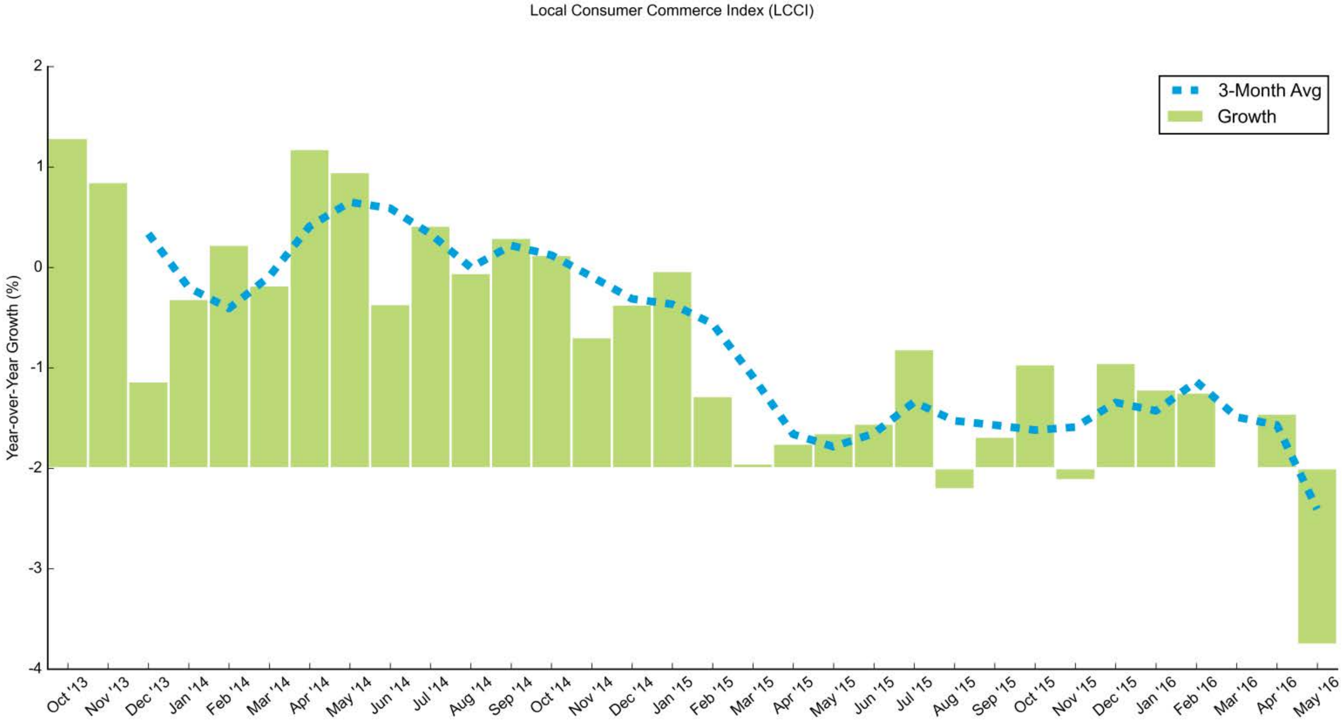
Local Consumer Commerce in May 2016

What Else Matters Besides Changes in How Much Consumers Choose to Spend?

The Local Consumer Commerce Index in May of 2016 (-3.5 percent) highlights a significant decline in consumer spending relative to April (1.1 percent). The magnitude of this change, its divergence from other related measures, and the novelty of the LCCI measure all warrant more detailed explanation this month relative to most releases. Our view is that the decline in the year-over-year growth rate is a function of structural factors in addition to the economic conditions we typically consider when thinking about consumer spending.

Figure 1: Local Spending Declined by 3.5% Between May 2015 and May 2016



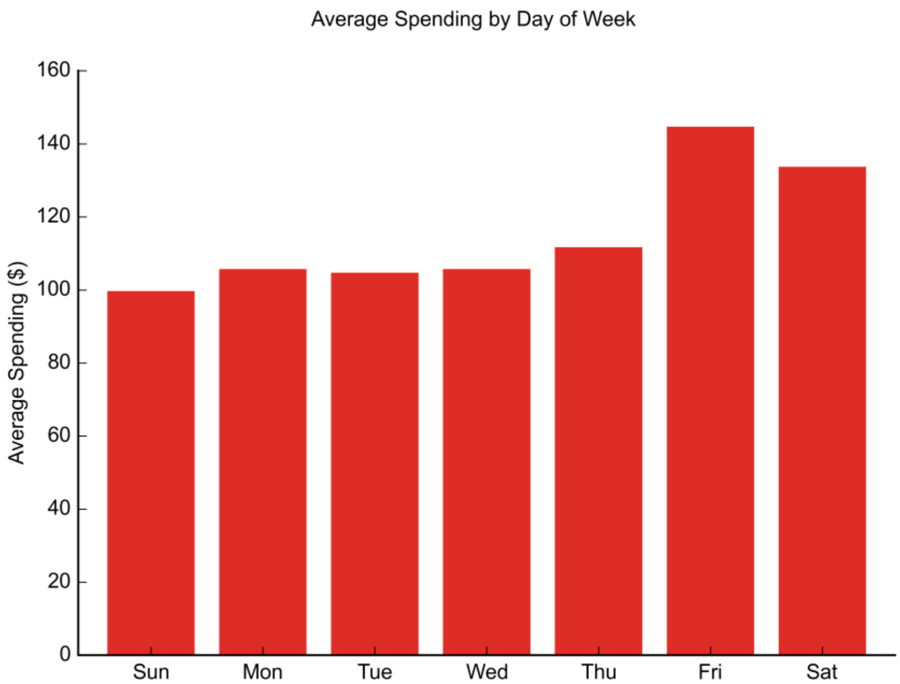
Specifically, this memo addresses two separate issues. The first is the magnitude of the gap between the growth numbers in April and May. The second is the difference between our view of local consumer commerce and another major consumption related series, the Census Monthly Retail Trade Survey (MRTS).

The former is largely the result of calendar effects, while the latter is largely due to online commerce and our view of durable spending. Each of these components is addressed in turn.

Consumers spend more on Fridays and Saturdays; there were more of both days in May 2015 than in May 2016.

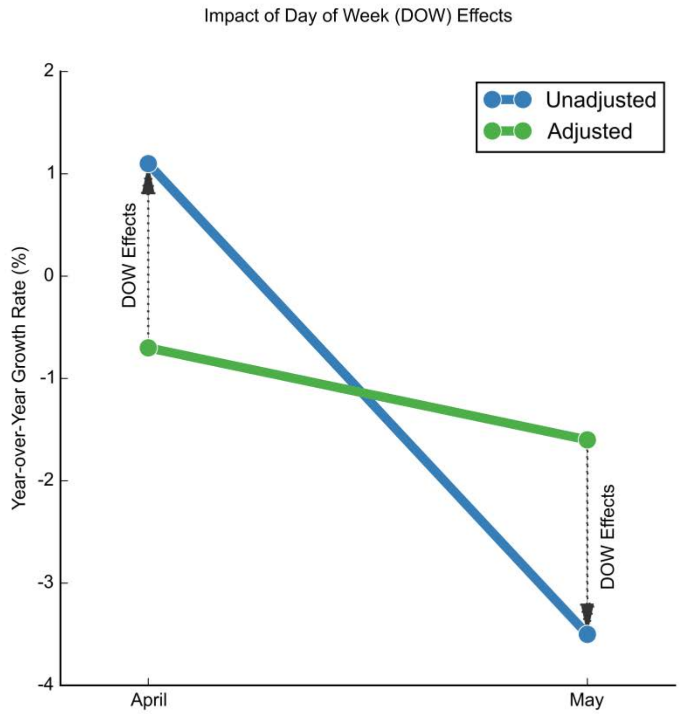
Consumers do not spend at equal rates on each day of the week. In fact, Fridays and Saturdays are the highest spending days by a significant margin. Figure 2 provides a normalized view of average spending by day of the week over the May 2015 to May 2016 period. If average spending on Sundays is set to $100, Friday and Saturday spending are equivalent to $145 and $134, respectively.

Figure 2: Friday and Saturday are high spend days



For this reason, if one month has five Fridays while another has four, the former will appear to have higher rates of spending even if underlying consumer behavior has not changed. In May 2015, there were actually five Fridays, Saturdays, and Sundays. In May 2016, there were only four Fridays and Saturdays (accompanied by five Sundays, Mondays, and Tuesdays). This is issue was particularly acute because two high spending days moved due to 2016 being a leap year. Since our growth rate calculation compares May 2016 to May 2015, growth in May 2016 appears lower. The “day of week” (DOW) effect, shown in Figure 3, is significant.

Figure 3: DOW effects account for most of the gap between April and May



The blue line in Figure 3 captures the unadjusted LCCI topline spending growth figures we regularly report, while the green line captures the same growth with DOW effects backed out. The chart demonstrates that the LCCI was higher in April and lower in May due to variance in the number of high spending days in the month. The unadjusted growth fell from +1.1 percent in April to -3.5 percent in May, while growth adjusted for DOW effects fell only from -0.7 percent to -1.6 percent. The gap in adjusted growth (0.9 percentage points) is only about 20 percent of the gap in unadjusted growth (4.6 percentage points).

Growth in spending as measured by the LCCI may fall below growth rates reported in MRTS because the LCC excludes many online purchases, which are growing more quickly than offline purchases.

The purpose of the LCCI is to evaluate growth in spending as a measure of economic activity in specific locations. Our view focuses on establishments in these locations, because the economic activity associated with establishment sales accrues directly to these locations. Online sales, by contrast, are not so constrained. The establishment focus represents a significant departure from current practice in other series like MRTS, which bundles much of online spending with establishment sales, rolled up to the sector level.[1] This practice is in line with the geographic scope of the MRTS, which is a national survey. Concerns over where sales should be allocated within the country grow as we look at smaller and smaller spaces within the country. We may feel confident that the vast majority of US residents engage in online

[1] MRTS does house much of the online commerce it sees in the "Nonstore Retailer" sector, but many retailers offer storefront and online purchase channels.

commerce with firms that are located in the US. We feel much less confident that most consumers engaging in online commerce live in the same metro area in which said firms are located.

None of this would matter if online commerce was a fixed proportion of all retail sales activity, but that is not the case. Online commerce is growing as a proportion of retail sales, which means that it is growing faster than sales at establishments. Since the LCC lens is more focused on establishments, LCCI will often appear to grow slower than MRTS. Determining the magnitude of the gap requires a rigorous division of different online payment channels, because some online payments really are local commerce. For example, it is possible to order pizza online from a local establishment. Getting a clear view of the varying types of online commerce, and measuring the relative contributions to overall retail sales is the subject of ongoing research by the JPMorgan Chase Institute.

The LCC view of durables is different than the view observed in other surveys. It focuses on everyday durable spending, and does not capture much of large, episodic durable purchases that are more likely to be acquired with in-store financing or loans.

The LCC view of durable expenditures differs from MRTS for two major reasons. The first relates to automobile purchases, which LCC does not see. MRTS does generate a somewhat more comparable "ex-Auto" series that removes this component. The second departure is not as easily reconcilable. The LCC data lens captures consumer credit and debit card spending. High cost durable assets like housing appliances and furniture are often purchased with in-store financing or loans. Since we do not see these financing arrangements, we do not see the entire durables space that the Census sees. That being said, our data provide a better view of everyday durable spending, since large ticket purchases are episodic and often involve saving/borrowing behavior that does not occur with everyday spending. The LCC growth measure related to durables can, and does, deviate from MRTS based upon the extent to which commonly financed durable purchases grow or decline.

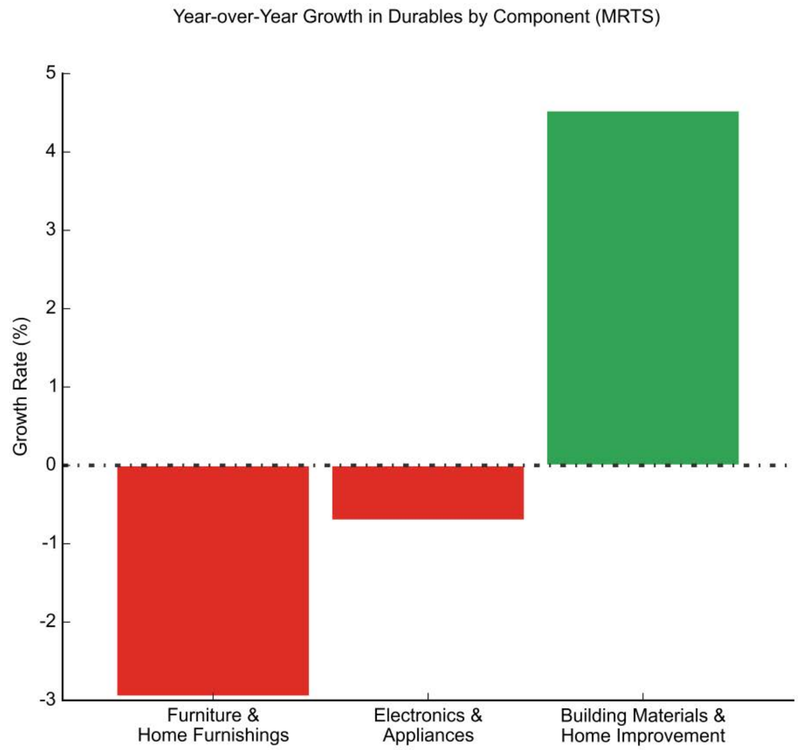
Durables are captured in MRTS data via three high-level sector aggregates:

1. Furniture and home goods (442)
2. Electronics and appliances (443)
3. Building materials and home improvement (444)

Out of the three of these, LCC can provide a comparable view of furniture and home goods, and a reasonably comparable view of electronics and appliances.[2] Building materials and home improvement, on the other hand, are far less represented in LCC data relative to MRTS. If spending goes up in building materials and home improvement, but declines for other durables, LCC is going to have far less spending growth in durables than MRTS.

[2] In the second quarter of 2015, furniture and home goods comprised 2.6 and 2.7 percent of all non-automobile spending in LCC and MRTS data, respectively. Electronics and appliances comprised 2.1 and 2.5 percent in the LCC and MRTS data. By contrast, building materials and home improvement accounted for only 5.7 percent of all spending, while the comparable figure for MRTS was 10.4 percent.

Figure 4: MRTS sees a decline in everyday durables spending in May 2016



As can be seen in Figure 4, the building material growth scenario did occur in May. Furthermore, this sector is such a large portion of overall spending on durables that it has a disproportionate impact on the growth rate for all durables, which was higher in the MRTS view than the LCC view.

The JPMorgan Chase Institute is committed to delivering data-rich analyses and expert insights for the public good. Our regularly updated Local Consumer Commerce Index measures 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 U.S.