# Local Consumer Commerce March 2016 

The Local Consumer Commerce Index (LCCI) was flat for March 2016, following a few months of moderate growth.

Figure 1: Local Consumer Commerce Index (LCCI)


The JPMorgan Chase Institute's LCCI is a measure of the monthly year-over-year growth rate of everyday debit and credit card spending by over 50 million anonymized Chase customers across 15 cities in the US. Unlike many sources of data on consumer spending, the LCCI captures actual transactions, instead of self-reported measures of how consumers think they spend, with a unique dataset constructed from over 14 billion anonymized debit and credit card transactions. The LCCI's geographically specific data provide a granular and timely view of how cities and their surrounding metro areas are faring on a monthly basis. Our portfolio of cities mirrors the geographic and economic diversity of larger metropolitan areas in the United States and accounts for 32 percent of retail sales nationwide. ${ }^{1}$ The LCCI captures economic activity in consumer facing retail and services sectors that previously have not been well understood by other data sources. These include activities in sectors such as food trucks, new merchants, and personal services. The LCCI is a powerful tool for city development officials, businesses and investors, and statistical agencies to better understand the everyday economic health of consumers, businesses, and the places they care about.

This report analyzes the growth of local consumer commerce across all 15 metro areas in aggregate and in each of the 15 metro areas individually. It also presents a view of local consumer commerce through five important lenses: two consumer, two business, and the residence of consumers relative to the location of the business. For each lens, we show how different segments contributed to year-over-year spending growth for each month covered by the series.


Spending growth in much of 2015 was both volatile and weak on average. The first quarter of 2016 has seen higher average growth than last year, but initial growth has slowed significantly. Between December and March, year-over-year spending growth slowed from 2.1 to slightly less than 0 percent. No month in the first quarter of 2016 exceeded 2 percent growth, and by March, the three month rolling average fell to its lowest level (1 percent) since November of 2015 (0.8 percent).

Local consumer commerce growth varied considerably across metropolitan areas. Only 8 of the 15 cities experienced positive growth in March. Despite growth in this subset, the average growth rate across all cities was negative 0.1 percent. The remaining seven cities (Chicago, Denver, Houston, Los Angeles, Miami, San Diego, and San Francisco) all experienced slowdowns in year-over-year growth ranging from 0.6 to 3.8 percentage points. We present analyses of three groups of five metropolitan areas each, ordered by the relative amount of estimated spending in each of the metropolitan areas.

Figure 2: LCC Growth in Largest Metro Areas


Figure 2 above shows the performance of the five largest metro areas in our 15 metro area aggregate. In March 2016, spending in the New York metro area grew the fastest amongst these five largest metro areas (1.9 percent). By contrast, though Los Angeles has exhibited relatively stable local consumer commerce growth since January 2014, the growth rate has slowed more than any other large city since the start of 2016. Between December and March, the rate slowed from 3.7 to negative 0.6 percent. Among large cities, year-over-year growth in March was lowest for Houston at negative 2 percent. This is a dramatic slowdown from January 2014, when the city experienced a positive growth rate of 6.2 percent. Only Dallas and New York saw positive growth rates in March 2016.

Figure 3: LCC Growth in Mid-Sized Metro Areas


Figure 3 above depicts growth rates from the next five largest cities in our 15 metro area aggregate. Among these, local spending in March 2016 grew notably in Atlanta at 5.6 percent-faster than local consumer commerce grew in any of the other metro areas in our sample of any size. This was a marked reversal from declining growth and low growth rates in Atlanta throughout 2014 and much of 2015. Local consumer commerce in March 2016 actually contracted in San Francisco by 3.8 percent, the largest decrease in the group.

Figure 4: LCC Growth in Smallest Metro Areas


The five smallest metro areas in our sample are shown in Figure 4 above. In March 2016, local consumer commerce in the Columbus metro area grew 2 percent, faster than all other small metro areas. In contrast, Denver saw a substantial contraction in local consumer commerce ( 3.7 percent). This growth rate is 5.3 percentage points lower than the growth rate in March 2015. The San Diego metro areas saw the next largest slowdown over the same time period-from 1.4 percent in March 2015 to negative 2 percent in March 2016. Only Seattle and Columbus grew at a faster rate this year relative to March of 2015.

## Spending by Age

Figure 5: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Age


Figure 5 shows how consumers of different ages contributed to monthly local consumer commerce growth across all 15 metro areas. Consumers under 35 continued to make stable contributions to spending growth. In March 2016, consumers under 25 contributed 0.9 percentage points to overall spending growth, a strong contribution given their relatively low share of spending and the overall slowdown in spending growth during 2015. This is the largest contribution from any age group. In contrast, consumers 65 and over reduced their contribution to spend growth by 0.7 percentage points of overall growth in March 2016. This is indicative of the persistent reductions in growth contributions by this group, which began in the fourth quarter of 2014. Indeed, the 12 months following March 2015 exhibited a negative correlation between age and spending growth contribution. Consumers aged 35 to 54 made somewhat smaller contributions in Q1 2016 than they did during the Q4 2015 slowdown. In March, consumers aged 35 to 44 subtracted less than 0.1 percentage points from overall growth, while consumers between 45 and 54 subtracted 0.4 percentage points from overall growth.


## Spending by Income

Figure 6: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Income


Figure 6 shows how consumers in different income quintiles ${ }^{2}$ contributed to monthly local consumer commerce growth across all 15 metro areas. Consumers in the lowest 20 percent by income continued the stable contributions they made in 2015. These consumers contributed 1.2 percentage points to growth during the relatively strong month of March 2016, the largest overall contribution in that month. In contrast, consumers in the top 20 percent by income subtracted 1.8 percentage points from growth in March 2016, the lowest across all income groups. Each month in 2016 has seen larger contractions from the top income quintile, which has been a drag on growth since February 2015.

## Spending by Size of Business

Figure 7: 15 Metro LCC Year-over-Year Growth Contribution by Business Size


Figure 7 presents a monthly view of the contribution to local consumer commerce growth by large, medium, and small businesses across all 15 metro areas. Large businesses have an outsize impact on local consumer commerce. They account for less than 1 percent of establishments but generate 33 percent of observed local consumer commercial spending. Nonetheless, in the 24 months following March 2014, the large business contribution to the growth of local consumer commerce experienced a variable but persistent slowdown. Large businesses contributed 0.4 percentage points in March 2016. Small businesses increased contributions over the time period, with a year-over-year growth contribution of 1.2 percentage points in March 2016. Mid-sized businesses, by contrast, subtracted 1.6 percentage points from overall growth.

## Spending by Product Type

Figure 8: 15 Metro LCC Year-over-Year Growth Contribution by Product Type


Figure 8 presents a monthly view of the contribution to local consumer commerce growth by product type across all 15 metro areas. Fuel retailers continued to drag down growth. That being said, fuel subtracted slightly less from growth in March 2016 at only negative 1.2 percentage points, whereas fuel sales were generally more depressed during the previous 12 months. Other services ( 1.1 percentage points) and restaurants (1 percentage point) made the strongest contributions to growth in March 2016. Restaurants, in fact, experienced the strongest growth in the first quarter of 2016 with 1.3 percentage points in January, 1.2 points in February, and 1 point in March. Durables saw the largest contraction, reducing contributions to growth by 1.4 percentage points in March 2016.

## Spending by Consumer Residence

Figure 9: 15 Metro LCC Year-over-Year Growth Contribution by Consumer Residence


Not surprisingly, most local consumer commercial spending is local. Eighty-four percent of local consumer commercial spending at a business comes from consumers who live in the same metropolitan area, and nearly 30 percent comes from consumers who live in the same neighborhood.

Figure 9 depicts the monthly contribution to local spending by consumers who reside in different locations across all 15 metro areas. In the first quarter of 2016, the year-over-year growth contributions of consumers from the same metro area as a business declined from 0.5 percentage points in January to negative 0.6 percentage points in March. This reflects a general slowdown in this activity over time. Contributions from consumers outside of the metro area remained consistently positive over Q1 2016, though the growth contribution dipped to 0.4 percentage points in February followed by only a slight rebound to 0.6 percentage points in March. Consumers from the same neighborhood experienced more volatile growth, even dropping their contribution to negative 0.1 percentage points in March 2016.

## Measuring Local Consumer Commerce

Local consumer commerce is the everyday spending of individuals on goods and services that impacts a local community. We observe local consumer commerce through the anonymized credit- and debit-card transactions of JPMorgan Chase customers for which we can establish a geographic location. This approach shares some conceptual similarities with other established measures (for example, the US Census Bureau Monthly Retail Trade Survey and the US Census Bureau Quarterly Services Survey), but differs in several significant ways.

In particular, our card-based perspective captures another important sector of commerce: spending at non-employer businesses, new businesses, and other small businesses that are often difficult to reach through establishment surveys. Moreover, in addition to restaurant spending observed by other data sources, our approach captures spending on a wide range of individual consumptionoriented services, including the barber and beauty shops, doctors and dentists, ${ }^{3}$ hotels, gyms, and local transportation providers that play a significant role in local economies.

Our card-based approach offers a detailed view of the types of products consumers purchase. However, this view does not capture spending by consumers through cash, checks, electronic transfers, or purchase orders. Importantly, the extent to which consumers use credit and debit cards to purchase services and goods varies significantly across product categories. In particular, differences in payment methods by product type lead us to a different perspective on the consumption of durable goods.

We classify firms as small, medium, or large based on market share calculated from transaction data and external Census and Small Business Administration (SBA) data. Firms with more than 8 percent market share are classified as large, and firms that qualify for SBA loans are classified as small. All other firms are considered medium.

For additional details on the construction of the data asset, see the online methodological appendix. The JPMorgan Chase Institute website also contains all of the data presented in this update, including the growth rate, share of spend, and growth contribution for each metro area by consumer age, income quintile, consumer residence relative to the business, product type, and business size.

## Endnotes

## 1 Total retail sales figures are reported in the 2012 Economic Census.

2 The ratio of spending between primary account holders in the highest income quintile and the lowest income quintile is about 2 in our data. Comparable estimates from Aguiar and Bils (2015) using survey data suggest a ratio of at least 2.6 for households. We believe this gap is explained by measurement error in our income estimates.

3 We observe the out of pocket card based spending of consumers at healthcare providers.

