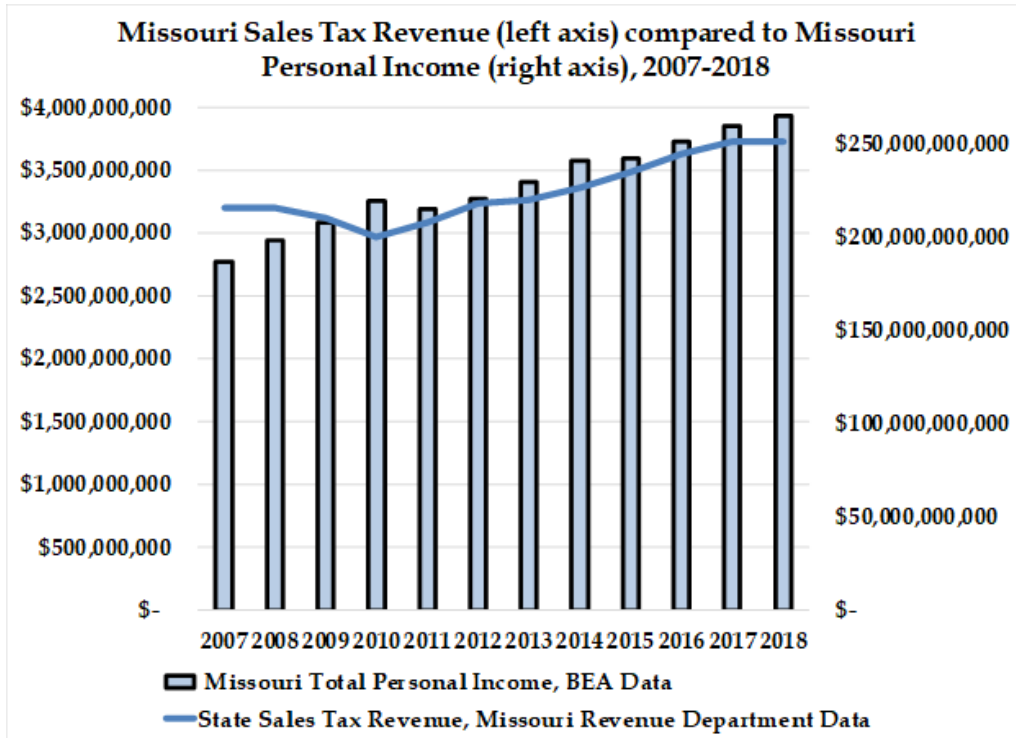
- ❖ **Missouri sales tax growth is much less than income growth over a dozen year period.** From 2007 through 2018, the percentage of income growth of Missouri residents has been more than two and a half times the percentage of sales tax



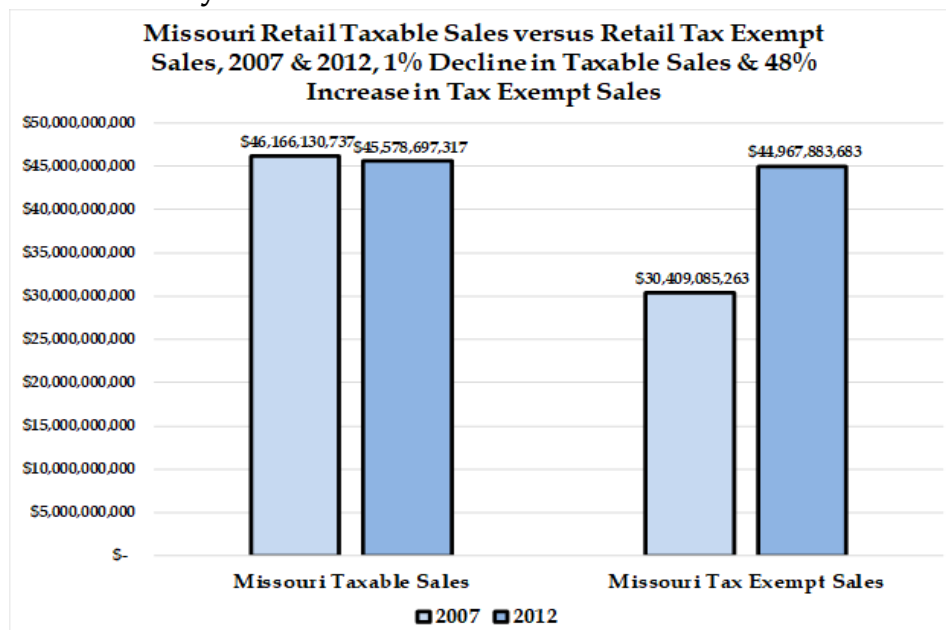
- ❖ **Missouri sales tax as a percentage of total personal income of Missouri residents has dramatically declined since the last decade.** In 2018, Missouri residents paid almost 20% less in annual sales taxes as a percentage of personal income in 2018 as compared to in years 2005 through 2009.



- ❖ **Missouri income and sales tax receipts have grown, but personal income growth has outstripped sales tax growth.** The following chart shows that sales tax as compared to personal income in years 2007 through 2009 was much higher than in years 2016 through 2018.

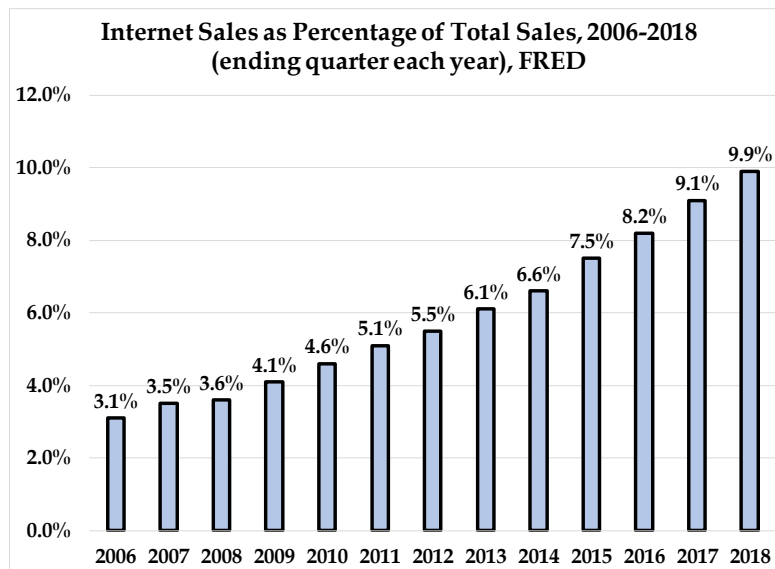


- ❖ **Missouri tax exempt sales were almost as much as taxable sales in 2012. From 2007 through 2012 (the last year of available federal data), tax exempt sales grew dramatically while taxable sales declined.**



## E-commerce charts:

- ❖ **Nationally, e-commerce sales as a percentage of total sales have increased substantially over the last decade.**



Source Data: Federal Reserve Board of St. Louis, Federal Reserve Economic Data, April 2019.

- ❖ **Missouri e-commerce sales are estimated to have grown dramatically. Considering the last year of sector-specific federal e-commerce data, Missouri e-commerce sales increased an estimated 21% from 2012 to 2016.**

Missouri Estimated Total E-Commerce Sales			
Applying Missouri GNP Percentage to National Figures (millions of dollars)			
Sector	2012	2016	Implied
	Implied E-Commerce Sales	Implied E-Commerce Sales	
Manufacturing	\$ 49,600	\$ 54,912	11%
Merchant Wholesale	\$ 29,687	\$ 36,796	24%
Retail	\$ 3,765	\$ 6,158	64%
Selected Services	\$ 6,078	\$ 9,634	59%
<b>Total</b>	<b>\$ 89,129</b>	<b>\$ 107,500</b>	<b>21%</b>

Implied sales based upon U.S. Census data, 2012 & 2016.

- ❖ Businesses like Walmart and Etsy do not charge sales tax in Missouri on numerous purchases. See the following screenshots for Walmart and Etsy purchases to be delivered to residents of Missouri where no sales tax would be collected:

The screenshot shows a Walmart cart with three items. The right sidebar displays the order summary:

Subtotal (3 item)	\$2,901.15
Delivery	Free
<b>Tax, taxes &amp; fees (Based on \$0.00)</b>	<b>\$0.00</b>
<b>Est. total</b>	<b>\$2,901.15</b>

A blue "Check Out" button is visible below the summary.

**Your cart: 3 items**

- Mickey Roadster Racers Super-Charged Steering Wheel** (Qty: 1) - \$49.95. Sold by Rocky Mountain Textbooks. *Order soon, only 1 left!*
- Mtd Products 13A877B5066 7-Speed Riding Lawn Tractor, Briggs & Stratton Intek 547cc Engine, 42-in. - Quantity 1** (Qty: 1) - \$2,002.21. Sold by Ron's Home and Hardware. *Order soon, only 1 left!*
- Gymax 18.5-inch Kettle Charcoal Grill BBQ Outdoor Backyard Cooking with Wheels Black** (Qty: 1) - \$48.99 (List \$99.99). Sold by Gymax LLC.

Etsy

The screenshot shows the Etsy checkout page with a PayPal overlay. The PayPal overlay displays the following information:

Etsy		X
Fabulous Antique W...	More	\$125.00 usd
Item total		\$125.00 usd
Subtotal		\$125.00 usd

The background shows the shipping address (Michigan, United States) and the PayPal logo with the text: "PayPal is the safer, easier way to pay. No matter where you shop, we keep your financial information secure."



## Report Key Findings:

- ❖ **Missouri is annually losing an estimated \$800 million thanks to sales tax erosion. Of this amount, e-commerce and other remote selling sales tax avoidance is estimated to amount to \$575 million to over \$600 million.**
  - Previous 2012 studies (including a University of Missouri study) estimated that Missouri lost over \$400 million from non-taxed e-commerce and other remote sales. Adjusting said amount by updating e-commerce sales estimates and higher local sales tax rates since 2012, and through the use of federal data, places the estimated revenue loss at \$575 million to over \$600 million a year.
  - Federal data attributed to the nation and to Missouri, coupled with assumptions used in prior studies, are used to develop sales tax loss estimates regarding e-commerce.
  - **If federal e-commerce growth data applies to Missouri and e-commerce growth continues on the same trajectory, then Missouri could be losing \$800 million in sales tax at the beginning of the new decade.**
- ❖ **Missouri is the only state in the country that has not enacted e-commerce taxation legislation that is stronger than the click-through and affiliate nexus standard.** Missouri could capture lost revenue if it updates its treatment of e-commerce and other remote seller sales.
- ❖ **Missouri is estimated to be experiencing general sales tax erosion of \$800 million a year because of sales tax versus income growth comparisons over time.**
  - **Personal income growth has outstripped sales tax growth.**
  - **If Missouri residents paid the same percentage of their incomes in sales taxes as they did a decade ago, then Missouri would be collecting an additional \$800 million even after considering non-taxed services growth.**
- ❖ **It is estimated that Walmart is not collecting up to an estimated \$89 million to \$117 million in Missouri state and local sales tax.** Such sales tax loss range incorporates both potential over-exemption of sales and estimated non-taxation of e-commerce third-party sales. Walmart potential sales tax losses are separated into two categories, e-commerce and general exemptions. Both categories are discussed as follows:
  - **E-Commerce.** It is estimated that Walmart is under-remitting up to \$54 million in sales tax revenue associated with e-commerce third-party sellers. The \$54 million is believed to be in addition to \$35 million to \$63 million in general sales tax remittance discrepancies concerning estimated revenue, exempt sales, and taxes remitted discussed below.
    - Walmart's e-commerce sales have increased substantially in recent years.

- Walmart.com does not collect sales tax on certain sales to Missouri residents even though such sales would be taxable in any Missouri Walmart Supercenter, Sam's Club, or Neighborhood Market.
- It is estimated that 90% of Walmart's e-commerce sales are by third-party sellers – outside sellers that advertise and sell their products on Walmart.com. Walmart says they do not collect sales tax on such sales unless sellers request sales tax to be collected.
- **General Exemptions.** It is estimated that Walmart is generally under-remitting sales tax by up to \$63 million a year based upon a sales revenue and tax exemption analysis.
  - Walmart remits \$643 million in sales tax to Missouri.
  - Walmart sells both taxable and non-taxable items.
  - This report estimates Walmart in-store revenue and non-taxable sales and estimates that the taxes remitted to the state are \$35 million to \$63 million lower than what is suggested to be due based upon revenue and non-taxed sales estimates.

The report is separated into two segments. The first segment addresses statewide e-commerce sales tax losses estimated to have been \$575 million to over \$600 million in 2018, and this discussion is followed by an analysis of estimated e-commerce sales tax losses attributed to Walmart. The second portion of the report provides an analysis of statewide estimated sales tax erosion of \$800 million, and thereafter the report includes an assessment of Walmart in-store sales tax remittance and the company's contribution to the sales tax erosion issue as estimated for this report.

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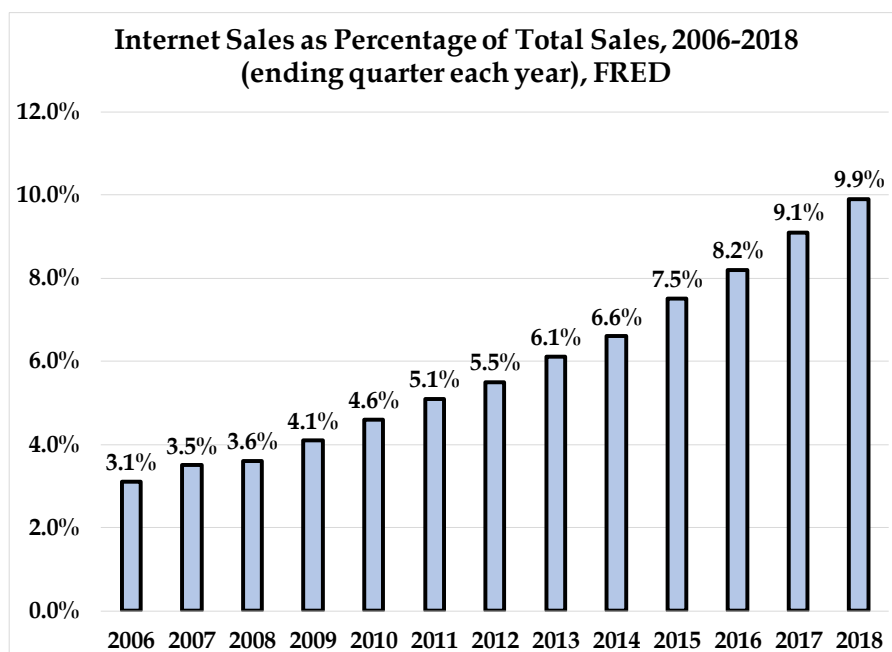
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## E-Commerce Issues:

### Non-taxed E-Commerce Sales equal an estimated \$575 million to over \$600 million in Missouri sales tax loss

E-commerce/remote seller estimated losses contribute to Missouri's tax erosion issues. This section of the report concerns e-commerce/remote sales as they relate to sales tax loss and such loss is quantified using different approaches. This report estimates that Missouri remote seller sales tax losses were \$575 million to over \$600 million in 2018, and such loss amount could easily exceed \$650 million by next year, and \$800 million early in the next decade, if the e-commerce growth trend continues.<sup>3</sup> The U.S. Supreme Court decided last year that states could tax numerous previously untaxable e-commerce sales. Other states have acted (including every contiguous state as recent as 2018 or 2019), but Missouri, without taking further action, leaves itself open to much more sales tax erosion.

There are sales in bricks-and-mortar stores and there are sales of goods over the Internet. Putting e-commerce sales in perspective is helpful in understanding the magnitude of the e-commerce impact upon Missouri's traditional sales tax base over time. The following chart shows national e-commerce sales growth since 2006:



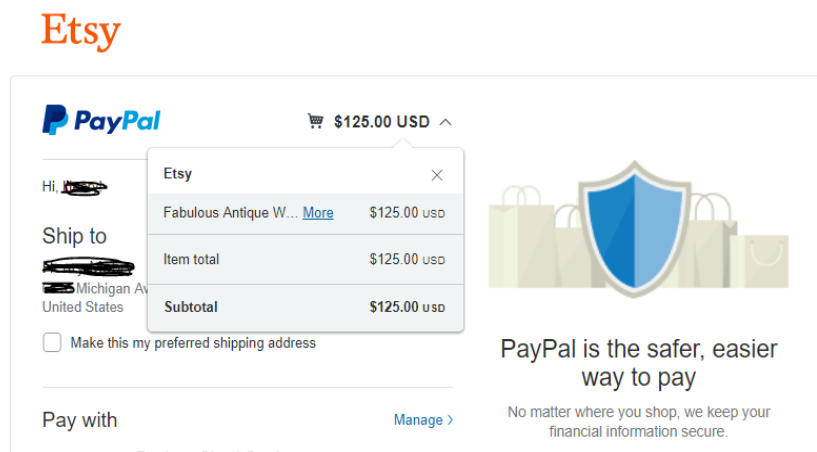
Source Data: Federal Reserve Board of St. Louis, Federal Reserve Economic Data, April 2019.

<sup>3</sup> E-commerce sales nationwide have increased 32% as a percentage of total sales since 2015 when the last update of state sales tax losses from remote selling was produced by the National Conference of State Legislatures (NCSL). Such range of figures is based upon 2012 estimated Missouri e-commerce sales tax losses produced by NCSL and an NCSL subsequent update in 2017 using 2015 national growth in sales tax loss figures. Figures based upon reports from the following sources: Federal Reserve Bank of St. Louis, Federal Reserve Economic Data, April 2019, and NCSL. Further explanation is provided in this section of the report.

The previous chart shows the growth in Internet sales as a percentage of total sales from 2006 through 2018. It should be noted that the Internet sales percentage is concerning all U.S. sales, and not just retail sales. Internet sales growth nationally has increased by 50% from 2013 through 2018. This increase in Internet sales, when most such sales have been deemed untaxable, has certainly been a large, if the not largest, contributor to sales tax erosion in Missouri and other states.

As shown in the report summary, Walmart and Etsy do not collect Missouri sales tax on many items sold to Missouri residents. The Etsy screenshot from the report summary, also seen below, is from the Etsy.com checkout page accessed in August 2019 for an item for purchase. The item is a Westclock Alarm Clock for \$125, and no sales tax would be charged if purchased by and sent to a resident of St. Louis, Missouri 63118 located on Michigan Avenue.

An unknown number of companies selling wares to Missouri residents also do not collect sales tax on countless, otherwise taxable products. This report finds, and other studies have found, that the e-commerce sales tax leakage issue is not limited to one or two companies. The e-commerce sales that go untaxed are estimated by this report and others to be costing Missouri and her local governments hundreds of millions of dollars every year.



Source: Etsy.com

## **Different reports estimate hundreds of millions of dollars in Missouri e-commerce sales tax losses**

Authors have estimated sales tax losses by state from e-commerce and other remote sales. Such estimates are discussed at this point in relation to the effect upon Missouri's sales tax base.

## **National Conference of State Legislatures: Missouri remote seller sales/use tax loss exceeded \$430 million in 2012, when e-commerce sales were almost just half as much as today**

**The National Conference of State Legislatures (NCSL) reported 2012 estimates for Missouri remote sales tax losses of \$430.2 million.**<sup>4</sup> This amount translates into approximately \$5.75 billion of Missouri sales. In 2012, Missouri retail sales (excluding services, manufacturing, and wholesale trade) were \$45.6 billion.<sup>5</sup> The estimated 2012 untaxed sales were equivalent to 12.6% of retail sector sales.<sup>6</sup>

The NCSL data uses a University of Tennessee study and a Washington State study by Dr. Lorrie Jo Brown as supporting documentation.<sup>7</sup> The University of Tennessee's Bruce, Fox, and Luna (2009) estimated e-commerce losses for states and local governments using Census data and survey data with assistance through the Federation of Tax Administrators (FTA).<sup>8</sup> The NCSL data include e-commerce estimates and estimates for non-e-commerce remote sales.<sup>9</sup>

Bruce, Fox and Luna (2009) estimate that a portion of manufacturing, wholesale trade, and services sales are taxable, and the authors estimate that much of the sales/use tax loss is thanks to non-compliance of businesses and consumers concerning transactions taxes. The authors estimated nationally that business to business use tax compliance was at 75%, and they estimated that compliance was at 66.1% for Missouri sales. The authors assumed 5% compliance concerning consumer purchases.

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<sup>4</sup> <http://www.ncsl.org/research/fiscal-policy/collecting-ecommerce-taxes-an-interactive-map.aspx>

<sup>5</sup> FY19 & FY18 Comprehensive Annual Financial Reports, State of Missouri, Jefferson City, Missouri.

<sup>6</sup> Sales tax base loss is not attributed solely to retail sector. Other sectors have contributed to the estimated sales tax base erosion regarding e-commerce in particular according to the Bruce, et al. (2009) study. The sales tax loss base percentage is included here to highlight the magnitude of the estimated e-commerce/remote seller sales tax base loss.

<sup>7</sup> Updated Sales Tax Loss Report, National Conference of State Legislatures, 2017,

<http://www.efairness.org/files/Updated%20Sales%20Tax%20Loss%20Report.pdf>

<sup>8</sup> Bruce, D., Fox, W., & Luna, L., State and Local Government Sales Tax Revenue Losses from Electronic Commerce, The University of Tennessee, April 13, 2009.

<sup>9</sup> Although the 2012 estimated losses are equivalent to a large portion of Missouri's retail sector, business to business sales via wholesale trade and manufacturing are also considered in the estimates. This means that the overall amount of potential sales tax loss includes potential taxable sales of manufacturing, wholesale trade, and some services.

The authors estimated tax losses by state for years up through 2012, and they also took into account in their analysis taxable versus non-taxable sales. Their findings regarding sales tax loss are concerning taxable sales assuming that a large portion of e-commerce sales are non-taxable (e.g., sales and use tax exempt sales, manufacturing inputs, & wholesale transactions).

NCSL took reporting the Bruce, Fox, and Luna (2009) e-commerce sales a step further by including non-electronic remote seller sales in their estimates. NCSL incorporated estimates from a Washington State study by Laurie Jo Brown to derive state estimates which included a \$430 million Missouri sales/use tax estimated loss of revenue from all remote selling.

The Missouri \$430 million is a portion of the national estimated sales tax loss of \$23.26 billion in 2012 which represents 1.85% of the total.<sup>10</sup> The NCSL figures suggest that Missouri businesses and individuals have engaged in e-commerce/remote selling purchasing to virtually the same degree as other states.

In 2017, NCSL produced an updated estimate of remote seller sales/use tax losses to states. From 2012 to 2017 the sales tax loss figure grew from \$23.26 billion to \$25.93 billion after considering additional business compliance concerning e-commerce sales tax remittance. This was an 11.48% increase over the five year period after taking into account additional compliance – the estimated growth in sales tax loss would have increased an additional 12% if compliance had not improved.

If Missouri experienced the same growth in sales tax loss as other states as estimated by NCSL, then Missouri, in 2015 (considering updated NCSL e-commerce loss growth amount from 2012 through 2015), would have lost \$480 million in sales tax revenue from remote seller activity. After considering local sales tax rate changes and St. Louis Fed growth in national e-commerce sales as a percentage of total sales, then the 2018 figure would be \$575 million.<sup>11</sup> Such amount assumes that Missouri e-commerce growth as a percentage of total sales mirrors the growth as estimated by the St. Louis Federal Reserve. In 2015, national e-commerce total sales were 7.5% of total sales and in 2018, the percentage had grown 32% to 9.9% of total sales.<sup>12</sup>

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<sup>10</sup> The 1.85% percentage is on par with Missouri's population percentage of the United States, which was 1.87% in 2018 according to Census Bureau estimates. Some states do not have a sales tax, and Missouri's 8.08% 2018 combined state and local sales tax rates are ranked 14<sup>th</sup> in the nation, according to the Tax Foundation, see <https://taxfoundation.org/state-local-sales-tax-rates-midyear-2018/>.

<sup>11</sup> The 2012 and 2017 Missouri state and local rates are used based upon Tax Foundation reports.

<sup>12</sup> This estimate also assumes the non-e-commerce remote seller sales remain static from the NCSL 2017 updates sales tax loss figures. The e-commerce 2015-2018 Federal Reserve of St. Louis growth percentage is only applied to the NCSL portion of sales tax losses only attributed to estimated e-commerce losses. The non-e-commerce remote seller static figure from 2015 to 2018 would mean that the \$575 million is likely underestimated.

A 2012 Missouri-specific study also asserted that e-commerce has caused Missouri sales tax leakage. Huang, Kosash, and Wesemann (2012) estimated that e-commerce sales tax losses were \$353 million in 2009 and were estimated to be \$358 million in 2014.<sup>13</sup> Such figures are as compared to 2012 NCSL estimates of just over \$400 million, but the Huang, et al. (2012) figures do not include non-electronic remote sales which means that that studies' e-commerce loss estimate is even higher than the NCSL figures used. NCSL 2012 and updated numbers from 2015 data, and Huang, et al. (2012) estimates both show large revenue losses thanks to e-commerce and other remote seller sales. Applying recent local tax rates and growth in e-commerce usage would show that prior e-commerce/remote seller sales tax loss estimates would have dramatically increased. Considering future estimated growth would mean the potential sales tax loss from untaxed e-commerce sales can be much higher.

CNN reported that A 2017 report by Credit Suisse projected that a quarter of shopping malls would close by 2022 thanks largely to e-commerce growth. The report said e-commerce sales represented 17% of total retail sales in 2017 and that e-commerce sales would represent 35% of total retail sales by 2030.<sup>14</sup> The report also estimated 8,600 store closures in 2017 in comparison to the 6,200 stores that closed in 2008 – the first year of the Great Recession. In 2019, Business Insider reported that UBS projects 75,000 store closures by 2025 thanks to e-commerce.<sup>15</sup>

The Business Insider article said:

“We calculate that for every 100 bp increase in e-commerce penetration, 8,000 - 8,500 retail establishments would need to close in order to maintain a 2% increase in sales per store (to cover rising costs such as wages),” the report states.

“E-commerce is already eating up an increasing amount of retail sales. In 2018, Amazon added \$35 billion in retail sales across America, according to UBS. That's the equivalent of roughly 7,700 stores.”

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<sup>13</sup> Y. Huang, J. Kosash, and A. Wesemann, Internet Sales and Use Tax Issues in Missouri, Institute of Public Policy Missouri Legislative Academy Harry S Truman School of Public Affairs April 2012, <https://pdfs.semanticscholar.org/84d6/1d4e04d611bbd68392381cef558efbfb06b.pdf>

<sup>14</sup> Malls are doomed: 25% will be gone in 5 years, CNN Business, CNN Money, money.cnn.com, June 2, 2017, <https://money.cnn.com/2017/06/02/news/economy/doomed-malls/index.html>

<sup>15</sup> K. Taylor, The retail apocalypse is far from over as analysts predict 75,000 more store closures, Business Insider, April 9, 2019, <https://www.businessinsider.com/retail-apocalypse-thousands-store-closures-predicted-2019-4>



If estimates are true for the future of bricks and mortar operations as opposed to e-commerce growth, then Missouri sales tax collections could be facing more sales tax shortfalls. Further shopper migration to e-commerce could amount to well over \$1.1 billion in Missouri sales tax losses in the not too distant future if the latter national forecasts ring true and are applicable to Missouri.



## E-Commerce Federal Data Applied to Missouri

The Bruce, et al. (2009) study was used by NCSL in its combined e-commerce/remote seller sales tax loss estimates for states. The Bruce, et al. (2009) study used federal total sales and e-commerce data developed by the Census Bureau. This information, coupled with Federal Reserve GNP data, provides another view of the magnitude of e-commerce upon Missouri's sales tax base.

## The U.S. Census E-Commerce Figures

The U.S. Census Bureau estimates total sales and e-commerce for different sectors on a national scale.<sup>16</sup> The following chart shows the magnitude of total and e-commerce sales, by sector, for 2012 and 2016, the latest information available regarding specific sector sales.

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<sup>16</sup> Current or recent state data is not available from the Census Bureau.

United States, Total Sales & E-Commerce Sales by Industry Group, 2012 & 2016, U.S. Census Bureau (millions of dollars)						
Industry Group	2012		2016		Total Sales Percentage Change	E-Commerce Percentage Change
	Total Sales	E-Commerce Sales	Total Sales	E-Commerce Sales		
Manufacturing	\$ 5,756,337	\$ 2,989,146	\$ 5,354,694	\$ 3,469,624	-7.0%	16.1%
Merchant Wholesale	\$ 6,771,454	\$ 1,789,095	\$ 7,182,179	\$ 2,324,953	6.1%	30.0%
Retail	\$ 4,344,140	\$ 226,878	\$ 4,856,334	\$ 389,111	11.8%	71.5%
Selected Services	\$ 12,004,067	\$ 366,277	\$ 14,591,111	\$ 608,718	21.6%	66.2%
Total	\$ 28,875,998	\$ 5,371,396	\$ 31,984,318	\$ 6,792,406	10.8%	26.5%

Source: U.S. Census Bureau

As the U.S. Census data chart shows, e-commerce sales were substantial in 2012, and even more substantial in 2016, which is the last year that the Census Bureau produced e-commerce data by industry category. In 2012, e-commerce sales represented 18.6% of total sales whereas in 2016 e-commerce sales represented 21.2% of total sales for all industry groups.

Often, data shown regarding e-commerce sales are retail-sector centric. The St. Louis Federal Reserve Board, for instance, says e-commerce retail sales were 9.8% of total sales. But, as the Census chart shows, manufacturing, wholesale trade, and even services dwarf retail e-commerce sales. Bruce, Fox, and Luna (2009) took into account all e-commerce sales—not just retail sales—in their study of sales tax losses to state and local governments which included Missouri and its political subdivisions.

E-commerce 2012-2016 sales growth for Missouri is estimated using Census data to be 3.6% of total Missouri sales for 2016.<sup>17</sup> Such amount of total sales—including sales of manufacturing, wholesale trade, services, and retail sectors—relative to the Missouri's sales tax base is a large number. Such e-commerce sales growth, putting into perspective the magnitude, is estimated to have been equal to 23.9% of 2016 Missouri retail sales. Most e-commerce sales are not taxable given the magnitude of wholesale, manufacturing, and services e-commerce estimated transactions. Even so, if two-thirds of e-commerce growth were deemed untaxable, such e-commerce sales growth would still equate to approximately 16% of estimated 2016 Missouri retail sales.

Total sales, using Missouri's portion of GNP to derive estimated Missouri sales, were \$506 billion for 2016. Applying 3.6% to this figure is a Missouri Internet sales growth amount of \$18 billion. This amount does not include existing Internet sales but rather just the growth of such sales. If all such sales were taxable, which they are not, then the estimated state sales tax from this Internet sales growth would have approached three-quarters of a billion dollars. Assuming a third of such growth was taxable would mean simply Internet sales growth from 2012 to 2016 would have resulted in over \$250 million in additional state sales tax.

<sup>17</sup> Estimate is derived applying Missouri's portion of GNP to national Census total sales and e-commerce data by sector—manufacturing, wholesale trade, retail trade, and services.

## Federal Data Usage for an Another Missouri E-Commerce Sales Tax Loss Estimate

Another method to explore the Missouri e-commerce issue is considering the Census data in conjunction with federal sales data and attributing Missouri's portion of the GNP to such sales. In 2012, Missouri's percentage of GNP was 1.66% of the nation's. In 2016, this percentage decreased to 1.58%.

U.S. Census data estimate total sales and e-commerce sales for 2012 and 2016, as shown in a previous chart. Federal sales data for 2012 is available on a state by state basis; however, such data are not available for subsequent years. Missouri's share of GNP is applied to national sales data to derive surrogates for Missouri total sales and Missouri e-commerce sales. The following charts shows Missouri attributed total sales and e-commerce sales using Missouri GNP as a percentage of the nation's.

Missouri Estimated Total Sales and E-commerce Sales by Sector, 2012 and 2016 (amounts in millions)				
Sector	2012 Implied Total Sales	2012 Implied E-Commerce Sales	2016 Implied Total Sales	2012 Implied E-Commerce Sales
Manufacturing	\$ 95,517	\$ 49,600	\$ 84,746	\$ 54,912
Merchant Wholesale	\$ 112,361	\$ 29,687	\$ 113,669	\$ 36,796
Retail	\$ 72,084	\$ 3,765	\$ 76,859	\$ 6,158
Selected Services	\$ 199,187	\$ 6,078	\$ 230,927	\$ 9,634
<b>Total</b>	<b>\$ 479,148</b>	<b>\$ 89,129</b>	<b>\$ 506,201</b>	<b>\$ 107,500</b>

Missouri Estimated Total E-Commerce Sales Applying Missouri GNP Percentage to National Figures (millions of dollars)			
Sector	2012 Implied E-Commerce Sales	2016 Implied E-Commerce Sales	Implied E-Commerce Growth
Manufacturing	\$ 49,600	\$ 54,912	11%
Merchant Wholesale	\$ 29,687	\$ 36,796	24%
Retail	\$ 3,765	\$ 6,158	64%
Selected Services	\$ 6,078	\$ 9,634	59%
<b>Total</b>	<b>\$ 89,129</b>	<b>\$ 107,500</b>	<b>21%</b>

Implied sales based upon U.S. Census data, 2012 & 2016.

If using state GNP as a tool to derive Missouri-estimated total sales and e-commerce sales is appropriate, then it would appear that Missouri's e-commerce sales growth has not been as high as the national growth albeit substantial. Nationally, the Census Bureau estimates that e-commerce growth grew by 26.5% from 2012 through 2016. In the above chart it is shown that Missouri's e-commerce growth is estimated to have been 21% from 2012 to 2016.

The largest sector growth in this area has been concerning retail, which shows a Missouri e-commerce growth of 64% over the four year period, followed by services at 59%. Given that retail sales contribute 59% of Missouri's state sales tax, according to the Missouri Revenue Department data and the state Comprehensive Annual Financial Report (CAFR), the 64% estimated retail e-commerce growth figure is most relevant.

Further, Missouri's e-commerce estimated sales growth amount from 2012 to 2016 points to issues raised by Credit Suisse and UBS regarding the future of bricks and mortar retail. The estimated Missouri e-commerce sales growth from just 2012 to 2016, using the Census data, is over \$18 billion. In 2016, using that same Census data, Missouri estimated retail sales were \$77 billion, so Missouri e-commerce sales in that year would be estimated to equal almost a quarter of total Missouri retail sales. The Credit Suisse and UBS reports suggest Missouri faces even larger e-commerce growth as compared to the 2012 to 2016 growth when e-commerce growth had not really begun to show its parabolic rise.

The Bruce, et al. (2009), University of Tennessee study estimated 2012 e-commerce sales tax loss to Missouri at \$210.7 million. The Washington State study projected Missouri other remote seller sales tax loss for 2012 at \$219.5 million.

In 2016, Missouri and her local governments would have lost \$580 million if the percentage growth using the Census and GDP data is applied to the 2012 figure for 2016, and NCSL updated figures for 2015 are used. Considering the higher average sales tax rate for 2016 versus 2012, the state and local sales tax loss figure for remote sales would be an estimated \$609 million, and the 2018 rate variance would mean state and local sales tax loss of an estimated \$621 million for 2018.

All e-commerce sales are not taxable. The University of Tennessee data takes this into account so the estimates using the NCSL figures would be reflective of losses being net of non-taxable sales. Even if there are non-taxed sales not taken into account in the complementary estimated e-commerce loss estimates, the range of \$575 million to over \$600 million should compensate for discrepancies. Further, such amounts are based upon 2018 data and are used as the overall range for current Missouri sales tax losses. If e-commerce growth continues on the same path as shown by the St. Louis Federal Reserve data, then \$575 million to over \$600 million should be well understated in 2019 and more so in 2020. If, by 2020 or 2021, the Missouri loss approaches or exceeds \$800 million, the current stated range of \$575 million to \$600 million should well compensate for any tax-exempt sales of products sold by e-commerce sellers.

## Federal Reserve national e-commerce data and Missouri observations

In 2012, the Federal Reserve Bank of St. Louis's Federal Reserve Economic Data (FRED) estimated that e-commerce sales represented 5.3% of total retail sales. FRED estimated e-commerce sales in 2012 were \$229.3 billion.

National state and local general sales tax collections (excluding selective sales taxes) in 2012 were \$316.7 billion.<sup>18 19</sup> Considering \$4.54 trillion in national sales (which is also consistent with the FRED figures) would mean a national effective sales tax rate of 6.97%. At such rate, and using the FRED estimate for e-commerce sales would mean potential e-commerce state and local revenues of \$15.98 billion in 2012. This means the e-commerce sales/use tax loss estimate was equivalent to over 7% of sales tax revenue in that year.

The St. Louis Fed has estimated that e-commerce sales accounted for 9.7% of total retail sales nationwide in 2018. The St. Louis Fed FRED estimate of e-commerce sales nationally for 2017 was \$448.4 billion which is dramatically higher – almost twice as much--than the St. Louis Fed FRED 2012 \$229.3 billion figure.<sup>20</sup>


If e-commerce sales in 2017 were almost twice as much as in 2012, then, according to the St. Louis Fed 2018 estimate of e-commerce sales as a percentage of total sales, e-commerce sales in 2018 were more than twice as much as in 2012. Missouri e-commerce sales loss estimates are based upon adjusted 2012, 2016, and 2017 figures. If the St. Louis Fed estimates of e-commerce growth just over the past two years were taken into consideration with these estimated amounts and the trend continues, then the Missouri e-commerce loss estimates could shortly exceed \$800 million.

## Missouri enacted click through and affiliate nexus in 2013 – what has changed?

Missouri enacted sales tax click-through and affiliate nexus legislation in 2013 in response to lack of taxation regarding e-commerce transactions. Since 2013, Missouri has considered other legislation to bolster e-commerce sales tax collections; however, such legislation has failed during the legislative process. **Missouri is the only state in the country that has not enacted/implemented more than click-through and affiliate nexus to address the e-commerce sales tax leakage question.**

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<sup>18</sup> State Government Tax Collections: 2012, American Fact Finder, U.S. Census Bureau, <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

<sup>19</sup> **State and Local Government Finances by Level of Government and by State: 2012**  **2012 Census of Governments, U.S. Census Bureau,** [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG\\_2012\\_00A1&prodType=table#](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_00A1&prodType=table#)

<sup>20</sup>E-Commerce Retail Sales, 2017, Federal Reserve Board of St. Louis, February 21, 2019, <https://fred.stlouisfed.org/series/ECOMSA>

It is unclear as to the state's tax revenue benefit by enacting click-through and affiliate nexus; however, based upon the discussion found in this section, it does not appear that click-through and affiliate nexus have materialized in much revenue for Missouri relative to e-commerce estimated sales tax leakage in Missouri. At most it would appear that click-through nexus may have generated approximately \$30 million; however, this analysis suggests that such amount likely exceeds the state's benefit from relying upon click-through and affiliate nexus to get the e-commerce taxation erosion loopholes at least partially closed. As this portion of the report shows, other states enacted click-through and affiliate nexus years ago, but all other 49 states have enacted legislation regarding e-commerce sales taxation in addition to or in lieu of click-through/affiliate nexus to address e-commerce sales tax loss.

The Sales Tax Institute in 2013 discussed Missouri's click through and affiliate nexus law in 2013. The following is what the institute said:

"Missouri has enacted legislation that adds click-through and affiliate nexus provisions. The legislation creates the presumption that a vendor is engaging in business activities in Missouri if any person with substantial nexus with Missouri performs certain activities in relation to the remote vendor within the state, including: sells a similar line of products under a similar business name; maintains a place of business that facilitates the delivery of property or services sold by the vendor or allows the vendor's customers to pick up property sold by the vendor; delivers, installs, assembles, or performs maintenance services for the vendor's customers in the state; or conducts any other activities in the state that are significantly associated with the vendor's ability to maintain a market in the state. The presumption is rebuttable by showing that the person's activities are not significantly associated with the vendor's ability to maintain a market in Missouri. An additional presumption is created that a vendor is engaged in business activities in Missouri if the vendor enters into an agreement with a Missouri resident under which the resident, for a commission or other consideration, refers customers to the vendor, whether by a link on a website, an in-person presentation, telemarketing or otherwise, and the vendor's cumulative gross receipts from sales to all Missouri customers referred by residents with such an agreement exceed \$10,000 in the preceding 12 months. This presumption is rebuttable by showing that the Missouri resident did not engage in activity within Missouri that was significantly associated with the vendor's market in Missouri in the preceding 12 months. (S.B. 23, Laws 2013, effective August 28, 2013, except as noted)"<sup>21</sup>

How has click through and affiliate nexus affected sales tax collections in Missouri? The answer is unknown; however, descriptive sales tax statistics suggest that the answer is not much. If the state's largest private employer<sup>22</sup> and one of the largest Internet sales entities, Walmart, is not collecting sales tax on the vast majority of its sales as asserted in this report, and if Etsy, one of the country's most successful e-commerce

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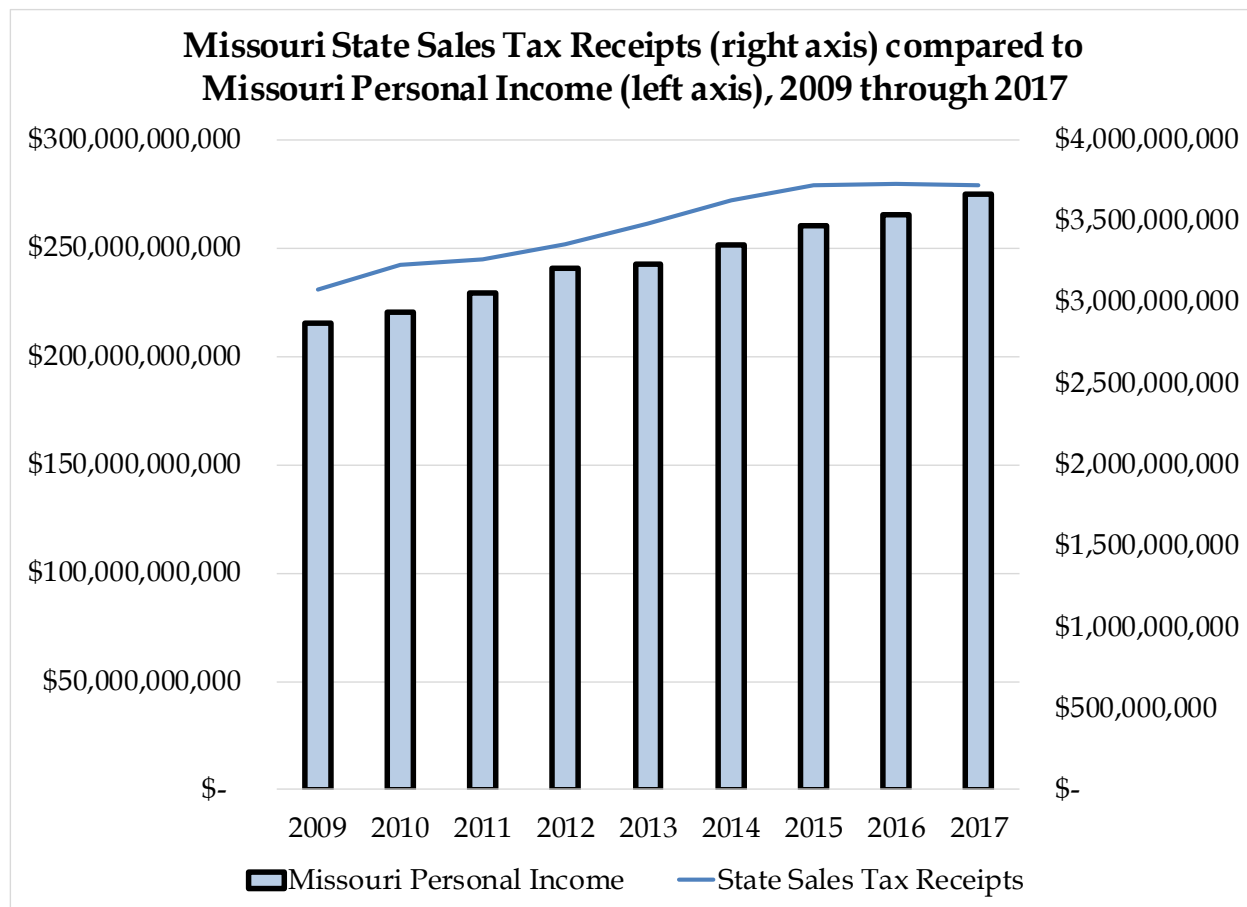
<sup>21</sup> Missouri enacts click through and affiliate nexus, Sales Tax Institute, July 22, 2013, <https://www.salestaxinstitute.com/resources/missouri-enacts-click-through-and-affiliate-nexus-legislation>

<sup>22</sup> State of Missouri Comprehensive Annual Financial Report, FY2018.



sellers is not collecting Missouri sales tax, then the success of click-through nexus would appear questionable.

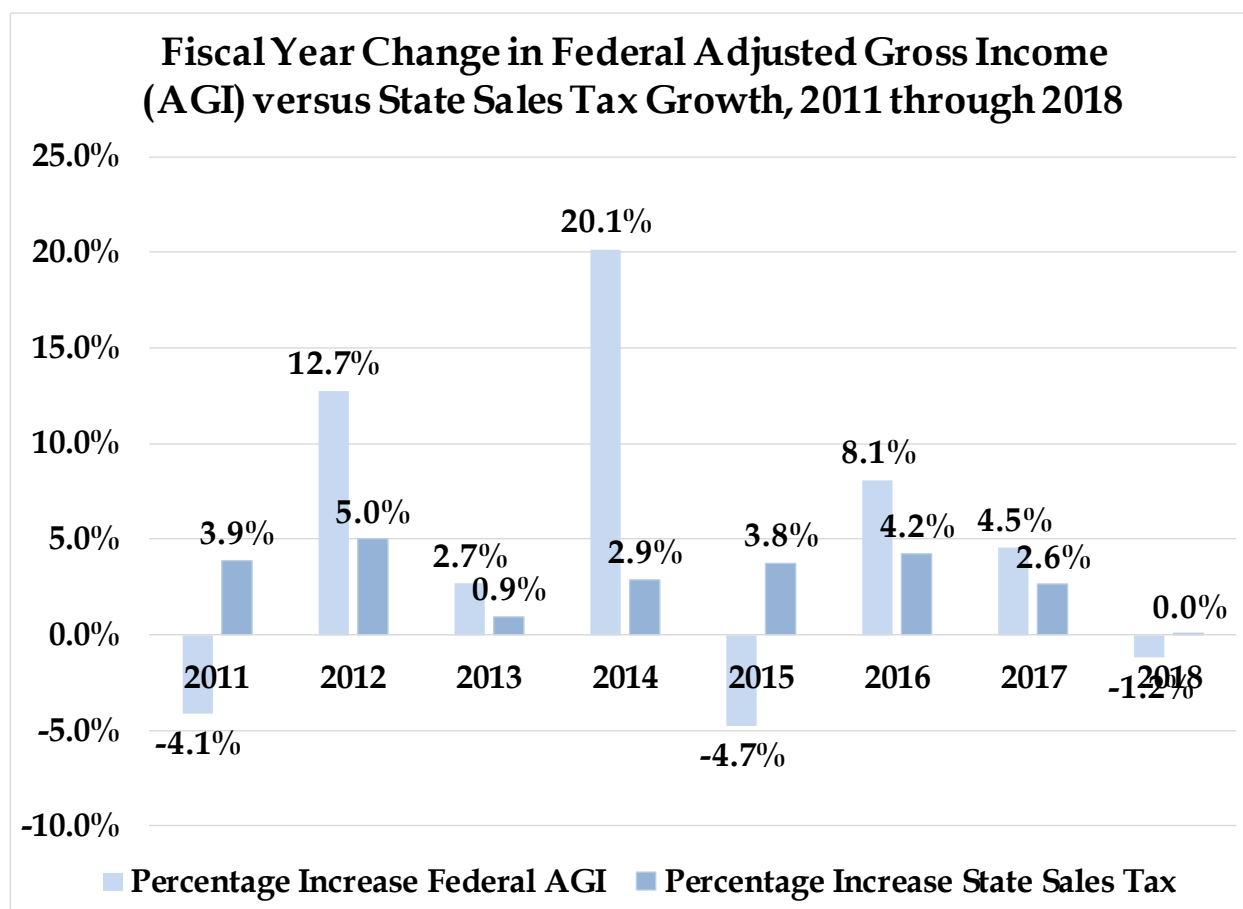
As the following chart shows, sales tax revenue increased slightly in 2014 following the 2013 enactment of click through and affiliate nexus, but the sales tax increased only slightly in comparison to total income and federal taxable income of Missouri residents as shown by the following chart and subsequent charts found in the next pages of the report.



Even though it is unknown as to whether click through nexus implementation in August of 2013 had much impact upon sales tax receipts, the growth in sales tax receipts in 2014 for all Missouri taxable purchasing activity was \$147 million. Taxable income growth in 2014 was \$9 billion. If only half of the taxable income growth was spent on taxable sales then \$191 million in additional sales tax would have been realized. If, because of fiscal year and taxable year differences and half of sales tax growth for 2014 was applicable to 2013 taxable income growth and half was attributed to 2014 taxable income growth, then \$5.3 billion in taxable income growth would have occurred for Missouri’s FY14. Half of spending on taxable goods would have resulted in \$113 million in additional sales tax. If the assumption holds true that at least half of

taxable income growth would be spent on Missouri taxable goods, then the most sales tax that could have been generated through click-through and affiliate nexus would have been an estimated \$34 million, assuming the remainder was income driven. If, however, 65% of total income growth was spent on taxable purchases, then no value would have been placed upon implementation of click-through nexus.

Another indicator of potential impact of click-through nexus may be to compare the percentage increase of federal Adjusted Gross Income (AGI) of Missouri taxpayers in relation to sales tax growth. The Missouri Comprehensive Annual Report (CAFR) produces federal AGI data on a fiscal year basis as well as sales tax information. The following chart shows the percentage change on an annual basis for federal AGI and sales tax receipts:

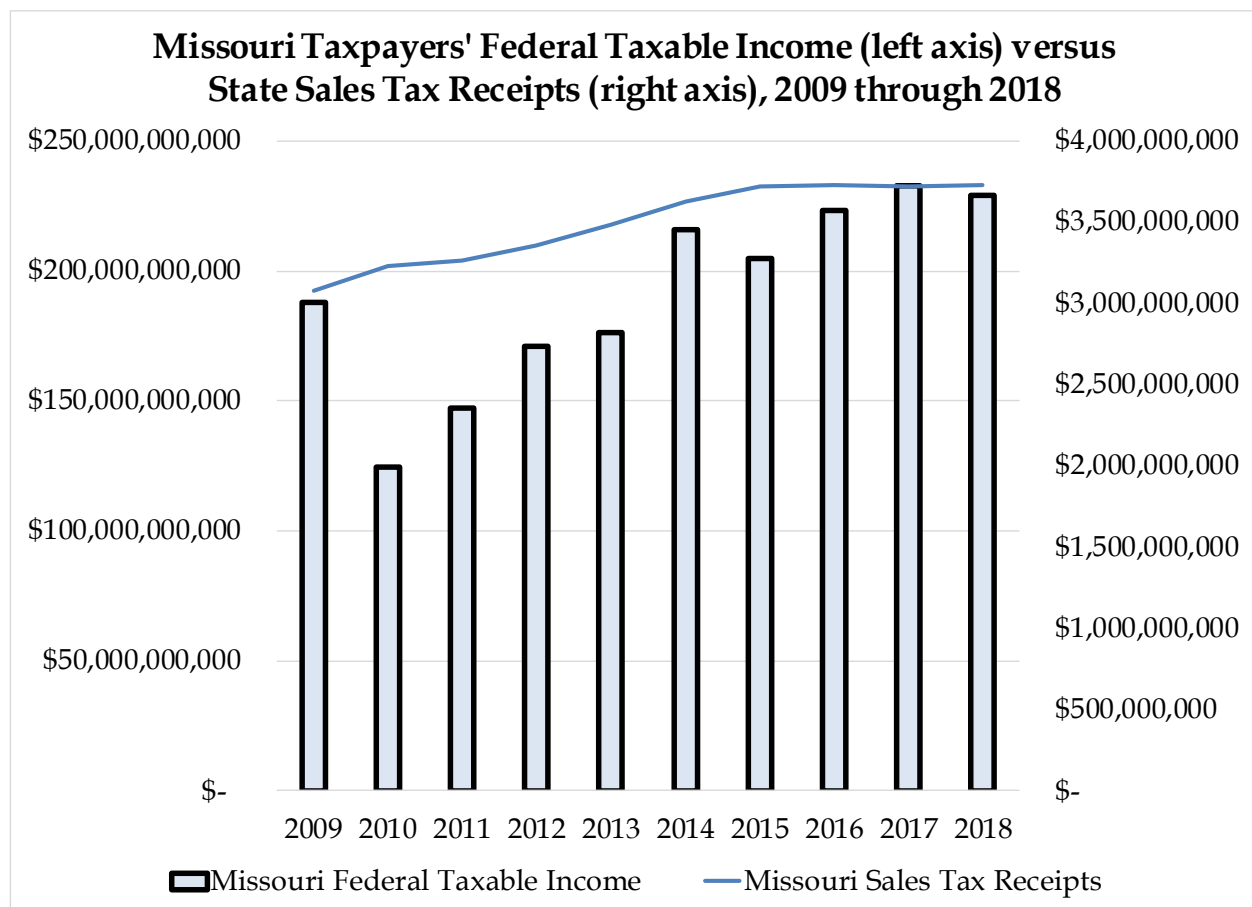


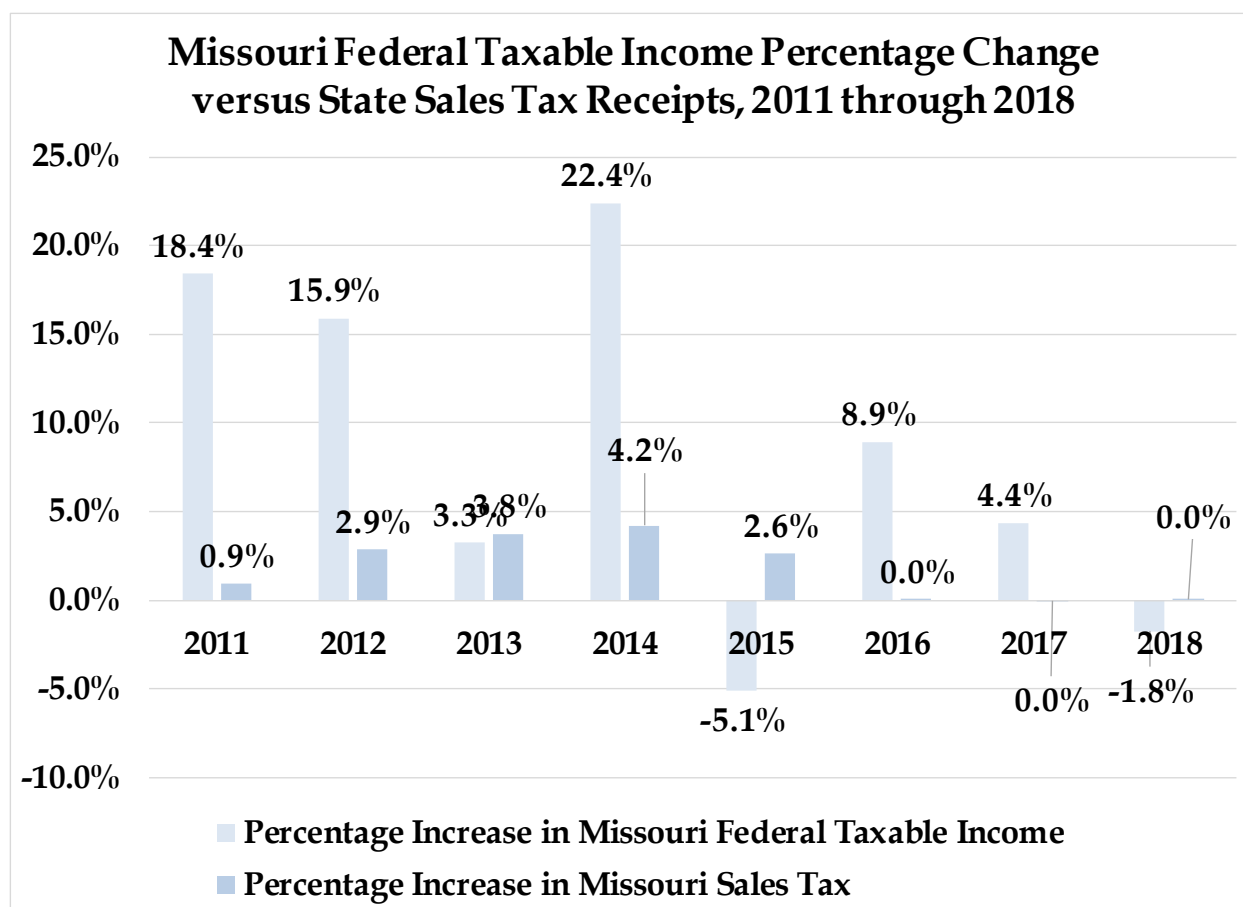
As the federal AGI versus sales tax receipts shows, federal AGI grew substantially in FY2014, 20.1%, while sales tax receipts grew 2.9%. Although click-through nexus may have had some impact upon 2014 sales tax receipts and subsequent year receipts it would appear that income growth had a much greater influence upon 2014 sales tax growth as opposed to click-through nexus.



If taxable income growth is viewed as a reasonable gauge of sales tax growth in relation to click-through nexus additional sales tax receipts, then 2012 and 2013 tax year taxable income growth suggests that click-through nexus would have contributed very little to the sales tax base. Splitting taxable income growth for FY14 using taxable income for CY2013 and CY2014 for Missouri was \$22 billion. In order for click-through nexus to have had an impact upon sales tax receipts, then less than 16% of the taxable income growth would have had to have been spent on taxable sales.

The following chart shows the percentage change in sales tax revenue as compared to total federal taxable income for Missouri residents. Both income and sales tax receipts increased in 2014 but calendar year sales tax revenue growth of 4.2% was much less than federal taxable income growth of 22%. Tax year 2013 was a low growth taxable income year with taxable income rising 3.3% as compared to 3.8% for sales tax revenue growth. The 2014 sales tax growth of 4.2%, slightly higher than 2013 sales tax growth, did not move dramatically in comparison to taxable income growth in that year.





### States have taken other avenues besides click-through and affiliate nexus to address e-commerce sales tax problems

Click through and affiliate nexus standards have not been a panacea for collection of lost e-commerce sales tax revenue in Missouri or elsewhere. This is indicative in the previous Missouri income versus sales tax growth comparisons for 2014; and also the number of states that enacted click through nexus and affiliate nexus only to later pass economic nexus laws (which Missouri considered in 2019 legislative session), and then marketplace seller legislation. **Missouri is now the only state in the country that has not enacted at least an economic nexus law to capture e-commerce sales tax.**



## Economic nexus trumps affiliate nexus

By Gail Cole - Guest Blogger of Avalara on May 17, 2018

Affiliate and click-through **nexus** laws and policies are increasingly popular in states seeking to capture sales tax revenue from out-of-state sellers. Traditionally, a state cannot impose a tax obligation on a business unless it has a substantial physical presence in the state, such as a brick-and-mortar store or employees. Yet states are increasingly challenging that precedent as sales by remote internet retailers have exploded and sales tax revenue has

Source: CMS Business Consulting Services, May 2018, <https://www.cmsct.com/blog/economic-nexus-trumps-affiliate-nexus>

Since the U.S. Supreme Court *Wayfair* decision more states have enacted economic nexus laws and subsequently marketplace seller laws to capture more e-commerce sales tax revenue as shown by the following chart with data compiled from the Sales Tax Institute and updated in July 2019 which shows the states with various levels of e-commerce laws and rules and the years that such statutes/policies were put into place:<sup>23</sup>

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<sup>23</sup> Remote Seller Nexus Chart, Sales Tax Institute, July 2019, <https://www.salestaxinstitute.com/resources/remote-seller-nexus-chart>

	Click-Through Nexus	Affiliate Nexus	Reporting Requirements	Economic Nexus	Marketplace Nexus
Alabama		2012	2017	2018	2019
Arizona				2019	2019
Arkansas	2011	2011		2019	2019
California	2012	2012		2019	2019
Colorado	2014	2014	2017	2019	2019
Connecticut	2011	2011	2018	2018	2018
Georgia	2012	2012	2019	2019	
Hawaii			2020	2018	2020
Idaho	2018	2018		2019	2019
Illinois	2015	2011		2018	2020
Indiana				2019	2019
Iowa	2019	2019	2019	2019	2019
Kansas	2013	2013		2018	
Kentucky			2013	2018	2019
Louisiana	2016	2016	2017	2018	
Maine	2013	2013		2018	2019
Maryland				2018	2019
Massachusetts				2017	
Michigan	2015	2015		2018	2018
Minnesota	2013	2018		2018	2018
Mississippi				2018	
<b>Missouri</b>	2013	2013			
Nebraska				2019	2019
Nevada	2015	2015		2018	2019
New Jersey	2014			2018	2018
New Mexico				2019	2019
New York	2008		2018	2018	2019
North Carolina	2009			2018	2019
North Dakota				2018	2019
Ohio	2015	2015		2019	2019
Oklahoma		2016	2016	2018	2018
Pennsylvania	2011	2011	2018	2019	2019
Rhode Island	2009	2017	2017	2019	2019
South Carolina				2018	2018
South Dakota		2011	2011	2018	2019
Tennessee	2015	2014	2012	2019	
Texas		2012		2019	2019
Utah		2012		2019	2019
Vermont	2015		2017	2018	2019
Virginia		2013		2019	2019
Washington	2015		2018	2018	2018
West Virginia		2014		2019	2019
Wisconsin				2018	2019
Wyoming				2019	2019
<b>Number of States</b>	<b>30</b>	<b>32</b>	<b>16</b>	<b>49</b>	<b>43</b>

As the Sales Tax Institute-based chart shows, states began late in the last decade and early in this decade to enact click-through nexus legislation. Then, as the chart shows, states enacted subsequent legislation mid-decade to last year and this year to capture e-commerce sales tax revenue. Missouri is the only state in the country that has not enacted/implemented more than click-through and affiliate nexus and although the state has considered new legislation such legislation has not passed the Missouri Legislature. If Missouri wishes to stop e-commerce sales tax leakage on a large scale and wants to guard against future, presumably larger losses as e-commerce sales grow, then Missouri should seek further legislative relief.

### **E-commerce summary**

Altering Missouri's e-commerce policies could result in over \$600 million in additional dollars to Missouri state and local governments. Presented here is a range of \$575 million to over \$600 million regarding 2018 losses to over \$800 million in potential lost sales tax revenue to state and local governments within the next two to three years because of untaxed remote seller sales that could be collected.

Some businesses remit e-commerce sales tax to Missouri and some do not. How much of new potential revenue is at play is uncertain; however, if the NCSL figures are any indication of what is not collected in Missouri, and if the other methods used are accurate to derive a 2018 \$575 million to over \$600 million loss amount (to \$800 million in estimated losses for early in the next decade), then Missouri stands to gain additional revenue if it so chooses to collect.

Considering all e-commerce sales, an estimated missing \$600 million to \$800 million in sales tax revenue would equal 7% to 10% of e-commerce sales taxes if all e-commerce items were taxable. Assuming that 80% of Missouri e-commerce sales are non-taxable would put the \$600 million to \$800 million in estimated missing tax at 38% of the remainder assumed to be taxable. Understanding the magnitude of Internet sales to the national and Missouri sales tax base is no doubt difficult to comprehend, yet the influence of the Internet regarding consumer--business and individual--behavior is no doubt substantial and costly to the Missouri state and local sales tax bases regarding those sales going untaxed.

Estimates are provided concerning remote seller sales tax loss to Missouri and the state's local governments of \$575 million to over \$600 million pegged at 2018 figures and estimates to sales tax losses of over \$800 million in the near term. The Missouri state and local remote seller sales tax issue is one that is equal to 16% to 21% of state sales tax collections (and roughly 8% to 10% of just the state sales tax base when

excluding the estimated local sales tax loss) and warrants further review if Missouri policy makers want to treat out-of-state and other remote sellers the same as in-state bricks and mortar establishments. Even if it was the case that only half of the new potential revenue presented in these estimates could come to fruition, this would still be up to \$400 million more available to state and local governments in the near term.

Missouri enacted click-through and affiliate nexus in 2013 to address e-commerce sales tax issues. Since the time of the Missouri click-through law passage, 49 other states have enacted stronger legislation than click-through and affiliate nexus to address e-commerce sales tax leakage. If Missouri leaders want to capture additional revenue regarding e-commerce sales, then passage of additional legislation would help.

Revenue aside, the potential sales tax loss gives remote sellers an 8% competitive advantage over local bricks and mortar businesses selling the same products because of the non-remittance of sales tax. For this reason alone, policy makers may choose to further explore this issue.

### **Walmart E-Commerce Untaxed Sales of Goods Taxable in Missouri**

In Missouri, Walmart offers residents of Missouri untaxed products that normally would be taxed if found on the shelves of Walmart in Kansas City or Walmart in Independence while other states are, or will be, collecting tax from all Walmart sales under new marketplace seller laws.

Walmart is the state's largest private sector employer with 156 stores, including supercenters, Neighborhood Markets, and Sam's Clubs. Walmart has the second largest e-commerce presence among large retailers. For these reasons, it is reasonable to use Walmart as an example to demonstrate the issue of sales tax erosion.

The following screenshot is from Walmart.com. These are purchases for Missouri zip-code 64015 in Independence. As shown, three items are in the online shopping cart totaling \$2,101, and no sales tax would be remitted on these purchases: a riding lawnmower, Mickey Mouse toy, and charcoal grill. Each item is sold by Walmart for a third-party seller.

**Walmart.com Cart Summary:**

Item	Quantity	Price	Delivery
Mickey Roadster Racers Super-Charged Steering Wheel	1	\$49.95	Free
Mtd Products 13A877BS066 7-Speed Riding Lawn Tractor, Briggs & Stratton Intek 547cc Engine, 42-In. - Quantity 1	1	\$2,002.21	Free
Gymax 18.5-Inch Kettle Charcoal Grill BBQ Outdoor Backyard Cooking with Wheels Black	1	\$48.99	Free
<b>Subtotal (3 items)</b>		<b>\$2,101.15</b>	
<b>Est. taxes &amp; fees (Based on \$2,101.15)</b>		<b>\$0.00</b>	
<b>Est. total</b>		<b>\$2,101.15</b>	

**Check Out**

Source: Walmart.com, retrieved August 2019

**This section of the report estimates that Walmart e-commerce non-remittance of sales tax is costing Missouri \$54 million a year. It is sales such as the ones in the screenshot found above that give rise to this estimated tax loss.**

Walmart sells goods to Missouri residents via its website Walmart.com in addition to selling goods in Walmart bricks-and-mortar stores across the state. Walmart.com sells goods to Missouri residents and some items sold are taxed and many are not taxed because of the third-party seller issue. In the example shown above, Walmart.com does not collect sales tax on items like lawnmowers, barbeque grills, and toys, even though such items are clearly tangible personal property subject to Missouri's sales tax and clearly would be taxable if purchased at a Walmart Supercenter in St. Louis, Kansas City, Fenton, or Branson. Tangible personal property is taxable unless exempt by statute, but there are evidently loopholes concerning e-commerce transactions including a large one concerning goods sold by Walmart's out-of-state third-party sellers even when Walmart has a huge physical presence in the state.

How are many untaxed goods sold by Walmart.com? Walmart.com does not collect Missouri sales tax on otherwise taxable goods on Walmart.com offered for sale by third-party sellers. Even after the U.S. Supreme Court said states could tax many e-commerce transactions, Walmart continues to avoid collecting sales tax on an untold number of Missouri e-commerce transactions because these “third-party sellers” are not located in Missouri. This report estimates that approximately 90% of Walmart’s e-commerce sales go untaxed because most Walmart.com sales are by third-party sellers doing business through Walmart instead of Walmart just selling its own goods to customers.

Walmart’s own corporate website admits that it does not take responsibility for collecting sales tax on items sold by third-party sellers.<sup>24</sup> Third-party sellers, or “marketplace sellers,” are businesses that sell their wares on Walmart.com, but that are mostly located out-of-state. The outside sellers hold the products, the products are sold on Walmart.com, Walmart collects the money for the sales without sales tax (unless “sellers” chooses to collect sales tax as shown below), and Walmart arranges product delivery. The third-party sellers ship products to buyers in Jefferson City or Kansas City from another state. The seller pays Walmart a commission for the sale. Approximately 65 million products of these third-party sellers can be found on Walmart.com.

### **Walmart admits that it is customary not to collect sales tax on third-party sales**

Walmart leaves it up to the “seller” regarding sales tax collection. Regarding the sales tax issue, Walmart says (highlights added):

## **“How We Determine Sales Tax**

### **“For Items Purchased from a Walmart Marketplace Seller**

“Under Your Account then See Details you can see the seller of your item. If it is anyone other than "Walmart.com," then you have purchased that item from one of our Marketplace Sellers.

“Marketplace Sellers are responsible for collecting and remitting the sales tax for the items they sell. They may choose to add the cost of tax to the price of their items, or they can list the tax separately. A Marketplace Seller may not charge tax in all 50 states and U.S. territories. This means you may or may not see a charge for tax in your cart. If you have questions about a Marketplace Seller’s tax practices, please contact the Seller directly.”<sup>25</sup>

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<sup>24</sup> How we determine sales tax, Walmart.com Help Center, [https://help.walmart.com/app/answers/detail/a\\_id/36/~how-we-determine-sales-tax](https://help.walmart.com/app/answers/detail/a_id/36/~how-we-determine-sales-tax)

<sup>25</sup> How we determine sales tax, Walmart.com Help Center, accessed on the Internet May 9, 2019, [https://help.walmart.com/app/answers/detail/a\\_id/36/~how-we-determine-sales-tax](https://help.walmart.com/app/answers/detail/a_id/36/~how-we-determine-sales-tax)



Walmart.com may choose to say that a Walmart.com third-party sale is not a Walmart “sale,” but:

1. no purchase would have been made had the product not been seen on Walmart.com,
2. many undecided purchases would not be made without Walmart following-up with targeted Internet advertising regarding such goods,
3. Walmart takes payment,
4. and Walmart arranges delivery.

Walmart.com may argue that third-party sales are not Walmart sales, but this argument is specious. Walmart.com clearly sells goods to Missouri residents with no sales tax collected.

### **Walmart E-Commerce Missouri Sales Tax Avoidance Estimate, up to \$54 million**

How much of Walmart’s e-commerce sales are going untaxed in Missouri? Only an estimate can be made for Walmart Missouri e-commerce data is unavailable. An estimate can be made, though, using Walmart corporate sales data relative to the nation and Missouri as well as Walmart.com specific information regarding sold goods from Walmart’s own inventory on Walmart.com versus the sales magnitude of third-party seller goods sold on Walmart.com. This section of the report estimates that Walmart e-commerce sales are costing Missouri up to an estimated \$54 million a year — or more than \$1 million a week. Such amount is expected to grow over time as e-commerce sales increase.

Walmart had e-commerce sales of a reported \$14 billion in 2016.<sup>26</sup> By the end of 2018, Walmart was estimated to have had e-commerce sales of \$20.91 billion.<sup>27</sup>

In 2018, the number of Walmart Missouri Supercenters was 3.1% of the U.S. Walmart total. Missouri Sam’s Clubs were 3.2% of the Sam’s Clubs throughout the nation. Walmart Missouri Neighborhood Markets comprised 2.3% of the U.S. total number of Walmart Neighborhood Markets. Overall, Walmart Missouri stores amount to 2.9% of the national Walmart number of stores. For e-commerce estimating purposes, it is assumed that Missouri share of total Walmart.com sales are 2.45% of the total which is less than the Walmart Missouri’s store percentage of the national Walmart total.

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<sup>26</sup> Dignan, L., Walmart's e-commerce annual sales hit \$13.7 billion, zdnet.com, February 18, 2016, <https://www.zdnet.com/article/walmarts-e-commerce-annual-sales-hit-13-7-billion/>

<sup>27</sup> Perez, P.,

Walmart passes Apple to become No. 3 online retailer in US, Techcrunch.com, November 2018, <https://techcrunch.com/2018/11/16/walmart-passes-apple-to-become-no-3-online-retailer-in-u-s/>

A slightly lesser amount of the Missouri Walmart bricks-and-mortar percentage is used because of Missouri's overall smaller Internet sales activity relative to the nation as compared to Missouri's population percentage using GNP figures (e.g., 1.87% population percentage versus 1.58% for 2016 GDP percentage).<sup>28</sup> Such implied lower Internet purchase usage percentage difference is 15.5% of the total. Whereas statewide e-commerce and remote seller estimates are provided using other studies and data, the Walmart e-commerce estimate is derived using Walmart-specific total e-commerce and store data relative to Missouri. Missouri residents have a national disproportionate share of Walmart business relative to Missouri's population, and Walmart e-commerce purchases are believed to be favorites, too, of Missouri residents, but because of Missouri's lower assumed Internet purchases as compared to the population the Walmart overall Missouri proportion is discounted by 15.5%. For such reason it is estimated that Missouri's proportion of Walmart.com e-commerce sales is 2.45% of the total.

If it is assumed that Walmart Missouri's e-commerce sales are 2.45% of total Walmart.com sales, then Missouri Walmart.com attributable sales could have been \$512 million in 2018. Sales tax implications for Missouri state and local governments would be an estimated \$41 million considering such amount of sales.


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## What Walmart's 43% E-Commerce Growth Says About the Retailer's Game Plan

It just turned in its 11th straight quarter of sales growth, but Wall Street still dinged the stock.

Motley Fool Staff ([the\\_motley\\_fool](#))  
Nov 18, 2018 at 9:30PM

There was a period not so many years ago when the retail powerhouse that is **Walmart** ([NYSE:WMT](#)) was sputtering. No longer: When it reported on its most recent quarter this week, the top-line numbers were strong again, its online and omnichannel efforts clearly have momentum, and management gave full-year guidance an upward adjustment.

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<sup>28</sup> This approach is viewed as conservative and may understate the Walmart.com e-commerce losses by 15.5%. Using Internet sales losses from the University of Tennessee study would not discount the Missouri Internet sales percentage at all. The discount is used to be both conservative in estimating and also to account for potential third-party sales that would not be taxable anyway. For instance, Walmart.com has a site section dedicated to farm and ranch products. Most of the chicken feed and litter sold in the farm and ranch section is sold by third-party sellers. In Missouri, chicken feed and litter would not be taxable.

Walmart's ecommerce sales have grown dramatically and are expected to grow even more this year. If Walmart is successful and its e-commerce growth continues at its same recent pace, then the company could see e-commerce sales exceeding \$30 billion this year with Missouri sales potential \$735 million. Such amount could mean Walmart.com could be remitting this year \$60 million, just from e-commerce sales, if Missouri's statutes were modified or interpreted differently especially given the U.S. Supreme Court *South Dakota vs. Wayfair* decision. This is to say that the potential total tax for Walmart's e-commerce activities could be resulting in almost \$60 million in Missouri sales tax for 2019. This would be, though, only if Walmart remitted tax for all such sales which it is not.

The screenshot shows the top of a CNBC website page. The navigation bar includes links for MARKETS, BUSINESS, INVESTING, TECH, POLITICS, and CNBC TV. Below this is a 'RETAIL' section with sub-links for APPAREL, DISCOUNTERS, DEPARTMENT STORES, E-COMMERCE, FOOD AND BEVERAGE, and RESTAURANTS. The main headline reads 'Wal-Mart calls for 40 percent e-commerce sales growth in fiscal 2019'. To the left of the article text are social media sharing icons for Facebook, Twitter, LinkedIn, Email, and Print. The article text begins with a bullet point: 'Ahead of its annual investor day, Wal-Mart reiterates its earnings outlook for the current fiscal year.' It continues with two more bullet points about store remodeling and e-commerce growth expectations. At the bottom of the article snippet, it credits Lauren Thomas (@laurenthomasx3) and provides publication and update timestamps from October 2017.

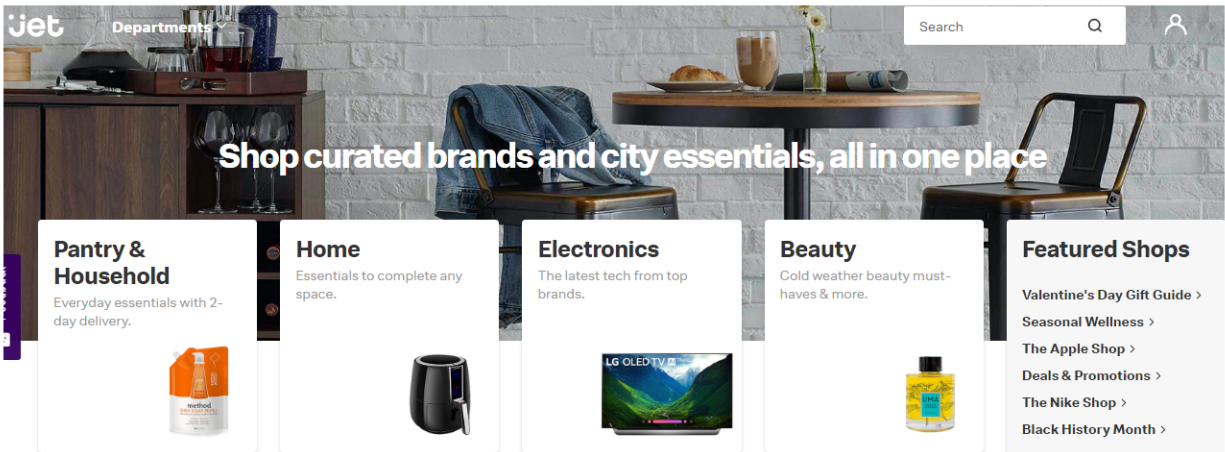
Walmart does remit sales tax on various items sold on Walmart.com. This is clear when attempting to purchase various items on Walmart.com. The question remains as to the magnitude of such sales tax collection in relation to items not being taxed.

Walmart has expanded its online sales operation dramatically since 2012. In 2017 alone, Walmart expanded Walmart.com's sales offerings by three-fold. In 2017, Walmart president and CEO Doug McMillon said, "Over the past year, we've tripled the number of items on Walmart.com to reach more than 70 million SKUs today."<sup>29</sup> This is an increase from 4.5 million products being offered online in 2015.<sup>30</sup>

<sup>29</sup> Lindner, M., More products for sale help Walmart generate 50% web sales growth in Q3, November 16, 2017, digitalcommerce360.com, <https://www.digitalcommerce360.com/2017/11/16/triple-online-assortment-leads-50-year-year-online-sales-growth-walmart/>

<sup>30</sup> Walmart Longtail of Selection, marketplacepulse.com., November 20, 2018, <https://www.marketplacepulse.com/articles/walmart-long-tail-of-selection>

To help with its e-commerce strategy, Walmart purchased Jet.com in 2016 for \$3 billion. Such business caters to urban and millennial customers and had 12 million items for sale in its first year of business.<sup>31</sup>



Concerning Missouri and other states, an issue is the number of products offered for sale by Walmart itself in comparison to third-party sellers. As marketplacepulse.com stated in 2018, Walmart itself offered 3.5 million products for sale on Walmart.com whereas Walmart's 20,000 third-party marketplace sellers accounted for 38.5 million products sold on Walmart.com.<sup>32</sup> Walmart, it is believed, collects sales tax on those estimated 3.5 million products. Walmart apparently does not collect sales tax on sales of the 38.5 million products "sold" by someone else unless that someone else has a physical presence in Missouri.

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<sup>31</sup> Walmart agrees to buy Jet.com for \$3 billion, Walmart.com, August 8 2016, <https://news.walmart.com/2016/08/08/walmart-agrees-to-acquire-jetcom-one-of-the-fastest-growing-e-commerce-companies-in-the-us>

<sup>32</sup> Ibid.



Figures are in terms of units of goods offered for sale by Walmart.com. Source: Marketplacepulse.com, November 2018.

Even though the previous chart shows the number of items sold on Walmart.com in 2018 (to coincide with the relevant year of data concerning this report), it should be noted that the number of units, according to Walmart's CEO, has grown even more to over 70 million units and this is a dramatic increase not reflective in this reports figures – a 60% increase – which is believed to mean the Missouri Walmart e-commerce estimated sales tax loss is understated.

It is unknown how much third-party sales revenue there is as compared to e-commerce revenue from sales out of Walmart's own inventory. Units available for sale suggest that 90% to 95% of products offered by Walmart.com are through third party vendors. In 2018, Walmart.com had an estimated \$21 billion in e-commerce sales, and that figure can meet or exceed \$30 billion in 2019. Walmart's corporate guidance for 2020 e-commerce growth is another 35%.<sup>33</sup>

<sup>33</sup> Thomas, L., Walmart shares surge as holiday sales crush estimates, boosted by e-commerce growth, [cnbc.com](https://www.cnbc.com/2019/02/19/walmart-reports-earnings-q4-fiscal-2019.html), February 19, 2019, <https://www.cnbc.com/2019/02/19/walmart-reports-earnings-q4-fiscal-2019.html>



# Walmart U.S.

(Amounts in millions)

	Q1	$\Delta^1$
Net sales	\$77,748	3.1%
Comparable sales <sup>2,3</sup>	2.1%	70 bps
• Comp traffic	0.8%	-70 bps
• Comp ticket	1.3%	140 bps
eCommerce impact <sup>3</sup>	~100 bps	~20 bps
Gross profit rate	Decrease	-23 bps
Operating expense rate	Increase	11 bps
Operating income <sup>4</sup>	\$3,927	-3.1%



<sup>1</sup> Change versus prior year comparable period.

<sup>2</sup> Comp sales for the 13-week period ended April 27, 2018, excluding fuel. Including fuel, Walmart U.S. comparable sales are 2.2%. See press release located at [www.stock.walmart.com](http://www.stock.walmart.com) and reconciliations at the end of this presentation regarding non-GAAP financial measures.

<sup>3</sup> The results of new acquisitions are included in our comp sales metrics in the 13th month after acquisition.

<sup>4</sup> This quarter, the company revised its corporate overhead allocations to the operating segments. Accordingly, previous segment operating income was recast to be comparable to the current period's presentation.



7

Source: Walmart, First Quarter Financial Highlights Presentation, Walmart Corporate, 2019.

According to a Walmart Corporate quarterly financial document, Walmart, Inc., “e-commerce impact” was 1% of net sales in the first quarter of FY2019 which were \$77.75 billion (see above Walmart report graphic).<sup>34</sup> Assuming the same for the remainder of the year (which would have been most of calendar year 2018), the “e-commerce impact” would have been \$3.11 billion on Walmart, Inc., net sales for the year.<sup>35</sup> If total e-commerce “sales” for Walmart can be expected to be \$30 billion or more, then Walmart-inventory e-commerce sales could be approximately 10% of the total given the noted “e-commerce impact” concerning Walmart’s net sales.<sup>36</sup>

<sup>34</sup> <https://corporate.walmart.com/media-library/document/earnings-presentation-q1-fy19/proxyDocument?id=00000163-6b1f-ded8-ab7f-7f7f63170000>

<sup>35</sup> No e-commerce impact was provided concerning Sam’s Club in the same report. Regarding Sam’s Club e-commerce impact, the document says Not Provided.

<sup>36</sup> The Walmart, Inc., inventoried portion of sales may be less than \$3 billion in that the footnote in the above Walmart financial report excerpt notes that a portion of the “e-commerce impact” has to do with sales from e-commerce acquisitions which may or may not be considered taxable sales in states like Missouri.

It is unknown how many third-party sales from Walmart.com take place in Missouri; however, the 2018 near 11:1 ratio of third-party offerings to Walmart-proper goods means that it stands to reason that much of Walmart e-commerce sales are not taxed. Coupled with the 10% e-commerce impact on Walmart sales number (e.g., \$3 billion of an estimated \$30 billion in Walmart.com sales being dubbed “Walmart sales” for corporate sales purposes), if the ratio of third-party inventory goods to Walmart-inventory goods is similar to an actual sales ratio, then Missouri could be missing \$54 million in sales tax just from Walmart.com online third-party sales tax avoidance.<sup>37</sup>

## **Estimated State Sales Tax Losses:**

### **Personal Income growth as a guide to determining sales tax erosion**

Missouri’s estimated e-commerce/remote seller sales tax losses have been discussed. The e-commerce sales losses are expected to be linked to the over-arching sales tax erosion issue. In this section of the report, Missouri’s overall estimated sales tax erosion is discussed.

### **Sales Tax Growth and Personal Income Growth Disconnect**

Comparative data suggests that Missouri state and local governments received approximately \$800 million less in sales tax revenue in 2018 than in 2007 relative to that year’s sales tax collections as a percentage of total personal income of all Missouri residents. On just the state basis, an estimated \$422 million in being lost in state sales tax revenue comparing sales tax growth to income growth. As discussed later in this section of the report, the \$422 million in estimated state tax loss and \$800 million in state and local sales tax loss is after taking into consideration increased estimated costs for income taxes associated with income growth and after considering large increase in non-taxed services sector spending in Missouri.

### **Sales Tax as a Percentage of Personal Income: Missouri sales tax revenue growth has not kept up with income growth**

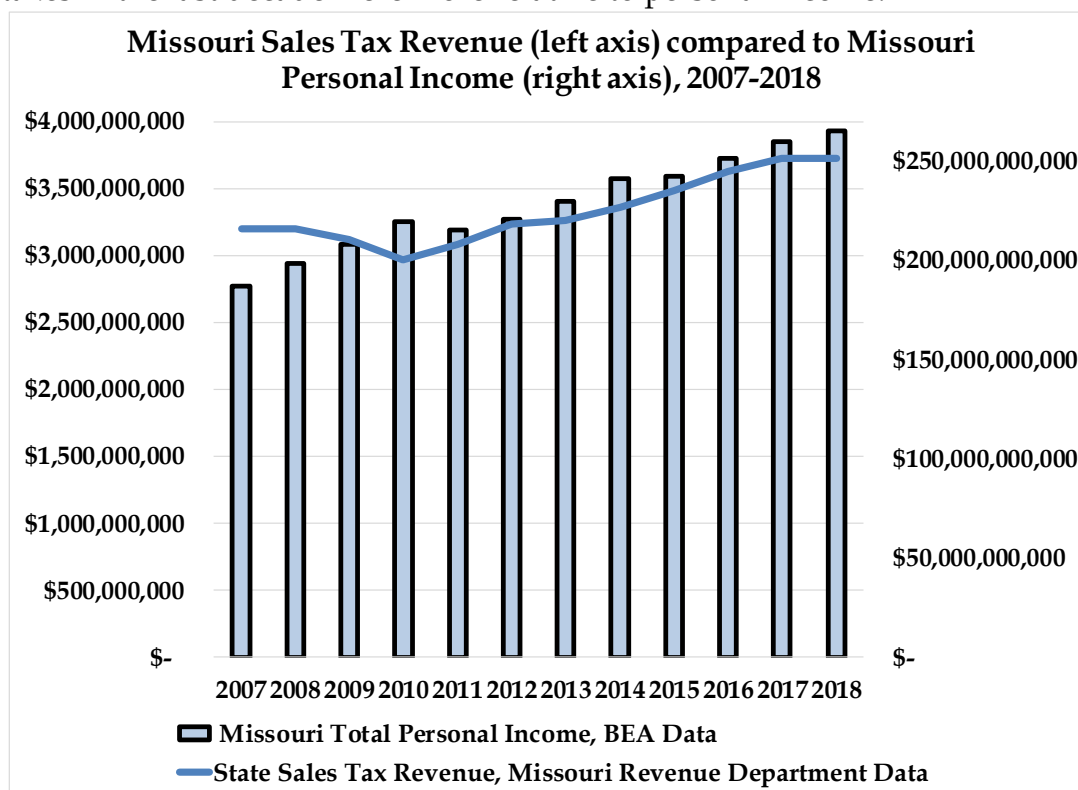
Missouri’s households and businesses pay sales tax. Measuring sales tax growth performance can be conducted by comparing total personal income growth to sales tax collection growth. Measuring such performance in this report is conducted by determining the proportion of sales tax collections to total personal income over time.

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<sup>37</sup> A portion of such estimated sales tax loss could be for food or other tax exempt items (e.g., chicken feed), so even if 10% of third-party seller items would be normally exempt, this still would mean Missouri sales tax loss of \$48 million just from Walmart.com third-party sales tax avoidance. Given that the current third party product offering has ballooned as compared to the older third party product offerings used in this report for calculation purposes, it is believed that the estimated \$54 million sales tax loss figure is reasonable regardless of legitimate tax exempt sales of third-part sellers.

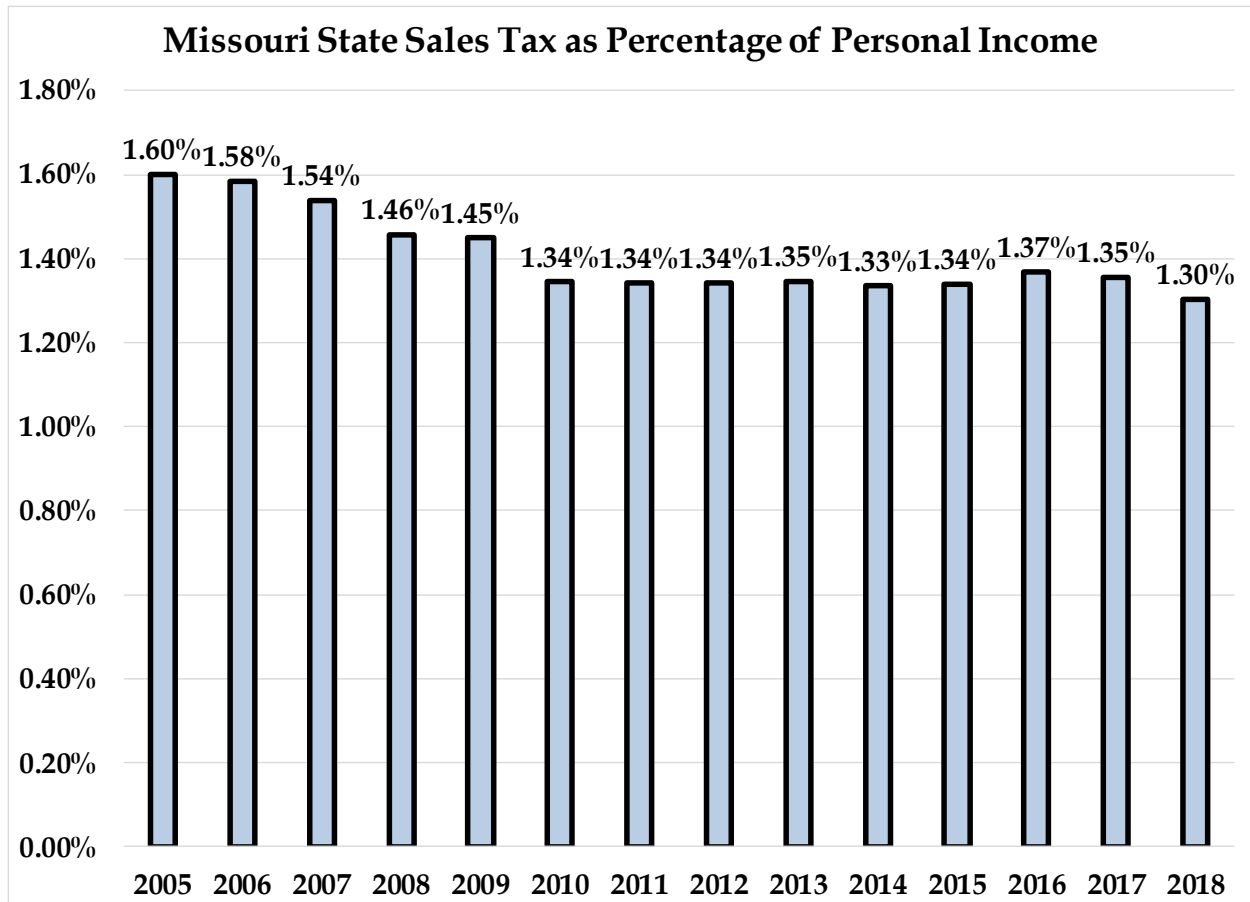
Such growth comparisons determined for the years 2007 through 2018. This proportion is presented as a ratio, or percentage of sales tax revenue paid as a portion of total state income.

Missouri state sales tax growth as compared to personal income growth shows that sales tax revenue in years past was a significantly higher portion of state residents' personal income. While income has grown, sales tax revenue has grown to a lesser extent, and, over time, the proportion of sales tax revenue to personal income has decreased. The following chart shows such change over time where it is evident that sales taxes in the last decade were more relative to personal income.

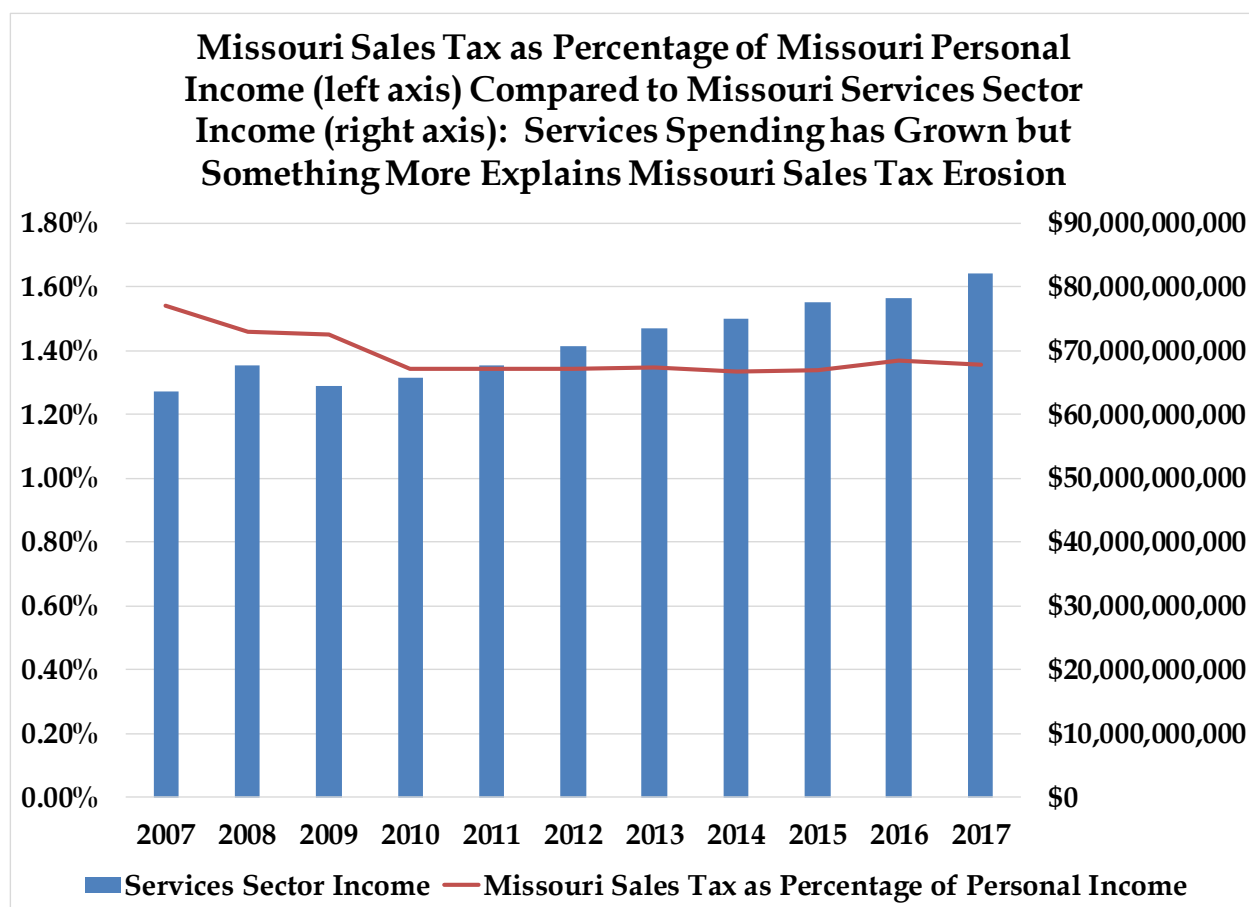


The following chart shows the percentage of personal income paid in Missouri state sales tax. As the chart shows, Missouri residents used to pay more than 1.5% of their incomes in state sales tax but in 2018 this percentage had dropped to 1.3%. This represents more than a 15% reduction in sales taxes paid as a percentage of personal income as compared to what was paid as a percentage of personal income in the last decade.





Increased services spending sales do not appear to explain the pattern of sales tax loss even though spending on tax exempt goods contributes to the reduction of the taxable sales tax base as illustrated in the following chart. Services spending has increased since 2007 as inferred by personal income growth of Missouri residents employed by the services sector; however, services spending has been fairly consistent since 2009 while state sales tax of all Missouri personal income began its decline in the late 2000s and has remained as a lower percentage of income since 2010. The sales tax/income ratio was at a significantly higher level for the 2005 to 2009 five year period than for years thereafter. It is believed that if services growth was the driver in Missouri sales tax erosion then more of a relationship between services growth and sales tax as a percentage of Missouri personal income would be expected. Services spending has been taken into account concerning the overall sales tax erosion estimated in this report, and the state sales tax losses discussed in this section of the report has been discounted for tax-exempt services spending increases.



State sales tax collections were used to gauge growth in comparison to personal income. Local sales tax rates changed over the time period in consideration; however, the same approach using local tax would result in the same loss dynamic, *ceteris paribus*. This analysis does take into consideration local sales tax revenue; however, information derived to compare income to sales tax growth is illustrated in this section with state sales tax data.

An example is presented here to explain the sales tax versus income growth ratio:

- If John David Johnson from St. Louis had income of \$50,000 in 2007, then John David Johnson would have paid 1.54% of his income, or \$770, in 2007 state sales taxes.
- John David Johnson, on average, would have basically paid the same amount of sales tax for years 2005 through 2009 (although slightly less given the average rate for this five year period) assuming the same income.
- After 2008, things changed and John David Johnson started paying less sales tax even though he made the same income.
- By 2018, with John David Johnson still making \$50,000, he would have paid only 1.3% of his income in state sale taxes, or \$650.

- In this example, John David Johnson used to pay \$770 a year in sales tax give or take some dollars, but by last year, he was paying only \$650 in sales tax, or \$120 less, which is over 15% less than he used to pay.

The example is now applied to the state as a whole. In 2005 through 2009, Missouri state sales tax revenues would have been over 1.5% of total personal income. By 2018, sales tax revenue as a percentage of personal income declined to 1.3%. This is a substantial shift in the sales tax base with 14.8% less in the proportion of sales tax to personal income in 2018 as compared to the average ratio of 1.53% for years 2005 through 2009.

It could certainly be argued that the boom and bust of the economy pre- and post-2007 had implications for sales tax revenue. This is acknowledged; however, since the Great Recession recovery took hold and income levels rose substantially in Missouri and other states to far exceed pre-recessionary income levels. Bureau of Economic Analysis data shows that Missouri total income in 2005 was \$187 billion, \$219 billion in 2008, and a recessionary low of \$215 billion in 2009.<sup>38</sup> Missouri personal income thereafter rose consistently every year thereafter from \$220 billion in 2010 to \$286 billion by 2018.

To summarize, from 2005 through 2009, the state sales tax to personal income percentage averaged 1.53%. After 2007 this percentage significantly declined. If Missouri residents paid the same state sales taxes in 2018 relative to personal income as in earlier years, then Missouri state and local governments would have much more revenue. It is estimated that this shift in the sales tax base (after considering increases in tax-exempt services spending and additional income tax) cost Missouri and local governments over \$800 million in 2018.

What could explain implicit sales tax erosion in comparing personal income growth to sales tax revenue? Possible reasons include: changes to the sales tax base via new exemptions, increased sales regarding nontaxable services, e-commerce, and other non-compliance issues.

New exemptions do not explain this loss of sales tax. Since 2007, after such time the erosion began its negative trajectory, no substantial new exemptions costing large amounts of tax were enacted to erode the sales tax base.<sup>39</sup> Since 2007, exemptions for coin-operated amusements, machinery and equipment, shipping, sports complex authorities, data centers, shooting ranges, and skeet supplies were enacted as well as other, minor exemptions. New exemptions cost the sales tax base money; however, new exemptions since 2007 do not explain a double-digit erosion of the sales tax base.

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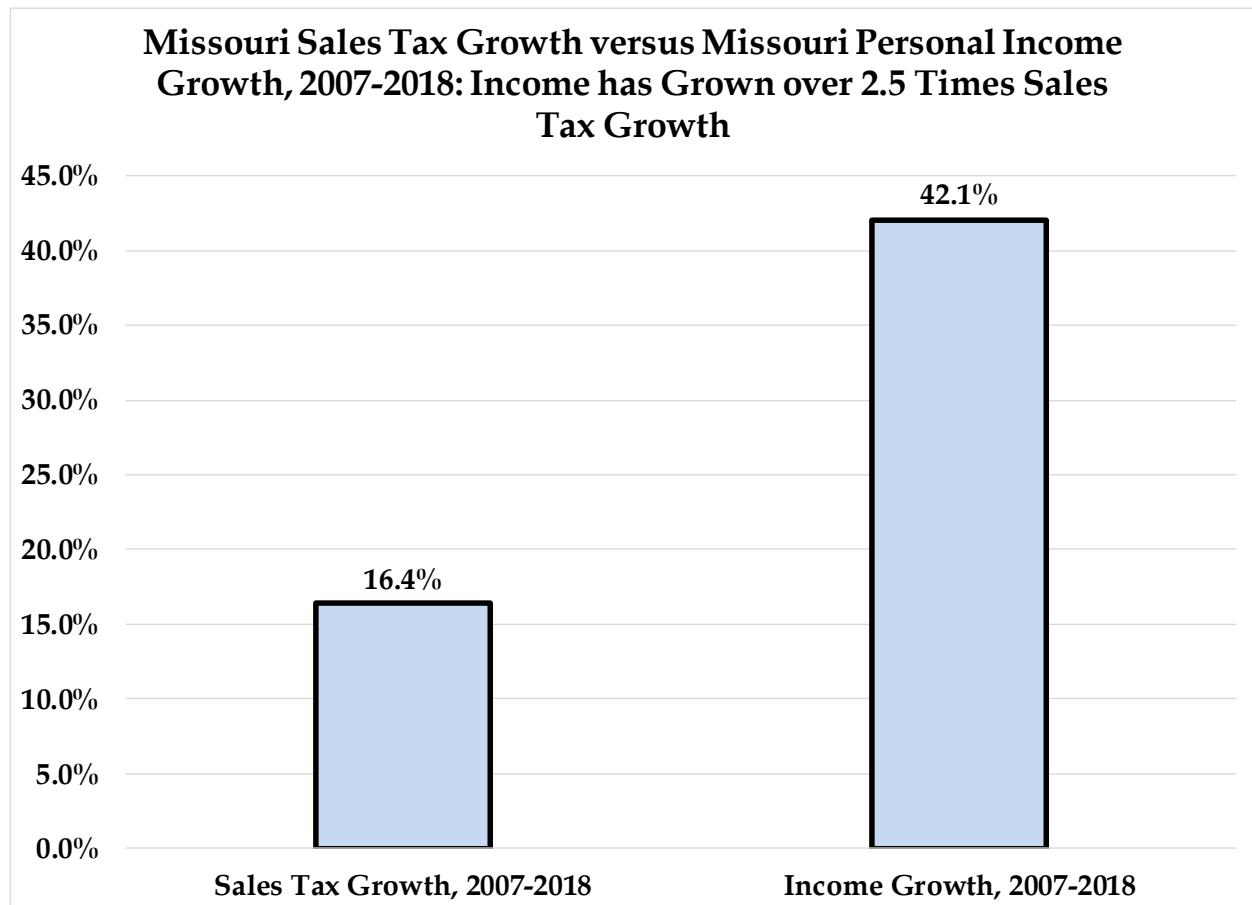
<sup>38</sup> SAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income, Bureau of Economic Analysis, Washington D.C., 2019.

<sup>39</sup> Sales and Use Tax Exemptions, Missouri Department of Revenue, [https://dor.mo.gov/business/sales/sales-use-exemptions.php?tab2=&stat=&sub\\_stat=](https://dor.mo.gov/business/sales/sales-use-exemptions.php?tab2=&stat=&sub_stat=)

The variance between Missouri income gain and state sales tax growth is 26%--income growth is 26% higher than state sales tax growth. Income grew 42% over the last decade while sales tax growth was only 16%.

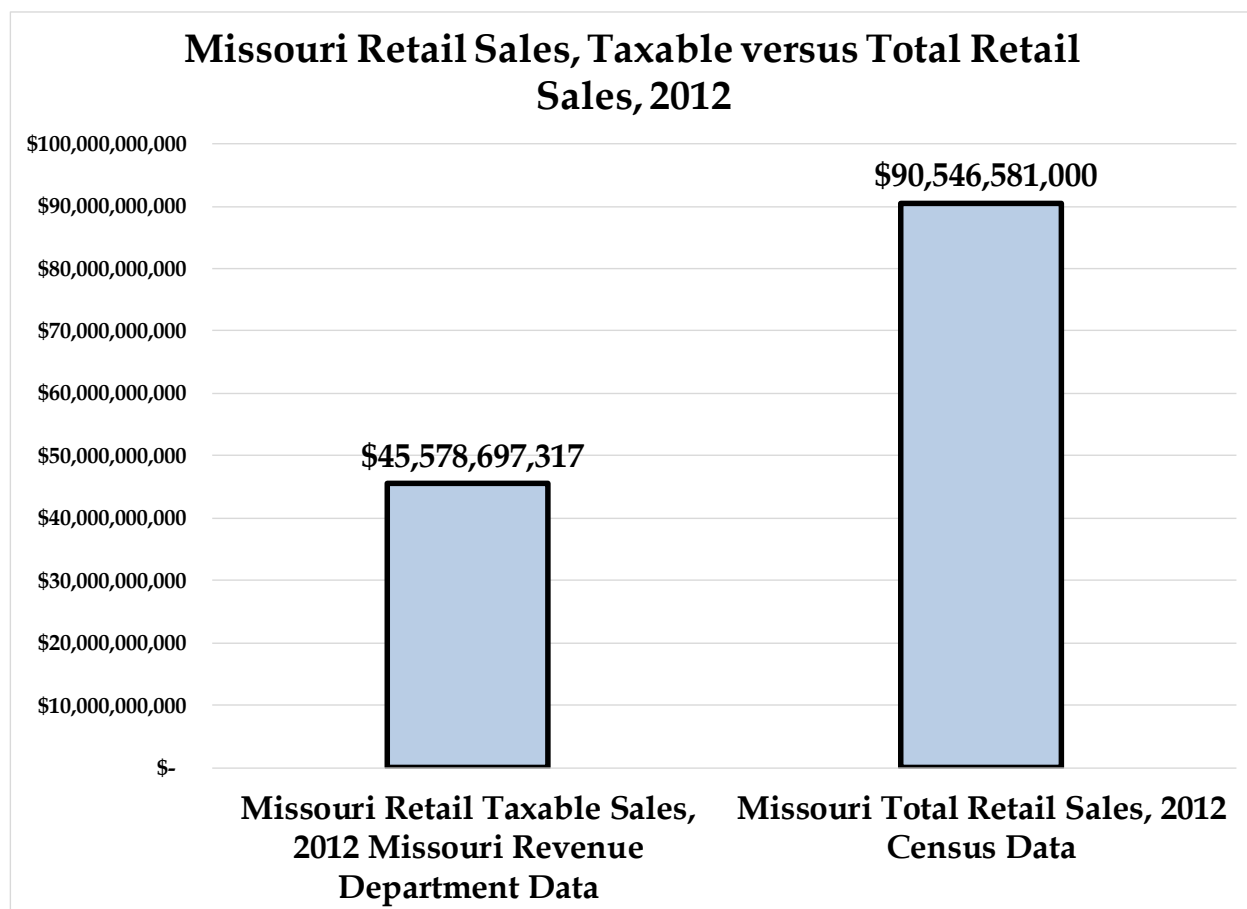
### **Missouri has experienced Sales Tax Erosion Since the Last Decade**

As noted, Missouri personal income growth has dwarfed growth of sales tax revenue. The following chart shows the disparity.



From an overall perspective, descriptive statistics suggest a substantial portion of the Missouri sales tax base has eroded. Reviewing data for the largest contributor to the sales tax base, retail trade, provides further information illustrating leakage.

Missouri has retail taxable sales and tax exempt sales. At the state level, most food items are tax exempt as well as all prescription drugs and sales to schools, colleges, and governments. At the local level, the same exemptions apply; however, most food sales are taxable instead of being tax-exempt. Exemptions from the sales tax are normal costs of state and local governments; however, Missouri, over time, has experienced an inordinate growth in tax exempt sales relative to taxable sales.



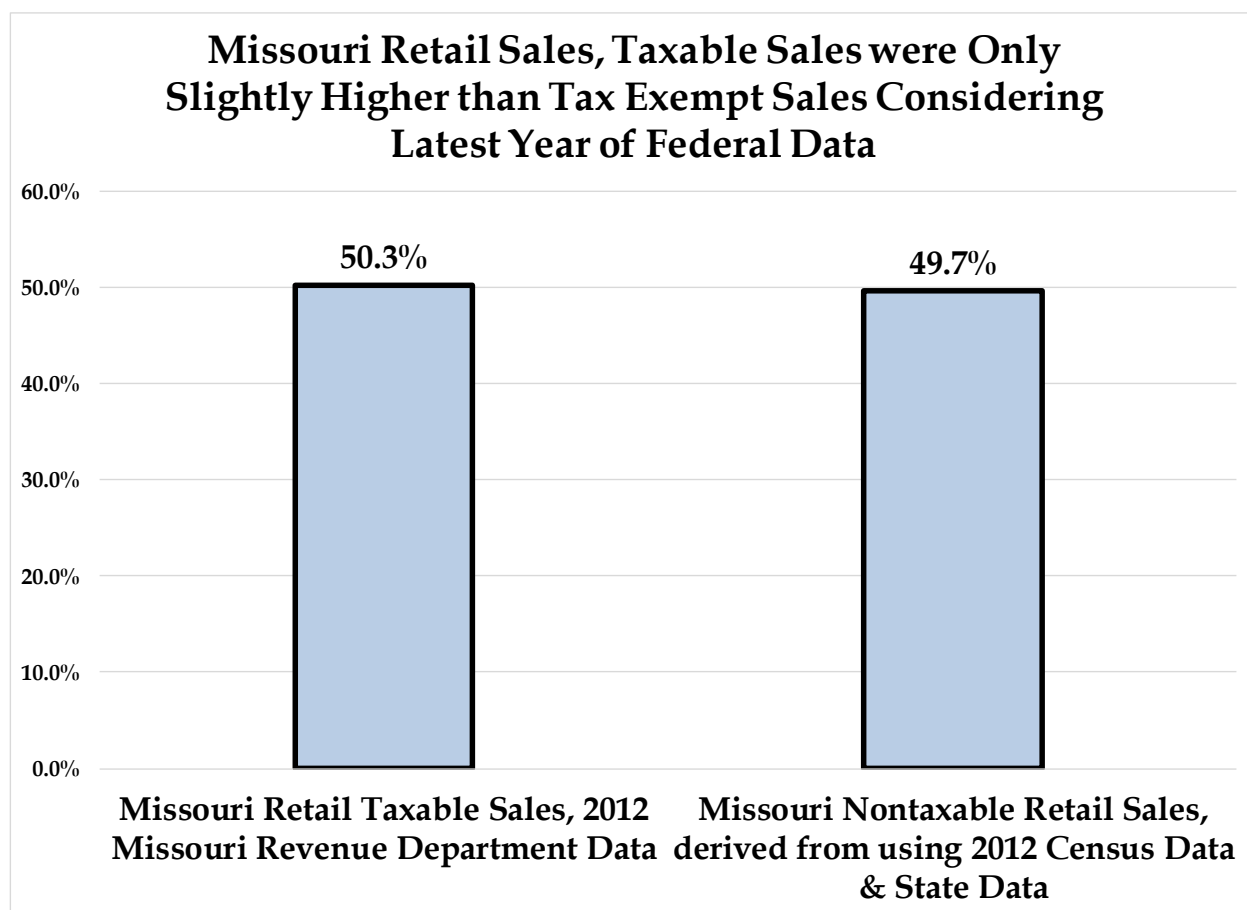
Unfortunately, data do not exist to quantify Missouri state and/or local sales tax exemptions. The latest estimates for major exemptions were presented in a University of Missouri, Columbia, study in 2009. In such study, most large exemptions were not quantified (e.g., lottery sales, sales to governments, and agricultural product sales), and because of the time lapse that has occurred since that time, information concerning the estimates provided in that study are too old to be useful for this analysis. A 2010 Missouri Legislative Committee on Research program evaluation of the Missouri Revenue Department's quantification of tax exemptions found that the department did not collect information concerning exemptions and did not calculate the impact upon the sales tax base concerning costs associated with such exemptions.<sup>40</sup> No public data have been found since the 2009 study concerning quantification of state sales tax exemptions with the exception of a 2016 food for personal use exemption estimate provided in a law review article footnote by Michael Harris, then a Missouri Revenue Department senior policy analyst.<sup>41</sup> The Missouri Revenue Department has changed its sales tax return to collect data regarding deductions to gross receipts to

<sup>40</sup> Program Evaluation: Review of the Missouri Department of Revenue State Sales Tax Exemptions, Committee on Legislative Research, Missouri Legislature, January 2010, <http://legislativeoversight.mo.gov/oversight/over09/PDFs/Revenue%20Sales%20Tax%20Exemptions.0150i.arc.pdf>

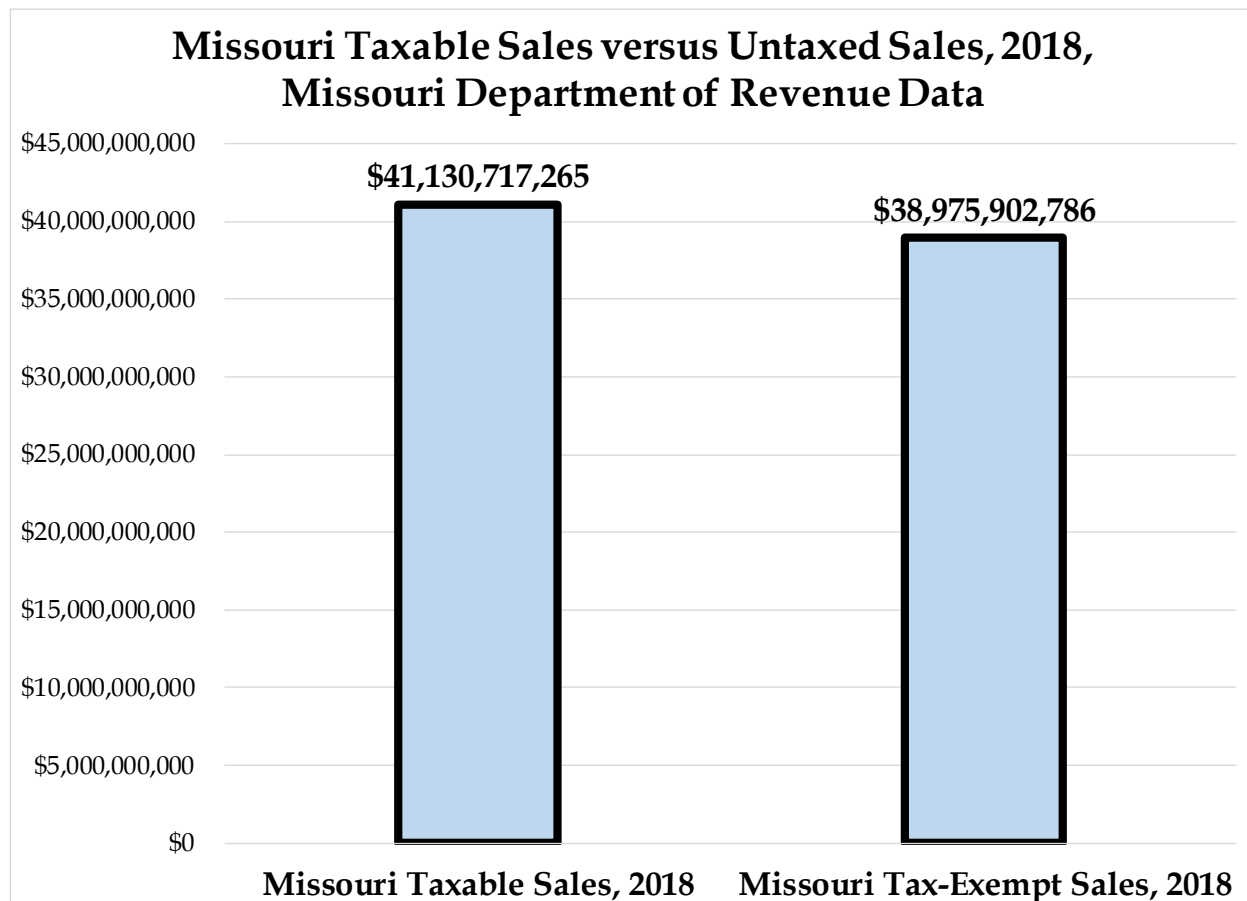
<sup>41</sup> <https://scholarship.law.missouri.edu/cgi/viewcontent.cgi?article=1017&context=betr>

derive taxable sales (e.g., tax exemptions). The Missouri Revenue Department collects such data and these gross receipts data were provided for this research and 2018 data will be discussed following state and Census comparative data for 2007 and 2012.

Gross sales are available for Missouri from the Census Bureau for 2007 and 2012. The previous and next chart were constructed using the federal census data for Missouri concerning gross sales in comparison to taxable sales according to Missouri Department of Revenue data. There may be a slight difference in the data because of state fiscal year versus federal calendar year data being used; however, the variance should be negligible – within two percent. The next chart shows the inferred taxable versus tax exempt sales in Missouri for 2012.



In 2018, Missouri Department of Revenue data also show a high level of tax-exempt sales as opposed to taxable sales pattern. In 2018, taxable sales were 51.3% of the total.<sup>42</sup>



Source: Missouri Department of Revenue, Data Attached to Email from Missouri Department of Revenue, August 20, 2019.

### **Missouri Taxable Retail Sales have been Nearly Half of Total Retail Sales**

There is an unexplained reduction in Missouri sales tax paid in comparison to income growth of Missouri residents. Why has the Missouri sales tax base apparently eroded over the last decade? Service sector spending has increased and such has been used to explain a portion of the reduction in sales taxes paid in comparison to income. In examining the differential between sales tax growth and income growth over time, increases in federal and state income taxes have also been estimated to explain a portion of the sales vs. income growth discrepancy. Even after considering services and income tax increased spending/cost, an unexplained \$800 million in sales tax revenue is estimated to be eluding Missouri state and local governments.

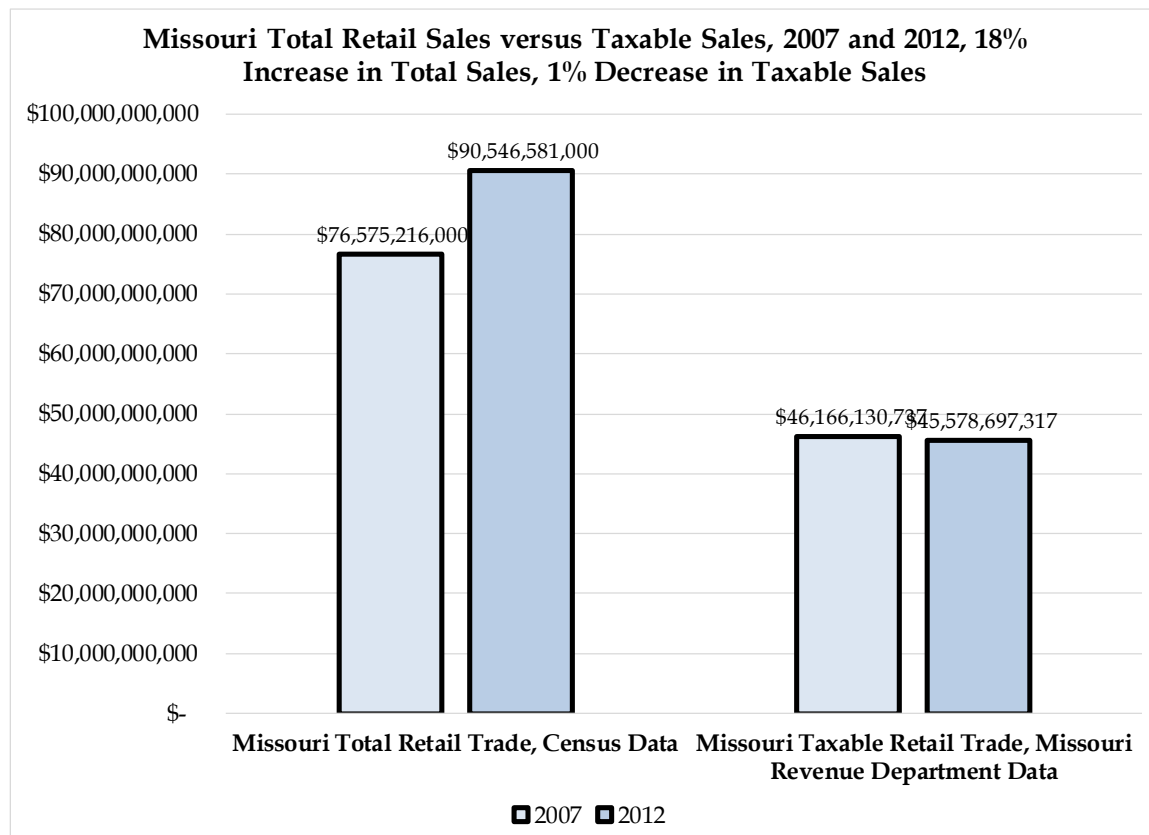
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<sup>42</sup> The state revenue department recently changed the way it classifies various sales by industry classification for data collection and reporting. For this reason, comparisons are not made between the 2012 and 2018 data.

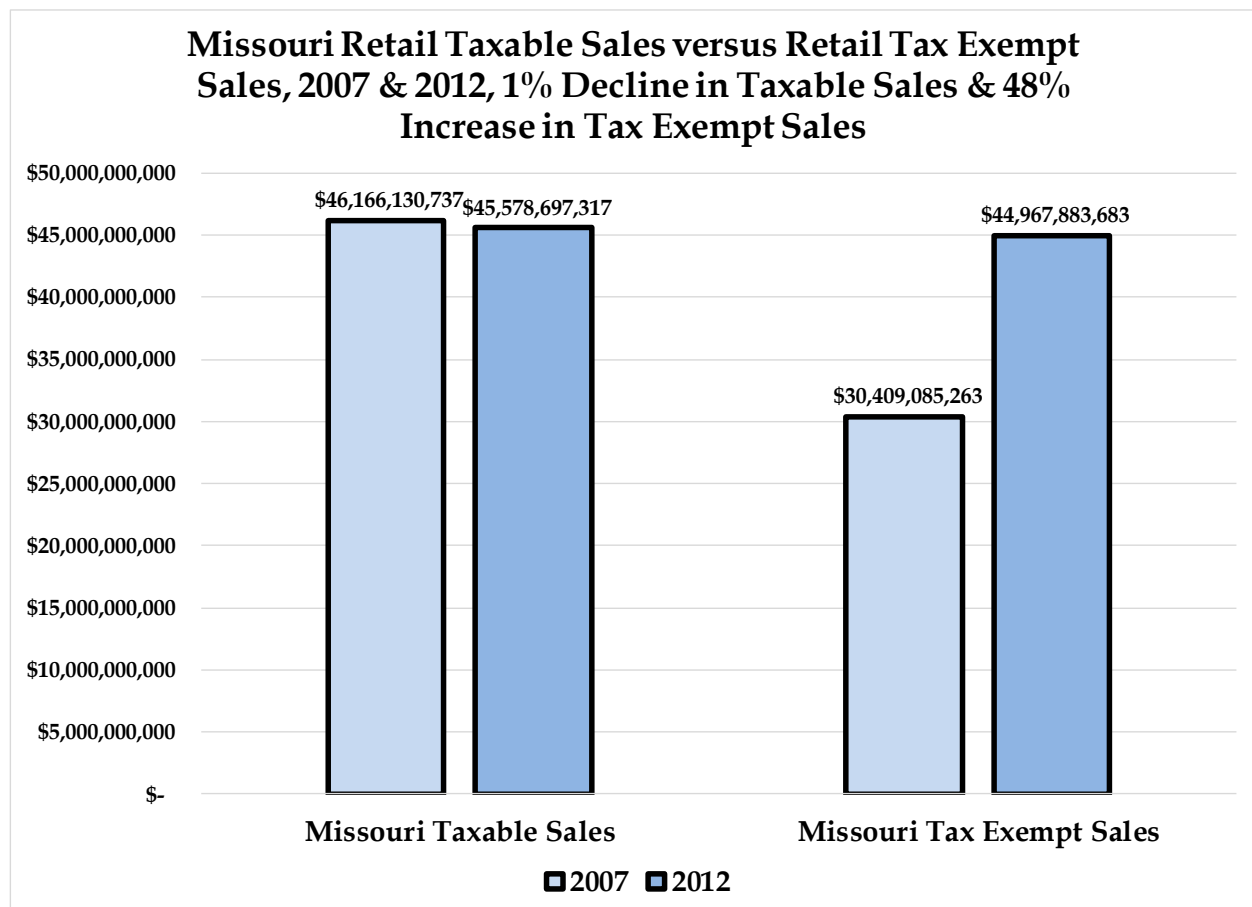
From a macro perspective there appears to be other factors at play other than services and federal/state income tax. Looking further at sales tax receipts in comparison to total sales as estimated by the federal government is another avenue to suggest other elements that may contribute to the tax erosion question.

State taxable sales data is available for current and prior years. Missouri Revenue Department sales tax data for 2018 is different than 2012 regarding industry classification. Because consistent data are available for 2012 and 2007, these federal and state retail sales data are used for comparative purposes rather than the 2018 data which also support the high level of tax exemptions relative to taxable sales.

Federal Census data provides Missouri total retail sales for years 2007 and 2012 by industry classification. Tax exempt sales for Missouri sales can be derived for these years by subtracting state taxable sales from the total federal figures. Although more recent retail trade data is not available from the federal government, the variation in taxable versus tax exempt sales for 2007 and 2012 show a stark contrast. Using the federal and state data for 2007 and 2012 shows that tax exempt sales have grown substantially while taxable retail sales declined from 2007 to 2012. The following charts shows this contrast. The first chart shows how overall sales grew by 18% for the five year period while taxable sales declined. The second chart shows that tax exempt sales increased 48% from 2007 to 2012 while taxable sales declined by 1%.







Another interesting observation concerns non-store retailers which may be partially attributed to the e-commerce sales tax leakage issue. Such sales include door-to-door sales, electronic shopping, and catalog shopping. Federal versus state data comparisons show that non-store retailer sales more than doubled from 2007 to 2012 from \$5 billion a year to over \$12 billion a year, yet taxable sales for non-store retailers only increased from approximately \$600 million to \$700 million. Taxable sales decreased as a percentage of total sales from approximately 12% of sales to less than 6% of sales.

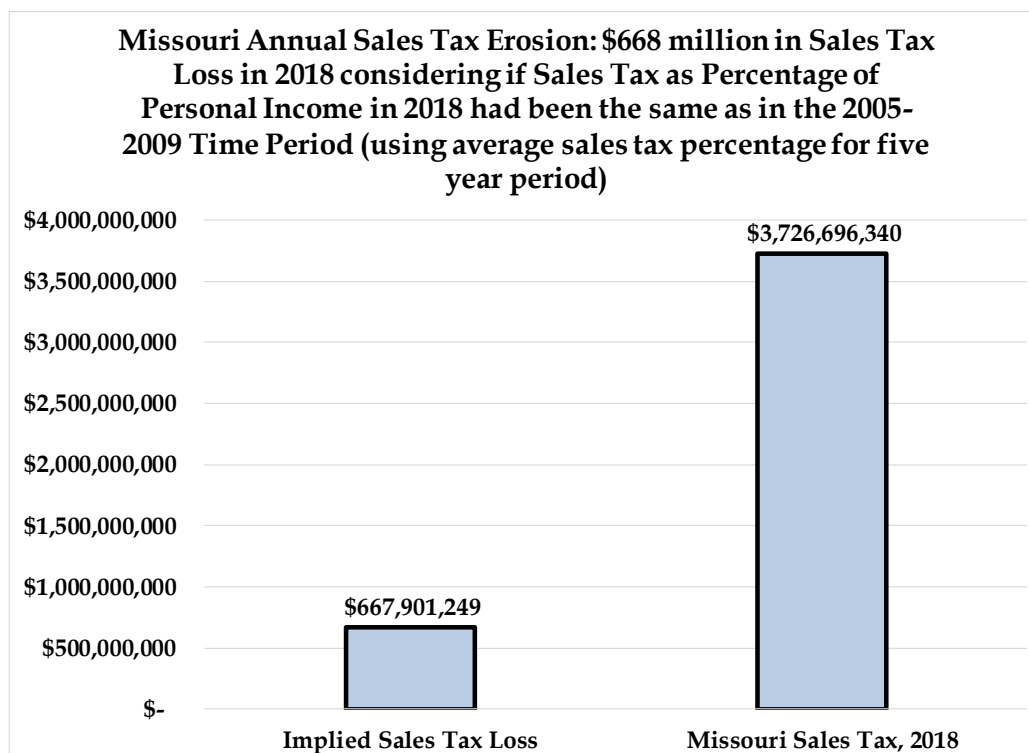
	Total Sales, Census Data	Taxable Sales, Missouri Revenue Department Data
Nonstore Retailer Sales, 2007/2008	\$ 5,112,218,000	\$ 577,109,103
Nonstore Retailer Sales, 2012	\$ 12,271,309,000	\$ 700,719,093

Could the non-store retailer sales growth of non-taxable items of \$7 billion be Internet-based sales? This is unknown; however, this \$7 billion growth in untaxed sales represents, by itself, \$300 million of sales tax not be collected on non-store sales.

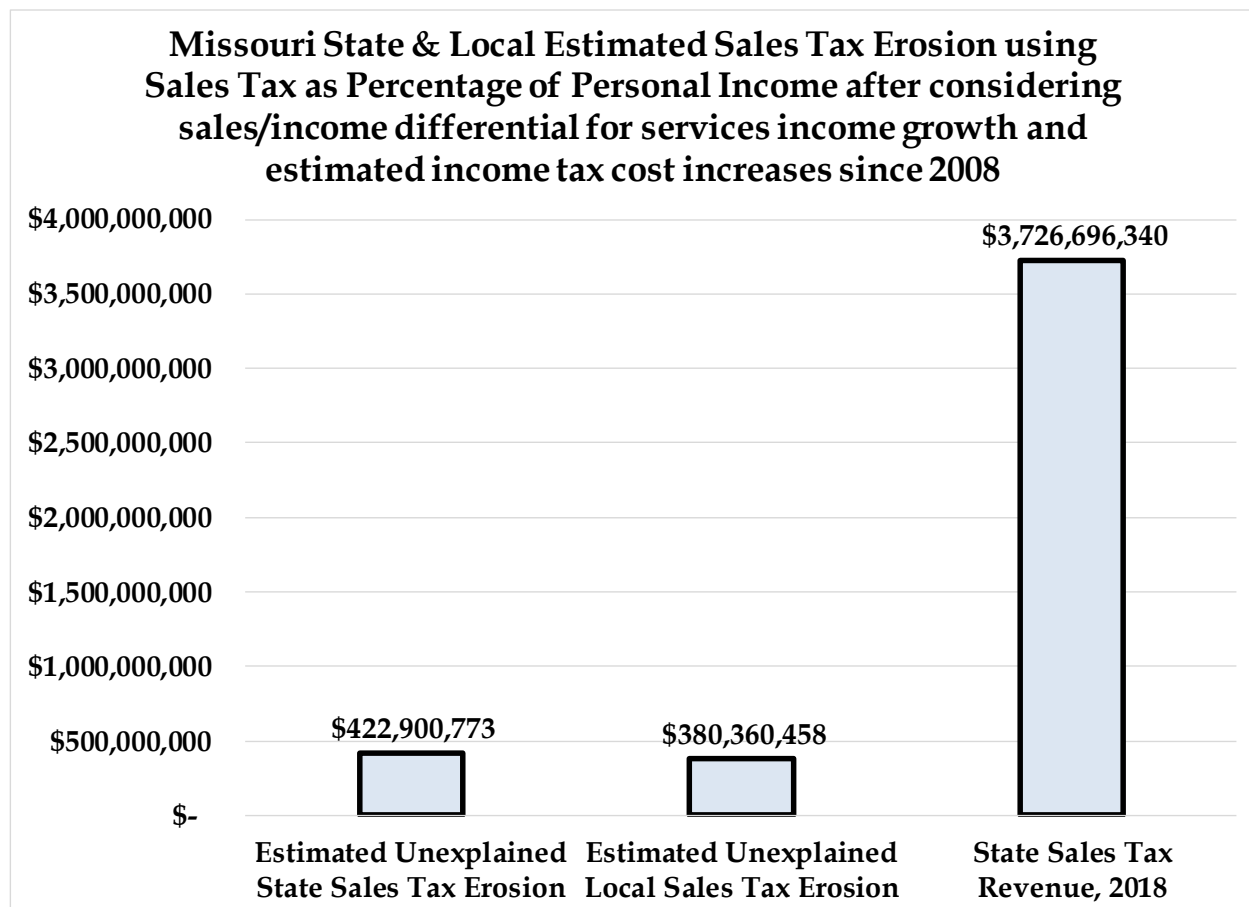
## Sales tax versus income growth differential: An unexplained \$10 billion in income growth apparently missing from the sales tax base

The much higher percentage of income growth than sales tax growth for Missouri would equate to \$48 billion in higher Missouri income growth as compared to sales tax growth for the 2007 to 2018 time period. Services industry income grew by \$19 billion for such time period. Out of total income growth, Missouri residents pay income taxes on such growth. These are two of the reasons for the difference in income growth versus sales tax growth, and such is taken into consideration when determining estimated sales tax erosion. If it is assumed that federal taxes paid by Missouri residents are 8.5 times state income tax receipts and the same multiple was applicable for 2007, then this could explain \$19 billion of the sales tax growth versus income growth disparity. The remaining differential that is unexplained would be just over an estimated \$10 billion. Such unexplained amount would equate to an estimated \$423 million is state sales tax and \$380 million in estimated local sales tax for a state and local unexplained tax erosion of \$803 million.

If sales taxes as a percentage of personal income remained the same in 2018 as in 2008, then an additional \$668 million in state sales tax would be generated an estimated \$601 million would be generated in local sales tax for a total of \$1.27 billion. The comparison of the state amount to 2018 sales tax receipts is provided in the following chart.



As mentioned, services spending and increased federal and state income tax costs are believed to contribute to the Missouri's state and local sales tax erosion issue. If stated assumed amounts are taken into consideration, then the State of Missouri and local governments have unexplained sales tax erosion of \$803 million. The net state amount from the gross amount in the chart above is provided in the following chart along with presumed local lost revenue sans services growth and provision for additional income tax paid.



### Overall Sales Tax Erosion Summary

Descriptive statistics show something does not make sense concerning Missouri sales tax growth relative to growth of the Missouri economy. A clear pattern exists showing a decline in sales tax as a percentage of personal income, and even Missouri non-store untaxed sales grew \$7 billion from 2007 to 2012. If Missouri residents paid out of their pockets the same amount of sales tax as a portion of their income as they did in the early part of the decade (after deducting spending increases for services and income taxes), then Missouri would have an estimated extra \$800 million a year in tax revenue.

This report discusses overall erosion of \$800 million and e-commerce sales tax loss of an estimated \$575 million to more than \$600 million. E-commerce loss and overall sales tax erosion figures (after considering services increased spending and increased income tax costs) are similar. E-commerce may represent most of Missouri's unexplained sales tax erosion. Given the magnitude of estimated sales tax loss erosion relative to the sales tax base suggests that the e-commerce and overall sales tax erosion issues warrant attention from Missouri executive and legislative branch leaders.

### **Walmart Overall Sales Tax Under-remittance to Missouri: up to \$63 million in general sales tax under-remittance and an estimated \$117 million when including e-commerce Walmart third-party untaxed sales**

Walmart reports that it remitted sales tax to Missouri \$643.2 million for the twelve months ending January 31, 2018. This report estimates, based upon estimated Walmart total sales and estimated sales tax exemptions attributable to Walmart sales, that Walmart sales tax collections are \$35 million to \$63 million lower than what should be remitting to the state. Additionally, Walmart.com uncollected e-commerce sales taxes are estimated to be \$54 million for a combined estimated Walmart under-remittance of sales tax of \$117 million. Such estimated amount is equal to approximately 17% of Walmart's sales tax collections. This section of the report focuses upon the general sales tax under-remittance range of \$35 million to \$63 million.

Missouri has numerous exemptions relevant to sales tax remitters, particularly those in the retail sector. Applicable state sales tax exemptions cost the state an estimated \$798 million in sales and use tax, and such exemptions cost local governments \$1.02 billion in sales and use tax. This report examines sales tax exemptions regarding all businesses and what exemptions should be available for Walmart.

In this section of the report, aside from the e-commerce estimate, other estimates are derived to suggest that Walmart is not collecting up to or over \$63 million in Missouri state and local sales taxes. Such amount may or may not be in addition to the e-commerce leakage. If e-commerce non-collection of sales tax is in addition to the other estimated leakage, then Walmart may not be collecting up to \$117 million in Missouri state and local sales tax. The e-commerce issue, though, is set aside for this portion of the report focuses solely on Walmart store revenue, applicable exemptions, what is paid in sales tax, and what is estimated that should be collected in sales tax.

Walmart last reportedly collected \$643 million in Missouri sales tax. This report estimates Walmart Missouri sales revenue and exemptions available to Walmart applicable to tax exempt sales. After estimating revenues and deducting exemption amounts, a range of sales tax collections estimated to be due is provided as compared to the \$643 million Walmart remits to the state. The end result is that it is estimated that Walmart does not remit up to \$63 million a year to Missouri that should be remitted.

## Walmart Sales Observations

Sales tax erosion is estimated at \$800 million for all Missouri sales. Walmart's has a large presence in Missouri. Walmart collects over \$600 million in sales tax and is the state's largest private sector employer. Because Walmart is the state's largest private sector employer and collects a relatively large portion of the sales tax total this report explores Walmart sales tax remittance to potentially provide insight regarding the sales tax erosion issue.

Analyzing this issue requires determining the appropriateness of what Walmart is collecting in sales tax relative to Walmart's sales. This report provides estimates for Walmart Missouri revenue and the exemption amounts relative to Walmart sales. First, Walmart Missouri estimated sales revenue is provided, and, second, Walmart Missouri applicable exemptions and the estimated impact on Walmart sales tax remittance bottom line is presented.

### Walmart Estimated Missouri Sales Revenue, \$12 billion

Before discussing exemptions in depth, it is important to discuss Walmart's Missouri sales revenue. This report estimates revenue for Walmart Missouri because such information is unavailable. Walmart Missouri available information concerns: sales taxes remitted, number of stores, and sales mix for all stores nationally (which is assumed to be the same for Missouri Walmart).<sup>43</sup> National Walmart financial data are also used for this exercise.

Missouri has 2.9% of Walmart's U.S. stores within the state. Walmart Missouri's stores vary by type relative to the nation. Missouri has a higher concentration of Supercenters and Neighborhood Markets, and Sam's Clubs, which have 3.1%, 2.3%, and 3.2% of the national total, respectively. The following is a chart showing Walmart stores, by type, in Missouri, and in the United States:

Walmart Stores Located in Missouri as Compared to those in the U.S., 2017-18			
Type Store	Walmart Missouri Stores	Walmart U.S. Stores	MO Percentage
Supercenters	112	3,570	3.1%
Discount Stores	9	386	2.3%
Neighborhood Markets	16	698	2.3%
Smaller Format Stores	-	102	0.0%
Sam's Clubs	19	599	3.2%
<b>Total</b>	<b>156</b>	<b>5,355</b>	<b>2.9%</b>

Walmart provides financial data in its annual report concerning sales by major store type, and Walmart provides the average square footage for each type of store.<sup>44</sup> Such information is used to provide revenue estimates for Walmart Missouri.

<sup>43</sup> Information is derived from Walmart annual reports and Walmart corporate location facts by state found on Walmart's corporate website.

<sup>44</sup> Walmart Annual Report, 2018

## Walmart Missouri Sales Revenue Estimate

Regarding the Walmart sales estimate for Missouri stores, it is estimated that Walmart Missouri had \$12.04 billion in retail sales in 2017/18. This number is derived by applying the national average revenue per type of store and applying such figures to Missouri's number of stores by type.

For the twelve months ending January 31, 2018, the following were average revenue amounts per store based upon a Walmart average store revenue per square foot of \$471.47 for Walmart stores and an average store revenue of \$737.10 per square foot for Sam's Club stores. The square footage revenue was determined by taking the total U.S. Walmart revenue and dividing that amount by number of square feet in the total Walmart footprint. The same approach was used in determining Sam's Club revenue per square foot. The following chart shows the estimated sales revenue by store type for the average Walmart nationally based upon the average revenue per square foot (discussed above) applied to the average feet per store as derived by Walmart Annual Report data (using the U.S. total number of feet by store type and dividing by the number of stores in each category):

Estimated Walmart Average Sales per Store, 2017/18	
Type Store	Average Sales Per Store
Supercenters	\$83,923,140
Neighborhood Markets	\$19,802,089
Discount Stores	\$49,505,223
Sam's Clubs	\$98,858,283

Source: Information based upon Walmart 2018 Annual Report data.

Based upon the number of Walmart stores in Missouri as applied to the above chart, Walmart Missouri total sales are estimated to have been \$12.04 billion for the 2017/2018 year ending January 31, 2018. These are estimated amounts and may vary in that the Walmart sales per square foot are not available for particular type stores. The aggregate per foot sales for the Walmart-branded stores are expected to be different for supercenters as compared to neighborhood markets so these figures should be viewed as approximations.

Whether Walmart Missouri stores sell as much as the average store nationally is unknown. However, Walmart Missouri's growth would suggest that Walmart Missouri does not underperform as compared to average stores. Walmart Missouri has grown over the past seven to eight years.

Walmart Stores Located in Missouri Growth since 2010			
Type Store	Walmart Missouri Stores 2010	Walmart Missouri 2018/19	MO % Increase
Supercenters	102	112	
Discount Stores	17	9	
Neighborhood Markets	-	16	
Walmarts On Campus	-	-	
Sam's Clubs	16	19	
<b>Total</b>	<b>135</b>	<b>156</b>	<b>15.6%</b>

The Walmart Missouri number of stores has increased by over 15% since 2010. It stands to reason that if Walmart Missouri stores underperformed average stores nationally then Walmart would not increase the number of Walmart Missouri stores by over 15%. Given the assertion that Walmart Missouri stores at least performs as well as average stores nationally the estimate is that Walmart Missouri store revenue at least equals average store revenue. Using these figures results in overall Walmart Missouri estimated sales revenue of \$12.04 billion.

## Sales Tax Exemptions

As noted previously, the State of Missouri has not produced recent tax expenditure estimates concerning various sales tax exemption costs with the exception of a 2016 food exemption estimate. For purposes of this report, estimates have been derived as to key sales tax exemptions that would be applicable to Walmart.

In this section of the report, sales tax exemptions are provided for a variety of product sales including food for personal use, prescription drugs, and agricultural inputs. This report applies most of these estimates to produce Walmart findings. Some exemptions are not included in the analysis for they are not applicable to major retail groups (e.g., manufacturing inputs, natural gas sales, and water works sales). Only exemptions concerning some applicable sectors, like construction and retail, are considered in this report to determine Walmart's presumed market share for various exemption costs.

## Walmart Exemptions

Estimating Walmart's sales tax collections due requires estimating the exemptions available to Walmart. Not all Walmart sales are taxable. Food, prescription drugs, sales to governments and non-profits, and various other Missouri exemptions make certain sales by Walmart tax exempt. In this section of the report, a chart shows the relevant exemptions to large retailers, and it is believed that the list includes the exemptions applicable to Walmart, although not all Missouri sales tax exemptions are applicable to Walmart (e.g., manufacturing and most agricultural inputs/machinery & equipment).

## State Exemption Estimates & Walmart Implications

Before Walmart exemption costs are estimated it is necessary to estimate the total cost of various exemptions and applying such total costs to Walmart based upon Walmart's estimated market share concerning different exemption areas. In this section of the report, different exemptions are estimated and Walmart's portion of such estimates are discussed.

### Applicable State and Local Sales Tax Exemptions

The following is a list of the relevant sales tax exemptions and tax cost to Missouri state and local governments:

Missouri Estimated State and Local Exemption Sales Tax Cost		
Exemption Item	State	Local
Food for Personal Consumption (includes WIC for Local)	\$ 419,000,000	\$ 1,918,820
Lottery Tickets	\$ 59,159,135	\$ 53,208,216
Food Stamp Purchases (state portion included in Food Exemption)	\$ -	\$ 44,840,000
Private Schools	\$ 4,412,614	\$ 3,968,741
Prescription Drugs	\$ 337,764,498	\$ 303,788,187
State, College, School, & Local Government Purchases	\$ 290,729,644	\$ 261,484,650
Nonprescription Drugs for Disabled Persons	\$ 4,804,740	\$ 4,321,423
Durable Medical Equipment	\$ 42,089,844	\$ 37,855,954
Agricultural Inputs/Machinery & Equipment	\$ 97,570,338	\$ 87,755,571
<b>Total</b>	<b>\$ 1,255,530,813</b>	<b>\$ 799,141,563</b>

### Major Exemptions: Food for Personal Use & Prescription Drugs

The food for personal use exemption is the largest exemption, as estimated, in Missouri. The second largest exemption is for prescription drugs. Both of these exemptions are applicable to Walmart.

In 2016, an tax policy analyst for the Missouri Department of Revenue estimated the state sales tax loss for food for personal use to be \$406 million. Adjusting such amount for inflation would bring the current cost to \$419 million.<sup>45</sup> State data concerning the Women, Infants, and Children (WIC) program and the food stamp program are available, and state and local tax rates were applied to these non-taxable amounts to

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<sup>45</sup> U.S. Inflation Calculator for 2017 and 2018, <https://www.usinflationcalculator.com/inflation/food-inflation-in-the-united-states/>



estimate the state sales tax loss at \$14.5 million and the local revenue loss to be \$46.8 million. Food stamp (SNAP) benefits in Missouri were \$1.18 billion in 2016 according to the Missouri Department of Social Services.<sup>46</sup> WIC benefits were \$50.49 million for Missouri for 2018.<sup>47</sup>

The Henry J. Kaiser Foundation estimates the amount of retail prescription drug sales by state. The foundation estimates pharmacy sales in Missouri to be \$7.99 billion and the estimated tax cost amounts are based upon this figure with state and average local sales tax rates as determined by the Tax Foundation. The total state and local prescription drug sales tax cost is estimated to be \$641 million.

### **Food for Personal Use Exemption as it applies to Walmart**

By far, the food for personal use exemption is the largest of the exemptions followed by prescription drugs. Walmart's annual reports have consistently noted that 56% of its sales are in the grocery area (with Sam's attributing 58% of its sales to grocery items in 2017). This means that Walmart has a substantial portion of its sales related to the food for personal use exemption (which includes non-alcoholic beverages, but not alcoholic beverages).

The previous chart has two exemption amounts for food: the food for personal consumption exemption (which includes WIC at the local level) and the Food Stamp exemption. Between these two exemptions, there is a state and local sales tax cost of over \$480 million for state and local governments.

Regarding gross sales of food for personal use, total state food purchases are estimated to be \$14 billion for 2018. This is derived by applying inflation growth for 2017 and 2018 against the Missouri Department of Revenue food for personal use estimate.

Two food exemption amounts for Walmart are provided and these are based upon estimated Walmart Missouri food for personal use market share. The first assumes a Walmart 30% food sales market share and the second assumes a Walmart 25% food sales market share.

### **Walmart Estimated Food for Personal Use Market Share**

The next step for estimating is to determine Missouri Walmart sales as a percentage of total food and beverage sales for off-premises consumption. Two estimates are provided based upon Walmart Missouri market share.

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<sup>46</sup> Food Assistance Benefits, Department of Social Services, State of Missouri, <https://mydss.mo.gov/food-assistance>

<sup>47</sup> WIC Program Grant Levels by State Agency, U.S. Department of Agriculture, 2018, <https://www.fns.usda.gov/wic/wic-funding-and-program-data>

## Walmart Food Exemption Estimate #1, \$4.15 billion in gross sales

The Walmart food exemption estimate uses the following approach to estimate the exemption value:

- ❖ Using Walmart Missouri estimated sales revenue as the base figure.
- ❖ Then applying such revenue against Walmart's national sales percentages by major category for groceries (e.g., 56% for Walmart, and 58% for Sam's Club, respectively).
- ❖ Using Progressive Grocer data (as discussed later in this section of the report), taxable versus tax-exempt grocery sales are estimated. The taxable portion of grocery sales is subtracted from the Walmart-asserted grocery percentage.
- ❖ The resulting Walmart food estimate figure equals 29.7% of all estimated Missouri tax exempt food for personal use sales.

As noted, Walmart estimated sales revenue is used Walmart's national "Grocery" percentage of total sales (e.g., the percentage Walmart says that groceries represent as the percentage of total sales). As discussed below, some of the items in the grocery category are taxable in Missouri, so this section discusses this issue. Once the taxable portion is derived (as estimated), such taxable amount is deducted from the grocery dollar amounts to determine the net food tax exemption amount.

Walmart's annual reports have said that 56% of its sales are "groceries" and the annual reports say that 58% of Sam's Club sales are "groceries." Walmart's annual report also says health and wellness sales account for 11% of Walmart sales and 6% of Sam's Club sales. Walmart's annual report defines what it considers "groceries" and "health and wellness." The following highlighted excerpt is from the 2018 Walmart Annual Report concerning the company's definition of groceries and health and wellness, which, in part is considered here along with grocery items:

Walmart says, "Grocery consists of a full line of grocery items, including meat, produce, natural & organics, deli & bakery, dairy, frozen foods, alcoholic and nonalcoholic beverages, floral and dry grocery, as well as consumables such as health and beauty aids, baby products, household chemicals, paper goods and pet supplies; Health and wellness includes pharmacy, optical services, clinical services, and over-the-counter drugs and other medical products;..."<sup>48</sup> (See highlighted items that are, mostly or at least in part, taxable in Missouri).

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<sup>48</sup> Walmart 2018 Annual Report, [https://s2.q4cdn.com/056532643/files/doc\\_financials/2018/annual/WMT-2018\\_Annual-Report.pdf](https://s2.q4cdn.com/056532643/files/doc_financials/2018/annual/WMT-2018_Annual-Report.pdf).

As the Walmart “Grocery” definition notes, not all grocery items in the 56% attributable grocery sales are tax-exempt items in Missouri. In order to provide a Walmart Missouri food and beverage estimate it is necessary to estimate the portion of Walmart grocery sales that are not food and non-alcoholic beverage items. Progressive Grocer information is used for this exercise.

Progressive Grocer is a supermarket trade publication and it produces typical sales of goods regarding grocery stores and product sales nationwide in a composite fashion. Progressive Grocer outlines various sold goods in supermarkets, with national sales by category, and a chart is used using this data to show the perceived portion of Walmart grocery sales that are non-taxable and taxable.<sup>49</sup> The following chart shows various line items that would be applicable to Walmart grocery sales and it is assumed that Walmart grocery sales are similar to other grocery stores regarding its grocery side of the business:

Progressive Grocer Sales Survey	
Grocery Sales Areas	
Groceries-Food	\$ 228,664
Perishables	\$ 445,660
Alcoholic Beverages	\$ 54,451
Health & Beauty	\$ 81,095
General Merchandise--Tracked	\$ 58,803
Groceries Non-Food	\$ 121,363
<b>Total Grocery Sales Areas</b>	<b>\$ 990,036</b>
Taxable Sales of the Grocery Sales Areas	
Alcoholic Beverages	\$ 54,451
Floral	\$ 7,407
Self-Serve Deli	\$ 11,256
Health & Beauty	\$ 81,095
General Merchandise--Tracked	\$ 58,803
Groceries Non-Food	\$ 121,363
<b>Total Taxable Sales</b>	<b>\$ 334,375</b>
<b>Taxable Sales as Percentage of Grocery Sales Areas</b>	<b>33.8%</b>

Numbers are 2017 estimated sales in millions of dollars for the industry according to Progressive Grocer.

Regarding grocery stores with pharmacies, Progressive Grocer includes a line for such sales. Pharmacy sales are omitted from this section of the report and from the Progressive Grocer data because the prescription drug segment exemption is separated for Walmart using Statista pharmacy market share data coupled with the Kaiser Family

<sup>49</sup> Progressive Grocer Consumer Expenditure Survey, Supermarket Sales Chart, 2017, <https://progressivegrocer.com/consumer-expenditures-study>

Foundation prescription drug estimate to quantify the pharmacy exemption value. In the above chart, health and beauty includes non-prescription drugs which are taxable in Missouri with the exception of disabled persons. Such exemption amount is considered in the “Other Exemptions” category applicable to Walmart and other retailers.

The Progressive Grocer data are used for the food estimated exemption amount for the statewide food exemption calculation. As the Progressive Grocer chart shows, 33.8% of 2017 supermarket sales are estimated to be taxable if applying Missouri exemption rules and assuming the same purchasing pattern applies to Missouri residents as the nation. Missouri considers most food items to be tax exempt with the exception of food for immediate consumption – hot food ready to eat, for instance. For such reason a portion of the “deli” Progressive Grocer sales data is placed in the hypothetical taxable grocery category.

The 33.8% taxable sales amount is deducted from the estimated gross grocery sales and estimated prescription and non-prescription exemptions are also taken into consideration for the Walmart calculations. This results for the first food exemption amount for Walmart Missouri of \$4.15 billion.

### **Walmart Food Estimate #2, \$3.49 million in gross sales**

When analyzing the Walmart exemption in relation to sales figures using the Walmart-corporatewide grocery percentage of sales, the Walmart percentage of food sales is 29.7% of the inflation-indexed Missouri food estimate after taking into account the Progressive Grocer estimated taxable portion of grocery purchases. Using Walmart corporate figures and assuming that Missouri Walmart grocery sales item percentages are the same as U.S. Walmart sales would mean that Walmart’s assumed food market share in Missouri is 30% of the total Missouri food for personal use estimated purchases.

It is unknown whether Walmart has a 30% food for personal use Missouri market share. Marketing Daily reported in January 2019 that Walmart has a 23% grocery national market share.<sup>50</sup> Because of the difference in the 30% and 23% market share figures a second Walmart food exemption estimate is provided assuming that Walmart has a Missouri food exemption 25% market share. The second food exemption amount for Walmart Missouri is \$3.49 billion.

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<sup>50</sup>S. Mahoney, Report: Walmart Continues To Gain Market Share In Most Categories, Marketing Daily, January 14, 2019, <https://www.mediapost.com/publications/article/331054/report-walmart-continues-to-gain-market-share-in.html>

## **Walmart Missouri Prescription Drug Exemption Estimate, \$528.1 million**

The state estimates a prescription drug sales amount of \$7.99 billion for a state tax cost of \$337.8 million. Statista estimates that Walmart has 5% of the nation's prescription drug market.<sup>51</sup> Using the Missouri estimate and assuming Walmart has 5% of the Missouri prescription drug market would place the Walmart Missouri prescription exemption value at \$399.7 million.

## **Walmart Other Exemptions Estimate, \$820 million in gross sales at the state level and approximately \$1.18 billion at the local level**

### **Other Exemptions: Sales to governments, agricultural inputs, lottery tickets, and smaller exemptions**

Missouri has other large exemptions that may or may not be applicable to Walmart and other retailers. Estimates are provided regarding each area and subsequent non-food and non-prescription drug exemption amounts associated with Walmart non-taxable sales are estimated in this section of the report.

The state has a number of other sales tax exemptions that are applicable to Walmart. There are four major exemption areas based upon Walmart's estimated market share of retailers selling such goods.

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<sup>51</sup> Share of the leading pharmacies in the United States in 2017, based on prescription revenue , Statista, <https://www.statista.com/statistics/255017/share-of-the-leading-us-pharmacies-based-on-prescription-revenue/>

The following other exemptions are viewed as relevant to Walmart sales:

1. Lottery tickets
2. Private School purchases
3. State and local government purchases
4. Agricultural inputs/machinery & equipment
5. Non-prescription drugs for disabled individuals

Missouri Estimated State and Local Exemption Sales Tax Cost		
Exemption Item	State	Local
Food for Personal Consumption (includes WIC for Local)	\$ 419,000,000	\$ 1,918,820
Lottery Tickets	\$ 59,159,135	\$ 53,208,216
Food Stamp Purchases (state portion included in Food Exemption)	\$ -	\$ 44,840,000
Private Schools	\$ 4,412,614	\$ 3,968,741
Prescription Drugs	\$ 337,764,498	\$ 303,788,187
State, College, School, & Local Government Purchases	\$ 290,729,644	\$ 261,484,650
Nonprescription Drugs for Disabled Persons	\$ 4,804,740	\$ 4,321,423
Durable Medical Equipment	\$ 42,089,844	\$ 37,855,954
Agricultural Inputs/Machinery & Equipment	\$ 97,570,338	\$ 87,755,571
<b>Total</b>	<b>\$ 1,255,530,813</b>	<b>\$ 799,141,563</b>

The previous chart shows the estimated state and local sales tax cost for various exemptions applicable to Walmart. All the exemptions provide Walmart shoppers with tax savings. Even though durable medical equipment and agricultural items are included in the list, these two items, along with sales to governments are believed to be of limited benefit regarding Walmart sales.

The following are assumed percentages for Walmart's portion of the Other Exemption amounts followed by assumption details:

1. Lottery tickets, 20%
2. Private School purchases, 15%
3. State and local government purchases, 5%
4. Agricultural inputs/machinery & equipment, 5%
5. Durable medical equipment, 5%
6. Non-prescription drugs for disabled, 20%

### Walmart Other Exemptions Assumption Detail

The estimates assume that Walmart sells 15% of lottery tickets. A lower percentage than food sales is used because of the prevalence of other retailers selling lottery tickets as compared to Walmart and because in the state's largest cities, St. Louis and Kansas City, Walmart is not listed as a lottery retailer in St. Louis and Walmart only sells lottery tickets at three locations in Kansas City.

Regarding private schools, Walmart has 19% of the retail base market share of all retail sales in the state according to Missouri Department of Revenue sales tax taxable data by industry; however, when reducing Walmart taxable sales by other exemption amounts (whereas the 19% only excludes Walmart exempt food and pharmacy sales), Walmart's market share of the taxable retail base is less than 17%. It is assumed that Walmart sells private schools 15% of its purchases. This is a lower percentage than Walmart's taxable assumed market share of various retailers because it is believed that private schools may have contractual arrangements with vendors for many purchases.

The private school exemption amount is derived by applying the Missouri private school student population as a percentage of the public school population. Missouri Department of Elementary and Secondary Education spending data from the FY19 Expense and Equipment line was used to estimate state school purchases of \$497 million. Local purchases were assumed to be 40% of the state amount and this amount, so state and local school purchases are estimated to be \$696 million.<sup>52</sup> Private school purchases, after applying the private school proportion of public school students, are estimated to be \$104 million.

Regarding the sale of non-prescription drugs to the disabled, a 20% market share is assumed. The percentage used is higher than the Walmart market share percentage noted in the previous paragraph because Walmart's grocery market share may drive more disabled persons to purchase at Walmart because of one-stop shopping. Health Affairs estimated national over the counter drug purchases to exceed \$31.7 billion a year in 2004.<sup>53</sup> Missouri's disabled population was estimated to be 14.1% of the total in 2013.<sup>54</sup> Using the Missouri disabled percentage of the population, national spending amount, and applying the Missouri population percentage would mean \$84 million in Missouri over the counter drug spending for the disabled population. The Consumer Healthcare Products Association said 2015 household non-prescription drug spending was \$338 per household in 2015.<sup>55</sup> Applying Missouri's household and population figures from the Census Bureau for 2018 would mean disabled non-prescription drug spending of \$114 million, assuming Missouri's population spending

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<sup>52</sup> In 2013, private school enrollment was 13.67% of public school enrollment. For the private school exemption estimate the 2018 percentage is assumed to be 15%. Sources: School Choice in Missouri, Ballotpedia, 2013, [https://ballotpedia.org/School\\_choice\\_in\\_Missouri](https://ballotpedia.org/School_choice_in_Missouri); and [https://oa.mo.gov/sites/default/files/FY\\_2019\\_EB\\_Elementary\\_and\\_Secondary\\_Education.pdf](https://oa.mo.gov/sites/default/files/FY_2019_EB_Elementary_and_Secondary_Education.pdf)

<sup>53</sup> **Retail Prescription Drug Spending In The National Health Accounts**, Health Affairs, 2004, <https://www.healthaffairs.org/doi/10.1377/hlthaff.23.1.160>

<sup>54</sup> Disability Statistics Status Report for Missouri, disabilitystatistics.org, 2013, [http://www.disabilitystatistics.org/StatusReports/2013-PDF/2013-StatusReport\\_MO.pdf](http://www.disabilitystatistics.org/StatusReports/2013-PDF/2013-StatusReport_MO.pdf)

<sup>55</sup> **Statistics on OTC Use**, Consumer Healthcare Products Association, <https://www.chpa.org/MarketStats.aspx>



was the same as the national average and disabled spending was the same for national over the counter medications. The more recent dollar amount is used for the disabled over the counter drug sales tax exemption estimate.

Regarding Missouri's sales tax exemption for sales to governments, this report assumes that federal government purchases from Missouri retailers would be minimal at best given that most related purchases are made through the General Services Administration. This report provides a tax expenditure estimate for state and local government spending based upon the U.S. Census of Government 2017 Annual Survey.

Assumptions are made to quantify applicable purchases of state and local governments. Here, the Census provides an estimate for State of Missouri operating costs, which includes payroll expenditures. After excluding payroll expenses, half of the remainder is excluded for service purchases, and then half of the remainder is excluded for state and local government purchases such as roadwork, public transportation, and water and sewer. After making these assumptions, it is estimated that the state and local government exemption amount is \$299 million to the State of Missouri and \$219 million for its political instrumentalities.

It is assumed that Walmart's sales to governments sales tax exemption is 5% of the total. It is assumed that Walmart has a low percentage of these sales because governments primarily have bid law requirements and many of government purchases are not related to Walmart sales (e.g., construction, water treatment equipment, roadwork, school buses, other vehicles, food purchases in bulk).

The tax costs noted here are believed to be overstated because the State of Missouri public contract data shows no Walmart contract with state government and numerous items will be purchased via bid. State government agencies may purchase small items not requiring to go through the bid process. Purchases under \$3,000 do not have to be competitively bid, so Walmart is believed to sell items not requiring bids.<sup>56</sup> How much in exempt sales is unknown, but there will be a limitation because of, as briefly mentioned, many government sales are inapplicable to Walmart such as HVAC systems, bulk cleaning supplies, other bulk supplies, computer-related equipment and supplies, other equipment, weapons, vehicles, furniture, and fixtures which may be related to the bid law or other mass purchasing arrangements.

Agricultural inputs/machinery & equipment exempt sales are also believed to be muted in Walmart's case. Here it is also assumed that Walmart Missouri only sells 5% of the amount of these purchases. Walmart sells seeds, plants, fertilizer, and pesticides; however, much of what is purchased in this category is unrelated to Walmart sales. For this reason the 5% figure is used. The state and local tax exemption cost for this area is estimated to be \$1.27 million.

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<sup>56</sup> State of Missouri Office of Administration Division of Purchasing and Materials Management, Vendor Manual, 2014, <https://oa.mo.gov/sites/default/files/vendormanual.pdf>



All total, Walmart Missouri other exemption amount totals \$821 million at the state level and \$1.15 billion to \$1.18 billion at the local level. The state tax cost amount is estimated to exceed \$35 million and the estimated local tax cost amount is estimated to exceed \$40 million.

### **Walmart Missouri Sales Revenue, Exemptions, Taxes Estimated to be Collected, and Actual Taxes Collected**

Estimates have been provided concerning Walmart Missouri revenue. Estimates have been provided concerning sales tax exemptions viewed as applicable to Walmart sales and the assumptions associated with each. Walmart corporate information provides sales taxes remitted to Missouri for 2018. This section of the report provides composites, based upon varying estimates, of what is believed that Walmart should be collecting in state and local sales tax as compared to how much sales tax revenue is remitted to Missouri by Walmart.

Exemption estimates applicable to Walmart are provided. In summary, the following chart provides the estimated Walmart sales revenue, Walmart sales exemptions, and the net difference as compared to tax applied to such net amount as opposed to what Walmart collects in sales tax:

<b>Walmart Revenue &amp; Exemption Estimate #1, Walmart Food 30% Market Share</b>		
	<b>State Walmart Sales Tax Estimate</b>	<b>Local Walmart Sales Tax Estimate</b>
<b>Walmart Missouri Revenue Estimate</b>		
Walmart Missouri Sales Estimate	\$ 12,040,075,928	\$ 12,040,075,928
<b>Exemptions</b>		
Food Exemption @ 30% All Food Sales	\$ 4,151,478,421	\$ 15,148,578
Other Exemptions (including Food Stamps/Local)	\$ 827,790,733	\$ 1,181,790,733
Pharmacy Exemption	\$ 399,721,299	\$ 399,721,299
<b>Total Estimated Exemptions</b>	<b>\$ 5,378,990,454</b>	<b>\$ 1,596,660,610</b>
<b>Implied Taxable Sales</b>	<b>\$ 6,661,085,475</b>	<b>\$ 10,443,415,318</b>
<b>Implied State Tax/Implied Local Tax</b>	<b>\$ 281,430,861</b>	<b>\$ 396,849,782</b>
<b>State &amp; Local Implied Sales Tax</b>	<b>\$ 678,280,643</b>	
<b>Actual Walmart Tax</b>	<b>\$ 643,200,000</b>	
<b>Discrepancy</b>	<b>\$ (35,080,643)</b>	
<b>Percent Discrepancy</b>	<b>-5%</b>	

As the above chart shows, it is estimated that Walmart under-remits sales tax to state and local governments of \$35 million using Food Exemption Estimate #1. It should be noted that such estimated sales tax discrepancy assumes that the Walmart food exemption is based upon Walmart having a 30% market share of exempt food sales. In January, Marketing Daily reported that Walmart has a 23% market share of grocery sales.<sup>57</sup> If Walmart had a 25% Missouri grocery market share, then the food exemption amount for Walmart would be reduced (ergo Food Exemption Estimate #2) and this would affect the overall sales tax discrepancy number. If Walmart has a 25% market share, then the sales tax discrepancy figure would be \$63 million as shown in the next chart because of a different food exemption amount.

<b>Walmart Revenue &amp; Exemption Estimate #2, Food for Personal Use 25% Market Share</b>		
	<b>State Walmart Sales Tax Estimate</b>	<b>Local Walmart Sales Tax Estimate</b>
<b>Walmart Missouri Revenue Estimate</b>		
Walmart Missouri Sales Estimate	\$ 12,040,075,928	\$ 12,040,075,928
<b>Exemptions</b>		
Food Exemption @ 25% All Food Sales	\$ 3,491,666,667	\$ 12,623,815
Other Exemptions (including Food Stamps/Local)	\$ 827,790,733	\$ 1,152,290,733
Pharmacy Exemption	\$ 399,721,299	\$ 399,721,299
<b>Total Estimated Exemptions</b>	<b>\$ 4,719,178,699</b>	<b>\$ 1,564,635,847</b>
<b>Implied Taxable Sales</b>	<b>\$ 7,320,897,229</b>	<b>\$ 10,475,440,081</b>
<b>Implied State Tax/Implied Local Tax</b>	<b>\$ 309,307,908</b>	<b>\$ 398,066,723</b>
<b>State &amp; Local Implied Sales Tax</b>	<b>\$ 706,205,661</b>	
<b>Actual Walmart Tax</b>	<b>\$ 643,200,000</b>	
<b>Discrepancy</b>	<b>\$ (63,005,661)</b>	
<b>Percent Discrepancy</b>	<b>-10%</b>	

These estimate concern only Walmart revenue and exemptions concerning Walmart-proper sales which would include Walmart.com items in Walmart's own inventory. The \$35 million to \$63 million amounts do not include the estimated \$54 million in Walmart.com third-party seller sales that are believed to be untaxed. It is believed that the overall store- and Walmart-inventory revenue and exemption net sales tax discrepancy is in addition to Walmart.com third-party seller untaxed sales. This is because Walmart does not consider third-party seller sales as "Walmart sales." As noted by the Walmart FY19 quarterly financial report, "e-commerce impact" on Walmart, Inc., net sales are an approximate annualized \$3 billion, which is

<sup>57</sup> S. Mahoney, Report: Walmart Continues To Gain Market Share In Most Categories, Marketing Daily, January 24, 2019, <https://www.mediapost.com/publications/article/331054/report-walmart-continues-to-gain-market-share-in.html>

approximately 10% of potential e-commerce sales for this year. This is interpreted to mean that non-taxed third party sales are not be considered to be included in Walmart net sales figures, thus the e-commerce portion may be in addition to the \$35 million to \$63 million in estimated Walmart under-collection of sales tax. Combined, the estimated Walmart sales tax under-remittance to Missouri state and local governments is \$89 million to \$117 million, depending upon Walmart's food for personal use market share.

## **Conclusion**

Missouri has experienced sales tax erosion relative to the state's economic growth after considering additional enacted exemptions. This report estimates an unexplained \$800 million in sales tax decline relative to personal income growth as of 2018. Further, this report estimates that the lack of taxation on remote seller sales to Missouri residents cost state and local government \$575 million to over \$600 million in sales tax in 2018 with potential losses exceeding \$800 million early in the next decade.

Walmart, the state's largest retail collector of sales tax, is estimated to be under-collecting sales tax in its stores by \$35 million to \$63 million. Additionally, Walmart.com e-commerce non-collection of sales tax is estimated to be up to \$54 million for this year. In total, Walmart may be not collecting Missouri state and local sales tax on sales to Missouri residents ranging from \$89 million to \$117 million.

Both the statewide and Walmart sales tax potential loss figures are substantial. These ranges of uncollected sales taxes represent significant dollars that Missouri and local governments could be receiving in additional revenue if further state review is conducted and attention to e-commerce rules and laws are examined as to apparent leakage.

Further attention to e-commerce and sales tax compliance issues are warranted if Missouri leaders wish to receive more sales tax revenue that is apparently due. An estimated \$800 million is being lost every year, and addressing e-commerce issues, as other states have worked toward, could address much of the tax shortcoming and avoid further tax erosion of hundreds of millions of more dollars in the near future.

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