

VIEWPOINTS

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Consumer Tradeoffs

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Given the uncertainty in financial markets and the increased importance of the consumer sector in today's economic environment, we are updating our views on the sector and what it means for investing. Representing 67.5% of the U.S. economy in 2019, consumer spending has long been a major driver of U.S. real GDP growth. That role only increased during the COVID-19 pandemic; in some quarters consumption grew to be the sole driver of economic growth. Yet, amidst sticky inflation, decreases in real disposable income, equity market volatility, and declines in sentiment, personal consumption growth is poised to soften over the next twelve months. The consumer will be forced to make important spending tradeoffs, which for investors, is only further complicated by the shifts in behavior catalyzed by the pandemic. Herein we present our views on the categories likely to outperform against that backdrop.

1

Personal Consumption: We expect a material slowdown in personal consumption as the high-income consumer slows spending over the next 12 months.

2

Inflation: We expect sticky inflation to remain elevated amidst higher shelter costs, exacerbated by Fed rate increases.

3

Key Pressure Points: The middle class is facing the highest rates of cost inflation given the share of wallet allocated to transportation expenses.

4

Consumer Behavior: Consumer behavior during the next downturn will diverge from prior recessions (1973-2019) amidst COVID shifts.

5

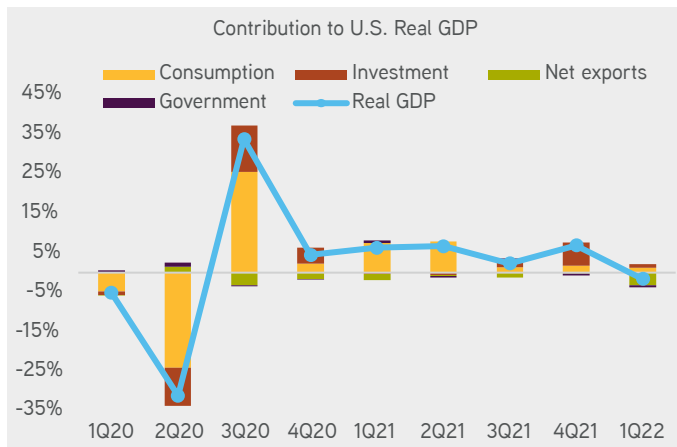
Key Themes: Thematically, we are constructive on rentership, vehicle maintenance, personal care, services rebound, work from home (WFH) renovation, ESG and value.

Section I: The Outlook for U.S. Growth

From the start of the COVID-19 pandemic, personal consumption provided a strong buffer for the U.S. economy amidst elevated uncertainty. Remarkably, in 3Q20, consumer spending contributed 25.5 percentage points to U.S. real GDP growth—the highest contribution since the time series began in 1946. Importantly, much of that consumer spending growth was initially driven by middle- and lower-income consumers who benefitted from fiscal stimulus. With the removal of stimulus, upper income consumers picked up the consumer spending baton in response to pent up demand. However, we expect that support to wane amid equity market declines and broader concerns about the economic outlook. In fact, sentiment for upper income households is now below that of other income cohorts (*Exhibit 4*) and we have already begun to see a deceleration in spending. Total expenditures for the top income quintile (5th) decreased by 5.5% from 2019 to 2020, according to the 2020 Consumer Expenditure Survey from the Bureau of Labor Statistics (BLS). More recently, while spending growth remains positive, we have begun to see a massive deceleration in high-income consumer durables and apparel spending versus last year.¹

Exhibit 1

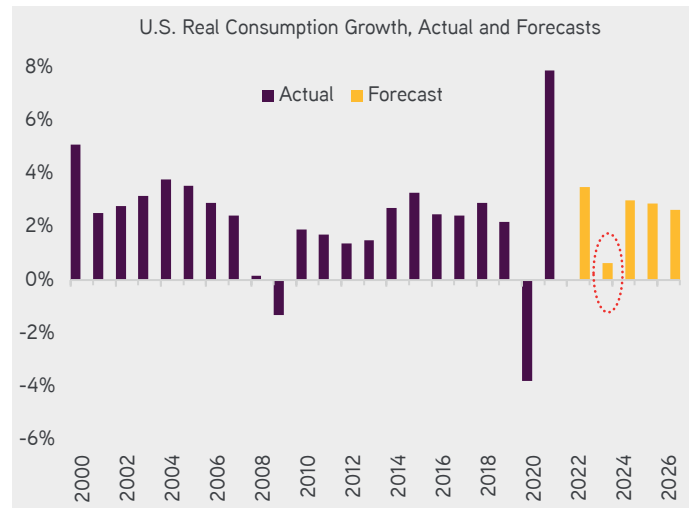
Consumption Is Providing the Primary Support for the U.S. Economy



Data as at June 29, 2022. Source: BEA, Haver Analytics.

Exhibit 2

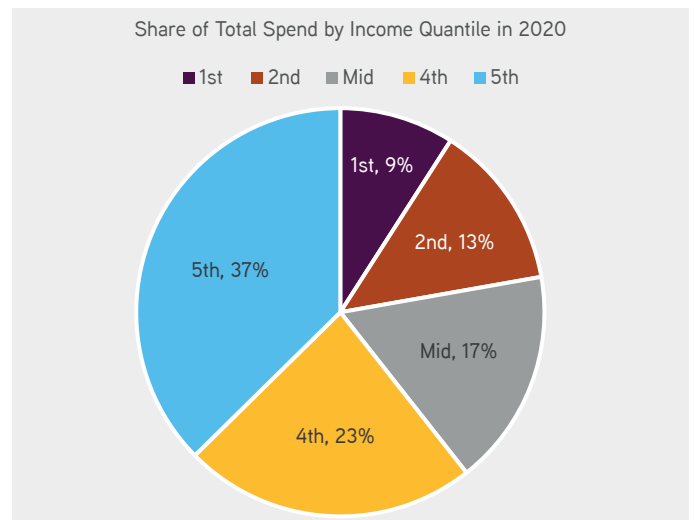
We Expect a Sizable Slowdown in Personal Consumption As the Fed Raises Rates, Unemployment Increases and Net Worth Declines



Data as at July 15, 2022. Source: BEA, KKR CREM estimates.

Exhibit 3

The U.S. Economy Is Heavily Dependent on Spending by the Mid- and High-Income Households

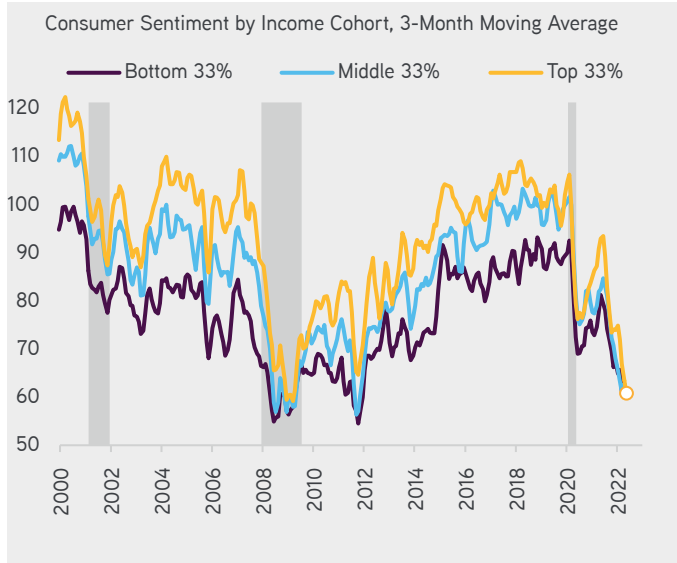


Data as at December 31, 2020. Source: Bureau of Labor Statistics, Haver Analytics.

1 Mscience.

Exhibit 4

Sentiment for Upper Income Households Is Now Below That of Other Cohorts



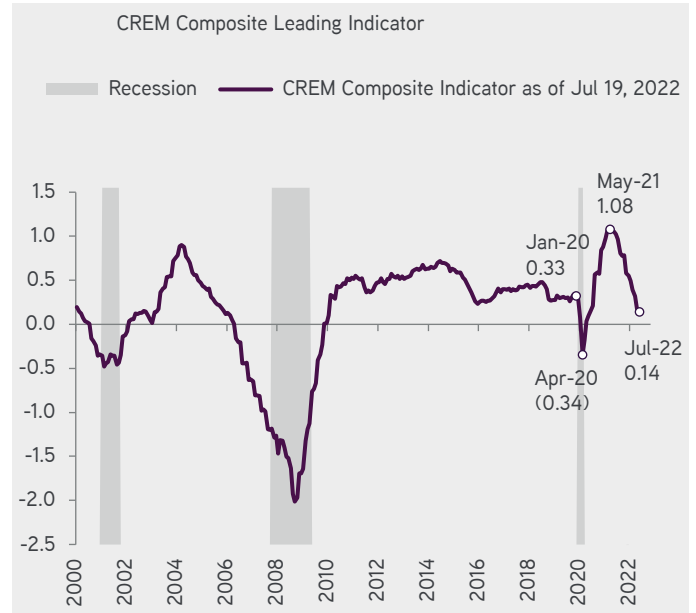
Data as at May 31, 2022. Source: University of Michigan, Bloomberg.

We believe that a meaningful slowdown in personal consumption is approaching, amidst headwinds from slowing real GDP growth, accelerating sticky inflation, higher interest rates, rising unemployment, negative real disposable income growth, and declines in net worth across income cohorts. Last year, annual real personal consumption expenditures (PCE) expanded by 7.9%. Using our proprietary model, we expect PCE growth to slow and flatten by 2023 (*Exhibit 2*).

Indeed, consumers will likely soon have to troop through a mild economic recession as corporations respond to deteriorating margins. Our leading indicators suggest that tightening financial conditions are already leading to a slowdown in economic activity (*Exhibits 5 and 6*). However, we do not expect a repeat of the Global Financial Crisis (GFC) as systemic risks to the banking system remain low, and default risks are still muted (*Exhibit 6*). Our U.S. Macro team’s base case now envisions growth of 1.8% for 2022, down from 3.2% previously. Next year we expect growth to stall, with U.S. real GDP increasing by a slight 0.5% percent.

Exhibit 5

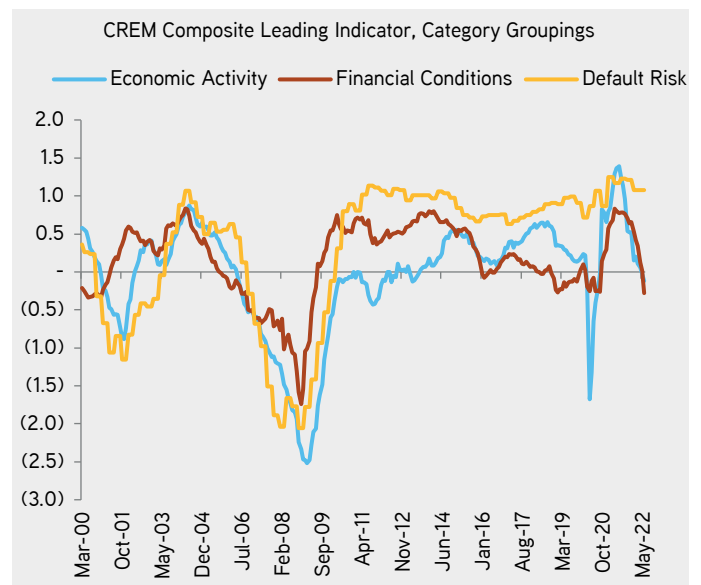
Our Model Is Showing Clear Signs of Economic Stress, Nearly Signaling Recession in 12 Months



Data as at July 19, 2022. Source: KKR CREM analysis.

Exhibit 6

Low Default Risk Is Supportive of Growth



Data as at July 19, 2022. Source: KKR CREM analysis.

Section II: Sticky Inflation

The core factors driving the economic slowdown are pernicious inflation and the necessary response by the Federal Reserve (Fed). The rebound in demand following the COVID-driven supply shock compounded by Russia’s invasion of Ukraine have placed significant upward pressure on food, energy, and automobile prices, in particular. Furthermore, in raising interest rates to combat inflation, the Fed will inadvertently drive rental prices even higher in an already supply constrained housing market.

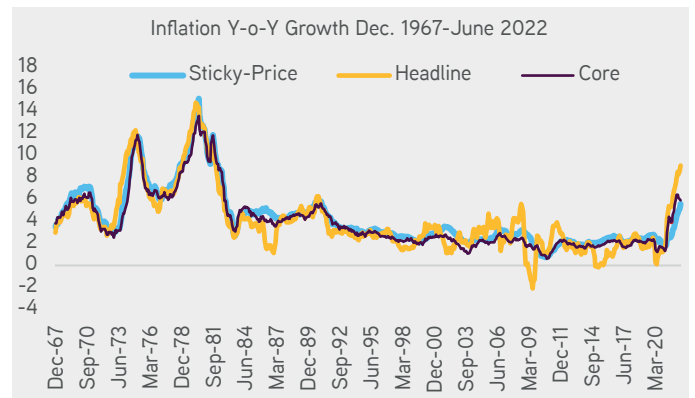
Indeed, inflation today is broad-based: the rising cost of living is driven not only by the volatile energy and food price components of consumer spending, but also by several core categories. The all-items consumer price index reached a 40.5-year high of 9.1% (y-o-y) in June and the Atlanta Fed sticky-price CPI index, which looks at goods and services categories that change price relatively slowly, continues to accelerate, and now stands at 8.1% m-o-m annualized (5.6% y-o-y) (Exhibit 7). In other words, price growth in slow-moving components—that account for the bulk of the U.S. consumer basket—have also accelerated since the start of the pandemic.

Of the BLS’ eight major components of inflation, only the

education and communication category, is below the Fed’s target of 2% (Exhibit 8). Furthermore, all other categories are above 2019 averages. Crucially, housing costs, which represent approximately 42% of the overall consumer basket, have been rising. Since the start of the year until May, housing CPI grew at 6.3% (y-o-y) on average.

Exhibit 7

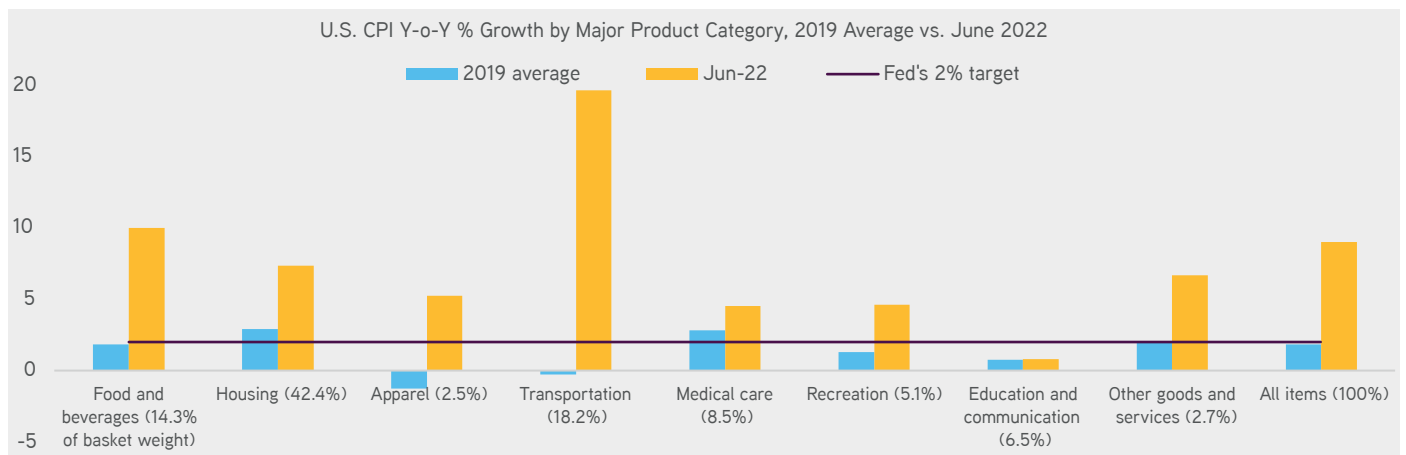
Inflation Rears Its Head A La 1970s Style



The Atlanta Fed’s sticky-price consumer price index is calculated from a subset of goods and services included in the CPI that change price relatively infrequently (e.g., rent of primary residence, education, recreation, etc.). Data as at July 13, 2022. Source: Bureau of Labor Statistics, Federal Reserve Bank of Atlanta.

Exhibit 8

Except For Education and Communication, All Major CPI Categories Are Over Fed’s 2% Target



Data as at July 13, 2022. Source: Bureau of Labor Statistics, Haver Analytics.

A Note on Housing Inflation

Slaying sticky inflation will be challenging in large part because housing costs, which account for nearly half of the consumer CPI basket, are poised to stay high in the coming years. At its root, housing supply is not keeping up with demand: a trend we've been following for over a decade (*Exhibit 9*).

Historically, demographic changes and low borrowing costs have driven elevated housing demand. For example, the Baby Boom of the 1950s resulted in increased demand for property in the 1970s as first-time homebuyers flowed to the market. Simultaneously, mortgage rates plummeted as the Federal Reserve cut interest rates from 13% to 4.75% during the early 1970s recession. This low-rate environment combined with increased demand on the back of demographic changes prompted a housing boom. However, the boom was halted in 1980 when the Fed hiked rates to combat double-digit inflation and ultimately sparked a recession.

While history may not repeat, it tends to rhyme. Today the largest generation, Millennials, are in the first-time home buyer stage and are driving housing demand. Over the last decade, household formations have outpaced new construction (*Exhibit 9*). Further, according to the U.S. Census Bureau, the size of the average American household fell from 3.33 people in 1960 to 2.53 people in 2020, while the U.S. population increased from 151 million to 331 million over the same period.

But there is an insufficient supply of housing to meet the new demand. The supply of existing single-family homes available for sale remains near all-time lows. What is more, as the American population ages and longevity increases, the large Baby Boomer cohort is remaining in their homes longer, limiting the turn of housing to new families. Additionally, existing homeowners who have fixed rate mortgages are more reluctant to sell their homes given the significant rise in rates. We expect the housing supply to rise only moderately from its historically low levels, providing a floor for home prices. This demographic tailwind will continue to support housing demand in the coming years.

As in 1980, an increase in mortgage rates is a significant risk to the housing market. Higher borrowing costs reduce

affordability and can push consumers to postpone big-ticket purchases. With the Fed raising its policy rate and beginning quantitative tightening, the mortgage rate has doubled from the low-3s at the start of the year. With further hikes on the horizon—our U.S. Macro team expects a cumulative 325 basis points of hikes in 2022, housing affordability may reach a tipping point.

Indeed, our proprietary survey work suggests that a 6-7% mortgage rate—just 100 bps higher than the current level—is a particularly sensitive entry point for homebuyers, where most would downgrade or even completely abandon their search. As a result of higher borrowing and homeownership costs, home price growth is likely to decelerate. Yet, importantly, we do not expect an outright decline in prices akin to the GFC when lax financing conditions collapsed the housing market.

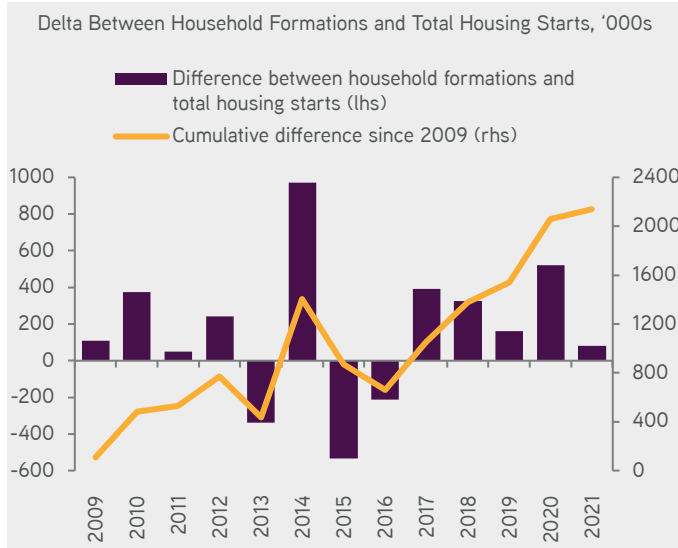
Despite the projected deceleration in home price growth, higher mortgage rates, and still elevated home prices, will lead to high costs of homeownership relative to renting. We believe home ownership costs as a share of median income will average 34% until 2025, up from 25% in 4Q21. As prospective buyers delay or abandon their home searches, there will be an increase in demand for both single family and multi-family rentals, placing upward pressure on rent growth, and further fueling the sticky inflation spiral. Existing lease data already suggests that rent growth should continue to accelerate through 2024. Incremental demand from abandoned home searches could drive rental rates even higher.

As a result, while we believe that demographics and consumer preferences will continue to provide support for all forms of housing, much of that demand favors rentership amidst the supply and affordability constraints we have discussed thus far. Indeed, much of the COVID driven boost to home sales was driven by existing homeowners. Adjusting for data anomalies, we believe homeownership rates increased by only 70 basis points to peak at 65.7% in 2020. Over the past 12 months, rates have normalized back down to 65.4% and we expect U.S. homeownership to remain rangebound in the coming years (*Exhibit 15*).²

² Note that the Census Bureau suspended in-person interviews for its data collection early in the pandemic and relied solely on telephone interviews, which appears to have led to a larger decline in response rates from rental units relative to homeowner units, leading to an upward bias in its estimates of the homeownership rate in Q2-Q3 2020. As a result, we believe the Q4 2020 homeownership rate provides a more accurate picture of the homeownership trend.

Exhibit 9

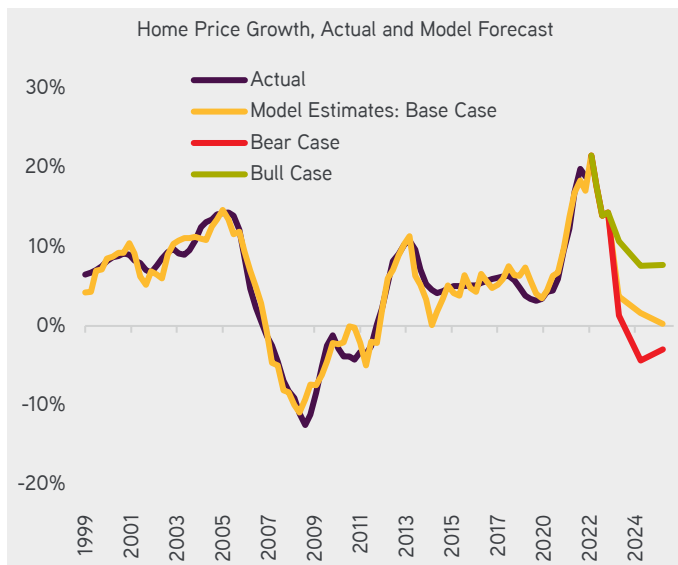
Housing Supply Shortages Remain High, Suggesting Elevated Home Prices for Longer



Data as at December 31, 2021. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM estimates.

Exhibit 10

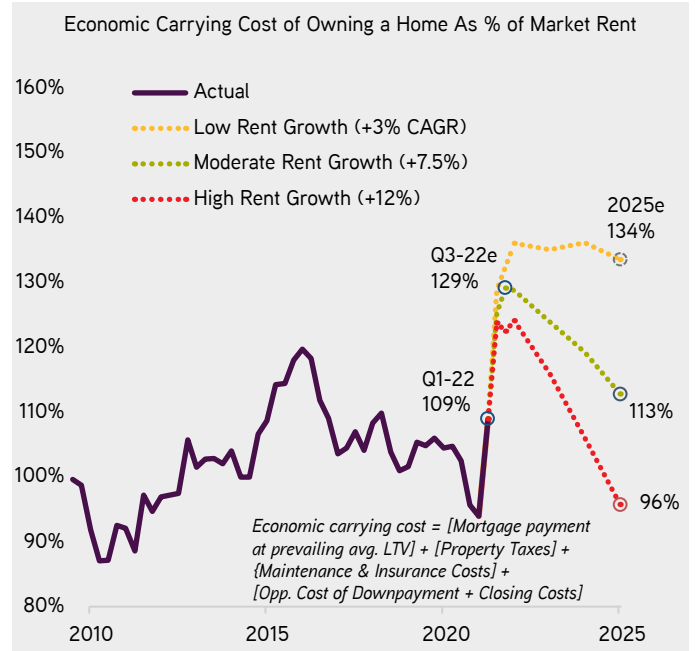
Home Price Growth Will Slow to Single Digits, As Higher Mortgage Rates Reduce Buyers' Appetite



Data as at July 15, 2022. Source: Standard & Poor's, Case-Shiller, National Association of Realtors, Bureau of Labor Statistics, Census Bureau, Federal Reserve Board, Urban Institute, Bureau of Economic Analysis, KKR CREM analysis.

Exhibit 11

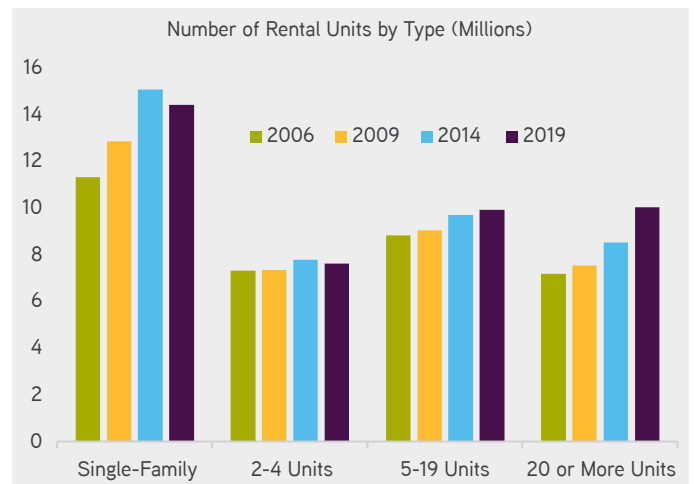
Assuming Moderate Rent Growth, Our Model Suggests Renting Will Be Cheaper Than Owning



Data as at July 15, 2022. Source: KKR CREM analysis.

Exhibit 12

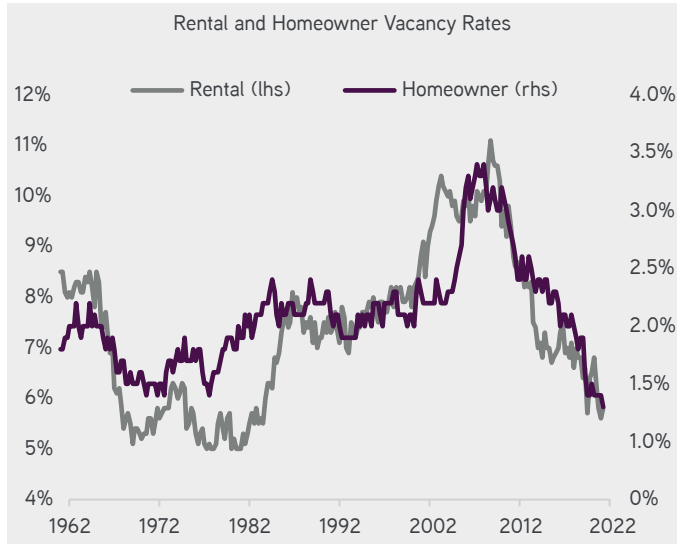
Single-Family and Large Multifamily Properties Have Driven Rental Growth in the Last Decade



Data as at December 31, 2019. Source: Harvard Joint Center for Housing Studies, KKR CREM analysis.

Exhibit 13

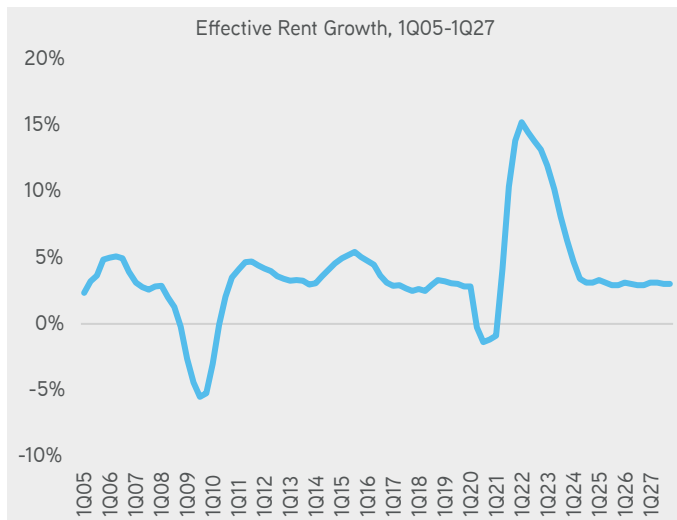
Rental and Homeowner Vacancy Rates Are Near Historical Lows



Data as at April 27, 2022. Source: Census Bureau, Haver Analytics.

Exhibit 14

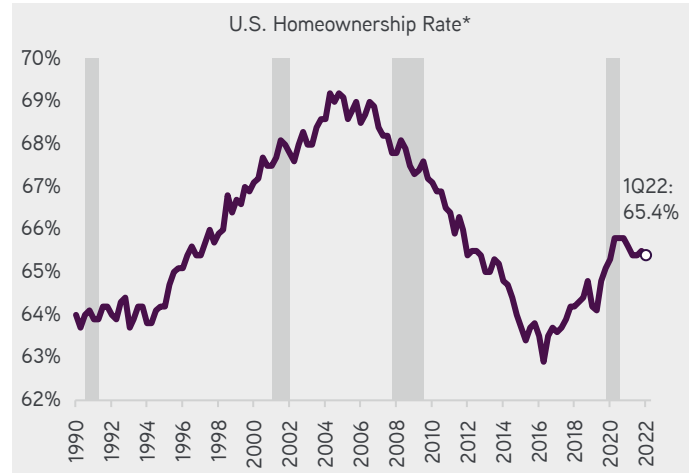
Currently, Rent Growth Is Expected to Remain Elevated Through 2024



Data as at July 7, 2022. Source: AXIOMetrics.

Exhibit 15

Homeownership Rate is Normalizing From the COVID Boost



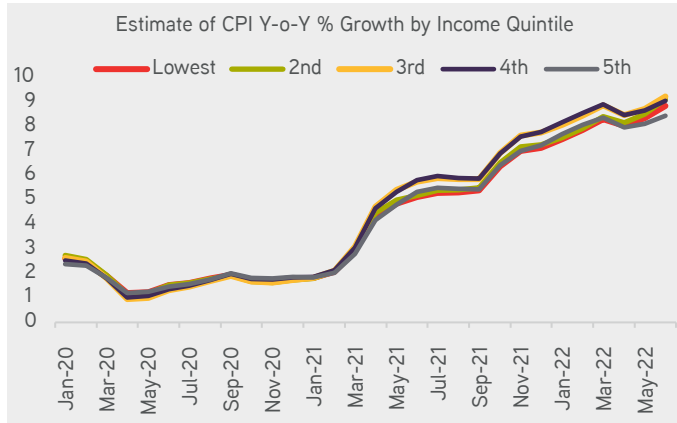
*Note: Quarterly Data. We replaced Q2-Q3 2020 estimates of the homeownership rate with the Q4 2020 estimate as the COVID-19 pandemic distorted data collection and inflated the estimated homeownership rate in Q2 and Q3 2020. Data as at April 27, 2022. Source: Census Bureau, Haver Analytics.

No consumer has been sheltered from inflation this year. Americans across regions and income cohorts are bearing the burden (*Exhibits 16 and 18*), but some are facing higher cost increases than others. While most economists are focused on the high- and low-income consumer dichotomy, it is the middle class that is enduring the highest inflationary pressures, albeit by a small margin.

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Exhibit 16

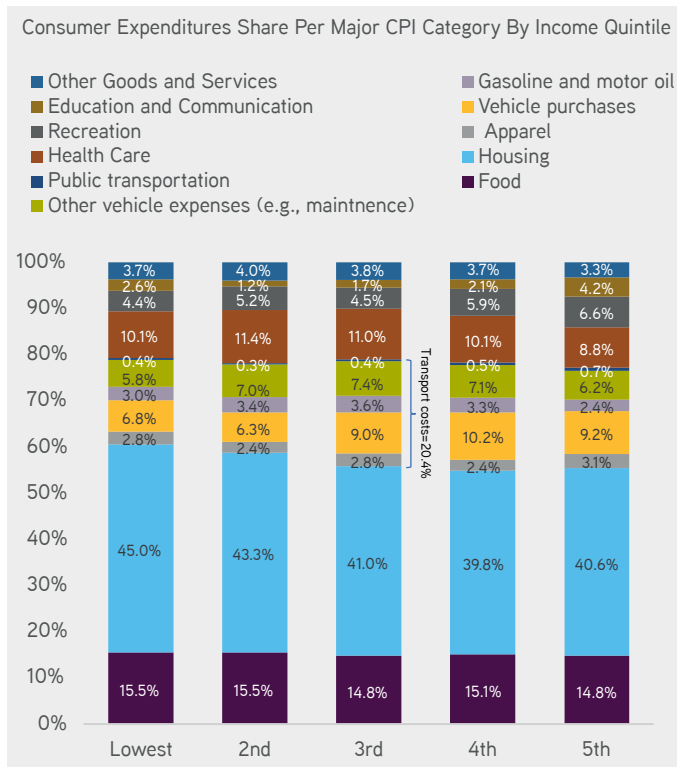
Inflation Is Hitting the Middle Class Hard



Data as at July 19, 2022. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM estimates.

Exhibit 17

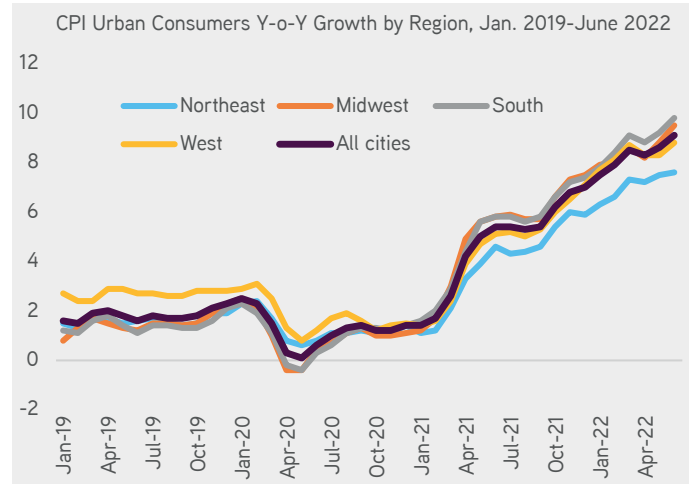
The Middle Class Is Highly Exposed to Spikes in Transportation Costs



Data as at July 19, 2022. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM estimates.

Exhibit 18

Inflation in the Midwest and the South Is the Highest in Part Due to Increased Migration During Lockdowns



Data as at July 13, 2022. Source: Bureau of Labor Statistics, Haver Analytics.

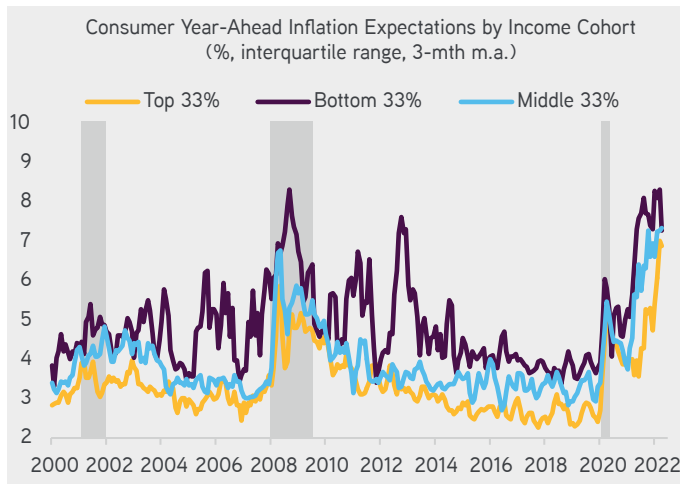
While prices of goods and services have increased for all, spending patterns differ across income cohorts, which determines the net inflation rate experienced by individuals. In June, the third income quintile experienced price growth of 9.2% (y-o-y) (*Exhibit 16*). Similarly, for the second and fourth quintiles, the cost of living increased 9.1%. The top quintile experienced a slightly lower inflation rate of 8.4%. While the difference between 9.1% and 8.4% is marginal it becomes meaningful when we consider the divergence between savings levels amongst income cohorts. Middle-income households have ~\$14,000 in savings vs. high-income households who on average have ~\$86,000 (*Exhibit 23*).

The third- and fourth-income quintiles, which capture the American middle class, are enduring the highest inflation largely because almost one-fifth of this group's expenditures is on transportation, which includes fuel, vehicle purchases as well as maintenance costs (*Exhibit 17*). Transportation has been the fastest growing major CPI category this year on the back of geopolitical shocks and supply shortages. With transportation prices rising 19.6% (y-o-y) in June (*Exhibit*

8), the middle class is feeling the heat. Lower- and-middle income consumers are particularly alert given a substantial chunk of their disposable income is allocated for essentials (*Exhibit 20*).

Exhibit 19

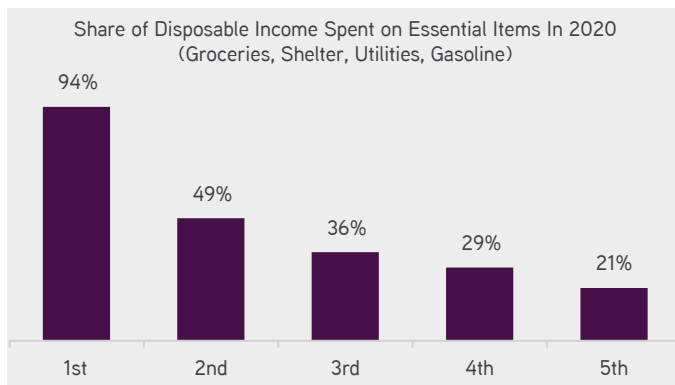
All Consumers Are Anticipating Inflation to Get Worse in 12 Months' Time



Data as at June 24, 2022. Source: University of Michigan, Bloomberg.

Exhibit 20

Low-Income Consumers Are the Worst Affected by High Prices of Energy, Food, and Shelter



Data as at July 30, 2021. Source: Bureau of Labor Statistics, KKR CREM analysis.

Looking forward, all consumers are expecting inflation to remain elevated over the next 12 months, but the outlook for lower- and middle-income cohorts is the most worrisome.

Our base case is that headline inflation will reach 8.25% this year and fall to 4.25% in 2023, in large part due to inventory bloats of major retailers causing goods deflation. Consumers are bracing for an even gloomier future. As of June, the University of Michigan’s Survey of Consumers one-year ahead expected inflation was at 7.3% for the bottom and the middle 33% income cohorts and at 6.9% for the top 33% (*Exhibit 19*).

The third- and fourth-income quintiles, which capture the American middle class, are enduring the highest inflation largely because almost one-fifth of this group’s expenditures is on transportation, which includes fuel, vehicle purchases as well as maintenance costs. Transportation has been the fastest growing major CPI category this year on the back of geopolitical shocks and supply shortages. With transportation prices rising 19.6% (y-o-y) in June, the middle class is feeling the heat. Lower- and-middle income consumers are particularly alert given a substantial chunk of their disposable income is allocated for essentials.

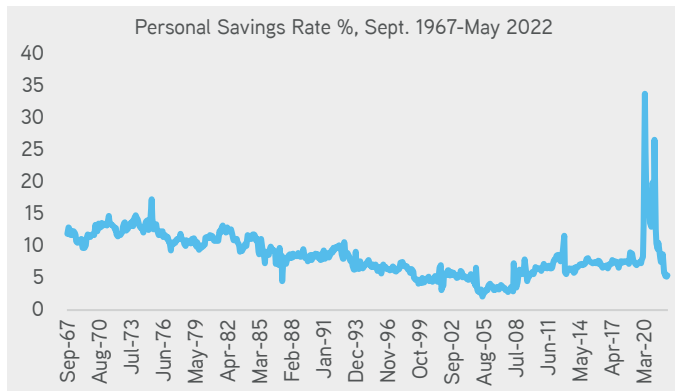
Section III: Tradeoffs

Thus far, consumers have reacted to higher costs of living by dipping into savings and cash reserves. However, as growth slows further and prices continue to rise, we expect consumers to increasingly make tradeoffs among categories of spend.

The personal savings rate, currently at [5.4%](#), has been edging downwards since March 2021 (*Exhibit 21*). The last time the rate was this low was in 2009. According to the Federal Reserve Board, the lowest income quintile has already depleted its cash reserves, and the second quintile had less than \$5,000 in 1Q22 (*Exhibit 23*). Mid- and high-income cohorts are still enjoying levels of excess cash relative to pre-pandemic levels, which offers some buffer to overall consumer spending.

Exhibit 21

We Are Below Pre-Pandemic Savings Levels as Pressures on Consumers Mount

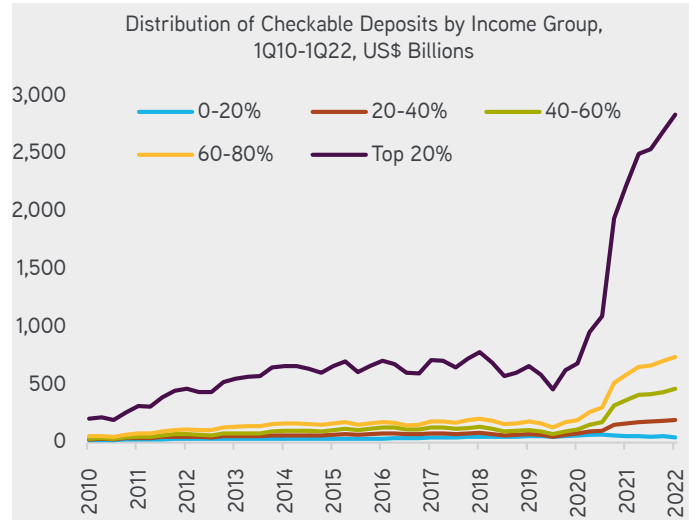


Data as at June 30, 2022. Source: BEA, Haver Analytics.

Thus far, consumers have reacted to higher costs of living by dipping into savings and cash reserves. However, as growth slows further and prices continue to rise, we expect consumers to increasingly make tradeoffs.

Exhibit 22

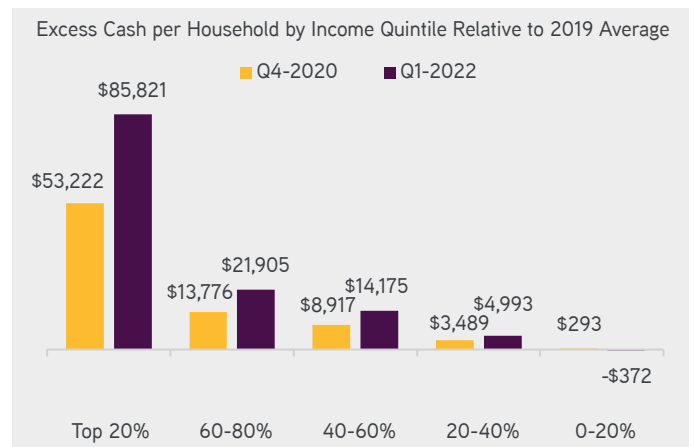
Deposits for Low- and Mid-Income Cohorts Are Normalizing Since the Pandemic Highs



Data as at June 29, 2022. Source: Federal Reserve, KKR CREM analysis.

Exhibit 23

Excess Cash Reserves Are Depleting for Lowest Income Cohort



Data as at June 29, 2022. Source: Federal Reserve, KKR CREM analysis.

Amidst rising inflation and declining real disposable income, consumers will need to decide how to allocate shrinking inflation adjusted wallets. Importantly, while analyzing

historical patterns of consumer behavior during low or negative growth and high inflation periods are a necessary starting point, we also note that COVID has catalyzed new patterns of behavior. To ascertain how consumers are likely to respond to the current economic regime, we leverage the concept of price elasticity of demand – how quantity demanded by consumers changes as prices changed, during periods of slowing economic growth pre- and post-COVID.³

During late cycle periods, where interest rates and prices are rising and growth has peaked, consumers typically respond to price changes by delaying goods purchases amid higher borrowing costs, and instead concentrate their focus on the essentials. For instance, a March 2022 AAA survey found that if average gas prices hit \$5 per gallon, 80% of respondents would plan to drive less. At the same time, pharmaceutical and other medical goods spending have generally remained robust throughout recessions. Here, we outline four key shifts in consumer behavior in late cycle environments preceding COVID:

1. **Price Sensitivity:** Average elasticity, in absolute values, is higher during recessions across all goods and services. In five of the last six non-COVID recessions, consumers became more sensitive to price increases compared to the total time period (1973-2019).
2. **Goods vs. Services:** Goods spending is hit disproportionately hard during recessions compared to services. Durable goods purchases such as new cars,

household furnishings, and others such as jewelry, electronics, etc. for which consumers often leverage credit, are especially sensitive to price changes during late cycle periods characterized by rising rates and slowing growth. As the cost of capital rises during recessions, financing of large purchases, such as motor vehicles and durable goods, becomes more costly. In comparison, services spending remains robust during recessionary periods. In fact, healthcare spending increases relative to expansionary periods. In other words, consumers are much more likely to shift/decrease their demand for goods during recessions, versus services.

3. **Essential vs. Nonessential:** During recessions, consumers tighten belts generally but less so on essential items, such as healthcare, pharmaceuticals, and energy. Historically, nonessentials tend to be more sensitive to price increases as consumers shift their spending towards items they need. In recent periods, we note the development of a class of 'new essentials' consisting of hair, dental, and other personal care products, which have become more defensive spending categories during recessions. Hotels and motels, on the other hand, are cyclical and spending slows during recession whether or not prices increase or decrease.
4. **New vs. Used:** In a drive to value, consumers increasingly shy away from new goods and retreat to

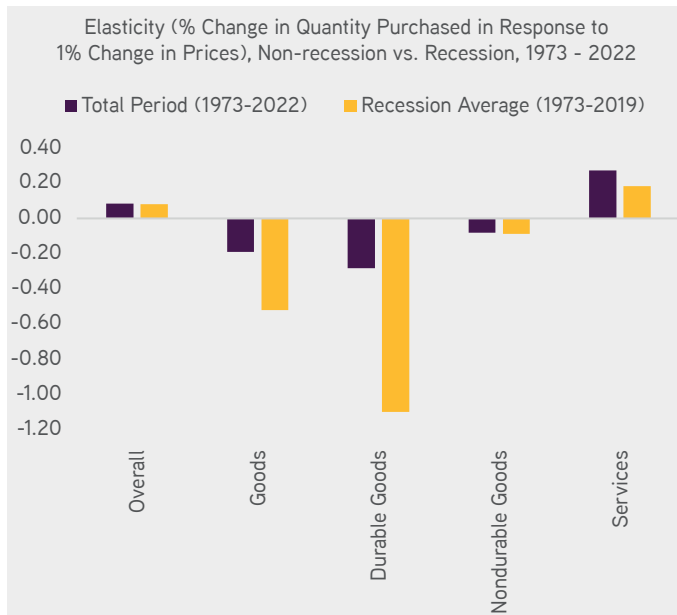
3 We make three simple transformations to our PCE data in our regression analysis to capture these elasticities:

- i. We divided total quantity purchased by the U.S. population to obtain per capita consumption. As population increases, aggregate purchasing also increases. We are interested in how individual consumers are sensitive to price changes.
- ii. We controlled for real disposable income. As per capita wealth has increased over time due to economic growth, consumer spending as a share of their total income has also changed. We want to isolate the effects of short to medium-run changes in the macro environment without mixing in the long-run American economic growth trend.
- iii. We took the natural log of all of our variables. A common practice in econometrics, this allows us to calculate elasticities in percentage change terms (how an X% change in price leads to a Y% change in quantity purchased).
- iv. With the exception of COVID, we extended the beginning of our recession windows by one year, but keep the recession end date as the official date. By extending the beginning of the recession, we can capture the effects on the consumer before the National Bureau of Economic Research declares an official recession (after two consecutive quarters of negative growth). We excluded COVID, which we defined as from February 2020 to June 2021 given the virus's unusual impact on consumer behavior.

used goods in low growth environments. For instance, if car prices increase during recessions, consumers demand fewer new cars while their response for used cars is far more muted.

Exhibit 24

Consumer Pocketbooks Typically Tighten on Goods During Recessions



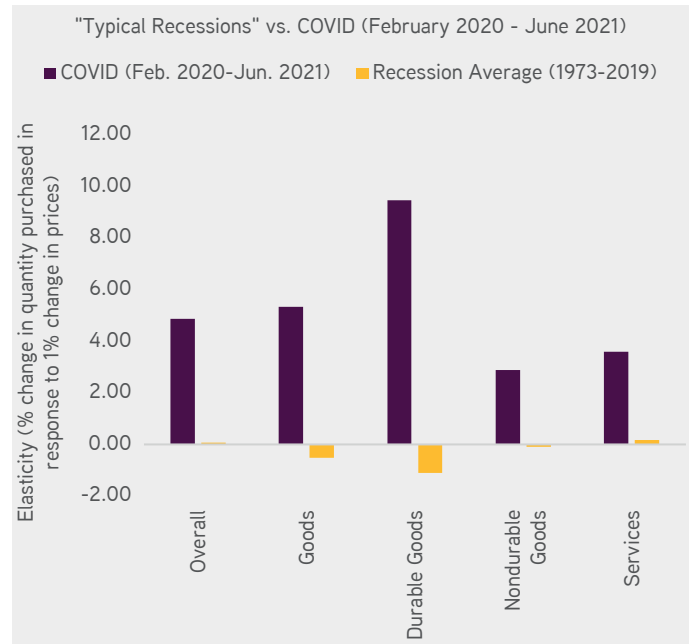
Data as at June 30, 2022. Source: Bureau of Economic Analysis, KKR CREM analysis.

While the recessions between 1973 to 2019 provided valuable lessons on the cyclicity of consumer spending, COVID has changed consumer priorities and behavior, the full impact of which will not likely be fully understood for some time. In our view, the forced closure of economies over many months, the ever-present awareness of health risks, the substantial stimulus which supported lower- and middle-income households, the accelerated adaption of technology such as e-commerce and Zoom, and the increase in labor bargaining power will likely have long standing impact on the consumer. Indeed, consumer behavior during the COVID recession diverged from all prior recessions. For example, while goods spending typically declines late in the economic cycle, the quantity of recreational goods purchased, even

as goods prices increased, reached record highs during the COVID recession as Americans spent more time away from the office.

Exhibit 25

The COVID Recession Saw Inflated Consumer Spending Compared to Typical Recessions



Data as at June 30, 2022. Source: Bureau of Economic Analysis, KKR CREM analysis.

Importantly though, we also cannot solely rely on COVID behaviors to be predictive of consumer behavior in the next downturn. Key shifts in consumer behavior during the COVID recession:

- Increase in spending:** Traditional recessions have largely seen pullbacks in spending – particularly in interest rate sensitive goods categories, as prices rise. However, during COVID consumers bought more goods even as prices rose. Government stimulus fueled much of this spending but in our view, the odds of seeing the same level of fiscal support in the next recession are low.

Exhibit 26

Price and Quantity Changes During Recessions for Select Personal Consumption Categories

Recessions	New Motor Vehicles		Used Motor Vehicles		Furnishings and Durable Household Equipment		Hair, Dental, and Shaving Goods		Hotels and Motels		Recreational Goods	
	Price	Qty	Price	Qty	Price	Qty	Price	Qty	Price	Qty	Price	Qty
Nov. '73 - Mar. '75	+	-	+	-	+	-	+	-	+	-	+	+
Jan. '80 - Jul. '80	+	-	-	+	+	-	+	-	+	-	+	+
Jul. '81 - Nov. '82	+	-	+	-	+	-	+	-	+	-	+	+
Jul. '90 - Mar. '91	+	-	-	+	+	-	+	+	+	-	+	+
Mar. '01 - Nov. '01	-	+	+	+	-	+	+	+	-	-	-	+
Dec. '07 - Jun. '09	-	-	-	-	-	-	+	+	-	-	-	-
Feb. '20 - Jun. '21	+	+	+	+	+	+	+	+	+	-	+	+

Date as at June 30, 2022. Source: Bureau of Economic Analysis, KKR CREM analysis.

- Increase in home goods and furnishing spending:** An increase in the prevalence of remote work propelled spending on furnishings and other durable household equipment, even as prices rose, which deviated from patterns in previous recessions. We do expect the work from home (and nesting) trend to persist, which will mitigate some of the expected declines in goods spending we anticipate in the next downturn.
- Increase in spending on food at home:** As consumers spent more time at home during COVID, spending on food at home increased dramatically. We believe that the nesting theme will continue to have legs and expect above pre-pandemic trend spending on food at home.

Comparing the examples of late cycle periods, pre-and post-COVID, we expect some reversion to the mean as real wallets shrink in the absence of substantial fiscal stimulus. We expect spending on services to increase relative to goods as a proportion of the consumer wallet e.g., for rent, vehicle maintenance, and healthcare. However, given our expectation for an increased prevalence of remote work, we expect some COVID spending behaviors around nesting to

persist and continue to buck historical trends. Specifically, we expect to see above trend spending on home renovation and furnishings versus prior recessions.

An increase in the prevalence of remote work propelled spending on furnishings and other durable household equipment, even as prices rose, which deviated from patterns in previous recessions. We do expect the work from home (and nesting) trend to persist, which will mitigate some of the expected declines in goods spending we anticipate in the next downturn.

Section IV: Risks to the Consumer

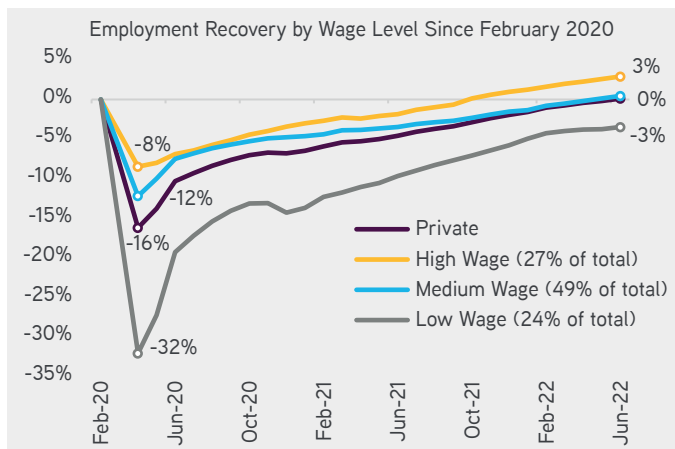
While we anticipate a mild recession and a meaningful slowdown in consumer spending, we still believe the sector is relatively well positioned, especially when compared with the GFC. The consumer sector is amply supported by a strong labor market and healthy household balance sheets as highlighted by low levels of both consumer leverage and delinquencies. That said, beyond sticky inflation, additional risks to the U.S. consumer exist—and will only exacerbate from here.

Labor. The U.S. labor market has proven resilient during the pandemic, but amid rising inflation and slowing demand, companies may increasingly scrutinize whether they have over-hired.

Pandemic-related job losses are still concentrated in lower-wage sectors that were worst affected by mobility restrictions and consumers' rush to goods (*Exhibits 27 and 28*). We expect these jobs to gradually return as COVID-19 becomes endemic and consumers shift their focus from goods purchases to experiences, kick starting a boom in services—both professional and recreational.

Exhibit 27

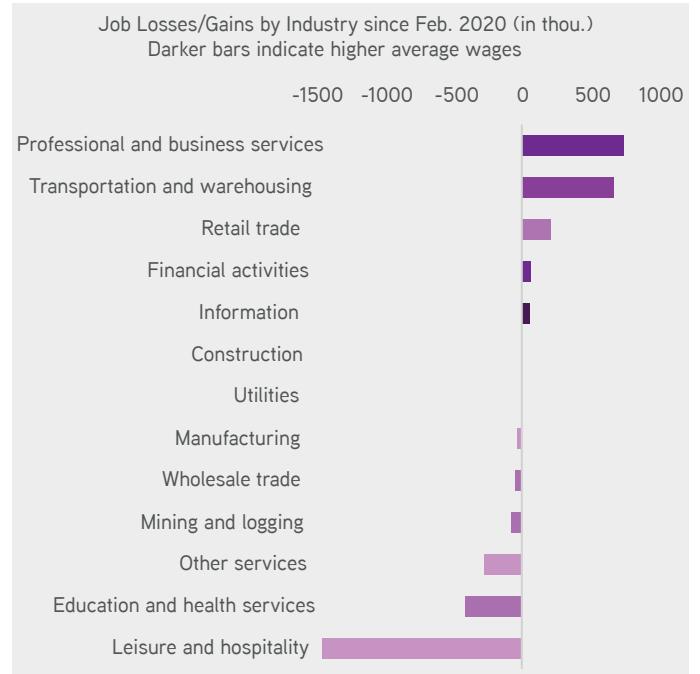
Lower Income Workers Have Faced a Difficult Employment Recovery



Data as at July 1, 2022. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM analysis.

Exhibit 28

Pandemic-Related Job Losses Are Concentrated in Lower-Wage Industries



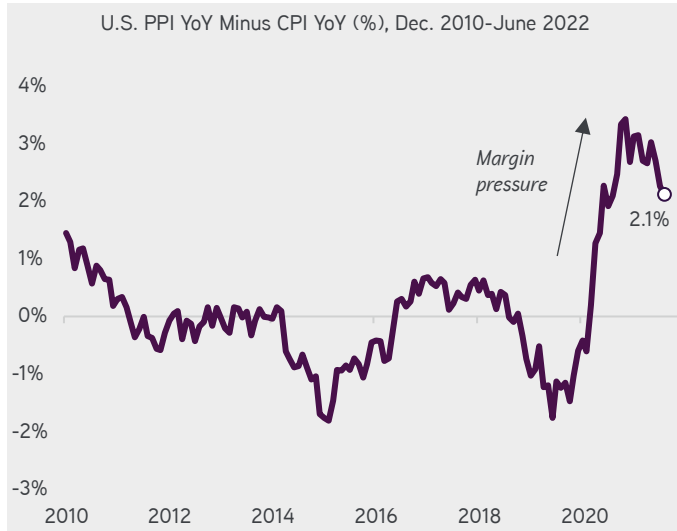
Data as at July 1, 2022. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM analysis.

However, Henry McVey has cautioned that surging input costs, as measured by the PPI, are rising faster than prices charged to consumers, represented by the CPI, which is leading to margin deterioration. If Henry is right about margin deterioration, and we think he is, then this presents a key risk to the labor market.

Margin pressures have been increasing since the start of the pandemic during the COVID driven supply chain disruption. Most recently in June, the difference between PPI and CPI y-o-y growth stood at 2.1%. Peeling back the onion, the sectors at substantial risk of severe margin deterioration are autos and furniture (*Exhibit 30*) and we think retailers in these industries may look to lower costs which represents a risk to labor in those sectors.

Exhibit 29

High Input Costs Are Putting Pressure On Company Margins



Data as at June 30, 2022. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM analysis.

Exhibit 30

Autos and Furniture Retailers Are Facing Margin Pressure and Could Look to Lower Costs

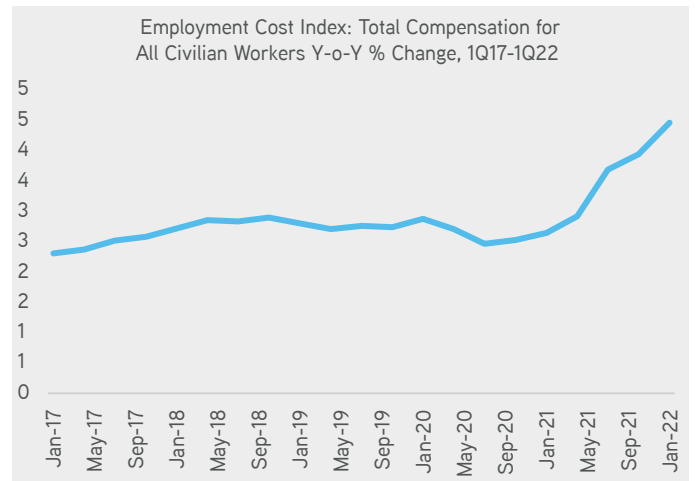
	PPI YoY Minus CPI YoY		
	Dec-19	Jun-21	Jun-22
Overall	-1%	2%	2%
Autos	4%	0%	5%
Furniture	2%	8%	8%
Food & Beverage	2%	0%	3%
Gasoline Stations	-22%	-52%	-41%
Apparel	4%	20%	2%
Sporting Goods	2%	-5%	-5%
Appliances	-5%	1%	-25%

Data as at June 30, 2022. Source: Bureau of Labor Statistics, Haver Analytics, KKR CREM analysis.

However, we do not think a full-blown labor crisis will materialize on the back of this recession. COVID-related labor shortages are still top of mind for managers, so curtailing new hiring is more likely than massive layoffs. Indeed, the job openings rate in major industries started to dip this year (Exhibit 32).

Exhibit 31

Employment Costs Continue to Surge

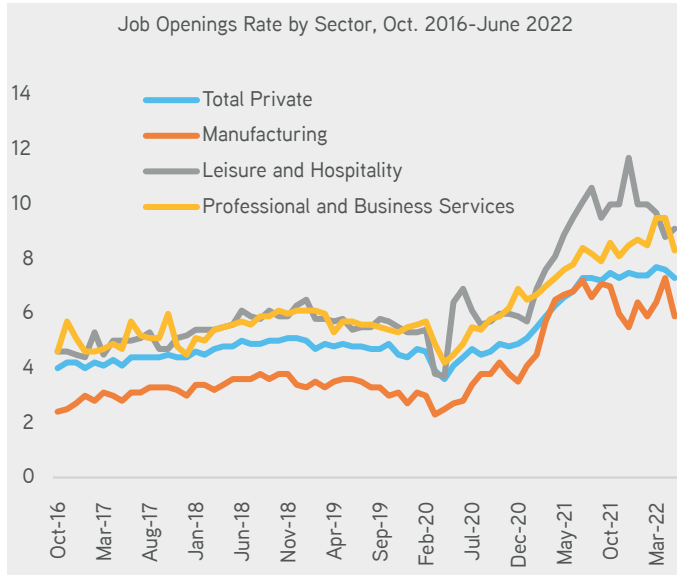


Data as at April 29, 2022. Source: Bureau of Labor Statistics, Haver Analytics.

Pandemic-related job losses are still concentrated in lower-wage sectors that were worst affected by mobility restrictions and consumers' rush to goods. We expect these jobs to gradually return as COVID-19 becomes endemic and consumers shift their focus from goods purchases to experiences, kick starting a boom in services—both professional and recreational.

Exhibit 32

Hiring Has Been Curtailed



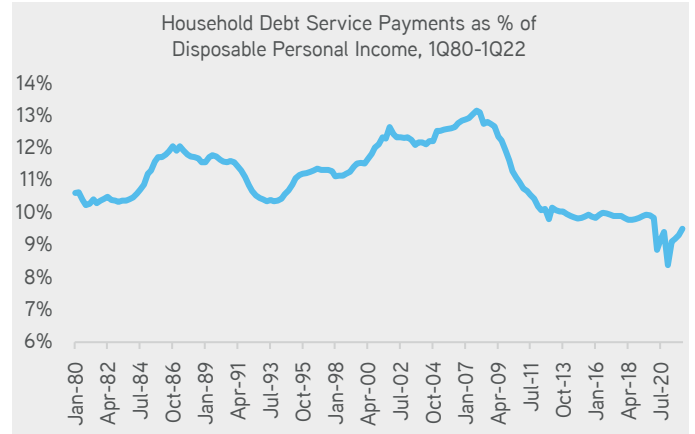
Data as at July 6, 2022. Source: Bureau of Labor Statistics, Haver Analytics.

Consumer Balance Sheets. The financial state of U.S. households remains healthy in our view. While older Millennials are driving the increase we are seeing in auto and mortgage debt, consumer leverage remains at historically low levels (*Exhibit 36*). In January, household debt payments represented ‘only’ 9.5% of disposable personal income. This is lower than in January 1980, when the Fed began publishing the rate which then stood at 10.6%. However, we are seeing some signs of stress emerge that is typical for late in an economic cycle, as consumers increase borrowing, delinquencies start to increase, and equity market volatility causes declines in net worth.

While older Millennials are driving the increase we are seeing in auto and mortgage debt, consumer leverage remains at historically low levels.

Exhibit 33

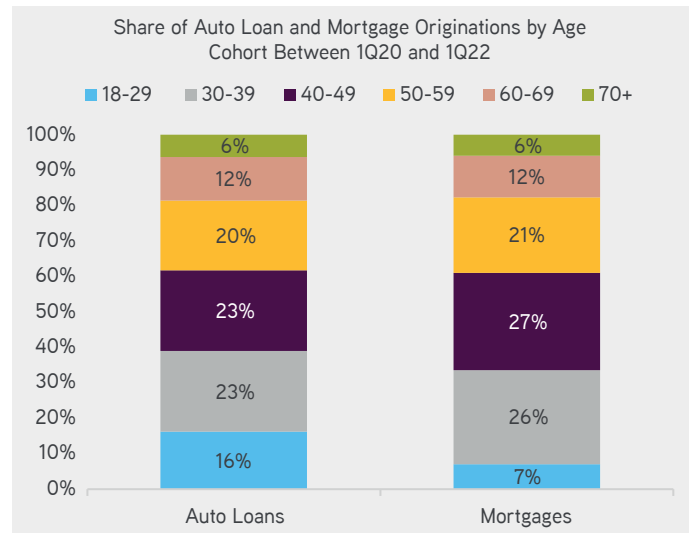
Consumer Leverage Still Remains Low by Historical Measures



Note: The Household Debt Service Ratio (DSR) is the ratio of total required household debt payments to total disposable income. Data as at June 24, 2022. Source: Board of Governors of the Federal Reserve System.

Exhibit 34

Older Millennials Account for the Bulk of the Increase in Auto and Mortgage Debt

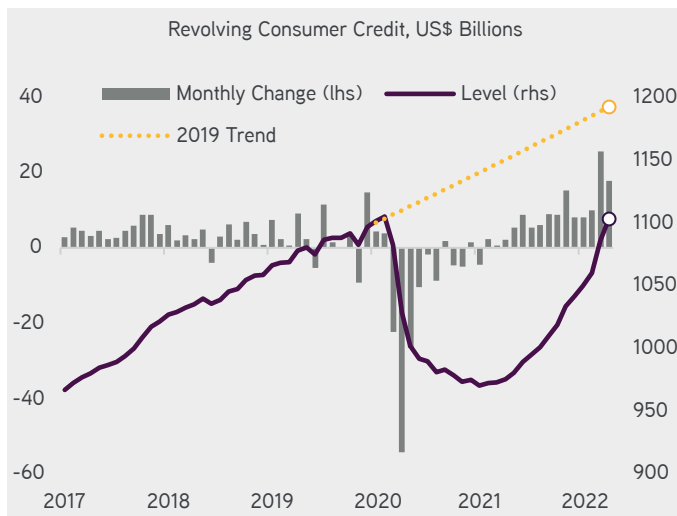


Data as at March 31, 2022. Source: Federal Reserve Board, Haver Analytics.

It is worth flagging that the ‘return’ to federal student debt payments will also add pressure to households’ balance sheets. While the U.S. government has paused federal student loan payments multiple times since the start of the pandemic, it is only a matter of time before consumers are faced with additional loan obligations. Indeed, as inflation stretches consumers’ wallets, households have already started to increase their credit card debt spending (*Exhibit 35*), which according to FISERV, now outpaces debit card spending.

Exhibit 35

Credit Card Debt Utilization Is Recovering at a Rapid Pace



Data as at April 30, 2022. Source: Federal Reserve Board, Haver Analytics.

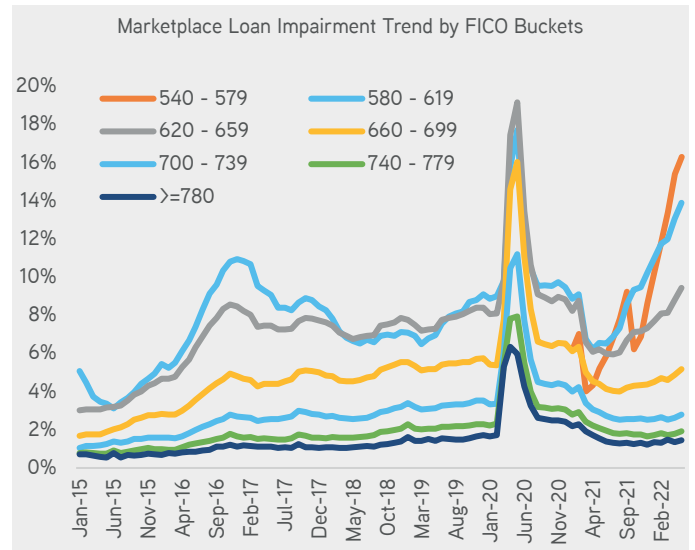
One risk area that we are paying close attention to is loan delinquencies. While delinquencies still remain at historically low levels, we are seeing consumers with low credit scores (FICO range of 540-659) starting to fall back on their loan commitments (*Exhibit 36*). While this is a growing risk, it is again worth emphasizing that we do not expect a repeat of the GFC.

Another area of risk, which affects the mid- and high-income cohorts the most, is consumers sizable exposure to equities. Households currently hold more equities and mutual fund shares than any previous time in modern history. With

the S&P 500 down nearly 20% year-to-date, consumer wallets will be further stretched in this high interest-rate environment.

Exhibit 36

High-Risk Consumers Are Slowly Starting to Fall Back On Loans



Note: Impairment measures the percentage of marketplace (unsecured) loans that are delinquent or modified. Data as at May 31, 2022. Source: KKR Private Credit.

In January, household debt payments represented ‘only’ 9.5% of disposable personal income. This is lower than in January 1980, when the Fed began publishing the rate which then stood at 10.6%. However, we are seeing some signs of stress emerge that is typical for late in an economic cycle.

Section V: Investment Themes

In every economic regime change, no matter how challenging, there are promising investment opportunities. But spotting these—especially in periods of high inflation and low growth, while following a pandemic—is no easy task for both retail and institutional investors. Herein we summarize some of the key themes in focus for our team:

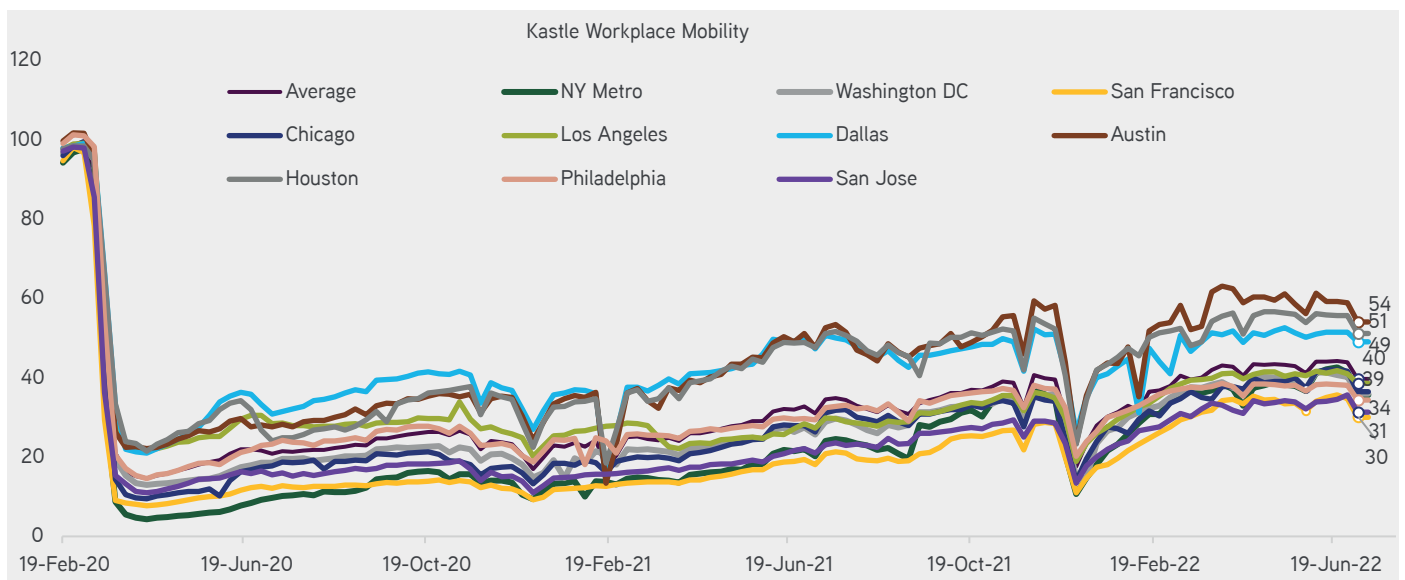
Rentership (and Self-Storage). Amid demographic shifts, tight housing inventories and declines in affordability, we are bullish on multifamily and single-family rentals. Owner occupied housing has gotten significantly more expensive which we believe will drive rentership. There could be a shift in preference to single-family rentals, but supply and scale are considerations. Multifamily demand is strong across income cohorts and has seen outsized rent increases, but cyclical is a consideration. Self-storage is a read through on secular trends in housing: supply constraints, affordability challenges and remote work. Space constrained consumers who are either priced out of homeownership or unable to upgrade existing homes amidst elevated prices and interest rates will continue to drive demand.

Remote Work. To start, our view is that the office is not dead, as many now suggest. That being said, we doubt working arrangements in every industry will revert to pre-pandemic patterns. Indeed, in major U.S. cities, workplace mobility data suggest that occupancy levels range between 30% and 54% of what they were before the pandemic (*Exhibit 37*).

For many industries hybrid work is the new normal. According to the June 2022 [WFH Research survey](#) which questioned nearly 22,000 U.S. residents, approximately 15% of the survey participants were fully remote, around 55% were on-site full-time, and about 30% had opted for a hybrid working arrangement. Increasingly, employer plans for work from home post-COVID suggest that most managers envision employees to WFH approximately 2.3 days per week (*Exhibit 38*). Importantly, the WFH Research data suggests that the gap between workers’ desired amount and employers’ plans for WFH arrangements is shrinking, signaling an alignment of priorities.

Exhibit 37

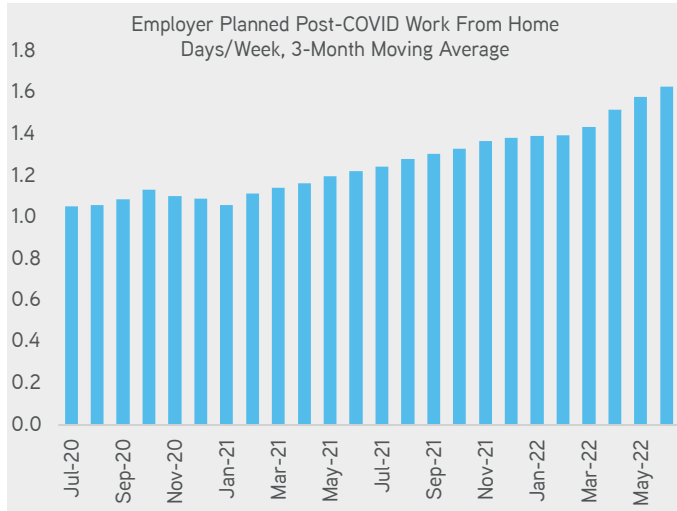
Office Occupancy Has Decreased Significantly From Pre-Pandemic Levels, But the Office Is Not Dead



Data as at July 13, 2022. Source: Kastle, Bloomberg.

Exhibit 38

Hybrid Work Arrangements Are the New Normal



Note: The survey questioned 21,908 U.S. residents aged 20 to 64 and earning at least \$10,000 in 2019. Source: WFH Research (Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.)

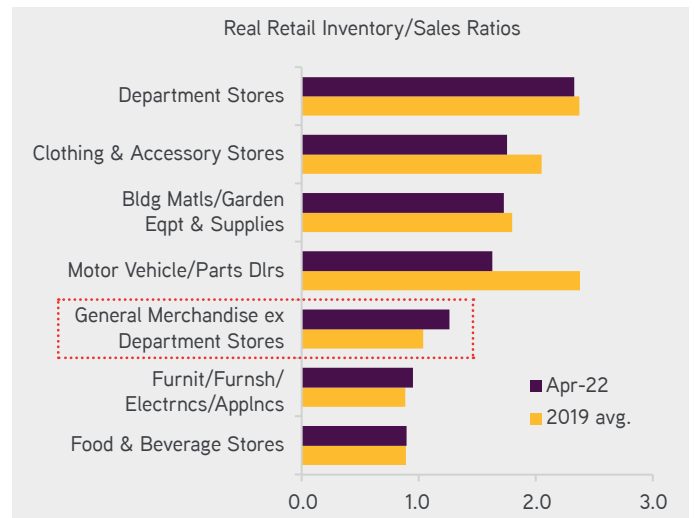
Services Rebound. The end of mobility restrictions means that pent up demand for recreation and leisure services is bound to be unleashed and likely in force. In fact, we are already seeing the first signs of consumers shifting their spending from goods to services. That said, increased work from home prevalence has also given rise to new social norms and lifestyle changes. While we expect consumers to cut back on major durable goods purchases as was typical in pre-COVID recessions, we believe that consumers will not refrain from spending on products that facilitate remote work.

Value. General merchandise stores are reporting increased real retail inventory to sales ratios rising above pre-pandemic averages (Exhibits 39 and 40). Even Target and Walmart, America’s leading retailers, are suffering from inventory bloat. We think retailers may soon be forced to sell products at a steep discount in order to empty their fully stacked inventories, leading to goods deflation. With essential goods, we expect consumers to prefer private label products, as these are cheaper than branded equivalents. For instance,

private label food products are on average around 30% cheaper relative to branded goods.

Exhibit 39

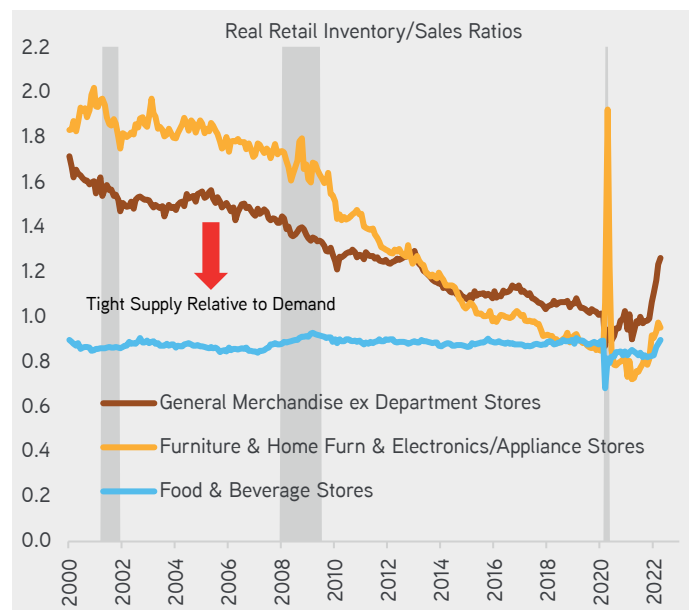
Consumers Have Gotten Their Fill of General Merchandise; Expect Heavy Discounts



Data as at April 30, 2022. Source: Bureau of Economic Analysis, Haver Analytics.

Exhibit 40

Sales Are Not Keeping Pace With High Inventory Levels

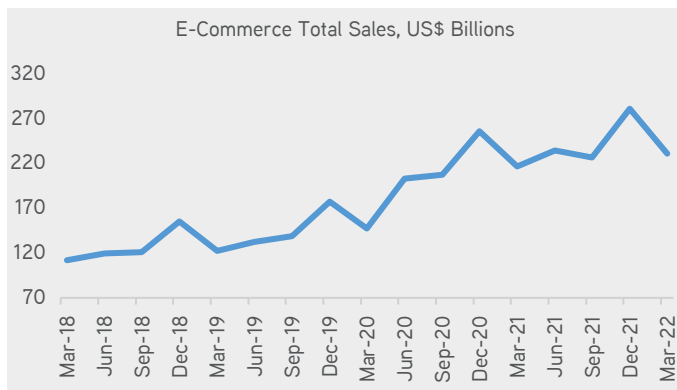


Data as at April 30, 2022. Source: Bureau of Economic Analysis.

Omnichannel. E-commerce penetration ramped up significantly during the pandemic when brick-and-mortar channels were inaccessible. While we expect e-commerce to remain a dominant and growing channel, we see the moderation in e-commerce sales as a reflection of consumers focus on retail optionality e.g., the option to purchase goods via multiple channels--online, in store, curbside pickup etc.

Exhibit 41

E-Commerce Sales Are Edging Downward



Data as at March 31, 2022. Source: Bureau of Labor Statistics, Bloomberg.

Personal Care. The pandemic has forced many families to think more rigorously about health and childcare. Our elasticity analysis indicates that spending on personal care products and services tends to decrease during recessions—unless these items are essential to everyday life, e.g., hair, dental, shaving equipment (*Exhibit 30*). While we expect to see a slowdown in the personal care sector during the approaching recession, spending on wellness products and services will continue to be a priority for many American households. However, despite strong demand, companies in the sector may see margin pressure from commodity inflation

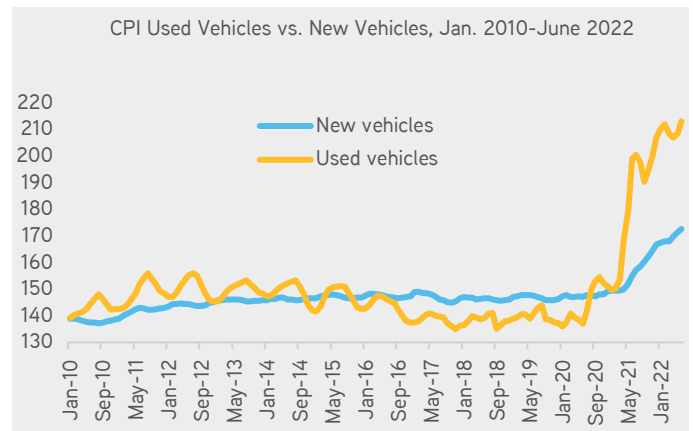
Auto Maintenance and Customization. One of the legacies of the pandemic goods spending frenzy is that consumers ramped up their purchases of used and new cars as suburban migration increased, and public transportation usage declined (*Exhibit 42*). In many cases, individuals

opted for old vehicles to avoid long waits for new cars that were caused by pandemic related semiconductor and labor shortages. Amid higher auto prices, consumers are likely to spend more on services that extend the life of vehicles purchased. Additionally, vehicle customization is popular among the large cohort of Millennial and Gen Z consumers who are excited about self-expression.

According to S&P Global, the average age of U.S. light vehicles reached an all-time high this year as the vehicle fleet climbed to 283 million passenger cars. Today the average age of a passenger car and light trucks is [12.2 years](#), a metric that has been rising for five straight years. At the same time, Americans are driving as much as before COVID came into the picture. Indeed, [vehicle miles traveled](#) have returned to pre-pandemic levels.

Exhibit 42

Car Prices Have Reflected Increased Pandemic-Related Demand



Data as at July 13, 2022. Source: Bureau of Labor Statistics, Haver Analytics.

ESG. In the spirit of history rhyming, similar to the late 1970s, we are living in a time in history as defined by high inflation, growing discontent with the socio-political foundation of the country, and increased defense spending on the back of Russia’s invasion of Ukraine. Times like this often give rise to innovation. Ken Mehlman believes, and we agree that, sustainable and socially-conscious living

is once again top of mind for American society. Today's workforce reflects technological innovation and demographic transition (i.e., aging population), leaving many industries short of qualified workers. We have invested behind and see growing opportunities for products and services that address this labor market imbalance including vocational training platforms, labor data analytics companies, and educational technology. Similarly, the energy transition will require both investment in new forms of green energy and products that reduce waste and mitigate the environmental impact of extreme weather. ESG-conscious consumers are willing to pay for sustainable and healthy products, even in the face of slowing growth and high inflation. We must also remember we are living in a "Gutenberg II" moment, where the radical transparency of the internet has added billions to the global conversation, making much of the world witnesses, journalists, and activists. All companies will be judged by employees and customers by how they treat their workforce, whether they responsibly manage their externalities, and by the sustainability of their supply chains. Investors should understand this new world.

Ken Mehlman believes, and we agree that, sustainable and socially-conscious living is once again top of mind for American society. Today's workforce reflects technological innovation and demographic transition (i.e., aging population), leaving many industries short of qualified workers. We have invested behind and see growing opportunities for products and services that address this labor market imbalance including vocational training platforms, labor data analytics companies, and educational technology.

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