## Retail Sales

Because shopping is often a major tourist activity, many tourism impact studies estimate the economic impacts of changes in retail sales. RIMS II is detailed enough to separately account for the activity of producers and retailers, which are often located in different regions.

RIMS II separately accounts for the activity of producers and retailers by using retail margins to separately account for the output of the retail trade industry. These margins are measured by sales receipts less the cost of goods sold. The cost of goods sold includes the value of goods purchased from manufacturers and the cost of transporting these goods to retailers. If wholesalers sold these goods to retailers, these costs also include a wholesale margin. In other words, output for retail trade is measured by the margin earned by retailers for selling goods.

The impact of a change in retail sales can be calculated in five steps:

1. Collect information on the change in retail sales by type of purchased good. The value of these sales should include any sales or excise taxes collected by retailers.
2. For each purchased good, calculate the national retail share. These shares can be calculated with information from the national distribution cost tables.
3. For each purchased good, multiply the national retail share by local retail sales to calculate the local retail margin.
4. Sum all the local retail margins calculated in step 3 to get an estimate of the total retail margin.
5. Multiply the total retail margin by the final-demand multipliers for retail trade to estimate the impact of the change in retail sales.

To give an example of how to estimate the impact of a change in retail sales, consider the case of a developmental project to further beautify the beachfront in Myrtle Beach, South Carolina. The completion of this project is expected to generate in increase in a wide variety of tourism-related activities, including shopping. Clothing sales are expected to increase by $\$ 30.0$ million. Gasoline sales in the area are expected to increase by $\$ 17.5$ million. A local chamber of commerce wants an estimate of the total impact of the expected increase in retail sales. All of the purchased products are expected to be produced and transported by businesses outside the region.

To conduct the impact study, the following decisions are made:

- Final-demand change. This change consists of only the retail margin on the increase in sales because none of the goods purchased by tourists are expected to be produced or transported by businesses in the region.
- Final-demand industry. Retail trade is the only final-demand industry. Because the detail for retail trade is the same in both the detailed and aggregate industry series, multipliers from the more recent annual series are used in the analysis.
- Final-demand region. The final-demand region is the Myrtle Beach, Metropolitan Statistical Area. This region is a good choice for the analysis because most of the inputs purchased by retailers are expected to be supplied locally. ${ }^{1}$ This region is also good choice when using Type II multipliers because most of the retail sales associates are expected to spend their earnings locally.

Table 1 shows national retail shares for apparel, leather, and allied products. For each product, the retail share (column 3) equals the retail margin (column 1) divided by the purchaser value (column 2). The values in the first two columns are from the national distribution cost table for personal consumption expenditures.

This table shows that the retail shares vary by clothing category. Because no information is available on tourist spending by category, a retail share for all clothing (0.38) is used in the analysis. This share equals the sum of the retail margins ( $\$ 127.6$ million) divided by the sum of the purchaser values ( $\$ 334.0$ million). This calculation implicitly weights the spending across all of the detailed categories in accordance with national spending patterns.

Table 2 shows the retail share for motor vehicle fuels (0.17). Since the retail margin on gasoline is considerably smaller than the retail margin on clothes, a dollar spent on gasoline will have less impact on the region than a dollar spent on clothing.

Table 3 shows the local retail margins for all the expected increases in retail sales in Myrtle Beach, South Carolina. For each purchased good, the local retail margin (column 3) equals local retail sales (column 1) times the national retail share (column 2). The total retail margin is \$14.4 million.

Table 4 shows the Type II final-demand multipliers for retail trade in Myrtle Beach, South Carolina. Using these multipliers, gross output is expected to increase by $\$ 22.44$ million ( $\$ 14.4$ million x 1.5533 ). This estimate includes the $\$ 14.4$ million increase in local retail margins. The value added portion of this output, which is an equivalent to gross domestic product, is $\$ 14.6$ million ( $\$ 14.4$ million $x$ 1.0153). The earnings portion of this value added is $\$ 6.8$ million ( $\$ 14.4$ million x 0.4754 ). Employment, which includes both full- and part-time workers, is expected to increase by 282 jobs ( $\$ 14.4$ million x 19.5767).

[^0]This example highlights the importance of separately accounting for the output of manufacturers and retailers. The impact of retail sales is considerably smaller when products are only retailed in the region because only the retail margin affects economic activity.

Further examples and tips on how to use RIMS II multipliers in an economic impact study are available in the RIMS II Handbook. Additional information is available on the RIMS II website.

Table 1. U.S. Retail Margins and Shares for Apparel, Leather, and Allied Products

| Commodity | Retail margin <br> (millions of dollars) | Purchaser value <br> (millions of dollars) | Share |
| :--- | ---: | ---: | ---: |
| Women's and girls' clothing | 72,115 | 161,036 | 0.45 |
| Men's and boys' clothing | 32,175 | 97,053 | 0.33 |
| Children's and infants' clothing | 3,431 | 6,995 | 0.49 |
| Other clothing materials | 0 | 212 | 0.00 |
| Footwear | 14,641 | 49,918 | 0.29 |
| Furniture, furnishings, and floor coverings | 64 | 145 | 0.44 |
| Household textiles | 27 | 93 | 0.29 |
| Other sporting and recreational goods | 280 | 744 | 0.38 |
| Pets, pet products, and related services | 318 | 920 | 0.35 |
| Photographic goods and services | 118 | 344 | 0.34 |
| Personal care | 7 | 22 | 0.32 |
| Personal items | 4,460 | 16,557 | 0.27 |
| Total | 127,636 |  | $0.34,039$ |

Table 2. U.S. Retail Share for Petroleum Products

| Commodity | Retail margin <br> (millions of dollars) | Purchaser value <br> (millions of dollars) | Share |
| :--- | ---: | ---: | ---: |
| Motor vehicle fuels, lubricants, and fluids | 66,133 | 386,406 | 0.17 |

Table 3. Local Retail Margins, Myrtle Beach-North Myrtle Beach-Conway, SC Metropolitan Statistical Area

| Commodity | Local retail sales <br> (thousands of <br> dollars) | U.S. share | Local retail margin <br> (thousands of <br> dollars) |
| :--- | ---: | ---: | ---: |
| Clothing, leather, and allied products | 30,000 | 0.38 | 11,400 |
| Motor vehicle fuels | 17,500 | 0.17 | 2,975 |
| Total | 47,500 | $\ldots$ | $\mathbf{1 4 , 3 7 5}$ |

Table 4. Type II Final-demand Multipliers for Myrtle Beach-North Myrtle Beach-Conway, SC Metropolitan Statistical Area

| Industry $^{1}$ | Output | Value Added | Earnings | Employment |
| :--- | ---: | ---: | ---: | ---: |
| Retail trade | 1.5533 | 1.0153 | 0.4754 | 19.5767 |

1. Aggregate industry from the annual series

[^0]:    ${ }^{1}$ Since the cost of goods sold is excluded from the measure of output for retail trade, the purchase of these goods are not treated as intermediate inputs. The primary inputs to this industry are hired labor and business services.

