HOLIDAY FORECAST
OF OHIO RETAIL SPENDING

Rocking Around the Spending Spree

Prepared by the Economics Center

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The Economics Center forecasts a **1.54 percent increase** in Ohio retail spending for the 2016 holiday season relative to the previous year.

The Economics Center forecast is lower than national forecasts, potentially due to a shift in consumer preferences to entertainment and experiences over goods.

Over time the share of sales and use tax revenues accounted for by the retail sector in Ohio has declined.

Economic indicators for the state show stability, but not necessarily substantial growth over previous years. While employment is increasing, total wages and salaries are growing at a slower pace. Consumer confidence remains strong, but close to 2015 levels.

Online shopping continues to be a growing component of retail sales, with mobile shopping playing a larger role. Online and mobile shopping provide consumers electronic access to a wide array of vendors, allowing them to be more informed before they enter a store. Competition for consumer loyalty has increased, with brand recognition and philanthropic preferences playing a role.

The state’s three largest metro areas account for more than half of estimated retail sales this holiday season, with modest growth projected. Smaller areas of the state are anticipated to experience higher growth rates.
INTRODUCTION

Retailers highly anticipate the holiday spending season. The time is reputed as that when retail businesses generate sufficient sales to realize profits for the year.\(^1\) “Black Friday” – and now “Cyber Monday” – are recognized as signaling the beginning of the holiday spending season.\(^2\) The additional sales and activity anticipated by businesses leads to seasonal hiring, providing opportunities for temporary employment. To assist Ohio retailers with preparing for the holiday season, the Economics Center constructs an annual forecast of holiday retail spending.

While holiday spending provides a boost to the economy in general, the size of that boost is largely determined by how confident consumers feel.\(^3\) In times of uncertainty and volatility, consumers are generally more likely to spend less than in an economic environment characterized by robust opportunities and growth. Economic dynamics such as inflation, the amount of debt households carry, and employment and wages influence the level of holiday spending.

Deloitte, PricewaterhouseCoopers (PwC) and the National Retail Federation (NRF) have released national holiday retail forecasts, anticipating a strong retail season. All forecasts note changing tastes among consumers, with technology influencing the items purchased and the manner of purchasing (e.g. online versus in-store). The share of online or digital sales continues to increase and, as Deloitte and PwC note, purchases from mobile devices are rising as well.\(^4\) Similarly, NRF expects the growth rate of online sales to be twice that of holiday sales overall from last year.\(^5\)

Overall holiday spending is expected to be bolstered by consumer confidence, with memories of the recent recessions fading amidst modest employment and earnings growth. In addition to higher volumes of digital and online purchases, greater demand for experience and entertainment gifts is anticipated to moderate holiday retail spending. NRF and PwC both note that brick-and-mortar retailers may not capture all of the gains forecasted for retail spending as a whole due to these sources of competition.\(^6\) While the presidential election has generated questions about the future performance of the economy, it is unclear if the outcome will be more or less positive for spending overall.\(^7\)

\(^2\) http://www.cbsnews.com/news/heres-how-cyber-monday-is-different-from-black-friday/
\(^4\) PwC (2016); Deloitte University Press (2016)
\(^5\) NRF (October 2016)
\(^6\) PwC (2016); NRF (October 2016)
\(^7\) Deloitte University Press (2016)
HOLIDAY SPENDING FORECAST

Data and Methodology

To develop a forecast for Ohio retail spending during the holiday season, the Economics Center compiled monthly data on sales and use tax revenues and rates by county maintained by the Ohio Department Taxation. The Tax Department administers permissive sales and use taxes for all 88 counties and eight regional transit authorities. Revenues from monthly collections is distributed to the counties and transit authorities. Total revenues and rates applicable within the counties were used to develop an estimate of the value of retail activity necessary to generate revenues collected. Data collected and analyzed cover the period from January 2004 to August 2016. Revenues attributable to “holiday” spending were taken to include collections from November, December and January.

Sales and use tax revenues are derived from a variety of sources in addition to the retail activity applicable to the holiday sales forecast. To isolate relevant retail activity ("retail spending"), data on semi-annual sales and use tax revenues by industry were analyzed to estimate the relevant retail portion. For the purposes of the forecast, relevant retail is defined to exclude Motor Vehicles and Parts Dealers and Gasoline Stations. Table 1 outlines the sectors used to define relevant retail. Businesses categorized as "Arts, Entertainment, and Recreation" and "Accommodation and Food Services" are also excluded from relevant retailers.

<table>
<thead>
<tr>
<th>Retail Sector</th>
<th>Included in Relevant Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicle and Parts Dealers</td>
<td>No</td>
</tr>
<tr>
<td>Furniture and Home Furnishings Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>Electronic and Appliance Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>Building Material and Garden Equipment &amp; Supplies</td>
<td>Yes</td>
</tr>
<tr>
<td>Food and Beverage Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>Health and Personal Care Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>Gasoline Stations</td>
<td>No</td>
</tr>
<tr>
<td>Clothing and Clothing Accessories Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>Sporting Goods, Hobby, Book, and Music Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>General Merchandise Stores</td>
<td>Yes</td>
</tr>
<tr>
<td>Miscellaneous Store Retailers</td>
<td>Yes</td>
</tr>
<tr>
<td>Nonstore Retailers</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Ohio Department of Taxation
Despite an expansion in definition of “relevant retail” in recent years, the share of sales and use tax revenues accounted for by these sectors has declined. Figure 1 displays the total sales and use tax collected, as well as the portion accounted for by Total Retail and Relevant Retail from 2005 to 2016. While revenues have increased, particularly following the recent recession, total and relevant retail revenues have remained relatively stable. Revenues derived from relevant retail sectors accounted for about 61 percent of total sales and use tax revenues in 2005, and approximately 45 percent of revenues in 2015 and 2016.

Figure 1: Sales and Use Tax Revenues and Retail Shares, 2005-2015

![Figure 1: Sales and Use Tax Revenues and Retail Shares, 2005-2015](image)

Source: Economics Center calculations from Ohio Department of Taxation data

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8 Prior to 2015 nonstore retailers were not included among relevant retail sectors for forecasting state retail sales. Inclusion is consistent with current national forecasts including the National Retail Federation.
In addition to sales and use tax revenues, the Economics Center collected and analyzed data on employment and wages in Ohio\textsuperscript{9}, as well as national retail sales, household debt, inflation, and consumer sentiment. The models also include an indicator for the period of the recent recession. Table 2 displays data used in the development and estimation of the forecast.

### Table 2: Data for Forecast

<table>
<thead>
<tr>
<th>Measure</th>
<th>Source</th>
<th>Most Recent Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio sales and use tax revenues and rates</td>
<td>Ohio Department of Taxation</td>
<td>August 2016</td>
</tr>
<tr>
<td>Ohio total wages and salaries</td>
<td>U.S. Bureau of Economic Analysis, retrieved from FRED, Federal Reserve Bank of St. Louis</td>
<td>April 2016</td>
</tr>
<tr>
<td>Household debt service payments as percent of disposable income</td>
<td>Board of Governors of the Federal Reserve System, retrieved from FRED, Federal Reserve Bank of St. Louis</td>
<td>April 2016</td>
</tr>
<tr>
<td>US Retail Trade</td>
<td>U.S. Census Bureau</td>
<td>July 2016</td>
</tr>
<tr>
<td>Consumer Confidence Index</td>
<td>Conference Board, retrieved from University of Wisconsin</td>
<td>March 2016</td>
</tr>
</tbody>
</table>

The Economics Center utilized a Vector Auto Regression (VAR) model to forecast Ohio retail sales for the upcoming period. The VAR model is a standard macroeconometric approach which takes into account the movements of all included variables over the time period considered, developing internal predictions for data items that do not have current values for the forecast period.\textsuperscript{10} Thus, the model forecasts future values for Ohio retail sales as well as future values for employment, wages, confidence, debt and inflation.

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\textsuperscript{9} Employment and wage data

\textsuperscript{10} Details of the VAR models are available upon request.
For the regional models, regional employment was included in lieu of statewide employment. Regions are defined as the counties contained within the metropolitan statistical area (MSA). For MSAs with multi-state areas, only the Ohio counties are included. The map below illustrates the regions used in the analysis.

**Figure 2: Ohio Metropolitan Statistical Areas**

Retail Spending and Forecast Results

Retail sales in Ohio have generally increased in 2016 relative to 2014 and 2015, as captured by sales and use taxes. Overall, retail spending is approximately 5 percent higher for 2016. February and April represent the largest year-over-year gains from 2015 to 2016 (7 and 9.6 percent). Figure 3 displays the monthly retail sales. As the estimates illustrate, December and January tend to register the largest volumes, consistent with holiday spending.
The Economics Center projects a 1.54 percent increase in holiday retail spending in 2016 compared to 2015.

The Economics Center estimates holiday retail revenues of $22.2 billion statewide for 2016, an increase from $21.7 billion in 2015. Similarly, existing national forecasts project increases in retail spending for this holiday season. National estimates range from 3.6 – 4 percent (NRF, Deloitte) to 10 percent (PwC). The increase is largely driven by online, particularly mobile, purchases as well as by a greater share of experiential and entertainment gifts. All national forecasts note that traditional store retailers may face some challenges capturing the growth in spending as transactions move to mobile platforms and consumer tastes shift towards more experience and entertainment gifts. While the Economics Center forecasts includes non-store retailers, the result excludes the growing entertainment category which could account for some of the moderating effect. As displayed in Figure 4, retail sales continue their progress towards pre-recession totals, although growth continues to be slower than before 2006.
Regional Breakdown

Across the state’s metro regions, holiday retail sales are projected to increase, although the magnitudes vary widely. Not surprisingly, the state’s largest metro areas – Columbus, Cleveland and Cincinnati – account for the majority (54 percent) of estimated holiday retail sales. Smaller areas such as Youngstown and Mansfield are projected to see the largest percentage gains for 2016.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus</td>
<td>$4,213</td>
<td>$4,344</td>
<td>3.1%</td>
<td>19.6%</td>
</tr>
<tr>
<td>Cleveland</td>
<td>$3,934</td>
<td>$4,017</td>
<td>2.1%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>$3,479</td>
<td>$3,583</td>
<td>3.0%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Dayton</td>
<td>$1,526</td>
<td>$1,552</td>
<td>1.7%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Akron</td>
<td>$1,350</td>
<td>$1,378</td>
<td>2.1%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Toledo</td>
<td>$1,193</td>
<td>$1,199</td>
<td>0.5%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Youngstown</td>
<td>$  731</td>
<td>$  776</td>
<td>6.2%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Mansfield</td>
<td>$  210</td>
<td>$  220</td>
<td>4.9%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Lima</td>
<td>$  211</td>
<td>$  218</td>
<td>3.3%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Source: Economics Center calculations
ECONOMIC CONDITIONS

Overall, economic indicators illustrate a stable consumer base. While most indicators display consistency, growth in these measures has slowed or plateaued relative to 2015. Economic measures suggest continued stability for consumer spending this holiday season.

Employment and Wages

Steady overall employment growth continues to characterize the Ohio economy since 2013. Figure 5 displays total nonfarm employment for Ohio, illustrating the seasonal nature and holiday hiring. Improving employment totals help bolster consumer confidence and overall economic outlook, leading to a strong holiday spending season.

Figure 5: Ohio Total Nonfarm Employment (thousands)*, 2013-2016

Source: U.S. Bureau of Economic Analysis, retrieved from St. Louis Federal Reserve Bank Economic Data (FRED)
*not seasonally adjusted
While employment has shown a steady trend of gains, total wages and salaries have exhibited declining growth recently. Figure 6 displays total wages and salaries and quarter-to-quarter change. The trend in income has been positive overall since 2013, although the quarterly change exhibits larger swings in the most recent period. Confidence buoyed by greater employment prospects may be tempered by smaller income gains. PwC’s 2016 Holiday Outlook notes that consumers rank income as the most important factor influencing holiday spending.\(^{11}\)

**Figure 6: Ohio Total Wages and Salaries\(^*\), 2013 -2016**

\(^{11}\) PwC (2016)
Consumer Confidence

Mirroring recent growth in employment and income, consumer confidence nationally has increased as measured by the Conference Board’s Consumer Confidence Index. While the index has risen since 2013, the recent period is marked by a plateau in the overall rate of growth. Thus, consumer confidence is strong overall compared to 2013 and 2014 but relatively unchanged from last year. PwC cites persistent underemployment and slower hiring overall as mitigating influences on consumer confidence.\(^\text{12}\)

\begin{figure}
\centering
\includegraphics[width=\textwidth]{consumer_confidence.png}
\caption{Consumer Confidence Index, 2013 -2016}
\end{figure}

\hspace{1cm}
\textbf{Source:} Conference Board, retrieved from University of Wisconsin

\(^{12}\) PwC (2016)
Household Wealth

Houses in an appreciating real estate market tend to be a source of wealth for households, and housing prices in Ohio continue to recover following the recession. Growth in the house price index, displayed in Figure 8, is increasing which suggests a robust housing market. While growth in home prices has increased, the rate has slowed slightly to just under 4 percent from 2015 to 2016, compared to more than 4 percent when comparing the same quarter of 2014 to 2015.

**Figure 8: Ohio House Price Index, All Transactions, 2013 -2016**

Source: U.S. Federal Housing Finance Agency, retrieved from St. Louis Federal Reserve Bank Economic Data (FRED)
Household debt payments also constitute a smaller share of disposable income in 2016 than 2010, concurrent with rising home prices. These trends indicate an improving balance sheet for households overall. However, recent debt levels are rising. While this may be suggestive of greater consumer confidence, rising household debt levels may also have a moderating effect on holiday spending relative to previous years.

**Figure 9: Household Debt Service Payments as Percent of Disposable Personal Income, 2013-2016**
National Retail Trade and E-Commerce

National retail trade volumes have increased since 2015, suggesting continued growth through 2016. As noted in the national forecasts, e-commerce continues to be a growing source of retail volumes. E-commerce sales have exhibited growth since 2000, and account for more than 8 percent of total sales nationally. Following the 2008-2009 recession, the growth rate of e-commerce sales has averaged about 15 percent annually as displayed in Figure 10.

Figure 10: US Retail Trade Activity*, 2013-2016

The growth of online sales is substantial, with Deloitte projecting a 17-19 percent increase in e-commerce this holiday season.\textsuperscript{13} Similarly, PwC forecasts a 25 percent increase in digital shopping.\textsuperscript{14}

\textsuperscript{13} Deloitte University Press (2016)
\textsuperscript{14} PwC (2016)
Figure 11: E-Commerce Sales, Dollars and as Percent of Total Sales, 1999-2016

![E-Commerce Sales Chart]

Source: U.S. Census Bureau, retrieved from St. Louis Federal Reserve Bank Economic Data (FRED)

Figure 12: Year-over-Year Change in E-commerce Sales, 2009-2016

![Year-over-Year Change Chart]

Source: U.S. Census Bureau, retrieved from St. Louis Federal Reserve Bank Economic Data (FRED)
Within Ohio, sales tax revenues derived from non-store retailers provide an indicator for e-commerce activity. As depicted in Figure 13, revenues have increased since 2010. From 2013 onward, the annual growth rate of nonstore retailer revenues has been about 20 percent, indicating a significant component of statewide retail activity. As of June 2015, Amazon began collecting sales taxes for online purchases in Ohio.15

![Figure 13: Ohio Sales Tax Revenues from Nonstore Retailers, 2010-2015](image)

With the rise in online and mobile shopping, not only are brick-and-mortar retailers competing from the perspective of mode of purchase, but competition in terms of advertising is also increasing. The ease of shopping provided by online and mobile platforms means that customers can discover new products and vendors more easily, and bargain shop during the year in advance of the holiday season. Brand recognition is increasingly important for retailers, which includes courting potential customers through offering deals as well as appealing to charitable and philanthropic preferences.

Digital and mobile technology means that consumers are generally more informed, with the ability to research their purchases before they arrive at the store. The speed of shopping also creates challenges for retailers in terms of optimizing inventory.16

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16 Deloitte University Press (2016); PwC (2016)
Inflation

Inflation, as measured by the Midwest Consumer Price Index, has increased since 2015 but remains lower than in earlier years. Steadily increasing prices are suggestive of overall economic stability. Given the slow and steady growth in wages, slowly rising price levels help to maintain the purchasing ability of the consumer base.

Figure 14: Midwest Consumer Price Index and Change from Previous Year, 2013-2016

Source: U.S. Bureau of Labor Statistics

EconomicsCenter
SUMMARY

The Economics Center forecasts steady growth in holiday retail sales, 1.54 percent statewide for 2016. Growth across Ohio’s metro regions varies substantially. The three largest areas – Columbus, Cleveland and Cincinnati – account for more than half of estimated sales. Smaller areas such as Youngstown are projected to experience higher growth rates. These sales include nonstore retailers such as Amazon, but do not include entertainment and experience purchases. National forecasts project strong holiday spending but note that much of this spending will accrue to experience and entertainment industries as well as online retailers.

Factors influencing the Ohio forecast include steady employment growth, moderated by slower income growth. Consumer confidence remains strong but shows little increase from 2015. Similarly, household budgets benefit from a stronger housing market, which may be partially offset by slightly rising household debt. Online sales continue to grow, but retail sales overall comprise a smaller share of Ohio sales and use tax revenues than other industries. Indicators suggest a steady holiday spending season within the state, with slower growth than recent years.
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