McKinsey Global Institute

The postpandemic economy

The consumer demand recovery and lasting effects of COVID-19

March 2021

McKinsey Global Institute

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Preface

The COVID-19 pandemic delivered an unprecedented shock to the global economy. The impact on consumers is central to the prospects for recovery as the pandemic recedes, as it eventually will. Understanding how the pandemic has affected consumer demand, the engine of the global economy, and what that means for the recovery is the focus of this research effort. This report is part of a series by the McKinsey Global Institute on the postpandemic economy that includes *The future of work after COVID-19* and *Will productivity and growth return after the COVID-19 crisis?* It builds on McKinsey and MGI's long history of consumer surveys and published reports such as *Understanding Chinese consumers: Growth engine of the world* and *Urban World: The global consumers to watch*.

The research effort for this report was led by Jaana Remes, an MGI partner based in San Francisco, together with Sundiatu Dixon-Fyle, an MGI visiting senior fellow based in London; James Manyika, co-chair of MGI based in San Francisco; Sven Smit, co-chair of MGI based in Amsterdam; Sajal Kohli, a McKinsey senior partner based in Chicago with expertise in retail and consumer markets; and Victor Fabius, a McKinsey partner based in Paris. The project team was led by Anton Nakaliuzhnyi and consisted of Sydney Bub, Maciej Latocha, and Henry Pollock. Eduardo Doryan, Ezra Greenberg, and Soyoko Umeno provided guidance, modeling, analytics, and data support, for which we are very grateful.

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As with all MGI research, this work is independent, reflects our own views, and has not been commissioned by any business, government, or other institution. We welcome your comments on the research at MGI@mckinsey.com.

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In brief

The consumer demand recovery and lasting effects of COVID-19

The COVID-19 pandemic caused an unprecedented consumption shock to the global economy in 2020. But what happens when the pandemic ends? In this report, we examine how the pandemic affected consumer demand in China, France, Germany, the United Kingdom, and the United States and what that means for the recovery. We divide consumers into nine segments based on age and income to determine the size and shape of the consumer demand recovery. We then determine how the mix of consumer demand could evolve and which pandemic-induced behavioral changes are likely to "stick." We find:

The exceptional nature of the shock provides reasons to be optimistic for a fast rebound in consumer spending once the pandemic is over. Unlike previous recessions, this one involves no consumer debt overhang, bursting asset price bubbles, or long-term business cycle fluctuations. The sudden and deep drop in consumption across China, the United States, and Western Europe, ranging from 11 to 26 percent, resulted mainly from cutbacks to in-person services, especially travel, entertainment, and dining. These categories have been growing steadily, and consumer surveys indicate a likely strong demand rebound once the pandemic ends. The ten- to 20-percentage-point spike in the savings rate in the United States and Western Europe in 2020 (a doubling in the United States) left many households in a strong position to spend. China's consumer spending recovery after controlling the COVID-19 virus is another reason for optimism.

But the recovery is likely to be uneven, especially in the United States, as higher-income households emerge largely unscathed financially, while lower-income households have lost jobs or face income uncertainty. Our analysis indicates a strong but unequal consumption recovery in the United States with variations among income and age segments and a more balanced although slower recovery in Europe. Demand from high-income households, which accounted for two-thirds of the consumption drop and roughly half of the savings increase in the United States, will be key to the strength and speed of the recovery. However, young and low-income households, disproportionally working in hard-hit service-sector jobs and occupations with accelerated digitization and automation, are likely to face purchasing power constraints when government stimulus ends. As a result, we may see widening polarization of consumer demand and an increase in inequality, especially in the United States.

The pandemic will leave lasting marks on consumer behavior as long-standing habits—more spending on services, greater digital adoption, and more time and money spent out of the home—have been interrupted, accelerated, or reversed. To determine whether these pandemic-induced behaviors might stick, we examined consumption shifts across consumer life using our stickiness test that takes into account actions by consumers, companies, and governments. The pandemic accelerated the adoption of digital products and services with a step change in healthcare, a near doubling of online grocery shopping, and widespread adoption of streaming services that will continue. Additionally, home nesting will remain an enduring lifestyle for many, facilitated by consumers' elevated rates of investment in home improvement and continuing opportunities to work from home, all of which have broadened the definition of home to include work, fitness, and entertainment. Our analysis indicates other behaviors that were interrupted—leisure air travel, in-person education, and in-person dining—will resume but with modifications like contactless restaurant menus or selective use of digital tools in education.

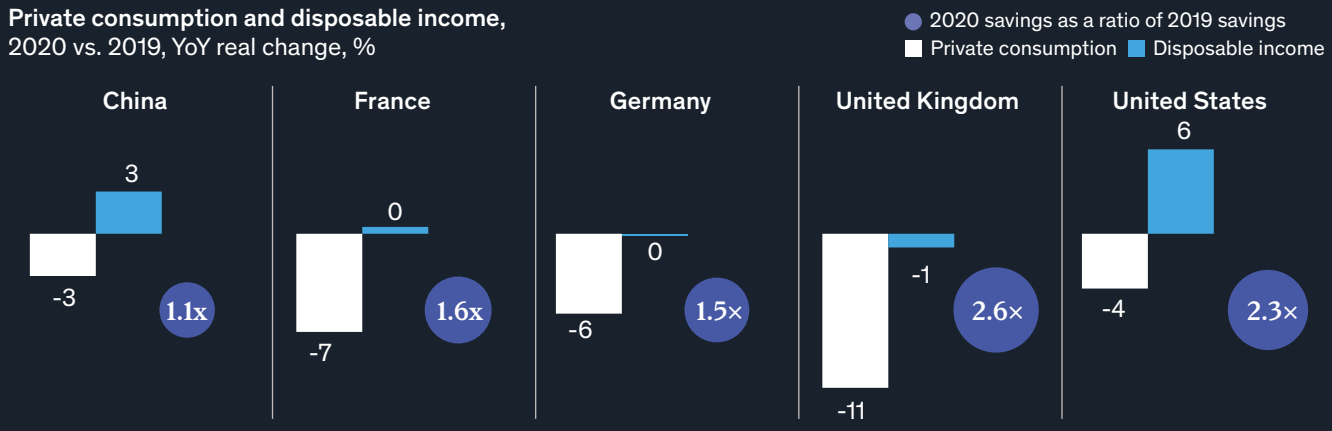
While the consumer drivers we identify in our stickiness test—value, experience, and investments—are critical in determining what behavior will persist, company and government actions matter at least as much. Wider adoption of work from home may reduce business air travel by as much as 20 percent and that will have an impact on the routes and flights available for leisure travelers. In entertainment, where box office revenue globally in 2020 was only 20 to 35 percent that of 2019, our analysis indicates a lasting drop in demand for movie theaters, due to the likelihood of permanent theater closures and the shift to digital channels by movie studios. Government regulations surrounding virtual healthcare provisioning will largely determine how much consumers use telehealth.

Companies and governments face challenges from an uneven consumer demand recovery and lasting effects of the pandemic, such as changes to the competitive landscape and increasing inequality. In preparation, companies could determine how a segmented rate of recovery, varying degrees of stickiness of consumer behaviors from COVID-19, and emerging innovations, business model changes, and a reshaped competitive landscape will affect their product and service offerings. Governments will face many challenges—finding the right balance of macro policies to support the consumer demand recovery, adjusting regulations in consumer markets to keep up with changes, and addressing lasting marks from the pandemic, especially on inequality.

What will happen to consumer spending and behavior when the pandemic ends?

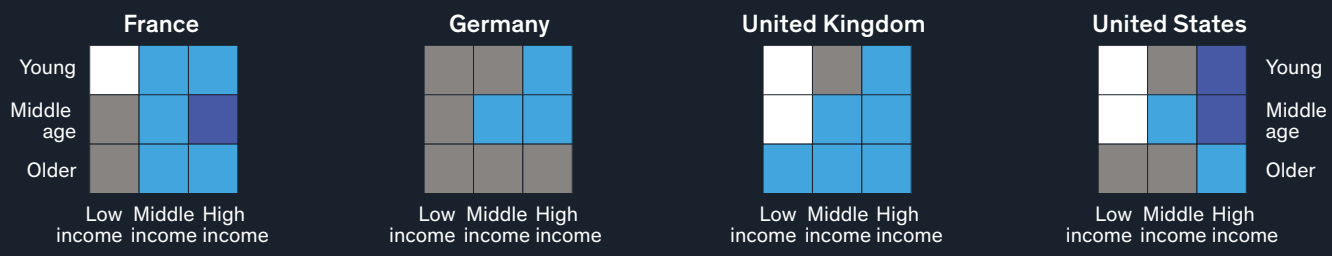
There are reasons for optimism for a strong recovery as many households maintained income but were not able to spend, increasing savings

Private consumption and disposable income, 2020 vs. 2019, YoY real change, %

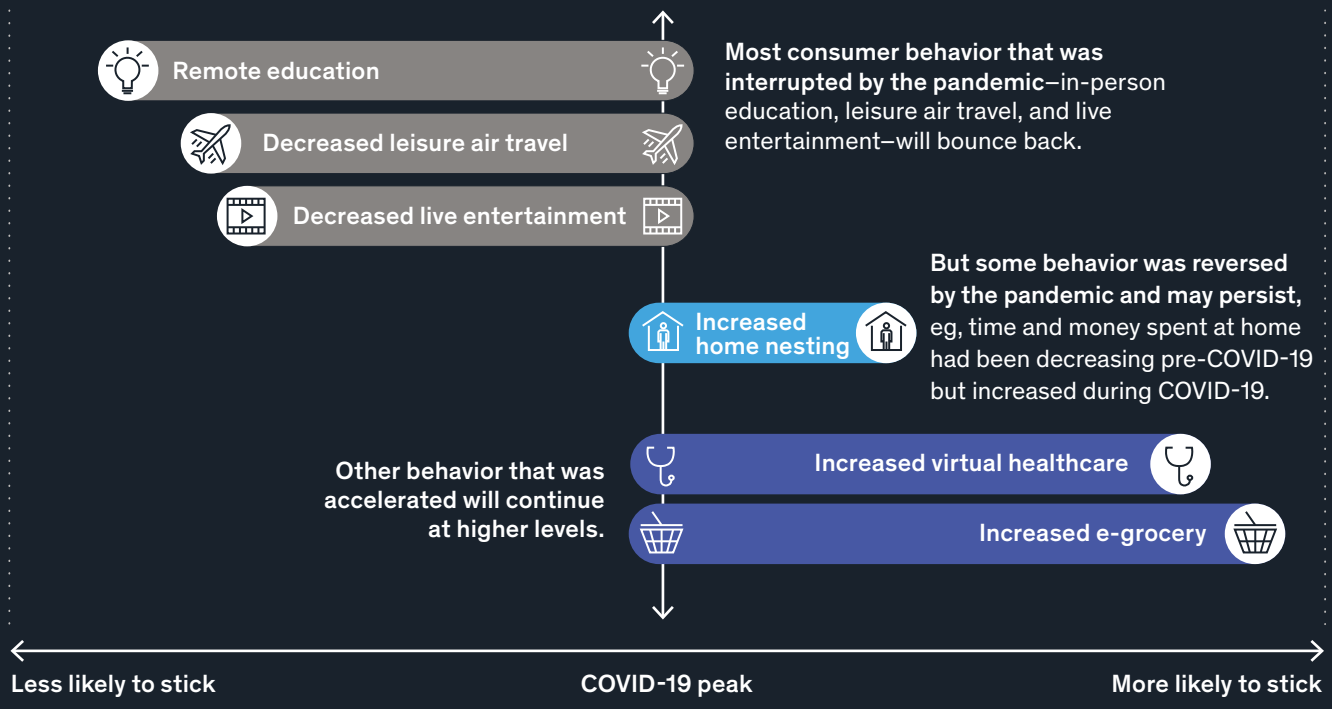


But the recovery in consumer spending will be uneven ...

Recovery of real consumer spending by segment vs. overall spending recovery, compared with pre-COVID-19 levels



... and consumer behavior will change in lasting ways.



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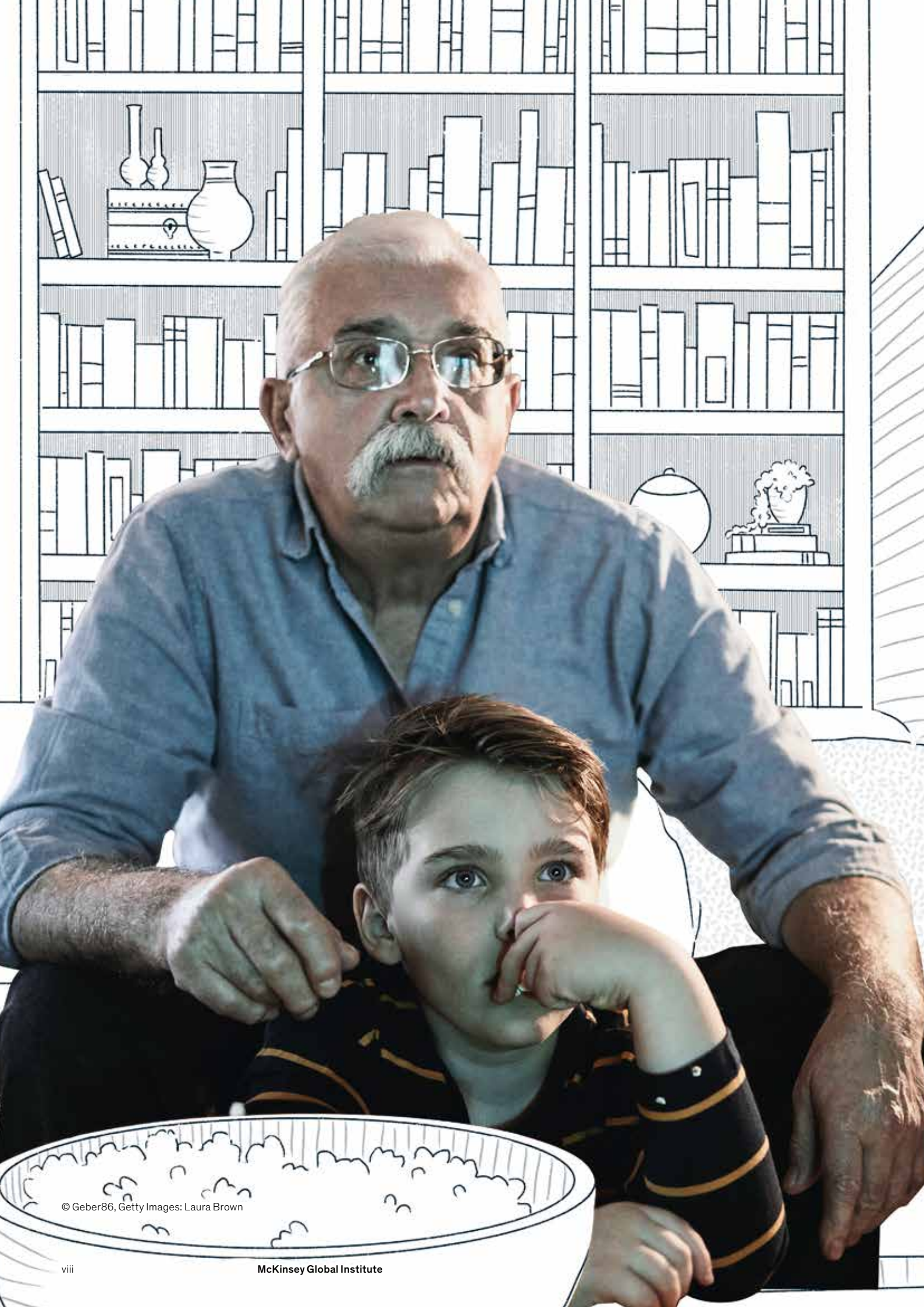


Executive summary

The COVID-19 pandemic brought on an economic pandemic, unprecedented in scale. And just as the coronavirus has affected regions and individuals in vastly different ways, the impact on economic health has also been very uneven. Restaurants and bars, travel and tourism, sports and performing arts have been among the hardest hit, while grocery and liquor stores, movie streaming platforms, and delivery and shipping industries have been booming. Employees able to work from home have maintained jobs and income, accumulating more savings as their consumption dropped; others lost jobs and income or closed down businesses and have struggled to pay the bills. Across countries, the pandemic has forced consumers to change long-standing habits, companies to abruptly transform business models, and governments to adjust regulations to keep up with a world in flux. While there is reason to be optimistic for a robust recovery in consumer spending once the COVID-19 virus is controlled due to pent-up demand and a significant accumulation of savings, the pandemic, like other crises, will leave a lasting mark. Understanding what that means for consumer behavior and the recovery in consumer spending is the focus of this report.

In our analysis, we focus on France, Germany, the United Kingdom, and the United States, where we divide consumers into nine segments based on age and income to analyze pre-COVID-19 trends and the impact of COVID-19 in order to determine the size and shape of the consumer demand recovery. Additionally, we analyze consumption patterns in China, including China's consumer demand rebound in 2020, as a case study for the consumer recovery. To understand what COVID-19 behaviors might stick, we complemented our macro analysis with a micro analysis of six case studies that cover a broad spectrum of consumer life, were material in time and money spent by consumers, and were affected by the pandemic in 2020. These cases include e-grocery shopping, entertainment, home nesting, leisure air travel, remote education, and virtual healthcare. To determine what might change and what might remain the same, we created a stickiness test that takes into account not only consumer preferences but also the role of industry and government in shaping consumption patterns.

There are reasons to be optimistic for an initial strong rebound in consumer spending once the pandemic is over, although uncertainty remains over timing

Typically, past downturns have involved business cycle fluctuations, consumer debt overhang, or bursting asset price bubbles. None of those factors were present during the 2020 recession. Instead, the COVID-19 pandemic caused an almost immediate consumption shock from consumers' fear of the virus and the forced shutdown of some entire industries.[1] That means an effective vaccine rollout to bring the pandemic to an end could restore consumer demand to prepandemic levels, fueled by rising consumer confidence, pent-up demand, and accumulated savings.

The decline in consumer spending in 2020 was steep, quick, and mostly in consumer services, setting the 2020 recession apart from previous economic contractions (Exhibit E1). Consumer spending in the United States and major Western European economies (France, Germany, and the United Kingdom) declined between 11 and 26 percent in second-quarter 2020 versus fourth-quarter 2019.[2] The drop in consumption was by far the largest since the 1930s Great Depression in the United States and since World War II in Europe. For the United States, the 11 percent consumption drop from peak to trough during 2020 was about five times

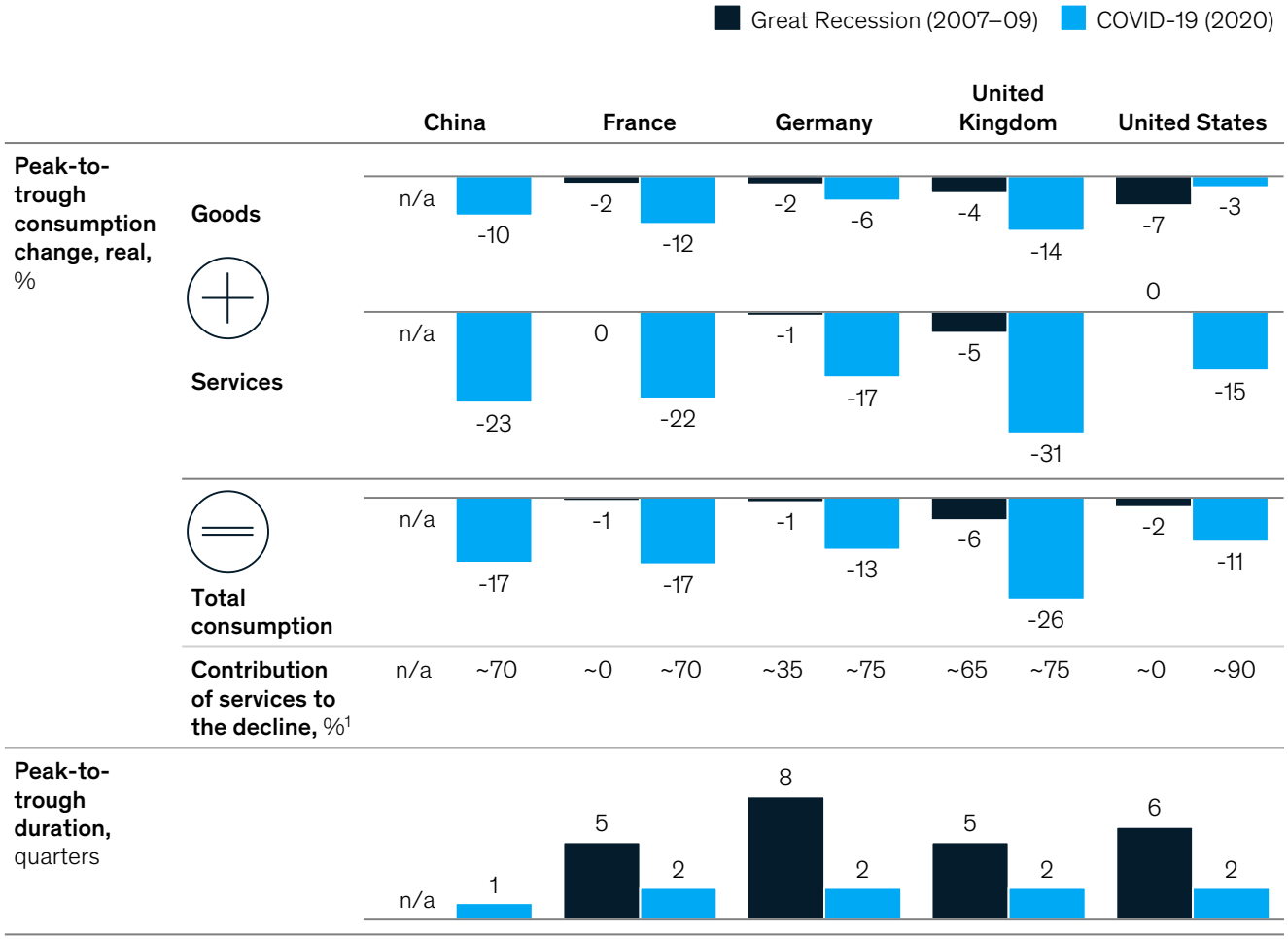
[1] US research suggests that health concerns had an even bigger impact on consumer activity than lockdown measures. See, for example, Austan Goolsbee and Chad Syversonet, "Fear, lockdown, and diversion: Comparing drivers of pandemic economic decline," NBER working paper number 27432, June 2020.

[2] Throughout this report, we often use shorthand for these three major Western European economies we analyzed (France, Germany, and the United Kingdom) and refer to them as "Western Europe."

higher than the 2 percent decline during the Great Recession of 2007 to 2009.[3] Another difference was the speed of the decline: it took a year and a half to reach the consumption trough in the United States during the Great Recession, compared with only two quarters for the contraction induced by COVID-19. Furthermore, the decline in consumer spending occurred primarily in services, such as dining, accommodation, and travel, which contributed 70 to 90 percent of the second-quarter blow to consumer spending in China, the United States, and Western Europe.[4]

Exhibit E1

The consumption shock was triggered by lockdowns and health fears that severely curtailed spending on services, setting it apart from past recessions.



1. Estimated based on data in constant prices; actual contribution in current prices can differ due to different inflation of goods and services.
Note: Peak-to-trough based on quarterly consumption data. For Great Recession, dates vary across countries. For COVID-19, assumed peak in Q4 2019 and trough in Q2 2020 (Q1 2020 in China). Figures may not sum to 100% because of rounding.
Source: BEA; Eurostat; NBS; Oxford Economics; McKinsey Global Institute analysis

In China, the consumption drop in first-quarter 2020 was also severe, about 17 percent. However, public health initiatives brought the pandemic largely under control by the end of the first quarter of 2020, spurring a recovery in consumer spending that has continued since.[5] Services as a share of consumer spending started to recover once restrictions were lifted, yet

[3] Peak-to-trough calculated quarterly for COVID-19 and the Great Recession, but annually for the Great Depression (1929–33) because of data limitations (quarterly peak-to-trough drop would be higher). Data from US Bureau of Economic Analysis (BEA).
[4] Data from BEA, Eurostat.
[5] Timing of the pandemic varies by country, and in this report we often refer to pre-COVID-19, spring COVID-19 peak, and postpandemic. For China this means: fourth-quarter 2019, February 2020 (or first quarter), and second quarter (or specifically May 2020 onward). France: fourth-quarter 2019 through February 2020, March–April 2020, and no postpandemic yet. Germany: fourth-quarter 2019 through February 2020, March–April 2020, and no postpandemic yet. United Kingdom: fourth-quarter 2019–February 2020, April 2020 (or second quarter), and no postpandemic yet. United States: fourth-quarter 2019 through early March 2020, April 2020 (or second quarter), and no postpandemic yet.

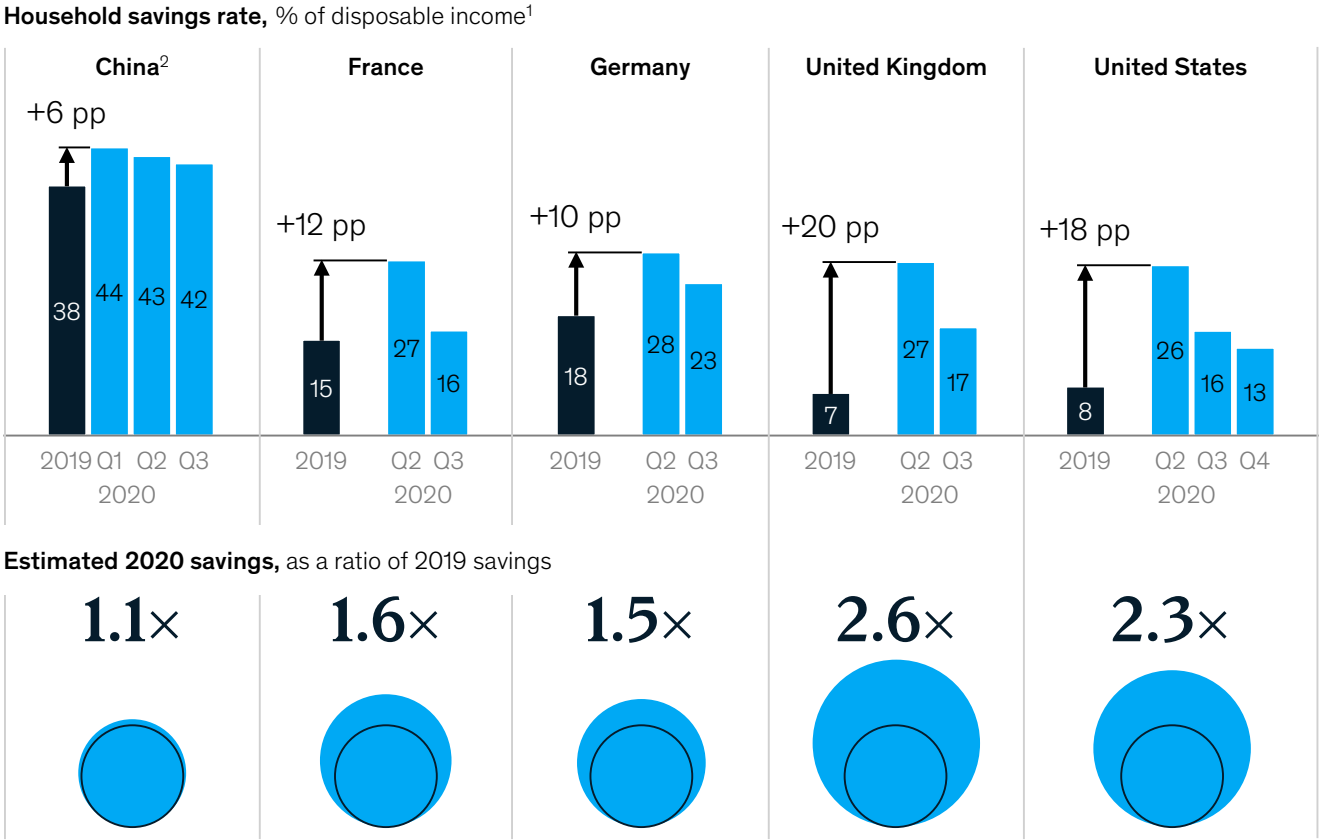
still remain below pre-COVID-19 levels. According to government data, the share of services for the full year 2020 was 50.1 percent, compared with 53.6 percent the previous year.[6] China's experience provides further reason for optimism that the consumption shock can be reversed when the pandemic is controlled.

A large share of the consumption decline came from high-income households (more than two-thirds in the United States). Since most high-income households were able to continue working, many from home, they accumulated greater savings while their consumption was restricted by the pandemic. The savings rate of US households in 2020 more than doubled compared with the previous year, almost all driven by high- and middle-income households. In Western Europe, based on third-quarter data, the 2020 savings rate could more than double in the United Kingdom and increase by about a half in France and Germany because of a less severe consumption drop and initially higher savings rates (Exhibit E2).[7] Many households are in a strong economic position to spend once the pandemic is controlled.

There is little doubt that in the short term, the timing of the recovery in consumer spending will be determined by the trajectory of the pandemic. At the beginning of 2021, the vaccine rollout was under way in the United States, Europe, and China; however, there was considerable uncertainty stemming from the ability of countries to quickly and efficiently vaccinate their citizens as well as the resilience of more aggressive strains of the virus to the vaccine (see Box E1, "Our macro methodology and key assumptions").

Exhibit E2

Spending restrictions boosted savings in 2020, more than doubling US and UK household savings from 2019.



1. Q4 2020 available for United States only. Q1 2020 presented for China only because of earlier outbreak of COVID-19 pandemic.
2. China officially reports savings rate as gross domestic savings as a % of GDP. In order to assure comparability with other countries, Chinese savings rate was estimated based on disposable income and private consumption sourced from Oxford Economics.

Note: Full-year saving amounts calculated as difference between disposable income and private consumption (excl nonconsumption expenses such as fines or donations) based on Oxford Economics baseline forecast as of January 2021; for United States actual BEA figures used.

Source: BEA; Eurostat; Oxford Economics; McKinsey Global Institute analysis

6 The National Bureau of Statistics of China.
7 For more detail about savings, see chapter 1.

Box E1

Our macro methodology and key assumptions

In this report we divide consumers into nine segments based on their disposable income and age, as both criteria shape the size and structure of consumption. We do this for four countries: France, Germany, the United Kingdom, and the United States. For income, we took a distribution-based approach and classified households into low-income (first and second quintile), middle-income (third and fourth quintile), and high-income (fifth quintile).[1] For age, we divided households into three groups based on head-of-household age.[2] By cross-tabulating income and age criteria, we arrive at nine consumer segments that we use to assess the shape of postpandemic consumption.[3]

Our main objective was to understand how consumer demand by segment was likely to recover after the pandemic. To do this, we needed to make assumptions about disposable income, savings, and consumption mix evolution as well as behavioral assumptions about the likely consumption rebound after the pandemic ends. We relied on McKinsey's economic scenarios developed in collaboration with Oxford Economics as the basis for our macroeconomic assumptions.[4] Those scenarios provide a range of key aggregate variables related to consumer spending (for example, disposable income, employment, private consumption) and are developed based on a set of assumptions regarding virus control and economic response to the crisis. In this report, we focus on three scenarios—A1, A2, and A3—all of them assuming no structural damage to the economy, yet a different pace of recovery.[5]

While we have taken a scenario approach given the high degree of uncertainty surrounding the trajectory of the virus, the extent of government stimulus, the extent of perceived health risks, and the level of precautionary savings, risks to these scenarios remain. However, while forecasts presented in this report might change in terms of pace of the recovery, conclusions regarding the underlying drivers and relative performance of consumer segments are likely to remain broadly unchanged.

Our aggregate income and consumption projections to 2024 do not explicitly consider the impact of changes in the mix of disposable income sources (wages, assets, or transfers), nor make assumptions about the impact of changes in consumption mix on specific consumer segments. In our savings calculations, we focus on the difference between household disposable income and consumption, neglecting non-consumption expenses such as transfer payments, fines and interest payments given their small size and stability over time—about 4 percent of consumption value over the past decade in the United States. Lastly, we did not analyze the impact of the pandemic on household assets and net worth.

1 Because of data limitations, US income groups have been defined based on constant gross household income brackets. Low income, <$40,000; middle-income, $40,000–$100,000; high-income, >$100,000. In 2018, those groups reflected 39 percent, 35 percent, and 26 percent of households, respectively.

2 Head of household is defined as a person with the highest income living in a given household. We distinguished three age cohorts: young (<35, for the United Kingdom only <30), middle age (35–64, United Kingdom 30–64), and older (65+).

3 All historical values and projections in this report are shown in real terms (in constant prices) in order to exclude inflation uncertainty and present conclusions in terms of real purchasing power of consumers.

4 For details about the scenarios, see Sven Smit, Martin Hirt, Kevin Buehler, Susan Lund, Ezra Greenberg, and Arvind Govindarajan, "Safeguarding our lives and our livelihoods: The imperative of our time," March 2020, McKinsey.com.

5 Within this range, A1 is the most conservative scenario, assuming medium effectiveness of both health and economic response. This translates into controlling the adverse health impacts by around mid-2021, followed by acceleration of economic growth toward the end of the year. The A2 scenario assumes a more effective economic response, leading to an earlier acceleration of economic growth, while A3 is the most optimistic, assuming earlier virus control (that is, through effective rollout of the vaccination process), resulting in a steeper growth path already in 2021. The range of A1 and A3 scenarios is consistent with baseline forecasts of IMF, Oxford Economics, and the OECD. See the end of chapter 1 for details about our macro methodology, and for details on McKinsey's economic scenarios developed in collaboration with Oxford Economics and underlying assumptions, see "Safeguarding our lives *and* our livelihoods," McKinsey.com, March 2020; and Nine scenarios for the COVID-19 economy, McKinsey.com, January 2021.

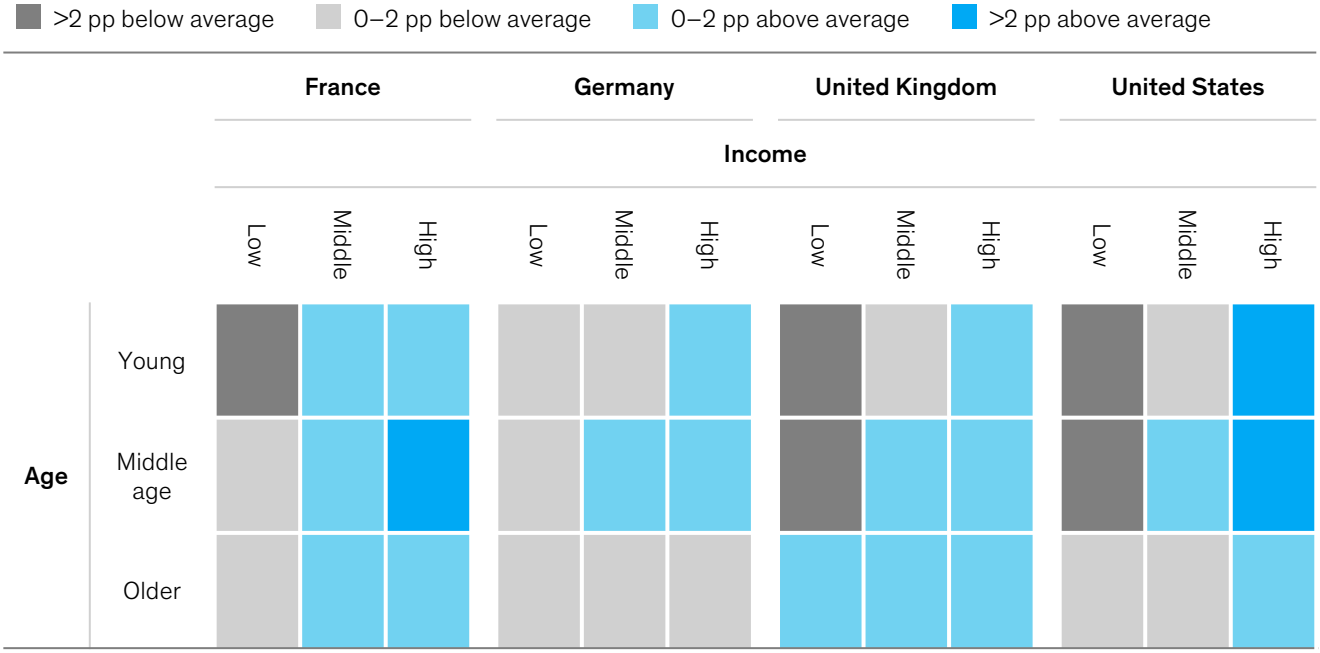
Once under way, the consumer demand recovery is likely to be faster but more uneven in the United States than in Europe

Assuming the pandemic is brought under control, our analysis points to a strong recovery in the United States, reinforced by historically large economic support in the form of direct stimulus payments to households and businesses in 2020 and an additional $1.9 trillion in 2021. However, once stimulus measures expire, the recovery in consumer spending is likely to become unequal among income segments and lead to greater polarization of consumption (Exhibit E3). Spending by middle- and high-income cohorts is likely to bounce back to pre-COVID-19 levels between 2021 and 2022, while spending by low-income cohorts could drop below pre-COVID-19 levels once stimulus measures expire.[8] Consumption is expected to shift toward older and richer segments, because of both a growing share of the population over 65 and a slower postpandemic recovery for low-income cohorts. However, we emphasize, this is highly dependent on how quickly health risks recede with vaccinations and whether governments provide further economic support.

Exhibit E3

The recovery in consumer spending is likely to be more uneven between income and age cohorts in the United States than in Europe.

Recovery of real consumer spending by segment, vs aggregate (average) spending recovery in a given country, compared with pre-COVID-19 levels, percentage points



Total consumer spending, 2024 vs 2019, cumulative change vs A1–A3 scenario range, %

	France	Germany	United Kingdom	United States
Real (constant prices)	+3 to +9	+3 to +6	-1 to +4	+6 to +11
Nominal (current prices)	+10 to +19	+9 to +15	+4 to +13	+14 to +23

Note: Segmentation differs across countries due to data limitations. We classify households into low-income (Europe, 1st–2nd quintile; United States, below $40,000 per year), middle-income (Europe, 3rd-4th quintile; United States, $40,000-$100,000 per year), and high-income (Europe, 5th quintile; United States, $100,000+ per year). For age, we divided households into 3 groups based on head of household age: young (<35, United Kingdom <30), middle age (35–64, United Kingdom 30–64), older (65+). For more detail see Box E1, "Our macro methodology and key assumptions."

Source: McKinsey economic scenarios developed in collaboration with Oxford Economics, November 2020; McKinsey Global Institute analysis

[8] Fiscal stimulus in 2020 in the United States consisted in large part of payments directly to citizens in the form of stimulus checks and increased unemployment benefits, successfully helping support spending by low-income households who might have been laid off work. Additional support in 2021 may help maintain consumption levels of low-income households in the very near term. Our recovery forecasts to 2024 reflect the slowing prospects for jobs recovery for this segment because of labor market friction and accelerated automation. See chapter 1 for more extensive discussion.

We expect a slower but more balanced recovery in Europe, with less pronounced inequality than in the United States, although low-income cohorts will likely recover more slowly without additional government stimulus. As short-time work programs have helped to protect employment (although with shorter working hours), there is a higher chance for employees to maintain their jobs and avoid a drop in disposable income in 2021.[9] In addition, the stronger safety net (including more stable employment contracts and more expansive labor protection) as well as mechanisms to protect low-income segments will support the recovery of discretionary consumption.[10] On the other end, high-income consumers did not experience as large an increase in savings as in the United States and the consumption drop was more severe in Europe. As a result, high-income households may not accelerate their spending as quickly as in the United States, in line with past recoveries including the one following the Great Recession. Because of increased economic uncertainty, savings rates are expected to remain slightly elevated after the pandemic, a pattern observed after past downturns.[11]

But there are country variations: Germany, with initially the most effective COVID-19 response (both health and economic) and a strong labor market in both the service and industrial sectors, may recover first, followed by France and the United Kingdom. However, the United Kingdom could recover faster if it maintains the pace and effectiveness of its vaccination campaign, which in early 2021 was by far the fastest in Europe.[12]

Once the virus is brought under control and reopening is under way, three main factors will determine the strength and sustainability of the consumer demand recovery: the willingness to spend by high-income households, income constraints on low-income cohorts, and what happens to savings.

The unequal consumption impact of the pandemic makes high-income households the ones to watch for the near-term consumer demand recovery across all countries we analyzed.[13] As those consumers have experienced much more limited, if any, income constraints during COVID-19, their consumption recovery depends mainly on lockdown measures and travel restrictions being lifted as well as confidence to travel, dine out, and socialize in person. This is the segment that will determine both the speed of recovery and pandemic-induced behavioral changes in the 2021 consumption path.

The low-income, working-age population is much more likely to experience a sustained reduction in purchasing power from disruptions to income because of pandemic lockdowns and business closures, which could act as a drag on consumer demand in the recovery. Government stimulus in the United States and Western Europe helped counter the near-term impact from service-sector job losses to varying degrees, and the rebound in high-income household spending will fuel service jobs growth, helping low-income households. However, the question remains if further stimulus measures will be sufficient to support low-income consumption until economic activity fully recovers. The acceleration of digitalization and AI is likely to slow down the return of service jobs and low-wage jobs, which may contribute to both slower consumption growth and the polarization of consumption.[14] Because low-income households have a higher propensity to consume, growing income inequality will slow down

[9] However, there is uncertainty over what might happen to jobs once government support is withdrawn.

[10] Government support programs in response to the COVID-19 pandemic have been unprecedented in scale both in the United States and Europe. Those programs have largely protected disposable income of households, but differed in terms of approach. The United States focused on protecting income through direct transfers, while European countries focused on protecting jobs (by subsidizing salaries). See *COVID-19 has revived the social contract in advanced economies—for now. What will stick once the crisis abates?* McKinsey Global Institute, December, 2020.

[11] See chapter 1, Box 2, "A closer look at savings."

[12] "Statistics and research: Coronavirus pandemic (COVID-19)," Our World in Data. As of February 16, 2021, the number of cumulative COVID-19 vaccination doses administered per 100 people was 24.3 in the United Kingdom, 16.7 in the United States, 5.3 in Germany, and 4.9 in France. Note that the number may not equal the total number of people vaccinated, depending on the specific dose regime (for instance, multiple doses).

[13] For example, 20 percent of the wealthiest US households represent about 39 percent of total consumption. In France, the top 20 percent of households by income represent 30 percent of consumption, in Germany they represent 36 percent of consumption and in the United Kingdom 34 percent. For more details, see US Bureau of Labor Statistics Consumer Expenditure Survey, 2018, and national statistical offices in Europe (Destatis, INSEE, ONS).

[14] See *The future of work after COVID-19,* McKinsey Global Institute, February 2021. In particular, this report finds that low-wage jobs are likely to be disrupted the most after the pandemic.

consumption growth; this was evident before the pandemic.[15] For example, we calculate that if the income distribution in 1990 in the United States had remained unchanged (instead of becoming more unequal), US consumption in 2019 would have been more than 3 percent higher or around $450 billion.[16]

What happens to savings accumulated during the pandemic as well as the extent of continued precautionary savings behavior will also impact consumption. What middle- and high-income households do with their accumulated savings (over $1.6 trillion more savings in the United States in 2020 compared to 2019 and about $400 billion more in Western Europe) after the pandemic—consume, hold, invest, or repay debt—will have an impact on the consumption recovery.[17] The investments made in real estate or other long-term assets do not have a large direct multiplier effect and may take years to add to aggregate consumption.

The pandemic will leave lasting marks on consumption, not just from shifting behaviors but also from industry and government actions

Long-standing consumer habits—more money spent on services, greater digital adoption, and more time and money spent out of the home—have been interrupted, accelerated, or reversed during the pandemic. To determine whether these pandemic-induced behaviors are likely to stick, we examined six consumption shifts that cover a broad range of consumer life and are drawn from sectors that cover almost three-quarters of consumer spending.[18] These include an acceleration of e-grocery shopping, a sharp decline in live entertainment, the emergence of home nesting (that is, spending on items such as home gyms, backyards and gardens, and kitchen equipment), a decrease in leisure air travel, a switch to remote learning, and an increase in virtual healthcare visits. Based on our case study findings, we developed a "stickiness test" that identifies factors that determine whether a behavior will persist (see Box E2, "Our stickiness test"). Focusing on the period 2020 to 2024, we determined whether each of our case study behaviors would stick in our sample of major economies: China, France, Germany, the United Kingdom, and the United States.

We found that e-grocery shopping, virtual healthcare visits, and home nesting were likely to stick while remote learning, declining leisure air travel, and decreasing live entertainment would likely revert closer to prepandemic patterns (Exhibit E5). Overall, we found that while consumer value, experience, and investments are critical in determining what behavior will stick, company and government actions matter at least as much.

Across our case studies, we found that an important precondition for stickiness is adequate infrastructure. Typically infrastructure is defined as basic physical and organizational structures and facilities, such as buildings, roads, and power supplies, needed for the operation of an enterprise or society. How adequate infrastructure is can affect consumer, industry, and government response in determining the stickiness of behaviors. For example, in the case of consumers, reliable internet access played a role in determining whether consumers had a good or bad experience with remote learning and ultimately whether they are willing to try it again. In the case of industry, it could apply to supply chains and the network of third-party relationships. For example, in e-grocery, those companies with established delivery relationships were able to respond to the new environment quickly and effectively, determining the choices consumers had. In the case of government, infrastructure policy can enable and support consumption. For example, comprehensive digital infrastructure is key to virtual healthcare access for everyone. In our analysis, we took into account the existing state of infrastructure as it related to consumers, industry, and government, while analyzing key stickiness indicators.

[15] The BLS Consumer Expenditure Survey shows that low-income households' propensity to consume is higher than for high-income ones, therefore a higher concentration of disposable income across more affluent segments results in lower aggregate consumption.

[16] Due to lower propensity to consume of high-income households. Calculation assuming 2018 propensity to consume for each income segment.

[17] Data from US Bureau of Economic Analysis. For Europe, MGI estimates based on Oxford Economics baseline forecast as of January 2021; calculated as 2020 savings less 2019 savings.

[18] "Personal Consumption Expenditures by Function," Table 2.5.5, BEA, 2019.

Box E2

Our stickiness test

To evaluate behavioral stickiness, it is important to understand shifting dynamics across three broad categories: consumer response (for example, do consumers find value in it? How satisfied are they with the end-to-end consumption experience? Have they made durable investments?), industry response (How have companies responded? What is the impact of underlying or emerging industry structure?), and the role of government (Has the government provided economic support? What is the impact of regulations?). Exhibit E4 shows the full framework.

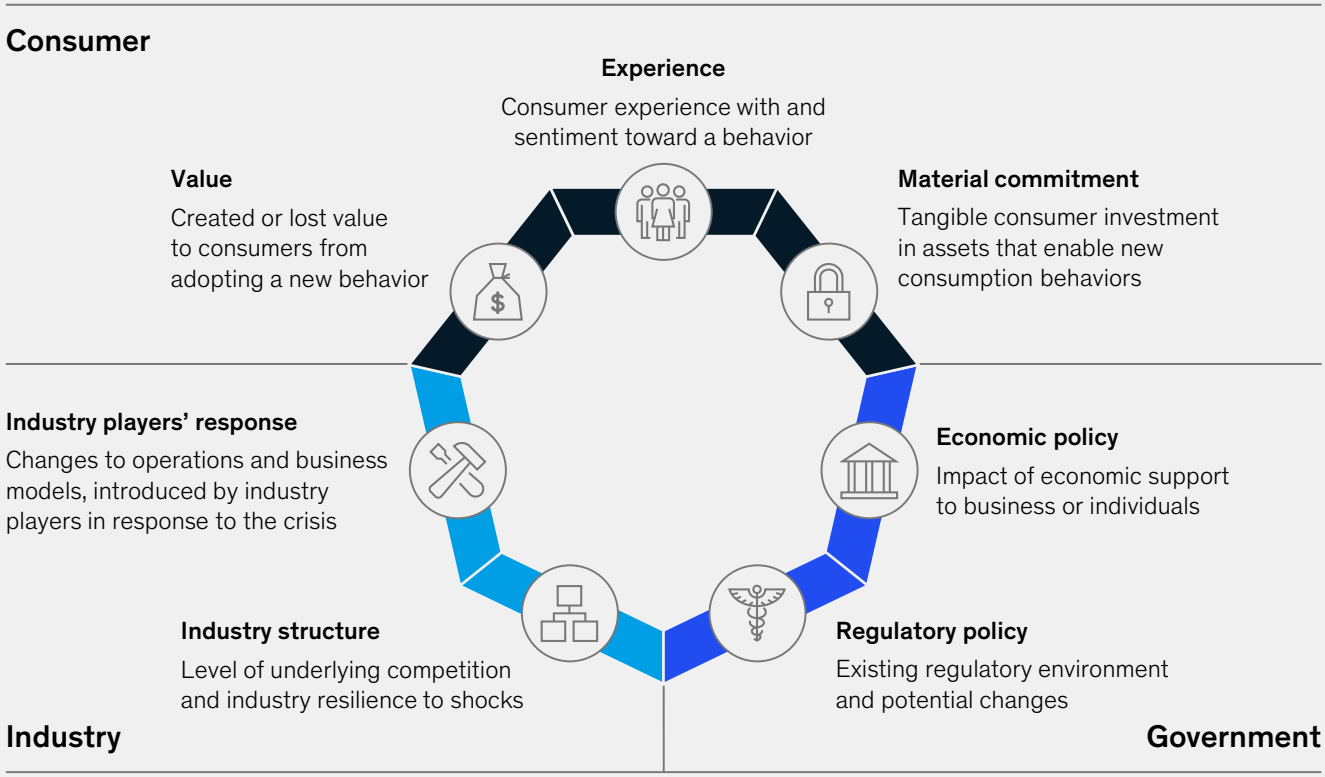
For each category, we have identified a set of key indicators to understand the forces at play behind behavior. These indicators are as follows:

Consumer response

- **Value.** How much value consumers perceive as gained or lost when they adopt a new behavior is critically important to its long-term stickiness. For consumers, value is often evaluated in relation to prior behaviors and alternatives. For example, leisure air travelers have experimented with alternatives to flying for vacations and visiting family for holidays during the pandemic, but these are poor replacements for the real thing.
- **Experience.** Consumer experience with a behavior is also critical to long-term stickiness. Beyond the inherent value of new habits, the end-to-end experience, from ease of purchase to the simplicity of use and the efficacy of the product or service in satisfying consumer needs, matters greatly. For example, many households have enjoyed the ease and expanded selection of digital entertainment at home, while remote K–12 education has been broadly criticized as inadequate compared with in-person learning.[1] And as with other components of stickiness, the underlying infrastructure plays a role in consumer experience, as the limitations of digital and other infrastructure shape how consumers can and do interact with new products and services.
- **Material commitment.** Another driver of stickiness is consumer investment in assets that enable consumption behaviors. For example, many households have

Exhibit E4

MGI's stickiness framework predicts whether changes in consumer behavior will last and takes into account the impact of industry and government actions on consumer choice.



Source: McKinsey Global Institute analysis

[1] Haley Apel, "Survey finds remote learning gaps in US elementary schools," Nebraska College of Education and Human Sciences, August 31, 2020.

invested in home offices or gyms or upgraded gaming devices during the pandemic.[2] Those investments in fitness equipment and multiple months of building an at-home exercise habit are likely to impact the willingness of some past gym members to renew their membership once the pandemic is over.

Industry response

— **Industry players' response.** In response to the COVID-19 pandemic, companies across industries were forced to very quickly adjust their operations and business models. How well they responded to the new challenges shaped consumer choices and experience. While in many cases, industry players responded with new products and services, some less obvious responses, such as increased supply chain resilience, also played a role. For example, in e-grocery, discounters had limited online capabilities before COVID-19, and their lean model impaired efforts to rapidly stand up new capabilities or pushed them to outsource e-grocery to third-party logistics players, albeit at a cost. Mainline grocers (especially major urban players), on the other hand, already had an online presence and delivery relationships and were ready to take advantage of the demand expansion.[3]

— **Industry structure.** Industry structure, the nature of competitive dynamics and changes in competition, broad availability of distribution and consumption models, and the underlying resilience to shocks induced by COVID-19 have implications for consumers' choices in the future. For example, in entertainment, movie studios responded to consumer apprehension about in-person entertainment by bypassing traditional distribution channels with a direct-to-consumer model.[4] Reduction in business air travel is putting pressure on airline profitability and may lead to higher prices or reduced routes available for leisure air travelers.[5]

Role of government

— **Economic policy.** Economic policy choices, including pandemic-related economic support to businesses and individuals, often impact consumption both directly and indirectly. For instance, $25 billion of the $2 trillion CARES Act stimulus infusion in the United States softened airlines' initial economic pain.[6] In contrast, independent live entertainment venues have been hard hit, yet did not initially receive industry-specific government support in 2020, likely causing long-term changes in supply options for consumers.[7] *Billboard* reported that more than 90 independent venues in the United States were forced to permanently close as of September 2020.[8] The situation in Europe was similar, with Live DMA reporting that its 2,600 members, which include subsidized private nonprofits and government-supported entities, earned only about a third of anticipated total 2020 revenues.[9] Finally, the indirect impact of infrastructure policy also plays a role in consumer life. For instance, at least 39 states pledged to use CARES Act funding for infrastructure development, focused on bridging the digital divide in education.[10]

— **Regulatory policy.** Existing and future regulatory policy is also an important facet of stickiness. For instance, in response to the pandemic, the US government was quick to allow previously limited reimbursement of telehealth services, facilitating virtual healthcare visits.[11] Similarly, the US government initially limited Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) payment use for online grocery purchasing to selected retailers in certain states. However, it is now rolling the program out to additional markets, facilitating greater adoption of e-grocery after a bumpy start.[12]

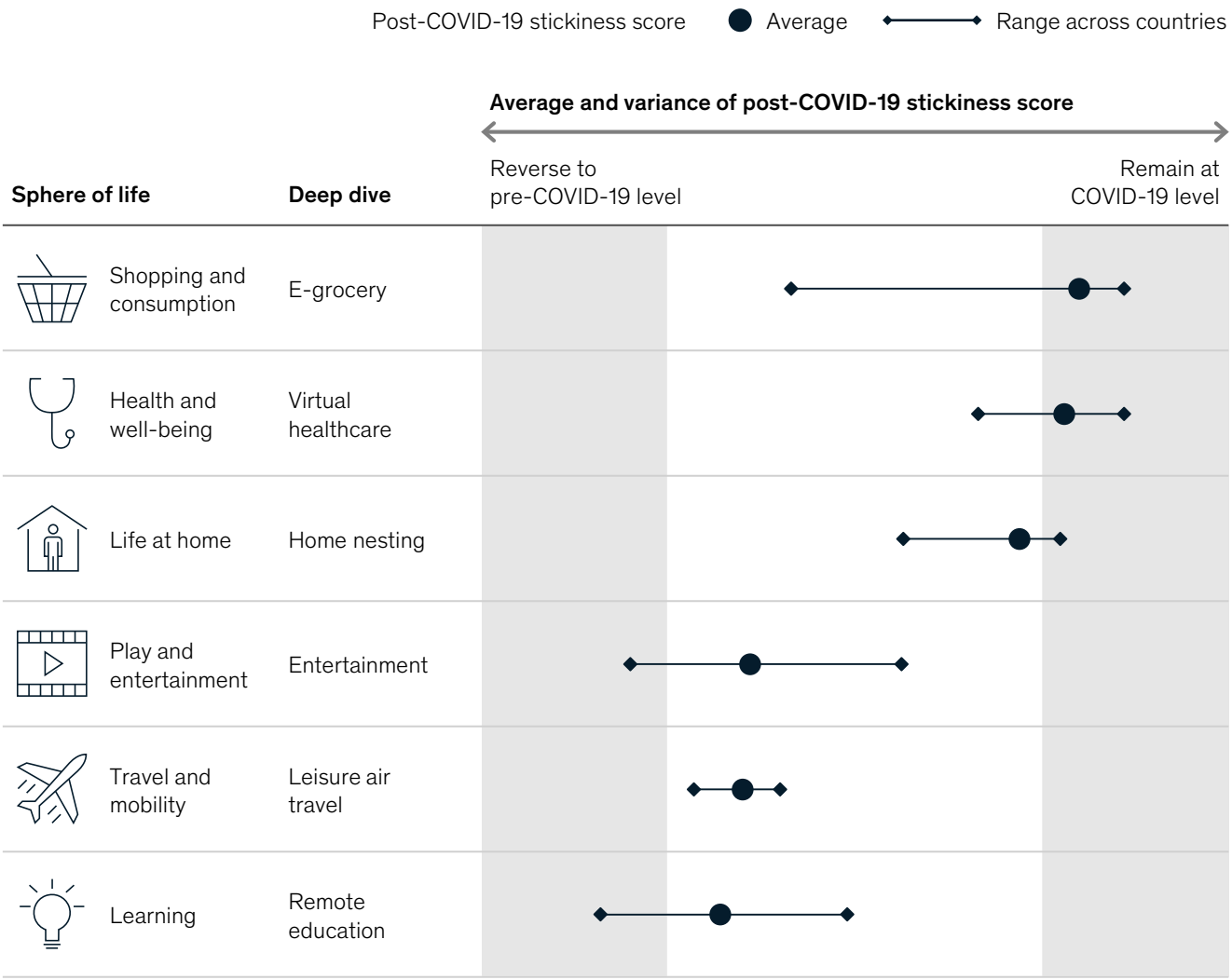
Across our five countries, for each of the factors outlined above, we assess the extent to which a factor increases the likelihood of lasting change, decreases the likelihood of lasting change, or has a neutral impact. This allows us to attribute individual factors to the root causes of behavioral shifts, to triangulate the overall likelihood of stickiness based on the strength of each factor, and to determine what factors to track for stickiness in the future.

2 US Bureau of Economic Analysis; "US consumer spend on video game products continues to break records," NPD Group, August 10, 2020.
3 "Reviving grocery retail: Six imperatives," McKinsey.com, December 2018.
4 Rebecca Rubin, "Hollywood at a Crossroads: Tough choices on how to reach audiences as coronavirus worsens," *Variety*, December 1, 2020.
5 Andrew Curley, Rachel Garber, Vik Krishnan, and Jillian Tellez, "For corporate travel, a long recovery ahead," August 13, 2020, McKinsey.com.
6 Lori Aratani, "US airlines to accept billions in loans from federal government; still no deal to avoid furloughs," *Washington Post*, September 2020.
7 These venues were eligible for small-business loans if they met the requirements of the program. See "Where $521 million in small business aid went," Bloomberg, July 2020.
8 Taylor Mims, "Venues closing across America: An updating list (and why it matters)," *Billboard*, January 5, 2021.
9 "Key numbers: Impact of the COVID-19 pandemic on 2,600 Live DMA European music venues and clubs in 2020," Live DMA, September 2020.
10 Austin Reid and Jocelyn Salguero, "States use CARES Act funds to address digital divide," National Conference of State Legislatures," October 28, 202; ncsl.org
11 "Medicare telemedicine health care provider fact sheet," US Centers for Medicare and Medicaid Services, May 2020.
12 "FNS launches the online purchasing pilot," US Department of Agriculture Food and Nutrition Service, December 31, 2020; and Nathaniel Meyersohn, "Online grocery shopping is growing, but millions of Americans on food stamps are being left behind," CNN Business, December 8, 2020.

Exhibit E5

What will stick and what will not differ by sector and geography; overall, we find e-grocery is the stickiest and remote education the least sticky.

Summary of case findings



Source: McKinsey Global Institute analysis

Two consistent patterns stood out across our case studies. First, the COVID-19 pandemic accelerated digital adoption, especially in grocery shopping and healthcare, and this is expected to continue. Second, the pandemic and lockdowns reversed the long-standing trend of declining money and time spent at home, leading to "home nesting." This behavior is likely to stick as some portion of high-income households prefer to work more from home after the pandemic and low-income households retain low-cost at-home alternatives such as digital entertainment. At the same time, many other behaviors that the pandemic interrupted—leisure air travel, in-person education, and in-person dining—will resume with the recovery, although potentially with modifications from the experience of the pandemic.

There are other behavioral changes that we did not cover in our case studies: sustainability is one; an increased focus on health is another. We think tracking the stickiness factors—consumer behavior as well as company offerings and government role—could help predict the nature of long-term behavioral changes we should expect. On sustainability, many households had more time to consider their shopping choices and expressed increased desire to make eco-friendly and sustainable choices in their purchases (see Box E3,

"Consumption and sustainability in a postpandemic world").[19] In the case of health, consumers also expressed appetite for making healthier choices. The pandemic brought healthy behaviors to the forefront because of both the higher risk from COVID-19 infection to those with preexisting health conditions and the experience of workers who reduced travel and reported better sleep and more time for exercise while working from home.[20] On both accounts, however, the likelihood of consumers actually sustaining these choices will critically depend on the product choices and pricing that companies offer, as well as the regulatory incentives for both companies and individuals to shift toward more sustainable or healthy goods, services, and behaviors.

Across our cases, value, experience, and material investment matter for shaping consumer behavior

How much a consumer values a product or service, what kind of experience they have with it, and how much investment they make all determine the stickiness of consumer preferences. For example, the rapid rise of digitization was observed across many consumer spheres, yet the value it provided to consumers varied widely (see Box E4, "A closer look at individual case studies"). Digital health services saw one of the most dramatic accelerations from a low base, with telehealth claims growing 25 times in the United States from February to April 2020, 25 times in France, and 2.2 times in the United Kingdom.[21] Both patients and doctors found that digital health provided additional value, especially for certain kinds of visits such as follow-ups or initial screenings that resulted in time and money saved.[22] In contrast, online education for primary and secondary school children did not deliver better experience, as teachers found it was more difficult to engage with students, and students found it was more difficult to learn. As a result, most countries have prioritized education reopening after the initial lockdown period and have structured policies to keep schools open.[23] However, that does not exclude the potential that over the long term (and outside the period of this study), new solutions for online education will emerge and become more widely adopted.

In other areas, the experience of digitization was important. For example, e-grocery was widely liked across countries as the transition from in-store to online was often seamless. As a result, the positive experience of consumers accelerated digital adoption in grocery shopping by about ten years in eight weeks as new business models were rolled out.[24] We found that first-time users of online grocery shopping accounted for 30 to 50 percent of total US shoppers buying online in July, driven by baby boomers and low-income households.[25]

[19] COVID-19 Europe Consumer Pulse Survey, November 9–16, 2020, McKinsey & Company.
[20] Christine Blume, Marlene H. Schmidt, and Christian Cajochen, "Effects of the COVID-19 lockdown on human sleep and rest-activity rhythms," *Current Biology*, 2020, Volume 30, Number 14. In the near term, however, we are likely to face worse health outcomes because of delayed medical appointments and social isolation and stress contributing to poor mental health. *Prioritizing health: A prescription for prosperity*, McKinsey Global Institute, July 2020.
[21] Data from Compile.
[22] See McKinsey COVID-19 Physician Survey, July 27, 2020, where 46 percent of those surveyed said it was less expensive to provide telehealth services, 27 percent said it was about the same, 15 percent said it was more expensive, and 12 percent did not know.
[23] Michael Birnbaum, "Europe's schools still open, still relatively safe, through covid-19 second wave," *Washington Post,* December 1, 2020.
[24] Victor Fabius, Sajal Kohli, Björn Timelin, and Sofia Moulvad Veranen, "How COVID-19 is changing consumer behavior—now and forever," July 30, 2020, McKinsey.com.
[25] McKinsey Consumer China and US Pulse Check Surveys: China survey updated June 29, 2020, using data collected from June 15 to 21; US survey updated using data from July 7 to 12.

Box E3

Consumption and sustainability in a postpandemic world

While sustainability has been a growing concern for many consumers, corporations, and governments, the COVID-19 pandemic has accelerated awareness around the topic.[1] During the pandemic, many households had more time to consider their shopping choices and expressed increased desire to make eco-friendly and sustainable choices in their purchases, especially in Europe. For example, in one survey, 17 percent more Europeans reported shaping buying decisions around sustainable and eco-friendly products compared to pre-COVID-19; in another survey of global consumers, one in three ranked sustainability as a top purchasing criteria.[2] Another indication of growing interest in sustainability is the rise of environmental, social, and governance investment funds. Inflows into these sustainable funds hit a record high during the fourth quarter, up 88 percent versus 2019 to $152.3 billion.[3]

Yet even when consumers express greater appetite for making more sustainable choices, it is less clear to what extent these stated preferences will be realized in changed behavior and different product and service choices. Many consumers who indicate a preference for sustainable products and services ultimately select cheaper or more easily accessible alternatives. This is known as the attitude-behavior gap.[4] Research has highlighted this misalignment; in different surveys, about 30 percent to 50 percent of consumers indicate an intent to consume sustainable products but when it comes to making a purchase, these products often account for less than 5 percent market share of sales.[5]

Past evidence suggests that government and industry action will be key to meaningful change in the marketplace. Companies can impact the choices available to consumers through their product and service offerings, pricing, and labeling. For example, "FairTrade" logos on cotton products helped to double the sales of fair trade items in Europe between 2007 and 2008.[6] H&M uses discounts to nudge consumers into recycling worn apparel and collected the equivalent of 145 million T-shirts in 2019. The retailer also set up a resale site where, for a commission, consumers can buy and sell pre-worn apparel (as have Patagonia, Levi's and other apparel companies).[7] Energy efficiency labeling schemes for home durables across the world have been shown to shift consumer choices to more environmentally friendly products. One study showed that consumers are willing to pay 30 Euro or more for a better energy efficiency class, all else equal.[8]

1 For a broader overview of climate risk and response, see *Climate risk and response: Physical hazards and socioeconomic impacts*, McKinsey Global Institute, January 2020; for COVID's implications for companies and next normal, see also *The Next Normal: Doubling down on sustainability*, McKinsey & Company, December 2020; for a review of the circular economy, see *The circular economy: Moving from theory to practice*, McKinsey & Company, October 2016.

2 COVID-19 Europe Pulse Survey, 11/9-11/16 2020, McKinsey & Company; COVID-19 Consumer Pulse Research: Wave 7 (August 2020), Accenture.

3 Simon Jessop and Elizabeth Howcroft, "Sustainable fund assets hit record $1.7 trillion in 2020: Morningstar," Reuters January 28, 2021.

4 Wiltrud Terlau and Darya Hirsch, "Sustainable consumption and the attitude-behaviour-gap phenomenon—causes and measurements towards a sustainable development," International Centre for Sustainable Development at Bonn-Rhein-Sieg University of Applied Sciences, July 2015.

5 C. William Young et al., "Sustainable consumption: Green consumer behaviour when purchasing products," *Sustainable Development* January/February 2010, Volume 18, Issue 1, pp. 20-31; Michael J. Carrington, Benjamin A. Neville, and Gregory J. Whitwell, "Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethical minded consumer," *Journal of Business Ethics*, November 2010, Volume 97, issue 1.

6 European Commission, "Policies to encourage sustainable consumption," 2012L

7 "Recycling and upcycling," H&M Group, 2021; "COS Resale," Cos.com; "Wornwear," Patagonia.com; "Secondhand Levi's," Levis.com.

8 Mark A. Andor, Andreas Gerster, and Stephan Sommer, "Consumer inattention, heuristic thinking and the role of energy labels," *Energy Journal*, January 2020, Volume 41, Issue 1.

Regulatory changes can shift consumption toward more green choices by shaping both consumer options and company actions. Incentives to encourage energy efficient cars are one example. The Netherlands offered fiscal incentives of about 38,000 EUR for plug-in hybrid vehicles (equivalent to about 75 percent of the typical vehicle base price) in 2013, incentives which were associated with a 1,900 percent market share increase from 2012 to a 5 percent market share in 2013.[9] Early tax incentives in Norway and California have similarly helped accelerate electric vehicle sales.[10] London's congestion charge for car usage and Australia's water use targets are other examples of financial incentives leading to meaningful change in consumer behavior. Industry regulation can also shape consumer choices by shaping company actions. For examples, the Montreal Protocol helped dramatically reduce chlorofluorocarbon-emitting devices from the marketplace, and fuel-efficiency standards led to more efficient fleets of combustion engine vehicles.[11]

We are likely to see more incentives for sustainable consumption. The European Union's Circular Economy Action plan is an example that sets goals for Europe to reduce single use products, improve recycling, and expand reclaimed materials reuse.[12] Recent fiscal policy initiatives, such as green stimulus packages in the EU, where 30 percent of economic recovery funds target climate-related projects, similarly encourage sustainable solutions.[13] Our sector case studies included examples of this. For example, the French government made its $8 billion bailout of Air France conditional on reducing domestic emissions by 50 percent by 2024 and has scrapped an $11 billion planned expansion of Charles De Gaulle Airport over environmental concerns.[14] Also in France, the government provided financial assistance tied to sustainability and financial incentives for green home renovations that encouraged consumer spending on home nesting.[15]

[9] Peter Mock and Zifei Yang, *Driving electrification: A global comparison of fiscal incentive policy for electric vehicles*, White Paper, ICCT, May 2014..
[10] See "Norwegian EV policy," Elbil.com; "Electric vehicle incentives," PG&E.
[11] "*The carbon productivity challenge: Curbing climate change and sustaining economic growth*, McKinsey Global Institute, June 2008.
[12] "EU circular economy action plan," European Commission, Environment.
[13] European Council, *Special European Council, 17-21 July 2020*
[14] David Meyer, "Airline bailouts highlight the debate over how green the coronavirus recovery should be," *Fortune*, June 27, 2020; Claude Chendjou, "Operator links decision to COVID-19 crisis and promises to turn Charles de Gaulle and Orly airports into 'leaders in green aviation,'" Reuters, February 11, 2021.
[15] For more details, see our case studies at the end of Chapter 2.

The pandemic and the forced lockdowns and rules meant consumers were largely restricted to the home, facilitating greater material investments on the home front to increase utility and comfort. In contrast to digitization, home nesting reversed a pre-COVID-19 trend of declining time and money spent at home.[26] For example, as of June 2020, US consumer spending on furnishings was up by 12 percent year over year. In the same period, US spending on household appliances rose by 10 percent and spending on tools and equipment rose by 16 percent.[27] Home nesting is likely to persist after the pandemic for a segment of consumers, although at lower levels, because of these investments in gym, office, and kitchen equipment as well as entertainment and fitness streaming services; the development of new habits such as do-it-yourself home improvements; and continuing opportunities for flexible work-from-home schedules.[28]

Companies' readiness and changes in industry will shape consumer choices

From innovative new consumer products and services like restaurant in a box to virtual fitness and gym glasses, companies have shaped consumer behavior during the pandemic. For example, China, the United Kingdom, the United States, and, to a degree, France, had grocery players with an established, albeit low-penetration, online presence that were relatively well prepared for the explosion of e-grocery. These countries also had higher e-commerce penetration and had strong delivery networks. For example, large ecosystem players in China, like Alipay and WeChat Pay, fueled mobile payments growth of 123 percent a year from 2013 to 2018, reaching 300 billion transactions in 2018.[29] Together, this enabled grocers to rapidly offer a variety of options, be it BOPIS (buy online, pick up in store) versus delivery or third-party versus grocer-hosted, at the same time integrating with payment platforms that provided more reliable, timely, and tailored services. Moreover, these grocers could offer a variety of choices to meet consumer needs—such as bicycle delivery in congested New York City versus curbside pickup in an exurb of Paris. In entertainment, where box office revenue globally in 2020 was only 20 to 35 percent that of 2019, a lasting drop in demand for movie theaters is likely, due to the high probability of permanent theater closures (in October 2020, the Regal movie chain announced it would close 536 locations) and the shift to digital distribution channels by movie studios, both encouraging consumers to stick with at-home digital entertainment.[30] There is also variance by company size. For example, in the entertainment industry, small venues have been particularly hard-hit by COVID-19. Yelp has tracked the economic outcomes of businesses on its platform and found that as of September 2020, about 6,500 nightlife businesses (e.g., bars, live music venues) had closed and that 54 percent of those closures were permanent (up from 44 percent in July).[31]

Some company actions can have ripple effects on consumer behavior. Work-from-home policies during the pandemic taught companies to work remotely and thus remain efficient without corporate travel, something many companies were looking to do for cost and climate reasons already.[32] This is likely to suppress demand for business trips during the recovery and beyond, which adds enduring strain to airlines that are facing massive pressure on their balance sheets and operations amid an unprecedented demand crisis that generated a $370 billion industry-wide loss in 2020.[33] McKinsey estimates that business air travel could be 20 percent lower after the pandemic, and other sources predict up to a 36 percent

[26] It is important to note that additional spending at home may not increase proportionally with time spent at home. For example, investment in home exercise equipment has allowed many to build home gyms and will enable continued time exercising at home. While some consumers will continue to invest in more capabilities (such as new machines or equipment), others will leverage the growing digital marketplace for affordable options: 46 percent of survey respondents in April 2020 planned to use free at-home apps post-COVID-19, nearly double the 24 percent that will do the same with paid apps.

[27] McKinsey Global Institute analysis, BEA, figures in nominal terms.

[28] *The future of work after COVID-19*, McKinsey Global Institute, February 2021; and "What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries," McKinsey Global Institute, November 23, 2020.

[29] *Global Payments Report 2019: Amid sustained growth, accelerating challenges demand bold actions*, McKinsey & Company Global Banking Practice, September 2019, analysis using Bank of China data.

[30] "Regal movie chain will close all 536 U.S. theaters on Thursday," NPR, October 5, 2020.

[31] *Local economic impact report*, Yelp, September 2020.

[32] For more details see "What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries," McKinsey Global Institute, November 23, 2020.

[33] Seth Borko, Wouter Geerts, and Haixia Wang, *The travel industry turned upside down*, September 2020, McKinsey.com; and ICAO, "2020 passenger totals drop 60 percent as COVID-19 assault on international mobility continues," January 15, 2021.

decline, a contraction that pressures airlines' balance sheets, networks, and pricing, in turn constraining flight options for leisure travel.

The pandemic has upended the competitive landscape across industries. In particular, changing consumption patterns have led to shifts in market share and opened the possibility of new entrants. Many companies have been forced to accelerate investment in e-commerce and expand their capabilities such as in regards to customer delivery.[34] The ramifications of these shifts will be felt for some time and continue to shape consumer choices long after the pandemic is over.

Government regulation, incentives, and funding will also have a long-term impact on consumer choices

As in past crises, government regulations can have a significant impact on the strength and shape of the consumer demand recovery. For example, in the near term, both individual fears about the coronavirus and government travel policies, such as vaccine passports or mandatory quarantines, will determine how fast the demand for air travel will recover. Industry regulation can also shape consumption options. One example is virtual healthcare. The COVID-19 pandemic prompted changes to restrictions around virtual healthcare provision, combined with physician office closures, leading to increased virtual healthcare adoption globally. In the United States, Congress enacted Waiver 1135, which temporarily legislated payment parity for virtual healthcare services during COVID-19.[35] Similarly, the French government enacted policies guaranteeing 100 percent telehealth reimbursement through December 31, 2020, and changed restrictions requiring referrals for virtual healthcare, allowing non-referral reimbursement in cases where COVID-19 is suspected.[36] In the United Kingdom, where virtual healthcare was broadly allowed before COVID-19, the National Health Service introduced a "total triage" program, in which all patients would first have a phone consultation before determining next steps for health services. In addition to changing regulations, France and Germany announced multibillion-dollar plans for funding healthcare digitization broadly. Expectations around these changed regulations have shaped the extent to which healthcare providers have invested in virtual healthcare.

Government incentives and funding also help shape consumer behaviors. For example, in France, the government introduced a program in 2020 known as MaPrimeRenov', which offered up to €20,000 per household for essential renovations, encouraging home nesting. According to the government, 192,000 households applied for the program and funding was increased in 2021 with the goal of reaching 450,000 households.[37] In the case of air travel, government bailouts in our sample countries (up to about 35 percent of 2019 ticket revenues) supported the industry through its most challenging period ever, helping the industry adapt and preventing bankruptcies or closures that would limit consumer choices.

[34] For more details about the impact of e-commerce shifts during the pandemic see *The future of work after COVID-19*, McKinsey Global Institute, February 2021.
[35] "Medicare telemedicine health care provider fact sheet," March 2020.
[36] Government of France, "Teleconsultation: A practice facilitated during health crises," www.service-public.fr.
[37] Boursorama, "Rénovation énergétique: Le dispositif MaPrimeRenov' a rempli ses objectifs en 2020," January 29, 2021.

Box E4

A closer look at individual case studies

In each case study, the impact of consumers, companies, and governments on the stickiness of consumer behavior varies. But often it is the interaction among the three that is important, and we try to capture that in each case study. A brief summary of each case study follows here, while our more detailed individual write-ups can be found at the end of chapter 2.

E-grocery. E-grocery penetration more than doubled from pre-COVID-19 levels in some countries and has maintained much of this expansion, bringing the online share of total grocery sales in 2020 to 10 percent in the United States and over 10 percent in the United Kingdom. However, stickiness differs both by geography, as retailers have varied widely in their readiness to provide good customer experience, and by income, as delivery fees limit demand in low-income households. Offering a variety of products and services such as delivery, BOPIS, and drive-in across prices will enable more widespread stickiness.

Entertainment. The COVID-19 pandemic caused a precipitous drop in live entertainment spending, a decline of about 83 percent in the United States from February to April 2020 according to credit and debit card data, while boosting home entertainment spending by 6 percent in the same period.[1] That trend persisted into early 2021 in both the United States and Western Europe. While in-person entertainment is likely to rebound as the pandemic recedes, how live entertainment emerges from revenue losses from the pandemic and changes in industry practices like digital movie launches will shape consumer behavior the most.

Home nesting. Home nesting—spending on items that facilitate life at home such as home gyms, backyards and gardens, and kitchens—has been a core COVID-19 experience. The first wave of COVID-19 in the spring of 2020 resulted in widespread lockdowns, work closures, and health fears that suddenly meant home was the center of consumer life, reversing a trend of declining time and money spent at home. A sticky new habit of home nesting emerged as consumers invested time and money in the home, which paid off in positive experiences. In the longer term, some work from home (WFH) is here to stay (especially for high-income households in the United States and Europe), and it may provide the structural support necessary to enable ongoing investment in time (and perhaps money) to further expand and improve the home as a space for activities across spheres of life.[2]

Leisure air travel. Despite one of the sharpest contractions of any industry (losing effectively 100 percent of traffic at the nadir), demand for leisure air travel is set to bounce back to prepandemic aggregate growth. Strong long-term growth momentum and pent-up demand from pandemic restrictions, together with government support and effective industry response, have set the stage for a robust rebound when travel restrictions lift. However, the shape of demand may shift. Reduced business travel is likely to create ripple effects on full-service airline profitability, in turn changing the landscape for leisure travelers, both in the form of constraints (such as contracted networks and price increases) and opportunities (from greater service to leisure destinations by low-cost/point-to-point carriers and more catering to the non-business premium segment).

Remote education. The pandemic caused the single biggest disruption to education globally in the modern era. At the peak, nearly 1.6 billion children globally were impacted by school closures, and schools were forced to rapidly switch to remote learning models. While remote learning at primary and secondary schools is not expected to stick because of poor student, teacher, and parent experience, it may be used selectively to enhance education. For higher ed, online learning is likely to continue to develop and grow as a tool.

Virtual healthcare. COVID-19 caused a rapid increase in virtual healthcare use, with visits increasing 25-fold from February to April 2020 in the United States, a trend mirrored in Western Europe and China. Increased virtual healthcare usage is expected to remain after COVID-19, as consumers have gained experience and comfort, more providers have developed their virtual capabilities, and industry players have invested in services. But the postpandemic virtual healthcare regulatory environment will play a critical role in the pace of growth and ultimate penetration.

[1] Affinity Solutions.
[2] "What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries," McKinsey Global Institute, November 23, 2020.

Companies and governments can prepare for a segmented consumer demand recovery and consider the implications for their customers and citizens

Accounting for the unequal economic impact and the full range of stickiness factors can lead to quite different outcomes between markets and product categories, and companies and governments that can anticipate the challenges and opportunities may well be able to shape the recovery path rather than simply waiting to see the outcome.

Our analysis of consumption before, during, and after the pandemic is based on a nine-segment view of consumer demand made up of three income segments (low-income, middle-income, and high-income) and three age cohorts (young, middle age, and older) that can be a useful tool. While significant uncertainty remains, there are a variety of questions to ask and drivers to watch for in each segment to understand and prepare for the recovery (Exhibit E6).

Exhibit E6

These are key questions to ask to prepare for the demand recovery by consumer segment.

Consumption Historical (2020) — Expected recovery (2024) ↑ Positive ↓ Negative → Neutral

		Household income		
		Low	Middle	High
Age	Young	↑ — ↓ Will government stimulus support this cohort long enough so they can find new jobs in a services-automated, digital world? Will decisions to postpone higher education during the pandemic be reversed?	↑ — → Will the economic recovery come quickly enough to limit scarring from fear of job loss or fears over economic uncertainty?	↓ — ↑ Will back-to-back crises permanently scar this cohort and encourage them to save more and accumulate greater wealth?
	Middle age	↑ — ↓ How long will government stimulus help support consumption of households in this cohort, many of which are families? How long until employment and wages recover?	→ — ↑ Will this cohort, the largest consuming group in the US, have confidence after the pandemic in their economic prospects? What will their job prospects be in the shift to AI and digitization?	↓ — ↑ What legacy did the pandemic leave on the lifestyle choices of this segment (particularly women) in terms of balancing career and family obligations?
	Older	→ — → How much will rising relative prices of basic categories such as health and housing constrain their discretionary purchasing power? Could there be health implications for this group from deferred treatment during the pandemic?	↓ — → Will expanded digital engagement persist post-COVID-19, or will consumers return to previous behavioral patterns? Will older workers in this cohort be able to find work after COVID-19 or could they be locked out of the job market permanently?	↓ — ↑ How quickly will health fears dissipate and spending resume? What does the greater adoption of digital by this cohort mean for consumer products and services? How has the pandemic affected retirement decisions?

NOTE: Segmentation differs across countries due to data limitations. We classify households into low-income (Europe, 1st–2nd quintile; United States, below $40,000 per year), middle-income (Europe, 3rd-4th quintile; United States, $40,000-$100,000 per year), and high-income (Europe, 5th quintile; United States, $100,000+ per year). For age, we divided households into 3 groups based on head of household age: young (<35, United Kingdom <30), middle age (35–64, United Kingdom 30–64), older (65+).

Source: McKinsey Global Institute analysis

Taking a segmented view can provide interesting insights. For example, we find that if elevated work-from-home behavior sticks post-COVID-19, a significant amount of food consumption will be shifted from out-of-home to at-home. One additional day of work from home may result in up to about a 10 percent shift in food expenditure for an average working-age consumer.[38] The question remains how much of it will be captured by grocery stores and how much from restaurant deliveries. Looking at the consumer segments driving the WFH change, the impact would come mainly from high-income workers who tend to have more opportunities to work from home. This matters for food retailers, as an average food and beverage basket of high-income consumers differs from that of a low-income one. For example, the share of alcoholic beverages of total food spending is 5 percent for low-income US households and 8 percent for high-income ones. At the same time, low-income households spend around 8 percent of their food budget on cereals and bakery products, compared with about 6 percent for high-income ones.[39] Therefore, a growing share of high-income households' at-home food consumption might lead to shifts in the sales structure of grocery retailers, leaning toward more expensive categories and high-end brands.

As companies and governments prepare for the recovery, they might consider the implications of the changing shape of demand. Companies could prepare for a segmented customer base along income and age; evolving COVID-19 behavioral trends, especially digitization, home nesting, and attitudes about health and safety; and new business models. Governments face many challenges, in particular the lingering economic impact of COVID-19 and its effects on inequality. These impacts are both particularly pronounced in the United States, where the jobless rate is significantly higher than before the pandemic and COVID-19 has exacerbated inequality of opportunities, income, and wealth that were already widening. At the local government level in both the United States and Western Europe, pandemic shifts to increased time spent at home and increased reliance on e-commerce, among others, will have implications for cities, states, and regions, especially around the viability of commercial districts, the provision of public services like public transportation, and rising poverty and homelessness.

One year after the pandemic began, there is light at the end of the tunnel in the form of vaccines. While there is still much uncertainty associated with the rollout of vaccinations and new variants of the virus, a recovery is coming, perhaps even as soon as the second half of the year. Yet that recovery is likely to be different from past economic recoveries as the pandemic leaves indelible marks on consumer purchasing power and behavior, as well as the choices consumers will have, shaped by companies and governments. Now more than ever, understanding the way consumer demand is shifting by income, age, and geographies will be important to planning ahead. We hope our analysis in this report helps in this endeavor.

[38] Assuming three meals of equal value consumed daily, and two shifted from out-of-home to at-home because of one additional day of work at home.
[39] Based on 2018–19 BLS Consumer Expenditure Survey.

1. The consumer demand recovery

What made the dramatic consumption drop in 2020 different from past recessions gives cause for optimism for the recovery. Typically, past downturns have involved business cycle fluctuations, consumer debt overhang, or bursting asset price bubbles. None of those factors have been present during the 2020 recession. Instead, much of the decline in consumption has been due to forced restrictions from pandemic lockdowns and fear of infection from the coronavirus, rather than constraints on income, especially in the case of high-income households. That means an effective vaccine rollout could quickly restore consumer confidence and boost consumer demand. What's more, accumulated savings may further fuel spending immediately after health worries abate as pent-up demand is released.

Yet the longer the pandemic disruption lasts, the more likely are enduring legacies that will shape the consumption recovery for months and even years to come. China experienced a robust recovery after public health initiatives swiftly brought the first wave of COVID-19 largely under control. Its economy had already recovered to prepandemic consumption levels by the fourth quarter of 2020, even though new outbreaks continued to prompt targeted lockdowns in impacted regions.[40] Both the United States and Western Europe reached the anniversary of the pandemic outbreak with a high degree of uncertainty over how new mutations and the effectiveness of the public health response (e.g., lockdowns, contact tracing) might shape the trajectory of the virus as well as how efficient and effective the vaccine rollout and uptake would be. The length of the disruption is very likely to lead to a more uneven recovery across age and income cohorts in these regions, and to more lasting shifts in consumption patterns from changes in consumer behavior, business actions, and government decisions made during the pandemic.

In this chapter we lay out what made the pandemic-induced consumption shock different from past economic contractions and what to watch for to gauge the strength and speed of the recovery. At the same time, we highlight differences across major countries that we have analyzed—China, France, Germany, the United Kingdom, and the United States—as well as across different income and age cohorts.[41]

The COVID-19 pandemic caused an almost immediate, service-driven consumption shock that sets it apart from other economic contractions

The drop in consumer spending in 2020 is different from past downturns because of the speed, scale, and source of the decline. The pandemic caused an almost immediate consumption shock, resulting from the forced shutdown of some entire consumer service industries. Consumer spending in the United States and major Western European economies (France, Germany, and the United Kingdom) declined between 11 and 26 percent in the second quarter of 2020 versus fourth-quarter 2019.[42] In China, the consumption drop in first-quarter 2020 was also severe, about 17 percent. The drop in consumption is by far the largest since the 1930s Great Depression in the United States and since the Second

[40] National Bureau of Statistics of China, "Households' income and consumption expenditure in China," January 19, 2021. The NBS reported more than 2.3 percent real GDP growth in 2020. Per capita consumption in fourth-quarter 2020 was about 1 percent above fourth-quarter 2019, but for the full year 2020 about 4 percent below 2019 in real terms (estimated based on NBS data on per capita consumption as of January 2021), which indicates that aggregate consumption in 2020 also stayed below 2019 levels (population growth projected by the United Nations for 2020 is about 0.4 percent).

[41] Throughout this report, we often use shorthand for the three major Western European economies included in our analysis—France, Germany, and the United Kingdom—and refer to them as "Western Europe."

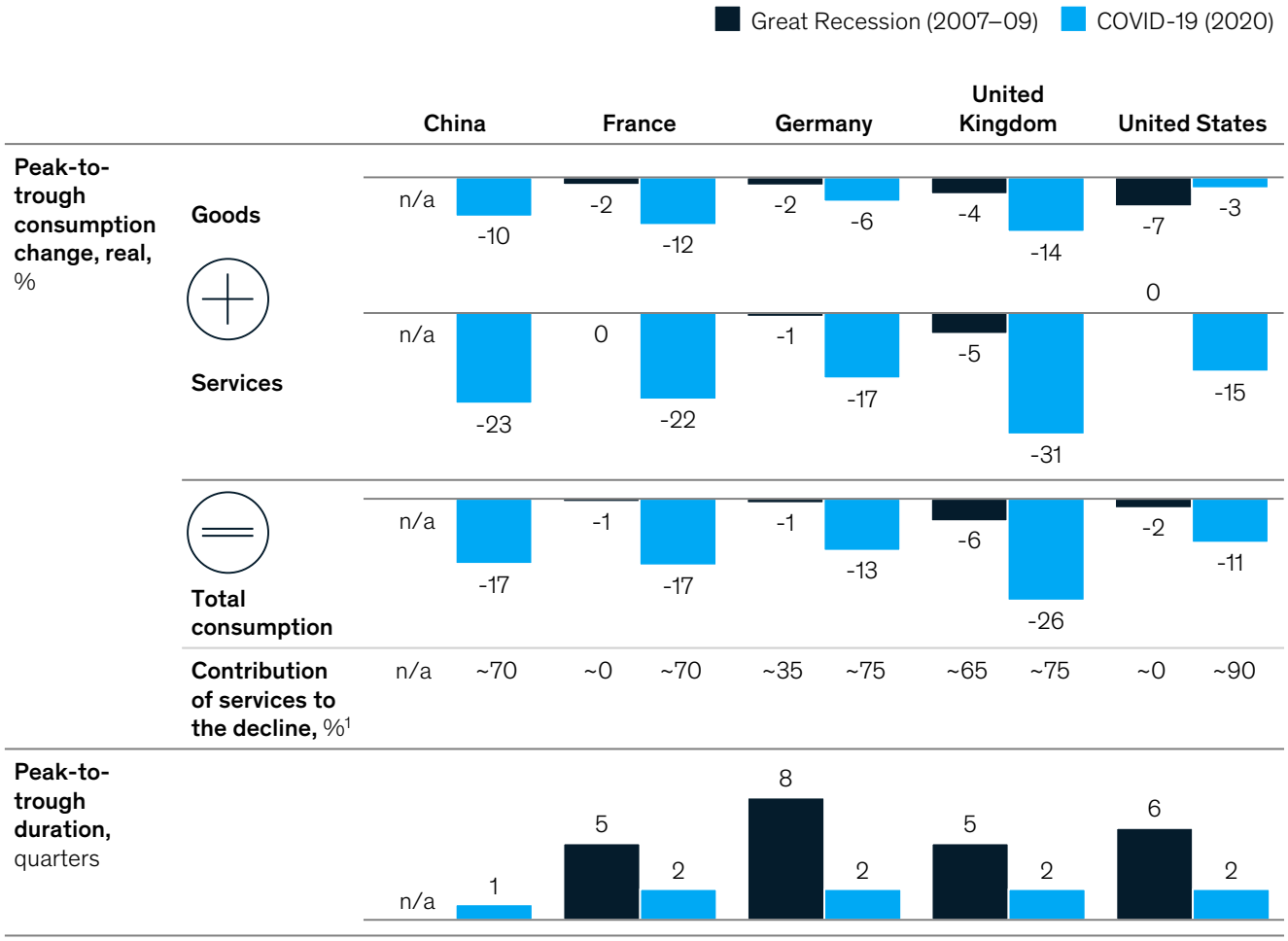
[42] Data from McKinsey Macroeconomic Scenarios developed in partnership with Oxford Economics, as of November 2020. For China, fourth-quarter 2019 versus first-quarter 2020.

World War in Europe. For the United States, the 11 percent consumption drop from peak to trough during 2020 was about five times larger compared with the Great Recession of 2007–09.[43] Another major difference with the past is the speed of the decline: it took a year and a half to reach the consumption trough during the Great Recession in the United States, compared with only two quarters for the contraction induced by COVID-19.

In contrast to past recessions, the decline in consumer spending occurred primarily in services, which contributed between 70 and 90 percent of the peak-to-trough blow to consumer spending in the United States, Western Europe, and China (Exhibit 1).[44] In-person services such as dining, accommodation, and travel were affected the most because of strict lockdown measures, travel restrictions, and fears of the coronavirus, helping to halt a long-term trend of rising demand for services versus goods.

Exhibit 1

The consumption shock was triggered by lockdowns and health fears that severely curtailed spending on services, setting it apart from past recessions.



1. Estimated based on data in constant prices; actual contribution in current prices can differ due to different inflation of goods and services.
Note: Peak-to-trough based on quarterly consumption data. For Great Recession, dates vary across countries. For COVID-19, assumed peak in Q4 2019 and trough in Q2 2020 (Q1 2020 in China). Figures may not sum to 100% because of rounding.
Source: BEA; Eurostat; NBS; Oxford Economics; McKinsey Global Institute analysis

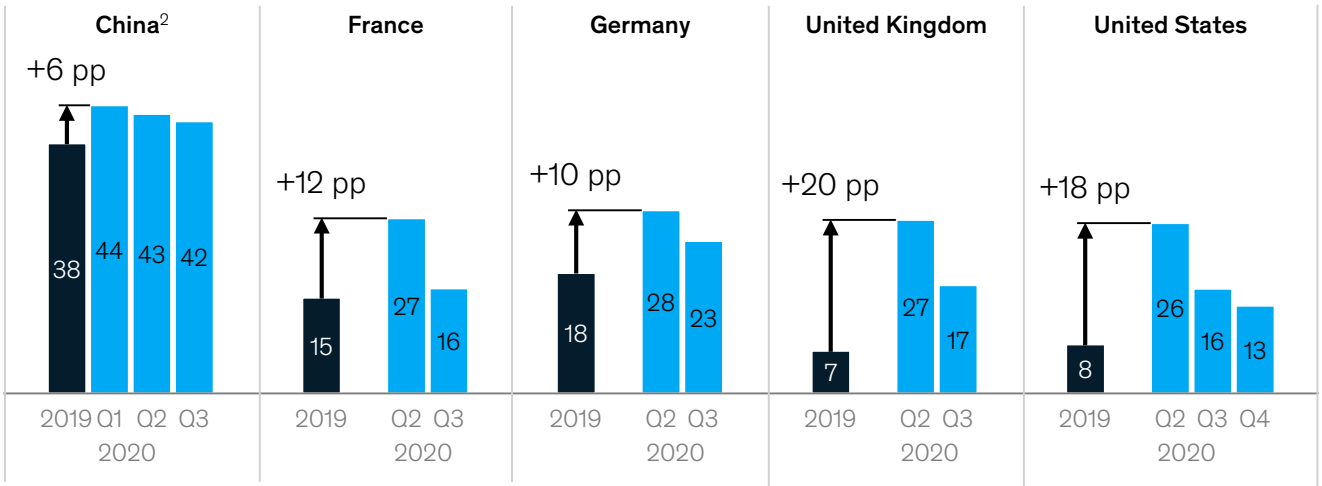
[43] Peak-to-trough calculated quarterly for COVID-19 and Great Recession: fourth-quarter 2019 versus second-quarter 2020 for COVID-19, and fourth-quarter 2007 versus second-quarter 2009 for the Great Recession.
[44] Data from BEA, Eurostat, Oxford Economics, and the National Bureau of Statistics of China.

On the flip side of the rapid decline in consumption was a rise in household savings. In a typical recession, savings rates rise by a few percentage points and remain elevated for several years during the recovery. That was the case during the Great Recession when US household savings grew by almost seven percentage points over five years as households paid down their mortgages and credit card debt accumulated before 2008.[45] Yet in 2020, the savings rate spiked by 18 percentage points in less than six months, causing aggregate savings of US households in 2020 to climb to almost $3 trillion, more than double 2019 savings.[46] Other countries experienced similar spikes in savings rates, ranging from 20 percentage points in the United Kingdom (which had the lowest pre-COVID-19 savings rate) to a six-percentage-point spike in China's already high savings rate (Exhibit 2).[47] As a result of lower consumption, many households ended 2020 with more savings than they might have previously expected.

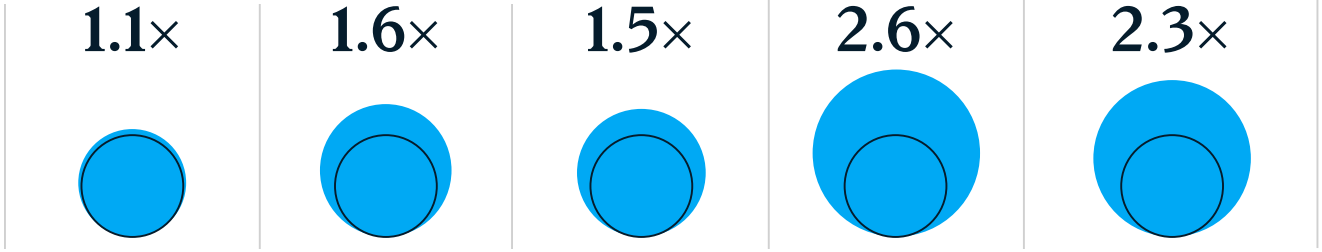
Exhibit 2

Spending restrictions boosted savings in 2020, more than doubling US and UK household savings from 2019.

Household savings rate, % of disposable income[1]



Estimated 2020 savings, as a ratio of 2019 savings



1. Q4 2020 available for United States only. Q1 2020 presented for China only because of earlier outbreak of COVID-19 pandemic.
2. China officially reports savings rate as gross domestic savings as a % of GDP. In order to assure comparability with other countries, Chinese savings rate was estimated based on disposable income and private consumption sourced from Oxford Economics.

Note: Full-year saving amounts calculated as difference between disposable income and private consumption (excl nonconsumption expenses such as fines or donations) based on Oxford Economics baseline forecast as of January 2021; for United States actual BEA figures used.

Source: BEA; Eurostat; Oxford Economics; McKinsey Global Institute analysis

[45] During the Great Recession, the spike in savings rate was particularly high for working lower- and middle-income households, many of whom were forced to deleverage because of the real estate market crash and uncertainty about future economic prospects. See *Debt and deleveraging: The global credit bubble and its economic consequences,* McKinsey Global Institute, July, 2011.

[46] McKinsey Global Institute Analysis using data from BEA. See also Jason Furman and Wilson Powell III, "What the US GDP data tell us about 2020," Peterson Institute for International Economics, January 28, 2021.

[47] BEA, Eurostat, and Oxford Economics. Peak-to-trough delta for Western countries is second-quarter 2020 versus 2019, for China first-quarter 2020 versus 2019.

The severity of the decline in consumer demand varied both within and across countries

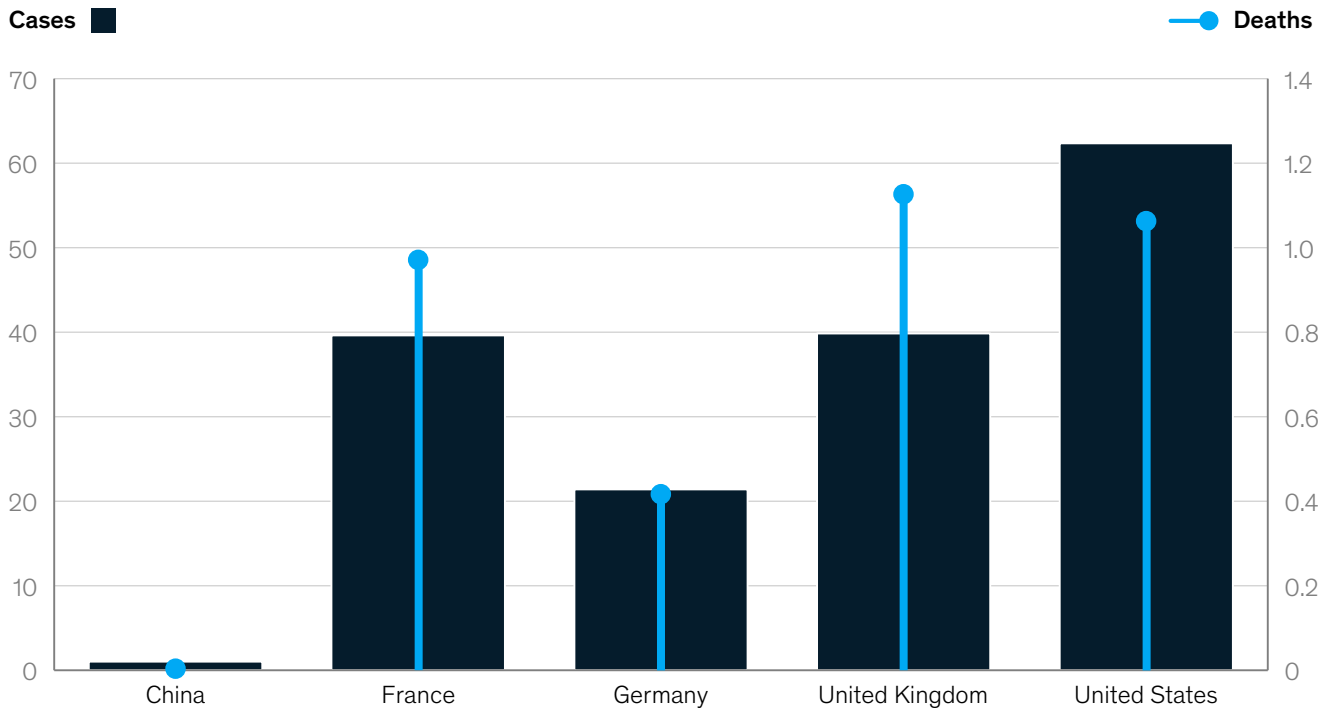
The impact of the pandemic on consumer demand and disposable income was global and unpreceded in scale, yet it varied in severity both within and across major economies. Within countries, consumption retrenchment differed by income and age group. Based on real-time credit and debit card data, we found that unlike the Great Recession, the most significant contraction in spending in both the United States and Western Europe came from high-income households who cut back spending most dramatically. The reason is that more affluent consumers typically consume the highest share of discretionary, service-intensive items that were most directly impacted by lockdowns, travel restrictions, and concerns about close physical proximity with others. Low-income households spend a higher share on food, housing, and other basic goods that were less directly impacted. Instead, their consumption in 2020 reflected differences in labor market outcomes and economic stimulus policies across countries.

Across the countries we studied, the public health response of China set it apart from the United States and Western Europe. By the end of the first quarter of 2020, China had largely contained the spread of COVID-19.[48] Differences in the effectiveness of the health response are visible in the number of reported cases and deaths per thousand inhabitants, which was very low in China compared with the United States and major Western European countries (Exhibit 3). So while the initial consumption shock in China was severe, the recovery in consumer spending started in the second quarter of 2020 and has continued.

Exhibit 3

The scale of the health shock in 2020 varied across countries, with the United States and Western Europe much more affected than China.

Reported number of COVID-19 cases and deaths, weeks 1–53, 2020, per thousand inhabitants



Source: European Centre for Disease Prevention and Control; McKinsey Global Institute analysis

[48] We often refer to pre-COVID-19, spring COVID-19 peak, and postpandemic. For China this means: fourth-quarter 2019, February 2020 (or first quarter), and second quarter (or specifically May 2020 onward). France: fourth-quarter 2019 through February 2020, March–April 2020, and no postpandemic yet. Germany: fourth-quarter 2019 through February 2020, March–April 2020, and no postpandemic yet. United Kingdom: fourth-quarter 2019 through February 2020, April 2020 (or second quarter), and no postpandemic yet. United States: fourth-quarter 2019 through early March 2020, April 2020 (or second quarter), and no postpandemic yet.

Another difference has been the degree that mobility declined in countries from lockdown restrictions, which impacted consumer spending. Google mobility data shows that since the COVID-19 pandemic began, mobility related to retail and recreation has decreased across the world.[49] However, there are big differences across the economies we analyze. On average, mobility dropped by 19 percent in the United States, by 25 percent in Germany, by 32 percent in France, and by 42 percent in the United Kingdom compared with pre-COVID-19 levels.[50] Those differences were driven by several factors, starting with the stringency (and duration) of lockdown measures, perceived health risks, and opportunities to work from home.[51] Although mobility related to commercial activities is not the only driver of the scale of the consumption decline, we found that across economies it was positively correlated. In other words, the bigger the drop in mobility in a given country, the bigger the decline in consumption.[52]

In addition to the longer duration of the pandemic outbreak, different economic policies across the United States and Western Europe also played a large role in shaping the size and composition of the consumption shock. Since COVID-19 mostly affected spending on services, those economies with a higher share of services out of total consumer spending were more exposed to the initial shock. The United States went into the crisis with the largest share of consumption from services at about 69 percent, followed by the United Kingdom (59 percent), France (55 percent), and Germany (52 percent) (Exhibit 4). Differences in scale and scope of economic relief packages in turn more directly impacted labor market outcomes and household disposable income, and the prospects for recovery.

[49] Google COVID-19 Community Mobility Reports, accessed February 1, 2021, www.google.com.
[50] Average of daily changes in mobility during the period of February 15 to December 31 versus January 3 to February 6, 2020. Data not available for China.
[51] US research suggests that health concerns had an even bigger impact on consumer activity than lockdown measures. See, for example, Austan Goolsbee and Chad Syverson, "Fear, lockdown, and diversion: Comparing drivers of pandemic economic decline 2020," NBER working paper number 27432, June 2020.
[52] Raymundo M. Campos-Vazquez and Gerardo Esquivel, "Consumption and geographic mobility in pandemic times. Evidence from Mexico," *Review of Economics of the Household*, 2021. OECD Economic Outlook, Volume 2020, Issue 2.

Exhibit 4

Pre-COVID-19 economic characteristics help explain country differences during COVID-19 and potential differences for the recovery.

2019 unless otherwise noted

	Indicator	China	France	Germany	United Kingdom	United States
Employment	Unemployment rate, % of total labor force[1]	5	8	3	4	4
	Basic education unemployment rate, %[2]	n/a	16	8	7	5
	Youth unemployment rate, %[3]	11	20	6	11	8
Personal income[4]	National income per adult, € thousand, PPP-adjusted	15	37	40	35	53
	Share of income held by top decile, %	41	32	37	35	45
	Gini coefficient (income), %	0.55	0.43	0.48	0.45	0.58
Private consumption	Share of services in spending, %[5]	54	55	52	59	69
	Share of discretionary consumption, %[6]	40	52	56	59	52
	Share of consumption held by high-income households (top quintile), %[7]	n/a	30	36	42	39
Savings and wealth	Household savings rate, savings as % of household income[8]	38	15	18	7	8
	Share of net wealth held by top decile, %[9]	67	55	55	52	71
	Gini coefficient (wealth), %[10]	0.75	0.69	0.74	0.73	0.83

1. World Bank (modeled ILO estimate).
2. Basic education defined as below upper secondary education level. OECD, unemployment rates by education level (indicator). doi: 10.1787/6183d527-en (Accessed on 22 February 2021).
3. Youth defined as 15–24 years old. OECD, unemployment rate by age group (indicator). doi: 10.1787/997c8750-en (Accessed on 22 February 2021); data for China from World Bank.
4. World Inequality Database.
5. BEA, Eurostat, NBS.
6. BEA, Eurostat, NBS. Share in total private consumption, discretionary defined as categories other than housing, food at home, healthcare, and education (education incl in discretionary only in China, because of data limitations).
7. High income defined as top quintile of households by income. Analysis based on BLS, Destatis, INSEE, ONS data.
8. Savings as % of household disposable income, BEA, Eurostat. Analysis for China based on Oxford Economics data.
9. World Inequality Database, data for China as of 2015, France 2014, United Kingdom 2012, United States 2019. For Germany, Deutsche Bundesbank data as of 2017.
10. World Inequality Database, data for China as of 2015, France 2014, United States 2019. For Germany, Deutsche Bundesbank data as of 2017. For United Kingdom, data from World Economic Forum: The Inclusive Development Index 2018.

Source: McKinsey Global Institute analysis

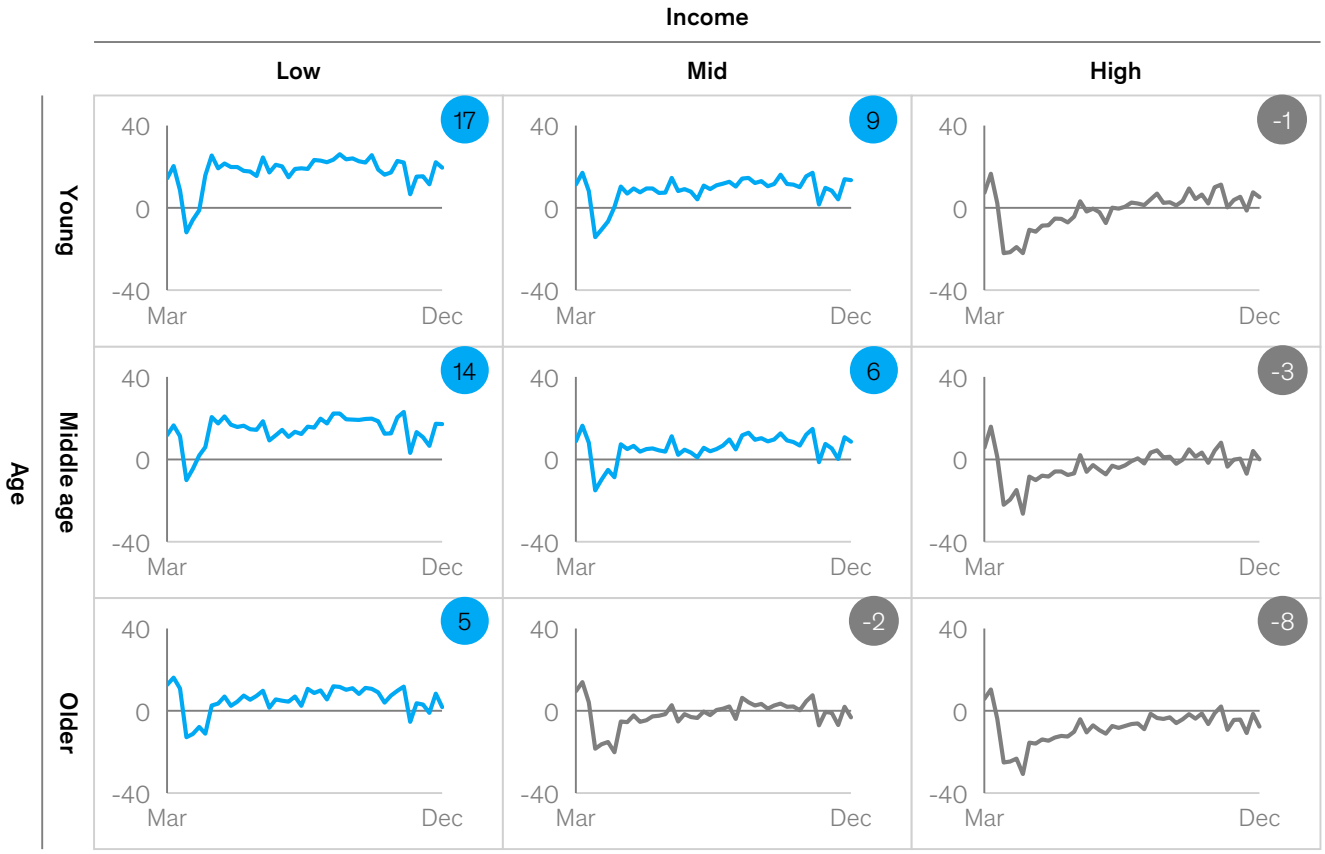
US service-sector jobs were hard hit, but government stimulus put cash directly into the hands of low-income and young consumers

The United States experienced the sharpest divergence in consumption across income and age groups. Credit and debit card spending declined in 2020 from 2019 levels among high-income and older middle-income households, but not among the young or low-income consumers (Exhibit 5).[53] Three factors contributed to this pattern. First, as mentioned above, more affluent consumers spend a higher share on discretionary services that were hard hit during the pandemic. Since they were also more likely to be able to work from home and much less likely to face job cuts, the drop in consumption led to a substantial increase in their savings.[54] Second, the US cash stimulus programs supported purchasing power among low-income households, helping sustain their consumption. And third, older consumers faced higher health risks and were more likely to cut back across consumption categories.

Exhibit 5

In the United States, the higher the income and age, the bigger the drop in spending due to lockdown and health fears, while fiscal stimulus supported the spending of low-income and younger cohorts.

Credit and debit card spending per consumer segment, March–December 2020 vs 2019, year over year, current prices, %



Note: Because of data limitations, consumer segmentation in credit and debit card data differs from the main segmentation used in this report, as described in Box E1, "Our macro methodology and key assumptions." For income per annum per household, low income is defined as <$35,000, middle income as $35,000–$80,000, and high income as $80,000+. Age segmentation reflects generation split: young is defined as <37 (~millennials), middle age as 38–51 (~Gen X), and older as 52+ (~baby boomers).

Source: Affinity Solutions; McKinsey Global Institute analysis

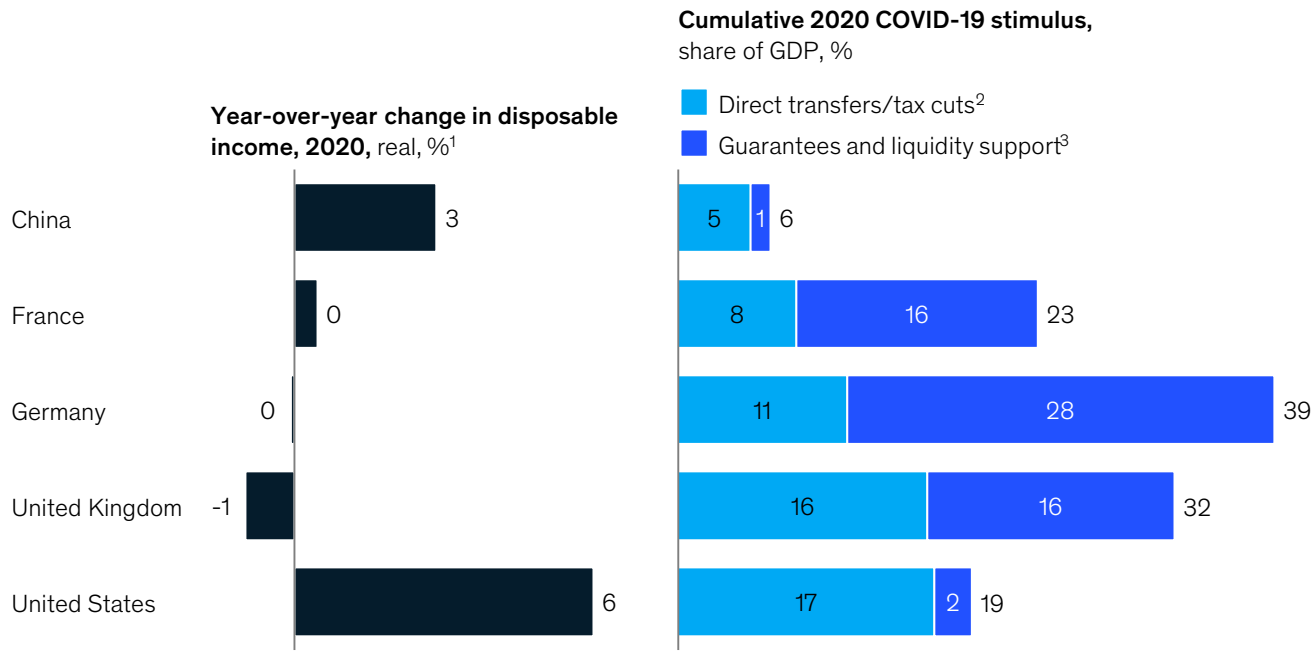
[53] While card spending represents only a part of overall consumer spending (housing and utilities and healthcare are among the major categories excluded from credit card spending), the changes in card data closely track changes in official consumption figures reported by the BEA. Card spending in 2020 decreased year over year by 3.0 percent, compared with a 2.7 percent decrease in overall consumption (both are in nominal terms). This is because the share of unaffected categories in card spending (that is, groceries and furnishings) is comparable with the share of categories not affected negatively by COVID in overall consumption (which includes housing). Data for card spending are from Affinity Solutions and aggregate consumption from the BEA.

[54] *The future of work after COVID-19*, McKinsey Global Institute, February 2021.

The collapse in many services caused millions of low-income workers and younger cohorts to lose their jobs in retail, restaurants, and hospitality. Both the number of hours worked and the number of employed people dropped proportionally indicating that people were laid off without being given shorter work options. The US stimulus consisted mostly of additional spending, paid in large part directly to citizens in the form of stimulus checks and increased unemployment benefits (Exhibit 6).[55] This helped directly support spending by low-income households and younger cohorts who might have been laid off work.

Exhibit 6

Large fiscal stimulus programs helped counter the income loss from lost service-sector jobs in 2020.



1. United States, France, and Germany, actual figures; China and United Kingdom, Oxford Economics baseline forecast as of March 2021.
2. Additional or accelerated spending and forgone revenues to/from businesses and individuals.
3. Equity injections, asset purchases, loans, and debt assumptions, including through extrabudgetary funds, guarantees, and quasi-fiscal operations (noncommercial activity of public corporations on behalf of government).

Note: Figures may not sum to 100% because of rounding.
Source: IMF Fiscal Monitor; Oxford Economics, Database of Country Fiscal Measures in Response to the Pandemic, January 2021; McKinsey Global Institute analysis

Another indication of the stimulus-induced boost comes from the number of personal bankruptcies in the United States. These were 30 to 40 percent below 2019 levels in the second and third quarters of 2020, while business bankruptcies remained relatively stable.[56]

Fiscal stimulus in 2020 in the United States could therefore be seen to be effective in supporting low- to middle-income households and consumption in the short term. However, while unemployment began falling later in the spring of 2020, it still remains above pre-COVID-19 levels. As of December 2020, the unemployment rate was 6.7 percent, about three percentage points above prepandemic levels or a deficit of 10 million jobs. A weak job

[55] For more details on country-specific stimulus programs, see Julia Anderson et al., "The fiscal response to the economic fallout from the coronavirus," Bruegel Datasets, November 24, 2020; and IMF, "Policy responses to COVID-19," February 5, 2021.

[56] Compared with 2019, business bankruptcies were down by 11 percent in the second quarter of 2020 and 1 percent in the third quarter. Falling number of bankruptcies is another factor that sets the COVID-19 recession apart from the previous crisis across advanced economies; data according to US bankruptcy courts. Another contributing factor was limited access to the bankruptcy courts due to pandemic restrictions. For more data on bankruptcies during COVID-19 versus past recessions, see also: IMF, "World Economic Outlook Update," January 2021.

market leaves many households vulnerable after near-term stimulus support ends, potentially exposing the nation to more economic inequality ahead.[57]

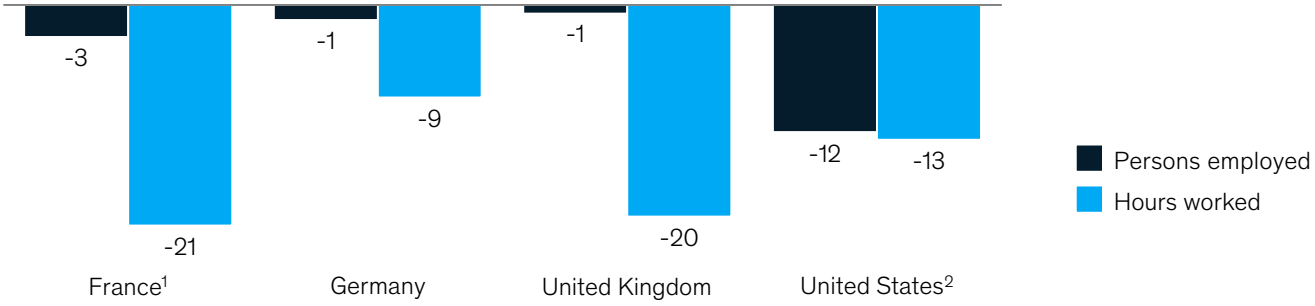
In Europe, fiscal stimulus differed across countries but mainly focused on supporting businesses to minimize job losses

The German stimulus package was the biggest relative to GDP and announced early in the pandemic, and it consisted mostly of liquidity measures for companies, as opposed to direct payments to individuals—for example, equity injections, asset purchases, loans, debt assumptions, including through extrabudgetary funds, guarantees and quasi-fiscal operations (noncommercial activity of public corporations on behalf of government). In contrast, the French and British packages were smaller and introduced later than in Germany.[58] The effect of European government stimulus can be seen on the labor market. The number of people employed in major European economies remained relatively stable during the initial phase of the pandemic, while the number of hours worked dropped sharply. For example, in France, the number of people employed declined by 3 percent in second-quarter 2020 from fourth-quarter 2019, while the number of hours worked dropped about 21 percent over the same period. For the United States during this period, the decline in employment measured in hours and persons was roughly the same (Exhibit 7). As a result of a lack of direct cash support to low-income households, the 2020 decline in spending in the Western European economies we analyzed was more evenly spread across income cohorts. For example, in Germany all income segments decreased their credit card spending, yet a higher share of discretionary, service-heavy categories in affluent consumer buckets has resulted in a more severe drop in overall spending (Exhibit 8).

Exhibit 7

In contrast to the United States, government support for short-time work schemes in Europe helped shield employees from layoff risk.

Change in employment during the pandemic, Q2 2020 vs Q4 2019, %



1. Persons employed not seasonally adjusted because of data limitations.
2. Number of hours worked for private sector employment only because of data limitations.

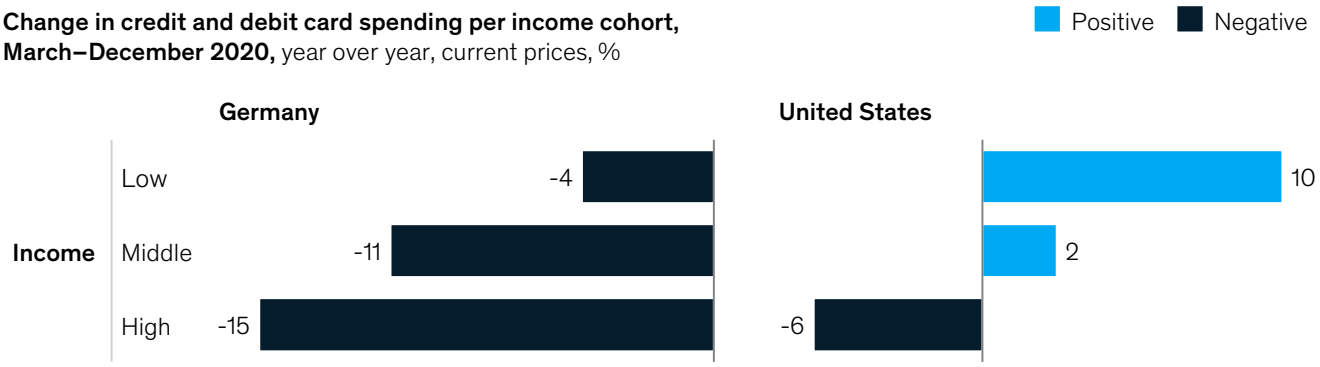
Source: BLS; Eurostat; McKinsey Global Institute analysis

[57] "The employment situation," US Bureau of Labor Statistics, January 2021.
[58] For details on size, scope, and timing of government stimulus by country, see IMF, Database of Country Fiscal Measures in Response to the COVID-19 Pandemic; and Julia Anderson et al., "The fiscal response to the economic fallout from the coronavirus," Bruegel Datasets, November 2020.

Exhibit 8

The drop in consumer spending was more evenly distributed in Germany than in the United States, but high-income cohorts still cut back the most.

Change in credit and debit card spending per income cohort, March–December 2020, year over year, current prices, %



Note: Because of data limitations, consumer segmentation in credit and debit card data differs from the main segmentation used in this report, as described in Box E1, "Our macro methodology and key assumptions." For Germany, income groups are defined based on average income in zip code of residence and split to reflect equal shares of population: low income, bottom 1/3 of population; middle income, middle 1/3 of population; and high income, top 1/3 of population. For the United States, for income per annum per household, low income is defined as <$35,000, middle income as $35,000–$80,000, and high income as $80,000+.

Source: Affinity Solutions; Fable Data; Michael Bauer International GmbH; McKinsey Global Institute analysis

There are reasons for optimism for a strong but segmented recovery, with variations across countries and income cohorts

The nature of the contraction in consumption has implications for the recovery, and there are reasons to be optimistic. Most of the decline in spending came from high-income households that were prevented from spending because of lockdown restrictions and health concerns, resulting in higher-than-expected savings as their income from wages and investments was largely unaffected. As a result, it is likely that once pandemic constraints subside, spending by high-income households could snap back quickly because of pent-up demand and accumulated savings. (see the end of this chapter for more details about our macro methodology.) The consumer recovery in China also provides reasons to be optimistic (see Box 1, "What can be learned from China's consumer recovery"). However, there is still tremendous uncertainty regarding the trajectory of the virus and its economic impact that will determine the timing of the recovery. The prospect of a consumption recovery is also less promising for lower-income and younger consumers, many of whom have lost jobs and labor income. The dramatic drop in service-sector jobs, combined with accelerated digitalization and automation across industries, adds to the uncertainty for the speed at which jobs will grow after the pandemic.[59] This could have a lasting impact on disposable income and thus spending by low-income households. In the United States in particular, this could result in a highly segmented or K-shaped recovery.

[59] *The future of work after COVID-19*, McKinsey Global Institute, February 2021.

Box 1

What can be learned from China's consumer recovery

As the first country to suffer an outbreak of COVID-19 and the first to subdue its spread, China provides an example of a postpandemic consumption recovery.

The Chinese economy is the only major economy worldwide that grew in 2020 (a 2.3 percent increase in real GDP growth, according to government figures).[1] Although private consumption has remained slightly below 2019 levels (estimated to be about 3 to 4 percent lower year over year), it bounced backed rapidly in the second half of 2020, after the pandemic was largely brought under control.[2] This picture is cause for optimism for the United States and Western Europe. However, it is important to note two major differences between China and the United States and Western Europe. First, compared with the United States and Western Europe, the health shock in China has been much smaller in scale (see Exhibit 4; about three cases per million inhabitants compared with over 62,000 in the United States since the start of the outbreak) and lasted for a much shorter time (fewer than 100 cases daily within three months of the first case).[3] This effective health response minimized the scale of disruption and in turn has led to a shorter "tail" of side effects including reduced time to incubate major consumption changes. Second, because of a lower share of private consumption in overall GDP and lower share of services in private consumption (54 percent versus 69 percent in the United States in 2019), the Chinese economy was less exposed to a services-driven consumption shock.[4]

Keeping in mind those differences, several lessons can be learned for the United States and Western Europe. First, effective virus control that enables a rapid rebound in domestic household consumption is possible. It also enabled China's strong export performance, relevant particularly for other export-oriented economies, such as Germany. After the initial decline at the start of 2020, Chinese domestic consumption had resumed its upward trajectory by the end of 2020, with annual growth estimated to be about 13.5 percent in 2021.[5] Exports have contributed to growth with a $535 billion trade surplus in 2020 driven by exports of PPE.[6]

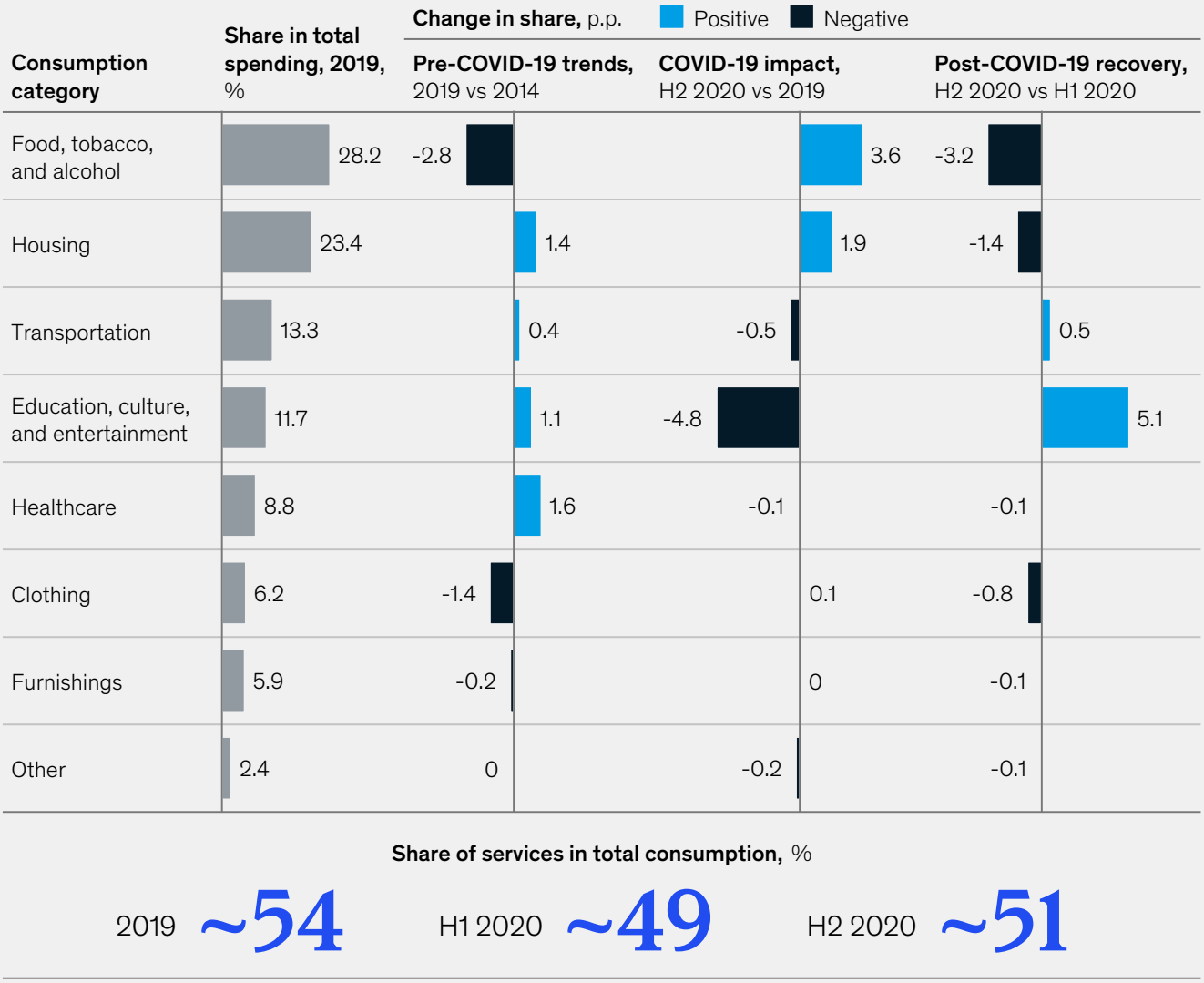
Second, spending on services has been recovering. Just as in the rest of the world, China's services took a hard hit during the pandemic. From about 30 percent of spending in the early 1990s, the share of services in overall consumption has been growing steadily and reached 53.6 percent in 2019.[7] However, in first-quarter 2020 this share fell to 49.2 percent, indicating the disproportional contributions of services to the consumption drop. As elsewhere, the decline came largely from spending on culture, recreation, transport, communication, dining out, and fashion, triggered mainly by severe lockdown measures. As soon as the pandemic was controlled and lockdowns lifted in the third quarter, consumption began returning to the pre-COVID-19 mix (Exhibit 9). Still, services as a share of total consumption had not yet recovered to pre-COVID-19 levels at the start of 2021.

Third, the recovery in consumer spending was uneven, with demand for luxury brands bouncing back first. Just as in the United States, consumer survey data show that on the income and wealth side, low-income consumers were most directly impacted by the COVID-19 recession.[8] This was due to the nature of their jobs (for example, construction,

1 Major defined as top 20 measured by 2019 PPP GDP. Data for China from National Bureau of Statistics of China; for other economies, data are from the IMF "World Economic Outlook Update," January 2021.
2 NBS. Per capita consumption in fourth-quarter 2020 was about 1 percent above fourth-quarter 2019, yet for the full year 2020 about 4 percent below 2019 in real terms (estimated based on NBS data on per capita consumption as of January 2021), which indicates that aggregate consumption in 2020 also stayed below 2019 levels (population growth projected by UN for 2020 is about 0.4 percent).
3 European Centre for Disease Protection and Control.
4 The Chinese economy has a higher share of manufacturing that was less affected by the consumption shock worldwide, including some categories, such as personal protective equipment or furnishing elements, that grew worldwide in 2020. Data from Oxford Economics.
5 Oxford Economics baseline forecast as of January 2021.
6 Joe McDonald, "China's 2020 exports up despite the virus; surplus surges to $538 billion," AP, January 14, 2021.
7 *Forward Thinking*, "China's consumers shake the (retail) world," Oxford Economics blog entry, February 22, 2018; and NBS.
8 China Household Finance Survey (CHFS), first quarter 2020, Survey and Research Center for China Household Finance, Southwestern University of Finance and Economics.

Exhibit 9

In China, COVID-19 reversed the trend of increasing share of service-heavy categories temporarily, yet in H2 2020 the consumption structure was coming back to normal.



Source: NBS, January 2021; McKinsey Global Institute analysis

in-person services, agriculture) being less adaptable to remote work compared to high-income occupations. And once restrictions were lifted, sales of luxury brands were the first to recover, indicating that as soon as affluent consumers regained confidence, they did not hesitate to spend. This may foretell a similarly segmented consumption recovery in the West.

Finally, the savings rate has gradually been declining, although it remained elevated at the start of 2021. This may be encouraging for the consumption recovery in the United States and Western Europe, where savings accumulation has been high.[9] China's savings rate spiked to over 43 percent in the first half of 2020 from an already high rate (the 2019 savings rate in China was 38 percent, compared with 8 percent in the US). Private economic estimates expect the savings rate in China to show a decline to 41 percent in the second half of 2020.[10]

[9] However, it is important to keep in mind China's much higher savings rate and smaller overall savings accumulation.
[10] China officially reports savings rate as gross domestic savings as a % of GDP. In order to assure comparability with other countries, Chinese savings rate was estimated based on disposable income and private consumption sourced from Oxford Economics.

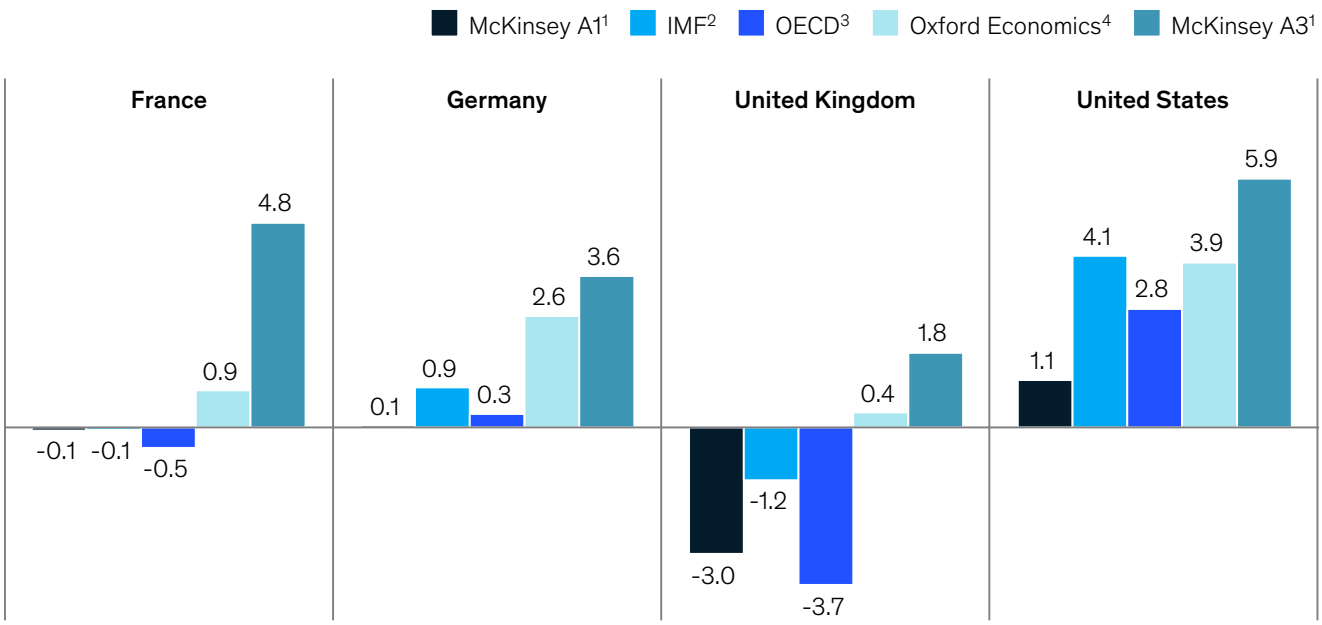
The US consumer demand recovery is likely to be faster but more uneven compared with Europe, although uncertainty remains over the timing

As of the start of 2021, there was an emerging view among economic forecasters that the US economy would recover the fastest, followed by Germany, France, and the United Kingdom (Exhibit 10). This view was reinforced by the passage of the $1.9 trillion US government stimulus package in March 2021. However, the timing of the economic recovery was highly uncertain and dependent on the trajectory of the pandemic and the extent of any additional government economic support. At the beginning of 2021, the vaccine rollout was under way in China, Europe, and the United States, along with other countries, and expectations were for broad vaccine availability in advanced and some emerging market economies by the middle of 2021, enabling restrictions to be lifted and economies to begin reopening by year-end.[60] But there is considerable uncertainty surrounding that timeline stemming from the ability of countries to quickly and efficiently vaccinate their citizens and new, more aggressive strains of the virus such as the 501.V2 variant first identified in South Africa, as well as the extent of government economic support of vulnerable households and businesses during the remainder of the pandemic.

Exhibit 10

The scenarios used in this report and independent baseline forecasts expect the US economy to rebound faster than major European economies.

GDP, real cumulative change, 2022 vs 2019, %



1. McKinsey analysis, in partnership with Oxford Economics, November 2020.
2. IMF, "World Economic Outlook," January 2021 update.
3. OECD Economic Outlook, Number 108, December 2020.
4. Baseline forecast, Oxford Economics, January 2021.

Source: IMF; OECD; Oxford Economics; McKinsey Global Institute analysis

As a result of that uncertainty, we take a scenario approach in our analysis that relies on scenarios developed by McKinsey in cooperation with Oxford Economics.[61] While there are nine scenarios assuming different economic and health responses and their effectiveness, the three we focus on in this report—A1, A2, and A3—are consistent with the forecasts of major institutions such as the IMF and the OECD. These three scenarios all assume no

[60] "World Economic Outlook Update," IMF, January 2021.

[61] For more details about the scenarios and underlying assumptions, please see "Safeguarding our lives *and* our livelihoods," March 2020, and "Nine scenarios for the COVID-19 economy," January 2021, both on McKinsey.com. See "Our macro methodology" at the end of this chapter for more details.

structural damage to the economy, yet differ in the effectiveness of health and economic interventions, resulting in different recovery paths. Within this range, A1 is the most conservative scenario, assuming medium effectiveness of both health and economic response. This translates into controlling the adverse health impacts by around mid-2021, followed by acceleration of economic growth toward the end of the year. The A2 scenario assumes a more effective economic response, leading to an earlier acceleration of economic growth, while A3 is the most optimistic, assuming earlier virus control (that is, through effective rollout of the vaccination process) resulting in a steeper growth path already in 2021. The range of A1 and A3 scenarios encompasses the baseline forecasts of IMF, Oxford Economics, and OECD.[62] As of the end of 2020, US consumption was closely tracking the A2 scenario path.

While the United States may rebound faster than Western European countries, the recovery is likely to be more uneven (Exhibits 11 and 12).[63] Coming into the pandemic, the United States had the highest disposable income per capita (PPP adjusted) of all the countries in our analysis but the most unevenly distributed across consumer segments (see Exhibit 4 for more details). In 2020, the COVID-19 pandemic initially reduced consumption inequality in the United States, thanks in large part to stimulus support for low-income consumers and the unemployed, and a bigger drop in consumption by more affluent households. However, the long-lasting impact of the crisis may well be to widen inequality further, which would both dampen aggregate consumption growth and further polarize purchasing power and consumption patterns between high- and low-income cohorts. For low-income cohorts, low average household net worth and tightening credit standards may limit opportunities for drawing on assets or borrowing to sustain consumption growth beyond pre-COVID-19 levels. In contrast, high-income households have remained largely unaffected by the labor market shock, are benefiting from low interest rates (for instance, to refinance their mortgages), and many have accumulated substantial savings over the course of the pandemic. Once restrictions are lifted and health risks diminish, there is little constraint on this cohort to start spending again. What is more, their accumulated savings can be partially used to finance pent-up demand.

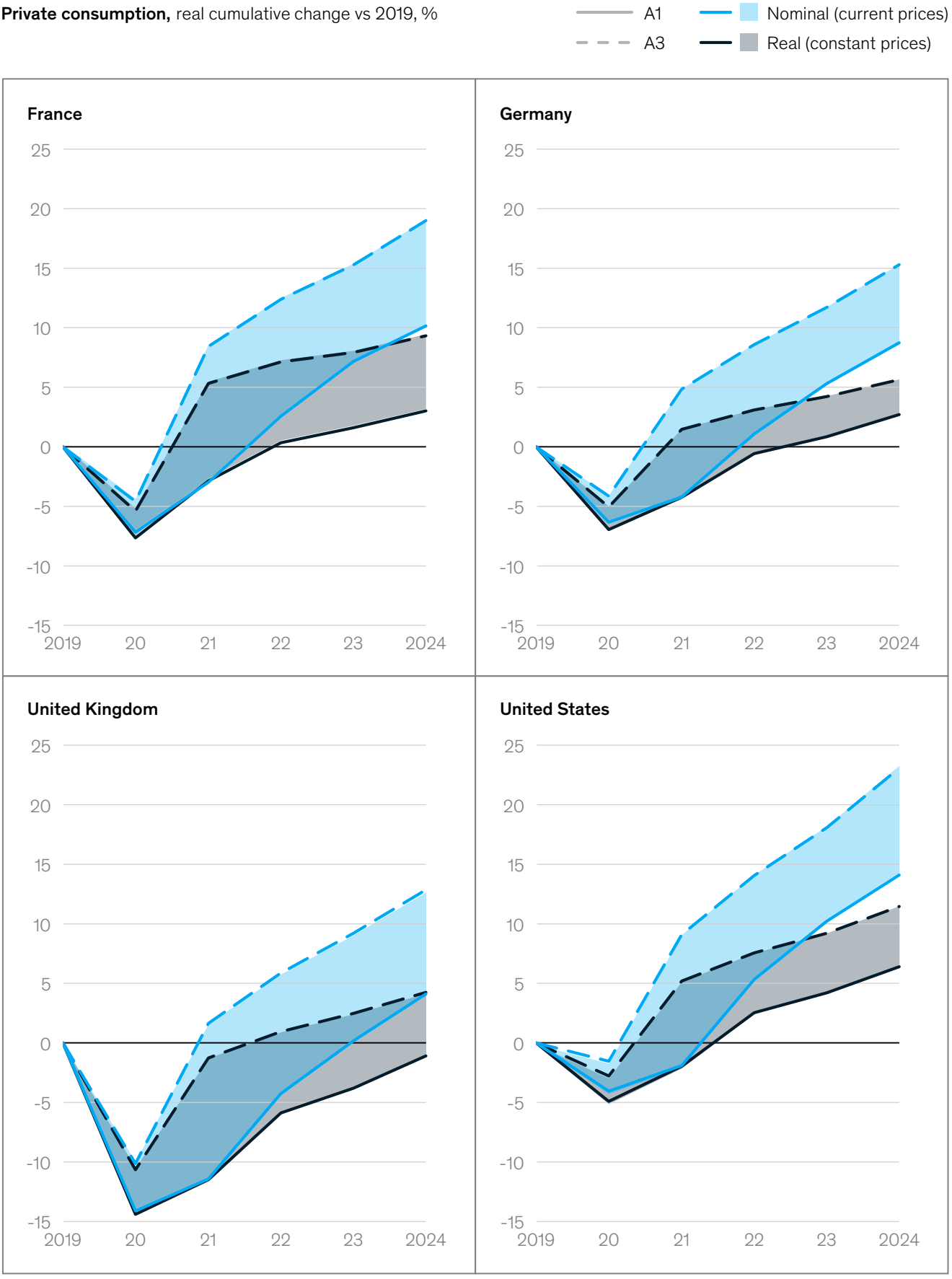
In Europe, short-time work programs have helped to protect employment (with reduced working hours), and this is likely to help workers maintain jobs and avoid a drastic drop in disposable income in 2021. However, there is uncertainty over when governments might end short-time work programs and whether demand will have recovered enough to prevent job losses. A stronger safety net, including more stable employment contracts and more expansive labor protection, as well as support mechanisms for low-income segments should also help underpin the recovery of discretionary consumption.[64] Additionally, high-income consumers did not experience as large an increase in savings as in the United States, and the consumption drop was more severe in Europe. As a result, high-income households may not accelerate their spending as quickly as in the United States, in line with past recoveries including the one following the Great Recession. Because of increased economic uncertainty, savings rates are expected to remain on slightly elevated levels post-COVID-19, a pattern observed after past downturns.

[62] Except for the United Kingdom, where the OECD expects a slightly slower recovery than in the A1 scenario.
[63] This is consistent with the IMF's economic forecasts. See "World Economic Outlook Update," IMF, January 21, 2021.
[64] For more on government response and the social safety net see "COVID-19 has revived the social contract in advanced economies-for now. What will stick once the crisis abates?" McKinsey Global Institute, December 10, 2020.

Exhibit 11

Private consumption is expected to recover fastest in the United States in all scenarios we analyzed.

Private consumption, real cumulative change vs 2019, %

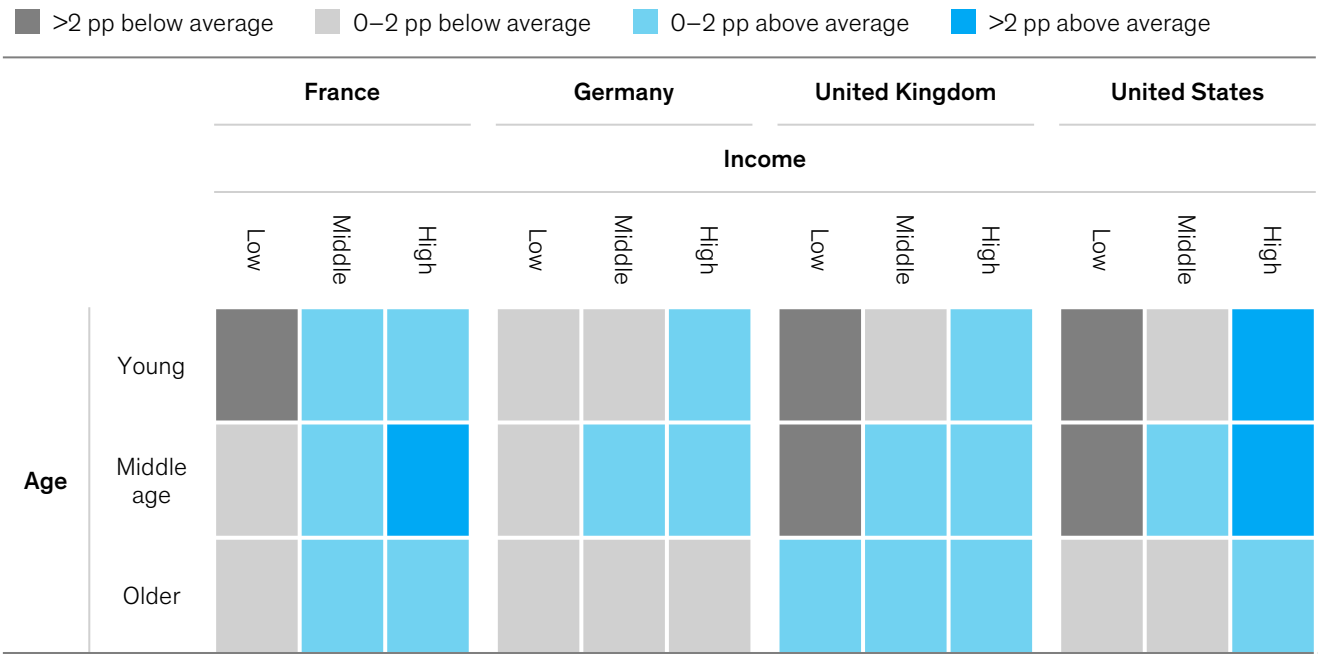


Source: McKinsey's economic scenarios developed in collaboration with Oxford Economics, November 2020; McKinsey Global Institute analysis

Exhibit 12

The recovery in consumer spending is likely to be more uneven between income and age cohorts in the United States than in Europe.

Recovery of real consumer spending by segment, vs aggregate (average) spending recovery in a given country, compared with pre-COVID-19 levels, percentage points



Total consumer spending, 2024 vs 2019, cumulative change vs A1–A3 scenario range, %

	France	Germany	United Kingdom	United States
Real (constant prices)	+3 to +9	+3 to +6	-1 to +4	+6 to +11
Nominal (current prices)	+10 to +19	+9 to +15	+4 to +13	+14 to +23

Note: Segmentation differs across countries due to data limitations. We classify households into low-income (Europe, 1st–2nd quintile; United States, below $40,000 per year), middle-income (Europe, 3rd-4th quintile; United States, $40,000-$100,000 per year), and high-income (Europe, 5th quintile; United States, $100,000+ per year). For age, we divided households into 3 groups based on head of household age: young (<35, United Kingdom <30), middle age (35–64, United Kingdom 30–64), older (65+). For more detail see Box E1, "Our macro methodology and key assumptions."

Source: McKinsey economic scenarios developed in collaboration with Oxford Economics, November 2020; McKinsey Global Institute analysis

But there are variations among European countries with Germany and France likely to recover faster than the United Kingdom.[65] Germany experienced the smallest consumption shock followed closely by France while the United Kingdom suffered the biggest. Stimulus measures also explain the differences, as Germany's package was bigger in relation to GDP and faster, with France and United Kingdom staying behind. As a result, the labor market shock in Germany (which also had the lowest unemployment rate before COVID-19) was milder compared with France and the United Kingdom. In France, the pre-COVID labor market situation was worse than in Germany and the United Kingdom, both in terms of overall unemployment rate and for the youth and basic education unemployment (see Exhibit 4 for more details). Given that the COVID-19 pandemic has affected mainly low-income, service sector jobs, the situation of young people with lower education levels might be particularly challenging in France in the near term. This may lead to further polarization of consumption and greater purchasing power scarring for this cohort. Yet there is a high degree of

[65] This is consistent with forecasts as of January 2021 from the IMF, Oxford Economics, and the European Union. See "World Economic Outlook Update," IMF, January 21, 2021.

uncertainty that could change this outlook (for example, if the United Kingdom's vaccination efforts remain ahead of its continental peers).

Once under way, the strength and sustainability of the recovery will depend on the willingness to spend by high-income households, income constraints on low-income cohorts, and what happens to savings

Once the virus is brought under control and reopening is under way, three main factors will determine the speed and strength of the consumer demand recovery: the willingness to spend by high-income households, income constraints on low-income cohorts, and what happens to savings.

The unequal consumption impact of the pandemic across segments, with high-income consumers decreasing their spending the most, makes affluent households the ones to watch for the speed of the overall consumer demand recovery across all analyzed countries. As those consumers' income has largely been unaffected by COVID-19, their recovery is dependent solely on regaining their access to services and having the confidence to spend. At the same time, this income cohort is critical for the overall recovery because of the high share they represent in overall consumption and the job impact of that spending to drive employment in restaurants, entertainment, travel, and other services.[66]

The earnings potential of young and low-income households may have been more permanently scarred, which could act as a drag on consumer demand. The pandemic triggered a massive labor market shock that affected mainly low-paid jobs in services where salaries and employment may remain depressed. Lockdown restrictions led to rapid digitization as retailers and restaurants expanded their online delivery services and as gyms and hospitals expanded digital channels. Some of these new digital customers will remain (see chapter 2 for a discussion of the factors driving stickiness of new behaviors). And while demand for in-person services is expected to undergo a robust rebound after COVID-19 and lead to jobs growth, the changed habits of middle and high-income cohorts mean that the nature and location of services demand will likely differ from the pre-COVID-19 trajectory (such as working more from home and retaining more digital entertainment and other services). Therefore, in-person service providers will likely adjust, often resulting in a different number, profile, and location of employees. This may lead to additional frictional unemployment in the near term and elevated structural unemployment later on, suppressing disposable income and as a result consumer spending of low-income cohorts.[67] So while in the near term, willingness of high-income consumers to spend on services is key to the consumption recovery, these trends may slow consumption growth in the medium term and lead to the polarization of consumption and consumer markets. This in turn may slow down long-term consumption growth, as high-income households have a lower propensity to consume.

Lastly, the savings rate is an indicator to watch as a rapid decline in consumer demand has caused a massive spike in savings, especially in the United States but also in Western Europe and China. There are two main sources of pandemic savings: forced savings among households with no opportunities to spend on services during lockdowns, and precautionary savings triggered by uncertainty over the future health and economic outlook. The pace in which middle- and high-income households spend their accumulated savings will be a factor shaping overall consumption recovery in the near term, while consumption in the medium term is vulnerable to the durability of elevated savings rates from precautionary motives (see Box 2, "A closer look at savings").

[66] See also Raj Chetty et al., "The economic impacts of COVID-19: Evidence from a new public database built using private sector data," NBER working paper 27431, revised November 2020. The share of high-income households differs across countries. Top quintile of households measured by income generate about 39 percent of consumption in the United States, 36 percent in Germany, about 30 percent in France, and 34 percent in the United Kingdom. Source: Consumer Survey data: BLS, Destatis, INSEE, ONS.

[67] See *The future of work after COVID-19*, McKinsey Global Institute, February 2021. This research finds that in 2030, labor displacement will mainly impact low-paying jobs and is expected to be 33 percent in the United States (United Kingdom 34 percent, France 28 percent, Germany 24 percent).

Box 2

A closer look at savings

Like many things to do with the pandemic, the impact on household savings has been unprecedented. Given that savings are the flip side of consumption, understanding the dynamics of savings is a crucial part of assessing prospects for a consumption recovery. Here we answer three questions related to consumer savings behavior in 2020 and beyond:

What caused the COVID-19 savings shock?

The savings spike during the COVID-19 pandemic was in large part caused by lockdown policies and health concerns that drastically limited the ability of consumers to spend.[68] Most households experienced little change in their disposable income, yet they stopped spending on restaurants, travel, and other in-person activities, and accumulated savings. In Europe, the deep decline in consumption largely explains the high spike in savings. In the United States, direct stimulus checks to households boosted the disposable income of many households, further contributing to the rise in savings. As economies partially reopened in the third quarter of 2020, saving rates declined from their initial peaks, yet remained above pre-COVID-19 levels.

While savings rates increased across all consumer segments, most of the savings boost came from middle and high-income households. We estimate that in the United States, over 80 percent of the savings increase in 2020 compared with the prior year came from high- and middle-income households that continued to earn income but were not able to spend as they may have planned to. Of this, we estimate nearly half of the savings increase in the US came from high-income households, which represent only 27 percent of households. Low-income households also saved more (or reduced their borrowing), and most saw their savings spike throughout the summer, but as time went on, many saw their income sources change and savings decline.[69] There are also signs of a potential debt overhang for low-income households that may have fallen behind on rent.[70] Low-wage workers employed in hospitality and accommodations were furloughed or laid off, yet benefited from the temporary stimulus payments while they lasted. This leaves the two segments in very different situations for the recovery. While high-income households have accumulated savings that they can draw on for future consumption, low-income household purchasing power (and potential to save) will depend on the duration and size of stimulus funding over the next few years and on the speed of service-sector job recovery.

What happens with accumulated savings?

What middle- and high-income households do with accumulated savings will impact the consumption recovery in the short term. Households have four major outlets for accumulated savings: consumption, liquid investments such as deposits or stocks, illiquid investments such as real estate, or debt repayments.

Spending of pent-up demand offers one potential outlet for accumulated savings as consumers replace their forgone consumption from forced savings. Given that the majority of consumer spending comes from services (for example, about two-thirds in the United States), once services spending returns, significant overall consumption growth will follow.[71] Yet unlike deferred durable purchases post-2008, the bounce-back from deferred services consumption will likely be tempered. Past opportunities for haircuts, restaurant meals, or holiday celebrations are harder to fully make up than, say, a deferred car or computer purchase. The return to durable purchases also offers some insight on the speed of a potential rebound. Durables saw a quick recovery and even consumption growth early in the pandemic, as many consumers (fueled by swelling bank accounts) invested in gaming devices, home appliances, and even recreational vehicles that enabled alternative pandemic-era consumption. That said, spending on durable goods grew only moderately. Taken in context

[68] "COVID-19 and the increase in household savings: Precautionary or forced?," European Central Bank, June 2020.
[69] "Household cash balances during COVID-19: A distributional perspective," JP Morgan Chase Institute, December 2020.
[70] Susan Cherry et al., *Government and private household debt relief during COVID 19*, NBER working paper 28357, January 2021.
[71] "Consumption of goods and services during the COVID-19 recession," Federal Reserve Economic Data, August 2020.

Box 2 (continued)

with the difficulty of making up services spend, it is less clear how sustainable the spending bounce will be after consumers are again free to enjoy social activities outside the home. For example, European consumers' expectation to make a major purchase over the next 12 months is down 16 percent as of January 2021.[72]

Liquid investments, such as deposits and stocks, have offered a major destination for accumulated savings. While bank deposits are easily accessible for consumption, equity investments have also received continued inflows, including from new groups of investors like younger cohorts and for retirement contributions. For example, the number of Fidelity IRA accounts owned by millennials in the United States is up 23 percent since second-quarter 2019, while 51 percent of investors under age 34 are trading more frequently since the pandemic (21 points more than the population as a whole).[73] The pattern appears across the Atlantic, too. In the United Kingdom, the stock of household bank deposits grew about 7 percent from December 2019 to September 2020, more than double the average during the same period over the previous five years.[74] In France, purchases of equities by retail investors increased fourfold in March 2020, fueled by new investments from more than 150,000 investors that had otherwise not purchased equity since February 2018.[75] The market's positive returns are reinforcing, turning these savings into higher household net worth, which may encourage consumption during recovery by reducing precautionary incentive to save. However, given that equity investments are disproportionally owned by high-income individuals, it is unlikely that a large share of additional investment in equities will go back to consumption in the near term.[76]

Illiquid investments have had a particularly strong surge of activity relative to historical trends, suggesting the category, especially real estate, has been a key outlet for savings.[77] Low interest rates also support refinancing in the United States, though in Europe tightening credit standards have limited real estate activity.[78] The wealthy have seen disproportionate activity, as those with credit scores above 760 were responsible for 80 percent of mortgage originations (about $760 billion) in the United States, the highest rate since the early 2000s.[79] By definition, illiquid investments are less likely to translate into near-term consumption, though increasing household wealth can spur consumption in the long run.

Debt reduction has not been a draw on savings of high-income households, unlike some lower-income households: 14 percent of stimulus check recipients reported using the transfer to pay off debt.[80] Overall, aggregate consumer debt in the United States increased by 2.9 percent, largely from rising mortgage debt (both refinancing and home purchases) from low credit risk individuals (see more in our home nesting discussion in chapter 2).[81]

Taken together, these trends suggest that much of the accumulated savings has flowed, or will, to accumulated wealth among high-income households that have a lower propensity to spend from wealth.[82] We are likely to see pent-up demand rebound on more lavish restaurant meals or vacation trips after COVID-19 abates, and investments in space and comfort of homes may continue to boost construction and related services. Yet as individuals tend to spend out of their invested wealth at far lower rates than their liquid assets, it is likely that

[72] "Business and consumer survey results for January 2021," European Commission, January, 2021.
[73] "E*Trade study reveals risk tolerance spike among millennial and Gen Z investors," E*Trade, August 19, 2020.
[74] OECD Economics, "The increase in bank deposits during the COVID-19 crisis: Possible drivers and implications," December 10, 2020.
[75] "Retail investor behaviour during the COVID-19 crisis," Autorité des Marchés Financiers, April 27, 2020.
[76] Jonathan D. Fisher et al., "Estimating the marginal propensity to consume using the distributions of income, consumption, and wealth," 2019, Federal Reserve Bank of Boston, Research Department Working Papers.
[77] Daria Solovieva, "Behind real estate's surprise 2020 boom and what comes next," *Fortune*, October 20, 2020.
[78] October 2020 Bank Lending Survey, European Central Bank.
[79] Federal Reserve Bank of New York Consumer Credit Panel/Equifax, February 2021.
[80] "About half of lower-income Americans report household job or wage loss due to COVID-19," Pew Research survey of U.S. adults conducted April 7–12, 2020.
[81] Unlike mortgages, nonmortgage debt dropped by $90 billion from the onset of COVID-19 through September. However, by the end of 2020, aggregate consumer debt in the United States had increased by 2.85 percent, driven mainly by rising mortgage debt (high rates of homebuying and refinancing). Equifax/New York Fed, *Quarterly Report on Household Debt and Credit*; February, 2021 and NerdWallet, *2020 American Household Credit Card Debt Study*, January 2021.
[82] Jonathan Fisher et al., "Estimating the marginal propensity to consume using the distributions of income, consumption, and wealth," Federal Reserve Bank of Boston, Research Department working paper number 19-4, 2019.

a substantial part of the forgone spending will translate into longer term assets that do not immediately fuel the recovery.

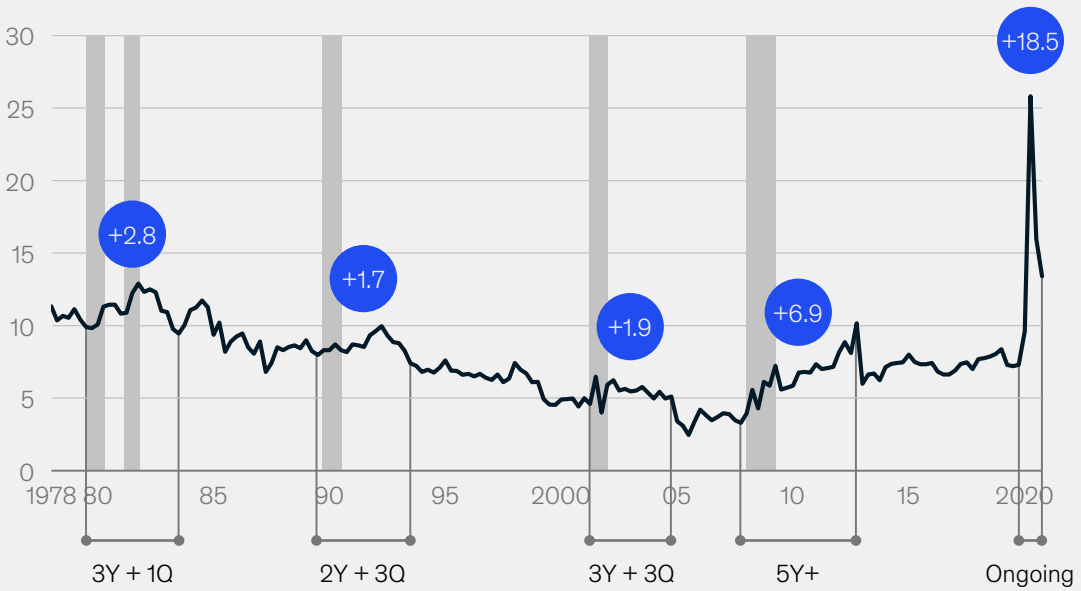
How could future savings behavior shape the consumption recovery?
Typically, savings rates remain elevated for a few years after the trough of a recession, slackening the speed of consumption recovery (Exhibit 13). At the aggregate level, savings rates are likely to remain elevated for the next three to five years, both in the United States and in Western Europe, as consumers are more financially cautious when there is elevated uncertainty about the future. Hence improved confidence of economic recovery ahead is an important factor for bringing savings rates down (and boosting consumption).

Severe economic shocks can also shape individuals' savings more permanently by increasing the motivation for saving for a rainy day, often called precautionary motive. For example, there are young individuals who suffered significant economic shocks both after the Great Recession and now with the pandemic and may make more cautious financial choices throughout their lives as a result.[83]

Exhibit 13

After a recession's onset, the US personal savings rate often increases and tends not to fall below prerecession levels for at least three years.

Patterns of elevated savings rates after recessions, personal savings rate, %



Time before savings rate drops below prerecession level (or other sustained decline)

Source: BEA; McKinsey Global Institute analysis

[83] Consumer savings behavior after past recessions suggests that precautionary motives following a shock of COVID-19's magnitude may bolster household savings rates by three to five percentage points in the two to three years following a downturn. For evidence of the savings response to increased uncertainty after the Great Depression, World War II, and the Great Recession, see Joshua Aizenman and Ilan Noy, "Saving and the long shadow of macroeconomic shocks," *Journal of Macroeconomics*, December 2015, Volume 46. However, the longer term impact on savings (and consumption on the flip side) is uncertain. The accumulated savings have increased household wealth and will likely add a tailwind to consumption in the medium term, especially among those at the lower end of wealth distribution (see Christopher Carroll et al., "The distribution of wealth and the marginal propensity to consume," *Quantitative Economics*, November 2017, Volume 8, Issue 3; Christopher Carroll, Misuzu Otsuka, and Jiri Slacalek, "How large are housing and financial wealth effects? A new approach," *Journal of Money, Credit and Banking*, February 2011, Volume 43, Issue 1; and Keynes' seminal argument in *The General Theory of Employment, Interest and Money*). Yet savings decisions depend on a complex set of factors such as the life-cycle hypothesis by Modigliani and Brumberg, especially relevant with the retirement of the large baby boomer cohort, as well as the potential for some cohort scarring from severe financial shocks in early life (see Ulrike Malmendier and Leslie Sheng Shen, "Scarred Consumption," Board of Governors of the Federal Reserve System, International Finance discussion paper number 1259, 2018; and Charles Schewe, Stephanie M. Noble, and G. E. Meredith, "Defining moments: Segmenting by cohorts," *Marketing Management*, January 2000, Volume 9, Number 3).

The sudden and deep drop in consumption across the United States, Western Europe and China, ranging from 11 to 26 percent in the initial months of the pandemic, was concentrated in consumer services, especially travel, entertainment, and dining. These categories have been growing over the long term, and consumer surveys indicate a likely strong demand rebound after the pandemic. However, the pandemic had an exceptionally uneven economic impact across households, forcing consumers to change long-standing behaviors, companies to abruptly transform business models, industries to restructure, and governments to adjust regulations. These actions will leave lasting marks on household consumption patterns after the pandemic. In the next chapter, we examine what will stick and what will not through our stickiness test representing a spectrum of consumer behavior across six case studies.

Our macro methodology

We used the following approach to estimating the COVID-19 impact on future consumer demand.

Consumer segmentation

Forecasting the impact of the pandemic on the shape and size of future consumer demand requires understanding differences in income, spending, and saving patterns across consumer segments. In this report, we have divided consumers into nine segments based on their disposable income and age, as both criteria have a substantial impact on size and structure of consumption. For income, we took a distribution-based approach and classified households into: low-income (first and second quintile), middle-income (third and fourth quintile), and high-income (fifth quintile).[84] For age, we have also divided households into three groups based on head of household age (where head of household is defined as a person with the highest income living in a given household).[85] By cross-tabulating income and age criteria, we arrived at nine consumer segments for which we aim to predict the shape of postpandemic consumption.

Pre-COVID-19 segment characteristics

We defined economic profiles for each of the nine segments by analyzing their historical income, consumption, and savings patterns. We rely on consumer expenditure surveys by national statistical offices for our baseline data on disposable income and its sources, spending, and structure, as well as savings and its allocation (note: scope of survey data available differs for each country), separately for each of the nine demographic groups. In addition, we analyzed pre-COVID-19 trends shaping the number of consumer units and their consumption baskets in each segment, including population aging, sources and growth of income, and the impact of rising prices of basic goods and services (such as housing) on consumption mix. These baseline trends underlie our post-COVID-19 recovery consumption size and mix forecasts and enable us to size the differential impact of the pandemic on each segment (for example, the impact of job losses on income or the service closure impact on overall consumption) as well as assess likely paths of consumption recovery.

The COVID-19 impact

Given the time lag in release of consumer survey data, the latest data available are from 2017 to 2019 and do not permit processing real-time information on the consumption patterns of each consumer segment during the pandemic.[86] Instead, we drew on additional sources, including national accounts data, credit and debit card data, and household pulse surveys to assess the more recent consumption impact during COVID-19.[87] We relied on quarterly and monthly aggregate national accounts data for anchoring the sum of disposable income, savings, and spending by category across all consumer segments, as the national accounts data are not available by age or income. At the time of writing the report, the most recent data available for most of the countries are third-quarter 2020 (fiscal year 2020 for the United States). We decompose the aggregate figures into specific consumer segments using real-time credit and debit card spending data. Although credit and debit card spending covers only part of overall household consumption, the time series patterns correlate closely with overall spending.[88] In this report, we were able to analyze credit and debit card data in age and income cuts for the United Kingdom and United States, and in income cuts only for

[84] Because of data limitations, US income groups have been defined based on constant, gross household income brackets. Low income: <$40,000, middle-income $40,000–$100,000, high-income >$100,000. In 2018, those groups reflected 39 percent, 35 percent, and 26 percent of households, respectively.

[85] For the United Kingdom, young defined as <30 because of data limitations.

[86] For Germany and the United States, data are for 2018, for France 2017, and the United Kingdom 2018–19.

[87] For further details on consumer segment-level impact of COVID-19, see also Raj Chetty et al., "The economic impacts of COVID-19: Evidence from a new public database built using private sector data," NBER working paper 27431, revised November 2020. Please note that although both the cited paper and this report leverage the same source of credit card data, applied methodology and consumer segmentation differ.

[88] Based on US analysis. We have leveraged the credit and debit card data as a proxy for discretionary consumption categories. For basic consumption (groceries, housing, education, and healthcare), we have assumed a proportional drop across all consumer segments.

Germany.[89] We used the card spending patterns to decompose COVID-19-induced changes in consumption into each of the nine demographic segments.[90] This allowed us to assess relative segment performance during COVID-19, while maintaining consistency with the aggregate national accounts data. Credit card data were supplemented by real-time household pulse surveys (US) and employment/earnings by industry data in order to assess segment-specific impact of COVID-19 on disposable income, savings behavior, and propensity to consume in 2020.

The post-COVID-19 recovery

The main objective of our forecasts was to understand both the overall prospects for consumption recovery and the ways consumer demand by segment is likely to evolve after COVID-19. We based our forecasts on economic assumptions on disposable income, savings, and consumption mix evolution, as well as behavioral assumptions on likely consumption rebound or recovery after the pandemic passes.

For aggregate consumption forecasts, we relied on McKinsey's economic scenarios developed in collaboration with Oxford Economics.[91] Those scenarios provide a forecast of key aggregate variables related to consumer spending (such as disposable income, employment, and private consumption) and are developed based on a set of assumptions regarding virus control and economic response to the crisis. While there are nine scenarios assuming different economic and health responses and their effectiveness, we focus on three in this report—A1, A2, and A3—which are consistent with the forecasts of major institutions such as the IMF and the OECD. These three scenarios all assume no structural damage to the economy, yet differ in the effectiveness of health and economic interventions, resulting in different recovery paths. Within this range, A1 is the most conservative scenario, assuming medium effectiveness of both health and economic response. This translates into controlling the adverse health impacts by around mid-2021, followed by acceleration of economic growth toward the end of the year. The A2 scenario assumes a more effective economic response, leading to an earlier acceleration of economic growth, while A3 is the most optimistic, assuming earlier virus control (that is, through effective rollout of the vaccination process) resulting in a steeper growth path already in 2021. The range of A1 and A3 scenarios encompasses the baseline GDP forecasts of IMF, Oxford Economics, and OECD (except for the United Kingdom, where the OECD expects a slightly slower recovery than in the A1 scenario).

The next step was to translate the aggregate forecast into consumer segment-specific recovery paths for disposable income, savings, and consumption. For each of the nine segments, we drew on both the pre-COVID-19 trends and the pandemic-induced shocks discussed above, as well as forecasts of stimulus support and labor market evolution, to build segment-specific forecasts of the recovery path of disposable income, savings, and consumption. For example, we relied on employment growth forecasts in estimating disposable income recovery for lower-income working-age consumers, but used GDP growth forecasts for older, high-income households who are largely out of the labor force. And given that young, low-income workers are more likely to work in in-person services (such as hospitality) that were harder hit and more likely to be automated as a result of the pandemic, we assumed a lower-than-average labor income recovery for them. Their consumption recovery is thus also slower to recover than among higher-income middle-aged households who are more likely to work in occupations more suitable for teleworking and thus less likely to have faced income loss during the pandemic. This allowed us to also assess how consumer spending may shift between consumer segments, both on the aggregate and category levels.

[89] At the time of writing this report, we did not have access to French card spending data. However, given similar developments of aggregate consumption in Germany and France, conclusions from German card data were applied to France. Age and income split was available for United States and United Kingdom only; for Germany only income split was available. The data for United States and Europe were sourced from different providers, which limits their direct comparability.

[90] Due to limitations in credit and debit card data (both on geography and spending coverage level), estimations of consumer segment level changes in spending were supplemented with estimations of exposure to consumption drop based on pre-COVID consumption mix.

[91] For more details about the scenarios and underlying assumptions, see "Safeguarding our lives *and* our livelihoods," March 2020 and "Nine scenarios for the COVID-19 economy," January 2021, both on McKinsey.com.

We built separate models for recovery for each country focused on the post-COVID-19 recovery period over the next three years, 2021–24.[92] While a high level of uncertainty remains about both pandemic evolution and economic policy, the consensus estimates across multiple macroeconomic forecasts expect most of the economies we analyze to have recovered at least to pre-COVID-19 levels during that period.[93] Yet independently of the timing of the recovery, presented consumer segment level differences in recovery patterns are likely to remain directionally correct for a wide range of macroeconomic outcomes.

Key areas of uncertainty

Because of high levels of uncertainty, actual recovery paths for the countries in this analysis might differ from our projections. Key areas of uncertainty include the following:

— **Pace of vaccination and reopening of the economy.** The faster the vaccination process, and the more widespread the uptake, the better the prospects for lifting the restrictions and reopening the economy. As of January 2021, the United Kingdom was ahead of both continental Europe and the United States. However, it was still uncertain which country would complete the full process and be first to lift restrictions. Additionally, new mutations of the coronavirus might pose a threat to the effectiveness of the global health response.

— **The scale and effectiveness of further stimulus measures.** The scale of government stimulus measures will be crucial to the recovery, especially in 2021, as most economies will still operate under COVID-19-related restrictions. If governments succeed in preventing business bankruptcies and assure a stable flow of disposable income to households (through subsidizing the jobs or directly paying individuals), the transition to a postpandemic economy could be quicker and smoother. In the opposite case, the output gap could be bigger and a return to normal take longer. China shows that a relatively minor economic disturbance and a quick return to normal operating conditions are key to a rapid recovery.

— **Perceived health risks.** A return to pre-COVID-19 levels of consumer activity depends not only on the reopening of industries, but also on perceived health risks, in turn a function of the severity and duration of the epidemic, the robustness of the public health response, and vaccine effectiveness and uptake. If, despite an end to restrictions, consumers are still fearful of consumption requiring activity outside the home, the consumer demand rebound will be delayed.

— **Level of uncertainty and precautionary savings.** Even assuming the health risk is over in 2021, perceived economic risk can last longer. Some consumers (especially low- and middle-income ones) might be more uncertain about the future economic prospects and decide to keep a higher savings rate for precautionary reasons. This will in turn slow down the recovery of aggregate consumption (see Box 2, "A closer look at savings," for more details).

What falls outside the scope of this research

Our aggregate income and consumption projections to 2024 do not explicitly consider the impact of changes in the mix of disposable income sources (wages, assets, or transfers), nor make assumptions about the impact of changes in consumption mix on specific consumer segments. In our savings calculations, we focus on the difference between household disposable income and consumption, neglecting nonconsumption expenses such as transfer payments, fines, and interest payments given their small size and stability over time (about 4 percent of consumption value over the past decade in the United States). Lastly, we did not analyze the impact of the pandemic on household assets and net worth.

[92] Excluding China.

[93] Some of the forecasts available only until 2022. The United Kingdom is not expected to recover within this time frame, according to the OECD and IMF. Forecasts analyzed: "World Economic Outlook," January 2021 Update (data until 2022), OECD Economic Outlook, Number 108, December 2020 (data until 2022), Oxford Economics baseline forecast, January 2021 (data until 2025).

Caption is optional. Detailed credit is mandatory.
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2. The lasting effects of COVID-19 on consumer behavior

Every crisis leaves its mark. The economic collapse of the 1930s produced a generation of careful savers. The oil price shock of 1974 kick-started a lasting movement to look for energy-efficient products and to reduce the environmental impact of consumption. The global COVID-19 pandemic is sure to leave an imprint on our collective psyche as well. It has been the most disruptive crisis in living memory, affecting behavior in nearly every community on earth. In addition to the economic ramifications discussed in the previous chapter, the pandemic is likely to leave lasting marks on behavior and the shape of household consumption. This is especially true in the United States and Western Europe, where consumers have had to dramatically adjust their behavior for almost a year—long enough to form new habits—by canceling travel, working from home, dining at home, socializing digitally, and more.[94] And the longer the pandemic, the deeper the mark.

To better understand those behavioral changes, we employed a bottom-up approach and investigated in detail six cases that cover a broad spectrum of consumer life, were material in time and money spent by consumers, and were impacted by the pandemic in 2020. These cases include e-grocery shopping, entertainment, home nesting, leisure air travel, remote education, and virtual healthcare (see the end of this chapter for individual case studies). To determine what might change and what might remain the same in these six cases, we created a "stickiness test" that highlights the importance of understanding not only consumer preferences but also the role of industry and government in shaping consumption patterns long after the pandemic is over (see Box 3, "What economic theory says about consumer behavior").

[94] A study by Lally et al. modeled habit formation in the real world, concluding that there is "considerable variation in how long it takes people to reach their limit of automaticity" but that participants reached 95 percent of their asymptote of automaticity from 18 to 254 days, with a median time of 66 days. See Phillippa Lally et al., "How are habits formed: Modelling habit formation in the real world," *European Journal of Social Psychology,* 2010, Volume 40, Issue 6.

Box 3

What economic theory says about consumer behavior

Classical economics views consumers as rational, utility-maximizing decision-makers who make choices based on tastes and preferences within temporal and financial constraints. Known as "utility theory", this view was originally developed in the late nineteenth century by English economist Alfred Marshall, widely considered a founder of neoclassical economics.[1] While utility theory provides a strong basis for theoretical economic modeling, economists have found it has limitations in predicting consumer behavior.

Using experimentation and cognitive psychology, Daniel Kahneman and other behavioral economists have expanded our understanding of the many ways individual choices differ from those predicted by utility maximizing theory. Among the engrained heuristics and biases that most directly impact household consumption decisions are: paradox of choice (too many choices can discourage consumers from selecting any); decision fatigue (after making many decisions, our ability to make optimal choices deteriorates); familiarity bias (we are more likely to choose what we know); herd behavior (we are more likely to mimic choices of those around us); priming and anchoring (an implicit impact of an earlier stimulus or reference on choices); time inconsistency (decisions today may no longer seem optimal tomorrow); and loss aversion (weighing potential losses more than gains of equal size); among others.[2]

The complex factors shaping consumer behavior make it challenging to have a single, unified perspective on how to explain and predict consumer behavior. In addition, institutional economists have emphasized the role that companies and governments play in shaping choices of social humans.[3] To understand the long term behavioral impact of the pandemic, our sector case evidence suggests that we need to consider a range of factors that shape consumer choices that go beyond the individuals themselves. Hence our stickiness test explicitly considers the role that companies, industries, and governments play in shaping the options and choices of households.

1 Alfred Marshall, *Principles of economics: unabridged eighth edition*. Cosimo, Inc., 2009. For more about the traditional economic view of the consumer see Angus Deaton and John Muellbauer, *Economics and Consumer Behavior,* Cambridge University Press, 1980. Gary Becker introduced optimization as a tool to analyze broader individual decisions such as household division of labor, time use, fertility, crime, and beyond. Robert T. Michael and Gary S. Becker, "On the new theory of consumer behavior," *The Swedish Journal of Economics*, December 1973, Volume 75, Number 4.

2 Daniel Kahneman and Amos Tversky, "Prospect theory: An analysis of decision under risk," *Econometrica*, March 1979, Volume 47, Number 2; Sheena S. Iyengar and Mark R. Lepper, "When choice is demotivating: Can one desire too much of a good thing?," *Journal of Personality and Social Psychology*, 2000; George Loewenstein, Daniel Read, and Roy F. Baumeister, eds. *Time and decision: Economic and psychological perspectives of intertemporal choice*. Russell Sage Foundation, 2003; Raffaella Misuraca et al., "The role of the brand on choice overload," *Mind & Society*, 2019; Abhijit V Banerjee, "A simple model of herd behavior," *The Quarterly Journal of Economics*, August 1992, Volume 107, Number 3, ; Amos Tversky and Daniel Kahneman. "Judgment under uncertainty: Heuristics and biases," *Science*, September 1974, Volume 185, Number 4157.. For an overview of the wide range of behavioral heuristics, see Daniel Kahneman, *Thinking, Fast and Slow*, New York, NY: Macmillan, 2011.

3 Thorstein Veblen, *The Theory of Business Enterprise*, New Brunswick, NJ: Transaction Publishers, 1978; John R. Commons, "Institutional economics," *Revista de Economía Institucional,* 2003, Volume 5, Number 8; and Douglass C. North, "The new institutional economics and development," Economic History series, number 9309002, 1993, University Library of Munich, Germany.

Long-standing consumer habits—more money spent on services, greater digital adoption, and more time out of the home—have been disrupted by the pandemic

A defining trend of mature economies has been the increasing share of consumer spending devoted to services such as childcare, healthcare, housing, and leisure air travel. For more than five decades, share of services have been increasing with rising incomes, both between countries and within countries by income segment.[95] For example, as of 2016, service-dominated categories accounted for 2.5 times more household consumption expenditure than goods in the United States, while in India goods account for 3.8 times more spending than services. Within countries, increasing levels of wealth drive more spending on different types of services. In China, spending on dining starts to increase rapidly at annual incomes of $3,000, while leisure air travel starts to increase at incomes of $18,000 per year.[96] However, forced lockdowns and fears about contagion from COVID-19 have resulted in spending on consumer services plummeting (Exhibit 14).[97] Initial lockdowns shut down childcare facilities, schools, doctors' offices, restaurants, and live entertainment venues, and travel was sharply curtailed. While some restrictions have been eased, many remain in place in Western Europe and the United States, and as of the beginning of 2021, fears of contagion remained high, further limiting spending on consumer services.

Another trend going into the health crisis has been growing digital adoption across industries. According to MGI research, by 2018, 26 percent of worldwide sales were made through digital channels, 31 percent of operations volume was being digitally automated, 25 percent of interactions in supply chains and 30 percent of internal operations were being digitized, yet there was vast potential to accelerate adoption.[98]

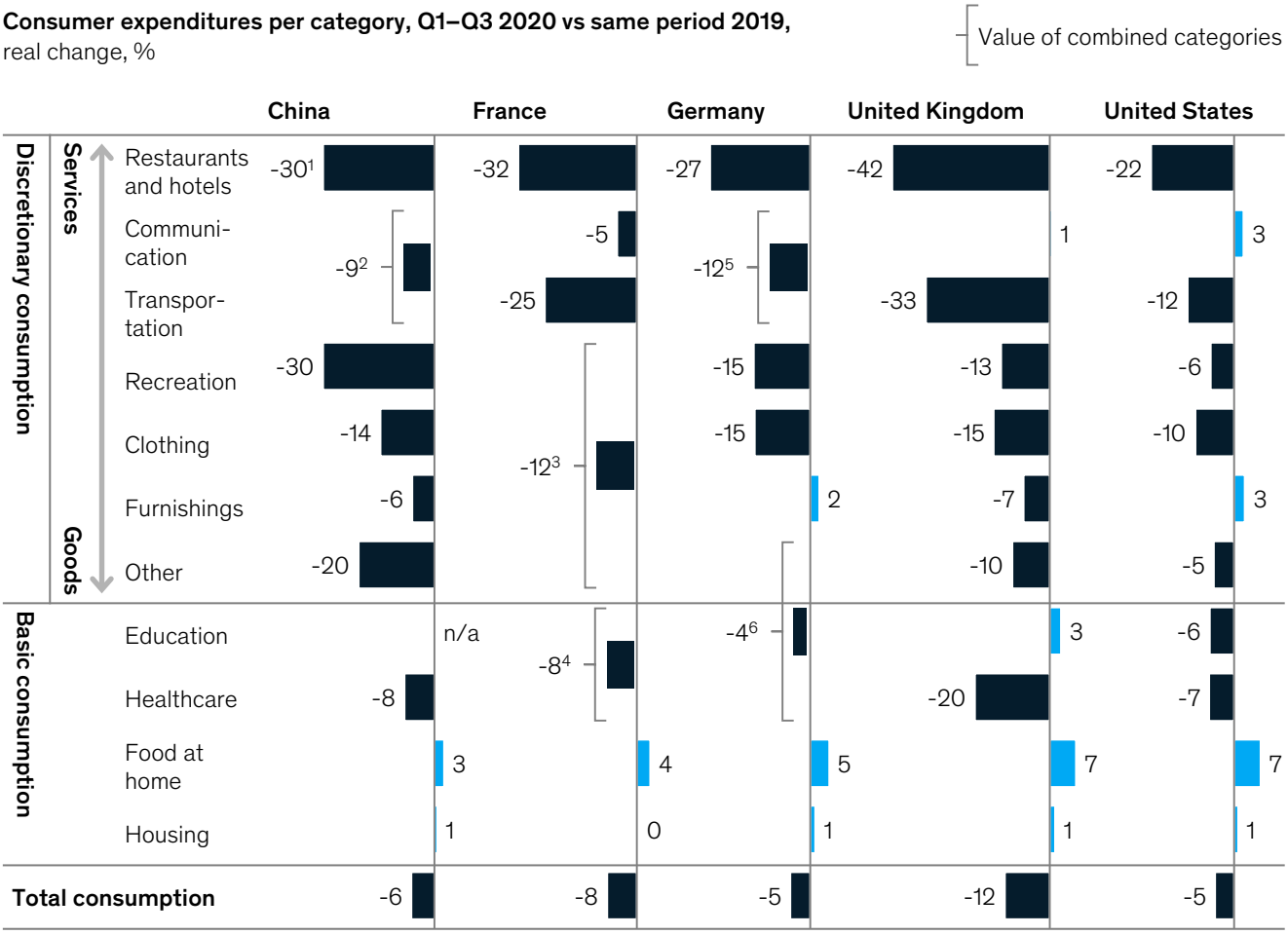
Still another trend was increased time and money spent outside the home, where we found that households increased their use of services like cleaning, eating out, or tutoring instead of doing it themselves. For example, in the United States, our analysis of the American Time Use Survey showed parents had spent over an hour less on household activities like helping children with homework and garden care per week on average since 2002 (Exhibit 15).[99] Here, too, lockdowns and work-from-home policies upended this trend and changed how many households spend their time; for example cooking more, watching more movies, and even sleeping more.

[95] *Domestic services: The hidden key to growth*, McKinsey Global Institute, December 2005; and *Urban World: The global consumers to watch*, McKinsey Global Institute, April 2016.
[96] *Urban World*, April 2016.
[97] *Future Development*, "The decline and recovery of consumer spending in the US," blog item by Thomas Mitterling, Nirai Tomass, and Kelsey Wu, Brookings Institution, December 14, 2020.
[98] For more details, see: *Digital America: A tale of the haves and have-mores*, McKinsey Global Institute, December 2015; *Digital China: Powering the economy to global competitiveness*, McKinsey Global Institute, December 2017; *Digital Europe: Pushing the frontier, capturing the benefits*, McKinsey Global Institute, June 2016; and *Twenty-five years of digitization: Ten insights into how to play it right*, McKinsey Global Institute, May 2019.
[99] American Time Use Survey, US Bureau of Labor Statistics, 2003–19.

Exhibit 14

COVID-19 has also impacted the consumption mix across countries, with discretionary services decreasing the most and basic consumption categories growing or remaining stable.

Consumer expenditures per category, Q1–Q3 2020 vs same period 2019, real change, %



1. China: based on culture, education, and recreation.
2. China: combination of communication and transportation.
3. France: combination of recreation, clothing, furnishings, and other.
4. France: combination of education and healthcare.
5. Germany: combination of communication and transportation.
6. Germany: combination of other, education, and healthcare.

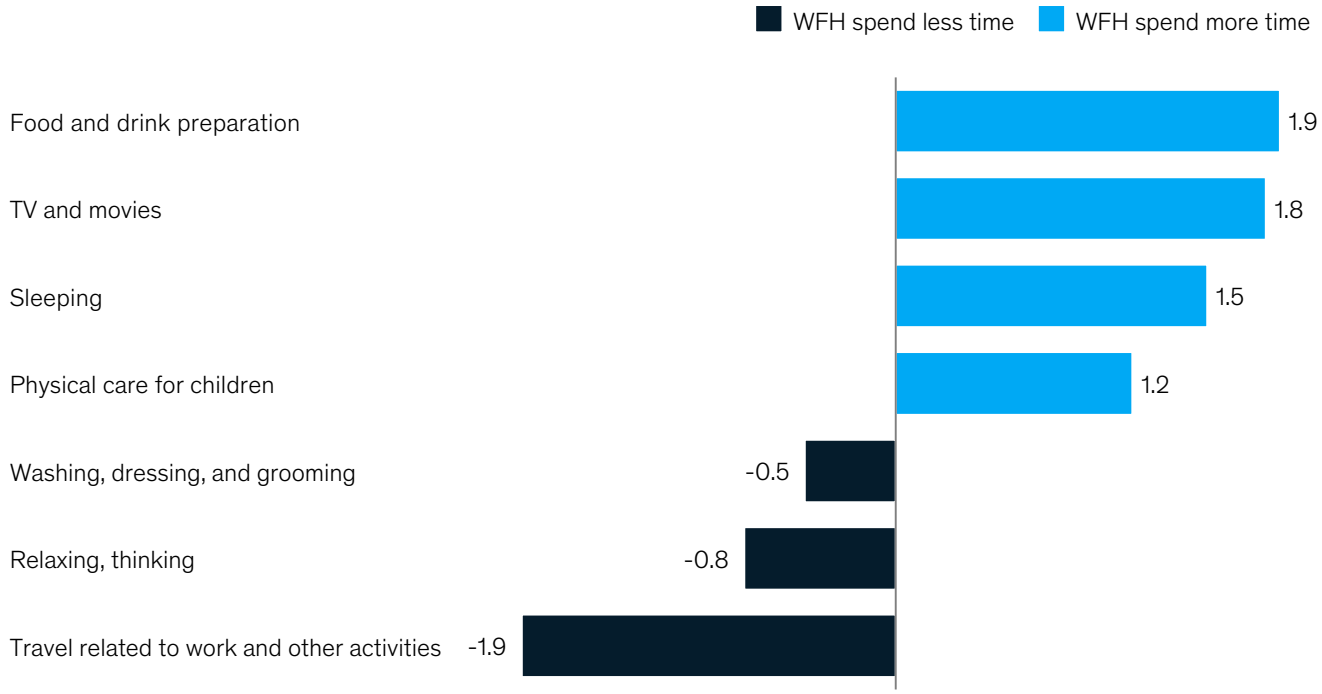
Note: For China, France, and Germany, some categories merged because of 2020 data limitations.

Source: BEA; Destatis; Eurostat; INSEE; National Bureau of Statistics China; ONS; McKinsey Global Institute analysis

Exhibit 15

Prepandemic surveys reveal that working from home tends to lead to more time spent on home responsibilities such as shopping, cooking, and laundry.

Time allocation by individuals who work from home (WFH) a majority of the time vs work from an office, hours spent per week on average, 2019



Source: US Census American Time Use Survey; McKinsey Global Institute analysis

To determine whether these pandemic-induced behaviors would stick, we examined six behavioral shifts that cover a broad range of consumer life and are drawn from sectors that cover almost three-quarters of consumer spending. These include: an acceleration of e-grocery shopping, an increase in virtual healthcare visits, the emergence of home nesting (that is, spending on items such as home gyms, backyards and gardens, and kitchen equipment), a switch to remote learning, a decrease in leisure air travel, and a sharp decline in live entertainment. Focusing on the period 2020 to 2024, we determine how likely each of these behaviors is to stick in China, France, Germany, the United Kingdom, and the United States (see Box 4, “Our stickiness test”).

Box 4

Our stickiness test

To evaluate behavioral stickiness, it is important to understand shifting dynamics across three broad categories: consumer response (for example, do consumers find value in it? How satisfied are they with the end-to-end consumption experience? Have they made durable investments?), industry response (How have companies responded? What is the impact of underlying or emerging industry structure?), and the role of government (Has the government provided economic support? What is the impact of regulations?). Exhibit 16 shows the full framework.

For each category, we have identified a set of key indicators to understand the forces at play behind behavior. These indicators are as follows:

Consumer response

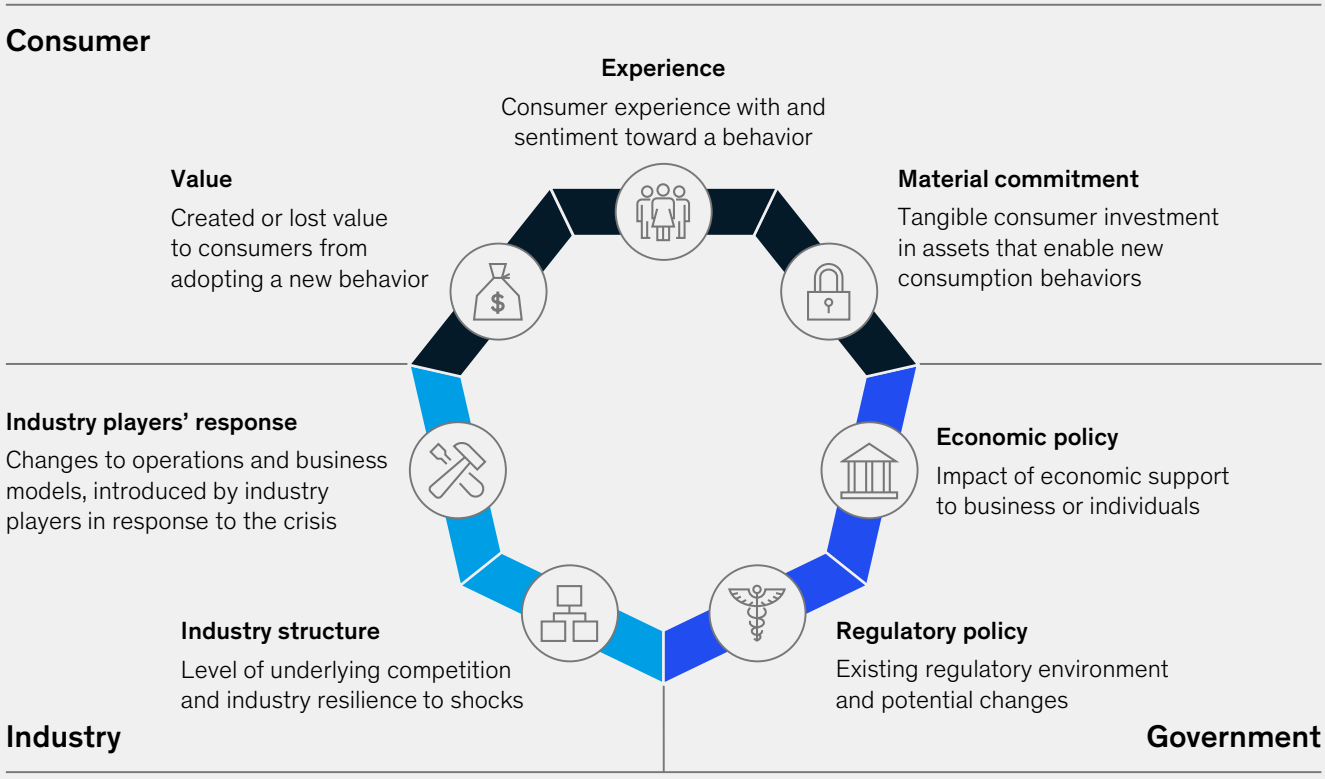
— **Value.** How much value consumers perceive as gained or lost when they adopt a new behavior is critically important to its long-term stickiness. For consumers, value is often evaluated in relation to prior behaviors and alternatives. For example, leisure air travelers have experimented with alternatives to flying for vacations and visiting family for holidays during the pandemic, but these are poor replacements for the real thing.

— **Experience.** Consumer experience with a behavior is also critical to long-term stickiness. Beyond the inherent value of new habits, the end-to-end experience, from ease of purchase to the simplicity of use and the efficacy of the product or service in satisfying consumer needs, matters greatly. For example, many households have enjoyed the ease and expanded selection of digital entertainment at home, while remote K–12 education has been broadly criticized as inadequate compared with in-person learning.[1] And as with other components of stickiness, the underlying infrastructure plays a role in consumer experience, as the limitations of digital and other infrastructure shape how consumers can and do interact with new products and services.

— **Material commitment.** Another driver of stickiness is consumer investment in assets that enable consumption behaviors. For example, many households have

Exhibit 16

MGI's stickiness framework predicts whether changes in consumer behavior will last and takes into account the impact of industry and government actions on consumer choice.



Source: McKinsey Global Institute analysis

[1] Haley Apel, "Survey finds remote learning gaps in US elementary schools," Nebraska College of Education and Human Sciences, August 31, 2020.

invested in home offices or gyms or upgraded gaming devices during the pandemic.[2] Those investments in fitness equipment and multiple months of building an at-home exercise habit are likely to impact the willingness of some past gym members to renew their membership once the pandemic is over.

Industry response

— **Industry players' response.** In response to the COVID-19 pandemic, companies across industries were forced to very quickly adjust their operations and business models. How well they responded to the new challenges shaped consumer choices and experience. While in many cases, industry players responded with new products and services, some less obvious responses, such as increased supply chain resilience, also played a role. For example, in e-grocery, discounters had limited online capabilities before COVID-19, and their lean model impaired efforts to rapidly stand up new capabilities or pushed them to outsource e-grocery to third-party logistics players, albeit at a cost. Mainline grocers (especially major urban players), on the other hand, already had an online presence and delivery relationships and were ready to take advantage of the demand expansion.[3]

— **Industry structure.** Industry structure, the nature of competitive dynamics and changes in competition, broad availability of distribution and consumption models, and the underlying resilience to shocks induced by COVID-19 have implications for consumers' choices in the future. For example, in entertainment, movie studios responded to consumer apprehension about in-person entertainment by bypassing traditional distribution channels with a direct-to-consumer model.[4] Reduction in business air travel is putting pressure on airline profitability and may lead to higher prices or reduced routes available for leisure air travelers.[5]

Role of government

— **Economic policy.** Economic policy choices, including pandemic-related economic support to businesses and individuals, often impact consumption both directly and indirectly. For instance, $25 billion of the $2 trillion CARES Act stimulus infusion in the United States softened airlines' initial economic pain.[6] In contrast, independent live entertainment venues have been hard hit, yet did not initially receive industry-specific government support in 2020, likely causing long-term changes in supply options for consumers.[7] *Billboard* reported that more than 90 independent venues in the United States were forced to permanently close as of September 2020.[8] The situation in Europe was similar, with Live DMA reporting that its 2,600 members, which include subsidized private nonprofits and government-supported entities, earned only about a third of anticipated total 2020 revenues.[9] Finally, the indirect impact of infrastructure policy also plays a role in consumer life. For instance, at least 39 states pledged to use CARES Act funding for infrastructure development, focused on bridging the digital divide in education.[10]

— **Regulatory policy.** Existing and future regulatory policy is also an important facet of stickiness. For instance, in response to the pandemic, the US government was quick to allow previously limited reimbursement of telehealth services, facilitating virtual healthcare visits.[11] Similarly, the US government initially limited Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) payment use for online grocery purchasing to selected retailers in certain states. However, it is now rolling the program out to additional markets, facilitating greater adoption of e-grocery after a bumpy start.[12]

Across our five countries, for each of the factors outlined above, we assess the extent to which a factor increases the likelihood of lasting change, decreases the likelihood of lasting change, or has a neutral impact. This allows us to attribute individual factors to the root causes of behavioral shifts, to triangulate the overall likelihood of stickiness based on the strength of each factor, and to determine what factors to track for stickiness in the future.

2 US Bureau of Economic Analysis; "US consumer spend on video game products continues to break records," NPD Group, August 10, 2020.
3 "Reviving grocery retail: Six imperatives," McKinsey.com, December 2018.
4 Rebecca Rubin, "Hollywood at a Crossroads: Tough choices on how to reach audiences as coronavirus worsens," *Variety*, December 1, 2020.
5 Andrew Curley, Rachel Garber, Vik Krishnan, and Jillian Tellez, "For corporate travel, a long recovery ahead," August 13, 2020, McKinsey.com.
6 Lori Aratani, "US airlines to accept billions in loans from federal government; still no deal to avoid furloughs," *Washington Post*, September 2020.
7 These venues were eligible for small-business loans if they met the requirements of the program. See "Where $521 million in small business aid went," Bloomberg, July 2020.
8 Taylor Mims, "Venues closing across America: An updating list (and why it matters)," *Billboard*, January 5, 2021.
9 "Key numbers: Impact of the COVID-19 pandemic on 2,600 Live DMA European music venues and clubs in 2020," Live DMA, September 2020.
10 Austin Reid and Jocelyn Salguero, "States use CARES Act funds to address digital divide," National Conference of State Legislatures," October 28, 202; ncsl.org
11 "Medicare telemedicine health care provider fact sheet," US Centers for Medicare and Medicaid Services, May 2020.
12 "FNS launches the online purchasing pilot," US Department of Agriculture Food and Nutrition Service, December 31, 2020; and Nathaniel Meyersohn, "Online grocery shopping is growing, but millions of Americans on food stamps are being left behind," CNN Business, December 8, 2020.

There are other behavioral changes that we did not cover in our case studies: sustainability is one; an increased focus on health is another. We think tracking the stickiness factors—consumer behavior as well as company offerings and government role—could help predict the nature of long-term behavioral changes we should expect. On sustainability, many households had more time to consider their shopping choices and expressed increased desire to make eco-friendly and sustainable choices in their purchases (refer back to Box E3, "Consumption and sustainability in a postpandemic world").[100] In the case of health, consumers also expressed appetite for making healthier choices. The pandemic brought healthy behaviors to the forefront because of both the higher risk from COVID-19 infection to those with preexisting health conditions and the experience of workers who reduced travel and reported better sleep and more time for exercise while working from home.[101] On both accounts, however, the likelihood of consumers actually sustaining these choices will critically depend on the product choices and pricing that companies offer, as well as the regulatory incentives for both companies and individuals to shift toward more sustainable or healthy goods, services, and behaviors.

A precondition for enduring pandemic behaviors is sufficient public and private infrastructure needed for meeting consumer expectations for service and performance quality. Access to high-speed internet is critical for most people working from home, just as students taking online classes need access to a connected computer and quiet space for studying. There are wide discrepancies by income and region in how equipped households are for continuing to shop, work, and receive healthcare through digital channels.[102] Business infrastructure can similarly shape lasting behaviors: retailers with an established online presence and supply chain and delivery infrastructure were ready to expand high-quality e-grocery offerings that kept first-time users coming back. Even economic density can matter: value of digital healthcare can be exceptionally high in rural areas with limited nearby medical care, while a variety of grocery offerings is more likely to emerge in dense urban areas like London or Shanghai than in the rural United States or decentralized Germany.[103] While our stickiness test is the key to understanding if a behavior change will persist, adequate infrastructure is a necessary but not sufficient condition for stickiness.

Consumer behavior shaped by the pandemic is sticky to varying degrees across sectors and countries

Our case study analysis identifies behaviors that COVID-19 accelerated, reversed, or interrupted. Out of these, we identify two broad trends that are likely to shape consumption beyond the pandemic (Exhibit 17). First, the COVID-19 pandemic accelerated digital adoption, and this will continue in many areas such as grocery shopping and healthcare. Second, we found that the pandemic and lockdowns reversed the long-standing trend of declining money and time spent at home, leading to "home nesting." On the basis of our analysis, we expect this behavior to stick as high-income households prefer to work from home after the pandemic and low-income households retain low-cost at-home alternatives such as digital entertainment. Most other behaviors that the pandemic interrupted—leisure air travel, in-person education, and in-person dining—will resume with the recovery, although perhaps with pandemic modifications like contactless menus or selective use of digital tools in education.

However, there are differences among countries, reflecting societal differences in households, business conduct and industry structure, and government regulation and policy. On the whole, China is the least sticky across most behaviors and the United States the most. In China, with a shorter pandemic, households and businesses did not face the same need

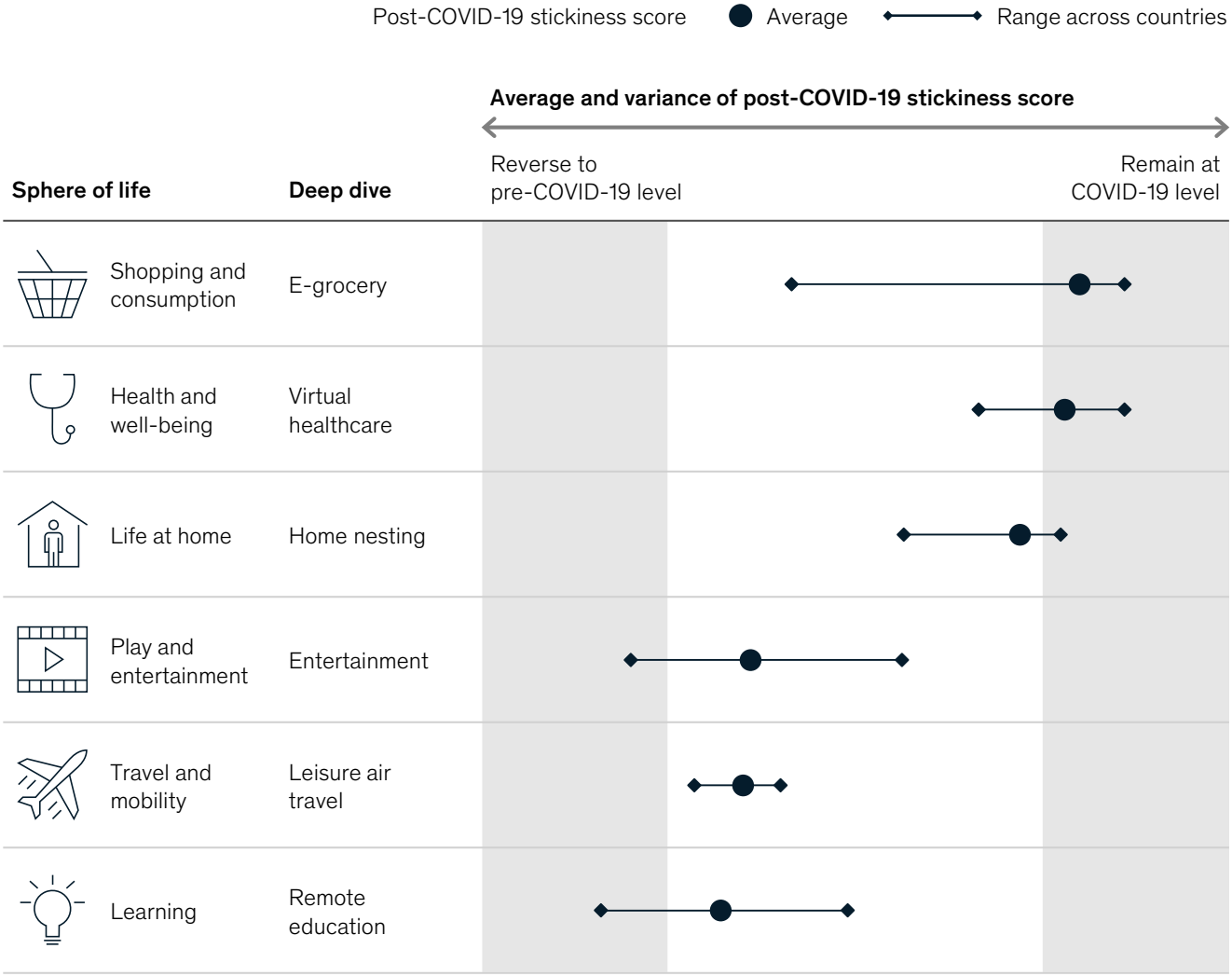
[100] COVID-19 Europe Consumer Pulse Survey, November 9–16, 2020, McKinsey & Company.
[101] Christine Blume, Marlene H. Schmidt, and Christian Cajochen, "Effects of the COVID-19 lockdown on human sleep and rest-activity rhythms," *Current Biology*, 2020, Volume 30, Number 14. In the near term, however, we are likely to face worse health outcomes because of delayed medical appointments and social isolation and stress contributing to poor mental health. *Prioritizing health: A prescription for prosperity*, McKinsey Global Institute, July 2020.
[102] "Internet/broadband fact sheet," Pew Research Center, June 2019.
[103] Jon Springer, "New data pegs online grocery penetration soaring past 20%," Winsight Grocery Business, Dec 22, 2020.

to change.[104] Yet it is important to acknowledge that time is not the only factor. For example, infrastructure differences also contribute to the greater stickiness of home nesting in the United States compared with Western Europe, as America's larger homes (65 square meters floor area per capita versus about 40 to 46 in France, Germany, and the United Kingdom) are more conducive to expanded life at home.[105]

Exhibit 17

What will stick and what will not differ by sector and geography; overall, we find e-grocery is the stickiest and remote education the least sticky.

Summary of case findings



Source: McKinsey Global Institute analysis

E-grocery shopping offers another example. It is likely to be stickiest in the United Kingdom and least sticky in Germany. This reflects structural differences between the two: a centralized urban population in the United Kingdom versus a decentralized urban space in Germany, a UK population that already had access to same-day delivery that was less common in Germany, and a higher pre-COVID-19 e-grocery penetration in the United

[104] "How COVID-19 is changing consumer behavior—now and forever," July 30, 2020, McKinsey.com; and Wendy Wood and David T. Neal, "The habitual consumer," *Journal of Consumer Psychology,* 2009, Volume 19.
[105] Urban Institute; and Katherine Ellsworth-Krebs, "Implications of declining household sizes and expectations of home comfort for domestic energy demand," *Nature Energy*, 2020, Volume 5.

Kingdom at about 7 percent versus 2 percent in Germany.[106] Moreover, infrastructure plays a role. Historically lower levels of delivery in Germany meant that major grocers in the country had less developed digital commerce infrastructure and delivery networks than UK grocers. All of those factors facilitated an easier shift to online grocery shopping in the United Kingdom than Germany.

Which factor most prominently determines stickiness varies across sectors (Exhibit 18). The effect of material commitments can be best seen in the case of increased time and money spent on home nesting. Home investments have sparked a virtuous cycle of increasing time and money spent at home, as they have enabled more positive experiences with at-home versions of formerly out-of-home activities (for example, dining, exercising, and working). Industry response in turn was a major factor shaping stickiness of e-grocery, where industry players' proactive responses enabled positive consumer experience and enhanced consumer value when well-executed, but country differences in readiness also played a role. The role of government regulation is likely to be central to the stickiness of virtual healthcare, whether by way of reimbursement rates in the United States or national health regulation and guidelines in Europe. Reimbursement and licensing requirements influence physician adoption of virtual healthcare, and thus supportive policies in these areas would increase the availability of virtual healthcare for consumers.[107] In other sectors, such as education, infrastructure or the lack thereof plays an important role in long-term stickiness. K–12 students in the United States and abroad struggled to effectively learn remotely, a problem exacerbated by the digital divide between wealthy consumers and consumers with less digital access, including lower-income and rural consumers.[108] Hence understanding the dynamics across not just consumers but also industry and government is key to correctly predicting how changes in consumption patterns will evolve.

Forced digital engagement during the pandemic is likely to lead to lasting acceleration of digitization in some areas such as health, entertainment, and grocery shopping

In most industries, digital engagement accelerated as consumers looked for alternatives to in-person services, with select instances of "step change" acceleration. Virtual healthcare utilization during COVID-19 is an example of step change in digitization, with telehealth claims growing 25 times in the United States from February to April 2020, 25 times in France, and 2.2 times in the United Kingdom (Exhibit 19).[109] While utilization is expected to stabilize and has already begun to do so as physicians' offices reopen and consumers' health fears abate, there is potential for continued step change in digitization. The regulatory environment heavily influences provider adoption. In the United States, healthcare providers have historically been reimbursed at higher rates for in-person services, and thus were not incentivized to promote digital engagement with patients. Before COVID-19 in France, patients were required to get a referral from their primary care providers, and physicians practicing telemedicine were required to have additional licensing.[110] Given these use and reimbursement requirements, postpandemic government decisions on virtual healthcare will be a critical determinant of the extent to which digitized healthcare persists and grows in the long term.

Innovation in response to the pandemic can also lead to a step change, and surveys of consumers across countries indicate that this may be the case with streaming services (Exhibit 20). Some movie studios are responding to the large drop in box office revenue and movie theater attendance by leveraging direct-to-consumer digital channels. For instance, Warner Brothers recently announced that it would stream all 2021 movie releases on

[106] A 2013 survey reveals that 60 percent of UK respondents were familiar with/have used same-day delivery, about double the rate in Germany. For more detail, see Ludwig Hausmann, Nils-Arne Herrmann, Jan Krause, and Thomas Netzer, "Same-day delivery: The next evolutionary step in parcel logistics," March 1, 2014, McKinsey.com.

[107] Carola Brinkmann-Sass, Laura Richter, Tobias Silberzahn, and Adam Somauroo, "The European path to reimbursement for digital health solutions," September 17, 2020, McKinsey.com.

[108] "Understanding the growing global connectivity divide," McKinsey.com, August 2020.

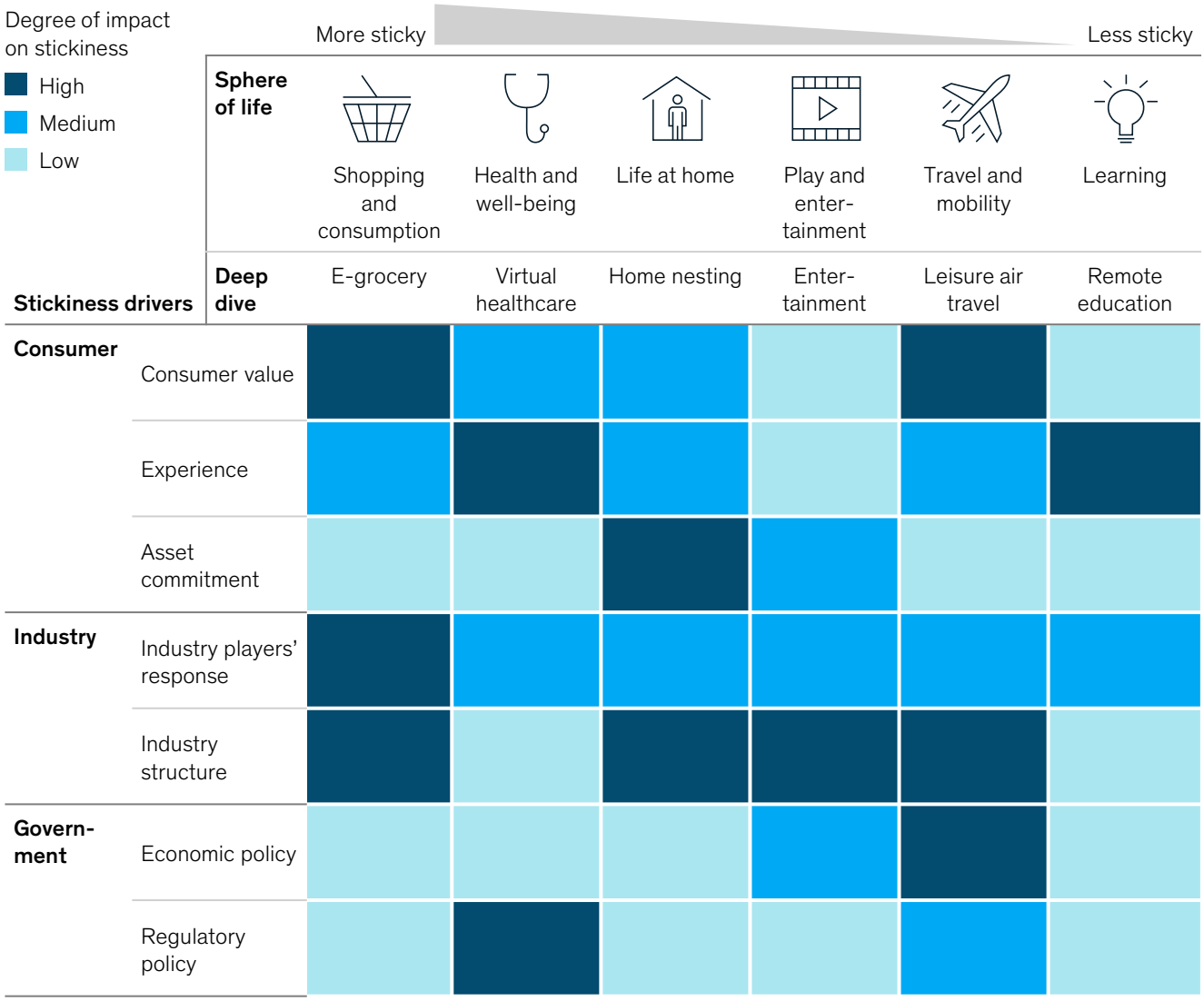
[109] Data from Compile.

[110] "Telemedicine in Europe," Osborne Clarke; Peter Critikos III, "License to screen: A review of the medical licensure schemes impacting telehealth proliferation in the United States, the European Union, and Australia," *Emory International Law Review*, 2018, Volume 32, Issue 2.

HBO Max on the same date the movies arrive in theaters.[111] Similarly, top higher education institutions are bolstering their online learning offerings.

Exhibit 18

The drivers of stickiness vary widely across the spectrum of consumer life, regardless of long-term behavioral durability.

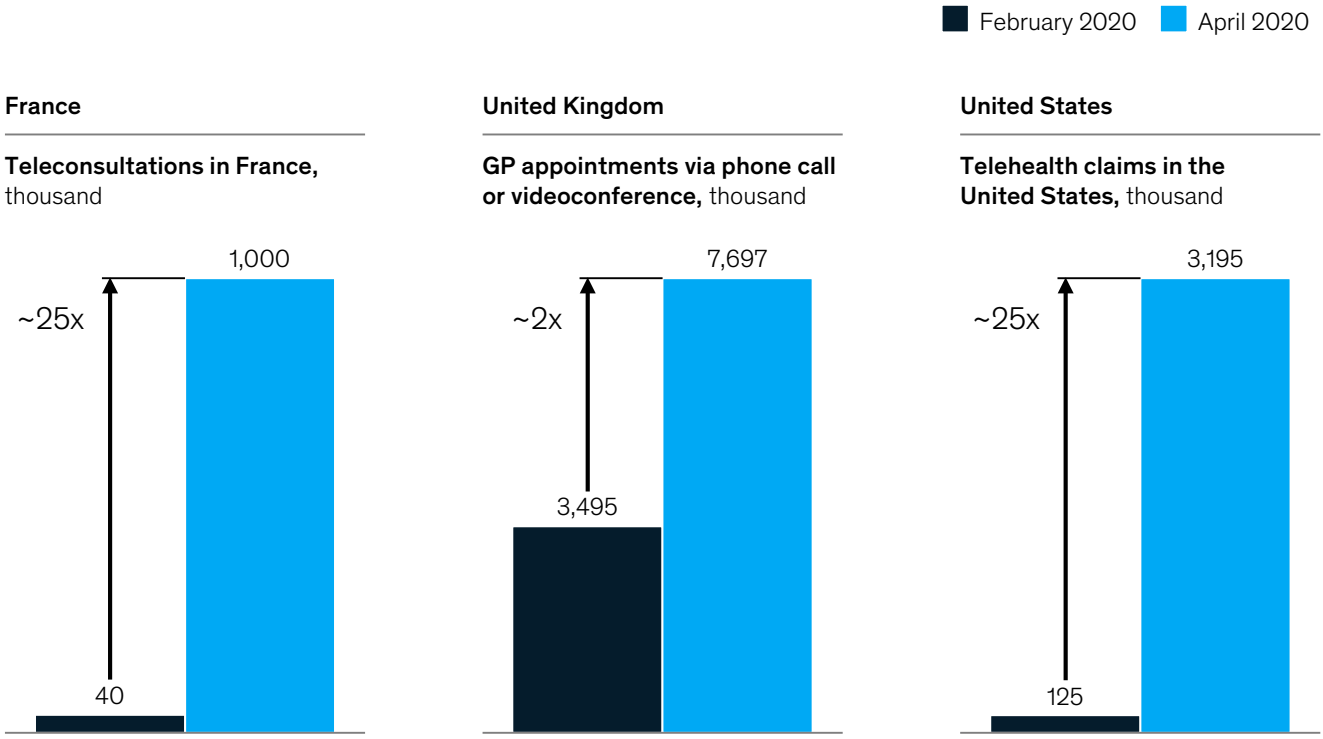


Source: McKinsey Global Institute analysis

[111] Warner Brothers Entertainment, "Warner Bros. Pictures Group announces innovative, hybrid distribution model for its 2021 theatrical slate," December 3, 2020, warnerbros.com.

Exhibit 19

Telehealth penetration increased by about ten to 30 percentage points across countries during the COVID-19 pandemic.



Note: Figures may not sum to 100% because of rounding.
Source: Data from Compile; NHS Digital; senat.fr; McKinsey Global Institute analysis

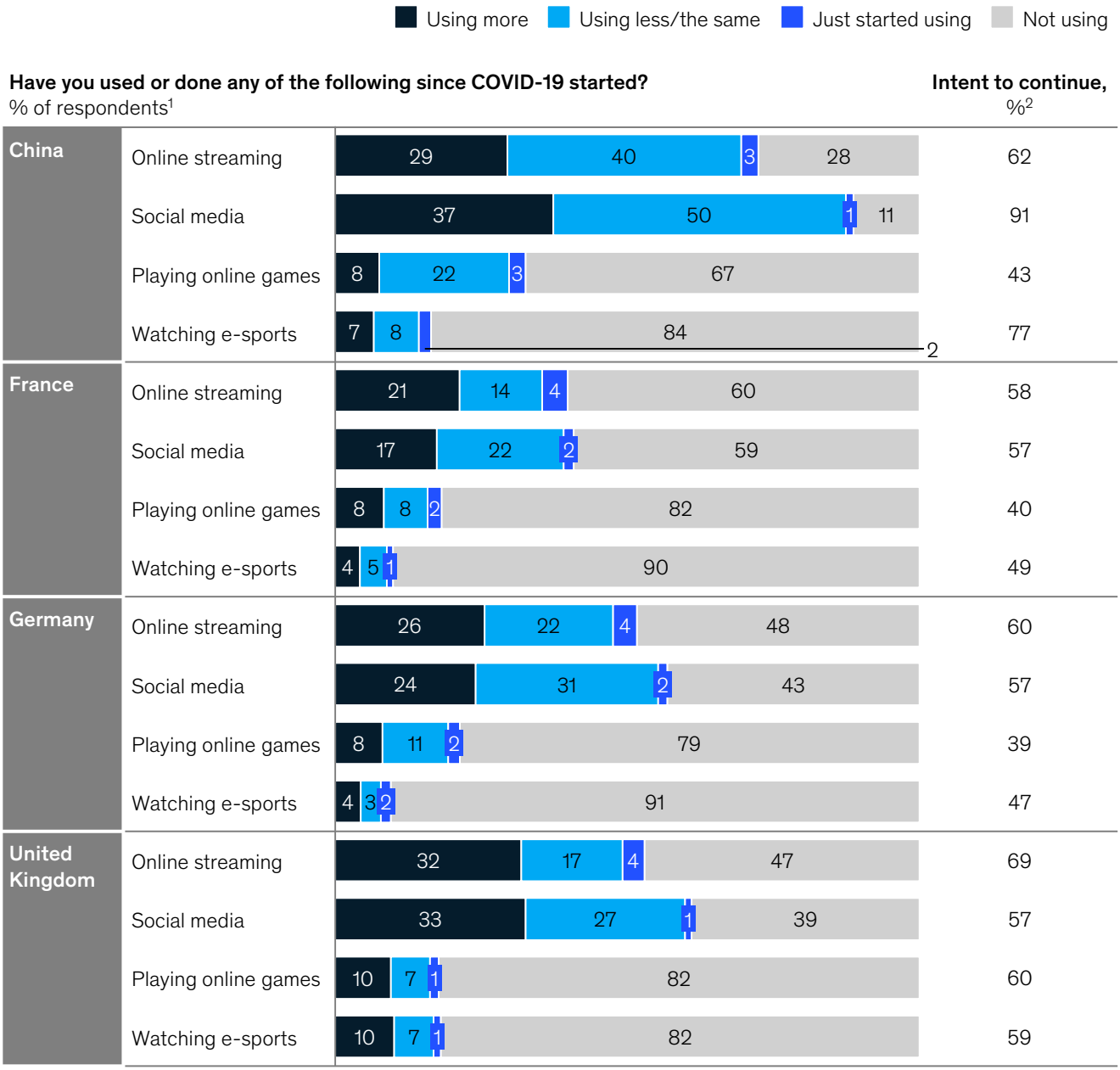
There have also been incremental shifts in digitization, for example in the area of online grocery shopping. Before the pandemic, e-grocery was growing and a digitized future for grocery was widely expected. While the shock has not fundamentally altered the growth path of e-grocery, it accelerated adoption ten years in eight weeks, with new business models like online ordering with curbside pickup (which had been more frequently seen in boardroom presentations or as pilots than at scale on the ground) became widespread and consumers had positive experiences during the pandemic.[112] We found that first-time users of online grocery shopping accounted for 30 to 50 percent of total US shoppers buying online in July, driven by baby boomers and low-income individuals.[113]

However, there are areas where elevated digitization is unlikely to stick after the pandemic. Primary and secondary education (K–12) is one of them: the experience of remote learning was widely considered negative. Given low levels of teacher training, unequal access to technology, and childcare difficulties, which all contributed to poor remote learning experiences and outcomes, most countries have prioritized education reopening after the initial lockdown period and have structured policies to keep schools open.[114] But that does not mean that over the long term (and outside the period of this study), new solutions for online education will not emerge and become more widely adopted. In fact, it may end up that the experience of remote learning during the pandemic spurs innovation in this industry in the future.

[112] "How COVID-19 is changing consumer behavior—now and forever," July 2020, McKinsey.com..
[113] McKinsey Consumer China and US Pulse Check Surveys; China survey updated June 29, 2020, using data collected from June 15 to 21; US survey updated using data from July 7 to 12.
[114] Michael Birnbaum, "Europe's schools still open, still relatively safe, through covid-19 second wave," *Washington Post*, December 1, 2020.

Exhibit 20

While Chinese consumers indicate the highest penetration of digital entertainment, approximately 60 percent of consumers in other countries express intent to continue streaming too.



1. Q: "Have you used or done any of the following since the COVID-19 situation started? If yes, Q: Which best describes when you have done or used each of these items?" Possible answers: "Just started using since COVID-19 started," "Using more since COVID-19 started," "Using about the same since COVID-19 started," "Using less since COVID-19 started."
2. Q: "Compared to now, will you do or use the following more, less, or not at all, once the coronavirus (COVID-19) situation has subsided?" Possible answers: "Will stop this," "Will reduce this," "Will keep doing what I am doing now," "Will increase this." Number indicates respondents who chose "Will keep doing what I am doing now" and "Will increase this" among new or increased users.

Note: Figures may not sum to 100% because of rounding.

Source: McKinsey COVID-19 China Consumer Pulse Survey 9/16–9/24/2020, n = 1,123, including Hubei province, sampled and weighted to match China's general population 18–65 years old; McKinsey COVID-19 UK, Germany, France Consumer Pulse Survey 11/09–11/16/2020, n = 1,089, sampled and weighted to match the general population 18+ years; McKinsey Global Institute analysis

In many areas, digitization will continue to be uneven and we may see further widening of the digital divide. For example, in the case of e-grocery, our analysis shows the cost of grocery delivery can be prohibitive, about $10 a week in delivery fees in the United States, which is more than 10 percent of low-income consumers' average weekly basket. Even with more cost-equitable services like BOPIS (buy online, pick up in store), obstacles remain for low-

income households. For instance, minimum order sizes can prove insurmountable, and SNAP users with EBT (electronic benefit transfer) cards in the United States often cannot access contactless payment systems or shop at all preferred retailers.[115] In addition, rural users have fewer options across e-grocery formats, given the location of groceries and delivery supply ecosystems. That means that regardless of their wealth, they may have limited opportunities to participate, further reinforcing a divide between rural and urban areas. In healthcare, lower-income and rural households, both more likely to lack access to adequate medical care, are also less likely to have reliable internet and connectivity. While these cohorts stand to gain a lot from expanded virtual healthcare, the relatively lower digitization in these areas poses a risk to their ability to take full advantage of virtual healthcare services.

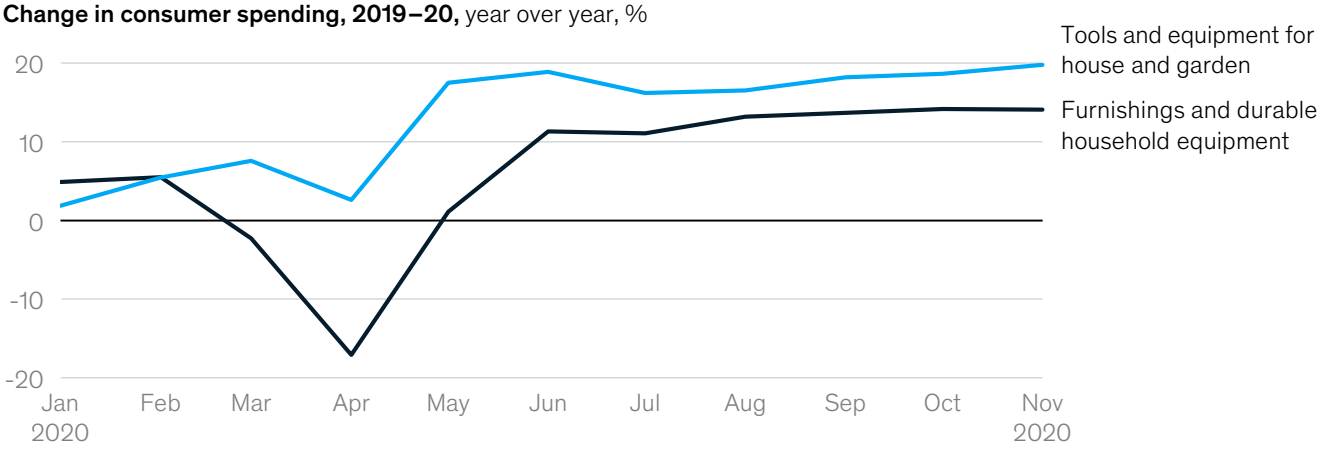
During the pandemic, the center of life shifted to the home, and home nesting is likely to remain elevated from the pre-COVID-19 trajectory

In contrast to digitization, home nesting reversed a prepandemic trend of declining time and money spent at home.[116] For example, in the United States, consumer spending on furnishings increased by 12 percent year over year in June 2020, 10 percent on household appliances during the same period, and 16 percent on tools and equipment (Exhibit 21). Some of this reversal is likely to persist after COVID-19, in part because of the positive experience consumers had by extending the reach of their home to include work, entertainment, and fitness and by developing new habits such as do-it-yourself home improvements.

Exhibit 21

In the United States, increased time at home has translated into higher expenditure on furnishings and durables, especially on tools to enable do-it-yourself (DIY) activities.

Change in consumer spending, 2019–20, year over year, %



Source: BEA; McKinsey Global Institute analysis

While lockdown levels of spending on home goods are unlikely to persist, there are two factors that will continue to boost spending. First, many employees reported positive experiences from working from home, and at least a portion will adopt flexible work-from-home schedules after the pandemic. However, this applies mainly to higher-income consumers in the United States and Western Europe. About 61 percent of American workers in August earning more than $100,000 worked remotely some of or all the time, versus 17 percent earning less than $50,000.[117] Aggregated across job types, workers in China are less able to work remotely in their roles than those in the United States and Western Europe; about 19 percent of working

[115] Romina Ruiz-Goiriena, "Federal government wants Americans to buy groceries online, but most people on SNAP can't," *USA Today*, January 24, 2021.
[116] It is important to note that additional spending at home may not increase proportionally with time spent at home. For example, investment in home exercise equipment has allowed many to build home gyms and will enable continued time exercising at home. While some consumers will continue to invest in more capabilities (such as new machines or equipment), others will use the growing digital marketplace for affordable options; 46 percent of surveyed respondents in April planned to use free at-home apps post-COVID-19, nearly double the 24 percent that will do the same with paid apps.
[117] US Census Bureau Household Pulse Survey, August 19–31, 2020.

time in China can currently be done remotely, compared with 34 to 40 percent in Europe and the United States.[118] Across countries, working from home is expected to remain elevated after the pandemic subsides. For one, the enhanced acceptance of Zoom and other remote communication technologies may spur a lasting decrease in business travel, as they are perceived as a relatively effective substitute for some interactions.[119] And greater ability to engage remotely enables more time at home, even for routine daily activities: a McKinsey Global Institute analysis found that more than 20 percent of the workforce could work remotely three to five days a week as effectively as they could if working from an office. The study concluded that if remote work took hold at that level, it would mean three to four times as many people working from home than before the pandemic.[120]

Second, investments that consumers made in their homes during the pandemic will drive elevated levels of commitment, among both higher-income households who invested in home offices, gyms, and other upgrades, and low-income households who retain low-cost at-home alternatives such as digital entertainment.[121] Our analysis of credit card data suggests lower-income, younger consumers increased spending on home goods more in the United States than in Western Europe, albeit from low absolute levels, partially helped by the former's government stimulus support. Spending at computer software stores and electronics stores was up 150 percent year over year in August, seasonally adjusted, and overall spending on hardware such as video gaming consoles was up 57 percent during the same period.[122] The investment continues to drive behavior in these areas, particularly for cohorts where spending is constrained and early experiences were positive.

As a result of these two factors—stickiness of work from home and material home investments made during the pandemic—we are likely to see the preference for more spacious homes prompted by COVID-19 to remain. However, the impact is disproportionally coming from high-income individuals who accumulated savings during the pandemic and benefited from the low interest rate environment to invest in renovations or new or second homes. The disproportionate activity by the wealthy can be seen in mortgages, as those with credit scores above 760 were responsible for 80 percent of mortgage originations (about $838 billion) in the United States in Q4 2020, the highest rate since the early 2000s.[123]

Many long-standing behaviors that were interrupted as a result of the pandemic are expected to resume during the recovery

COVID-19 has had a lasting impact on communities around the world. However, it is also true that once the pandemic is over, demand for many services, such as leisure air travel and in-person dining, will return to past growth paths. This is particularly true in cases where the pandemic induced stopgap measures rather than fundamental shifts in industry structures and consumer preference. For instance, certain forms of entertainment, such as live music and sports, transitioned online during the pandemic. Although the health crisis continues to prevent these activities at pre-COVID-19 levels, unlike in movie viewership, the digital alternatives produced during the pandemic have been unsatisfactory substitutes for live music concerts or live sporting events. For leisure air travel, alternatives such as nearby road trips or virtual reality-based visits to foreign locations are poor substitutes, and once the heath situation is resolved, consumption is likely to return in this area. Similarly, in-person primary and secondary education, for example, where consumers lack strong substitutes or where consumer behavior was limited largely by COVID-19 restrictions and industry fundamentals are relatively unchanged, is likely to bounce back in the recovery and

[118] *The future of work after COVID-19*, McKinsey Global Institute, February 2021.
[119] "For corporate travel, a long recovery ahead," August 2020, McKinsey.com.
[120] "What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries," McKinsey Global Institute, November 23, 2020..
[121] As any January gymgoer knows, today's spend does not guarantee tomorrow's behavior. That said, an academic review of the sunk cost fallacy suggests these commitments, especially financial ones, can drive future behaviors. These effects are especially profound among younger consumers and those that have made larger financial commitments. Stefan Roth, Thomas Robbert, and Lennart Straus, "On the sunk-cost effect in economic decision-making: A meta-analytic review," *Business Research*, 2015, Volume 8; David P. Jarmolowicz et al., "Sunk costs, psychological symptomology, and help seeking," *SpringerPlus*, 2016, Volume 5; and Veronika Rudd Tait, *Loss aversion and perspective taking in the sunk-cost fallacy*, 2015, dissertation, Brigham Young University.
[122] "US consumer spend on video game products continues to break records," NPD Group, August 2020.
[123] Data from the National Association of Realtors; New York Fed Consumer Credit Panel/Equifax.

in many cases is already showing signs of returning to pre-COVID-19 norms. For instance, many countries in Europe have kept primary and secondary schools open through the second COVID-19 wave, highlighting the extent to which normalcy is returning in certain sectors.[124]

Company and government actions will have a lasting impact on consumer choices after the pandemic

Consumer demand is a prerequisite for behavioral change, but the speed and depth at which behavioral changes embed themselves within a population depend on the actions of governments and industries.

Companies' readiness to respond to lockdowns is shaping consumer demand in the recovery

As consumers faced the unprecedented COVID-19 environment, the speed and range of new choices that an industry brought to market shaped what new behaviors consumers experimented with (see Box 5, "The pandemic inspired consumer innovations"). How satisfied they were with the initial experience will influence how likely they are to become repeat customers and for the new behavior to stick. E-grocery responses across geographies offer a good example. China, the United Kingdom, the United States, and, to a degree, France, had grocery players with an established, albeit low-penetration, online presence who were relatively well prepared for the explosion of e-grocery. These countries also had higher e-commerce penetration and had strong delivery networks; for example, large ecosystem players in China, like Alipay and WeChat Pay, fueled mobile payments growth of 123 percent from 2013 to 2018, reaching 300 billion transactions in 2018.[125] Together, the early start enabled grocers to rapidly offer a variety of options (such as BOPIS versus delivery, third-party versus grocer-hosted, and integration with payment platforms) that provided more reliable, timely, and tailored services to populations, who themselves were more familiar with the processes of digital commerce and delivery—and e-grocery has seen much more stickiness as a result. Moreover, these grocers could offer a variety of choices to meet consumer needs—for example, bicycle delivery in congested New York City versus curbside pickup in an exurb of Paris. On the flip side, discounters, which are popular in Germany and some consumer segments in the United States, had much more limited e-commerce capabilities before COVID-19, and their lean, streamlined model made it harder to rapidly stand up new e-grocery offerings.[126] As a result, their new e-grocery customers early in the pandemic faced delays and interruptions that made them much less likely to become repeat customers.

The COVID-19 crisis also caused changes in industry structure or dynamics that can bring ripple effects that inadvertently nudge consumers to new choices. For example, in the entertainment industry, small venues have been particularly hard hit by COVID-19. Yelp has tracked the economic outcomes of businesses on its platform and found that as of September 2020, about 6,500 nightlife businesses (such as bars and live music venues) had closed and that 54 percent of those closures were permanent (up from 44 percent in July).[127] In October, the Regal movie theater chain announced that it would close 536 theaters.[128] When consumers are ready to return to entertainment, some of their favorite venues may no longer be in business. Research indicates that small, independent businesses are more likely to close as a result of COVID-19, impacting the types of firms that will exist after the pandemic and further changing consumer options.[129]

[124] Michael Birnbaum, "Europe's schools still open, still relatively safe, through covid-19 second wave," *Washington Post*, December 1, 2020.
[125] *Global Payments Report 2019*, McKinsey & Company Global Banking Practice, September 2019.
[126] "Reviving grocery retail: Six imperatives," McKinsey.com, December 2018.
[127] *Yelp: Local economic impact report*, September 2020.
[128] Bill Chappell, "Regal movie chain will close all 536 U.S. theaters on Thursday," NPR, October 5, 2020.
[129] Alexander W. Bartik et al., "The impact of COVID-19 on small business outcomes and expectations," *Proceedings of the National Academy of Sciences*, July 2020, Volume 117, Number 30, pp. 17656–66.

Box 5

The pandemic inspired consumer innovations

It is often said that adversity inspires creativity. And that has been the case with the COVID-19 pandemic. As entire industries were shut down almost overnight, businesses were forced to think quickly and adapt. While there are many examples—contactless menus at restaurants, buy-local campaigns, farmers market shares to replace in-person shopping—we highlight a few below to show what businesses and consumers have been experimenting with during the pandemic:

Restaurants: Some Michelin-starred restaurants are offering special meals for holidays and events, which come with everything from table decorations to playlists. For instance, Andrew Wong partnered with David Swann and StarChefs to create a 13-dish banquet for home consumption with festive Chinese New Year-themed décor and a playlist available via Spotify. They also teamed up with Wanderlust Wines to create a selection of wine pairings to accompany the dinner.[1] Some restaurant owners and chefs have introduced "meal kits," in which customers receive semi-prepared foods and follow instructions to heat/reheat and serve restaurant-quality food at home. In the United States, restaurants are taking advantage of temporary changes to liquor laws to sell carry-out cocktails and cocktail kits.[2]

Gyms: In Los Angeles, studios are hosting outdoor workouts in the Beverly Center mall's parking lot and, to ensure that noise ordinances are not violated, providing headsets for workout music.[3] This is being replicated in cities and communities around the United States. Many other gyms have moved classes online and offering subscriptions.[4] Then there's the rise of "freemium," in which Instagram and other platforms have created a space where anyone, be it an influencer or a friend, can create classes.

Museums: Toronto hosted an immersive Van Gogh exhibit during the summer in a massive warehouse that allowed visitors to drive ("gogh by car") or walk through the exhibit (with significant physical distancing).[5] In Sao Paulo, a Brazilian art gallery also created a drive-through exhibit featuring 18 large works by various artists, housed in a large warehouse.[6] Other museums are experimenting with physical distancing monitors. For instance, the Magazzino Italian Art museum in New York State is distributing wearable tags that vibrate and flash when visitors get too close to one another.[7] Similarly, the Rosenborg Castle in Copenhagen has installed traffic lights that indicate when it is safe for visitors to enter the next room. Many museums have also increased their digital offerings, adding online exhibits, interactive video sessions with curators, and virtual activities for children.[8]

1 "Bringing the UK's best chef talent directly to your home, nationwide," StarChefs, starchefs.co.uk.
2 Associated Press and Dee-Ann Durbin, "Number of states allowing to-go cocktails has surged from 2 to 33 during coronavirus," *Fortune*, August 24, 2020.
3 Emily Leibert, "The best outdoor workouts in L.A. for Angelenos missing the gym," Uncover LA, January 13, 2021.
4 Naureen S. Malik, "Almost overnight the $100 billion fitness industry goes virtual," Bloomberg, March 24, 2020.
5 "Immersive Van Gogh Exhibit Toronto," https://vangoghexhibit.ca/
6 Michelle Baran, "Drive-through exhibits offer socially distanced art viewing," AFAR, July 30, 2020.
7 Akiva Blander, "As art museums reopen, they are experimenting with social distancing techniques," Metropolis, July 24, 2020.
8 Lanre Bakare, "UK museums turn to innovation to keep doors open in times of Covid," *The Guardian*, August 15, 2020.

Industry innovations and new business models can also change consumer choices. Movie theater attendance was dropping before the pandemic, and movie studios have increasingly faced consumer pressure for online offerings, but studios were hesitant to release box office films via streaming services for fear of revenue loss. COVID-19 accelerated pressure to move online as movie theaters globally closed to curb the spread of the virus. Some movie studios are responding to the large drop in box office revenue and theater attendance by leveraging direct-to-consumer digital channels. Interestingly, doing so has validated a new revenue model for some studios. Universal Pictures decided to release *Trolls World Tour* as a digital rental and in three weeks made almost $100 million in rental revenue. While *Trolls World Tour* likely earned less in rental revenue than it would have at the box office, movie studios also keep a higher percentage of the rental fee (about 80 percent versus around 50 percent for box office sales).[130] Other studios have followed suit and in some cases have doubled down on digital releases.

Some company actions can quite indirectly impact consumers. Mandatory WFH policies during the pandemic taught companies to work remotely and in turn allowed them to maintain efficiency with less travel, something many companies were looking to do for cost and climate reasons already. The new comfort of working remotely is likely to suppress business trips during the recovery and beyond, with McKinsey's Travel Practice estimating that about 20 percent of business travel may not return.[131] This adds pressure to airlines that are already facing massive challenges to their balance sheets and operations amid the worst crisis in their history. For consumers, we estimate that this permanent decline in profitable business travel will also reduce the flight options for leisure air travel and affect prices. Even though the underlying consumer demand prospects for air travel appear strong and linked to GDP growth, the loss of business travel revenue generates financial weaknesses, especially among large network airlines, adding pressure to restructure and consolidate their networks (or to raise leisure ticket prices to compensate for lost profit). In turn, this could leave consumers with fewer flight choices or more expensive fares—especially for multileg international travel such as flights by middle-income Chinese tourists to Europe through the Middle East.[132] The shape of demand is changing as a result: consumers still want to fly, but the prospect of longer/multiple connecting flights or higher costs may make them more likely to choose closer, more familiar destinations or (often less frequented) destinations within the networks of regional low-cost carriers.

Crisis-induced government policies can leave lasting marks on consumer choices and the shape of demand

As in past crises, government regulations can have a significant impact on the strength and shape of the consumer demand recovery. For example, in the near term, both individual fears about the coronavirus and government travel policies, such as vaccine passports or mandatory quarantines, will determine how fast the demand for air travel will recover. But in the longer term, the former should dissipate and government actions will play a big role in shaping consumer behavior. A look back to air travel after 9/11 is revealing (Exhibit 22). Fears about safety in the immediate aftermath of the terrorist attacks reduced air travel in the United States. But longer term after 9/11, regulatory shifts such as security and baggage requirements caused inconveniences for travelers and were shown to be responsible for the multiyear depression in demand more so than individual fears.[133] Unlike 9/11, though, airlines have taken quick action as a result of the pandemic to address health and safety concerns by requiring mask use and, in some cases, spacing passengers out, enabling domestic air travel globally to recover far faster than international air travel, even in geographies where the health threat remains. While the story is positive for domestic travel, regulation in the form of international travel bans presents a more enduring threat (which

[130] Erich Schwartzel, "'Trolls World Tour' breaks digital records and charts a new path for Hollywood," *Wall Street Journal,* April 28, 2020.
[131] Also see Scott McCartney, "The Covid pandemic could cut business travel by 36%—permanently," *Wall Street Journal*, December 1, 2020, wsj.com.
[132] Also see *The travel industry turned upside down*, McKinsey & Company, September 2020.
[133] Garrick Blalock, Vrinda Kadiyali, and Daniel H. Simon, "The impact of post-9/11 airport security measures on the demand for air travel," *Journal of Law & Economics*, November 2007, Volume 50, Number 4.

can be seen in the slow rollout of travel corridors and debates over "COVID passports"), contributing to a faster bounce-back for domestic compared with international flying.[134]

Exhibit 22

9/11 demonstrates that air travel can fully recover and do so quickly, even after the most significant air travel crisis in history.

35% decline in US domestic air travel in September 2001

3 years
for US air travel (both domestic and international) to recover to pre-9/11 levels

Baggage screening reduced US passenger volume by about
6 p.p.
on all flights

Source: Bureau of Transport Statistics; Garrick Blalock, Vrinda Kadiyali, and Daniel H. Simon, "The impact of post-9/11 airport security measures on the demand for air travel," *Journal of Law & Economics*, 2007; McKinsey Global Institute analysis

Virtual healthcare is a different example. Before the pandemic, the industry had been lagging in digital adoption.[135] However, the public health crisis led to physicians' office closures and prompted changes to restrictions around virtual healthcare provision, leading to a rapid increase in virtual healthcare adoption globally. In the United States, Congress enacted Waiver 1135, which temporarily legislated payment parity for virtual healthcare services during COVID-19.[136] This bolstered adoption by doctors, as they were essentially guaranteed equal payments for virtual healthcare services, which temporarily removed imbalanced financial incentives for in-person care. Similarly, the French government enacted policies guaranteeing 100 percent telehealth reimbursement through December 31, 2020, and changed restrictions requiring referrals for virtual healthcare, allowing nonreferral reimbursement in cases where COVID-19 is suspected.[137] In the United Kingdom, where virtual healthcare was broadly allowed before COVID-19, the NHS introduced a "total triage" program, in which all patients would first have a phone consultation before determining next steps for health services.[138] In addition to changing regulations, France and Germany both announced multibillion-dollar plans for funding healthcare digitization broadly. Expectations around the stickiness of new regulations have shaped the extent to which healthcare providers have invested in virtual healthcare.

Our stickiness test offers a tool to assess how likely a behavior is to persist after COVID-19. While we have not covered all behaviors affected by the pandemic, for example, increasingly mindful attitudes toward health in China or growing sensitivity to sustainability in Western Europe and the United States, the stickiness test offers a way forward. Across behaviors, tracking stickiness factors—looking beyond just consumer behaviors toward company offerings and governments' role as well—can offer a powerful tool to not only understand the postpandemic consumer world, but also assess shifts in consumer behavior after the COVID crisis. In the next chapter we turn to what all this means for companies and governments, putting together our consumer demand segmentation findings with our stickiness findings.

[134] Miriam Berger, "Covid-19 passports aim to streamline travel requirements. But there's no one-size-fits-all fix," *Washington Post,* February 18, 2021.
[135] MGI's *Digital America* report ranked healthcare as 18th out of 22 sectors in terms of digitization, above only hospitality, construction, and agriculture and hunting. See *Digital America: A tale of the haves and have-mores*, December 2015, for more details.
[136] "Medicare telemedicine health care provider fact sheet," March 2020.
[137] "Teleconsultation," www.service-public.fr.
[138] "Advice on how to establish a remote 'total triage' model in general practice using online consultations," UK National Health Service, September 2020.

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Case studies

E-grocery

Entertainment

Home nesting

Leisure air travel

Remote education

Virtual healthcare

Case study

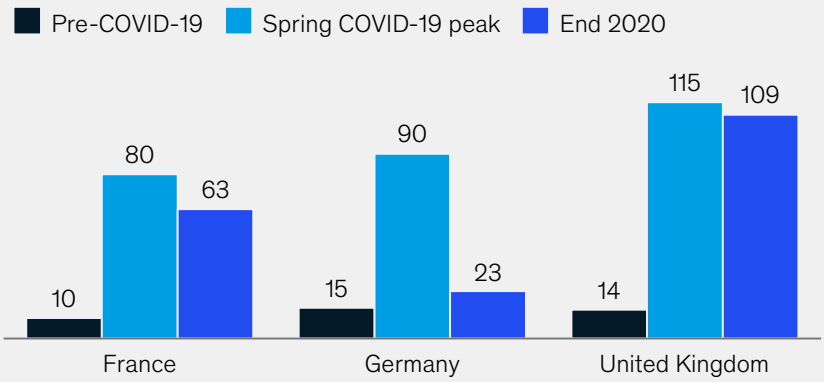
E-grocery

At a glance

E-grocery penetration more than doubled from pre-COVID-19 levels in some countries and has maintained much of this expansion, bringing the online share of total grocery sales in 2020 to 10 percent in the United States and over 10 percent in the United Kingdom. However, stickiness differs both by geography, as retailers have varied widely in their readiness to provide good customer experience, and by income, as delivery fees limit demand among low-income households. Offering a variety of products such as delivery, BOPIS, and drive-in across prices will enable more widespread stickiness.

Exhibit C1

Online grocery sales growth, year over year, %



Note: Timelines for pre-COVID-19, spring COVID-19 peak, and end 2020 vary by geography. France: weeks 1–9, 2020; weeks 11–17, 2020; weeks 43–45, 2020. Germany: Q4 2019; Q2 2020; 2Q 2020. United Kingdom: 4 weeks preceding March 2020; 4 weeks preceding June 2020; 4 weeks preceding November 2020.

Source: BEVH; Nielsen; McKinsey Global Institute analysis

Pre-COVID-19

Most e-grocery users before the pandemic were younger, high-income, urban shoppers who spent only a part of their grocery spending online. Before COVID-19, e-grocery penetration remained in the low single digits across most geographies; China and the United Kingdom led with online sales of about 7.5 percent of total grocery sales in 2019. In the United States, 38 percent of millennials reported having tried e-grocery as of 2018, more than double the 14 percent share of baby boomers (in Germany 45 percent of millennials had experimented, versus 31 percent of the entire population), and millennial users were growing faster (17 percent a year from 2015 to 2018 versus 5 percent for baby boomers).[139] Historically, grocery shopping has revealed access disparities across groups, and this is the case with e-grocery. Shoppers of different incomes have dramatically different experiences, as groceries account for about twice the share of wallet for lower-income than upper-income shoppers—all while the former group has fewer and often inferior options.[140] This divergence is only exacerbated when moved online. Typically, e-grocery has been more expensive than shopping in person, so it has favored high-income households, and delivery options may not have been readily available in more remote areas.

COVID-19 effects

E-grocery use took off during the pandemic; what would typically have been growth in use over a decade occurred in a few weeks. Penetration doubled during the spring peak of the pandemic (for example, 7.5 to 13 percent in the United Kingdom in June 2020, 6 to 10 percent in France in April).[141] First-time users drove much of this expansion, as restaurant and other business closures encouraged more grocery shopping during the pandemic and health concerns fueled the growth of online grocery channels. Credit and debit card data reveal that while all cohorts increased spending, older and low-income consumers increased spending the most, driven by higher shares of first-time users. Both these cohorts' weekly spending and usership growth roughly doubled their (relatively lower) year-over-year baseline in the spring.[142] Online penetration regressed as the pandemic endured, reflecting growing understanding of the relative risks of surface transmission, actions from grocers

[139] Statista, "U.S. Millennial shoppers who have used an online channel for groceries 2015–2018," November 30, 2020; Mintel, "Millennials lead the online grocery shopping revolution in Europe," September 19, 2016; and Food Marketing Institute and the Hartman Group, *U.S. Grocery Shopper Trends 2019*, June 18, 2019.
[140] US Bureau of Labor Statistics Consumer Expenditure Survey, 2019; and US Department of Agriculture Economic Research Service, *Access to Affordable and Nutritious Food*, administrative publication number 036, June 2009.
[141] McKinsey Global Institute analysis using data from Forrester and Nielsen; Ocado earnings call, July 2020.
[142] McKinsey Global Institute analysis, data provided by Affinity Solutions.

to mitigate safety concerns, and less stockpiling as supply chains adjusted to the demand shifts. However, the growth in the user base held to a large extent, and this allowed penetration to spike again, even reaching a new high of 13.7 percent share of sales during the United Kingdom's second lockdown in November.[143] While some grocers already had budding online capabilities, most needed to invest significantly to improve reliability and broaden their online offerings (such as improved pickup and in-house alternatives to third-party delivery) and thus meet diversifying shopping needs. This allowed consumers to experiment with new online offerings.[144]

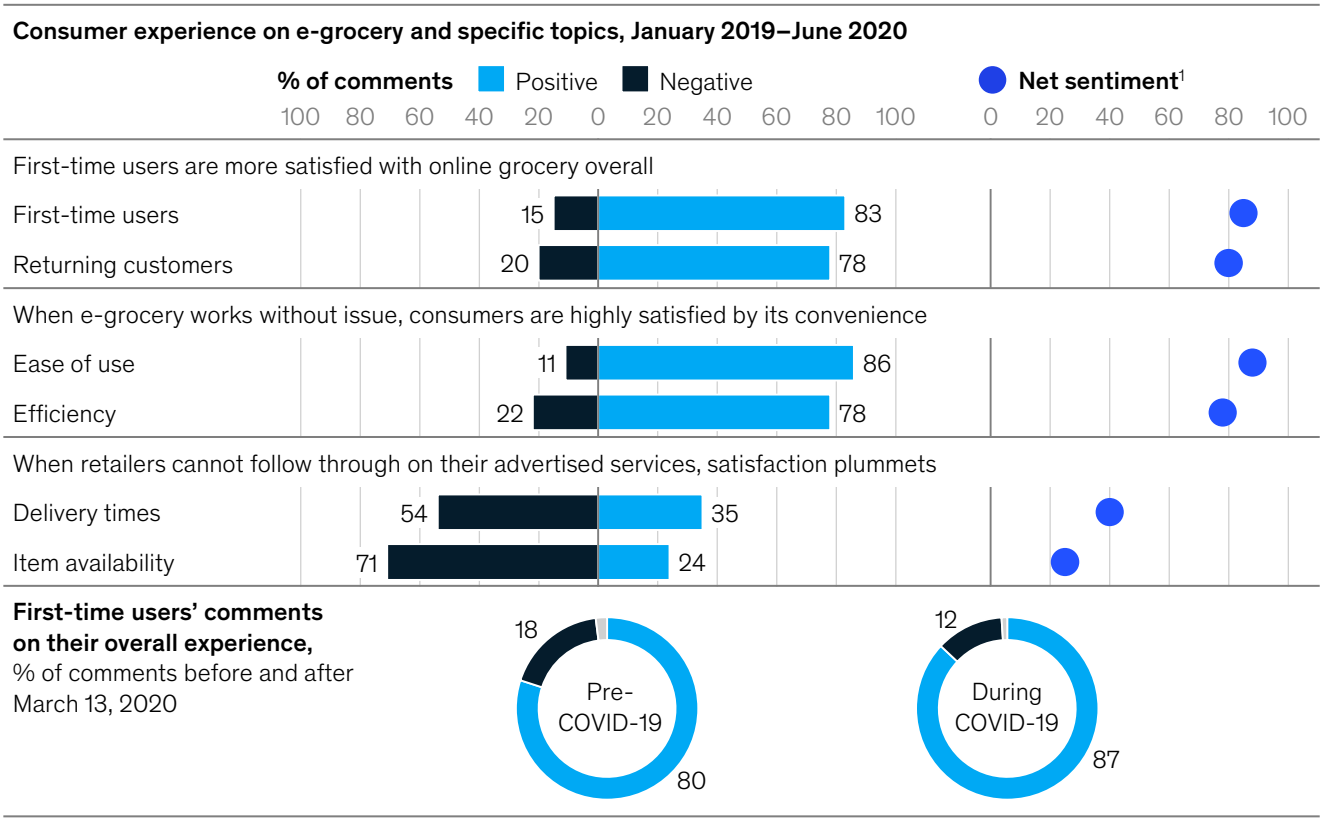
The recovery

E-grocery is here to stay, but the relative size of penetration gains will be shaped by the industry's readiness to provide a range of formats and prices to meet different needs across incomes and geographies. An important factor behind the stickiness of e-grocery is the positive experience that consumers have had during the pandemic. First-time users during the pandemic were seven percentage points more satisfied than first-time users previously (87 versus 80 percent), suggesting they will shop online again.[145] Social listening revealed that minimizing delays and cancellations mattered most to consumers.

Looking forward, e-grocery's ability to deliver benefits to all will determine whether the industry builds on the gains it made during the pandemic. And success factors vary across customer income segments and geographies. Shoppers' needs and preferences range from BOPIS for bulk purchase time savings, to rapid delivery for small, immediate-consumption goods. For example, in the United States, there has been a shift from delivery pre-COVID-19 to BOPIS. With fewer fees, BOPIS offers a better value proposition for low-income consumers, and they intend to use it at higher rates

Exhibit C2

Social listening suggests widespread satisfaction with e-grocery driven by efficiency and ease of use, while delivery and ordering interruptions create headwinds



1. Share of positive comments of total comments. Sentiment: 0 = overwhelmingly negative; 100 = overwhelmingly positive.
Note: Figures may not sum to 100% because of rounding.
Source: Revuze; McKinsey Global Institute analysis

[143] "UK grocery sales spike with early Christmas cheer," Kantar, December 8, 2020.
[144] Though on a vastly different scale, reviewing another pandemic-induced spike in South Korea during the 2015 MERS crisis reveals the potential e-grocery gains in the wake of a crisis. The initial MERS shock pushed more consumers to experiment with a new technology to limit exposure to the virus. Our analysis using data from Statistics Korea shows the MERS crisis contributed to year-over-year growth for online grocery of 62 percent in June and increasing penetration at the crisis's peak by 24 percent and at the crisis's closure by 8 percent, all while offline grocery sales fell. For more, see Eunae Jung and Hyungun Sung, "The influence of the Middle East respiratory syndrome outbreak on online and offline markets for retail sales," *Sustainability*, 2017, Volume 9, Number 3.
[145] McKinsey Global Institute analysis using data provided by Revuze.

than curbside pickup or delivery after COVID-19.[146]

However, despite the rapid rise of e-grocery, low-income consumers remain at risk of being boxed out of the emerging ecosystem. Delivery costs, lack of sales, and minimum order amounts for BOPIS can be prohibitive for low-income shoppers. Thirty-seven percent of low-income SNAP users said they could not meet "minimum purchase requirements," and 31 percent struggled to justify the "price of products online and lack of sales."[147] In the United States, regulatory barriers have exacerbated these issues, limiting access for those using SNAP. Despite progress since COVID-19's onset, as of December 2020, SNAP users still could not order online and use benefits in all 50 states. Furthermore, SNAP users' payment options are more limited because they are often required to engage in person (as SNAP payments cannot be processed online at many retailers and a lack of credit cards excludes pay-ahead or other contactless methods). Moreover, for those with mobility issues, delivery is limited. Walmart and Amazon were the only retailers for which delivery was available when using SNAP in a majority of SNAP-eligible states. While these barriers are large, discount grocers are rapidly investing to expand their online capabilities, which could help penetration catch up. For example, Aldi plans to add curbside pickup to 500 US stores by the end of 2021 and is rolling out the service alongside a $1.3 billion investment in the United Kingdom.[148]

We find distinct country variations in the stickiness of e-grocery. Increases in e-grocery penetration are most likely to stick in urban areas of China and the United Kingdom, mainly because of the nations' strong digital and delivery retail infrastructure. In China, nongrocery digital commerce was highly developed before COVID-19, so it was a seamless shift to use similar digital payment and ordering platforms for a greater share of grocery shopping. The United Kingdom has robust and low-cost delivery ecosystems previously focused on quick-service restaurants and food service (especially in dense urban cores like London), which allowed quick conversion to grocery in urban areas. Elsewhere, decentralized (Germany) and historically discounter-focused markets (Germany, lower-income United States) saw lower levels of enduring conversion. These lean grocer models could not efficiently pivot to manage the higher costs associated with delivery or from shifting to in-store pickup, and decentralization limited the feasibility of third-party players to offer cost-effective options.

Most important stickiness drivers and their implications

Value. Many tried e-grocery during COVID-19 because of necessity and found it both time-saving and convenient. Cost savings were another important determinant of value, with lower fees cited as the top reason (22 percent) that US respondents selected click-and-collect or curbside pickup over delivery—suggesting that more plentiful options across online grocery formats support stickiness.[149] Finally, e-grocery expanded into previously less valued categories, notably fresh produce, as issues like produce quality and ability to select specific products were less of a barrier.[150]

Industry structure. Intense grocery competition in the United Kingdom and the United States has spurred greater investment and progression of online capabilities, as well as the creation of more diverse retail formats and options for consumers. In contrast, Germany's lean discounter model provided a headwind to its ability to rapidly roll out new digital capabilities (and less consumer appetite for additional costs like delivery fees), though investments by discounters later in the pandemic or partnerships with third-party logistics players have helped mitigate this. Meanwhile, France's historic hypermarket strength aided click-and-collect options over home delivery.

Experience. Grocery shopping is a necessity, and consumers' experience can determine whether they stick with online channels or revert to in-person shopping. Social listening analysis shows that limiting interruptions or delays in delivery or ordering leads to a positive experience and supports intent to continue, while those who experience delays (especially on first-time use) are left dissatisfied and less likely to become return customers. Despite widespread issues with meeting demand in person and online in the earliest days of the pandemic, e-grocers appeared to meet this challenge as the crisis endured, suggesting even greater stickiness in areas where the crisis is lasting

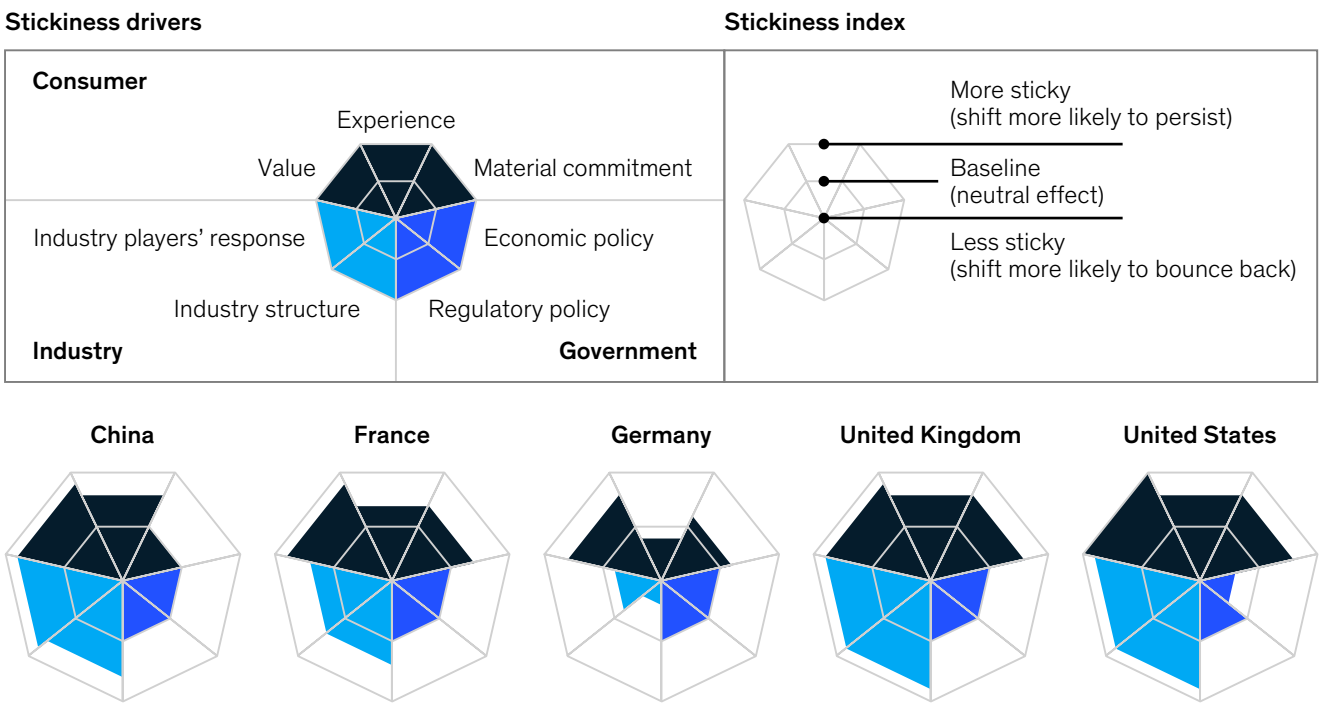
[146] McKinsey & Company COVID-19 US Consumer Pulse Survey, July 7–12, 2020, n = 1,923, sampled and weighted to match the US general population 18 years and older.
[147] *Endcaps & Insights*, "Food stamp users surveyed about BOPIS, grocery delivery," blog entry, Field Agent, April 26, 2019.
[148] Jonathan Eley, "Aldi steps up ecommerce efforts as it expands click-and-collect service," *Financial Times*, September 28, 2020; and Aldi press releases.
[149] McKinsey & Company, US Online Grocery Consumer Survey, September 18–23, 2020.
[150] Hung-Hao Chang and Chad D. Meyerhoefer, "COVID-19 and the demand for online food shopping services: Empirical evidence from Taiwan," *American Journal of Agricultural Economics*, March 2021, Volume 103, Issue 2.

longer.[151] New users continued to enter (23 percent of the customer mix in the United States in August 2020), and grocers' expanded capabilities facilitated fewer delays that in turn led to 83 percent of US consumers intending to make a repeat purchase in September, a record high.[152]

Exhibit C3

Overall stickiness: E-grocery

Penetration is likely to stick and is facilitated by strong industry support and positive experiences, especially in China and the United Kingdom



Source: McKinsey Global Institute analysis

[151] Consumers were likely more forgiving of delays or interruptions during the first days of the pandemic as outages and delays were rife—in-person shoppers weren't able to find 40 percent of the grocery items on their shopping lists between March 18 and 23, even after visiting an average of two grocery stores. Thus, while 28 percent of those using online grocery saw delays or cancellations, most still planned to continue ordering in the future. Russell Redman, "How the coronavirus crisis is changing grocery shopping," *Supermarket News*, April 3, 2020.

[152] Brick Meets Click, "Nov 2020 online grocery scorecard: Customer & sales mix shift toward delivery & pickup," December 8, 2020.

Case study

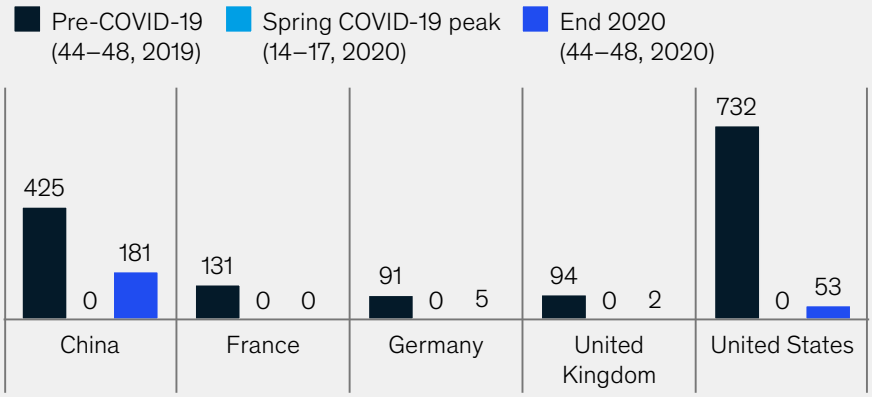
Entertainment

At a glance

The COVID-19 pandemic caused a precipitous drop in live entertainment spending—a decline of about 83 percent in the United States from February to April 2020, according to credit and debit card data—while boosting home entertainment spending by 6 percent in the same period. That trend persisted into early 2021 in both the United States and Western Europe. While in-person entertainment is likely to rebound as the pandemic recedes, the ways live entertainment emerges from revenue losses from the pandemic and changes in industry practices like digital movie launches will shape consumer behavior the most.

Exhibit C4

Box office gross revenue, $ million (weekend ranges)



Source: Information courtesy of Box Office Mojo; McKinsey Global Institute analysis

Pre-COVID-19

Entertainment spending had been growing strongly across consumer groups and categories, including digital and live entertainment, for several decades before the pandemic, even during recessions. Over the past 30 years, US consumers substituted social/in-person engagement with digital engagement, with time spent engaging digitally rising about 8 percent from 1990 to 2019.[153] In the United States, consumer spending on recreation grew 44 percent from 2010 to 2019. European countries mirrored this trend, with recreation and culture spending growing 33 percent, 8 percent, and 40 percent in Germany, France, and the United Kingdom, respectively, over the same period.[154] The decade from 2010 to 2019 also saw dramatic growth in US consumer spending on streaming services ($870 million in 2010 to $23 billion in 2019), as Netflix (which started offering online content in 2007), Hulu (launched in 2008), and others scaled offerings.[155] At the same time, revenues in certain entertainment sectors such as live music were growing strongly. Ticketed live entertainment and spectator sports sectors grew a total of 39 percent and 48 percent, respectively, from 2010 to 2019.[156] Moreover, entertainment spending was relatively stable during previous recessions, indicating that consumers considered entertainment an "affordable luxury."

COVID-19 effects

Spending on at-home entertainment accelerated, while spending on out-of-home entertainment collapsed. The COVID-19 pandemic led to event cancellations worldwide, with 300 concerts canceled in a two-week period in London alone, and box office sales dropping 100 percent during lockdowns and remaining low in the United States and Western Europe even as restrictions relaxed over the summer.[157] As consumers began spending more time at home, US consumer spending on entertainment goods (such as video and audio equipment) rose by 8 percent while spending on services, such as admissions to theaters, museums, and concerts, fell by about 73 percent from February to May 2020. Live entertainment, spectator sports, and movie theaters were among the hardest

[153] BEA, BLS American Time Use Survey, www.bls.gov/tus/.
[154] Eurostat, Final Consumption Expenditure of Households by Consumption Purpose; Recreation and Culture, ec.europa.eu.
[155] According to GMR.
[156] BEA, Table 2.5.5: Personal Consumption Expenditures by Function, adjusted for inflation, apps.bea.gov.
[157] Information courtesy of Box Office Mojo, boxofficemojo.com.

hit by this shift away from services, experiencing a more than 90 percent drop from February to May 2020. This differs from the Great Recession, when consumer entertainment spending was relatively stable or growing, highlighting the distinctiveness of the COVID-19 recession.[158]

The recovery

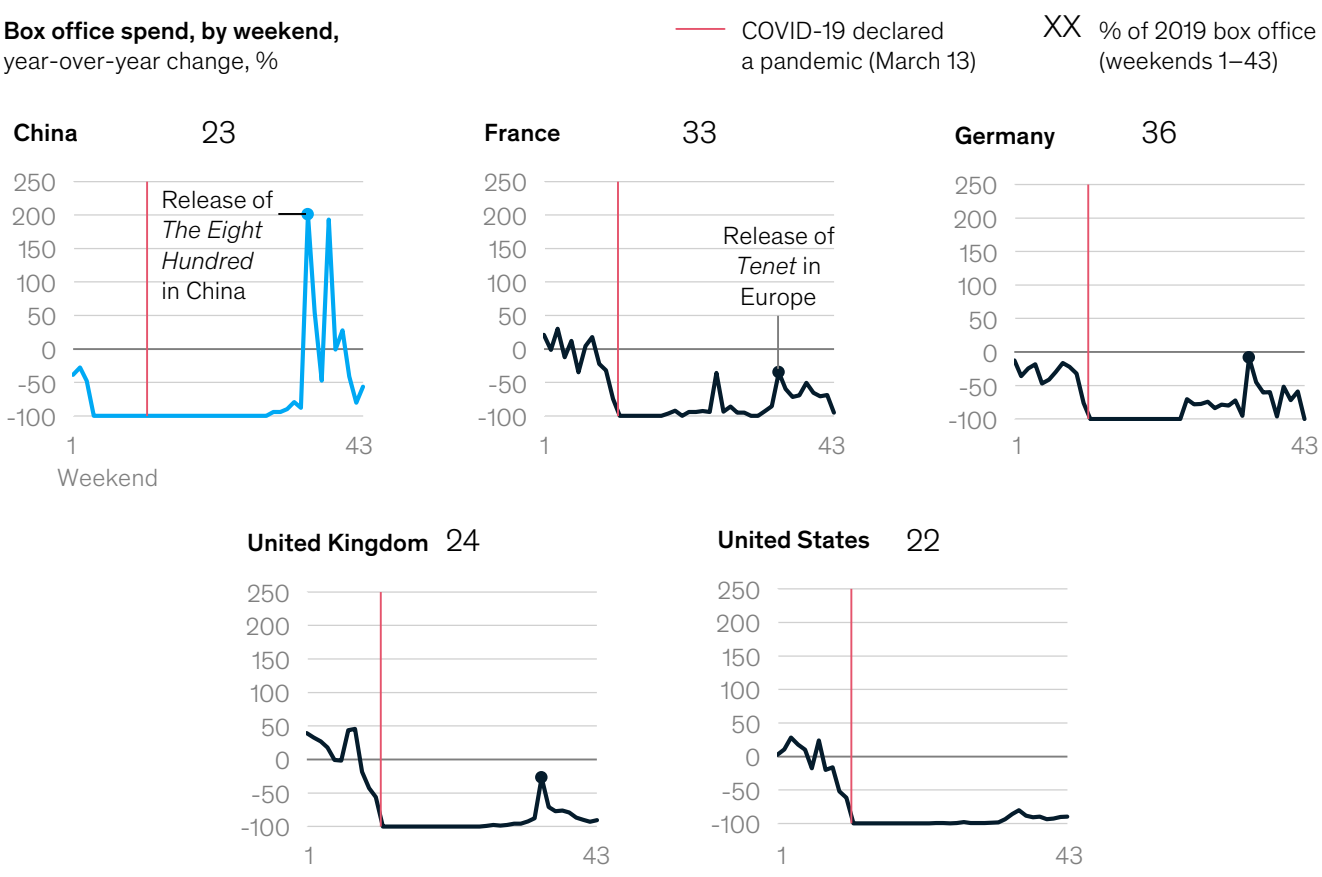
Spending on entertainment will likely recover to pre-COVID-19 growth rates, but consumer choice will be shaped by how well live entertainment providers weather the pandemic and by industry changes from accelerated digital adoption. Both surveys and early glimpses of the consumer recovery in China suggest that entertainment as a category will recover to its prepandemic growth trends and consumer spending levels in the United States and Western Europe, but with a higher share of digital entertainment and fewer local and independent movie theaters and live entertainment venues. Moreover, the substitution of in-person for digital forms of entertainment may put additional pressure on the entertainment spending recovery, as digital entertainment is scalable and far cheaper per hour for consumers than live entertainment.

Looking closer at each major category of entertainment, we find the following.

Live entertainment. The COVID-19 disruption impacted most live entertainment sectors equally, yet the long-term impact varies dramatically depending on the resilience of the segments. Large, diversified industry players such as professional sports and live music by established artists are most likely to fully bounce back. For instance, the professional sports industry is resilient to temporary ticket sale declines as broadcast contracts and nonticket sales (such as merchandise and sponsorships) make up a large proportion of revenue.[159] This is not the case for smaller, less diversified players: many independent artists, production companies, and venues will

Exhibit C5

COVID-19 led to event cancellations worldwide and strained many entertainment venues, but China's recovery experience indicates the potential for pent-up consumer demand



Source: Information courtesy of Box Office Mojo; McKinsey Global Institute analysis

[158] Data from the BEA.

[159] Mike Ozanian, "The stadium revenue each NFL team will lose if games are played without fans," *Forbes*, May 18, 2020; Christina Gough, "Major League Baseball – Statistics and Facts," Statista, April 29, 2020; Sam Quinn, "NBA will not allow fans at games if season resumes; decision could stretch into June, report says," CBS, May 8, 2020; and Christina Gough, "Broadcasting rights revenue of selected sports leagues worldwide in 2019," Statista, March 5, 2021.

not be able to sustain the extended COVID-19 revenue hit. In the United States, the National Independent Venue Association projected that nine out of every ten of its more than 3,000 members would close by October 2020 without meaningful financial assistance, and although the December 2020 federal COVID-19 relief package contains $15 billion in relief for live music venues, museums, theaters, and other entertainment sites, at least 88 prominent live music venues have already closed permanently.[160] While major artists have continued recording and selling albums to fans, many aspiring musicians both establish themselves and earn most (about 58 percent) of their income through live events, which may be further squeezed by independent venue closures.[161] The legacy of the COVID-19 pandemic is likely to be a more challenging economic environment for aspiring artists, a narrower industry talent pipeline, and an increasingly winner-take-all entertainment market.

Movie theaters. The pandemic led to innovations that are changing business models, with lasting implications on the choices available to consumers. For instance, movie studios, such as Disney and NBCUniversal, can withstand losses by investing in new delivery channels and have begun doing so (for instance, movies distributed via streaming platforms). In response to theater closures and consumer avoidance due to health concerns, studios have pursued three primary responses: delaying movie releases, releasing movies to international markets prior to domestic ones, and using direct-to-consumer delivery models. For instance, Amazon purchased *Borat Subsequent Moviefilm* for $80 million and provided it for free to Prime members, while Disney produced and offered *Soul* free to subscribers on Disney+.[162] Moreover, studios are using a combination of these options. For example, *Wonder Woman 1984* was initially delayed as Warner Brothers planned for a post-COVID-19 in-person release. As the pandemic continued, though, the studio shifted plans and released the film both in theaters and through its streaming service, HBO Max.[163]

At-home entertainment. As consumers spent more time at home, spending on home entertainment goods (such as electronics) and services (gaming, streaming) rose, and because of the upfront investment and a largely positive consumer experience, at-home entertainment is likely to stick. Consumers invested in home entertainment goods, with sales of TVs and PCs/tablets rising 9 percent and 6 percent, respectively, from February to May 2020, and they increased the number of streaming service subscriptions.[164] Consumers indicated watching up to 2.2 additional hours of online videos per week in 2020 relative to 2019.[165] Increased TV watching has resulted in increased consumer spending on at-home entertainment. About 35 to 50 percent of survey respondents reported subscribing to a new streaming service in the previous six months, citing COVID-19 as the primary motivation, and Netflix gained 26 million new subscribers in the first half of 2020 (nearly equivalent to the 28 million paid memberships added in all of 2019).[166] Similarly, consumer electronics sales are up relative to 2019 as consumers invest in TVs and consoles. Video game companies have reported more than 50 percent increases in sales of video game hardware and gaming accessories.[167] Rising hardware sales not only indicate the impact of COVID-19 on consumer entertainment behavior in the near term, but also prime the industry for future growth by expanding the console-owning consumer base for future game releases.

[160] Anastasia Tsioulcas, "America's independent music venues could close soon due to coronavirus," NPR, June 9, 2020; and Taylor Mims, "Venues closing across America: An updating list (and why it matters), *Billboard*, January 5, 2021..
[161] Amy X. Wang, "The median U.S. musician is still making under $25,000 a year," *Rolling Stone*, June 27, 2018.
[162] Brandon Katz, "Amazon reportedly paid $80M for 'Borat 2,' big money in a year of big film acquisitions," *Observer*, October 29, 2020; and Rebecca Rubin, "Pixar's 'Soul' skips theaters for Disney Plus," *Variety*, October 8, 2020.
[163] Warner Bros, Entertainment, "Warner Bros. 2021 Film Slate—New Hybrid Distribution Model," December 3, 2020.
[164] Affinity Solutions.
[165] *The State of Online Video 2020*, Limelight Networks, August 2020.
[166] Lauren Feiner, "Netflix blows away new subscriber expectations," CNBC, April 21, 2020.
[167] "US consumer spend on video game products continues to break records," NPD Group, August 2020.

Most important stickiness drivers and their implications

Industry structure. The industry structure is well set for a post-COVID-19 live entertainment resurgence, given the prevalence of large industry players with diversified revenues. Despite this, smaller players (such as independent music venues) and more fragmented subsectors that cannot sustain many months of low revenue (movie theaters) are at risk of closure.

Industry players' response. Industry response has been focused on a combination of financial resilience and innovation. The impact of response varies. For example, movie studios are leveraging directly owned streaming platforms for movie distribution, threatening traditional distribution networks, while museums are staging drive-through exhibits as a temporary way to enable physical distancing.

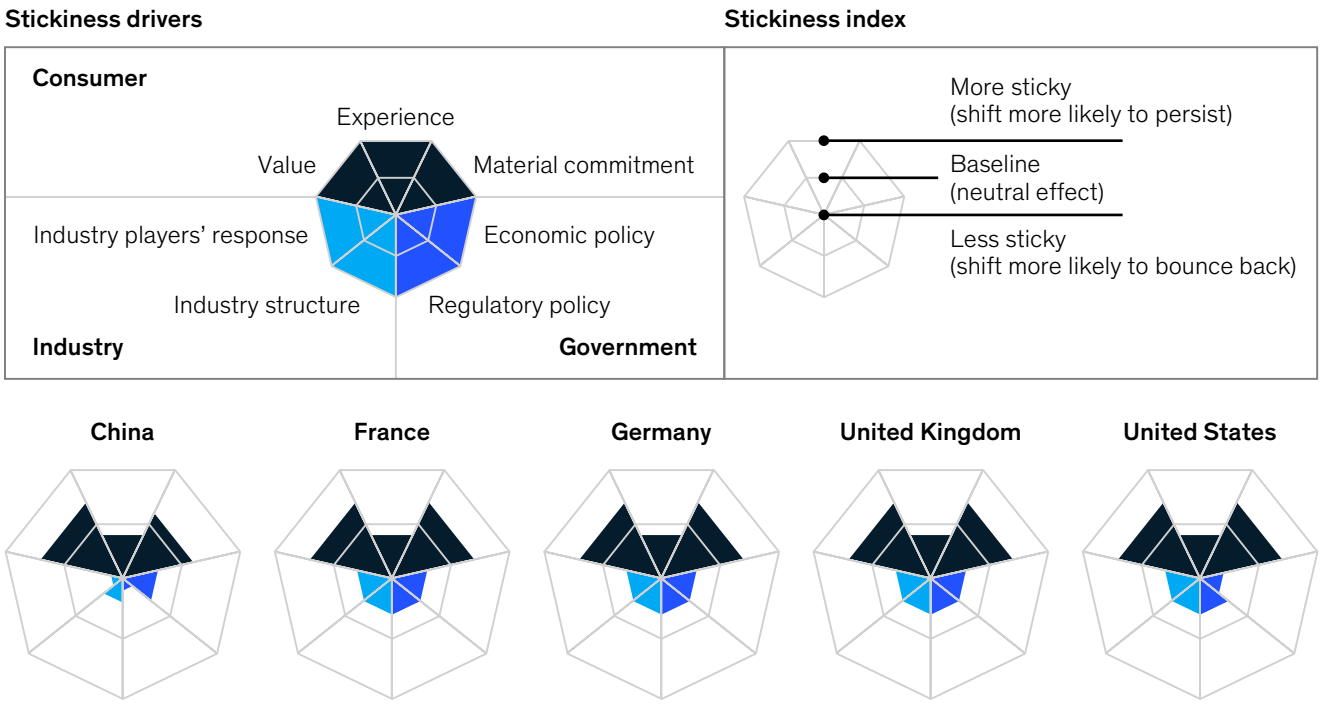
Material commitment. This bolsters the stickiness of COVID-19-induced declines in consumer spending on live entertainment, as consumers invest in home entertainment goods and services, such as increasing streaming subscriptions and video game consoles.

Experience. Consumer sentiment and comfort are key to recovery. In out-of-home entertainment, consumers in the United States and Western Europe remain wary, while consumers in China, where COVID-19 is far less prevalent, are becoming increasingly comfortable with out-of-home activities. This underscores the importance of the health recovery to the live entertainment resurgence. In the at-home entertainment segment, more than 60 percent of consumers in China, the United States, and Western Europe reported high intent to continue streaming and media consumption, driven by positive experiences with those services.

Exhibit C6

Overall stickiness: Entertainment

Will the decline in in-person entertainment continue post-COVID-19?



Source: McKinsey Global Institute analysis

Case study

Home nesting

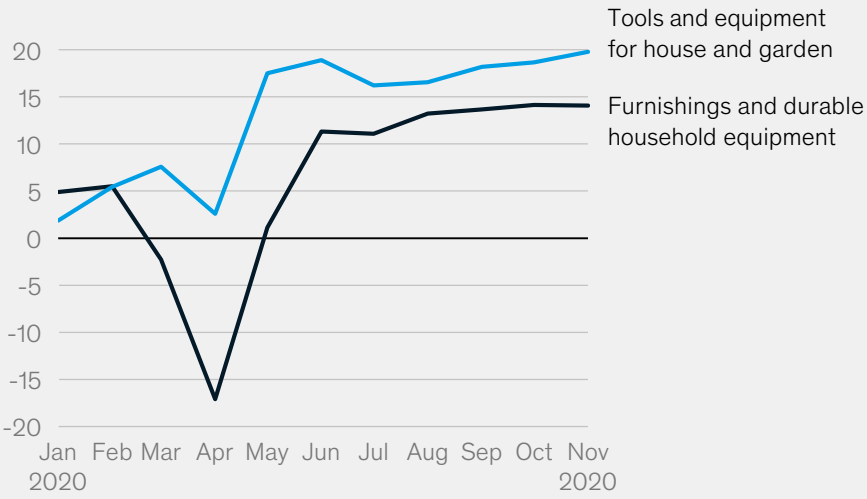
At a glance

Home nesting—spending on items that facilitate life at home such as home gyms, backyards and gardens, and kitchens—has been a core COVID-19 experience. The first wave of COVID-19 in the spring of 2020 resulted in widespread lockdowns, work closures, and health fears that suddenly meant home was the center of consumer life, reversing a trend of declining time and money spent at home. A sticky new habit of home nesting emerged as consumers invested both time and money in the home, which paid off in positive experiences. In the longer term, work from home (WFH) is here to stay (especially for high-income households in Europe and the United States), and it is likely to provide the structural support necessary to enable ongoing investment in time (and perhaps money) to further improve the home as a space for activities across spheres of life.

Exhibit C7

In the United States, increased time at home has translated into higher expenditure on furnishings and durables, especially on tools that enable do-it-yourself (DIY) activities

Change in consumer spending, 2019–20, year over year, %



Source: BEA; McKinsey Global Institute analysis

Pre-COVID-19

Consumer spending on home and home-related improvement as well as time spent at home were declining as a share of overall household money and time spent. Despite rising housing costs, up 83 percent from 1990 to 2019 in the United States, and growing spending on household furnishings and equipment, up 220 percent over the same period, our analysis suggests that consumers' share of spending on life at home was flat to declining on aggregate and that time spent at home was declining.[168] Total consumption in the United States grew 18 percent more than life-at-home consumption since 1990, driven mainly by healthcare but also recreation and education, and time spent on at-home activities had declined 9 percent since 2003 as service-based alternatives replaced time-intensive DIY on housework, gardening, maintenance, and childcare. Millennials were a notable exception to this trend, increasing spending on their homes, driven by rent, which represents a higher burden than any previous generation (rent as a share of income was 45 percent for ages 22 to 30, versus 36 percent for baby boomers at the same age).[169]

[168] McKinsey Global Institute analysis using BLS Consumer Expenditure survey.
[169] McKinsey Global Institute analysis using BEA data, BLS Consumer Expenditure Survey, and BLS American Time Use Survey. European data was not exactly comparable and we did not attempt the same analysis.

COVID-19 effects

As lockdowns and physical distancing extended from weeks to months, consumers invested in durable goods and furnishings to improve their experience at home. While overall home furnishing spending was up by 14 percent year over year in November 2020 in the United States, consumers increased spending most on tools and equipment, followed by small electrical appliances (up 20 percent and 15 percent, respectively, year over year in November).[170] The spending jump was strongest and most enduring in the United States, though it also occurred elsewhere, especially Germany, where sales at home DIY stores grew 16 percent in the first half of 2020 versus 2019.[171] Buying tools allowed consumers to develop their own capabilities, reflecting their reduced appetite to contract third-party services (and closures among providers) and an expanded role of DIY to build the infrastructure to accommodate new activities like working from home. Some governments offered targeted stimulus supporting home improvement, like France's MaPrimeRenov', which offered up to €20,000 per household for green essential renovations. Elsewhere, stimulus shored up household balance sheets but likely had a limited direct effect on home improvement spending; only 8 percent of CARES Act recipients in the United States used their stipend on household or recreational goods, versus 80 percent on food and 21 percent on clothing.[172] Credit and debit card data on home goods spending in the United States suggest that lower-income, younger consumers increased their home investments proportionally more than higher-income and older consumers.[173] Together, higher spending and the preference for DIY over spending on services demonstrate the depth of the reversal of pre-COVID-19 trends.

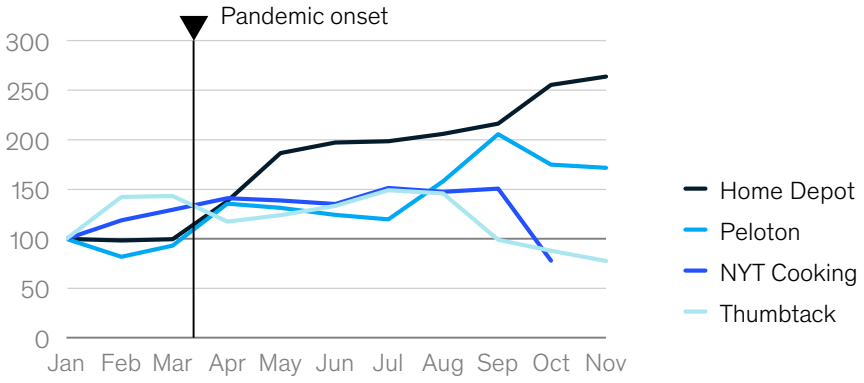
Our analysis of app use data across home improvement, exercise, and cooking reveals that increased expenditure on life at home has thus far been matched with increased engagement. In the case of home improvement, The Home Depot's app usership increases 88 percent from January to November and seasonally adjusted time spent on The Home Depot's app in November was more than 2.5 times that of January.[174] Similarly in the case of home exercise: time spent on Peloton's app was 1.7 times higher.[175]

As home became the location for more activities, consumers valued more space. COVID increased homebuying and renovation activity especially among high-income households in the US. Mortgage applications in the US reached an all-time high in March and remained 26 percent higher than the previous year in December. High credit score individuals represented most of the spike, reflecting the financial stability of this segment.[176] Investments on renovations and larger or second homes in turn fed into further spending on home furnishings and at-home activities. The COVID-induced house spending appears consistent with the long-term trend of expanding suburbs. However, the ultimate impact across and between urban regions will depend not just on home owners but younger renters many of whom, according to research by Stephan Whitaker of the Cleveland Fed, were unwilling or unable to move into urban centers and contributed a large share of the decline in net migration into urban centers in the United States.[177]

Exhibit C8

Expenditure on home nesting assets in the United States has been accompanied by increased time spent on digital mediums like apps, but the extent to which investment led to increased time varies by category

Total time spent on apps per month, 2020,
seasonally adjusted, index: 100 = January 2020



Source: Apptopia; McKinsey Global Institute analysis

[170] McKinsey Global Institute analysis using BEA data.
[171] "DIY stores in Germany are making leaps in sales due to Covid 19, *DIY International*, August 18, 2020.
[172] US Census Bureau, Household Pulse Survey, June 24, 2020.
[173] McKinsey Global Institute analysis using data from Affinity Solutions.
[174] McKinsey Global Institute analysis using data from Apptopia.
[175] McKinsey Global Institute analysis using data from Apptopia.
[176] "Mortgage applications increase in latest MBA weekly survey," Mortgage Bankers Association, December 16, 2020. Those with credit scores above 760 were responsible for 80 percent of mortgage originations (about $760 billion) in the United States, the highest rate since the early 2000s.
[177] Stephan D. Whitaker, "Did the COVID-19 pandemic cause an urban exodus?," Federal Reserve Bank of Cleveland, District Data Brief, February 5, 2021.

The recovery

Expanded working from home, investments made during COVID-19, and positive experiences from time and money spent at home will reinforce time spent nesting at home, but spending may not continue at similarly accelerated levels. Working from home is likely to stick and be the core driver of more time at home, though the spending implications are less clear. Expanded work from home nudges activities to the home from other spheres of consumer life that used to occur near or at a workplace. An example is weekday lunches. One additional day of work from home may result in up to a 10 percent shift in food expenditure for an average working-age consumer.[178] The question remains how much of it will be captured by grocery stores and how much from restaurant deliveries. WFH also brings potential efficiency gains that could unlock free time, and perhaps spending, at home, namely from time saved commuting. A comparison of individuals who worked from home before COVID-19 versus those who did not shows that structural differences allowed at-home workers to spend more time at home on home responsibilities and consumption-enabling "free time" instead of work or work-related activities. Despite this potential, WFH during COVID-19 may not yet have translated to proportional growth in free time at home. For example, while consumers are saving more than 50 minutes per day commuting, over half of these time savings has been allocated to more time working, and the average workday duration was actually 45 minutes longer as of June.[179]

Both new home purchases and renovations as well as investment in home furnishings and equipment are similarly likely to continue to fuel ongoing commitment to home nesting. Positive experiences with these at-home activities suggest they will continue, and they may lead to more spending in addition to time at home. For example, while intention to use the gym post-lockdown is 12 percent below pre-lockdown, 54 percent of gymgoers plan to complement their routines with at-home versions. While some options may not lead to spending (for example, intent to use free apps is up more than 250 percent versus before COVID-19), others will, such as the about 24 percent that plan to use paid apps for fitness.[180] More broadly, spending time on these activities at home can lead to greater spending, such as on consumables. A survey revealed that on average those working from home spent $108 more monthly across common expenditures like groceries, utilities, restaurants/takeout, gas/public transit, clothes cleaning, and childcare.[181] Beyond consumables, the likelihood of continued spending partially depends on the type of good and its life cycle. Essential spending and goods with longer life cycles (such as a dishwasher) are more likely to have been expected future expenditures that were "pulled through" and therefore will not spur additional spending. Discretionary or shorter life cycle goods (such as a breadmaker or an exercise band) are more likely to be impulse purchases or part of habits, and they have a greater capacity for add-on spending like extra parts (and need to be replaced more frequently).

However, there are country variations in stickiness. The United States and Western Europe have nearly double the potential for more work from home than China, due to the current mix of employment.[182] Moreover, China's shorter period under lockdown limited the experimentation with and stickiness of WFH. Additionally, Americans have larger homes (65 square meters of floor area per capita, versus 33 to 46 in China and Western Europe) and a more established culture of DIY home improvement ($265 annual home improvement spending per capita versus $49 in China and $121 in the United Kingdom), which allows for easier adaption of homes as coffee shops, offices, and so on, and offers more potential for a sticky increase in home nesting.[183]

[178] Assuming three meals of equal value consumed daily, and two shifted from out-of-home to at-home due to one additional day of work at home.
[179] US Census Bureau American Time Use Survey; and Evan DeFilippis et al., "Collaborating during coronavirus: The impact of COVID-19 on the nature of work," NBER working paper number 27612, July 2020.
[180] McKinsey & Company COVID-19 Fitness Survey (n = 2,855 completes) as of April 16, 2020.
[181] "35% Forced to Work from Home Want to Continue Doing So Full Time, Despite Increase in Expenses," CreditCards.com survey, June 11, 2020.
[182] *The future of work after COVID-19*, McKinsey Global Institute, February 2021.
[183] McKinsey Global Institute analysis with data from Euromonitor; "Implications of declining household sizes and expectations of home comfort," 2020.

Most important stickiness drivers and their implications

Material commitment. High levels of investment made on life at home (especially on furnishings, durables, and tools and equipment) during the crisis drive continued commitment to behaviors into the future, especially for younger consumers and those who spent more (that is, the wealthiest consumers). Renovations and homebuying in suburban areas only bolster this trend, offering more space.

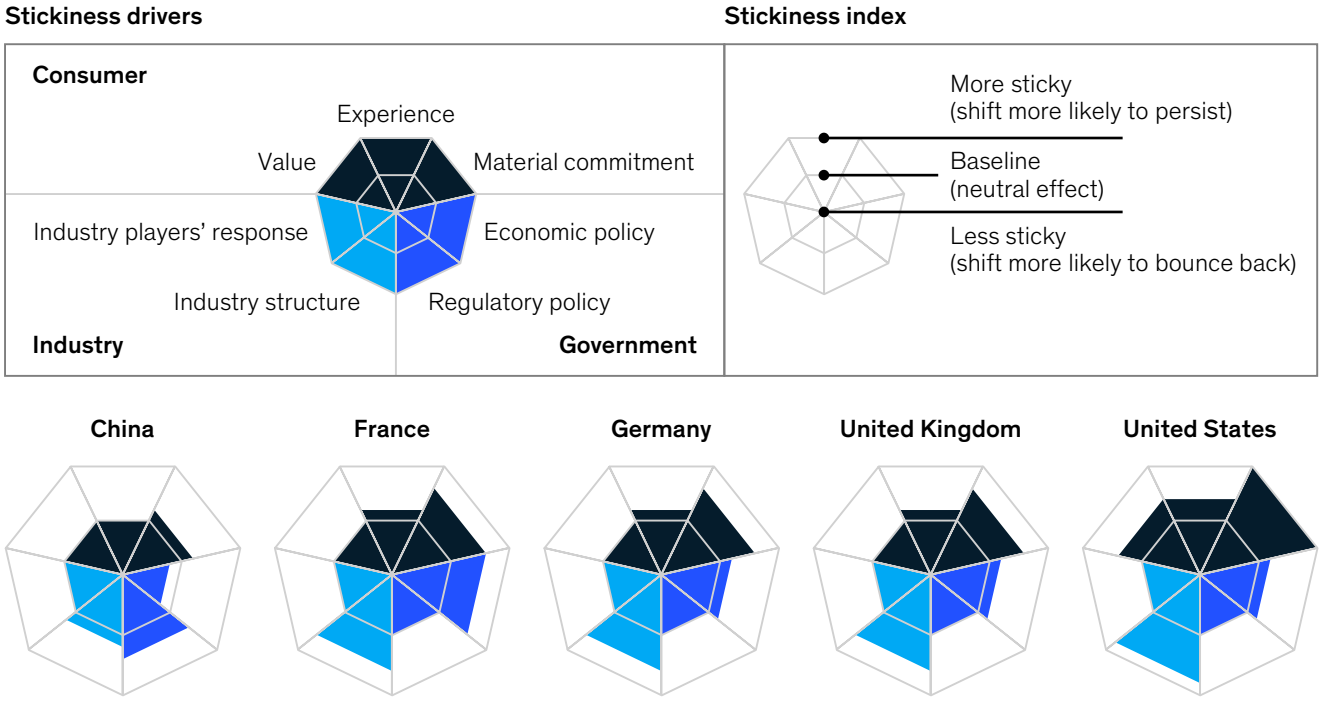
Industry structure. Work from home's growth, including hybrid models, is driving the shift to time and thus spending at home in other, related spheres of life (such as online shopping, cooking at home, and home gyms). This is especially prominent for wealthy individuals and in more developed economies.

Experience. Consumers dramatically increased engagement with specific behaviors (25 percent of Germans cook more at home, and 44 percent of Americans eat at home more often since COVID-19's start). While in some cases this led to positive experiences (35 percent of Americans report enjoying cooking at home more), consumers overall have grown tired of having all of life at home (69 percent reported burnout symptoms from WFH in July), and post-COVID-19 stickiness is not uniform for all behaviors at current levels.[184]

Exhibit C9

Overall stickiness: Home nesting

COVID-19 instigated a sticky reversal of existing trends, with material commitments combining with increased work-from-home (industry structure) to facilitate shifts to more time and expenditure at home in the long run



Source: McKinsey Global Institute analysis

[184] Hunter, "Hunter Food Study Special Report 2: America Keeps on Cooking," December 2020; survey by Monster, July 10, 2020.

Case study

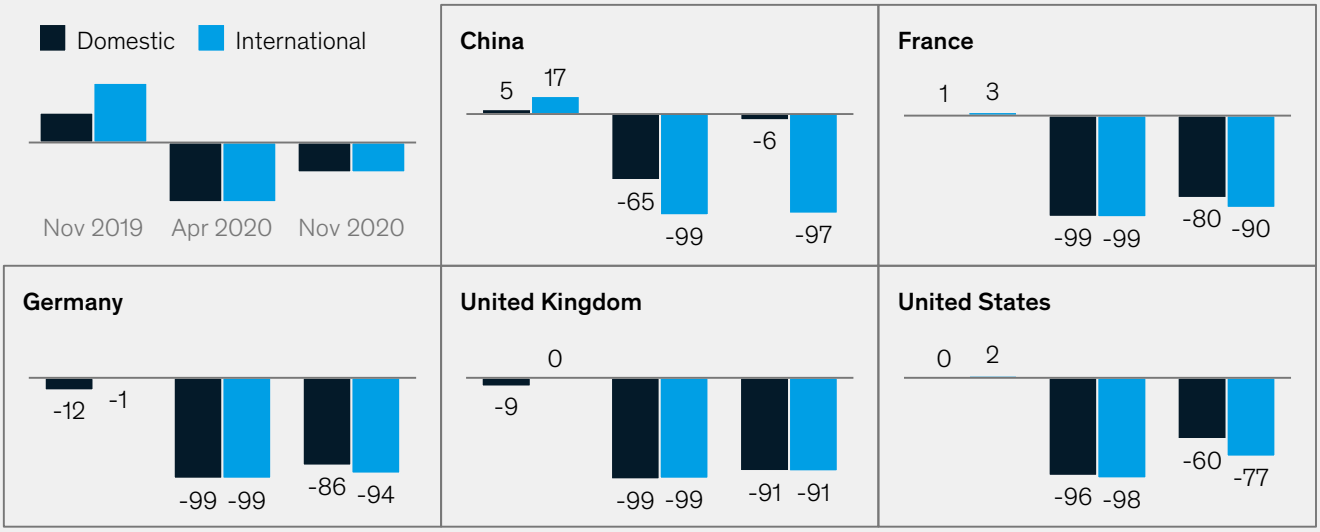
Leisure air travel

At a glance

Despite one of the sharpest contractions of any industry (losing effectively 100 percent of traffic at the nadir), demand for leisure air travel is set to bounce back to pre-COVID-19 aggregate growth. Strong long-term growth momentum and pent-up demand from pandemic restrictions, together with government support and effective industry response, have set the stage for a robust rebound when travel restrictions lift. However, the shape of demand may shift. Reduced business travel is likely to create ripple effects on full-service airline profitability, in turn changing the landscape for leisure travelers, in the form of both constraints (such as contracted networks and price increases) and opportunities (from greater service to leisure destinations by low-cost/point-to-point carriers and more catering to the nonbusiness premium segment).

Exhibit C10

Monthly air travel passenger traffic, year over year, %



Source: Civil Aviation Administration of China; Directorate General for Civil Aviation (France); Eurostat; IATA PaxIS; UK Civil Aviation Authority; US Bureau of Transportation Statistics; McKinsey Global Institute analysis

Pre-COVID-19

Leisure air travel grew in line with rising incomes over the past few decades because of expanded budget options from low-cost carriers and subsidization from more profitable business travel. The industry has been on a robust growth trajectory in line with rising incomes. Traffic (in revenue passenger kilometers) was expected to grow 5 percent a year from 1990 to 2036 before COVID-19, led by growing demand from Asia.[185] Leisure air travel became more accessible as low-cost carriers grew (for example doubling their intra-Europe capacity from 2006 to 2016), pushing down costs per available seat kilometer and thus prices.[186] Business travel contributed by subsidizing leisure air travel. With only 10 percent of seat demand in major airlines, business travel typically contributes 55 to 75 percent of profits.[187] It also facilitates broader networks by enabling profitable service at lower load factors, making feasible direct routes to and from secondary and tertiary locations (for example, direct flights from Raleigh, North Carolina, to Paris) and more frequent service. Though travel demand typically dips during economic downturns, it has consistently recovered to pre-crisis growth rates as the economy resumes

[185] McKinsey Global Institute analysis using data from IATA's *20 Year Passenger Forecast*, February 2021.
[186] Alex Dichter, Sybren Hahn, and Dominic Maxwell, "Winter is coming: The future of European aviation and how to survive it," September 2, 2016, McKinsey.com.
[187] "For corporate travel, a long recovery ahead," McKinsey.com, August 2020.

growing. However, business and international travel tends to be slightly less resilient: after both 9/11 and the Great Recession, business travel recovery was slower than leisure (in Germany, leisure travel recovered to pre-2008 levels 50 percent faster than business), as companies reduced travel costs during times of financial pressure and international travel was more vulnerable to geopolitical risk and regulation.

COVID-19 effects

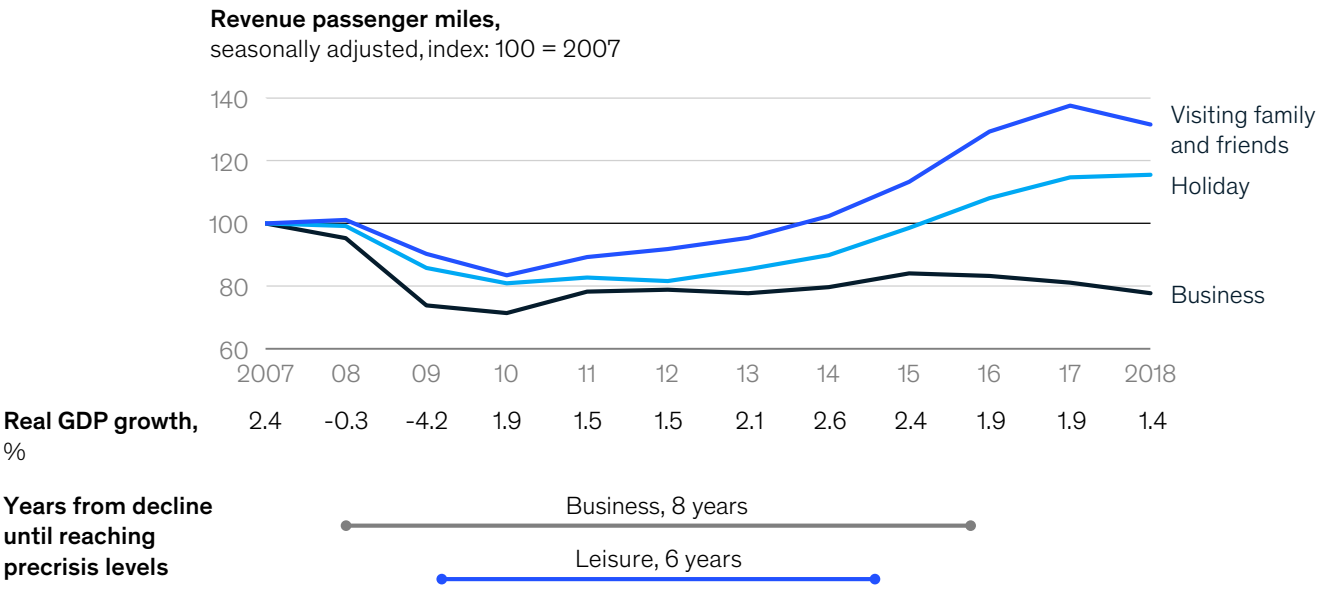
Global air travel ground to a halt in February as the virus began to spread to Europe and the United States. Since then, international travel has remained at unprecedented low levels. While the crisis started with a moderate decline in passenger levels driven by consumers choosing not to travel as cases of COVID-19 rose, it accelerated rapidly with travel bans and lockdowns. These started with the United States banning travel from China, China from Italy, and New Zealand from everywhere and grew around the world. At the trough, air travel of all types fell nearly 100 percent. Since the spring nadir, regulatory barriers have changed. For example, from a full ban to travel permitted with a negative COVID-19 test, or mandatory quarantine eliminated in fits and starts, or in some countries such as in the United Kingdom, the introduction of mandatory quarantine. Consumer safety fears have also begun to be addressed. Surveys show that airlines quickly implemented many of leisure travelers' top requests to protect them from the virus, such as adding more intense cleaning in all areas of the plane (which 35 percent of Americans and 25 percent of British at the time said would make them more likely to take a flight for leisure).[188] (see Box C1, "What clues can 9/11 give us for postpandemic air travel?") That said, the overall demand recovery has been piecemeal, and the industry remained under pressure.

China led the decline and has also led the recovery. China's domestic market reached more than 98 percent of 2019 levels in October after bringing the virus largely under control, and this compares with the rest of the world, where domestic flights remained 41 percent down for the same period.[189] However, the rebound in China has occurred in part because of widespread promotions and low fares, highlighting longer-term balance sheet risks for airlines. Elsewhere, areas with robust domestic networks like the United States have fared better than international-dependent countries like the United Kingdom given domestic travel's faster recovery.

Exhibit C11

The Great Recession shows leisure travel is more resilient than business travel

United Kingdom example



Source: UK Office for National Statistics; World Bank; McKinsey Global Institute analysis

[188] McKinsey & Company, Consumer Leisure Travel Survey, April 10–30, 2020.
[189] IATA, "Passenger Recovery Disappoints in October," December 8, 2020.

Box C1

What clues can 9/11 give us for postpandemic air travel?

The most significant crisis in the industry before COVID-19 can offer clues for postpandemic leisure air travel. After 9/11, international flights from the United States dropped 36 percent over the month of October 2001 compared with historical norms for the same period, and overall demand remained roughly 7.4 percent below pre-September 11 levels through 2003.[1] Demand resumed its growth trajectory and recovered to pre-9/11 levels within a three-year time frame. Notably, industry-driven factors shaped the recovery path more than consumer preferences. New travel procedures, especially baggage screening (which accounted for about six percentage points of the demand drop), created inconveniences that explain much of the multiyear delay in air travel recovery, suggesting that underlying demand is resilient and that industry response can be an important influence and promote the post-crisis recovery.[2]

[1] McKinsey Global Institute analysis using data from the US Bureau of Transportation Statistics.
[2] Garrick Blalock, Vrinda Kadiyali, and Daniel H. Simon, "The impact of post-9/11 airport security measures on the demand for air travel," *Journal of Law & Economics*, November 2007, Volume 50, Number 4..

The recovery

A robust recovery in demand for leisure air travel is likely, yet the shape of demand may be different. Underlying demand remains strong, and leisure air travel is likely to remain resilient so long as broader economic growth continues, a trend shown in past economic downturns. Globally, governments have helped airlines manage the financial impact of the pandemic and avoid mass bankruptcies by offering government support packages amounting to about 33 percent of 2019 ticket revenues in the United States, 36 percent in France, and 20 percent in Germany.[190] Moreover, industry players have already demonstrated their effectiveness in addressing passenger health fears. While today's consumer fears have contributed to low demand, they pose less of a risk of long-term headwinds after the pandemic than do structural changes. In fact, 22 percent of consumers report that leisure air travel is one of the top activities across spheres of life that they are excited to restart.[191]

After health concerns and government travel restrictions abate, the strength of recovery will depend on two main factors: household income growth and the extent of schedule and route reductions and price changes as the industry responds to cost pressures and business travel decline. This implies that despite robust underlying consumer appetite to travel, the recovery in leisure air travel will depend largely on factors outside of consumers' control. Household income growth discussed in chapter 1 suggests a bifurcation in the pace of recovery with upper-income cohorts returning faster, spending accumulated savings, while lower-income individuals face a less certain future. This split is reflected in consumer surveys, with high-income individuals 12 percentage points more likely than average to list leisure air travel as a top desired activity after the pandemic, while low-income individuals are nine points less likely. [192]

Regarding industry changes, McKinsey estimates that business travel could be 20 percent lower after the pandemic, a contraction that would continue to put pressure on full-service airlines' balance sheets, networks, and pricing, which may constrain flight options for leisure travel.[193] Videoconferencing provides a viable alternative for many business needs (especially internal meetings of companies), and its growth offers companies an opportunity to limit travel to obtain cash savings and to meet other corporate goals like sustainability.[194] With fewer business travelers, route planning and profits will depend more on leisure travelers, who are more price sensitive and less profitable per seat. A typical route might see profitability harder to reach, so airlines may need to adjust to achieve sustainable load factors by reducing frequency on major routes, discontinuing others, or considering price increases for leisure passengers across their network. Further, the squeeze has forced airlines and airports alike to slow billions of dollars' worth of capital expansion, risking further entrenching these capacity challenges.[195] However, the shift to focus on leisure routes also creates potential opportunities for low-cost carriers and other, less business-dependent point-to-point routes. These carriers have intracontinental models and price points that are well

[190] IATA, *Government aid*, May 26, 2020.
[191] McKinsey COVID-19 US Consumer Pulse Survey, November 9–13, 2020, n = 2,024, sampled and weighted to match the US general population 18 years and older.
[192] Ibid.
[193] Also see "The Covid pandemic could cut business travel by 36%—permanently," *Wall Street Journal*, December 1, 2020.
[194] See McKinsey CHRO/CFO surveys; and "For corporate travel, a long recovery ahead," McKinsey.com, August 2020.
[195] "Airlines count mounting costs of the coronavirus shock," Reuters, March 16, 2020

suited to meet leisure demand and have performed better through the crisis.[196]

While a full recovery in leisure air travel is widely expected, who travels, where, and why may be different from the past. Younger travelers have demonstrated a greater willingness to resume flying, as they are the least inhibited by public health conditions, and this group should be the first to return when the pandemic ends. Low-income travelers might be more constrained in their options if ticket prices increase to offset lost business revenue. Wealthier individuals, on the other hand, may find they have more front-of-the-cabin options if business travel remains weak and airlines shift to capture the high-end market by introducing more comfortable and spacious options.

We also expect that in the initial recovery phase, when consumers do fly they may lean toward closer locations, shorter durations, and cheaper options. International travel restrictions are set to continue until the virus is controlled around the world, and early efforts to create "vaccine passports" have hit headwinds.[197] Depending on vaccine rollout timelines, this may lead the United States and Europe to remove restrictions sooner (and thus enable a quicker international leisure recovery), while other geographies might keep restrictions in place until they acquire more effective testing or more widespread vaccination. While the wealthiest cohorts may be willing and able to spend considerably to replace deferred global travel, others may display residual preferences for familiar, safe destinations after the pandemic. And the difficulty of getting from Point A to Point B amid downsized networks may be a factor, especially those starting in second- or third-tier cities that are more likely to see service cuts. This is especially true for some pre-COVID-19 routes, such as Chinese group tours that had relied on subsidized flights through the Middle East to tour Europe. If the subsidized fares are no longer available, these travelers may choose other destinations closer to home.[198]

[196] Edgar Jimenez and Pere Suau-Sanchez, "Reinterpreting the role of primary and secondary airports in low-cost carrier expansion in Europe," *Journal of Transport Geography*, October 2020, Volume 88.

[197] Miriam Berger, "Covid-19 passports aim to streamline travel requirements. But there's no one-size-fits-all fix," *Washington Post*, February 18, 2021.

[198] For more, see Urs Binggeli, Margaux Constantin, and Eliav Pollack, "COVID-19 tourism spend recovery in numbers," October 20, 2020, McKinsey.com; and Guang Chen, Will Enger, Steve Saxon, and Jackey Yu, "What can other countries learn from China's travel recovery path?," October 15, 2020, McKinsey.com. Airline tickets are only part of the sticker price of leisure travel; hotel and restaurant closures and price increases at a destination can be even more influential in redirecting travelers to new, more cost-effective destinations than the airfare itself (for instance, choosing Phnom Penh over Paris).

Most important stickiness drivers and their implications

Industry structure. Leisure travel's future depends on the outcomes for airlines' balance sheets and their changing route networks and pricing from a decline in business travel. Declines in business travel, and the subsequent pressure on leisure, will be greatest where videoconferencing and remote work are most widely accepted and where financial, sustainability, or lifestyle motivations to cut corporate travel are strongest. Low-cost carriers are positioned to offset some of this pressure, but their ability to do so in the near term is limited given their intracontinental focus and still-limited global market share (31 percent as of 2019).[199]

Industry players' response. Quick actions by airlines to meet health and psychological concerns have been well received by consumers and have facilitated air travel's resilience—pushing many to delay, rather than eliminate, air travel plans.

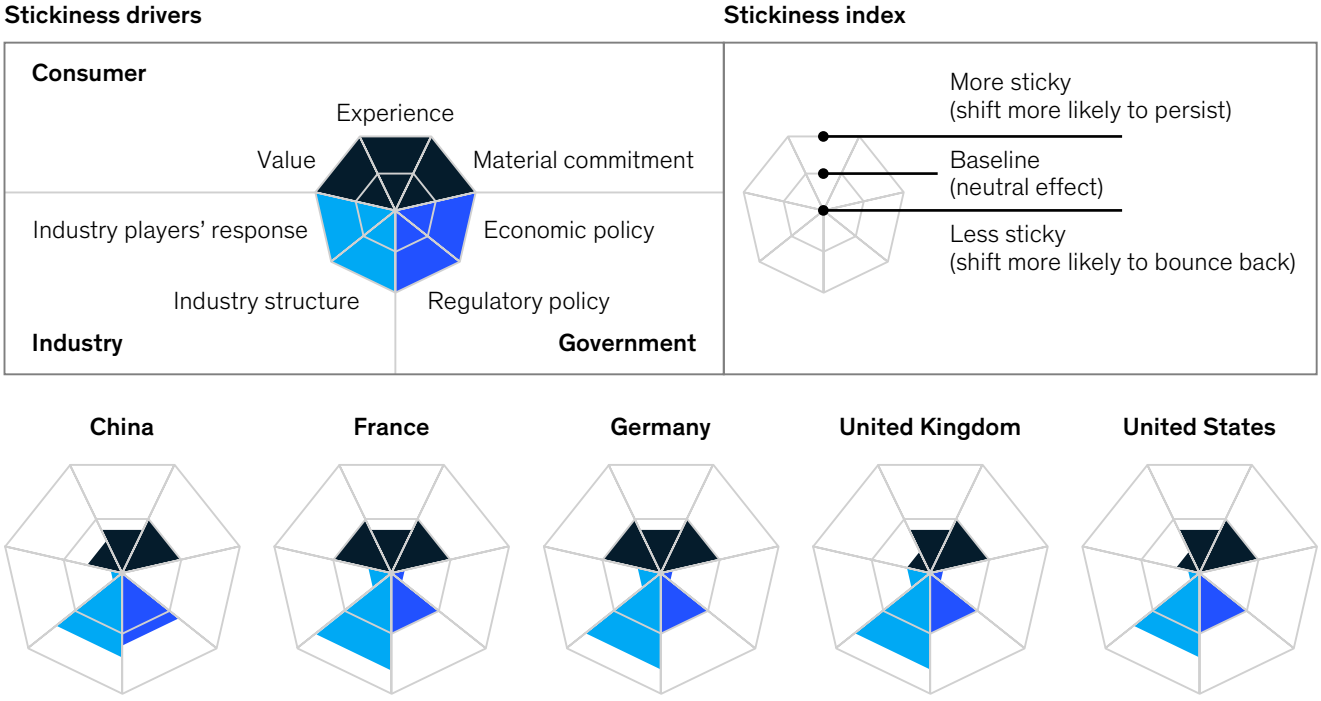
Value. The value proposition of leisure air travel remains strong on aggregate as there are no good substitutes for visits to family and friends in person or for vacations to new destinations. However, smaller networks will weaken bounce-back for certain cohorts. Specifically, higher prices from cost pressure will limit low-income travelers' bounce-back, and inconvenient (such as longer, multileg) routes may nudge travelers toward closer, familiar destinations, especially from secondary and tertiary cities or international travel.

Economic policy. Government economic support will buoy the industry, be it in the form of direct bailouts to private airlines or willingness by state-owned airlines to accept losses.

Exhibit C12

Overall stickiness: Leisure air travel

The reduction in air travel during COVID-19 is not likely to stick, but observers should watch for industry consolidation from potential business travel contractions



Source: McKinsey Global Institute analysis

[199] Statista, "Low cost carriers' worldwide market share from 2007 to 2019," June 10, 2020.

Case study

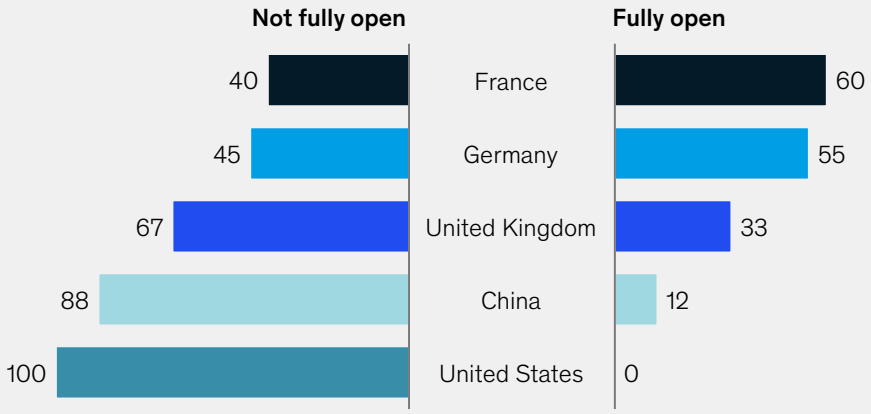
Remote education

At a glance

The pandemic caused widespread disruption to education around the world. At the peak, nearly 1.6 billion children globally were impacted by school closures, and schools were forced to rapidly switch to remote learning models. While remote learning at primary and secondary schools is not expected to stick because of poor student, teacher, and parent experience, it may be used selectively to enhance education. For higher ed, online learning is likely to continue to develop and grow as a tool.

Exhibit C13

School opening status, March 1–November 1, 2020, % of days



Note: School days classified as "partially open" are considered not fully open.
Source: McKinsey Education Practice; McKinsey Global Institute analysis

Pre-COVID-19

Before COVID-19, the incidence of online learning for primary and secondary school students was extremely low. Only about 0.5 percent of primary and secondary school students in the United States were enrolled in virtual learning environments, with the majority clustered in states with "cyber charter schools."[200] In Europe, there is less information about remote learning. A report by International Research on K-12 online learning in 2012 found there were 68 European virtual schools and colleges distributed across 18 countries while other researchers estimated the number could be closer to 100.[201] This differs greatly from the higher education sector; by 2018, about one million or more students were enrolled in online higher education institutions in the United States, and about 35 percent of undergraduate students and about 40 percent of graduate students reported taking at least one online course.[202] Growth was particularly pronounced at the graduate school level, where online enrollment increased by about 8.5 percent annually from 2013 to 2018.[203]

[200] *Snapshot 2019: A review of K–12 online, blended, and digital learning*, Digital Learning Collaborative, April 2019.
[201] Christo Dichev et al., "Current practices, trends and challenges in K-12 online learning," *Cybernetics and Information Technologies*, September 2013, Volume 13, Number 3.
[202] National Center for Education Statistics, "Distance learning," nces.ed.gov.
[203] National Center for Education Statistics, nces.ed.gov.

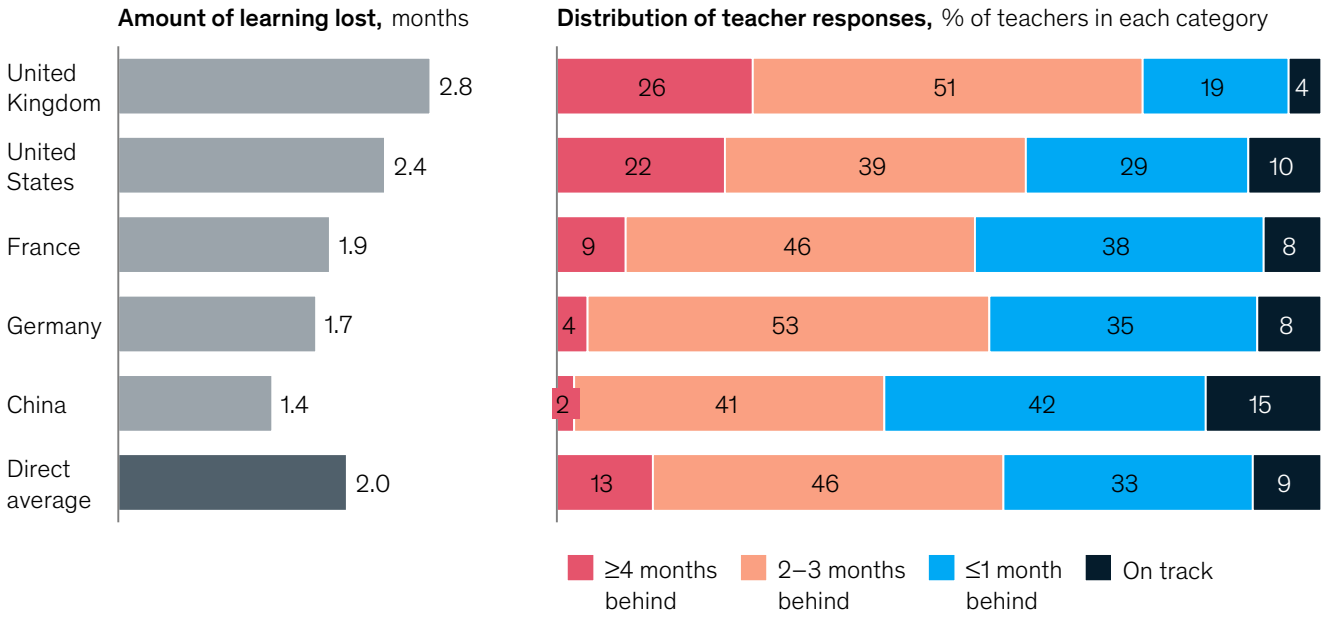
COVID-19 effects

COVID-19 lockdown policies caused students in primary, secondary, and higher education to shift to remote learning suddenly en masse. But given the poor teacher, parent, and student experience and the inequality of remote learning infrastructure (such as high-speed internet at home and devices for remote classes), remote learning during spring 2020 was widely regarded as less effective than in-person learning for primary and secondary school students. Spring 2020 surveys of US school districts indicate wide variation in how effectively schools adjusted to remote education, with only 11 percent offering full synchronous teaching and only 36 percent reporting full attendance tracking.[204] Moreover, surveys indicate that in the United States, about 55 percent or more of students spent less time on learning activities and half of students had no live engagement with teachers (see Box C2, "How the pandemic is widening the education gap between low- and high-income students").[205]

Exhibit C14

Teachers reported that students were on average two months behind where they usually would have been by early November 2020

Question: To what extent have your students lost learning due to COVID-19-related school closures?



Note: Figures may not sum to 100% because of rounding.

Source: Teacher survey carried out October 28 –November 17, 2020, of 2,455 teachers across Australia (52), Canada (350), China (350), France (278), Germany (274), Japan (350), United Kingdom (351), and United States (450); McKinsey Global Institute analysis

[204] Consortium for Policy Research in Education, Spring Database, www.crpe.org.

[205] US Census Bureau, Household Pulse Survey Data Tables, December 2020, www.census.gov.

Box C2

How the pandemic is widening the education gap between low- and high-income students

The COVID-19 pandemic uncovered vast inequalities between the learning environments, technology, and overall access available to students from low-income families versus high-income families. Students in lower-income households report less consistent access to technology and internet connectivity, which poses a threat to learning continuity. Additionally, students in lower-income households were more likely to depend on schools or other sources (such as charitable organizations) for technology or technology financing. Given this, not only do students from lower-income households have less access to education technology, but they also have more tenuous access as it is dependent, in many cases, on the ability of others to provide or finance it. The unequal impact of COVID-19 on students can already be seen in online engagement and achievement metrics, which are lower for lower-income students.[1] Moreover, this trend is mirrored by parents. Although search intensity for learning resources by income was stable before COVID-19, during the pandemic, higher socioeconomic status households increased search intensity relative to lower socioeconomic status households.[2]

In higher education, cancellation or delay risks increasing long-term inequality. When surveyed, low- and middle-income students were more likely to report canceling higher education plans as a result of COVID-19. When asked about reasons for canceling plans, students predominantly reported health and financial concerns.[3] As higher education is one of the most effective social equalizers, the shift of low- and middle-income students away from higher education plans has the potential to exacerbate inequalities.

Many specialists and education professionals are worried about learning loss for students in primary and secondary schools as a result of COVID-19 remote education. This fear is driven by documented instances of learning loss globally during education interruptions. In 2005, an earthquake in Pakistan resulted in 14 weeks of school closures. A study evaluating the earthquake's educational consequences found that proximity to the fault line, and therefore to closed schools, was highly correlated with poor academic test scores. Similar results were found in a study of school closures induced by severe flooding in Thailand, which caused test score drops across all academic grades evaluated.[4] Given that these educational interruptions were actually short in comparison to what is now a year-long interruption to in person education in many communities, COVID-19-induced learning loss is expected to be severe, further increasing inequalities. Research in the United States indicates that in a scenario where most US K–12 students returned to in-person school in January 2021, students of color would likely have one to two additional months of learning loss than the average student.[5] Learning loss, if not properly remedied, can cause a lifetime depression in student earnings and, as a result, in GDP.[6]

Post-COVID-19 learning loss may vary by country, given the different reopening prioritization models in China, the United States, and Western Europe. In Western Europe, parents noted that in-person education was the leading learning format and those whose children were still learning remotely anticipated a return to in-person learning within three months. In China, schools have fully reopened. Learning loss will likely be lowest in China, given the quicker resolution of the pandemic, and highest in the United States, given the prolonged nature of the pandemic and the prioritization of retail over education reopening. Still, there are a variety of strategies educators can take to mitigate learning loss (e.g., expanded learning time, high-intensity tutoring, exposure to grade-level content) and the extent to which this occurs within countries has the potential to shape long-term learning loss.[7]

1 Economic Tracker, Opportunity Insights, tracktherecovery.org.
2 Andrew Bacher-Hicks, Joshua Goodman, and Christine Mulhern, "Inequality in household adaptation to schooling shocks: Covid-induced online learning engagement in real time," NBER working paper number 27555, revised November 2020.
3 US Census Bureau, Household Pulse Survey, August 19–31, 2020, www.census.gov.
4 Tahir Andrabi, Benjamin Daniels, and Jishnu Das, "Human capital accumulation and disasters: Evidence from the Pakistan earthquake of 2005," RISE, working paper number 20/039, May 2020; and Sarah Gonser, "What past education emergencies tell us about our future," Edutopia, April 8, 2020.
5 Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and learning loss—disparities grow and students need help," December 8, 2020, McKinsey.com.
6 Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and student learning in the United States: The hurt could last a lifetime," June 2020, McKinsey.com.
7 Ibid.

The recovery

At-scale remote learning for primary and secondary school students is unlikely to continue, while expanded online learning is likely in higher education. However, COVID-19 has created an opportunity for school districts to increase resilience and use technological tools selectively to improve educational outcomes. This may occur in three main ways: learning may help bridge future learning gaps due to natural disasters or other emergency closures; schools may continue to integrate digital learning to enhance in-classroom experiences; and online learning may provide expanded access to differentiated coursework to help personalize learning for each student.

Primary and secondary education. Poor experience for students, teachers, and parents, coupled with inferior expected learning outcomes due to difficulties transitioning to remote learning, makes it unlikely that remote education will persist at scale after COVID-19. When asked about the efficacy of remote learning, about 70 percent of elementary school teachers surveyed believed it was ineffective or were uncertain of its efficacy. Similarly, only 20 percent of students reported learning better online, and only 37 percent reported enjoying online classes.[206] Despite public- and private-sector investment to provide adequate technology for remote learning, supply chain disruptions and financing limitations restrained schools' ability to properly equip all students.[207] Given these challenges, many schools globally transitioned back to in-person quickly, with schools in China and Western Europe reopening as early as late spring 2020. While many US schools are still closed in early 2021, poor experiences with remote learning and continued technological challenges limit the likelihood of significant growth in post-COVID-19 remote learning. However, it is important to note that although most students will transition back to in-person learning when the health situation resolves, the COVID-19 education experience has helped drive increased use of digital tools in teaching and learning, and has also exposed parents to the inner workings of their children's education, both changes that have the potential to shape education in the coming years.

Higher education. Higher education institutions experienced smoother transitions to remote learning than primary and secondary schools did. This is because of a combination of factors, including student population age and higher levels of technological access.[208] In higher education, the combination of a more positive experience, industry players' response of investing in strong online learning environments, and the ability to provide better value for students enhances the likelihood that online learning continues to grow.[209] Over the past few years, schools have been increasingly experimenting with pricing and delivery model shifts to address new markets, and COVID-19 has accelerated innovation and financial market investment in the ed-tech space. During the pandemic, top institutions such as Princeton and American universities provided discounts for students studying exclusively online because of COVID-19, while Georgia Tech is seeing increased enrollment in its online computer science master's program, which is priced at a fraction of an in-person master's. Finally, schools are continuing to invest in new delivery models, such as "unbundled" degree programs where students earn micro-credentials and AI-based support within online programs, a change potentially accelerated by COVID-19 as job seekers return to education to acquire new skills. Respondents to surveys regarding online learning expressed a greater openness to pursuing a four-year degree fully online, and about 40 percent believed that online degrees will be more socially acceptable because of COVID-19.[210]

[206] Haley Apel, "Survey finds remote learning gaps in US elementary schools," Nebraska College of Education and Human Sciences, August 31, 2020.
[207] Euirim Choi, "Remote learning without a laptop? Thousands could be stuck without devices due to shortage," *Wall Street Journal*, August 26, 2020.
[208] Surveys by New America / Third Way Higher Ed Tracking suggest that college students were able to access course content online in 97 percent of cases. Similarly, 92 percent of college students reported using laptops or desktops to complete coursework. Compared with primary and secondary students, college students have greater device and internet access. The US Census Bureau found that of the 52 million households with children present, only 74 percent always had access to a computer for educational purposes and only 73 percent always had access to internet for online learning (as of September 2020).
[209] Surveys indicate that only 37 percent of elementary school students enjoy online classes and only 31 percent of elementary school teachers believe they are effective. In contrast, studies of students in higher education indicate that although satisfaction dropped, 59 percent of students were still very or somewhat satisfied with their courses after they shifted to remote education. Moreover, students reported satisfaction with instructor's preparation (76 percent), online course content (71 percent), and instruction quality (68 percent). See *Suddenly online: A national survey of undergraduates during the COVID-19 pandemic*, Digital Promise in partnership with Every Learner Everywhere and Tyton Partners, July 2020.
[210] Hayoung Kim, Charag Krishnan, Jonathan Law, and Ted Rounsaville, "COVID-19 and US higher education enrollment: Preparing leaders for fall," May 21, 2020, McKinsey.com; and "Public Viewpoint: COVID-19 Work and Education Survey," Strada Education Network, April 29, 2020.

Most important stickiness drivers and their implications

Experience. In primary and secondary education, the experience of COVID-19-induced remote learning was poor for students, parents, and teachers alike. Remote education created childcare challenges for working families and exacerbated underlying inequalities between students from higher- and lower-income families. Given this poor experience, it is likely that in-person education will resume at scale in primary and secondary schools once the health situation is resolved.

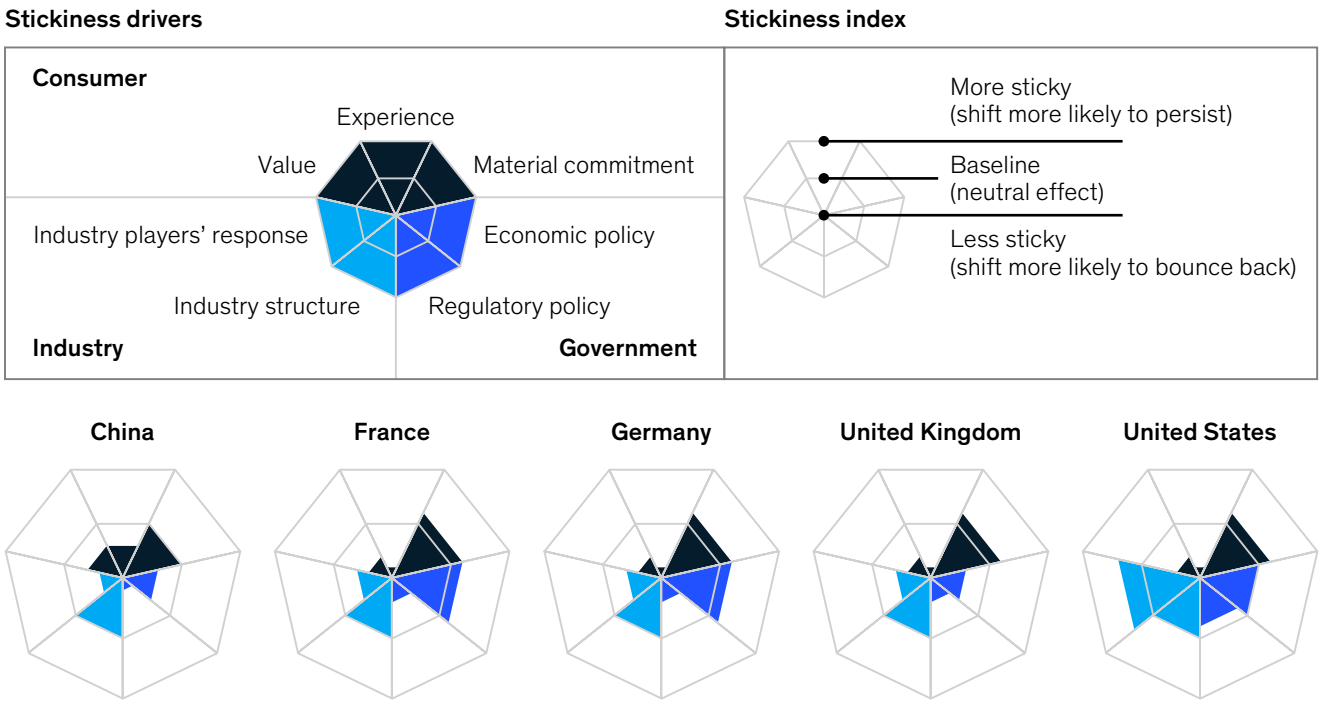
Value. For higher education, online learning provides an opportunity for enhanced value through lower costs, although this is dependent on schools running effective online learning programs that generate outcomes that are equal to or better than those from traditional in-person programs. Surveys of students indicate that program availability, career opportunities, and the cost of attendance are the most important factors in selecting a college. Currently, data on program cost and academic ranking suggest that there is a wide range of online MBA program pricing, so the longer-term level of student value will depend on where online program prices settle.

Industry players' response. Top higher education players have been investing in digital technology, potentially bolstering stickiness. In primary and secondary education, though, most countries have responded by opening schools as quickly as possible. The divergent impact of this stickiness factor on education level plays an important role in the different expectations for education during the pandemic.

Exhibit C15

Overall stickiness: Remote learning

Primary and secondary education are expected to return to pre-COVID-19 formats because of poor consumer experience and unequal infrastructure



Source: McKinsey Global Institute analysis

Case study

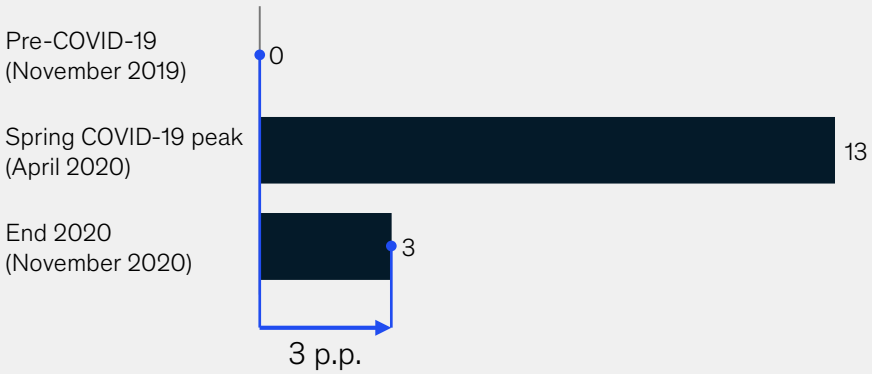
Virtual healthcare

At a glance

COVID-19 caused a rapid increase in virtual healthcare use, with visits increasing 25-fold from February to April 2020 in the United States, a trend mirrored in China and Western Europe. Increased virtual healthcare usage is expected to remain post-COVID-19, as consumers have gained experience and comfort, more providers have developed their virtual capabilities, and industry players have invested in services. But the post-COVID-19 virtual healthcare regulatory environment will play a critical role in the pace of growth and ultimate penetration.

Exhibit C16

US virtual health claims, % of total claims[1]



1. Total claims include virtual health visits, sick visits, and well visits.

Source: Data from Compile, December 15, 2020; McKinsey Global Institute analysis

Pre-COVID-19

For about five years before the pandemic, virtual health grew steadily in terms of visits and spending in the United States and Western Europe, but represented a very small percentage of overall healthcare claims.[211] Despite this, virtual health was a priority for healthcare providers; surveys indicate that by December 2019, 77 percent of US healthcare providers had implemented synchronous telemedicine, citing improved access to care as the primary goal.[212] Pre-COVID-19, the healthcare regulatory environment was viewed as a significant limiting factor for adoption, as low reimbursement rates and restrictions in many countries made virtual care uneconomical relative to in-person care for many healthcare providers.[213]

COVID-19 effects

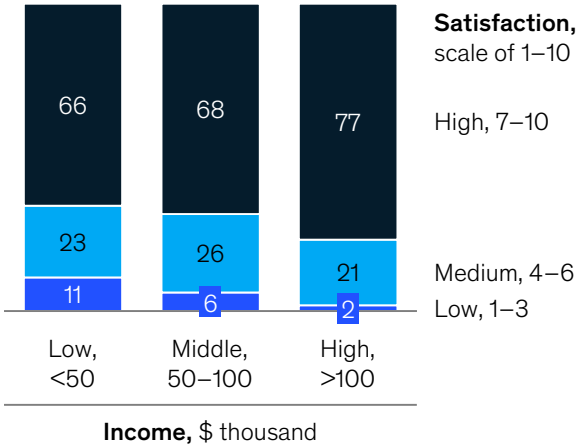
As COVID-19 led to global medical office closures and made consumers apprehensive about visiting healthcare providers, virtual health, and telemedicine specifically, accelerated dramatically in the United States and Western Europe. In the United States, virtual health use grew significantly during COVID-19 (a 50 percent increase during first-quarter 2020), with pronounced adoption among older populations.[214] In France, virtual visits increased from an average of 10,000 a week before March 2020 to 500,000 a week in late March, and in Germany, virtual health visits increased ten times from February to March 2020. In the United Kingdom, virtual health visits (primarily via telephone calls) also grew 2.5 times from February to April 2020.[215] Moreover, in China, 50 percent of medical care moved online to fight the coronavirus, building upon existing growth of virtual health to deliver care.[216] This is partially due to COVID-19-induced changes to the regulatory environment. In the United States, Waiver 1135 provided temporary reimbursement parity, which, along with a need to continue serving patients through office closures, gave physicians the incentive to adopt telemedicine.[217] In Western Europe, countries such as France, which had already implemented

[211] *2018 and beyond: Outlook and turning points*, The IQVIA Institute, March 2018; and "Fact sheet: Telehealth," American Hospital Association, www.aha.org.
[212] McKinsey Provider Survey, December 2019.
[213] See "Realizing the promise of telehealth: Understanding the legal and regulatory challenges," American Hospital Association, May 2015, which highlights that "telehealth is a rapidly developing field, so broad policies should be adopted in order to promote future growth and innovation." The policy considerations outlined include: more comprehensive Medicare coverage and payment policies for telehealth services that increase patient access to services in more convenient and efficient ways, harmonization of state laws, broader adoption of state telehealth parity statutes, and consistent standards to guide development of telehealth clinical guidelines and protocols.
[214] Lisa M. Koonin et al., "Trends in the use of telehealth during the emergence of the COVID-19 pandemic—United States, January–March 2020," *Morbidity and Mortality Weekly Report*, October 2020, Volume 69, Number 43, pp. 1595–99.
[215] *Health at a Glance: Europe 2020: State of Health in the EU Cycle*, OECD, November 2020.
[216] Lucy Handley, "How China turned to telehealth during the coronavirus," CNBC, November 18, 2020.
[217] CMS news alert, April 6, 2020, CMS.gov.

Exhibit C17

US patients report high satisfaction with telemedicine experiences

Satisfaction with recent visit, by income, %



Note: Figures may not sum to 100% because of rounding.
Source: McKinsey COVID Consumer Survey, Wave 1 2021 (1/11/2021); McKinsey Global Institute analysis

reimbursement parity, the temporary relaxation of strict licensing and other regulations helped accelerate growth.[218]

At the same time, investors flocked to virtual health, with leading companies such as Doctor on Demand, MDLive, and Amwell receiving about $300 million in additional financing.[219] Combined with regulatory changes, financial and technological investment on the part of providers catalyzed virtual health growth.

The recovery

In the near term, virtual health usage is expected to decline from peak COVID-19 levels as offices reopen and consumers regain comfort with in-person appointments, but is expected to stabilize at higher than prepandemic levels and continue growing. In the mid- to long term, for virtual health to persist, three factors are most important: patient satisfaction, physician satisfaction, and an enabling regulatory environment.

Patient satisfaction. The relatively lower cost of virtual appointments provides an opportunity for consumer cost savings, especially for the un- or underinsured population. For instance, behavioral health, a major segment of virtual healthcare, is not always reimbursed by insurance providers, so relatively lower cost telehealth visits could be even more impactful for US consumers. The financial benefit to consumers is greatest in the United States, where out-of-pocket healthcare expenditures and deductibles are highest, but could also be meaningful in other countries through systemwide cost savings, which would translate into lower long-term tax burdens in publicly funded healthcare systems.[220] Moreover, virtual health can help alleviate transportation barriers to healthcare access, which tend to impact older, poorer, and minority patients.[221]

Additionally, virtual health provides strong benefits for healthcare accessibility in China, the United States, and Western Europe. These access benefits to consumers are predicated on digital adoption and may require additional investment in rural infrastructure, but in places with sufficient infrastructure virtual healthcare allows patients to access care more quickly and can also connect patients with specialists in different geographic locations.[222] This benefit is particularly meaningful for Chinese consumers, as China's less established physical healthcare network contributes to longer wait times for in-person appointments, driving some patients to virtual care for faster service.[223] Industry players in China recognize this and are investing: Tencent-backed WeDoctor added 50,000 physicians to its platform in 2020, and JD Health, which offered free online consultations during the pandemic and drew about 150,000 patients daily, received $830 million in series B investor funding in the fourth quarter of 2020.[224]

[218] See *Health at a Glance: Europe 2020: State of Health in the EU Cycle*, OECD, November 2020: "Countries where telemedicine was already allowed before the pandemic, like France, Luxembourg and Poland, have made it easier for providers and patients to use remote consultations by relaxing restrictions or by creating new platforms."
[219] Heather Landi, "Amwell lands close to $200M in funding to keep up with demand for telehealth," Fierce Healthcare, May 20, 2020, www.fiercehealthcare.com; Doctor on Demand, "Doctor on Demand announces $74 million Series C financing," April 25, 2018, www.businesswire.com; and MDLive, "MDLIVE announces $50 million crossover equity investment from sixth street growth," September 14, 2020, www.mdlive.com.
[220] Ann B. Bynum et al., "The impact of telemedicine on patients' cost savings: Some preliminary findings," *Telemed J E Health*, winter 2003, Volume 9, Number 4, pp. 361–7; time and money savings are even higher for rural consumers, who otherwise may travel far for care.
[221] Samina T. Syed, Ben S. Gerber, and Lisa K. Sharp, "Traveling towards disease: Transportation barriers to health care access," *Journal of Community Health*, October 2013, Volume 38, Number 5, pp. 976–93.
[222] Jane A. McElroy, Tamara M. Day, and Mirna Becevic, "The influence of telehealth for better health across communities," *Preventing Chronic Disease,* 2020, Volume 17.
[223] Sui Lee-Wee, "China's health care crisis: Lines before dawn, violence and 'no trust,'" *New York Times*, September 30, 2018.
[224] Rita Liao, "JD.com's 1-year-old health unicorn to get $830M from Hillhouse," TechCrunch, August 18, 2020.

Physician satisfaction. Virtual health also represents an opportunity for greater healthcare provider and insurer effectiveness and efficiency. In instances of high healthcare demand volume (such as emergencies), virtual health allows for efficient triage and emergency management to focus care services on the highest risk populations.[225] This was adopted in many countries during the COVID-19 pandemic, with the United Kingdom implementing a "total triage" system.[226] Benefits of effective virtual triage can extend beyond the COVID-19 pandemic in other emergency situations (such as natural disasters). Virtual health may also help reduce healthcare costs and improve patient care. With equal reimbursement for virtual and in-person visits, there are enhanced opportunities for preventive and early-intervention care, which can help improve patient outcomes while helping avoid costly urgent care or emergency department visits.[227] Assuming a substitution of in-person for virtual visits, without equal reimbursement for virtual and in-person visits, there are direct cost savings due to lower care provision costs and lower cost insurance claims and payments. Outside of telemedicine, there are even larger potential benefits to condition management through remote monitoring, although adoption in this space has been lower.

Regulatory environment. The biggest unknown for post-COVID-19 virtual health use is regulatory policy. The extent to which virtual visits are regulated and reimbursed has the potential to fundamentally shape the virtual health adoption curve. Given that physicians were traditionally reimbursed at lower rates, they had less of an incentive to invest in offering and marketing virtual care. Similarly, in countries with strict licensing and other regulations, such as France, long-term adaptation or relaxation of these restrictions is key to adoption.

Healthcare provider adoption is a key driver of patient adoption, and will vary after COVID-19 based on the regulatory environment.[228] Patients surveyed during the pandemic cited their doctor's recommendations as the biggest driver of virtual health use, followed by stay-at-home guidelines and a personal preference for virtual care.[229] This underscores how factors beyond pure consumer preference play an important role in long-term virtual health adoption. Additionally, post-COVID-19 virtual health growth will likely vary by specialty, as some specialties like primary care and behavioral health are more readily adaptable than others.[230]

[225] *Health at a glance: Europe 2020: State of health in the EU cycle*, OECD, November 2020; Denmark, Portugal, Spain, the United Kingdom, and the World Health Organization/Europe among others have also used AI-powered interactive chatbots to deal with the surge in service demand as well as to collect information on symptoms, to triage patients, and to combat misinformation.

[226] "NHS advises 'total triage' as GP groups look to limit patient demand," Pulse, March 13, 2020.

[227] Oleg Bestsennyy, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?," May 29, 2020, McKinsey.com.

[228] See Jackie Drees, "Physician telehealth usage increased 58% since 2019, survey finds," Becker's Hospital Review, October 6, 2020; 64 percent of physicians cited uncertainty about reimbursement as a barrier to telehealth adoption.

[229] "Survey: US consumer sentiment during the coronavirus crisis," December 8, 2020, McKinsey.com.

[230] See Shira H. Fischer et al., "The transition to telehealth during the first months of the COVID-19 pandemic: Evidence from a national sample of patients," *Journal of General Internal Medicine*, January 2021; nearly 54 percent of patients with a behavioral health condition used telehealth between mid-March and early May 2020, while 43 percent of people with a chronic physical health condition did the same.

Most important stickiness drivers and their implications

Regulatory policy. During the COVID-19 pandemic, governments worldwide changed restrictions that had discouraged virtual healthcare and in some cases even instated insurance reimbursement parity with in-person visits. Moreover, in countries with private healthcare, many insurers reduced or removed copays for virtual health appointments. Changed regulations allowed virtual health to scale rapidly to alleviate pressure on the in-person healthcare system, and played a key role in increasing provider and patient adoption. Given the importance of regulation in the healthcare industry, the long-term penetration of virtual health will depend partially on the post-COVID-19 regulatory environment.

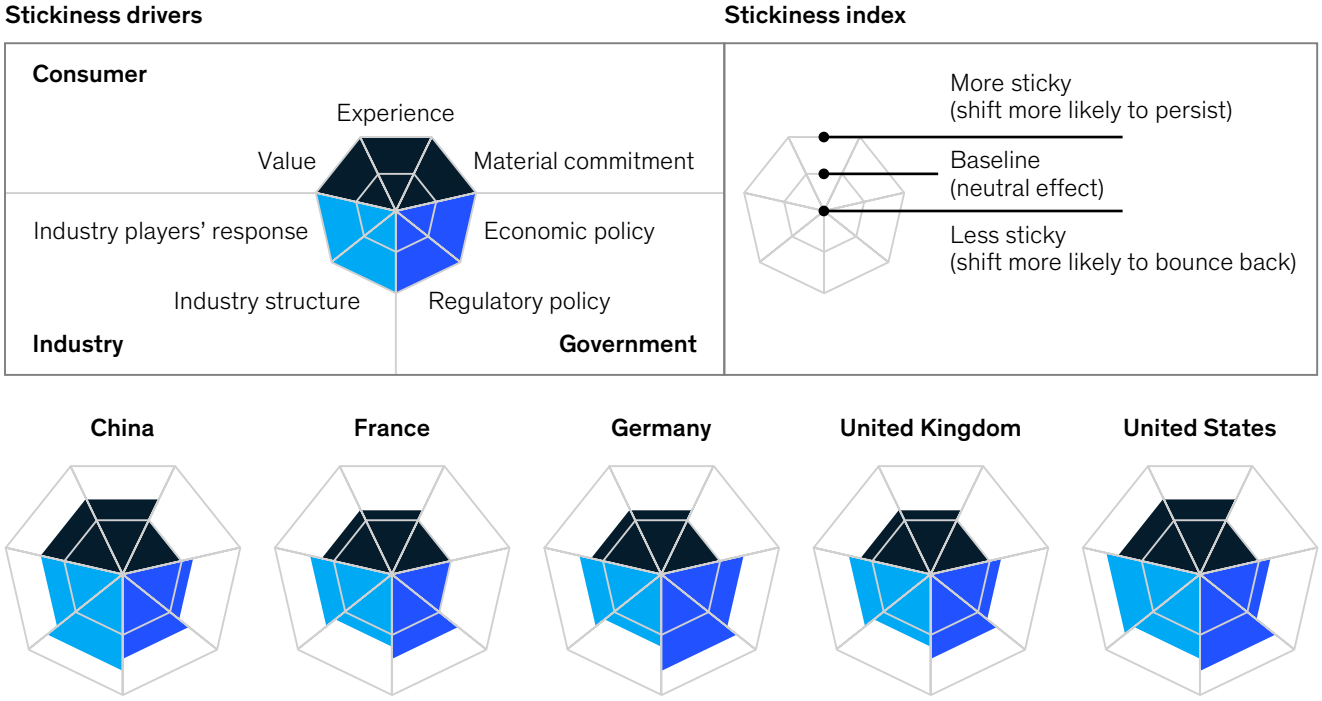
Industry players' response. Industry players responded quickly to enable virtual health services. Hospital systems scaled offerings, virtual health providers increased hiring, physicians registered with telemedicine services, and investors provided capital to virtual health companies. Combined, these factors served to enable virtual health during the pandemic, but also created lasting infrastructure to support greater virtual health adoption post-COVID-19.

Experience. Many providers and patients adopted virtual health for the first time during the pandemic, and their experience is an important factor for continued use. Surveys suggest high levels of satisfaction (more than 80 percent in the United States) with COVID-19-era telemedicine experiences, highlighting the potential for providers to create lasting virtual health relationships with satisfied patients and to invest in virtual health outreach.

Exhibit C18

Overall stickiness: Virtual healthcare

Virtual health is expected to remain elevated because of a supportive economic and regulatory environment, physician adoption, and consumer satisfaction, but speed of growth and penetration will partially depend on the post-COVID-19 regulatory environment



Source: McKinsey Global Institute analysis

3. Preparing for the recovery and the postpandemic consumer

The single outstanding feature of the COVID-19 pandemic is its uneven effect. Many people remain healthy, while others become seriously and even fatally ill from the coronavirus. Recoveries also vary widely, with some having immediate full recovery and others experiencing stubborn, lingering illness. So, too, with the economic impact of the pandemic: some consumers were spared any financial hardship, and others may suffer lasting income effects. Indeed, the uneven impact, especially the difference between high- and low-income cohorts, makes the COVID-19 recession different from the Great Recession. And that means understanding the path of each consumer segment matters a lot more now than it has in the past. To help companies and governments prepare for the recovery and the changes brought on by the pandemic, we lay out the consumer segments to watch by age and income cohorts and outline key issues affecting each. We then highlight implications that companies and governments should consider as they think ahead to a postpandemic world. Among other things, that world is likely to include accelerated digital adoption and a new definition of the home that includes work, fitness, and entertainment, and may include greater inequality of income and opportunities as well as economic scarring of younger, low-income populations.

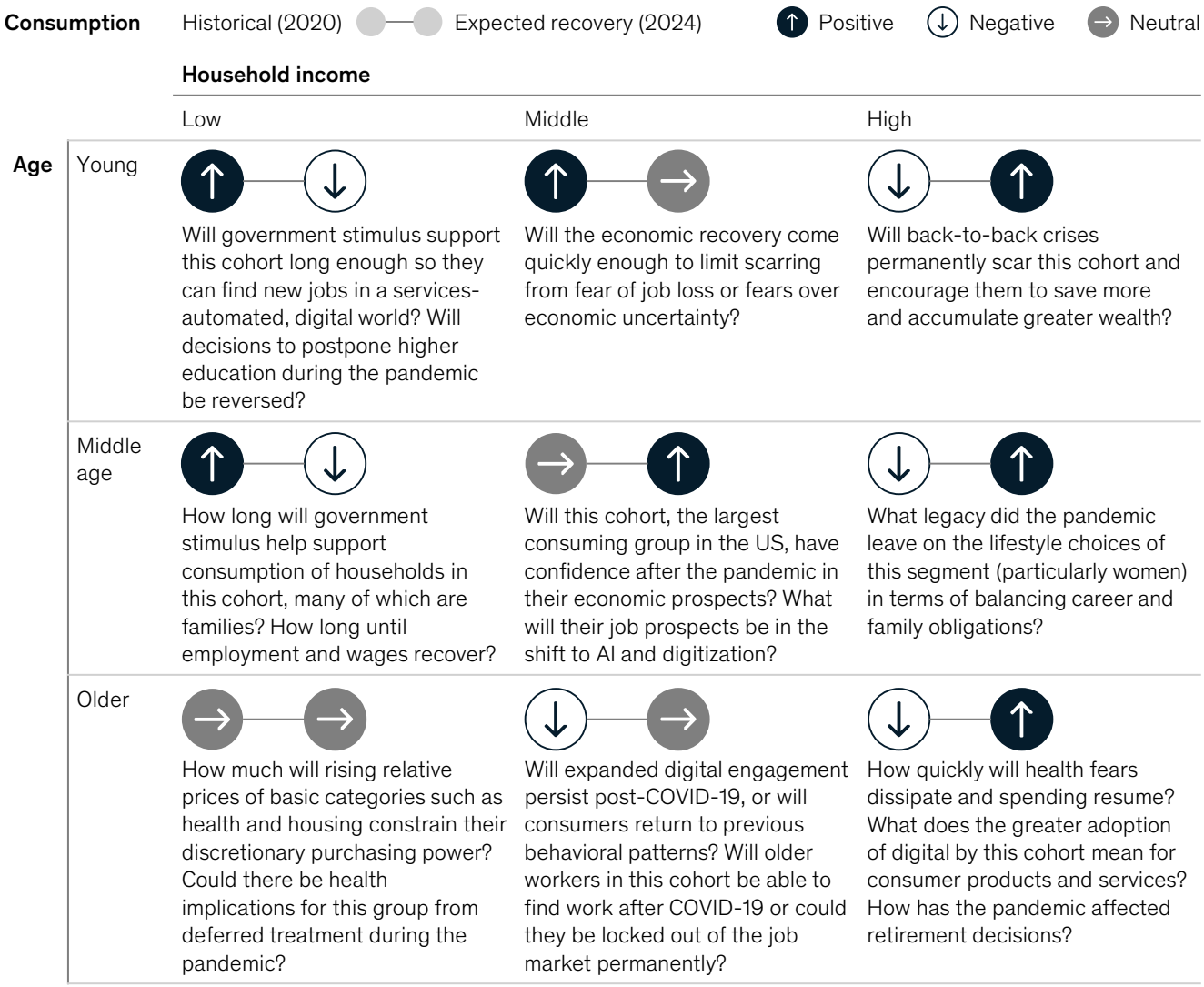
A segmented view of the consumer will be key to preparing for shifting consumer demand in the recovery

Our analysis of pre-COVID-19 and COVID-19 consumption is based on a nine-segment view of consumer demand made up of three income segments (low-income, middle-income, and high-income) and three age cohorts (young, middle age, and older).[231] While significant uncertainty remains, there are a variety of questions to ask and drivers to watch for in each segment to understand and prepare for the recovery (Exhibit 23). In particular, high-income households of all age groups are key to watch for what they do with their accumulated savings while jobs and earned income recovery for the low-income working population is critical for how sustainable the recovery in consumer spending is. We discuss each of the nine segments in more detail below.

[231] See chapter 1 for low-, middle-, and high-income thresholds for individual countries. By young we mean <35 (for the United Kingdom only <30), middle age 35–64 (United Kingdom 30–64), and older (65+).

Exhibit 23

These are key questions to ask to prepare for the demand recovery by consumer segment.



NOTE: Segmentation differs across countries due to data limitations. We classify households into low-income (Europe, 1st–2nd quintile; United States, below $40,000 per year), middle-income (Europe, 3rd-4th quintile; United States, $40,000-$100,000 per year), and high-income (Europe, 5th quintile; United States, $100,000+ per year). For age, we divided households into 3 groups based on head of household age: young (<35, United Kingdom <30), middle age (35–64, United Kingdom 30–64), older (65+).

Source: McKinsey Global Institute analysis

High-income households

As the health crisis abates, high-income consumers in the United States and Western Europe may experience a modern Roaring Twenties as pent-up demand driven by accumulated savings and wealth propel post-COVID-19 consumption. Given the level of accumulated savings within this group, it is clear that they will play a key role in the size and shape of recovery. This is consistent with what happened in the second half of 2020 in China, when luxury brands were the first to recover.[232] And early evidence from other economies suggests that luxury fashion brands were more insulated from demand shocks than traditional and value retailers. Luxury revenues and margins were down 26 percent and 15 percentage points respectively in the reporting quarters falling between February and June 2020, while the overall market was down 34 percent by revenues and 21 percentage points by margin.[233] However, any surge back in high-income spending will occur in fits and starts as geographies

[232] Michelle Toh, "China's luxury market boomed this year, even as global sales shrank," CNN, December 16, 2020.
[233] Amed, Imran, et al. "The state of fashion 2021." Business of Fashion and McKinsey & Company (2021).

are likely to reach a functional end to the pandemic at different times. Key questions include: how long could this spending bump last? Will it be strong and durable enough to promote sustained jobs growth in consumer services (and thus consumption by other income cohorts)? How will spending habits of high-income households have changed? Further considerations by age cohorts include:

— **Young:** For younger, wealthier consumers, one question emerging from the dual hit of the Great Recession and COVID-19 is whether this cohort may experience recession-based scarring and maintain higher levels of precautionary savings in the long term. This group's formative years and early careers have been marked by a series of "unprecedented" events, and many wealthier millennials used their unexpected savings during COVID-19 to invest in equities. Thus, there is uncertainty as to whether the pandemic encouraged them to save more, and thus spend less, of their income post-COVID-19.

— **Middle age:** High-income, middle-age consumers made up the largest share of 2019 consumer spending in Germany and the United Kingdom and the second largest in the United States and France (straight after the middle class), and similarly are expected to help drive the post-COVID-19 recovery.[234] Most households in this segment are homeowners (more than two-thirds in the United States) and were unlikely to experience job or income loss during the pandemic, making them financially more secure than most and more likely to have accumulated savings. However, this cohort is most likely to be parents to children still living at home or caretakers to elderly parents. The shift to remote education and increased time at home has, in many cases, increased caregiving responsibilities, even as time is saved elsewhere such as on commutes.[235] One outstanding question for this group is whether increased caregiving during COVID-19 will impact postpandemic job decisions, especially among women, who disproportionally bear the caring responsibilities. Another question to consider for members of this group, similar to high-income millennials, is how will they spend accumulated savings after COVID-19?

— **Older:** While older, wealthier consumers were relatively shielded from the negative financial impact of COVID-19 (with high levels of homeownership and retirement assets), health concerns and broader shutdowns of brick-and-mortar businesses accelerated digital adoption in many areas of life. Consumers who may not have otherwise adopted e-commerce or digital entertainment, among other things, were introduced to new products and services. This leads to two key questions: will precautionary health motives persist for this group post-COVID-19? And what does the greater adoption of digital by older high-income consumers mean for the global economy and consumer product and service industries?

Middle-income households

Average annual savings of middle-class households doubled in the United States and Western Europe during the pandemic, and how this cohort perceives its financial position and economic prospects will be key. The strength of the job market and the outlook for income and wages are critical factors for this income segment. The COVID-19 economic disruption occurred along a continuum, with middle-income households experiencing greater negative effects than high-income households, while maintaining a stronger financial position than low-income households. In line with this continuum, the middle-income consumer segment has greater digital access and thus can take advantage of digitized services such as click-and-collect e-commerce more than lower-income consumers, but may still prefer in-person activities if digitization comes with auxiliary costs, for example, BOPIS (buy online, pick up in store) grocery shopping without fees over delivery. Key questions include: how much will they increase precautionary savings behavior and limit discretionary consumption because of economic uncertainty? Will government policies impact economic prospects for this group?

[234] Consumer Expenditure Survey, US Bureau of Labor Statistics, ONS, INSEE, Destatis.

[235] Jose Maria Barrero, Nick Bloom, and Steven J. Davis, "60 million fewer commuting hours per day: How Americans use time saved by working from home," BFI working paper, September 2020.

— **Young:** While middle-income millennials experienced some joblessness and negative economic impact from COVID-19, on the whole, this cohort should enter the recovery relatively unscathed financially. Preliminary credit card analysis and surveys suggest that millennials are gaining comfort and are increasingly engaging (and spending) in activities outside the home. For those in this group who maintained employment and accumulated savings during the pandemic, an important question is when they will feel comfortable fully restoring their spending habits. And while they themselves may not have become unemployed, experiencing a second major recession early in their careers and seeing the impact around them may lead to more cautious borrowing and consumption patterns.

— **Middle age:** This group tends to have higher childcare responsibilities and a lower ability to finance external childcare support. Middle-income, middle-age households constituted the largest share of US consumer spending in 2019, and their post-COVID-19 behavior will have a substantial impact on broader economic recovery.[236] For this group, the COVID-19 pandemic has acted as a tailwind for existing trends (for example, moving out of older, colder urban cores to suburbs and Sun Belt cities). One question to consider is: what is the long-term impact of COVID-19 on the housing and living decisions of consumers in this group?

— **Older:** Retirement savings and homeownership shielded middle-income, older households from many of the direct negative financial consequences of COVID-19. However, the pandemic may also have delayed retirement for some of this group as they became more cautious about the outlook. Additionally, for some, COVID-19 was an introduction to expanded digital tools and services, with healthcare and grocery shopping, among other activities, moving partially or fully online. Questions to consider for this group are: will expanded digital engagement persist post-COVID-19, or will consumers return to previous behavioral patterns? Will delayed retirement decisions mean greater savings rather than consumption for this group?

Low-income households

A key driver of low-income household consumption in the near term is the scale and duration of government stimulus. In the near term in the United States, government stimulus may help lower-income households maintain living standards and support economic recovery, but policies that foster jobs growth will be critical to long-term spending by low-income households. In Europe, government stimulus maintained more stable employment while hours worked were reduced. If those business subsidies are cut too early or lockdowns continue for some time, this cohort will feel the effects the most. However, safety net and job protection laws are stronger in Europe than in the United States, and that may also result in geographic differences. Key questions include: will the recovery in high-income household spending or government policies to promote jobs growth be enough to help this segment recover fully from the pandemic? In the longer term, how will automation affect job prospects?

— **Young:** Low-income, younger consumers were disproportionately impacted by COVID-19, given high levels of service-sector employment and less resilient balance sheets entering the pandemic. In the United States, unemployment for this cohort was about 15 percent in 2020, higher than any other group, while in France it was 21 percent, the United Kingdom 12 percent, and Germany 6 percent.[237] Moreover, the vast majority (about 80 percent in the United States in 2019) of this segment is comprised of renters, posing the risk of a potential eviction crisis without stimulus support or a broader economic recovery.[238] Looking forward, a key consideration for this group is the labor market recovery. Will low-income millennials successfully reenter the labor market without long-term scarring from

[236] Consumer Expenditure Survey, US Bureau of Labor Statistics.

[237] "Unemployment rate by age group," OECD, accessed February 22, 2021; unemployment rate for the UK, Office for National Statistics.

[238] Survey of Consumer Finances 2019. Moody Analytics projected that nearly 12 million American renters would owe an average of $5,850 in back rent and utilities by January 2021. The Mortgage Bankers Association further shows $9 billion in rent was not collected in the third quarter. These accumulated rents may become a massive hangover affecting behavior in the near and longer term. See also Breno Braga, Signe-Mary McKernan, and Hannah Hassani, *Delinquent debt decisions and their consequences over time*, Urban Institute, March 2019.

the dual Great Recession and COVID-19 recession impact? And, if not, what is the impact of high young adult unemployment on the economic recovery?

— **Middle age:** Similar to their younger peers, this cohort disproportionately experienced COVID-19-induced employment uncertainty. While they experienced this at a lower rate than the young, they also tend to have greater caregiver responsibilities and lower access to digital solutions (due to either lower digital access broadly or prohibitive cost structures such as in e-grocery). The children in this cohort are also likely to have faced poor education outcomes during the pandemic and may have a learning gap. Spending in this group is focused heavily on basic consumption, and their income trajectory will be a major determinant of their consumption recovery. Although the middle-age population was less hit by unemployment than younger households, the labor market outcomes were still severe and recovery of low-income jobs will be key to stabilizing the economic situations for those households. A key question is, how quickly will low-income, middle-age households be able to regain pre-COVID-19 employment and income levels post-stimulus?

— **Older:** Although older cohorts in other income groups were relatively shielded from the COVID-19 recession, this group is in a different position, impacted by both economic and health shocks. Some low-income older workers were forced into early retirement because of the health risk of in-person work, without the financial security and savings necessary to truly retire. In Europe, members of this cohort may have government pensions, but they face uncertainty over care as they age in the face of greater illness from COVID-19 in retirement homes. One question facing this group is whether savings are sufficient to support retirement, or if they will need to reenter the post-COVID-19 labor market and how easy that will be.

Companies can prepare for a segmented demand recovery, evolving legacy of pandemic behaviors, and emerging innovations

In early 2021 (the time of writing this report), a top concern cited by corporate leaders was the uncertain speed and shape of the post-COVID-19 consumption recovery.[239] While this uncertainty will take time to resolve, companies that understand how three developments are likely to impact their customers and businesses will be better prepared. These include a segmented rate of recovery, the varying degrees of stickiness of consumer behaviors introduced during COVID-19, and the emerging innovations and changes in business models.

First, a segmented recovery. As detailed above, different geographies and income and age cohorts will likely face different recoveries from the pandemic.[240] Many higher-income consumers will increase spending based on when lockdown conditions dissipate enough to allow the release of pent-up demand. Lower income households will be much more influenced in the short term by government stimulus size and timing, while their medium-term purchasing power will hinge on the speed of the jobs recovery. In the United States, according to the Bureau of Economic Analysis and the national accounts, the share of transfers in disposable income increased from about 19 percent in 2019 to almost 25 percent in 2020. This helped to support consumption among low-income households but leaves them vulnerable until jobs return. If cash stimulus support is withdrawn before jobs of low-income cohorts recover, the purchasing power of these segments will be impacted, and this cohort will need to focus spending on basic categories like food and housing rather than clothes, entertainment, and other discretionary products. On top of that, the pandemic has accelerated the adoption of automation and digitization, which is leading to greater job displacement, especially in low-skill areas, and raising questions about how many jobs will come back and how well they will pay.[241] Europe is in a slightly different situation, as the income

[239] "C-Suite Challenge," The Conference Board. This survey was conducted between November 7 and December 10, 2020, of more than 900 CEOs and more than 600 C-suite executives from primarily three regions: Asia, Europe, and North America.
[240] For more detail about different recoveries by geography, see Sarun Charumilind, Ezra Greenberg, Jessica Lamb, and Shubham Singha, "COVID-19: Saving thousands of lives and trillions in livelihoods," August 17, 2020, McKinsey.com.
[241] *The future of work after COVID-19*, McKinsey Global Institute, February 2021.

of this cohort was more affected in 2020 with shorter working hours, but as they mostly retained their jobs, they may be less reliant on direct government stimulus and could be faster to recover than in the United States (as adding hours is likely faster than adding jobs). Yet on both sides of the Atlantic, the recovery of jobs and hours will be key to strengthening the purchasing power of the more vulnerable households and broadening the momentum for a sustained consumption growth.

Second, evolution of COVID-19 behaviors. In this report, we have used our stickiness test in the case of six COVID-19-induced behaviors to determine what consumer behavior changes will last after the pandemic. Companies can use that same stickiness test for each product and service they offer, tailored to each income and age cohort in each geographic market. By taking a granular approach to stickiness and combining it with segmentation, companies may more readily discover and prepare for challenges and opportunities in individual markets. For example, e-grocery strategy varies for fresh versus packaged goods and by food versus bulk items, affecting how much produce should be kept in stores and how much delivered, and by what means. And these strategies may vary based on location and income and age cohort. For example, while high-income shoppers might choose delivery, middle-income individuals may skew toward free pickup services, yet low-income shoppers may be boxed out completely by the relative burden of fees and price requirements.

Similarly, understanding segment-level recovery is important for entertainment providers. While live entertainment should resume postpandemic, especially among high-income, younger individuals with accumulated savings and an expressed desire to return to out-of-home entertainment, income-constrained groups may trade down to cheaper forms of live entertainment. Moreover, digital entertainment, which is highly scalable and can be consumed by multiple members of a household without additional cost, may provide greater value to those who are income-constrained. Understanding one's consumer base can help companies tailor offerings to best fit individual segments' disposable income trajectory.

Third, innovations and new business models. The pandemic caused an almost immediate, dramatic change in almost every company's operations. Improving safety and hygiene standards, adjusting to temporary closures due to lockdowns, or urgently building a digital presence are among the initial wave. As the pandemic crises extended, some companies closed and others looked to new ways to do business. The recovery is going to include new competitors and new business models, from both large and small players. For example, in the film industry, large movie studios have shifted to digital distribution. In the fitness industry, local gyms were forced to close, and large players such as Peloton, smaller competitors like Mirror, and a new crop of (often free) online trainers have established themselves in people's homes, potentially impacting the number of people who return to the gym after the pandemic.[242] Overall new business starts have been increasing in the United States. The IRS saw a 24 percent year-over-year increase in applications for businesses (in the form of employer identification numbers), with an 82 percent increase in the third quarter compared with 2019. Online commerce is set to emerge as a winner, accounting for roughly a third of the 600,000 excess applications through October.[243] Just as during the pandemic itself, industries and business are likely to continue to be shaken up. The financial sector is among the ones to watch. There are both more money looking to be invested (for example, the extra $1.6 billion saved in the United States during 2020 compared to 2019) and many new entrants, such as the 23 percent growth in Fidelity IRA accounts owned by millennials in the United States or the new investments from more than 150,000 French investors that had otherwise not purchased an equity since February 2018.[244] The experience of these consumers is likely to shape their savings behavior for decades to come, be it reinforced via retirement fund gains or discouraged via day-trading losses.

[242] Jade Scipioni, "59 percent of Americans don't plan to renew their gym memberships after Covid-19 pandemic: Survey," CNBC, July 23, 2020.
[243] US Census Bureau; and Michael Sasso and Steve Matthews, "Business startups surged amid COVID-19 pandemic," *Insurance Journal*, January 19, 2021.
[244] E*Trade, "E*TRADE study reveals risk tolerance spike among millennial and Gen Z investors," August 2020; and "Retail investor behaviour during the COVID-19 crisis," Autorité des Marchés Financiers, April 27, 2020.

Governments will face many challenges–finding the right fiscal policy balance to support the recovery, keeping up with changes in consumer markets, and confronting the lasting effects of COVID-19 on inequality

It is clear that the goals of reopening the economy and resolving the health crisis are inextricably linked.[245] For governments, the most urgent priority is to manage the pandemic effectively and ensure that people receive vaccinations swiftly and safely as well as to provide economic support for the most vulnerable populations. Beyond that, the post-COVID-19 recovery poses three main challenges for governments: finding the right balance of macroeconomic policies to support the consumer demand recovery for sustainable growth, adjusting regulations in consumer markets to keep up with ongoing changes, and addressing the lasting marks from the COVID-19 pandemic, especially on inequality.

First, finding the right fiscal policy balance is an immediate challenge for national governments. Targeted policies are especially valuable now to support the many vulnerable households that have been hurt by the pandemic and may have to wait to find new jobs but are not necessary for high-income households with significant accumulated savings. Research shows that effectiveness of fiscal support measures depends on how well they are targeted.[246] Directing the support measures toward low-income households maximizes not only the positive distributional effects (limiting inequality and helping the ones in need), but also the overall effectiveness of government spending to promote overall economic recovery (due to a higher fiscal multiplier). Actions that target high-income households might include strengthening confidence in public health and safety as well as confidence in the stability of financial markets.

Second, adjusting regulations in consumer markets to changing conditions is an ongoing challenge. Policy makers are forced to stay abreast of the role that regulation plays, both directly and indirectly, in shaping enduring household behaviors and consumer spending in key markets. For example, domestic air travel has benefited from relatively stable (and generally less restrictive) national air travel rules while the limited recovery of international travel has been especially volatile amid ever-changing travel bans, negative test requirements, upon-arrival quarantines, and more.[247] While some have floated digital "vaccine passports" to facilitate international travel, the fact remains that international leisure recovery depends on the world's diverse governments' response to their on-the-ground conditions. Moreover, ripple effects of regulation must be considered—both positive and negative. For example, in digital healthcare, regulation can be a catalyst for greater adoption of more efficient and effective care, like integrating home monitoring data into diagnoses, or it could add further complexity to protecting patients' medical records.

Third, addressing the lasting effects of the pandemic, especially on inequality, will be a particular challenge in the United States. The pandemic is widening inequality, with potentially generational effects due to educational gaps and earnings scarring from early unemployment. Children from lower-income households are at greater risk of falling behind their wealthier peers, with lifelong personal and aggregate GDP consequences, and lower-income individuals are not only more susceptible to the virus but also at greater risk of not receiving adequate "catch-up" healthcare (such as proper diagnostics). How policy makers address growing inequality will shape the economic prospects of generations to come.

But it is not just national or state governments that will face challenges from the lasting effects of COVID-19. Local governments will too. At the local level in the United States and Western Europe, living preferences, driven by increased time at home, alongside other

[245] "Safeguarding our lives *and* our livelihoods," March 2020, McKinsey.com.

[246] Effectiveness of fiscal policies can be measured by fiscal multiplier that shows how much additional GDP is generated by increasing transfers by a dollar. On average, one dollar transferred to a household generates about 0.8 cents of additional GDP. However, if targeted to the cohorts with higher marginal propensity to consume, low-income households, one dollar of transfers can generate up to 1.8 dollars of additional GDP, more than 2 times more. Joel P. Flynn, Christina Patterson, and John Sturm, "Fiscal Policy in a Networked Economy," February 11. 2021.

[247] IATA Travel Center COVID-19 Travel Regulations Map.

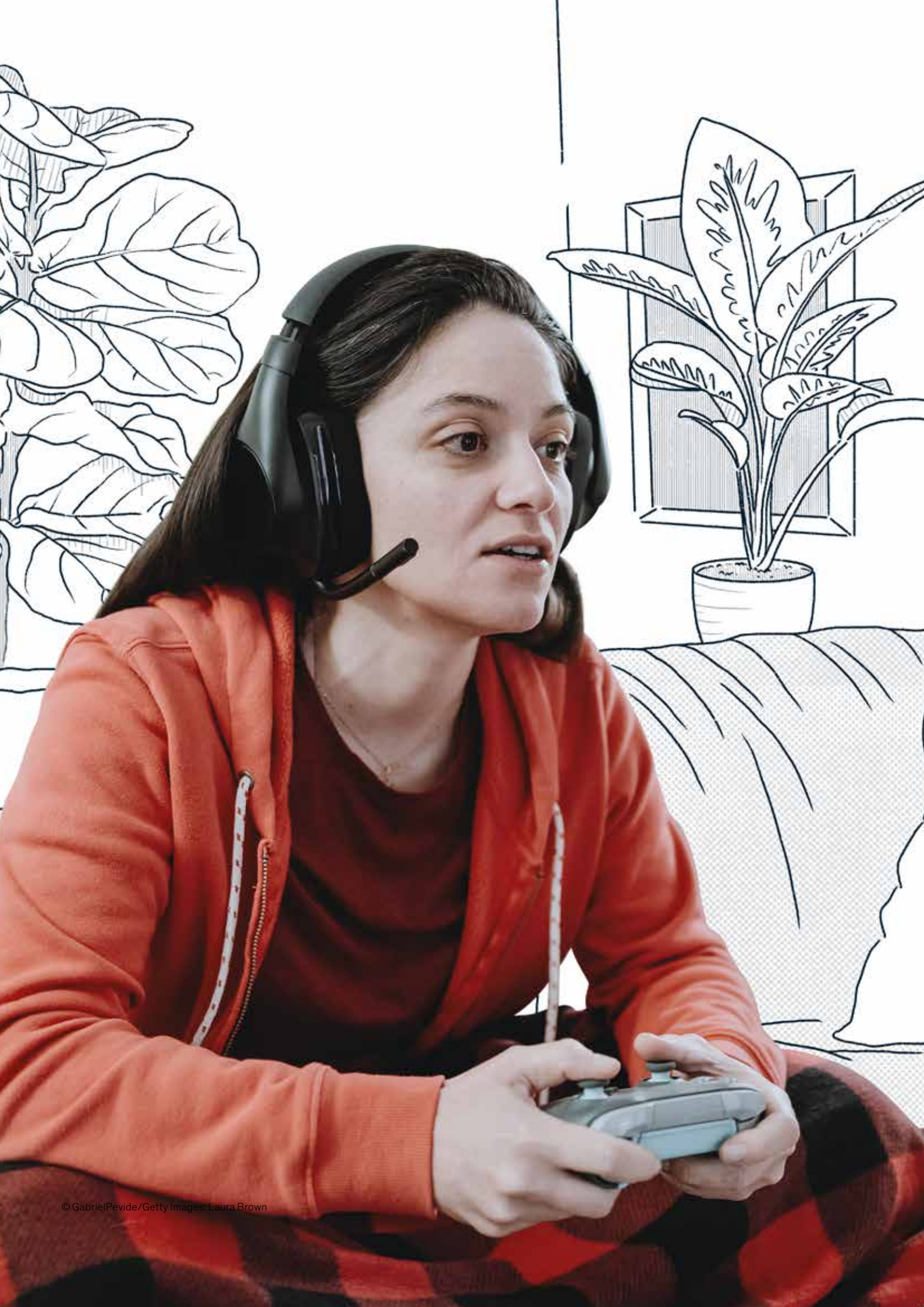
changes such as increased e-commerce have potentially profound implications for cities, states, and regions.

As consumers have increasingly shifted consumption online, some brick-and-mortar retailers have closed their doors. In a post-COVID-19 world, it is possible that commercial districts will have excess retail space. In the United Kingdom, for example, 54 retail companies filed for bankruptcy in 2020, prompting more than 5,000 shop closures and eliminating about 110,000 jobs.[248] Cities face the question of what to do with that retail space and will need to evaluate zoning regulations and real estate policies to ensure they are in line with their post-COVID-19 urban revitalization goals. At the same time, local governments will face the spillover effects of business closures. For instance, restaurants before COVID-19 contributed more sales and service taxes to New York State than any other industry, and also drew visitors and tourists. COVID-19 has dramatically curtailed restaurant dining, leading to restaurant closures with potential spillover effects on communities. Further, these spillovers may affect other decisions; for example, choices for leisure air travel are shaped by higher prices or reduced availability of activities like dining or entertainment at the destination.

But local governments face many other challenges too, such as the rise of homelessness and declining revenues of public transit systems as many commuters have stayed home to work. The US Census Bureau reported that nearly 20 percent of households were behind on rent in December, and although the nationwide ban on evictions was extended through March 2021, this signals a potential housing issue looming on the horizon.[249] While eviction moratoriums and stimulus payments have staved off widespread housing issues, persistent post-COVID-19 unemployment poses a risk. Cities should consider their existing and planned investments in affordable housing to alleviate economic pressures and investments in public services that support low-income households the most.

At the start of 2021, with the vaccine rollout under way, there was reason for optimism that the world could bring the pandemic under control, igniting a global economic recovery in the second half of the year. Yet plenty of uncertainty remained over the effectiveness of the vaccine itself, the challenge of vaccinating billions of people around the world quickly, and new strains of the virus that may be more contagious, deadly, and vaccine resistant. It is not hard to imagine problems that delay a full recovery. Still, even with so much uncertainty, it is possible to plan for better days ahead. Our research has shown that when we emerge from the pandemic and consumer spending begins to recover, the shape of consumer demand will likely be different across consumer segments and countries than before the COVID-19 pandemic. And that will bring opportunities as well as challenges. By understanding the marks left by the pandemic on consumer behavior, we hope companies and governments can prepare effectively and in the process promote shared prosperity.

[248] Alistair MacDonald and Saabira Chaudhuri, "Latest Covid-19 lockdown slams U.K. business owners," *Wall Street Journal*, January 17, 2021.
[249] "Tracking the COVID-19 recession's effects on food, housing, and employment hardships," Center on Budget and Policy Priorities, January 21, 2021.



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Bibliography

A

Aizenman, Joshua, and Ilan Noy, "Saving and the long shadow of macroeconomic shocks," *Journal of Macroeconomics*, December 2015, Volume 46, pp. 147–59.

Anderson, Julia, et al., "The fiscal response to the economic fallout from the coronavirus," Bruegel Datasets, November 24, 2020.

Andrabi, Tahir, Benjamin Daniels, and Jishnu Das, "Human capital accumulation and disasters: Evidence from the Pakistan earthquake of 2005," RISE, working paper number 20/039, May 2020.

Apel, Haley, "Survey finds remote learning gaps in US elementary schools," Nebraska College of Education and Human Sciences, August 31, 2020.

Aratani, Lori, "US airlines to accept billions in loans from the federal government: Still no deal to avoid furloughs," *Washington Post*, September 30, 2020.

Autorité des Marchés Financiers, "Retail investor behaviour during the COVID-19 crisis," April 2020.

B

Bacher-Hicks, Andrew, Joshua Goodman, and Christine Mulhern, "Inequality in household adaptation to schooling shocks: Covid-induced online learning engagement in real time," NBER working paper number 27555, revised November 2020.

Barrero, Jose Maria, Nick Bloom, and Steven J. Davis, "60 million fewer commuting hours per day: How Americans use time saved by working from home," BFI working paper, September 2020.

Bartik, Alexander W. et al., "The impact of COVID-19 on small business outcomes and expectations," *Proceedings of the National Academy of Sciences,* July 2020, Volume 117, Number 30, pp. 17656–66.

Berger, Miriam, "Covid-19 passports aim to streamline travel requirements. But there's no one-size-fits-all fix," *Washington Post*, February 18, 2021.

Bestsennyy, Oleg, Greg Gilbert, Alex Harris, and Jennifer Rost, "Telehealth: A quarter-trillion-dollar post-COVID-19 reality?," May 29, 2020, McKinsey.com.

Binggeli, Urs, Margaux Constantin, and Eliav Pollack, "COVID-19 tourism spend recovery in numbers," October 20, 2020, McKinsey.com.

Birnbaum, Michael, "Europe's schools still open, still relatively safe, through covid-19 second wave," *Washington Post*, December 1, 2020.

Blalock, Garrick, Vrinda Kadiyali, and Daniel H. Simon, "The impact of post-9/11 airport security measures on the demand for air travel," *Journal of Law & Economics*, November 2007, Volume 50, Number 4, pp. 731–55.

Blume, Christine, Marlene H. Schmidt, Christian Cajochen, "Effects of the COVID-19 lockdown on human sleep and rest-activity rhythms," *Current Biology*, 2020, Volume 30, Number 14.

Borko, Seth, Wouter Geerts, and Haixia Wang, *The travel industry turned upside down*, September 2020, McKinsey.com.

Braga, Breno, Signe-Mary McKernan, and Hannah Hassani, *Delinquent debt decisions and their consequences over time*, Urban Institute, March 2019.

Brinkmann-Sass, Carola, Laura Richter, Tobias Silberzahn, and Adam Somauroo, "The European path to reimbursement for digital health solutions," September 17, 2020, McKinsey.com.

Bynum, Ann B. et al., "The impact of telemedicine on patients' cost savings: Some preliminary findings," *Telemedicine Journal and e-Health*, winter 2003, Volume 9, Number 4, pp. 361–7.

C

Campos-Vazquez, Raymundo M., and Gerardo Esquivel, "Consumption and geographic mobility in pandemic times. Evidence from Mexico," *Review of Economics of the Household*, 2021.

Carroll, Christopher D., Misuzu Otsuka, and Jiri Slacalek, "How large are housing and financial wealth effects? A new approach," *Journal of Money, Credit and Banking*, February 2011, Volume 43, Issue 1, pp. 55–79.

Carroll, Christopher et al., "The distribution of wealth and the marginal propensity to consume," *Quantitative Economics*, November 2017, Volume 8, Issue 3, pp. 977–1020.

Center on Budget and Policy Priorities, "Tracking the COVID-19 recession's effects on food, housing, and employment hardships," January 21, 2021.

Chang, Hung-Hao, and Chad D. Meyerhoefer, "COVID-19 and the demand for online food shopping services: Empirical evidence from Taiwan," *American Journal of Agricultural Economics,* March 2021, Volume 103, Issue 2, pp. 448-65.

Charumilind, Sarun, Ezra Greenberg, Jessica Lamb, and Shubham Singha, "COVID-19: Saving thousands of lives and trillions in livelihoods," August 17, 2020, McKinsey.com.

Chen, Guang, Will Enger, Steve Saxon, and Jackey Yu, "What can other countries learn from China's travel recovery path?," October 15, 2020, McKinsey.com.

Chetty, Raj et al., "The economic impacts of COVID-19: Evidence from a new public database built using private sector data," NBER working paper 27431, revised November 2020.

Choi, Euirim, "Remote learning without a laptop? Thousands could be stuck without devices due to shortage," *Wall Street Journal*, August 26, 2020.

Commons, John R., "Institutional economics," *Revista de Economía Institucional*, 2003, Volume 5, Number 8, pp. 191–201.

Critikos, Peter, III, "License to screen: A review of the medical licensure schemes impacting telehealth proliferation in the United States, the European Union, and Australia," *Emory International Law Review*, 2018, Volume 32, issue 2.

Curley, Andrew, Rachel Garber, Vik Krishnan, and Jillian Tellez, "For corporate travel, a long recovery ahead," August 13, 2020, McKinsey.com.

D

Deaton, Angus, and John Muellbauer, *Economics and Consumer Behavior*, Cambridge, UK: Cambridge University Press, 1980.

DeFilippis, Evan et al., "Collaborating during coronavirus: The impact of COVID-19 on the nature of work," NBER working paper number 27612, July 2020.

Dichter, Alex, Sybren Hahn, and Dominic Maxwell, "Winter is coming: The future of European aviation and how to survive it," September 2, 2016, McKinsey.com.

Digital Learning Collaborative, *Snapshot 2019: A review of K–12 online, blended, and digital learning,* April 2019.

Digital Promise in partnership with Every Learner Everywhere and Tyton Partners, *Suddenly online: A national survey of undergraduates during the COVID-19 pandemic*, July 2020.

Dorn, Emma, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and learning loss—disparities grow and students need help," December 8, 2020, McKinsey.com.

Dorn, Emma, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and student learning in the United States: The hurt could last a lifetime," June 2020, McKinsey.com.

E

Ellsworth-Krebs, Katherine, "Implications of declining household sizes and expectations of home comfort for domestic energy demand," *Nature Energy,* 2020, Volume 5, pp. 20–25.

Equifax, New York Fed, *Quarterly Report on Household Debt and Credit*, February 2021.

European Central Bank, "COVID-19 and the increase in household savings: Precautionary or forced?," June 2020.

F

Fabius, Victor, Sajal Kohli, Björn Timelin, and Sofia Moulvad Veranen, "How COVID-19 is changing consumer behavior—now and forever," July 30, 2020, McKinsey.com.

Federal Reserve Economic Data, "Consumption of goods and services during the COVID-19 recession," August 2020.

Fischer, Shira H. et al., "The transition to telehealth during the first months of the COVID-19 pandemic: Evidence from a national sample of patients," *Journal of General Internal Medicine*, January 2021.

Fisher, Jonathan D. et al., "Estimating the marginal propensity to consume using the distributions of income, consumption, and wealth," 2019, Federal Reserve Bank of Boston, Research Department Working Papers.

Food Marketing Institute and the Hartman Group, *U.S. Grocery Shopper Trends 2019*, June 18, 2019.

Furman, Jason, and Wilson Powell III, "What the US GDP data tell us about 2020," Peterson Institute for International Economics, January 28, 2021.

G

Google COVID-19 Community Mobility Reports, accessed February 1, 2020, google.com/covid19/mobility/.

Goolsbee, Austan, and Chad Syversonet, "Fear, lockdown, and diversion: Comparing drivers of pandemic economic decline," NBER working paper number 27432, June 2020.

Government of France, "Teleconsultation: A practice facilitated during health crises," www.service-public.fr.

H

Hausmann, Ludwig, Nils-Arne Herrmann, Jan Krause, and Thomas Netzer, "Same-day delivery: The next evolutionary step in parcel logistics," March 1, 2014, McKinsey.com.

I

IMF, "Policy responses to COVID-19," February 5, 2021.

IMF, "World Economic Outlook Update," January 21, 2021.

IMF, Database of Country Fiscal Measures in Response to the COVID-19 Pandemic, October 2020.

J

Jarmolowicz, David P. et al., "Sunk costs, psychological symptomology, and help seeking," *SpringerPlus*, 2016, Volume 5.

Jimenez, Edgar, and Pere Suau-Sanchez, "Reinterpreting the role of primary and secondary airports in low-cost carrier expansion in Europe," *Journal of Transport Geography,* October 2020, Volume 88.

JP Morgan Chase Institute, "Household cash balances during COVID-19: A distributional perspective," December 2020.

June, Eunae, and Hyungun Sung, "The influence of the Middle East respiratory syndrome outbreak on online and offline markets for retail sales," *Sustainability*, 2017, Volume 9, Number 3.

K

Kahneman, Daniel, and Amos Tversky, "Prospect theory: An analysis of decision under risk," *Econometrica*, March 1979, Volume 47, Number 2, p. 263–292.

Kahneman, Daniel, *Thinking, Fast and Slow*, New York, NY: Macmillan, 2011.

Keynes, John Maynard, *The General Theory of Employment, Interest and Money*, London, UK: Macmillan, 1936.

Kim, Hayoung, Charag Krishnan, Jonathan Law, and Ted Rounsaville, "COVID-19 and US higher education enrollment: Preparing leaders for fall," May 21, 2020, McKinsey.com.

Koonin, Lisa M. et al., "Trends in the use of telehealth during the emergence of the COVID-19 pandemic — United States, January–March 2020," *Morbidity and Mortality Weekly Report*, October 2020, Volume 69, Number 43, pp. 1595–99.

Kuijpers, Dymfke, Virginia Simmons, and Jasper van Wamelen, "Reviving grocery retail: Six imperatives," December 3, 2018, McKinsey.com.

L

Lally, Phillippa et al., "How are habits formed: Modelling habit formation in the real world," *European Journal of Social Psychology*, 2010, Volume 40, Issue 6, pp. 998-1009.

Limelight Networks, *The State of Online Video 2020*, August 2020.

Live DMA, "Key numbers: Impact of the COVID-19 pandemic on 2,600 Live DMA European music venues and clubs in 2020," September 2020.

M

MacDonald, Alistair, and Saabira Chaudhuri, "Latest Covid-19 lockdown slams U.K. business owners," *Wall Street Journal*, January 17, 2021.

Malmendier, Ulrike, and Leslie Sheng Shen, "Scarred Consumption," Board of Governors of the Federal Reserve System, International Finance discussion paper number 1259, 2018.

McCartney, Scott, "The Covid pandemic could cut business travel by 36%—permanently," *Wall Street Journal*, Dec. 1, 2020, wsj.com.

McElroy, Jane A., Tamara M. Day, and Mirna Becevic, "The influence of telehealth for better health across communities," *Preventing Chronic Disease*, 2020, Volume 17.

McKinsey & Company Global Banking Practice, *Global Payments Report 2019: Amid sustained growth, accelerating challenges demand bold actions*, September 2019.

McKinsey & Company, *Understanding Chinese consumers: Growth engine of the world*, November 2020.

McKinsey Global Institute, *Debt and deleveraging: The global credit bubble and its economic consequences*, July 2011.

McKinsey Global Institute, *Digital America: A tale of the haves and have-mores*, December 2015.

McKinsey Global Institute, *Digital China: Powering the economy to global competitiveness*, December 2017.

McKinsey Global Institute, *Digital Europe: Pushing the frontier, capturing the benefits*, June 2016.

McKinsey Global Institute, *Domestic services: The hidden key to growth*, December 2005.

McKinsey Global Institute, *The future of work after COVID-19*, February 2021.

McKinsey Global Institute, *Prioritizing health: A prescription for prosperity*, July 2020.

McKinsey Global Institute, *Urban World: The global consumers to watch*, April 2016.

McKinsey Global Institute, "What's next for remote work: An analysis of 2,000 tasks, 800 jobs, and nine countries," November 23, 2020.

Meyersohn, Nathaniel, "Online grocery shopping is growing, but millions of Americans on food stamps are being left behind," CNN Business, December 8, 2020.

Michael, Robert T., and Gary S. Becker, "On the new theory of consumer behavior," *Swedish Journal of Economics*, December 1973, Volume 75, Number 4, pp. 378–396.

N

National Bureau of Statistics of China, "Households' income and consumption expenditure in China," January 19, 2021.

NerdWallet, *2020 American Household Credit Card Debt Study*, January 2021.

North, Douglass C., "The new institutional economics and development," Economic History series, number 9309002, 1993, University Library of Munich, Germany.

NPD Group, "US consumer spend on video game products continues to break records," August 10, 2020.

O

OECD Economics, "The increase in bank deposits during the COVID-19 crisis: Possible drivers and implications," December 10, 2020.

OECD, Economic Outlook, Number 108, December 2020 (data until 2022).

Osborne Clarke, "Telemedicine in Europe," osborneclarke.com.

P

Pew Research Center, "Internet/ broadband fact sheet," June 2019.

R

Roth, Stefan, Thomas Robbert, and Lennart Straus, "On the sunk-cost effect in economic decision-making: A meta-analytic review," *Business Research*, 2015, Volume 8, pp. 99–138.

Ruiz-Goiriena, Romina, "Federal government wants Americans to buy groceries online, but most people on SNAP can't," *USA Today*, January 24, 2021.

S

Sasso, Michael, and Steve Matthews, "Business startups surged amid Covid-19 pandemic," *Insurance Journal*, January 19, 2021.

Schewe, Charles, Stephanie M. Noble, and G. E. Meredith, "Defining moments: Segmenting by cohorts," *Marketing Management*, January 2000, Volume 9, Number 3, pp. 48–53.

Schwartzel, Erich, "'Trolls World Tour' breaks digital records and charts a new path for Hollywood," *Wall Street Journal*, April 28, 2020.

Smit, Sven, Martin Hirt, Kevin Buehler, Susan Lund, Ezra Greenberg, and Arvind Govindarajan, "Safeguarding our lives *and* our livelihoods: The imperative of our time," March 2020, McKinsey.com.

Springer, Jon, "New data pegs online grocery penetration soaring past 20%," Winsight Grocery Business, December 22, 2020.

Statista, "U.S. Millennial shoppers who have used an online channel for groceries 2015–2018," November 30, 2020.

Syed, Samina T., Ben S. Gerber, and Lisa K. Sharp, "Traveling towards disease: Transportation barriers to health care access," *Journal of Community Health*, October 2013, Volume 38, Number 5, pp. 976—93.

T

Tait, Veronika Rudd, *Loss aversion and perspective taking in the sunk-cost fallacy*, 2015, dissertation, Brigham Young University.

Toh, Michelle, "China's luxury market boomed this year, even as global sales shrank," CNN, December 16, 2020.

U

UK National Health Service, "Advice on how to establish a remote 'total triage' model in general practice using online consultations," September 2020.

US Bureau of Labor Statistics, "The employment situation," January 2021.

US Centers for Medicare and Medicaid Health Services, "Medicare telemedicine health care provider fact sheet," March 17, 2020.

US Department of Agriculture Economic Research Service, *Access to Affordable and Nutritious Food*, administrative publication number 036, June 2009.

US Department of Agriculture Food and Nutrition Service, "FNS launches the online purchasing pilot," December 31, 2020.

V

Veblen, Thorstein, *The Theory of Business Enterprise*, New Brunswick, NJ: Transaction Publishers, 1978.

W

Whitaker, Stephan D., "Did the COVID-19 pandemic cause an urban exodus?," Federal Reserve Bank of Cleveland, District Data Brief, February 5, 2021.

Wood, Wendy, and David T. Neal, "The habitual consumer," *Journal of Consumer Psychology*, 2009, Volume 19, pp. 579–592.

Y

Yelp, *Yelp: Local economic impact report*, September 2020.

Related MGI and McKinsey research

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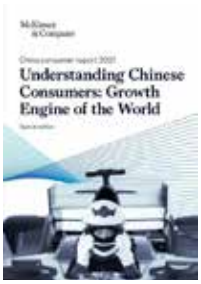

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