Empirical Research Partners

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Consumer Strategy June 2020

Mind the Gap

The Consumer's Odyssey

- After ten years of relatively smooth sailing the coronavirus struck the U.S. consumer like a bolt of lightning and they've been forced to navigate uncharted waters on a makeshift raft. The government is keen on facilitating the journey to safety but obstacles remain. The virus is threatening on one side and a vaccine remains out of sight. Stimulus has put wind in the sails but the speed and power with which it was deployed may create some wake, making for choppy waters. The fate of the U.S. consumer hangs in the balance. Powers that be will almost surely offer them another lifeline but it might take a bout of market anxiety to extract it, and when it arrives it may not be as generous as the first one was. When it comes to navigating consumer stocks, we think it makes sense to play a bit more defense.

Mobility Has Been Driving Consumption but Income Will Ultimately Steer the Ship

- Personal income has been growing even though wages are down sharply. Transfer payments have come to the rescue. These subsidies have been rising in the mix for decades and today they represent a quarter of personal income. Stimulus checks have largely been spent, though. It's estimated that people that live paycheck to paycheck spent three-quarters of the bounty within two weeks. Most of this went to nondurable purchases like food and cleaning supplies. Wal-Mart was the biggest beneficiary with an 18% capture rate. Amazon saw a smaller surge but it's held on to more of the gain. Some of the remaining funds were used to pay rent, credit card bills and cell phone providers.
- We've been tracking state-level data that measures daily spending by category and by income level. Low-income consumers saw a +20% surge in spending once they received their checks from the government and spending of this cohort is down from pre-pandemic levels by only (3)%. Spending for high-income consumers seems to be down by (13)%. The difference has a lot to do with the fact low-income earners devote more of their budget to necessities that were fairly accessible even when lockdowns were highly restrictive. The two cohorts are inextricably linked though since well-heeled consumers account for 60% of demand in leisure-oriented industries and lower-income workers furnish the labor.
- Data suggests that in recent months mobility has influenced consumption more than income, having explained two-thirds of the variation in overall spending and more than 80% of the changes we've seen in hotels and restaurant outlays. Days with reduced mobility seem to help grocery sales by +5% but it pares apparel and leisure spending by (15)%. It's only a matter of time before income begins to dictate consumption patterns and on that score there's some reason for concern.
- The $300 billion benefit derived from stimulus checks is already in the rear-view mirror and by the end of July another $175 billion allotted to unemployment supplements is set to expire. Standard unemployment benefits typically last 26 weeks and during the Financial Crisis their term was extended to 99 weeks. The government is likely to do something similar this time around but that tactic would only serve to replace 50% of lost income. The expiring part of the program allowed the bottom half of earners to collect a multiple of their pre-pandemic income, a windfall that may not be repeated.

Savings Probably Won't Add Firepower Where It's Needed

- The savings rate has surged over the past two months and technically that's created $200 billion of firepower that the consumer could use to fund purchases in the back half of the year. This is probably an optimistic assessment though, since people in the bottom half of the income distribution don't save. Our take is that excess savings have accrued to people that are less likely to need - and spend - it. The same is true for deferred tax payments that've effectively acted like a $300 billion bridge loan for wealthy individuals. Low-income families stand to recoup $30 billion from tax refunds in the next month but it won't be enough to fill the void unless we get another generous helping of government Kool-Aid.
- When the pandemic first hit the Fed and legislators brought out some pretty big guns. Some key elements of the package are set to run off or expire over the next month or so, putting back-half consumption patterns at risk. It's likely the government will respond with another package. We're in an election year and the markets know how to play a mean game of chicken when it comes to prodding the leadership for more stimulus. Discretionary stocks were winners on the back of the CARES Act but they've performed about as well as past surges in transfer payments would've suggested. We'd be a bit more defensively postured until we see what the stimulus sequel has to offer.

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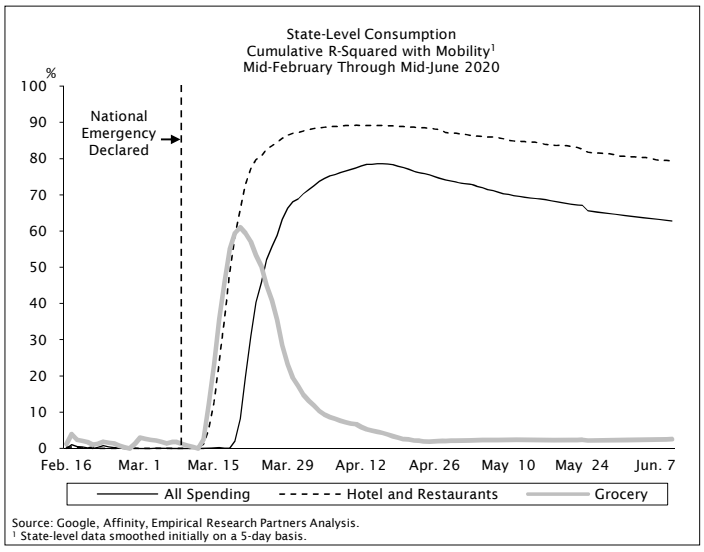
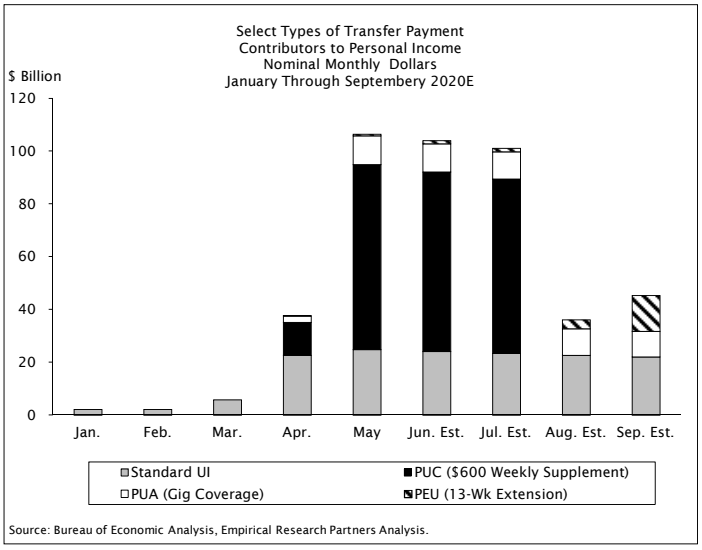
Conclusions in Brief

- During the pandemic mobility has been driving spending trends…



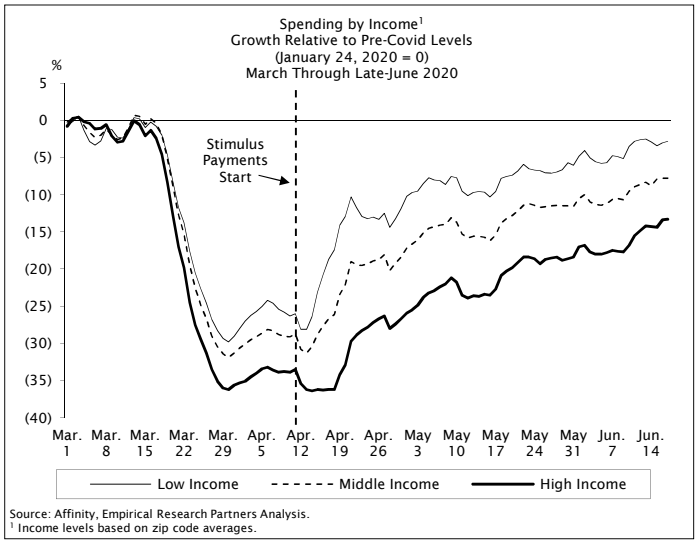
Source: Google, Affinity, Empirical Research Partners Analysis.
[1] State-level data smoothed initially on a 5-day basis.

- …But income will play a more leading role unless the government refills the punch bowl:



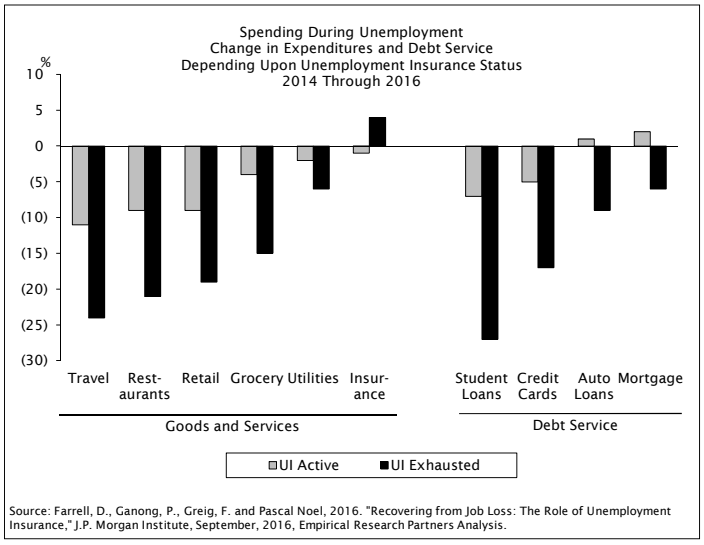
Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

- Spending by low-income households surged when stimulus checks arrived…



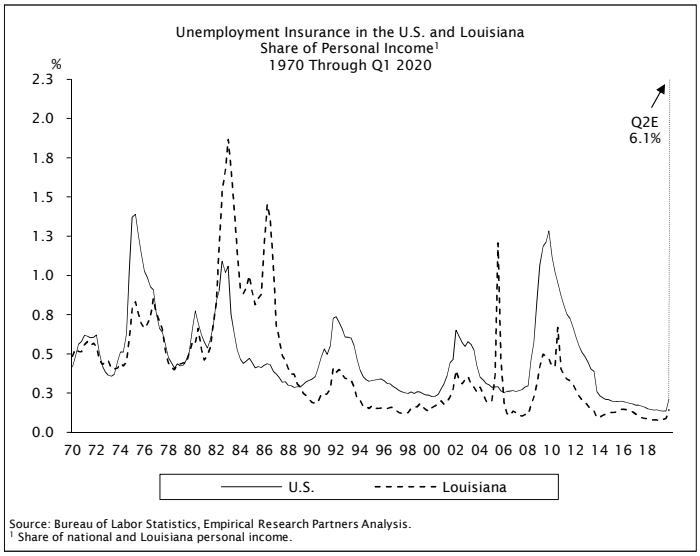
Source: Affinity, Empirical Research Partners Analysis.
[1] Income levels based on zip code averages.

- …But there's risk to consumption once benefits run out:



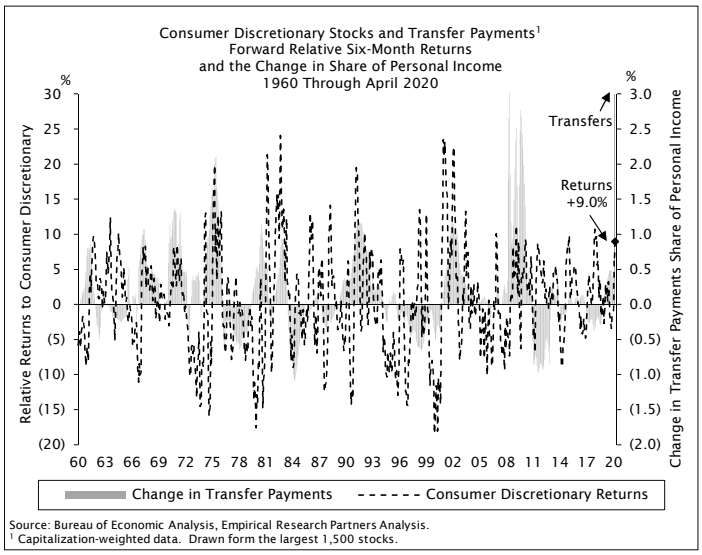
Source: Farrell, D., Ganong, P., Greig, F. and Pascal Noel, 2016. "Recovering from Job Loss: The Role of Unemployment Insurance," J.P. Morgan Institute, September, 2016, Empirical Research Partners Analysis.

- In the end, the pandemic may feel more like a natural disaster than a standard business cycle…



Source: Bureau of Labor Statistics, Empirical Research Partners Analysis.
[1] Share of national and Louisiana personal income.

- …But with no vaccine in sight, the risk/reward in consumer discretionary stocks is fairly middling:



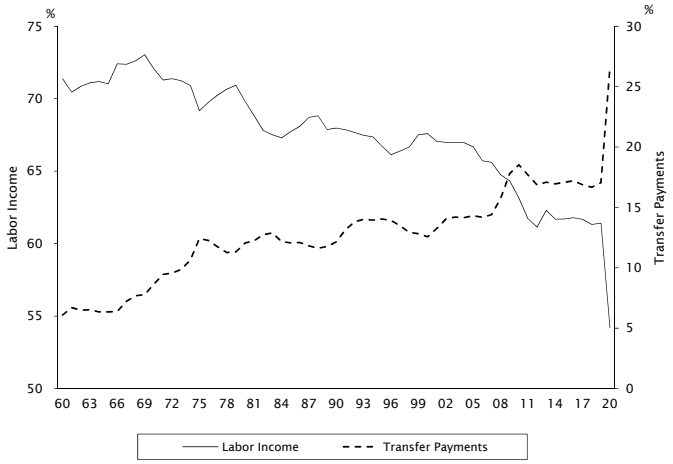
Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.
[1] Capitalization-weighted data. Drawn form the largest 1,500 stocks.

More Kool-Aid, Please!

The consumer derives income from many sources. Salaries and wages usually account for more than two-thirds of personal income, a share that's fallen dramatically in recent months as a result of the pandemic (see Exhibit 1). The government has stepped in to fill the void and they brought out some pretty big guns. Transfer payments have surged and in May they accounted for more than a quarter of total income. The virus however has not gone away and it'll take many months for a vaccine to be approved and commercialized. Investors are beginning to suspect that additional rounds of stimulus may be needed. The aim of this report is to understand how well the initial measures have worked and to assess what additional support may be needed to keep the U.S. consumer on track. In some ways it feels like financial markets and the political leadership are squaring off in a game of chicken. The markets may ultimately convince the Administration to refill the punch bowl but the next few months have the potential to be harrowing.

Personal income grew by +12% in April and +7% in May, not exactly what one might expect from the depths of a sharp recession (see Exhibit 2). Transfer payments from the government, include social security benefits, Medicare and the like, and while these have been growing over time due the aging of the population, they've been dwarfed in recent months by unemployment insurance and stimulus checks that've been needed to offset a decline in wages (see Exhibit 3).

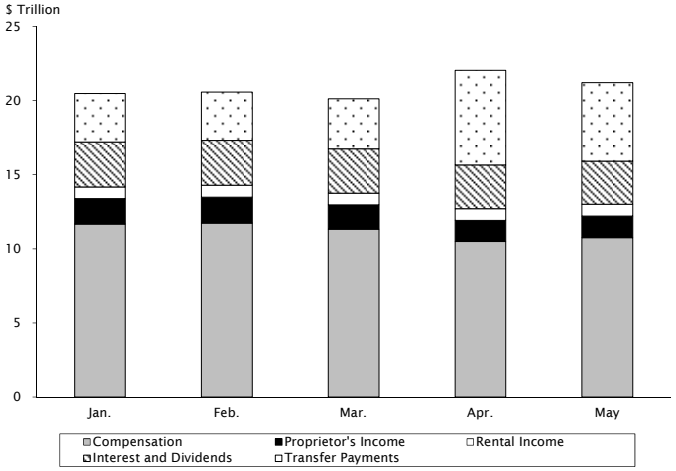
Exhibit 1: Labor Income and Transfer Payments[1]
Share of Personal Income
1960 Through May 2020



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Labor income excludes proprietors' income.

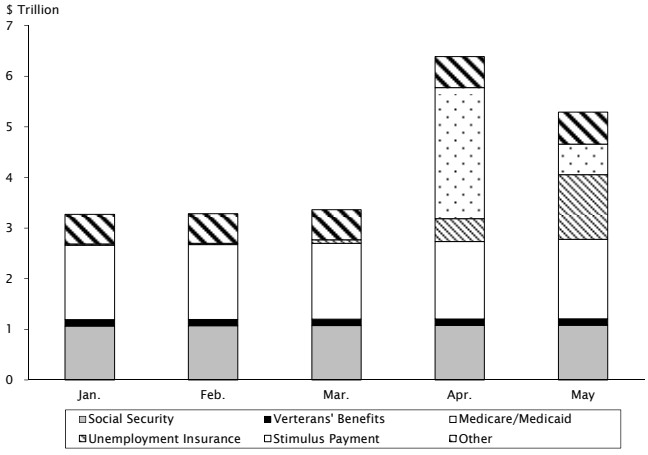
Exhibit 2: Sources of Personal Income
Contribution to Total[1]
January Through May 2020



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Annualized contribution.

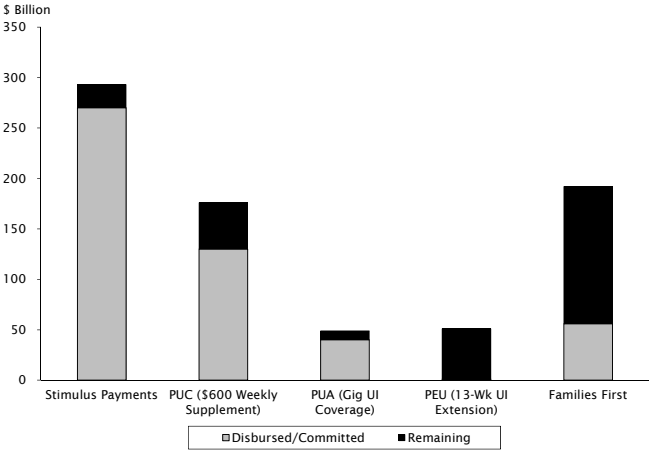
Exhibit 3: Transfer Payments
Contribution to Total[1]
January Through May 2020



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Annualized contribution.

Exhibit 4: Status of Consumer-Oriented Stimulus
Disbursements and Remaining Availability by Program
As of June 25th 2020

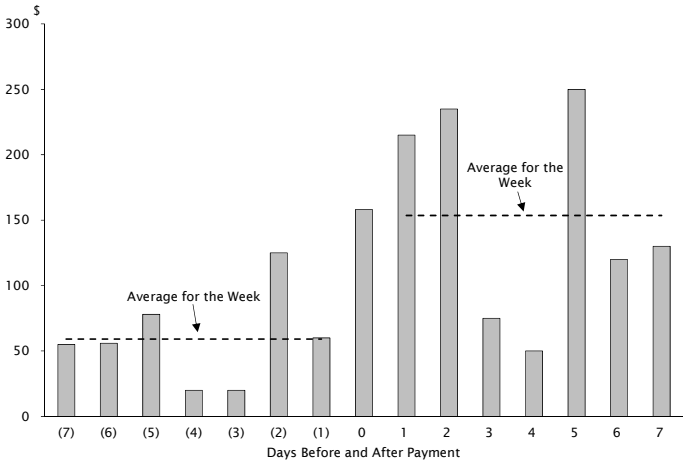


Source: Committee for a Responsible Federal Budget, Empirical Research Partners Analysis.

Where Did it Go…and When?

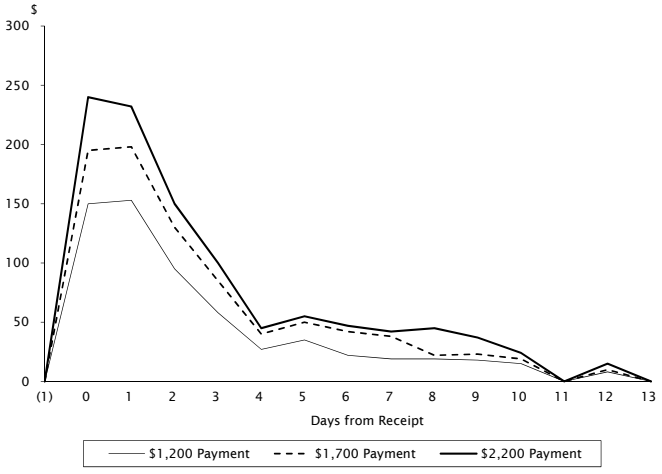
Stimulus checks amounted to a $300 billion bounty and they were disbursed and spent fairly quickly (see Exhibits 4 (overleaf) and 5). The data suggests that people with less than $500 in their bank accounts spent nearly half of their payment in 10 days' time, and most of that was directed to food, nondurables, rent and bill payments. Researchers at the Fed have come to a similar conclusion and they estimate people that live paycheck to paycheck spent two-thirds of the stimulus in two weeks (see Exhibit 6). They also tracked where and how the money was spent. Wal-Mart was the single biggest beneficiary with an 18% capture rate. Less was spent at Amazon commensurate with a smaller market share, though their gains were more evenly paced across the period (see Exhibit 7). Other companies like AT&T, Comcast and Verizon saw smaller and shorter spurts.

Exhibit 5: Consumption of Stimulus Payments
Mean Daily Spending Around Receiving Stimulus Payments
April Through Early-May 2020



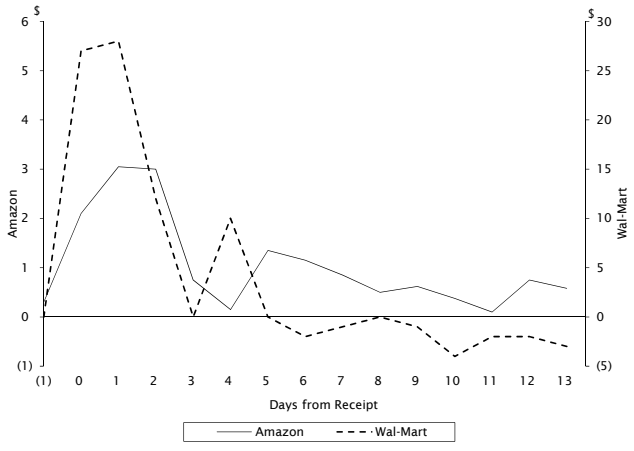
Source: Baker, S., Farrokhnia, R., Meyer, S., Pagel, M. and Constantine Yannelis, 2020. "Income, Liquidity and the Consumption Response to the 2020 Economic Stimulus Payments," NBER Working Paper No. 27097, May 2020, Empirical Research Partners Analysis.

Exhibit 6: Average Daily Spending Post-Stimulus by Type
Indexed to One Day Before Receipt
As of Late-April 2020



Source: Karger, E. and Aastha Rajan, 2020. "Heterogeneity in the Marginal Propensity to Consume: Evidence from Covid-19 Stimulus Payments," May 2020, Federal Reserve Bank of Chicago, Working Paper No. 2020-15, Empirical Research Partners Analysis.

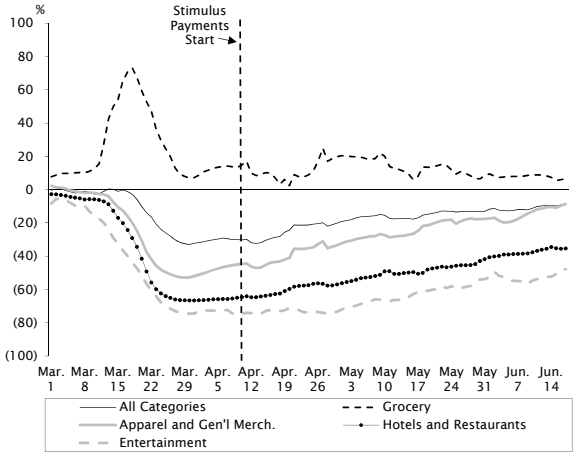
Exhibit 7: Average Daily Spending Post-Stimulus
at Amazon and Wal-Mart[1]
Indexed to One Day Before Receipt
As of Late-April 2020



Source: Karger, E. and Aastha Rajan, 2020. "Heterogeneity in the Marginal Propensity to Consume: Evidence from Covid-19 Stimulus Payments," May 2020, Federal Reserve Bank of Chicago, Working Paper No. 2020-15, Empirical Research Partners Analysis.

[1] For $1,200 recipients.

Exhibit 8: Spending by Category
Growth Relative to Pre-Covid Levels
(January 24, 2020 = 0)
March Through Late-June 2020

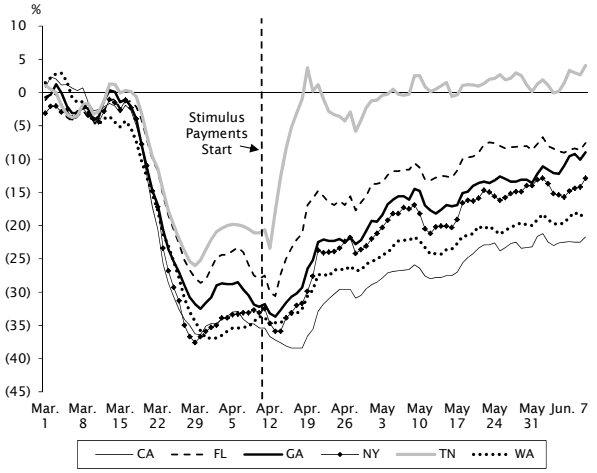


Source: Affinity, Empirical Research Partners Analysis.

We've analyzed data that tracks credit card payments on a daily basis and Exhibit 8 depicts how a handful of categories have fared since the pandemic began. The thin black line represents spending across all categories and its down by (9)% compared to pre-pandemic levels on a seasonally-adjusted basis. Spending on apparel and general merchandise saw the most pronounced rise after the stimulus checks were issued. Entertainment spending is down

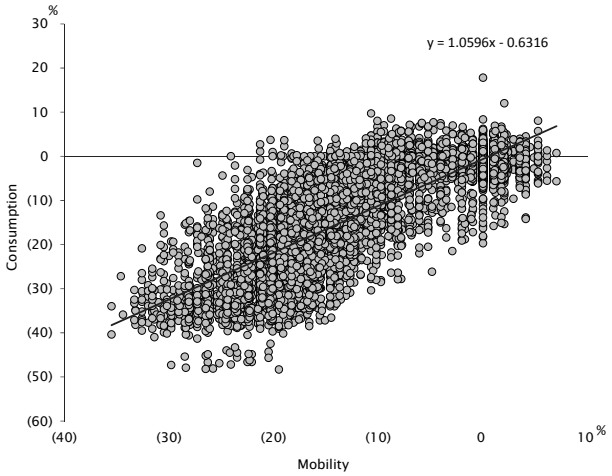
by half from pre-pandemic levels while restaurants and hotels are down by a third. There's some disparity across states depending on their exposure and reaction to the virus (see Exhibit 9). California, Washington and New York fared much worse than Tennessee and Florida. Varying rates of mobility across state lines and over time have played a big role in the consumption equation.

Exhibit 9: Consumer Spending During the Pandemic by State
Growth Relative to Pre-Covid Levels
(January 24, 2020 = 0)
March Through Mid-June 2020



Source: Affinity, Empirical Research Partners Analysis.

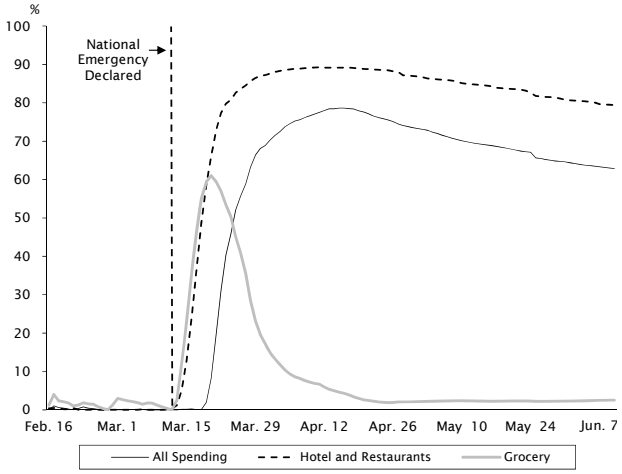
Exhibit 10: Consumption and Mobility
State-Level Change Indexed to January 2020
February 15th Through Mid-May 2020



Source: Google, Affinity, Empirical Research Partners Analysis.

We plot state-level spending on a daily basis against Google's mobility data in Exhibit 10 and the upward slope of the graph is hard to miss. The pattern has been intact since the national emergency was declared in the middle of April (see Exhibit 11). Changes in daily mobility seem to explain roughly two-thirds of the variation in overall spending and more like 80% of the movement in spending at restaurants and hotels. Grocery sales have moved inversely with mobility and aside from the initial phase of pantry loading, the category has been agnostic to changes in mobility. The grey bars in Exhibit 12 show that overall spending has been down by (15)% when mobility is below average. The declines are half as bad when movement is less constrained. Exhibit 13 graphs the differential between these two sets of occurrences. Grocery sales have been (4)% worse when people are moving about relatively freely. Other categories have seen a double-digit improvement in trends when that's the case. This dovetails with our analysis of the PCE data. Demand has been steady for things that've been accessible and it's plummeted for categories that've been inaccessible (see Exhibit 14). In recent months demand has been more sensitive to mobility than to income but at some point, income will rule the day (see Exhibit 15).

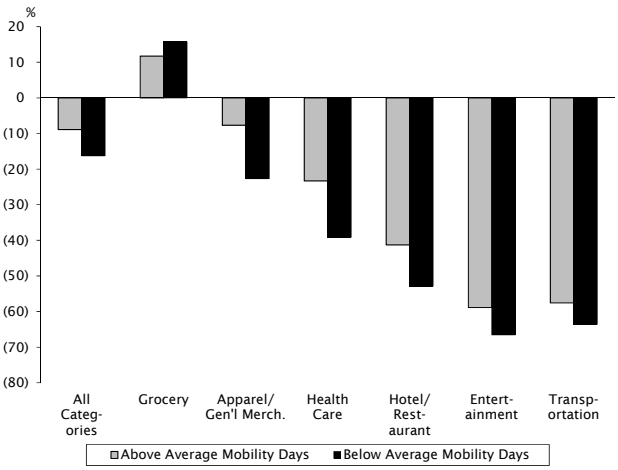
Exhibit 11: State-Level Consumption
Cumulative R-Squared with Mobility[1]
Mid-February Through Mid-June 2020



Source: Google, Affinity, Empirical Research Partners Analysis.

[1] State-level data smoothed initially on a 5-day basis.

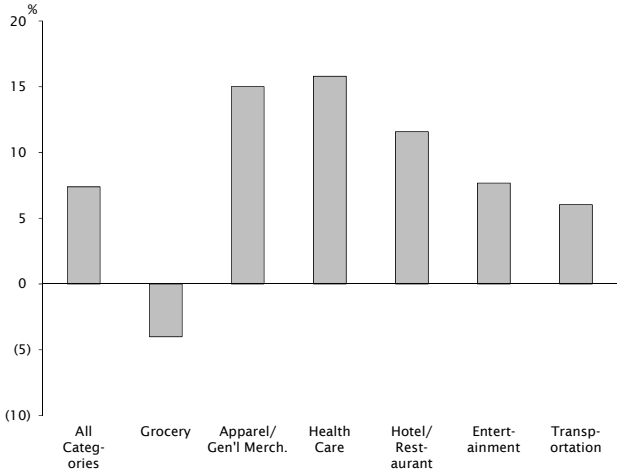
Exhibit 12: Consumption and Mobility by Category
Average Growth Rates Depending on Mobility[1]
May Through Mid-June 2020



Source: Google, Affinity, Empirical Research Partners Analysis.

[1] Growth relative to pre-Covid levels.

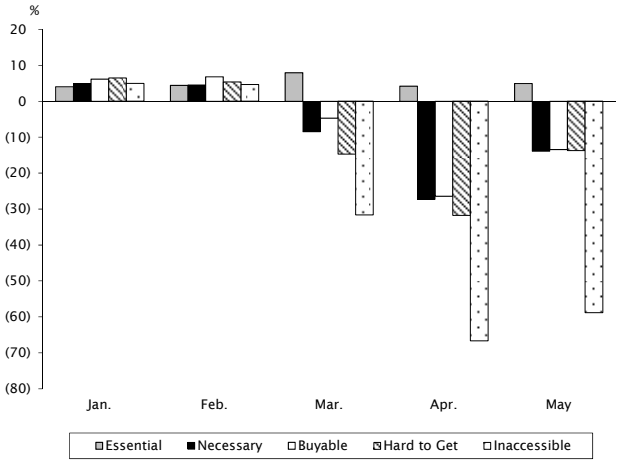
Exhibit 13: Consumption and Mobility by Category
Differential in Growth Rates Depending on Mobility[1]
May Through Mid-June 2020



Source: Google, Affinity, Empirical Research Partners Analysis.

[1] Growth relative to pre-Covid levels. Spread in periods with above average mobility less those with below average mobility.

Exhibit 14: Consumption Growth by Accessibility[1]
Year-over-Year Change
January Through May 2020



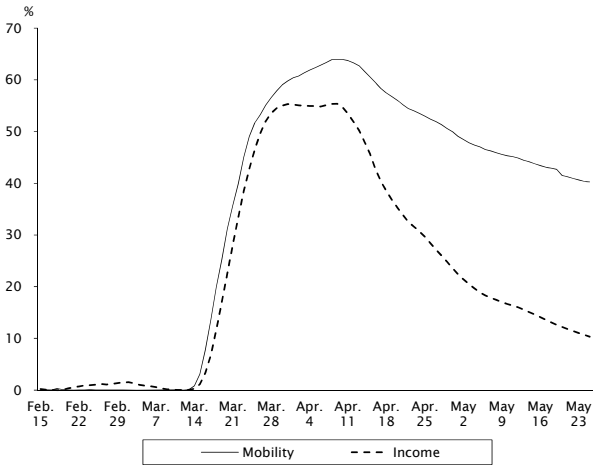
Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Essentials include food, drug, rent, alcohol and utilities. Necessary includes grooming, at-home entertainment and the like. Buyable includes home repair, car maintenance and some medical. Hard to get includes autos, furniture and clothing. Inaccessible includes live events, travel, full-serve restaurants and leisure.

Watch the Money

Government support was geared to propping up lower-income households and for good reason – that's where the job losses have mounted (see Exhibits 16 and 17). In that respect the stimulus appears to have had the desired effect. Checks were first deposited on or around April 9th and at that point spending was down by roughly (30)% across the income distribution (see Exhibit 18). From the pre-stimulus level spending by low-income households proceeded to improve by more than +20% while high-income households saw gains that were closer to +5% (see Exhibit 19). The two cohorts though are inextricably linked since high-income folks consume a disproportionate amount of services provided by low-income earners. In Exhibit 20 we show that the top two deciles of earners represent 40% of demand in the industries most affected by shutdowns but they supply only 5% of the labor to those industries. The bottom two deciles account for 60% of the labor and consume less than 10% of the goods and services. It makes sense that low-income earners have seen worse employment trends in high-income zip codes (see Exhibit 21). If the virus continues a resurgence the exposure of low-income jobs to high-risk industries could intensify, especially now that the benefit from stimulus payments have begun to wear off.

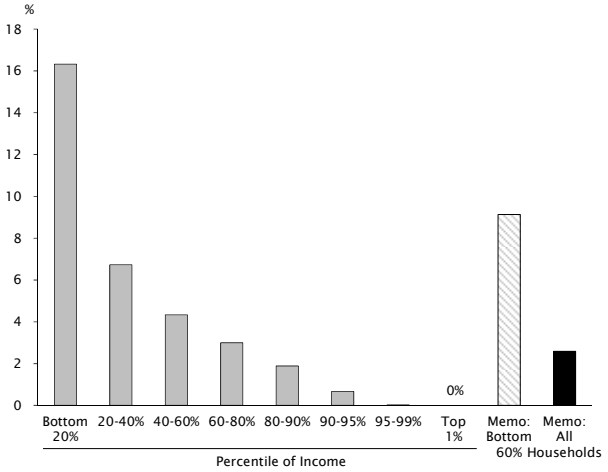
Exhibit 15: State-Level Consumption
Cumulative R-Squared with Income and Mobility[1,2]
Mid- February Through May 2020



Source: Affinity, Google, Earnin, Homebase, Empirical Research Partners Analysis.

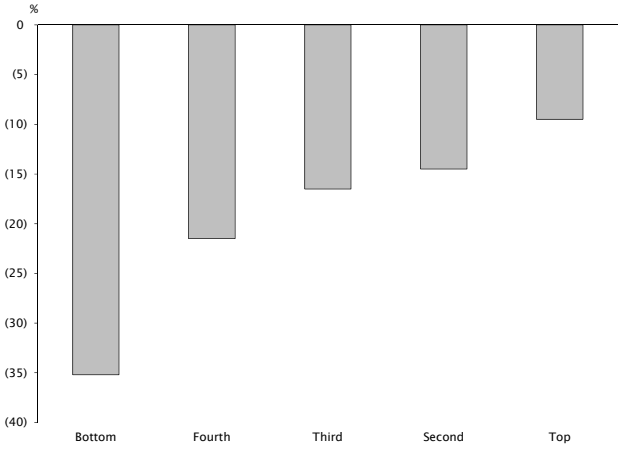
[1] State-level data smoothed initially on a 5-day basis.
[2] Spending and income for low- income households. Mobility for all households.

Exhibit 16: Distributional Effects of the Coronavirus Response Bill
Share of After-Tax Income
2020E



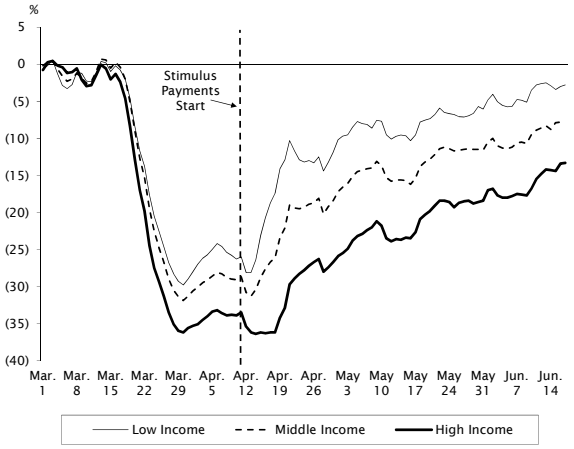
Source: Tax Foundation, Empirical Research Partners Analysis.

Exhibit 17: Employment Declines by Wage Quintile
Cumulative Change
February 15th Through April 25th 2020



Source: Cajner, T., Crane, L., Decker, R., Grigsby, J., Hamins-Peurtolas, A., Hurst, E., Kurz, C. and Ahu Yildirmaz, 2020. "The U.S. Labor Market During the Beginning of the Pandemic Recession," NBER Working Paper No. 27159, May 2020, Empirical Research Partners Analysis.

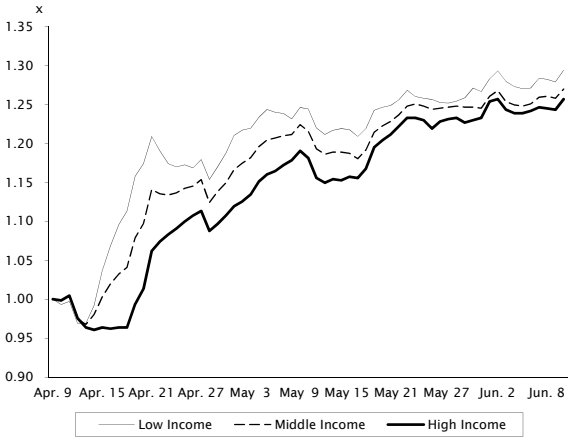
Exhibit 18: Spending by Income[1]
Growth Relative to Pre-Covid Levels
(January 24, 2020 = 0)
March Through Late-June 2020



Source: Affinity, Empirical Research Partners Analysis.

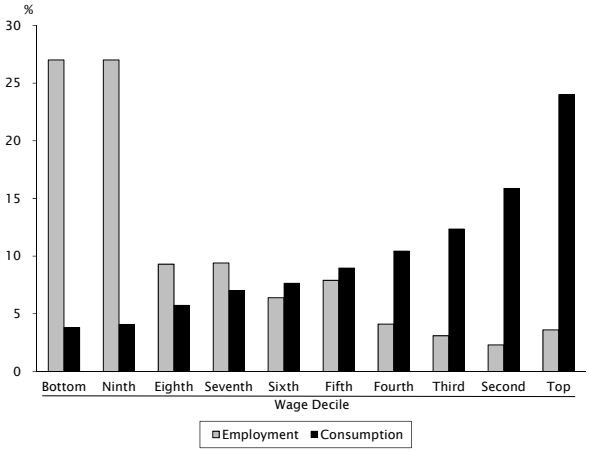
[1] Income levels based on zip code averages.

Exhibit 19: Consumer Spending and Covid-19 by Income Cohort
Change from Pre-Stimulus Level
Indexed to April 9th
Early-April Through Late-June 2020



Source: Affinity, Empirical Research Partners Analysis.

Exhibit 20: Industries Affected by Shutdowns[1]
Share of Employment and Consumption
by Wage Decile
2019



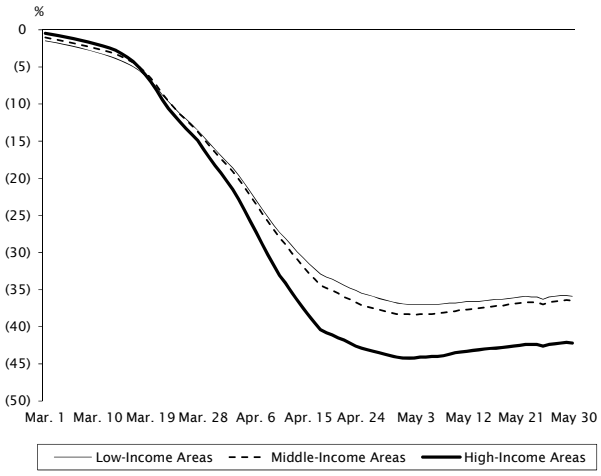
Source: Bureau of Labor Statistics, Empirical Research Partners Analysis.

[1] Sectors include restaurants, bars, entertainment, personal services, sensitive retail, travel and transportation and sensitive manufacturing.

In ordinary times, unemployment benefits are designed to replace half the income a person earned before being laid off. The CARES Act super charged the benefits though and researchers have estimated lower ends of the income distribution are currently earning a multiple of their pre-pandemic income even though they're unemployed (see Exhibit 22). The risk we see is that the Pandemic Unemployment Compensation (PUC) that's been doling out an incremental $600 per week in unemployment benefits is set to expire at the end of July (see Exhibit 23). At that point other aspects of the stimulus, including extended unemployment are likely to kick in but they wouldn't be nearly big enough to match the $600 weekly benefit that's slated to roll off. In our view the fate of that benefit will be important in determining what consumption looks like in the second half of the year.

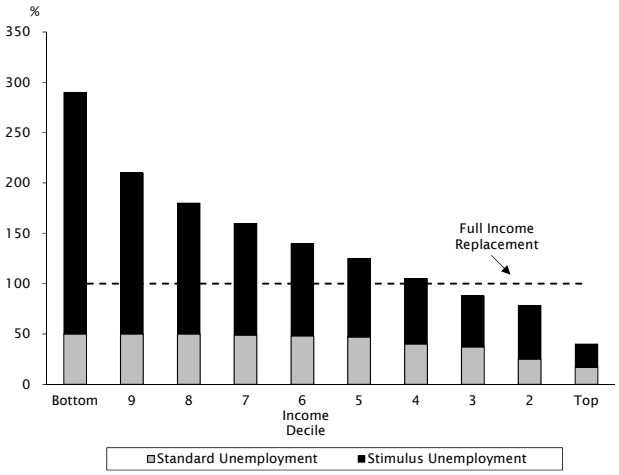
In most states standard unemployment checks last for 26 weeks and in most recessions that's enough to cover 60% of the unemployed population. The remaining 40% are unemployed long enough to exhaust that benefit, a share that swelled to nearly 60% during the Great Recession (see Exhibit 24). In that instance the government extended unemployment insurance multiple times, reaching a total of 99 weeks at its peak (see Exhibit 25). The extension of unemployment benefits has proven to be one of the most effective forms of stimulus over time. Household income falls by half when unemployment strikes and spousal income coupled with unemployment insurance only go so far (see Exhibit 26).

Exhibit 21: Low-Income Employment by ZIP Code Affluence
Change Relative to Pre-Covid Levels
(January 24, 2020 = 0)
March Through May 2020



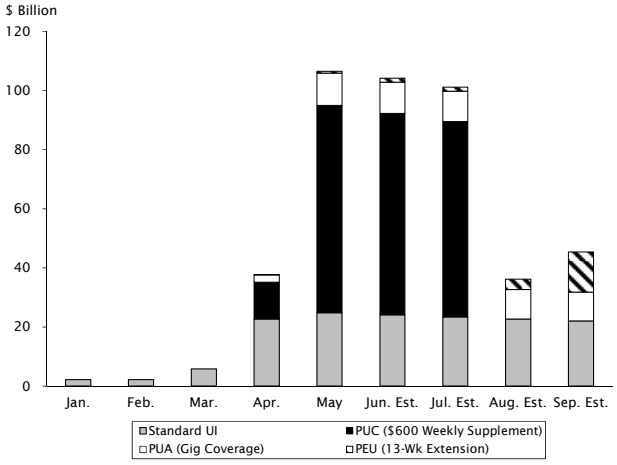
Source: tracktherecovery.org, Empirical Research Partners Analysis.

Exhibit 22: Unemployment Benefits by Income Decile
Share of Income Replaced Under the CARES Act
As of May 2020



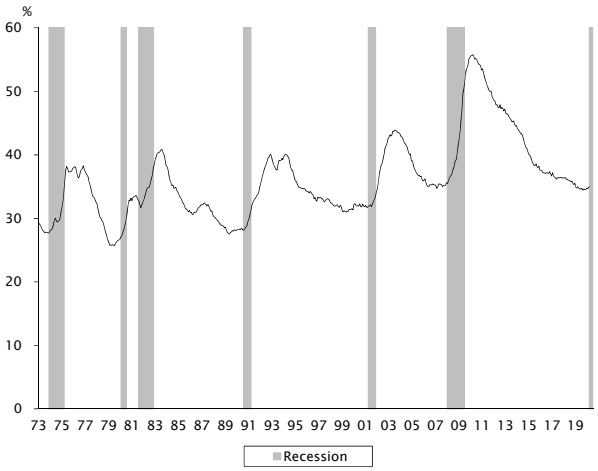
Source: Ganong, P., Noel, P. and Joseph S. Vavra, "US Unemployment Insurance Replacement Rates During the Pandemic,"2020, NBER Working Paper 27216, May, 2020, Empirical Research Partners Analysis.

Exhibit 23: Select Types of Transfer Payment Contributors to Personal Income
Nominal Monthly Dollars
January Through September 2020E



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

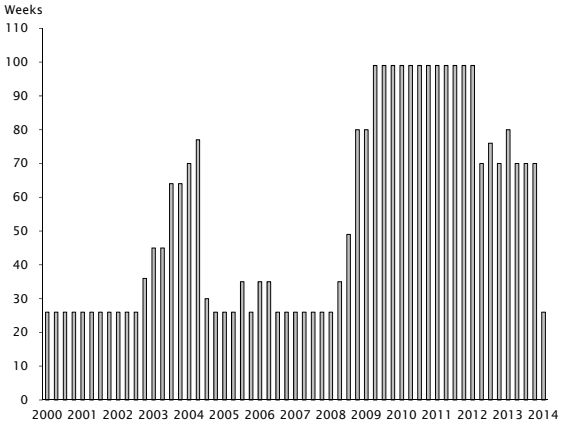
Exhibit 24: Unemployment Insurance Exhaustion Rate
1973 Through March 2020



Source: Department of Labor, Empirical Research Partners Analysis.

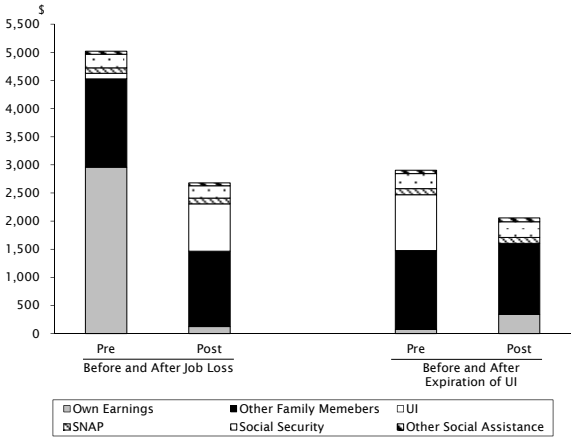
Researchers have estimated that spending on nondurable goods falls by only (5)% when someone loses a job, provided they are collecting unemployment insurance. The drop is more like (18)% when benefits run out (see Exhibit 27). Spending on travel and leisure fall more than average. Payments associated with student debt and credit cards are not that far behind, especially when unemployment insurance runs out. The risk however is mitigated by the fact that households with an unemployed person spend about half what the average household does and not all of them end up exhausting their benefits. The duration of unemployment may also look different this time around. Most people that've lost their jobs expect to be back to work within six months (see Exhibit 28). This assessment sounds optimistic but it's not entirely unreasonable if the pandemic proves to be more like a natural disaster than a classic business cycle (see Exhibit 29). When Hurricane Katrina struck, unemployment claims surged but didn't last long and spending patterns seemed to recover relatively quickly (see Exhibit 30). The recent flare-ups in COVID-19 cases will probably extend the downturn but we think there's reason to suspect a recovery can resemble a natural disaster as much as a typical business cycle.

Exhibit 25: Unemployment Benefit Duration
Maximum Availability
2000 Through 2014



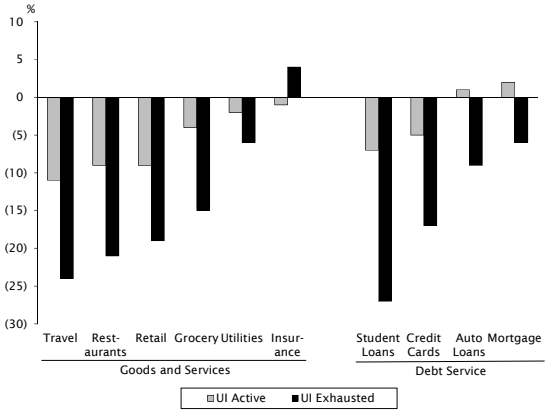
Source: Rothstein, J. and Robert Valletta, 2017. "Scraping By: Income and Program Participation After the Loss of Extended Unemployment Benefits, April 2017, Federal Reserve Bank of San Francisco, Working Paper 2014-06, Empirical Research Partners Analysis.

Exhibit 26: Composition of Monthly Household Income for the Unemployed
Before and After Job Separation
Before and After Expiration of Unemployment Insurance



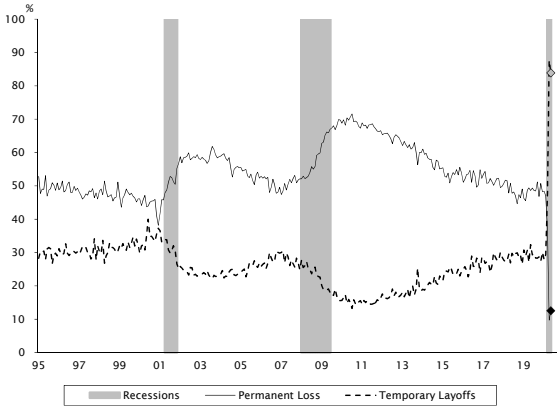
Source: Rothstein, J. and Robert Valletta, 2017. "Scraping By: Income and Program Participation After the Loss of Extended Unemployment Benefits, April 2017, Federal Reserve Bank of San Francisco, Working Paper 2014-06, Empirical Research Partners Analysis.

Exhibit 27: Spending During Unemployment
Change in Expenditures and Debt Service
Depending Upon Unemployment Insurance Status
2014 Through 2016



Source: Farrell, D., Ganong, P., Greig, F. and Pascal Noel, 2016. "Recovering from Job Loss: The Role of Unemployment Insurance," J.P. Morgan Institute, September, 2016, Empirical Research Partners Analysis.

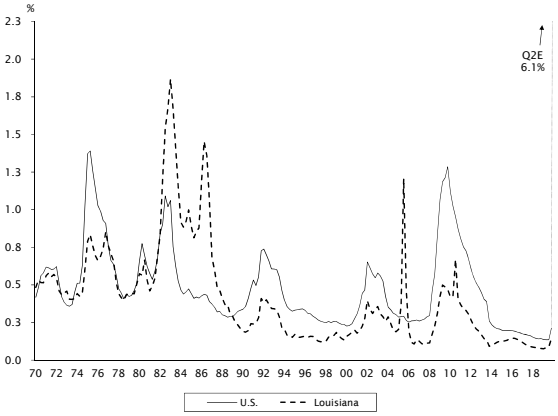
Exhibit 28: Job Losses
Share Citing Temporary Layoffs and Permanent Loss[1]
1977 Through May 2020



Source: Bureau of Labor Statistics, Empirical Research Partners Analysis.

[1] Does not include people completing temporary jobs.

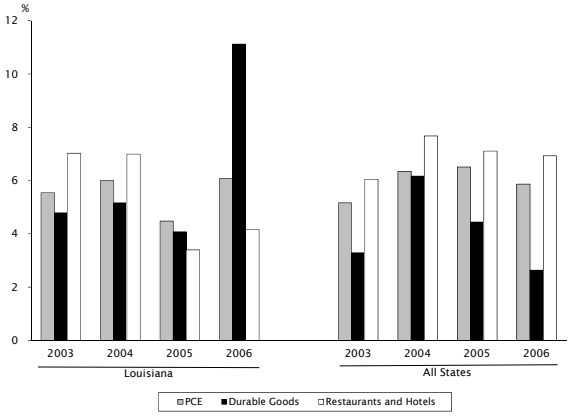
Exhibit 29: Unemployment Insurance in the U.S. and Louisiana
Share of Personal Income[1]
1970 Through Q1 2020



Source: Bureau of Labor Statistics, Empirical Research Partners Analysis.

[1] Share of national and Louisiana personal income.

Exhibit 30: Louisiana Personal Consumption
Year-over-Year Growth
2003 Through 2006

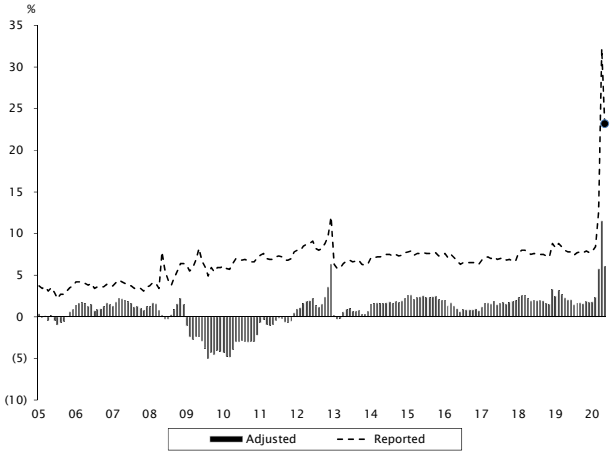


Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

Will a Savings Glut Help Smooth Consumption?

Some believe that the savings rate will help to smooth out consumption even after the stimulus has begun to roll off. We're a bit less confident in this logic though for a number of reasons. First, the reported savings rate has been more misleading than normal since it annualizes stimulus-related income even though many aspects of the program aren't slated to last a full year (see Exhibit 31). The way we see it, the savings rate was more like 12% in April and 6% in May. These are 20 percentage points below the reported figures though they're ~5 points higher than the comparable figures seen in the prior year. We think that's largely due to the fact that roughly 10% of consumption has been inaccessible to the pandemic. Mathematically, the excess savings is large and could offer up to $200 billion of firepower for the consumer if pent-up demand seen over the past three months is unleashed in the back half of the year (see Exhibit 32). On its own this would be enough to offset the lost $600 in unemployment insurance but the difference is in the distribution. People in the bottom 60% of the income distribution have probably not benefitted much from reduced spending on hotels, restaurants and airfare so we doubt they're suddenly flush with savings (see Exhibit 33). Excess savings have probably accrued to households that need it the least. Some of these folks might also need to repay the equivalent of a $300 billion bridge that arose from an extension of tax payments (see Exhibit 34). Lower-income households typically get tax refunds when they file so there's no incentive for the them to delay tax filings. Our math suggests they're likely to see $30 billion in additional refunds as administrative delays are ironed out but in the past rebates have tended to be spent quickly (see Exhibit 35).

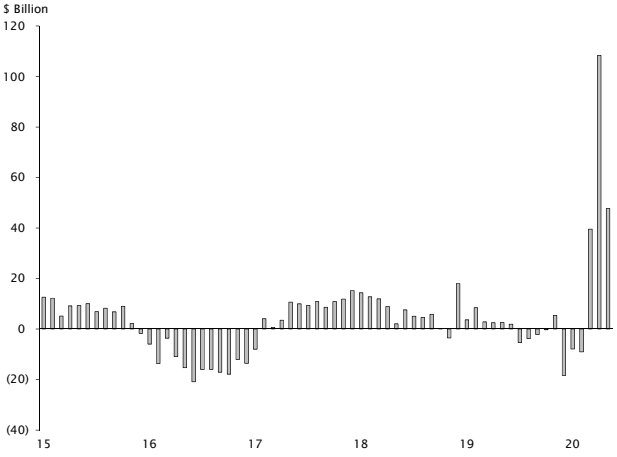
Exhibit 31: Savings Rate
Share of Disposable Income With and Without Transfer Payments[1]
2005 Through May 2020



Source: Bureau of Economic Analysis, Empirical Research Partners.

[1] Adjustment reflects personal income excluding government transfer payments less personal outlays.

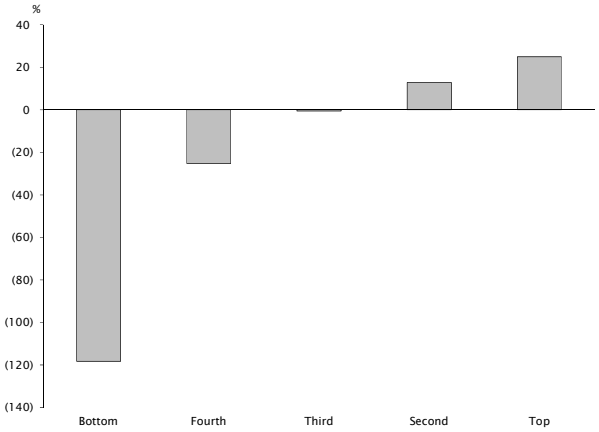
Exhibit 32: Personal Savings Adjusted for Transfer Payments[1]
Dollar Change from the Previous Year[2]
2015 Through May 2020



Source: Bureau of Economic Analysis, Empirical Research Partners.

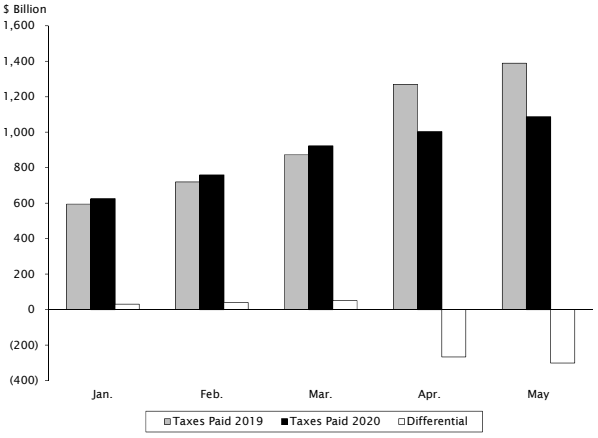
[1] Adjustment reflects personal income excluding government transfer payments less personal outlays.
[2] Annualized data divided by 12 to approximate monthly trends.

Exhibit 33: Average Savings Rate by Income Quintile
2014 Through 2018



Source: Bureau of Labor Statistics: Consumer Expenditure Survey, Empirical Research Partners Analysis.

Exhibit 34: Individual Income Tax Receipts
Fiscal Year-to-Date
2019 Through May 2020

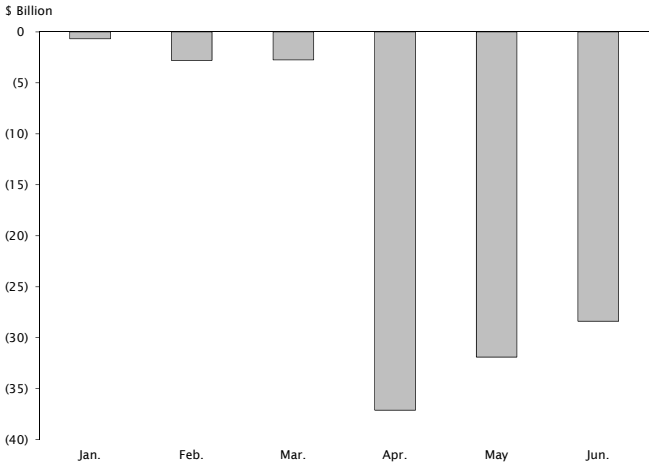


Source: U.S. Treasury, Empirical Research Partners Analysis.

Conclusion: Consumer Discretionary Stocks May Not Be the Best Way to Play the Game of Chicken

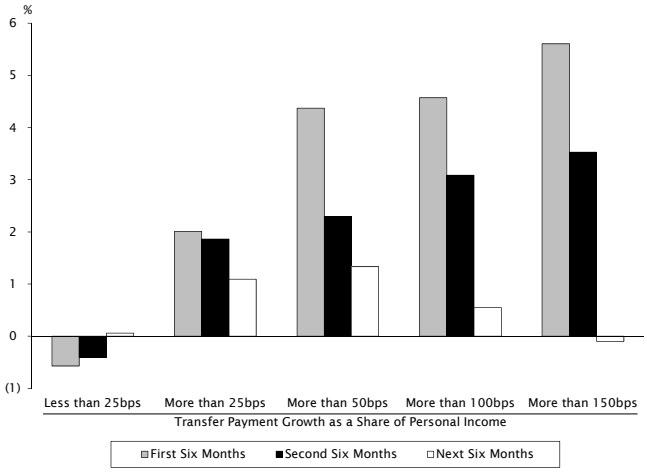
The pandemic is proving to be resilient at about the same time as enhanced unemployment benefits are set to expire and stimulus checks are in the rear-view mirror. We suspect the government will ultimately agree on a new package – it is an election year after all - but the clock is ticking and it may take another bout of market anxiety to coax the political leadership into action. In the past consumer discretionary stocks have responded well to government assistance. The sector has outperformed the broader market when transfer payments have grown as a share of personal income (see Exhibit 36). Those gains have scaled with the size of the stimulus but they've tended to fade as time passes. Transfer payments are up more significantly now than they've ever been but the past six months have also seen outsized performance from consumer discretionary stocks (see Exhibit 37). Our assessment of the situation is that we're likely to see another round of stimulus but we're not sure the upside in consumer discretionary stocks is worth engaging in a harrowing game of chicken. We take a slightly more conservative posture in our Consumer Lens portfolio as a result of the analysis in this report (see Exhibit 38).

Exhibit 35: Tax Refunds
Season-to-Date Difference from the Previous Year
January Through Late-June 2020



Source: Empirical Research Partners Analysis.

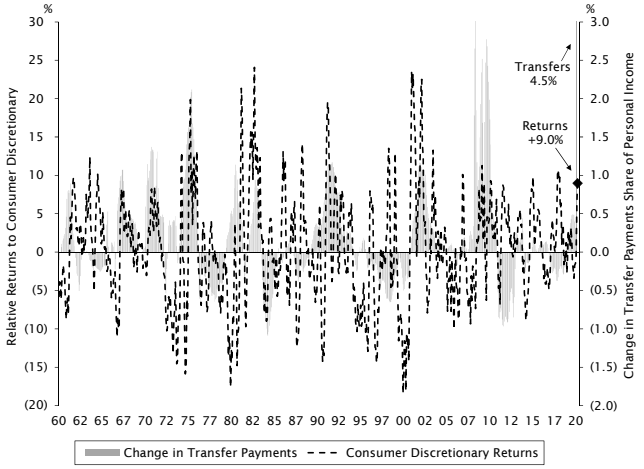
Exhibit 36: Consumer Discretionary Stocks[1]
Relative Forward Returns Over Various Holding Periods Depending on Government Transfer Payments[2]
Monthly Data Compounded
1970 Through May 2020



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Drawn from the largest 1,500 stocks. Capitalization-weighted.
[2] Change in transfer payments as a share of personal income smoothed on a three-month basis.

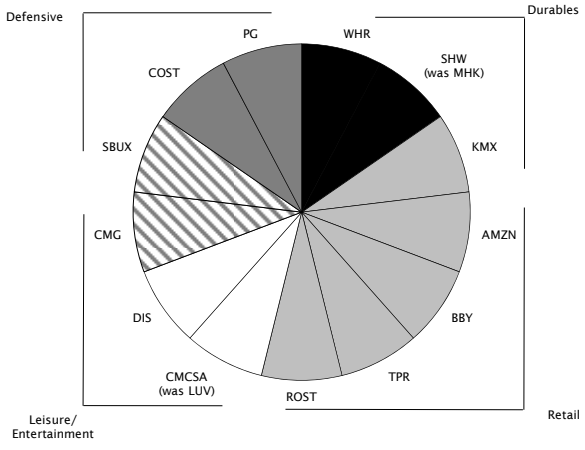
Exhibit 37: Consumer Discretionary Stocks and Transfer Payments[1]
Forward Relative Six-Month Returns
and the Change in Share of Personal Income
1960 Through April 2020



Source: Bureau of Economic Analysis, Empirical Research Partners Analysis.

[1] Capitalization-weighted data. Drawn form the largest 1,500 stocks.

Exhibit 38: The Consumer Lens
Positions by Theme
As of Late-June 2020



Source: Empirical Research Partners Analysis. Drawn from the largest 1,500 stocks.

Appendix 1: Large-Capitalization Consumer Stocks
Worst Decile of the Failure Model
Sorted By Market Capitalization Within Sector
As of Late-June 2020

Decile Ranks (1=Best; 10=Worst)

			Valuation					Capital Deployment and Earnings Quality							Market Reaction															
					Normalized:			Capital Deployment and Financing				Earnings Quality											Interactions of:			Market Structure				
Symbol	Company	Price	Gross Cash Flow Yield	Free Cash Flow-to-Enterprise Value	Free Cash Flow Yield	P/E Ratio	Price-to-Book Ratio	Capital Spending Growth	Capital Spending -to-Depreciation	Inventory Growth	Change in Common Shares Outstanding	Free Cash Flow Margin	Change in Net Non-Current Assets	10-K/Q Disclosure Model	Arbitrage Risk (1=Lowest 10=Highest)	Downside Risk	Nine-Month Price Trend	Share Turnover	Technical Indicator	Media Sentiment	News Intensity	Supernovas & Nine-Month Price Trend	Stability of Earnings Growth & Arbitrage Risk	Downside Risk & Down Day Volume	Short Pressure	Sector ETF Flows and Equivalent Volume	Core Model	**Failure Model Rank**	Market Capitalization ($ Billion)
Consumer Cyclicals:																														
Consumer Durables																														
HAS	HASBRO INC	$70.61	5	5	5	3	6	5	3	3	10	5	10	10	7	8	10	4	7	9	3	7	5	8	8	4	9	**10**	$9.7
Retail and Other Consumer Cyclicals																														
SBUX	STARBUCKS CORP	$71.57	9	9	3	na	10	3	7	6	2	8	10	9	2	3	8	3	3	10	1	3	1	6	7	5	9	**10**	$83.6
TJX	TJX COS INC (THE)	49.54	10	9	7	6	9	4	6	5	4	9	6	10	5	6	5	5	1	7	6	6	3	2	3	5	9	**10**	59.3
ROST	ROSS STORES INC	83.75	9	9	6	6	9	9	8	4	3	9	7	10	7	6	8	2	1	10	6	8	4	4	2	5	10	**10**	29.8
BURL	BURLINGTON STORES INC	194.43	8	8	7	3	10	5	7	1	5	8	8	9	6	8	3	9	1	10	4	6	5	5	7	4	8	**10**	12.8
RCL	ROYAL CARIBBEAN CRUISES LTD	46.41	1	10	4	2	2	10	10	8	6	10	7	7	10	10	10	10	5	10	1	10	8	10	10	3	5	**10**	9.7
DRI	DARDEN RESTAURANTS INC	72.95	5	8	3	5	6	5	6	5	4	8	10	6	9	10	8	10	9	6	1	9	7	10	4	4	9	**10**	9.5
WYNN	WYNN RESORTS LTD	69.05	6	9	10	1	8	1	6	10	7	10	4	10	9	9	8	10	1	9	7	9	7	8	9	3	7	**10**	7.4
MTN	VAIL RESORTS INC	176.19	6	6	4	7	7	6	2	9	6	5	9	9	8	3	8	8	3	10	4	8	7	6	8	3	9	**10**	7.1
BFAM	BRIGHT HORIZONS FAMILY SOLTN	110.26	8	7	7	8	8	5	6	na	7	6	6	8	8	9	8	7	3	8	9	8	5	10	4	3	9	**10**	6.4
FIVE	FIVE BELOW INC	103.56	9	10	9	5	8	8	10	10	5	9	10	7	7	9	6	9	1	7	6	8	5	10	9	4	10	**10**	5.8
SERV	SERVICEMASTER GLOBAL HLDGS	35.17	8	6	6	1	4	2	1	2	3	6	1	8	10	9	10	9	10	9	6	10	9	10	2	3	6	**10**	4.6
SKX	SKECHERS U S A INC	29.29	5	8	4	3	4	10	9	10	7	9	8	7	4	7	7	9	4	10	7	5	4	3	5	2	5	**10**	4.6
UAA	UNDER ARMOUR INC	9.11	7	8	9	8	5	4	2	7	8	9	2	10	9	9	10	10	2	9	2	9	7	10	9	4	6	**10**	4.1
NCLH	NORWEGIAN CRUISE LINE HLDGS	15.28	1	10	9	1	2	8	10	4	5	10	2	10	10	10	10	10	7	10	1	10	9	8	10	3	4	**10**	3.9
Consumer Staples																														
DEO	DIAGEO PLC	$133.46	7	6	6	7	8	7	8	7	2	3	6	na	1	1	8	1	2	10	9	1	na	5	10	2	10	**10**	$79.0
EL	LAUDER (ESTEE) COS INC -CL A	184.14	8	7	7	8	9	7	7	9	5	4	10	6	3	3	5	7	3	2	2	2	2	6	3	5	10	**10**	66.3
BF.B	BROWN FORMAN CORP	61.00	9	8	9	7	9	5	7	8	7	3	4	3	4	2	5	2	1	9	3	3	3	1	9	6	10	**10**	29.2
SYY	SYSCO CORP	52.30	5	5	4	8	9	9	7	8	4	9	7	8	6	9	8	6	3	3	6	8	4	5	3	4	7	**10**	26.5
HRL	HORMEL FOODS CORP	48.21	8	7	8	6	7	6	9	6	7	6	7	9	2	1	4	3	10	6	7	4	1	1	10	5	10	**10**	26.0
BYND	BEYOND MEAT INC	141.68	10	10	10	10	10	9	10	10	10	10	9	na	10	9	3	10	1	4	1	9	10	9	10	2	10	**10**	8.8
BG	BUNGE LTD	40.22	10	10	10	9	2	4	3	3	7	9	1	3	7	6	9	7	8	9	2	8	9	8	3	1	9	**10**	5.7
CASY	CASEYS GENERAL STORES INC	142.60	3	8	9	4	6	5	8	2	7	9	7	9	3	4	6	3	2	7	2	1	3	2	8	7	9	**10**	5.2
USFD	US FOODS HOLDING CORP	19.10	3	5	5	3	2	7	2	8	8	9	9	1	10	10	10	9	6	7	6	10	10	10	4	3	5	**10**	4.2
PFGC	PERFORMANCE FOOD GROUP CO	27.88	9	9	6	3	4	4	2	10	10	9	10	8	10	10	5	9	10	6	7	10	10	8	3	3	9	**10**	3.7

Source: Empirical Research Partners Analysis.