Monthly Labor Review

BLS

December 2020

Changes in consumer behaviors and financial well-being during the coronavirus pandemic: results from the U.S. Household Pulse Survey

The onset of the coronavirus disease 2019 (COVID-19) pandemic led to considerable changes in consumer spending behavior in the United States. Using data from the Household Pulse Survey, this article examines the extent of pandemic-related behavioral changes reported in August 2020. The article also shows how these changes differed across generations and geography.

Dedication: We dedicate this article to the memory of our colleague, Jennifer Edgar, past Associate Commissioner in the Office of Survey Methods Research. Jennifer significantly contributed to the testing of questions asked in the Household Pulse Survey.

In early 2020, the coronavirus disease 2019 (COVID-19) pandemic brought unprecedented health, economic, and social upheaval throughout the world. For many people living in the United States, the pandemic began on January 31, 2020, when the U.S. Secretary of Health and Human Services declared a public health emergency in response to the outbreak. For others, the pandemic began months later, as the disease spread across the country. On the international stage, on March 11, 2020, the World Health Organization announced that COVID-19 could be characterized as a pandemic because of the high rates of infection in various countries around the globe. Shortly thereafter, on March 13, 2020, President Donald J. Trump declared that the coronavirus outbreak in the United States constituted a national emergency.[1] On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was passed by Congress and signed into law by the President, providing an economic stimulus payment, extra unemployment benefits, additional funding for food and housing programs and activities, and other provisions.

From that point forward, general health concerns and a number of measures, such as stay-at-home orders, gathering restrictions, and store closings, led to a significant shift in the daily lives of people. Travel declined, telework increased, and consumer spending behavior changed in significant ways. Attesting to how these measures affected many consumers, Raj Chetty et al. reported that, from January to April 2020, total consumer credit and debit card spending by all consumers decreased by $7.5 billion, about a 34-percent reduction.[2] More recently, some states and local governments have relaxed restrictions and resumed business, at least partially.[3] (See figure 1.) At the same time, as people have dealt with the consequences of the pandemic, they have experienced differential impacts in their financial well-being. Yet, regardless of where we are today—personally, financially, and health-wise—versus where we were before January 2020, all of our lives have been affected by the coronavirus pandemic.

Thesia I. Garner
garner.thesia@bls.gov

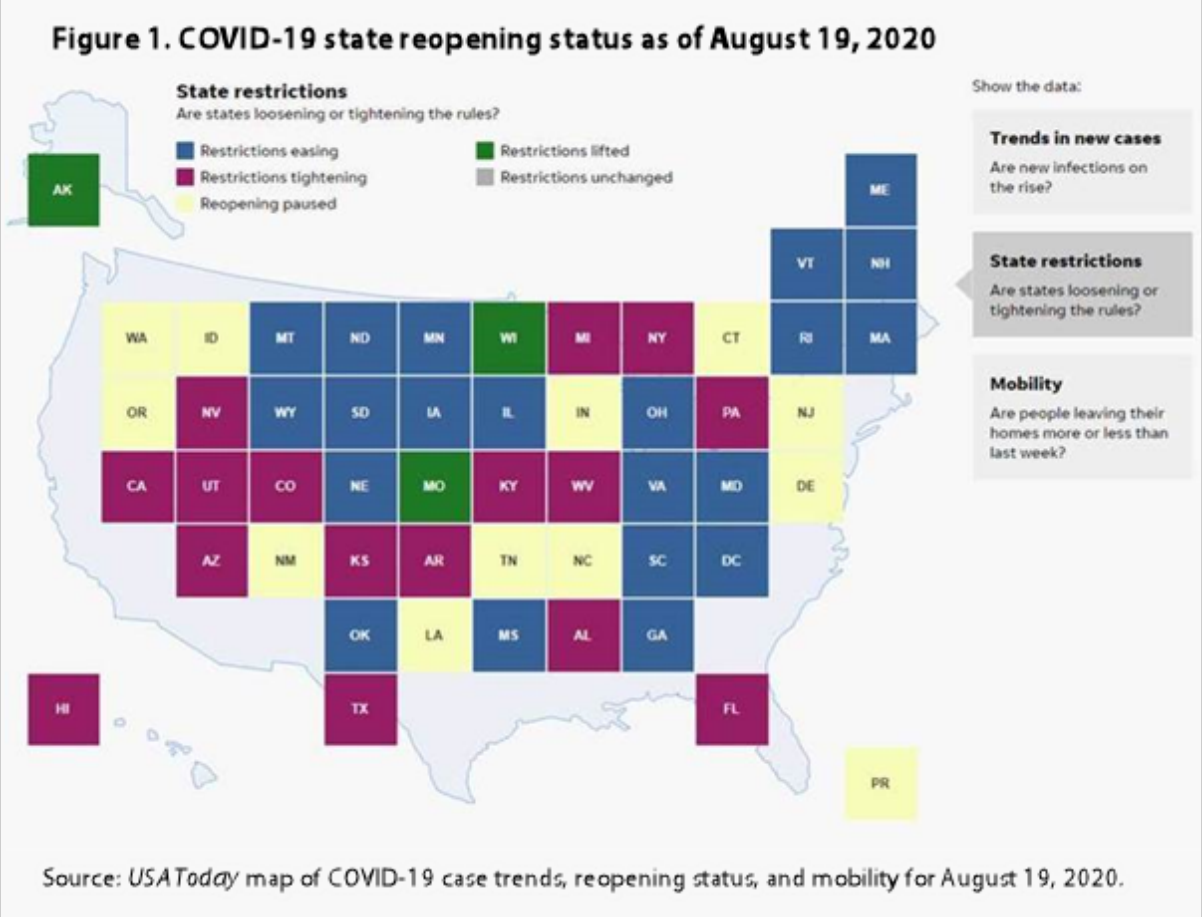
Thesia I. Garner is a division chief in the Office of Prices and Living Conditions, U.S. Bureau of Labor Statistics.

Adam Safir
safir.adam@bls.gov

Adam Safir is a division chief in the Office of Prices and Living Conditions, U.S. Bureau of Labor Statistics.

Jake Schild
schild.jake@bls.gov

Jake Schild is a research economist in the Office of Prices and Living Conditions, U.S. Bureau of Labor Statistics.



Among the first major pandemic-related behavioral changes in the daily lives of people were those related to work and shopping behaviors. In many areas across the United States, these changes affected the use of public services. For example, in March 2020, public transportation authorities in many U.S. cities reduced transit services in an effort to address ridership declines and protect the health and safety of employees and customers.[4] Data from the U.S. Bureau of Labor Statistics (BLS) Current Population Survey indicate that, in May 2020, 35.4 percent of employed workers teleworked because of the coronavirus pandemic.[5] In April 2020, an analysis of personal credit and debit card purchases of millions of people in the United States showed spikes in online purchases of groceries, meals from restaurants, and products ordinarily purchased in stores. At the same time, dramatic drops in credit and debit card spending were reported for businesses associated with entertainment, transportation, and travel.[6]

Against this backdrop, a question arises whether consumer behavioral changes continued through the summer as more states and counties began phased reopenings. In this article, we address this question by analyzing Household Pulse Survey (HPS) data collected in August 2020.[7] Specifically, we examine the extent to which spending behaviors and financial well-being changed during August 2020 and show how these changes differed across generations and geography. The changes in consumer behavior and financial well-being presented here only reflect a snapshot in time, and future developments will depend on individual and state responses to changes in the incidence of COVID-19 cases.

The main findings of our analysis are as follows:

- *Tough times for younger respondents*. Meeting expenses was more difficult for younger respondents than for older respondents. While 64.7 percent of millennials (those born in 1981 or later) reported at least some difficulty in paying for expenses, only 34.5 percent of the Silent Generation (those born between 1928 and 1945) reported the same.
- *Protective (pandemic-avoidance) consumer behavioral changes (e.g., increasing online shopping, avoiding eating at restaurants) were reported as more likely than were relaxing consumer behavioral changes (e.g., increasing in-store shopping, resuming eating at restaurants)*. Of all respondents, 46.8 percent reported participating in exclusively protective changes in behavior, the most frequent response among the options of protective changes, relaxing changes, or both. In contrast, only 4.3 percent of respondents reported exclusively relaxing changes in behavior.
- *Protective behavioral changes are concentrated among some states and less so among others*. Protective consumer behavioral changes are most pronounced in densely populated states.

About the data

BLS, along with several other federal agencies, developed questions for the rapid-response HPS. The HPS, an online survey using a probability-based sample and email and text message invitations to elicit responses from participants, is a collaboration among the U.S. Census Bureau, BLS, the U.S. Department of Housing and Urban Development, the National Center for Education Statistics, the National Center for Health Statistics, and the Economic Research Service of the U.S. Department of Agriculture. The survey was developed for a quick release in the field, gathering data on the many ways in which the lives of people in the United States have been affected by the pandemic. The survey instruments include questions on respondent demographics, employment, food security, health, housing, education, financial well-being, and spending behaviors.[8]

The first phase of the survey was fielded from April 23 to July 21, 2020. The BLS Office of Prices and Living Conditions (OPLC) contributed questions related to the receipt and actual or expected use of Economic Impact Payments (also known as stimulus payments), as well as sources of income being used to meet spending needs during the pandemic. We recently published another article summarizing the results of the survey.[9]

The present analysis reports findings from the first week of the second phase of the survey. Fielded from August 19 to 31, 2020, OPLC questions shifted the focus from economic stimulus payments to potential long-term impacts of the coronavirus pandemic and related policies or changes in business practices that influence consumer buying behavior. (See appendix for a list of BLS questions in the HPS phase 2 questionnaire, including those contributed by the Office of Employment and Unemployment Statistics.[10]) The U.S. Census Bureau releases these data with person- and household-level weights. In our analysis of data for phase 2, we applied person-level weights, as we did in our analysis of data for phase 1. Thus, our results are shown for people as opposed to households, and the statistics are presented for weighted respondents. This distinction is important for readers who might wish to compare our results with those of researchers who use household sampling and weights in their analyses.

Readers examining our results should also note that the HPS questions about consumer behavioral changes reflect only a 7-day reference period. This question feature, discussed in greater detail in later sections, implies that although two respondents may have exhibited the same behavior during the pandemic (e.g., avoiding eating at restaurants), their responses to the same HPS question could differ. This difference would occur if one of the respondents made the change before the survey's 7-day reference period and the other made the change during

the reference period. Only the respondent who made the change during the reference period would be tabulated as such in the survey findings presented here.

Findings

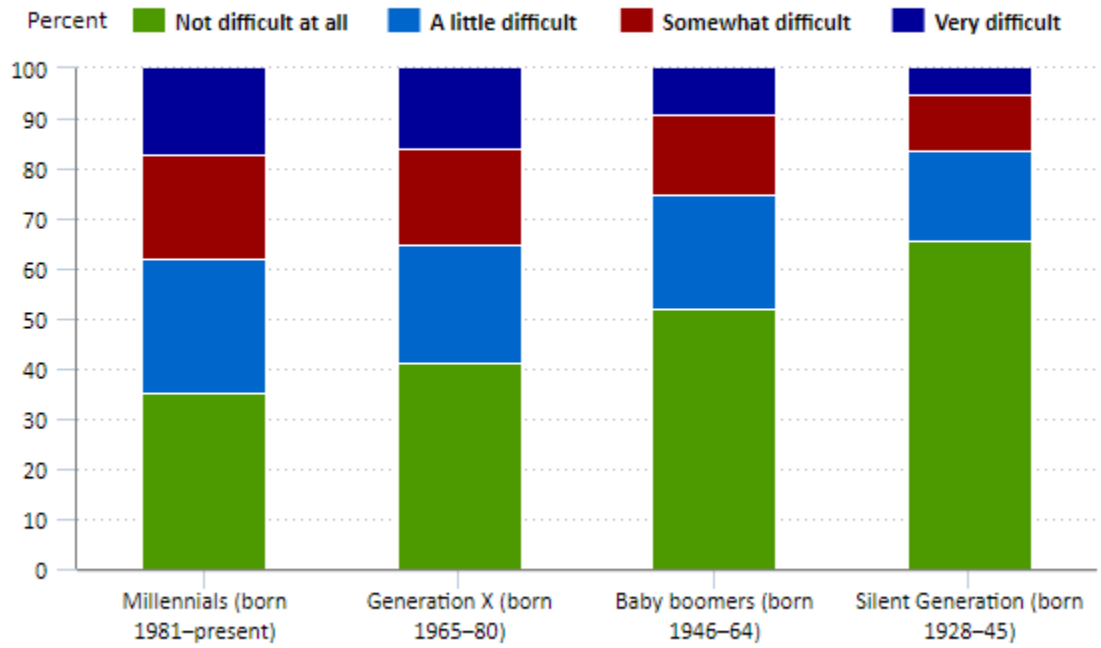
This section discusses financial well-being with respect to reported consumer difficulties in meeting household expenses during the pandemic and identifies changes in spending behavior across generations and geography.

Difficulty in paying for usual household expenses over the last 7 days

In response to the question, “In the last 7 days, how difficult has it been for your household to pay for usual household expenses, including but not limited to food, rent or mortgage, car payments, medical expenses, student loans, and so on?” 13.6 percent of respondents (weighted to represent the population) reported it being very difficult, and 18.3 percent reported it being somewhat difficult. In comparison, in response to an August 2020 RAND survey question, “In the past month, how difficult has it been for you to cover your expenses and pay all your bills?” 7.1 percent of respondents reported it being very difficult, and 26.6 percent reported it being somewhat difficult.[11] Similarly, according to results from wave 4 (July 2–13, 2020) of the Consumer Finance Institute COVID-19 Survey of Consumers, 11.5 percent of respondents reported being very concerned about their ability to make ends meet over the next 3 months.[12] In contrast, in answering a 2019 Federal Reserve Board survey question, “Overall, which one of the following best describes how well you are managing financially these days?” 6 percent of respondents reported finding it difficult to get by, while 18 percent reported just getting by.[13] In an April 2020 supplemental survey questionnaire, these percentages had increased marginally, with 7 percent of respondents reporting finding it difficult to get by and 20 percent reporting just getting by.[14]

The findings about difficulty in paying for usual household expenses were more pronounced for younger respondents than for older respondents. While 64.7 percent of millennials reported at least some difficulty in paying for usual expenses, only 34.5 percent of the Silent Generation reported the same.[15] (See figure 2.) Additionally, as expected, those in the lowest income category reported the most difficulty in paying for usual expenses. (See table 1.)

Figure 2. Difficulty in paying for usual household expenses over the last 7 days, by generation



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Census Bureau, Household Pulse Survey.

Table 1. Difficulty in paying for usual household expenses over the last 7 days, by household income

Household income	Percent distribution			
	Not difficult at all	A little difficult	Somewhat difficult	Very difficult
Less than $25,000	18.0	22.9	26.4	32.7
$25,000 to $34,999	26.3	25.4	26.5	21.8
$35,000 to $49,999	33.3	26.9	21.4	18.4
$50,000 to $74,999	44.1	25.3	18.8	11.8
$75,000 to $99,999	51.0	25.3	15.8	7.9
$100,000 to $149,999	63.5	21.2	10.8	4.5
$150,000 to $199,999	70.4	18.2	8.1	3.2
$200,000 and more	80.6	11.9	4.8	2.7
Did not report	38.9	27.4	20.5	13.3

Note: Values may not sum to 100 because of rounding.

Source: U.S. Census Bureau, Household Pulse Survey.

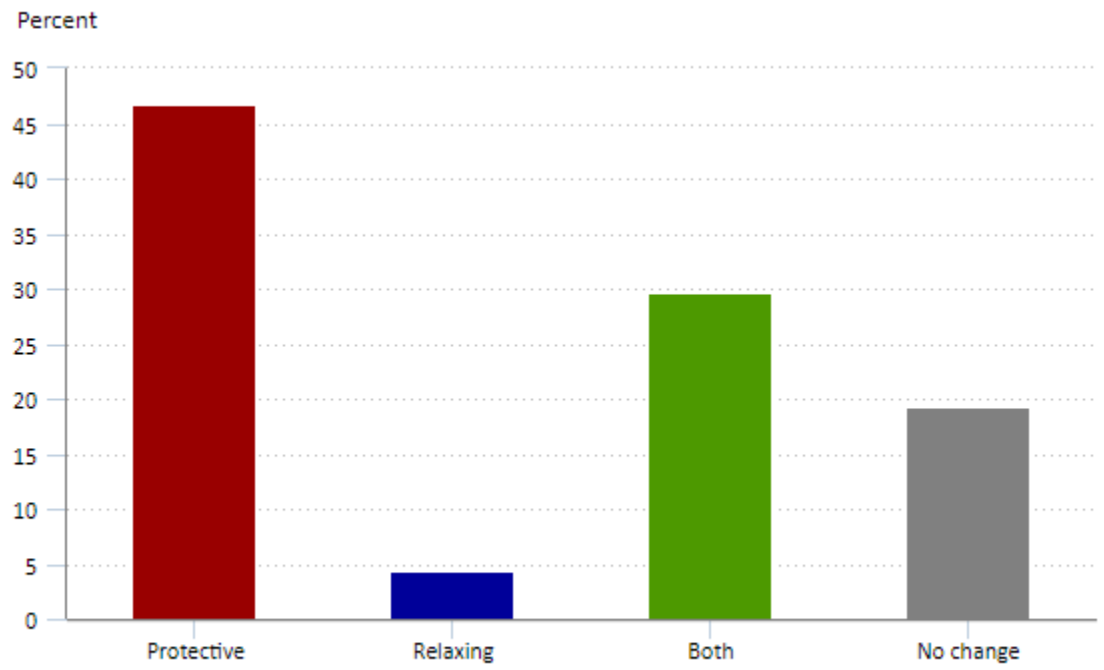
How spending behaviors changed

Respondents were presented with a list of behavioral changes and asked to indicate how their shopping behavior had changed within the last 7 days. For the present analysis, we created categorical variables based on responses to the question's check-all-that-apply response options. The consumer behavioral changes in the list were classified as "protective" or "relaxing" on the basis of their adherence to pandemic-avoidance behaviors. A

"protective" behavioral change is one that conforms to pandemic-avoidance behaviors (e.g., increasing online shopping, avoiding eating at restaurants), whereas a "relaxing" behavioral change indicates a weaker adherence to pandemic-avoidance behaviors (e.g., increasing in-store shopping, resuming eating at restaurants).

As seen in figure 3, 46.8 percent of respondents reported exclusively protective changes in behavior, the most frequently reported category. In contrast, only 4.3 percent of respondents reported exclusively relaxing changes in behavior. A subset of respondents, 29.7 percent, reported at least one protective and one relaxing behavioral change. (A more detailed analysis of this group's behavioral changes is provided later in this article.)

Figure 3. Protective versus relaxing changes in consumer spending behavior

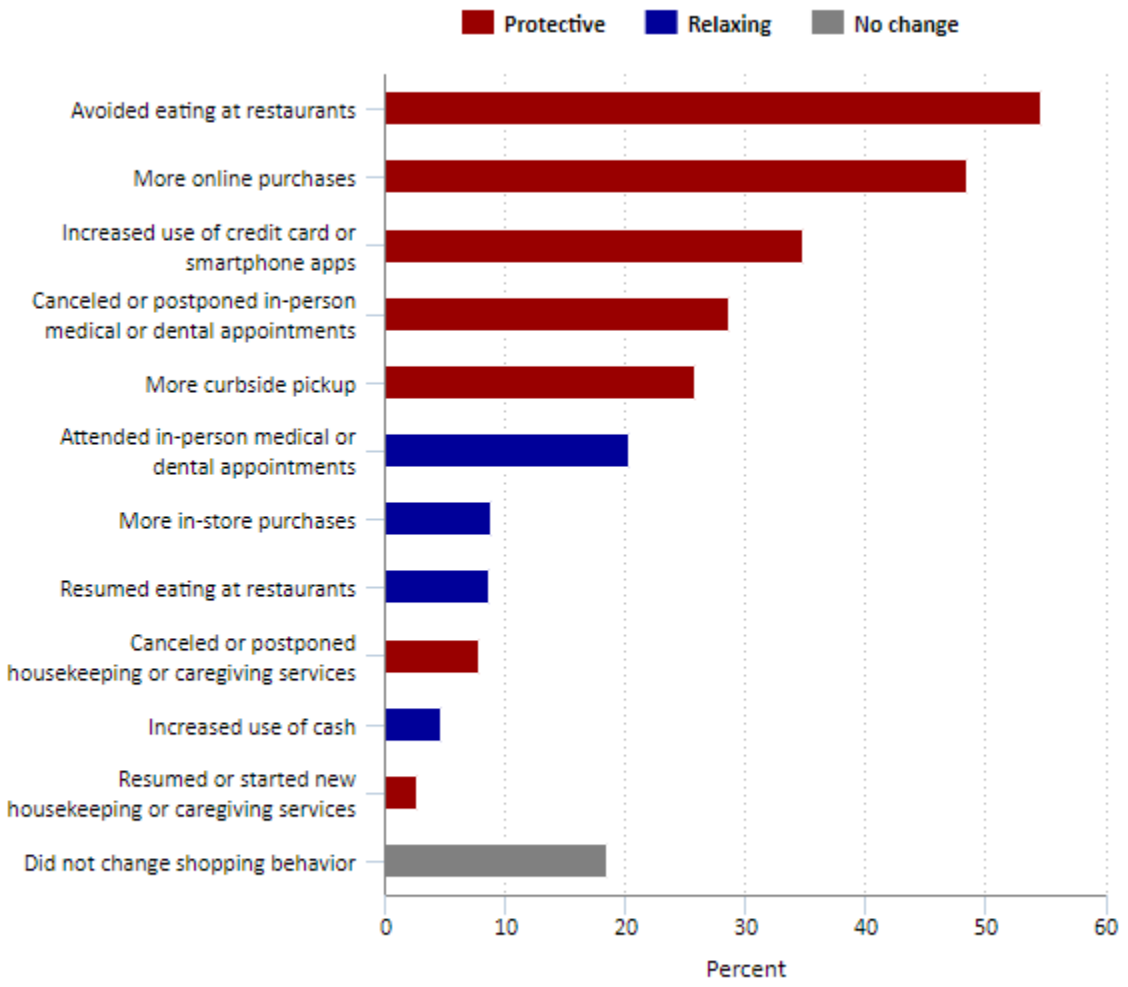


Hover over chart to view data.
Source: U.S. Census Bureau, Household Pulse Survey.

Focusing on individual behavioral changes reveals that 54.6 percent of respondents reported a change toward avoiding eating at restaurants, 48.5 percent reported a change toward making more online purchases, and 34.8 percent reported a change toward increasing their use of credit cards or mobile apps for purchases. These findings agree with recent global results reported in September 2020 by the Organisation for Economic Co-operation and Development, which show that the United States has had persistent pandemic-avoidance behaviors relative to nations such as France, Germany, Italy, and Great Britain, all of which saw a more pronounced relaxation of avoidance strategies.[16] In our data, the most frequently reported relaxing change in U.S. spending behavior only ranked sixth among all reported consumer behavioral changes, and that change was for a necessity (20.4 percent of respondents reported changing spending to attend in-person medical or dental appointments) as opposed to discretionary spending (such as resuming eating at restaurants). A little over one-fifth of respondents (18.5 percent) reported no change in their spending or shopping behavior. (See figure 4.) A possible explanation for the high rate of "no change" responses could be the question's reference period (last 7 days). As noted previously,

respondents may have implemented some of the behavioral changes that the question asks about, but they may have done so more than 7 days ago.

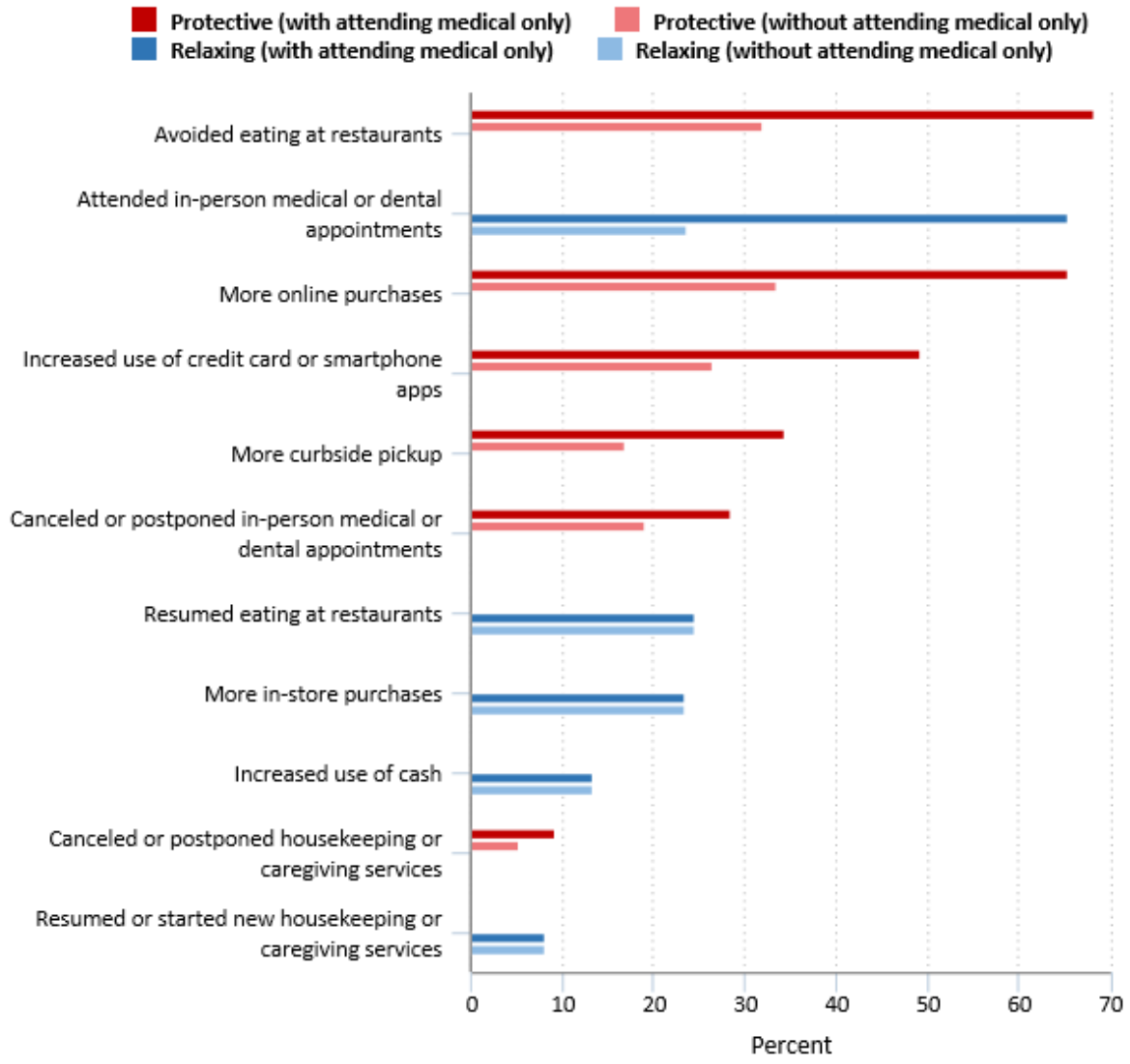
Figure 4. Consumer behavioral changes over the last 7 days, all respondents



Click legend items to change data display. Hover over chart to view data.
Note: Percentages do not add to 100 because respondents were allowed to select more than one category when answering this question.
Source: U.S. Census Bureau, Household Pulse Survey.

Figure 5 provides a more detailed look at those respondents who reported at least one protective behavioral change and at least one relaxing behavioral change. The darker red and darker blue bars in the figure show the percentage of respondents who reported both protective and relaxing behavioral changes and the corresponding change in spending behavior. For example, the top dark red bar shows that, among respondents who reported at least one protective and at least one relaxing behavioral change, 68.3 percent reported avoiding eating at restaurants within the past 7 days. Attending in-person medical or dental appointments was the most frequently reported relaxing behavioral change, with 65.4 percent of respondents within the “both” category reporting it, and the second most frequently reported change in behavior for this group.

Figure 5. Consumer behavioral changes over the last 7 days, subset of respondents with at least one protective and at least one relaxing change



Click legend items to change data display. Hover over chart to view data.
Note: Percentages do not add to 100 because respondents were allowed to select more than one category when answering this question.
Source: U.S. Census Bureau, Household Pulse Survey.

Because attending in-person medical or dental appointments is viewed as a necessity, it may be the only relaxing behavior for many respondents who reported both protective and relaxing behaviors. To determine the effect of these respondents on the results reported in figure 5, we dropped them from the analysis. The results based on this exclusion are represented by the figure's light red and light blue bars.

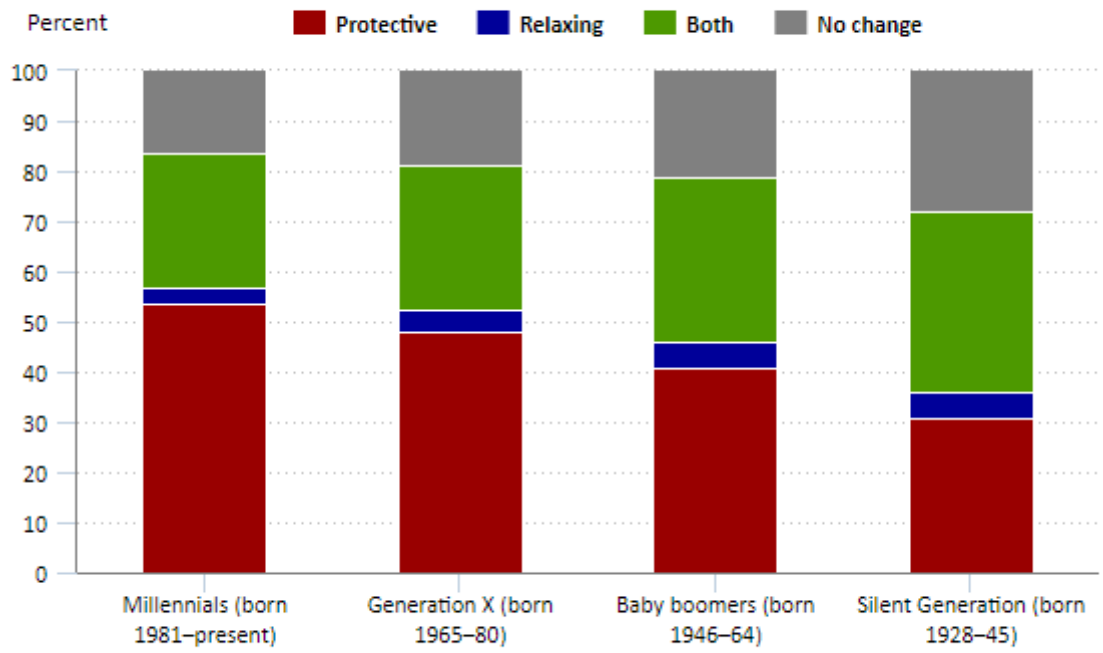
The difference between the dark blue and light blue bars corresponding to attending in-person medical or dental appointments represents the percentage of respondents whose only reported relaxing behavior was attending in-person medical or dental appointments (41.8 percent). The difference between the dark red and light red bars represents the percentage of respondents who reported a given protective behavior and whose only relaxing behavior was attending in-person medical or dental appointments. For example, among respondents who reported

avoiding eating at restaurants, 36.3 percent (68.3 percent minus 32.0 percent) reported attending in-person medical or dental appointments as their only relaxing behavior.

Spending behavioral changes differed by generation. Older respondents were more likely to report avoiding eating at restaurants: 78.3 percent of respondents in the Silent Generation reported this protective behavioral change, compared with 62.7 percent of millennials. On the other hand, older respondents were more likely to resume attending in-person medical or dental appointments: 77.7 percent of respondents in the Silent Generation reported this relaxing behavioral change, compared with 58.3 percent of millennials.

Younger respondents were more likely to report a protective change only (53.6 percent of millennials versus 31.0 percent of respondents in the Silent Generation), whereas older respondents were more likely to report no change (28.3 percent of respondents in the Silent Generation versus 16.4 percent of millennials). (See figure 6.) This difference suggests that older respondents adopted a pandemic-avoidance strategy early and remained firm in that decision, while younger respondents were more prone to changing their behavior.

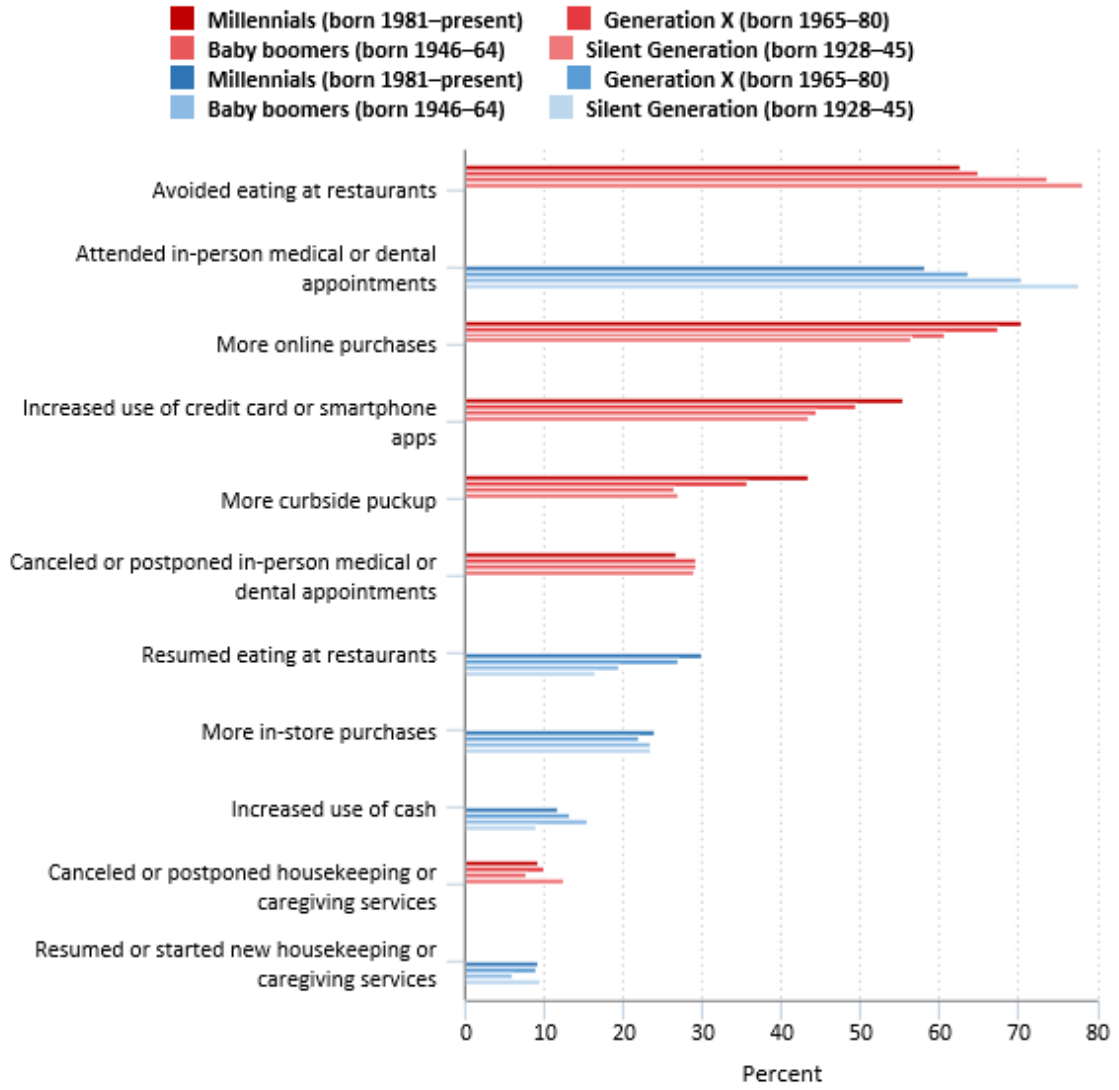
Figure 6. Protective versus relaxing changes in consumer spending behavior, by generation



Click legend items to change data display. Hover over chart to view data.
Source: U.S. Census Bureau, Household Pulse Survey.

Younger respondents were more likely to make more purchases online: 70.4 percent of millennials reported this behavioral change, compared with 56.5 percent of respondents in the Silent Generation. Younger respondents were also more likely to opt for more curbside pickup: 43.5 percent of millennials reported doing so, compared with 27.0 percent of respondents in the Silent Generation. (See figure 7.)

Figure 7. Consumer behavioral changes over the last 7 days, by generation

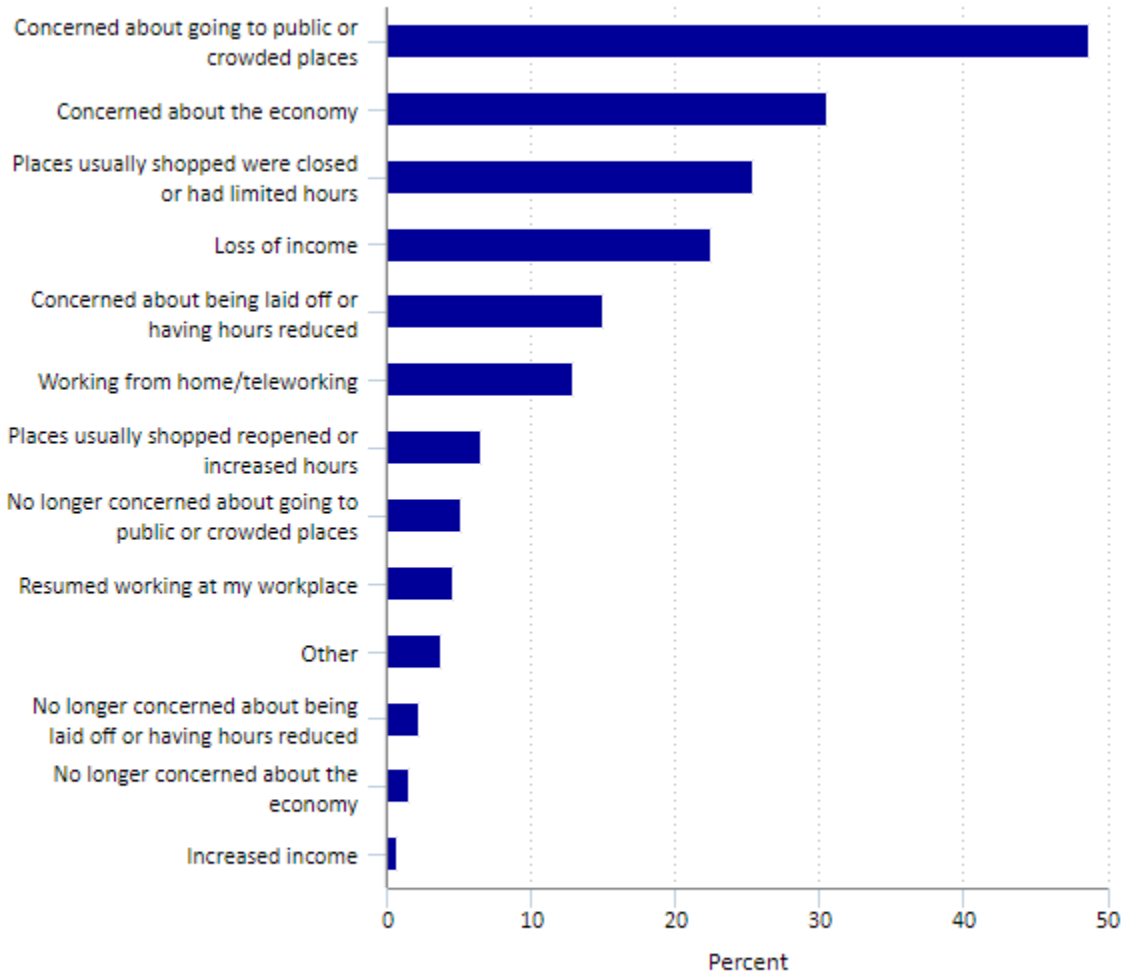


Click legend items to change data display. Hover over chart to view data.
Note: Red and blue bars indicate protective and relaxing behavioral changes, respectively. Percentages do not add to 100 because respondents were allowed to select more than one category when answering this question.
Source: U.S. Census Bureau, Household Pulse Survey.

Reasons for consumer behavioral changes

When asked the question, “In the last 7 days, for which of the following reasons have you or your household changed spending?” 48.8 percent of respondents reported concerns about being around public or crowded places or high-risk people, while 30.5 percent reported concerns about the economy.[17] (See figure 8.) The top six reasons given by respondents for changing spending behavior were related to pandemic avoidance.

Figure 8. Reasons for consumer behavioral changes

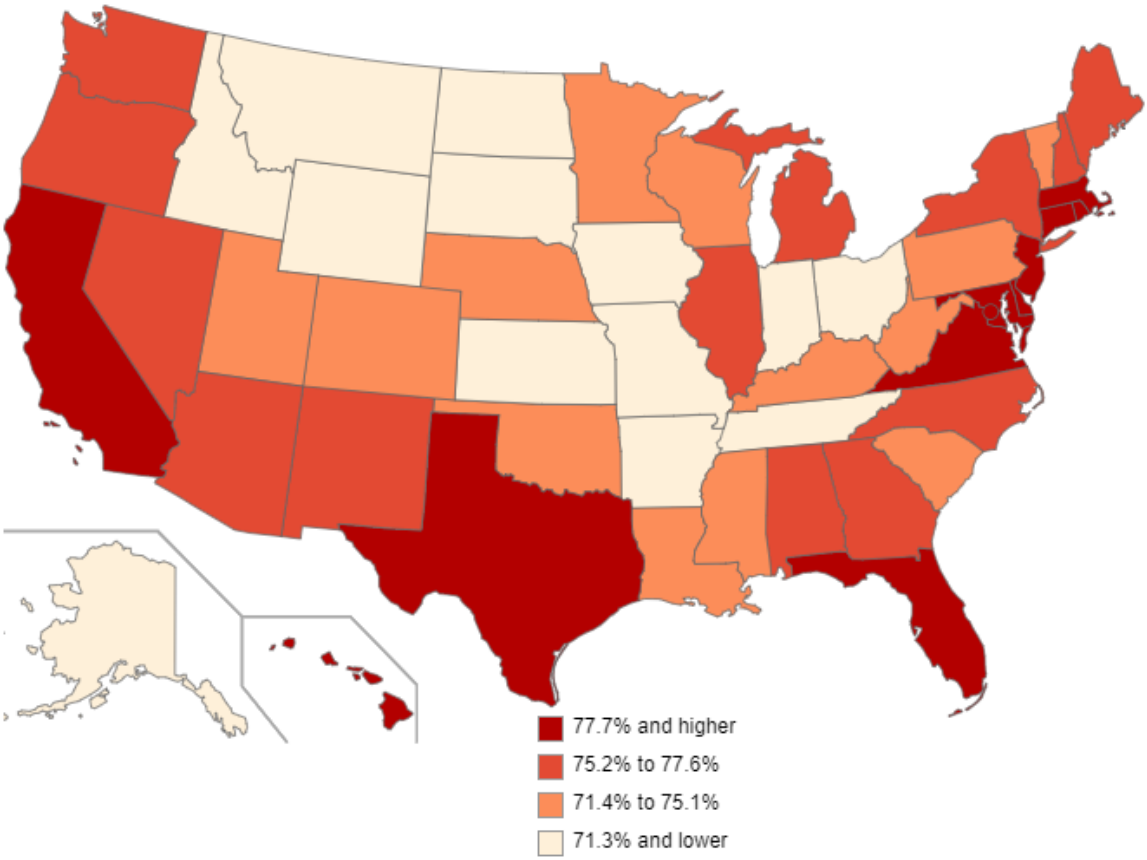


Hover over chart to view data.
Note: Percentages do not add to 100 because respondents were allowed to select more than one category when answering this question.
Source: U.S. Census Bureau, Household Pulse Survey.

Consumer behavioral changes by state

Besides being affected by usual sociodemographic characteristics such as age and income, decisions about protective or relaxing consumer behavioral changes are influenced by fluid pandemic conditions in each state and local jurisdiction. Media reporting, rates of infection, hospitalizations, deaths, and state- and local-level openings or closings may all affect the pandemic-avoidance tolerance thresholds and day-to-day activities of consumers. In this article, we focus on behavioral changes at the state level only. Protective behavioral changes appear to be more concentrated among certain states (e.g., California, Florida, Maryland, Massachusetts, New Jersey, Washington) and less so among other states (e.g., Arkansas, Iowa, Missouri, Montana, North Dakota, South Dakota, Wyoming). (See figure 9.)

Figure 9. Protective change in consumer spending behavior, August 19–31, 2020



Hover over a state to see data.
Hover over legend items to see states in a category.
Source: U.S. Census Bureau, Household Pulse Survey.

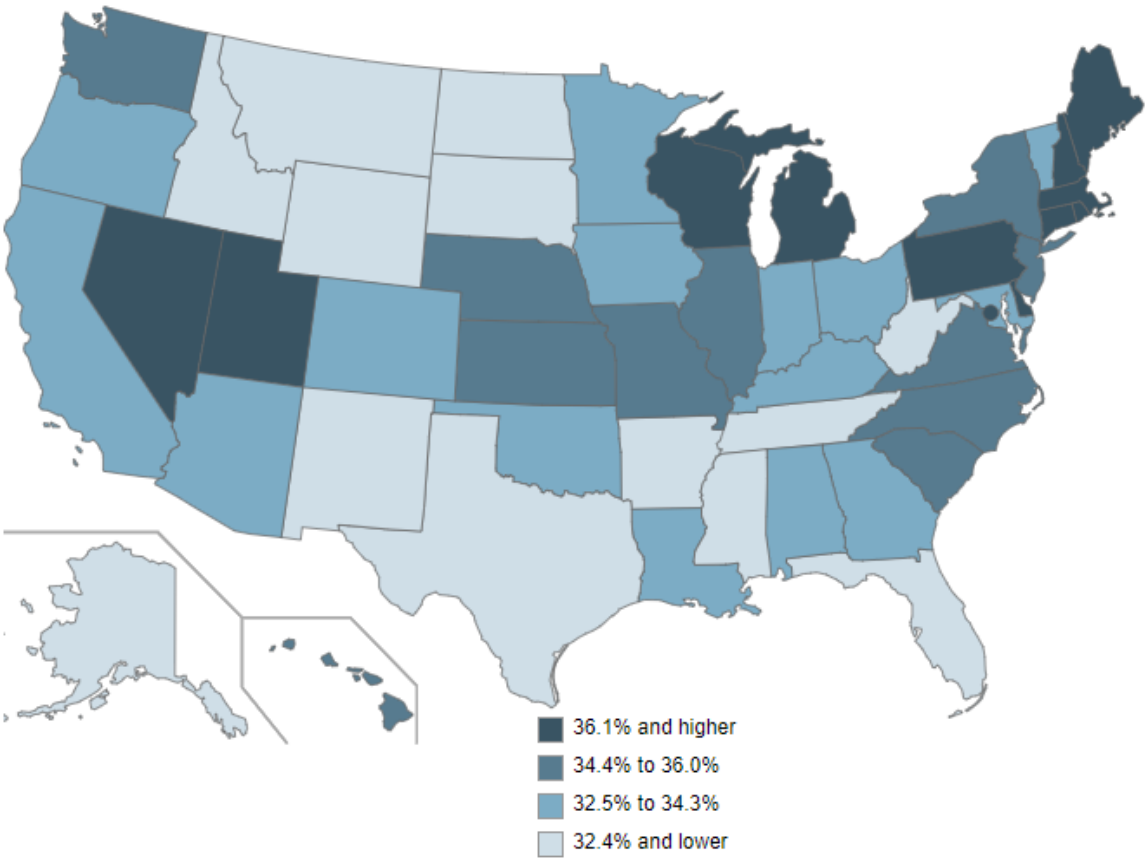
Notably, this trend is related to population density. States with more densely populated areas tend toward protective consumer behavioral changes. (See table 2.) Conversely, less densely populated states tend toward relaxing consumer behavioral changes. (See figure 9.) Although relaxing changes are less prevalent overall, when they do occur, they are more likely to be adopted (relative to protective changes) by less densely populated states than by more densely populated states. Note that, unlike figure 6, which shows mutually exclusive behavioral change categories, figures 9 and 10 display the proportion of the population reporting a protective or relaxing behavioral change, respectively, without excluding the possibility that both types of changes were reported. In other words, in figure 9, some of the respondents included in the proportion reporting a protective behavioral change reported both a protective and a relaxing change. The same is true for figure 10, which shows the proportion of respondents reporting a relaxing behavioral change. Figure 11 displays the proportion of respondents who reported both protective and relaxing behavioral changes.

Table 2. Population density (2015) and consumer behaviors, by state

State		Population density (people per square mile)	Behavioral change (percent)	
			Protective	Relaxing
Most dense	District of Columbia	11,011	87.7	37.0
	New Jersey	1,218	80.7	35.8
	Rhode Island	1,021	80.0	37.1
	Massachusetts	871	80.7	37.0
	Connecticut	741	78.5	39.8
Least dense	South Dakota	11	64.2	30.6
	North Dakota	10	69.6	28.4
	Montana	7	62.4	29.4
	Wyoming	6	63.3	27.7
	Alaska	1	70.0	30.7

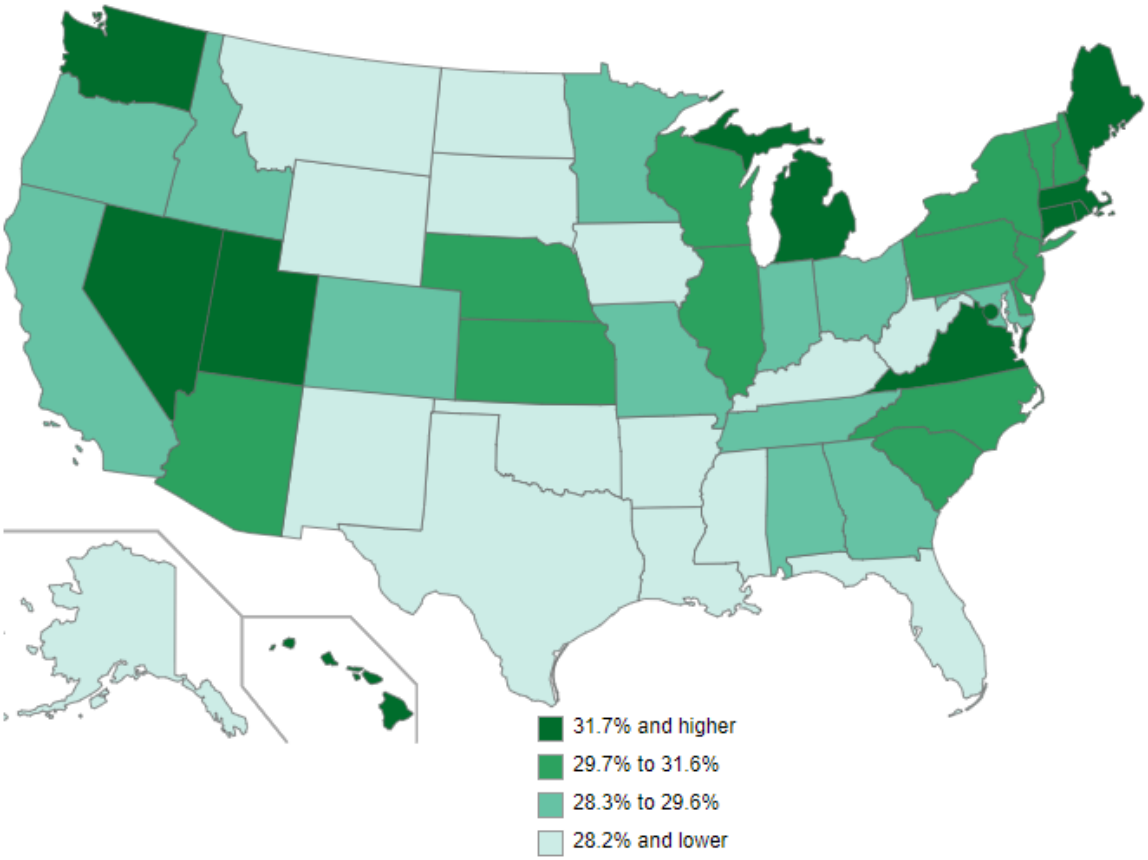
Source: U.S. Census Bureau, Household Pulse Survey and population density data.

Figure 10. Relaxing change in consumer spending behavior, August 19–31, 2020



Hover over a state to see data.
Hover over legend items to see states in a category.
Source: U.S. Census Bureau, Household Pulse Survey.

Figure 11. Both protective and relaxing change in consumer spending behavior, August 19–31, 2020



Hover over a state to see data.
Hover over legend items to see states in a category.
Source: U.S. Census Bureau, Household Pulse Survey.

Conclusion

The COVID-19 pandemic profoundly affected consumer spending patterns, both in the immediate aftermath of the national emergency declaration in March 2020 and into the summer months. This article suggests that concerns about disease spread and the economy are associated with consumer behavioral changes, and that many of the changes seen early in the pandemic have persisted and may continue for some time. Generational status and geographic location appear to be among the factors related to the likelihood of adopting consumer behavioral changes, although other factors may be revealed in more detailed multivariate analyses.

Appendix: BLS questions in the Household Pulse Survey, phase 2

Unemployment Insurance

Q14a. Since March 13, 2020, have you applied for Unemployment Insurance (UI) benefits? Select only one answer.

- Yes (1)
- No (2)

Q14b. Since March 13, 2020, did you receive Unemployment Insurance (UI) benefits? Select only one answer.

- Yes (1)
- No (2)

Q14c. Including yourself, how many people in your household received Unemployment Insurance (UI) benefits since March 13, 2020? Please enter a number.

Difficulty in paying for usual household expenses

Q19a. In the last 7 days, how difficult has it been for your household to pay for usual household expenses, including but not limited to food, rent or mortgage, car payments, medical expenses, student loans, and so on? Select only one answer.

- Not at all difficult (1)
- A little difficult (2)
- Somewhat difficult (3)
- Very difficult (4)

Consumer behaviors

Q19b. In the last 7 days, which of the following changes have you or your household made to your spending or shopping? Select all that apply.

- More purchases online (as opposed to in store) (1)
- More purchases by curbside pickup (as opposed to in store) (2)
- More purchases instore (as opposed to purchases online or curbside pickup) (3)
- Increased use of credit cards or smartphone apps for purchases, instead of using cash (4)
- Increased use of cash instead of using credit cards or smartphone apps for purchases (5)
- Avoided eating at restaurants (6)
- Resumed eating at restaurants (7)
- Canceled or postponed in-person medical or dental appointments (8)
- Attended in-person medical or dental appointments (9)
- Canceled or postponed housekeeping or caregiving services (10)
- Resumed or started new housekeeping or caregiving services (11)
- Did not make any changes to spending or shopping behavior (12)

Q19c. In the last 7 days, for which of the following reasons have you or your household changed spending? Select all that apply.

- Usual shopping places were closed or had limited hours (e.g., restaurant, doctor/dentist office, health club, hair salon, childcare center) (1)
- Usual shopping places reopened or increased hours (2)
- Concerned about going to public or crowded places or having contact with high-risk people (3)

- No longer concerned about going to public or crowded places or having contact with high-risk people (4)
- Loss of income (5)
- Increased income (6)
- Concerns about being laid off or having hours reduced (7)
- No longer concerned about being laid off or having hours reduced (8)
- Working from home/teleworking (9)
- Resumed working onsite at workplace (10)
- Concerns about the economy (11)
- No longer concerned about the economy (12)
- Other, specify (13)

Resources for spending needs

Q20. Thinking about your experience in the last 7 days, which of the following did you or your household members use to meet your spending needs? Select all that apply.

- Regular income sources like those received before the pandemic (1)
- Credit cards or loans (2)
- Money from savings or selling assets (3)
- Borrowing from friends or family (4)
- Unemployment Insurance (UI) benefit payments (5)
- Stimulus (economic impact) payment (6)
- Money saved from deferred or forgiven payments [to meet your spending needs] (7)
- Supplemental Nutrition Assistance Program (SNAP) (8)

SUGGESTED CITATION

Thesia I. Garner, Adam Safir, and Jake Schild, "Changes in consumer behaviors and financial well-being during the coronavirus pandemic: results from the U.S. Household Pulse Survey," *Monthly Labor Review,* U.S. Bureau of Labor Statistics, December 2020, https://doi.org/10.21916/mlr.2020.26.

NOTES

1 See “Proclamation on declaring a national emergency concerning the novel coronavirus disease (COVID-19) outbreak” (The White House, March 13, 2020), https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/.

2 Raj Chetty, John N. Friedman, Nathaniel Hendren, Michael Stepner, and the Opportunity Insights Team, “The economic impacts of COVID-19: evidence from a new public database built using private sector data,” working paper (Cambridge, MA: Opportunity Insights, November 2020), https://opportunityinsights.org/wp-content/uploads/2020/05/tracker_paper.pdf.

3 For updates on case trends, reopening status, and mobility, see “COVID-19 restrictions: map of COVID-19 case trends, restrictions, and mobility,” *USA Today*, https://www.usatoday.com/storytelling/coronavirus-reopening-america-map/#restrictions.

4 Kate Taylor, “No bus service. Crowded trains. Transit systems struggle with the virus.” *The New York Times*, March 17, 2020, https://www.nytimes.com/2020/03/17/us/coronavirus-buses-trains-detroit-boston.html.

5 "One-quarter of the employed teleworked in August 2020 because of COVID-19 pandemic," *The Economics Daily* (U.S. Bureau of Labor Statistics, September 15, 2020), https://www.bls.gov/opub/ted/2020/one-quarter-of-the-employed-teleworked-in-august-2020-because-of-covid-19-pandemic.htm.

6 Lauren Leatherby and David Gelles, "How the virus transformed the way Americans spend their money," *The New York Times*, April 11, 2020, https://www.nytimes.com/interactive/2020/04/11/business/economy/coronavirus-us-economy-spending.html.

7 "Household Pulse Survey: measuring social and economic impacts during the coronavirus pandemic" (U.S. Census Bureau), https://www.census.gov/programs-surveys/household-pulse-survey.html.

8 For more information about the Household Pulse Survey, see ibid.

9 Thesia I. Garner, Adam Safir, and Jake Schild, "Receipt and use of stimulus payments in the time of the Covid-19 pandemic," *Beyond the Numbers: Prices & Spending*, vol. 9, no. 10 (U.S. Bureau of Labor Statistics, August 2020), https://www.bls.gov/opub/btn/volume-9/receipt-and-use-of-stimulus-payments-in-the-time-of-the-covid-19-pandemic.htm.

10 The full household questionnaire is available at https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Phase_2_Questionnaire_09_09_2020_English.pdf.

11 Katherine Grace Carman and Shanthi Nataraj, "2020 American Life Panel survey on impacts of COVID-19: technical documentation" (Santa Monica, CA: RAND Corporation, 2020), https://www.rand.org/pubs/research_reports/RRA308-1.html.

12 Tom Akana, "CFI COVID-19 Survey of Consumers—wave 4 tracks how the vulnerable are affected more by job interruptions and income disruptions," Consumer Finance Institute special report (Federal Reserve Bank of Philadelphia, September 2020), https://www.philadelphiafed.org/-/media/frbp/assets/consumer-finance/reports/cfi-covid-19-survey-of-consumers-wave-4-updates.pdf.

13 See appendix B, "Consumer responses to 2019 survey questions," in *Report on the economic well-being of U.S. households in 2019, featuring supplemental data from April 2020* (Board of Governors of the Federal Reserve System, May 2020), https://www.federalreserve.gov/publications/2020-supplemental-appendixes-2019-Appendix-B-Consumer-Responses-to-2019-Survey-Questions.htm.

14 See appendix D, "Consumer responses to April 2020 supplemental survey questions," in *Report on the economic well-being of U.S. households in 2019, featuring supplemental data from April 2020* (Board of Governors of the Federal Reserve System, May 2020), https://www.federalreserve.gov/publications/2020-supplemental-appendixes-2019-Appendix-D-Consumer-Responses-to-2019-Survey-Questions.htm.

15 Millennials are those born in 1981 or later, Generation X are those born between 1965 and 1980, baby boomers are those born between 1946 and 1964, and the Silent Generation are those born between 1928 and 1945.

16 See slide 10 in Laurence Boone, "Living with uncertainty," *OECD Economic Outlook* presentation (Organisation for Economic Co-operation and Development, September 16, 2020), https://read.oecd-ilibrary.org/view/?ref=136_136495-20g6l69n4a.

17 The interpretation of "concerns about the economy" was left open to the respondent; for example, some respondents may have been concerned about the impact of the pandemic on the value of their retirement accounts, the stock market, or business closings, and these concerns may have resulted in either spending less or spending more.

RELATED CONTENT

Related Articles

From the barrel to the pump: the impact of the COVID-19 pandemic on prices for petroleum products, *Monthly Labor Review*, October 2020.

Receipt and use of stimulus payments in the time of the Covid-19 pandemic, *Beyond the Numbers*, August 2020.

The impact of the COVID-19 pandemic on food price indexes and data collection, *Monthly Labor Review*, August 2020.

Ability to work from home: evidence from two surveys and implications for the labor market in the COVID-19 pandemic, *Monthly Labor Review*, June 2020.

Demographics, earnings, and family characteristics of workers in sectors initially affected by COVID-19 shutdowns, *Monthly Labor Review*, June 2020.

Related Subjects

Unemployment Insurance | Consumer expenditures | Social issues | Geographic areas | Worker safety and health | Labor market | Demographics | Global Economy | Health care