Research Brief
July 2021

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Retail Sales and the Pandemic: A Most Remarkable Year

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Introduction

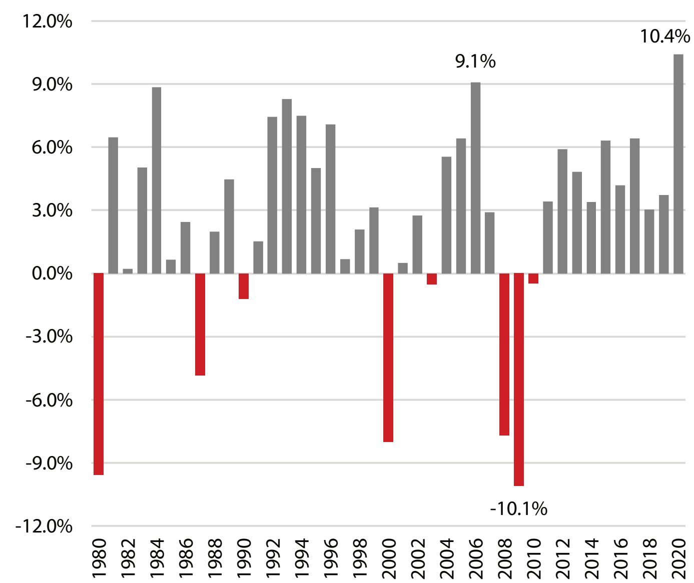
This research brief examines 2020 retail trade sales in the context of long-term historical trends in sales activity.[1] A seemingly straightforward comparative analysis of yearly sales, however, was complicated by data comparability issues. Hence, care was taken to ensure an "apples to apples" approach, which required some discussion of evolving tax reporting and remittance requirements. Considerable effort focused on constructing recent online sales trends and the impact of COVID-19 on those sales. Eric Cropper, senior tax economist at the Utah State Tax Commission, provided invaluable assistance in isolating, as narrowly as possible, the likely online sales activity. The brief concludes with a discussion of how federal assistance programs supported retail sales during the pandemic. The term *retail sales* in this report refers to taxable retail trade sales and does not include taxable retail services or taxable business investment.

Measuring Retail Sales

Can record levels of retail sales occur during the worst public health crisis in over 100 years? What seems a paradox, occurred in 2020. During the pandemic, retail sales in Utah grew at a record double-digit pace and reached the highest level ever, due in part, to the shift in spending from retail services to retail trade (goods). Since the Great Recession, sales had grown steadily at a rate of 3% to 6% annually, but with the outbreak of COVID-19 and "stay-at-home" orders, it seemed likely that consumer spending would plummet, and the steady growth in retail sales would be interrupted. Instead, the pandemic brought an unexpected surge in retail sales and a record-breaking 10.4% growth rate, a rate well above the previous record of 9.1% in 2006 (see Figure 1).

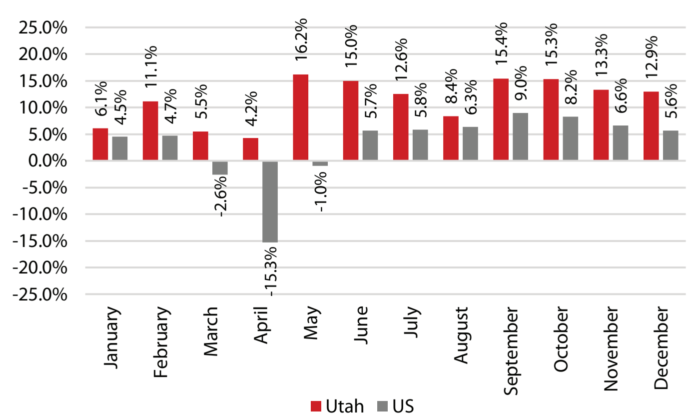
What's more, year-over retail sales in Utah increased every month in 2020. Nationally, they fell from March through May, with April registering the largest year-over decline of 15.3%. In that same month, retail sales in Utah were up 4.2% (see Figure 2). Utah's retail sector benefitted from federal legislation (primarily the CARES Act), including Economic Impact Payments to Utah households, enhanced unemployment benefits, and the Payroll

Figure 1: Annual Percent Change in Taxable Retail Sales in Utah, 1980–2020
(adjusted for inflation)



Note: Reliable retail sales data prior to 1980 were not available. Before 1998, sales at restaurants and drinking establishments were included in retail trade. For comparability purposes, 1980–1998 restaurant and drinking establishment sales are excluded from the data, as well as the value of marketplace facilitator sales.
Source: Utah State Tax Commission

Figure 2: Year-Over Percent Change in Retail Sales, 2019–2020

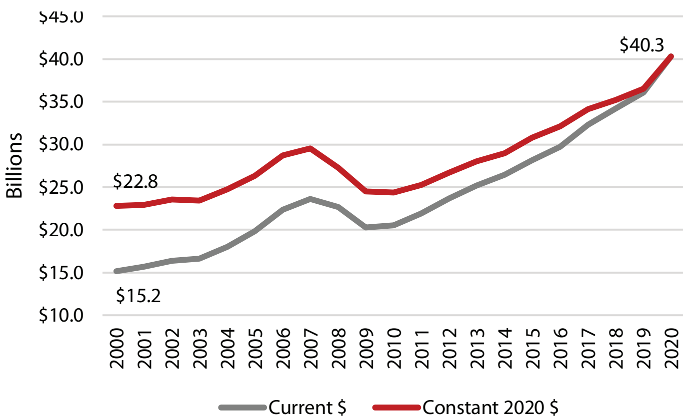


Source: U.S. Census Bureau, Monthly Retail Sales 1992–Present and Utah State Tax Commission

Protection Program. These assistance programs were in full force April through June, coinciding with a 16.2% increase in retail sales in May and a 15.0% increase in June. But it is not clear why, in the early months of the pandemic, sales in Utah were so much stronger than sales nationally.

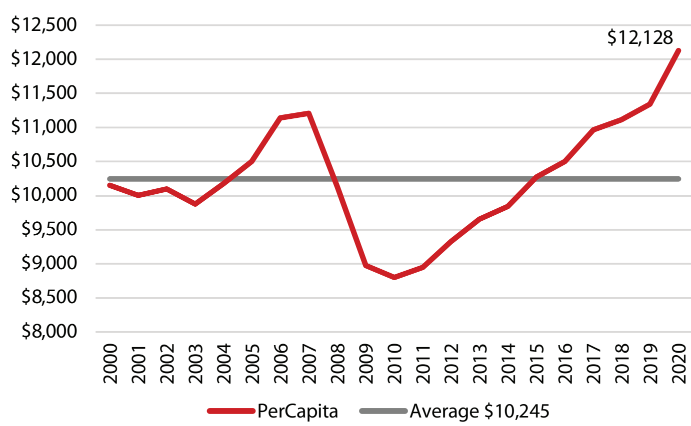
In an economy with rapid demographic and employment growth, the long-term retail sales trajectory will inevitably trend higher. In Utah, the value of retail sales in current dollars has increased from $22.8 billion to $40.3 billion over the past 20 years, an average annual growth rate of 5.0% (see Figure 3). This growth is driven, in part, by the state's population increase as well as by rising prices of retail goods. We can better understand the growth in retail sales by calculating the annual value of sales in constant (inflation-adjusted) dollars and dividing this value by the population in that year. This adjusts for both inflation and population growth. Since 2000, Utah's per capita retail sales have averaged $10,245 (see Figure 4).

Figure 3: Annual Taxable Retail Sales in Utah, 2000–2020
(Billions)



Note: These figures exclude sales of marketplace facilitators, which are discussed later in this brief.
Source: Utah State Tax Commission

Figure 4: Per Capita Retail Sales in Utah in Constant Dollars, 2000–2020
(Constant 2020 dollars)



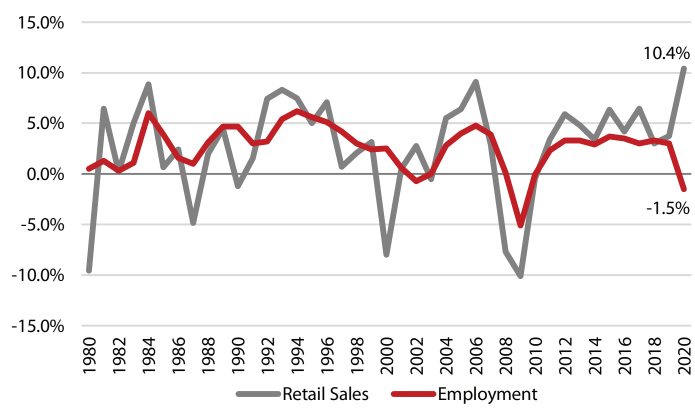
Source: Utah State Tax Commission and Kem C. Gardner Policy Institute

The experience of retailers during the Great Recession compared with the pandemic year is a study of contrast. The Great Recession was devastating for retail. It took nine years for per capita sales to return to the pre-recession level, whereas during the pandemic year, per capita retail sales hit an all-time high of $12,128 with an increase of 7%, likely the largest single-year increase ever. All major retail trade sectors saw increases in 2020 sales except for clothing and clothing accessories. (Retail trade does not include sales at eating and drinking establishments. Those sales are classified as retail services.)

Retail Sales and Employment

Retail sales broke from past trends in another important respect. As time-series data show, sales are volatile and especially sensitive to labor market conditions. When employment growth drops to near 1% or goes negative, as in the Great Recession, retail sales typically suffer. This has been the historical pattern until the "most remarkable year" of 2020, when employment fell by 1.5% and retail sales increased by 10.4%. This unusual and unexpected departure from past trends is vividly depicted in Figure 5.

Figure 5: Annual Percent Change in Taxable Retail Sales and Total Employment in Utah, 1980–2020



Source: Utah Department of Workforce Services, State of Utah Revenue Assumptions Working Group, and Utah State Tax Commission

Sales by Sector

Building material and garden equipment stores were the biggest retail winners in 2020. Sales increased by a remarkable 24%, a gain of over $936 million (see Table 1). In terms of sales increase amounts, a closely bunched group is general merchandise stores (e.g., Walmart and Target), grocery stores, and motor vehicle dealers. These three sectors had increases of $750 to $780 million. Two sectors with strong *percentage* increases were non-store retailers (discussed later) and sporting goods, music, hobby, and bookstores. In both cases, sales were up just over 21%.[2]

Table 1: Retail Trade Sectors Ranked by Numeric Change in Sales, 2019–2020
(Current dollars)

Retail Trade Sector	2020 Sales	2019–2020 Change	
		Absolute	Relative
Building Material and Garden Equipment Stores	$4,838,914,088	$936,193,409	24.0%
General Merchandise Stores	$8,266,675,350	$779,727,637	10.4%
Food and Beverage Store	$5,856,220,802	$763,301,916	15.0%
Motor Vehicle and Parts Dealers	$8,159,942,137	$750,175,412	10.1%
Non-Store Retailers	$3,443,230,889	$616,483,050	21.8%
Sporting Goods, Music, Hobby, and Bookstores	$1,303,454,121	$230,137,893	21.4%
Miscellaneous Retail	$2,303,221,568	$198,342,408	9.4%
Gasoline Stations	$1,345,547,881	$100,237,029	8.0%
Furniture and Home Furnishing Stores	$1,191,875,779	$54,188,130	4.8%
Health and Personal Care	$687,362,888	$6,923,598	1.0%
Electronics and Appliance Stores	$1,259,888,943	$219,590	0.0%
Clothing and Clothing Accessories	$1,672,879,649	–$269,421,664	–13.9%
Total	**$40,329,214,094**	**$4,166,508,409**	**11.5%**

Note: Excludes marketplace facilitators.
Source: Utah State Tax Commission

While 2020 was marked by substantial sales increases across almost all sectors, the share of sales by sector didn't change much. The only sectors with more than a one percentage point change were building materials and garden stores with an increase in share from 10.8% to 12.0%, and clothing and clothing accessories with a drop in share from 5.4% to 4.1% of total retail sales.

Comparability Issues: Marketplace Facilitator Sales

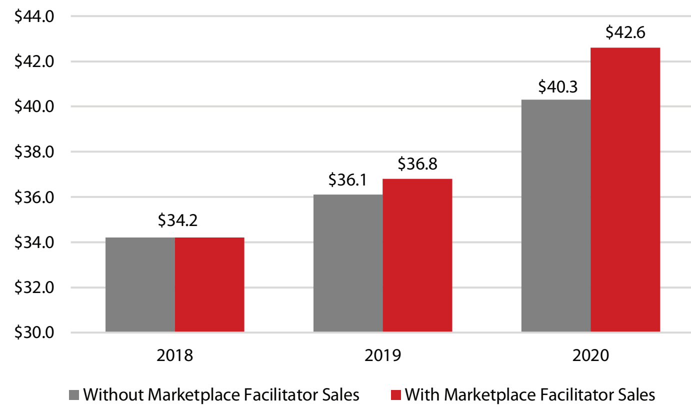
In the last three years, the comparability of retail sales data has been complicated by changes in the taxation of online sales, including Amazon's decision in 2017 to begin remitting sales taxes to the state, a 2018 Supreme Court decision, and 2018 and 2019 state legislation. These events resulted in an increase in retail sales tax collections from which the Utah State Tax Commission calculates the dollar value of retail sales. Thus, changes in taxation led to changes in reported taxable retail sales. Consequently, what appears to be an increase in retail sales may reflect, in part, a change in tax law that broadened the tax base to capture sales from previously untaxed activity.

In 2017, Amazon voluntarily agreed to remit sales taxes from online purchases made by Utahns. A year later, the U.S. Supreme Court in *South Dakota v. Wayfair, Inc.* overruled the long-standing physical presence rule, thereby allowing states to require remote sellers to collect and remit sales tax. The Utah Legislature passed S.B. 168 and S.B. 2001, requiring remote sellers to collect and remit sales tax to the state. Remote sellers include marketplace facilitators (discussed below).

As noted, Amazon agreed to collect and remit sales taxes in 2017, but only on products it sold from its fulfillment centers to Utah households and businesses. With the passage of S.B. 168, Amazon, for example, was now required to expand its collection and remittance of sales tax to include sales of third-party vendors. Third-party vendors are independent sellers of products or services who partner with a company that, in almost all cases, owns an electronic platform (website). For the third-party vendor, partnering with an online retail giant like Amazon or Wayfair expands its potential customer base and sales. But following the Supreme Court's *Wayfair* decision and the passage of S.B. 168, third-party vendors' sales in Utah became subject to sales tax collection and remittance requirements as of October 2019. Marketplace facilitators collect and remit the tax on third-party vendor sales, and those sales are now included in the Utah Tax Commission's taxable sales data. Consequently, taxable retail sales in 2020 are not comparable to sales in 2019 or previous years. In order to achieve comparability, Eric Cropper of the Utah State Tax Commission provided taxable sales data for 2019 and 2020 that exclude marketplace facilitator sales. The figures and charts presented so far in this report have excluded marketplace facilitator sales.

In 2020, taxable retail trade sales excluding marketplace facilitators totaled $40.3 billion. Marketplace facilitator sales added another $2.3 billion statewide, bringing the combined total to $42.6 billion. Taxable sales data for 2020 clearly suggest that before the passage of S.B. 168, very few third-party vendors were collecting taxes on their sales in Utah. Figure 6 illustrates the jump in taxable retail sales in 2019 and 2020 due to the addition of marketplace facilitators. The increase doesn't necessarily reflect higher levels of retail sales but rather an expansion of the tax base to capture previously uncollected tax on purchases.

Figure 6: Total Taxable Retail Trade Sales in Utah, 2018–2020
(Billions of current dollars)



Source: Utah State Tax Commission

COVID-19 and Online Sales

To understand the impact of COVID-19 on the volume of online sales, we need to unravel how retail sales are reported. Unfortunately, online sales are not disaggregated into a single retail category but are included with other types of retail sales. Consequently, the best estimates of online sales volume are inferences from retail sales data that, include more than online sales.

Non-Store Retailers

At first blush, the non-store retailer sector seems most likely to provide a good approximation of online sales; however, due to reporting practices, a significant share of online sales are excluded from this sector. For example, online sales include marketplace facilitator sales (e.g., Amazon, Wayfair) and direct sales online (e.g. Walmart, Harmons, Barnes & Noble, and Amazon). A share of these sales are captured in the non-store retailer data, but not all. For instance, the online sale of a book through Amazon will be reported in the non-store retailer sector since Amazon's primary business is non-store retailer. In contrast, an online book sold by Barnes & Noble will be allocated to the Sporting Goods, Hobby, Music & Book Stores (NAICS 452000–452999) category because Barnes & Noble's primary business is bookseller. Consequently, non-store retailer data does not capture online sales by direct sellers, whose primary business is other than non-store retail. Retail sales are categorized based on how the seller is classified, not on how the sale was conducted.

Schedule J Retail Trade Sales

Published data from the Utah State Tax Commission are not detailed enough to draw any conclusions about the trend and level of online retail sales. But, by using unpublished data in the Tax Commission's Schedule J, we can get a better idea about the impact of COVID-19 on online sales. The taxable sales in Schedule J include all sales from non-fixed places of business. So, in contrast to non-store retailer data, the online book sale by Barnes & Noble cited above is included in the Schedule J data. But the Schedule J data also include catalog sales, phone sales, and some business-to-business sales. However, sales in these categories are likely considerably less than online sales and have probably, at best, remained quite constant. Therefore, it seems that the increase in Schedule J sales would be a good measure or at least a good indicator of the increase in online sales. But measuring the growth trend in Schedule J data becomes problematic due to two factors: Amazon's remitting of sales tax beginning in 2017 and the inclusion of marketplace facilitator sales in 2019.

In 2017, Schedule J sales suddenly increased by 47.8%. This increase was due primarily to Amazon's decision to begin remitting taxes on their Utah sales (see Table 2). Hence, the 2017 increase, for the most part, doesn't reflect growth in online sales but rather the addition of sales with taxes that previously went uncollected. Schedule J sales data are now benefiting from not only the inclusion of Amazon online sales but also the growth in Amazon's sales since then. And beginning in the fourth quarter of 2019, marketplace facilitator sales have been included in the Schedule J data. The recent inclusion of these two additional sources of retail sales makes it difficult to sort out the growth in online sales. Due to the Utah State Tax Commission's non-disclosure policy, Amazon's contribution to online sales can't be released, but the marketplace facilitator data are available. In the fourth quarter of 2019, marketplace facilitator data accounted for $500 million in increased sales and $2.3 billion in 2020. These sales were likely going untaxed two years ago but are now captured, adding about $160 million in additional tax revenue to the state and municipalities: $105 million to the state and $55 million to municipalities in 2020.

The Impact of COVID-19 on Online Sales

Has COVID-19 led to a significant increase in the online share of retail sales? The Schedule J data suggest that's likely with the 57.8% increase in 2020. However, this increase includes, for the first time, a full year of marketplace facilitator sales. When marketplace facilitator sales are excluded from Schedule J sales, 2020 still registers a sizeable gain of 28% and a numeric increase of $1.4 billion (see Table 3). In the absence of COVID-19, Schedule J sales, which are largely online sales, probably would have increased at a rate consistent with the previous two years, around 23% rather than 28%. Thus, it is likely that COVID-19 accelerated online sales by at least $400 million above what would have otherwise occurred in the absence of the pandemic.

Table 2: Increase in Schedule J Retail Trade Sales in Utah, 2013–2020

(Billions of current dollars)

Year	Taxable Retail Sales*	Schedule J Taxable Retail Sales	
		Amount	Increase
2013	$25.2	$1.70	9.3%
2014	$26.5	$1.84	8.2%
2015	$28.2	$1.92	4.3%
2016	$29.7	$2.24	16.7%
2017	$32.3	$3.31	47.8%
2018	$34.2	$4.06	22.7%
2019	$36.8	$5.50	35.5%
2020	$42.6	$8.68	57.8%

* Includes marketplace facilitators.
Source: Utah State Tax Commission

Table 3: Schedule J Taxable Retail Trade Sales for Utah Excluding Marketplace Facilitators, 2013–2020

(Billions of current dollars)

Year	Taxable Retail Sales	Percent Increase	Numeric Increase
2013	$1.70	9.3%	—
2014	$1.84	8.2%	$140 million
2015	$1.92	4.3%	$80 million
2016	$2.24	16.7%	$320 million
2017	$3.31	47.8%	$1.07 billion
2018	$4.06	22.7%	$750 million
2019	$5.00	23.3%	$940 million
2020	$6.40	28.0%	$1.4 billion

Source: Utah State Tax Commission

Table 4: CARES and Families First Coronavirus Response Act Assistance to Utah

Source	Amount
Paycheck Protection Program (PPP)	$5.3 billion
IRS Economic Impact Payment to Households	$2.6 billion
Unemployment Benefits (Traditional and Enhanced)	$1.6 billion
Economic Injury Disaster Loans	$1.4 billion
Coronavirus Relief Fund	$1.3 billion
Provider Relief Funds	$361 million
Federal Medicaid Spending Match Increase	$141 million
Total	**$12.7 billion**

Source: Utah Governor's Office of Management and Budget

Online Sales as a Share of Retail Sales

In 2020, the Schedule J sales totaled $8.68 billion, representing 20% of Utah's $42.6 billion in retail sales. A large share of the $8.68 billion of Schedule J sales is exclusively online sales. The only Schedule J sales that are not online sales are catalog, phone, and business-to-business sales. The precise share of these non-online sales is unknown, but it is relatively small. Consequently, it's likely that about $8 billion of Schedule J sales are online sales, which would account for around 19% of retail sales in Utah. Nationally the share of online sales was 19.6% in 2020.[3]

Conclusion: What Drove Record-Breaking Retail Sales in 2020?

No matter how retail sales are measured—current dollars, constant dollars, sales per capita—2020 was a most remarkable year. During the worst public health crisis in over a century, the value of retail sales in Utah hit record levels. Sales increased every month of 2020, even in April, May, and June, the months of the greatest economic uncertainty.

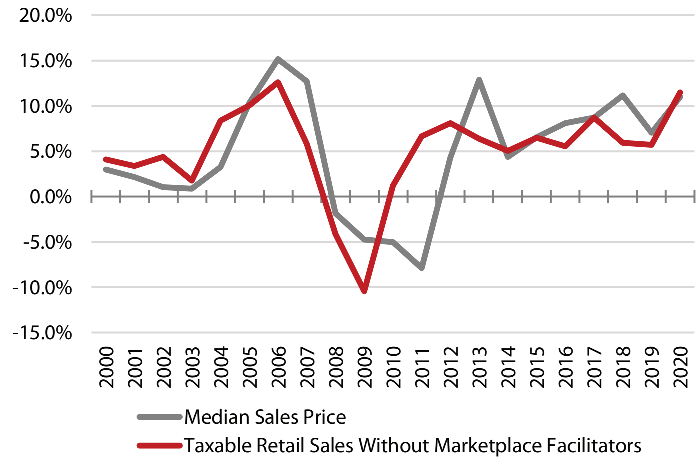
Several factors contributed to this surprising outcome, but none more important than the federal government's response. The swift Congressional reaction with the passage of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act and Families First Coronavirus Response Act) was crucial in preventing a retail catastrophe. The $2.2 trillion act provided $12.7 billion in federal assistance to Utah households and businesses, roughly $4,000 for every person in the state (see Table 4).

In addition to the fiscal response, the Federal Reserve's monetary response, which garners less press, was just as consequential. The Federal Reserve stepped in to limit COVID-19's impact on the smooth functioning of capital markets. Two of the most important policies were lowering the federal funds rate and adopting quantitative easing, the purchases of U.S. Treasury and mortgage-backed securities from financial institutions.

The Federal Reserves cut the target for the federal funds rate by 1.5 percentage points, pushing the rate down to 0% to 0.25%. The federal funds rate is a benchmark for other short-term rates and also affects longer-term rates. Lowering the federal funds rate effectively reduced the borrowing costs on mortgages, auto loans, home equity lines of credit, which stimulated retail spending.

Consumers also benefitted from the Federal Reserve's purchases of securities. Fearing a serious disruption to credit markets from COVID-19, the Federal Reserves announced in mid-March of 2020 that it would buy at least $500 billion in Treasury securities and $200 billion in mortgage-backed securities. Through this policy, the Federal Reserve pumped money into the financial sector, which supported consumer credit and encouraged retail spending through favorable interest rates.

Figure 7: Annual Percent Change in Median Home Sales Price and Taxable Retail Sales, 2000–2020



Source: UtahRealEstate.com and Utah State Tax Commission

Notably, the Federal Reserve's purchase of mortgage-backed securities provided enhanced liquidity to the secondary mortgage market, thus keeping mortgage rates low and contributing to the rapid increase in home prices. Rising home prices are a nearly surefire stimulus for retail spending. Figure 7 shows the close relationship between housing prices and retail sales. As a report from Harvard's Joint Center for Housing Studies puts it, "When housing wealth increases, consumers spend more. Indeed, they spend even more freely when capital gains from home sales and home equity borrowing escalate in tandem with rising home values."[4] Increasing housing wealth aptly describes Utah's housing market, and this wealth effect has supported a record level of retail sales.

Other factors also fed the increase in retail sales, such as the shift in spending from restaurants, travel, and personal care to retail goods, particularly home improvement, sporting equipment, and grocery products, and of course, the state's resilient job market.[5] Utah and Idaho are the only two states where year-over March employment increased. Total year-over employment was up 1.0% in Utah, while the number of retail trade jobs registered a remarkable 3.8% increase, a gain of 6,400 jobs. But, without the massive fiscal and monetary response from the federal government, these other factors would have had little chance to boost retail sales and employment. And with more federal assistance on the way, plus the high rates of household savings and pent-up demand, retail sales and the Utah economy will likely have another exceptional year in 2021.

Endnotes

1. The term retail sales in this report refers to taxable retail trade sales and does not include taxable retail services or taxable business investment.
2. Non-store retailer
3. Digital Commerce 360, https://www.digitalcommerce360.com/article/quarterly-online-sales/
4. Belsky, E., & Prakken, J. (2004). Housing Wealth Effects: Housing's Impact on Wealth Accumulation, Wealth Distribution and Consumer Spending, Joint Center for Housing Studies, Harvard University.
5. The shift from retail services to retail goods was undoubtedly a factor in the increase in retail trade activity but accounted for only a portion of the $3.8 billion in additional retail sales in 2020. And it's important to note that federal assistance helped provide household budgets with funds to facilitate the shift, such as eating out (restaurant services) to eating in (grocery goods). The largest drop in taxable retail services was in accommodations (hotel and motel sales tax), which fell by 37.7%, that's $784 million of the $1.8 billion decline in retail services spending in 2020. The drop in retail services, in this case, was due primarily to the loss of tourist spending, and a major share of the loss in tourist spending was a result of fewer out-of-state tourists and business travelers. The loss of out-of-state tourists and business travelers also impacted restaurant services. Restaurant sales dropped by $503 million in 2020, second only to accommodations. Comparing the detailed retail services data to the retail trade data suggests that probably no more than one-third of the increase in retail trade activity in 2020 can be attributed to the shift from retail services spending by Utahns. The shift from services to trade by Utah households likely accounts for about $1.3 billion of the $3.8 billion increase in taxable retail trade (excluding marketplace facilitators).