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Grassroots® Research Market Monitor

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Post-COVID-19 shelter in place – US

Grassroots® commissioned interviews with consumers in the US to gauge post-COVID-19 lockdown and recovery trends. Forty-five percent of sources believe the broader economy will reopen and return to normal by Aug. 1, 2020; 30% said 2021; and 25% said between September and November 2020. As to current employment status, 59% are working, 14% are not working, 24% are retired or disabled, and 3% are full-time students. Meanwhile. 26% of sources have had their hours of work reduced, and 23% have been furloughed or laid off. Among sources who are working, 77% have pulled back on their spending overall, while 20% have not. Among those who are working and have pulled back on spending, 38% have made a conscious effort to pull back due to economic uncertainty, while 29% are working for less pay or fewer hours than normal.

As a result of the COVID-19 situation, sources are streaming online videos/ movies and shopping for household items online more often, while they are using ride share apps and shopping in stores for everyday items less often. Currently, sources are least comfortable riding public transportation and going to concerts, while they are most comfortable going to retail stores, riding in elevators and getting personal services. In the next month, sources are most likely to go to a restaurant or coffee shop, while they are least likely to book a cruise or go to a live music concert.

After the COVID-19 lockdown, sources are most likely to resume shopping at stores, eating out and traveling domestically, while they are least likely to resume taking cruises, traveling internationally and going to theme parks. As to going back to restaurants



as soon as they reopen, 49% are somewhat or extremely likely to do so, 15% are neither likely nor unlikely, and 36% are somewhat or extremely unlikely. In addition, 81% of sources are moderately or very sensitive to eating in a crowded restaurant when health concerns around COVID-19 fade.



E-learning trends – France

Grassroots® commissioned interviews with educators in France to assess early experiences with e-learning, the primary platforms and communication software. and the likelihood of continuation after COVID-19. Forty percent of sources said their experience with e-learning since the beginning of the crisis has been convenient and 6% said very convenient, based on previous experience with online teaching, Still, 27% cited minor issues due to inadequate bandwidth, problems with internet connectivity or lack thereof, and lack of experience with e-learning, and 27% cited major issues, especially for low-income students and those in rural zones who do not have an adequate internet connection or hardware

As to software and online platforms, 53% of sources use one or several Google (Alphabet) applications for sharing files, creating documents and administering quizzes as well as YouTube (Alphabet) to post tutorial videos, while 47% have not started using e-learning software/online

platforms. In addition, 80% use external communication software – including Zoom (Zoom Video Communications), Microsoft Teams and Discord – as virtual classroom or videoconferencing solutions.

Meanwhile, 73% of sources have not received technical or financial support from their schools since the beginning of the crisis, while 27% said local municipalities have lent hardware to underprivileaed students. Looking ahead, 67% said it is not very likely that e-learning will continue to be used by their schools after the COVID-19 confinement period and in the next school year, as it is not adapted to teaching elementary school students, cannot replace human contact and excludes underprivileged children as well as due to a lack of motivation among some teachers to learn the technology. However, 27% of sources said it is likely, and 7% said very likely, because the benefits of these digital tools have become apparent.

Gasoline demand – US

To check on demand, sales and buying patterns for gasoline and to determine how the sales volume of gasoline is affected by current prices, Grassroots® commissioned interviews with gasoline industry sources in the US. One hundred percent of sources said gasoline sales volume decreased in March 2020 month-to-month – down an average 35% among those who cited estimates. In addition, 100% who commented said sales volume decreased in March year-to-year - down an average 38% among those who cited estimates. Meanwhile, among sources who commented. 74% cited no switching among gasoline grades in March month-to-month or year-to-year.

Regarding diesel sales volume in particular, among sources who commented, 74% said it decreased in March 2020 month-to-month, while it increased for 17% and remained flat for 9% – down an average 7% among those who cited

estimates. In addition, among those who commented, 70% said diesel sales volume decreased in March year-to-year, while it increased for 17% and remained flat for 13% – down an average 9% among those who cited estimates.

Meanwhile, 100% of sources who commented said the sole and major factor that negatively affected gasoline sales in March 2020 was the COVID-19 pandemic and subsequent lockdowns and stay-at-home orders, which resulted in consumers driving substantially less. However, diesel fuel sales reportedly were less affected by the pandemic in March than were regular gasoline sales. Regarding price sensitivy, 100% of sources who commented said consumers showed no sensitivity to gasoline prices in March month-to-month, as they could not take advantage of low prices due to COVID-19 restrictions, which have severely curtailed driving.

Consumer sentiment during COVID-19 – Japan



To examine views on overall economic development and household spending power as a result of the COVID-19 pandemic and identify activities/product categories most affected as well as the potential pace of recovery. Grassroots® commissioned interviews with consumers in Japan. When asked about support from the government since and during the pandemic, 49% of sources said it has been minimal. while 24% believe there has been no support, and 24% believe there are various measures but that it will take time for the economy to normalize. Meanwhile, 37% have tried working from home or during off-peak commute hours, and 79% of these said arrangements are working well. As to the top concerns for this year, the spread of COVID-19 in their communities is No. 1 for 68% of sources. followed by the worsening domestic economy, global recession/worsening global economy and potential salary cut/income loss. In addition, 18% said the pandemic affected their household income through either job loss or salary/income cut, and 51% cited a potential risk. Among sources whose household has experienced the loss of a job or income, 38% said their household income has decreased 10%–30%, while 20% said less than 10%. Looking ahead, 41% expect the local economy to improve gradually after the pandemic, while 35% expect it to deteriorate. In the next 12 months, 35% of sources expect their household financial situation to deteriorate slightly, and 16% expect it to deteriorate sharply.

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Regarding general consumption, sources said groceries, household supplies/necessities, healthcare and online entertainment are the areas that have seen the most increase in spending as a result of the pandemic, while dining out has seen the most decrease, followed by apparel, luxury goods, sports and consumer electronics. After the pandemic, spending on dining out reportedly is likely to see the most noticeable increase in spending, while spending in other categories is likely to remain flat, and exercise/playing sports is the area expected to see the most increase in consumer engagement. Meanwhile, 46% of sources originally planned domestic leisure travel for 1H this year prior to the pandemic, 22% planned healthcare treatment, and 13% planned international leisure travel. However, 50% canceled international leisure travel and 45% domestic leisure travel, with no expectation of resuming planning yet. At the same time, sources' plans for buying new cars as well as healthcare treatment are relatively less affected, as 29% and 20%, respectively, who planned for such spending will keep their original plans. As to social activities, shopping at a mall and dining out for gatherings reportedly are the most desired for 31% and 29%, respectively, after the pandemic.

When asked about the impact on household spending due to the stock market plunge, 55% of sources said there is no impact, while 31% have reduced unnecessary spending. Looking ahead, 73% expect household spending to decrease somewhat vs. the pre-virus level, generally 30% or less. Feedback on the anticipated use of government subsidies is mixed, with 36% of sources expecting to increase consumption spending, 33% expecting to keep it as savings, and 30% do not know. Meanwhile, asset allocations in the next 12 months reportedly will be 78% cash/bank deposits and 9% equity/stock market, while allocations to other asset classes will be minimal

Automobile sales - China

To examine the sell-through and demand outlook, particularly any meaningful changes due to COVID-19, Grassroots® commissioned interviews with car dealers in China. On average, sources' sales decreased 53% for joint-venture (JV) mass-market brands, 35% for domestic brands and 20% for JV premium brands in 1Q 2020 vs. 1Q 2019, although 98% said sales started to pick up in March after the COVID-19 outbreak. Looking ahead, on average, sales are expected to decrease 24% for domestic brands, 23% for JV mass-market brands and 4% for JV premium brands in 2Q 2020 vs. 2Q 2019. In 2020 vs. 2019, sources expect sales to decrease an average 11% for JV mass-market brands and 6% for domestic brands, and to increase an average 1% for JV premium brands

As to average inventory, sources said it is 61 days for domestic brands, 44 days for JV premium brands and 38 days for JV mass-market brands. Going into 2Q

2020, inventory expectations are mixed for each segment, depending on brands' and dealers' strategies. Meanwhile, the current level of discounts/promotions is up for 73% of sources vs. the same time last year, while it is flat for 27%.

Regarding market share, domesticbrand dealer sources said Lynk (Geely Automobile Holdings), Havel (Great Wall Motor) and Chang'an (Chonqing Chana'an Automobile) are aginina the most: JV mass-market dealers said all brands are losing and it is hard to anticipate market share shifts; and JV premium dealers said market share is stable and dominated by BMW (Bayerische Motoren Werke), Mercedes-Benz (Daimler) and Audi. Meanwhile, OEMs in all segments reportedly are offering support to help dealers during the pandemic, such as canceling or lowering sales targets, improving financial policies, and offering quick cash rebates.

Restaurants and food delivery services during COVID-19 – US

Grassroots® interviewed restaurant managers in the US to gauge the impact of COVID-19 and shelter-in-place policies on restaurants and food delivery businesses. One hundred percent of sources have closed dining-room service. Among those offering mobile ordering, carryout or delivery, 72% have reduced capacity or hours to some degree, while 28% have not. In addition, among sources offering drive-through service, 92% have reduced capacity or hours to some degree, while 8% have not.

Among sources who cited estimates, overall sales in March 2020 month-to-month decreased an average 47%, and for dining-room service specifically, 100% cited no or almost no sales in March. In addition, 57% reported that mobile or carryout orders in March month-to-month decreased 50% or more, and 48% who offer delivery service said delivery orders decreased 50% or more. However,

17% of sources each said mobile/ carryout and delivery orders in March month-to-month increased slightly, and 67% who offer drive-through service said sales remained flat or decreased slightly.

As to customers' average orders, 57% of sources have not seen any notable change, while 37% cited more items per order, and 3% cited larger average tickets. Regarding operational challenges, 47% said staffing generally is one of the biggest challenges facing their restaurant as a result of COVID-19, 43% said reduced demand, 23% said employee morale, 20% said retaining staff, and 20% said the need for increased cleaning and hygiene vigilance. When asked what delivery services are gaining ground in this environment, 47% of sources cited DoorDash, 40% cited Uber Eats (Uber Technologies), 27% cited Grubhub, and 13% cited Postmates.

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Grassroots® Research is unique to Allianz Global Investors. The Grassroots® Research division combines 7 in-house employees, a global network of over 300 independent, experienced journalists and Field Force researchers, and more than 50,000 industry contacts. We use this network to apply innovative market research and investigative journalism techniques to identify stock and sector trends before our competitors do.

Advantages:

- 30+ years of experience conducting customized investigative market research around the world.
- Utilizes expertise of independent journalists and Field Force Investigators to reach sources on the ground.
- Utilizes technological tools to target consumer and business panels online and to extract alternative data from the Web.
- Continuous exchange of information between Grassroots® analysts and our investment professionals.
- Provides timely business insights via quick turnaround times.

Resources:

- Access to thousands of consumers in more than 60 countries via targeted online consumer and business panels.
- 50,000+ industry contacts worldwide from a wide range of industries, including consumer, technology, healthcare, materials, industrials, energy and financials companies
- 300+ Field Force Investigators who conduct quantitative market research among consumers
- 60+ reporters who conduct interviews with industry experts
- 7 in-house staff in San Francisco, Frankfurt and Hong Kong

Grassroots® Research

Head of Grassroots Research®: Michele Rumfola

Editor / Writer: Heather Sprung

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Allianz Global Investors 555 Mission Street, Suite 1700 San Francisco, CA 94105 USA

USA phone: 415.954.5400

email: grassroots@allianzgi.com online: www.grassrootsresearch.com

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