

Q3

Economic & Market Review
Third Quarter 2020

Economic Review

Third Quarter 2020

Sharp Rebound, but Waning Momentum

US GDP plunged roughly 7% in the second quarter, the sharpest contraction since records began in 1947. With the easing of lockdowns, expectations for third quarter absolute growth are around 7%, which would be the largest quarterly increase on record, but would still leave GDP below pre-pandemic levels. Fourth quarter estimates have already been revised downward and actual performance will depend on the course of the virus, as well as any federal stimulus still to come.

Employment growth slowed more than expected in September, adding the fewest jobs since the recovery started in May. The unemployment rate dropped to 7.9% but that number fails to account for so-called “discouraged workers” who are not considered part of the current workforce. More than 25 million people, or about 15% of the workforce, collected unemployment benefits in September.

Manufacturing activity expanded for the fourth straight month in September but slowed from its August pace. New orders were down last month as the effects of this summer’s fiscal stimulus began to fade. Manufacturing employment showed some improvement, but the sector remains in contraction territory.

Fed Sees Low Rates for a Long Time

The Fed vowed to support the economic recovery with low interest rates and other measures, as necessary.

The central bank signaled a new, more inflation-tolerant policy. The Fed will now treat its 2% inflation target as an average over time, rather than a ceiling. This means it will now wait longer before raising short-term interest rates.

Consequently, **the Fed is considered unlikely to raise rates before 2023.**

Economic Review

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Economies Abroad Recovering, Brace for a Second Wave

The euro area economy contracted 11.8% over the second quarter, its steepest drop on record, as social distancing measures devastated consumer spending and exports. Spain's economy was hit hardest, contracting 18.5%.

While Europe is showing some positive economic momentum, **new outbreaks are jeopardizing the recovery** as member countries consider further lockdown measures.

Japan's economy shrank 7.8% in the second quarter, its third consecutive quarter of contraction as the pandemic continues to weigh on activity. On a positive note, Japan has controlled infection rates better than its western peers, permitting less severe restrictions on its populace.

China Forges Ahead; India and Brazil Struggle Following Lockdowns

China's economic recovery continues to build, with retail sales growth and increased domestic travel. Infrastructure spending and industrial production both picked up in August. The primary growth concerns are further US trade conflicts and a second wave of Covid cases this winter.

India's economy was battered by lockdown measures, leading to the sharpest quarterly GDP decline on record. Some growth momentum is returning, but a resurgence of Covid cases continues to hamper the recovery.

Social distancing measures to control Covid **caused Brazil's economy to shrink substantially in the second quarter**, with unemployment rising and household spending plunging. Despite some recent positive signs in manufacturing and retail sales, a prolonged battle with the virus is still the main challenge.

Market Review: Stocks

Third Quarter 2020

Stocks Move Higher Despite Covid Concerns, Supported by Signs of Economic Recovery

After rebounding sharply in the second quarter, **stocks continued to push higher in Q3 as the beginnings of an economic recovery appeared to take hold.** Continued accommodative monetary policies also supported equity markets.

US large cap stocks, as measured by the S&P 500 stock index, **rose 8.9% in the third quarter**, erasing year-to-date losses and briefly eclipsing their pre-Covid February highs before retreating in September. **US large caps are now up 5.6% year-to-date**, a remarkable achievement considering many parts of the economy remain closed or significantly hampered by the pandemic.

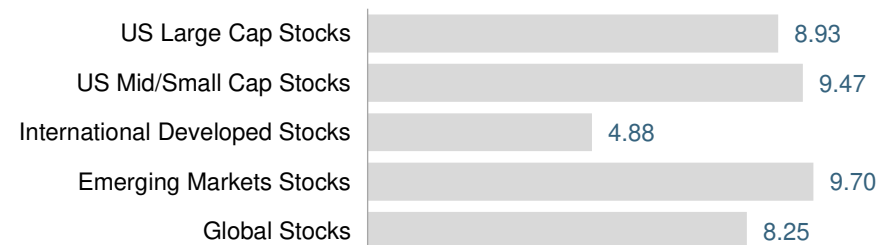
Mid and small cap US stocks, as measured by the Wilshire 4500 index, **modestly outperformed large caps on the quarter**, rising 9.5%. They remain somewhat behind large caps for the year, however, having risen 2.9% in 2020. This reflects the reality that the largest companies—online-economy giants like Amazon and Apple—have been the biggest beneficiaries of the pandemic-induced shift towards online work and shopping.

All US sectors rose in the third quarter, except for energy (see our alternatives section for more on that). **The largest gains were made in Consumer Discretionary** (up 15.3%), **Materials** (up 13.5%) and **Industrials** (up 12.5%), consistent with expectations of economic recovery. The Technology sector had another strong quarter, up 12.0%, and now up 28.7% for the year.

International developed stocks (up 4.9%) **also moved higher** but fell short of the surge seen in US equities. **Emerging markets did better** (up 9.7%) **as many Asian countries (including China) have had success containing the spread of Covid.** Year-to-date, developed stocks (down 6.7%) are still trying to regain lost ground, while emerging markets (down 0.9%) are almost there.

Market volatility declined a bit on the period, with the VIX volatility index dropping from 30.4 at the end of June to 26.4 at quarter-end. Forecasts suggest the potential for elevated market volatility in the weeks following Election Day.

Returns for the Quarter (%)



Period Returns (%)

Asset Class	YTD	1 Year	3 Years*	5 Years*
US Large Cap Stocks	5.57	15.15	12.28	14.15
US Mid/Small Cap Stocks	2.88	11.81	7.69	11.41
International Developed Stocks	-6.73	0.93	1.11	5.77
Emerging Markets Stocks	-0.91	10.91	2.79	9.37
Global Stocks	1.77	11.00	7.68	10.90

Past performance is not a guarantee of future results. Returns for periods longer than one year are annualized. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Large Cap (S&P 500 Index), US Mid/Small Cap (Wilshire 4500 Completion Index), International Developed (MSCI Europe Australasia Far East Index), Emerging Markets (MSCI Emerging Markets Index), and Global Stocks (MSCI All Country World Index). Growth of \$1,000 chart market segmentations as follows: US Stocks (Wilshire 5000 Index) and Foreign Stocks (All Country World Index ex US)

Market Review: Bonds

Third Quarter 2020

Bonds Move Modestly Higher as Fed Signals Interest Rates Likely to Remain Low Till 2023

Having slashed interest rates earlier in the year, **the Federal Reserve said it expects to keep short-term rates near historic lows for the foreseeable future.** The Fed indicated that going forward they will be more tolerant of inflation rates above their long-term 2% target.

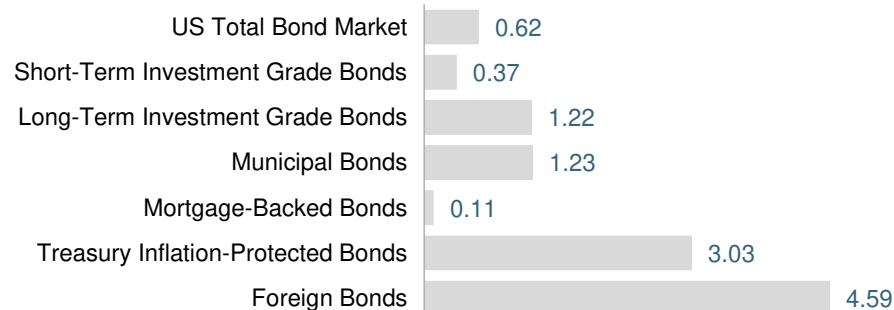
Despite this, government bond yields were largely unchanged, with the 10-Year US Treasury bond yield rising from 0.66% at the end of June to 0.69% at quarter-end. Short rates did grind a bit lower, with the 3-month T-bill yield falling from 0.16% to 0.10%. For the year, yields are down markedly from their pre-Covid levels.

Nearly all other bond sectors rose, with the Bloomberg Barclays Aggregate Bond index (the most widely tracked bond index in the US) rising 0.6%. Year-to-date, US bonds are up 6.8%, slightly outperforming US stocks, which understandably have received the lion's share of investor attention in their roller coaster year.

Consistent with an improving economy, **high yield bonds continued their recovery,** rising 4.6% in the third quarter and now up 0.6% for the year. **Treasury Inflation-Protected Securities (TIPS)** also moved higher in Q3 (up 3.0%) and **are among the 2020's best performing bond sectors** (up 9.2%).

This suggests investors are expecting higher inflation down the road, perhaps as a consequence of the Fed's extraordinarily accommodative monetary policy.

Returns for the Quarter (%)



Period Returns (%)

Asset Class	*Annualized			
	YTD	1 Year	3 Years*	5 Years*
US Total Bond Market	6.79	6.98	5.24	4.18
Short-Term Investment Grade Bonds	4.36	4.88	3.47	2.59
Long-Term Investment Grade Bonds	14.20	12.92	10.21	8.78
Municipal Bonds	3.33	4.09	4.28	3.84
Mortgage-Backed Bonds	3.62	4.36	3.68	2.98
Treasury Inflation-Protected Bonds	9.22	10.08	5.79	4.61
Foreign Bonds	5.68	5.60	3.54	3.89

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Market Review: Alternatives

Third Quarter 2020

Gold Marches Higher as REIT Recovery Stalls; Commodities Make Gains, but Energy Plummets

Along with technology stocks, gold has been one the best investments in 2020, with the precious metal rising 6.7% in Q3 and 26.7% year-to-date. The pandemic has spurred investor interest in gold, with it serving a dual purpose as a store of value during turbulent times and a hedge against the possibility of future inflation.

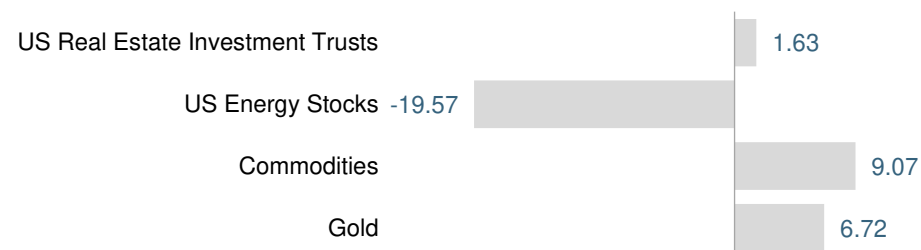
REITs, in contrast, have suffered in the pandemic. Despite rising a modest 1.6% on the period, REITs are down 17.1% year-to-date as commercial and retail properties have been hard hit by shuttered businesses and missed rent payments. This sector could be ripe for a rebound if economic recovery continues to take hold and a vaccine becomes more widely available in coming months.

Commodities rebounded (Bloomberg Commodity Index up 9.1%), **aided in part by weakness in the US dollar.** Livestock and agriculture were the best performing components, and industrial metals, led by steel, iron, ore and zinc, also posted strong gains.

Energy investments continued their rollercoaster ride in 2020, dropping 19.6% in the third quarter. For the year-to-date, the energy sector has shed almost half its value, having declined 47.7%. Interestingly, crude oil prices were mostly unchanged in the third quarter, suggesting some of the sector's

decline may be attributable to increased competition from renewables. It's also likely the price of oil is being managed by reducing supply in the face of decreased demand, impacting energy revenues and profits.

Returns for the Quarter (%)









Period Returns (%)

Asset Class	YTD	1 Year	* Annualized	
			3 Years*	5 Years*
US Real Estate Investment Trusts	-17.12	-17.76	0.31	3.99
US Energy Stocks	-47.66	-44.70	-20.10	-9.50
Commodities	-12.08	-8.20	-4.18	-3.09
Gold	26.72	29.93	14.58	11.99

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Market Summary

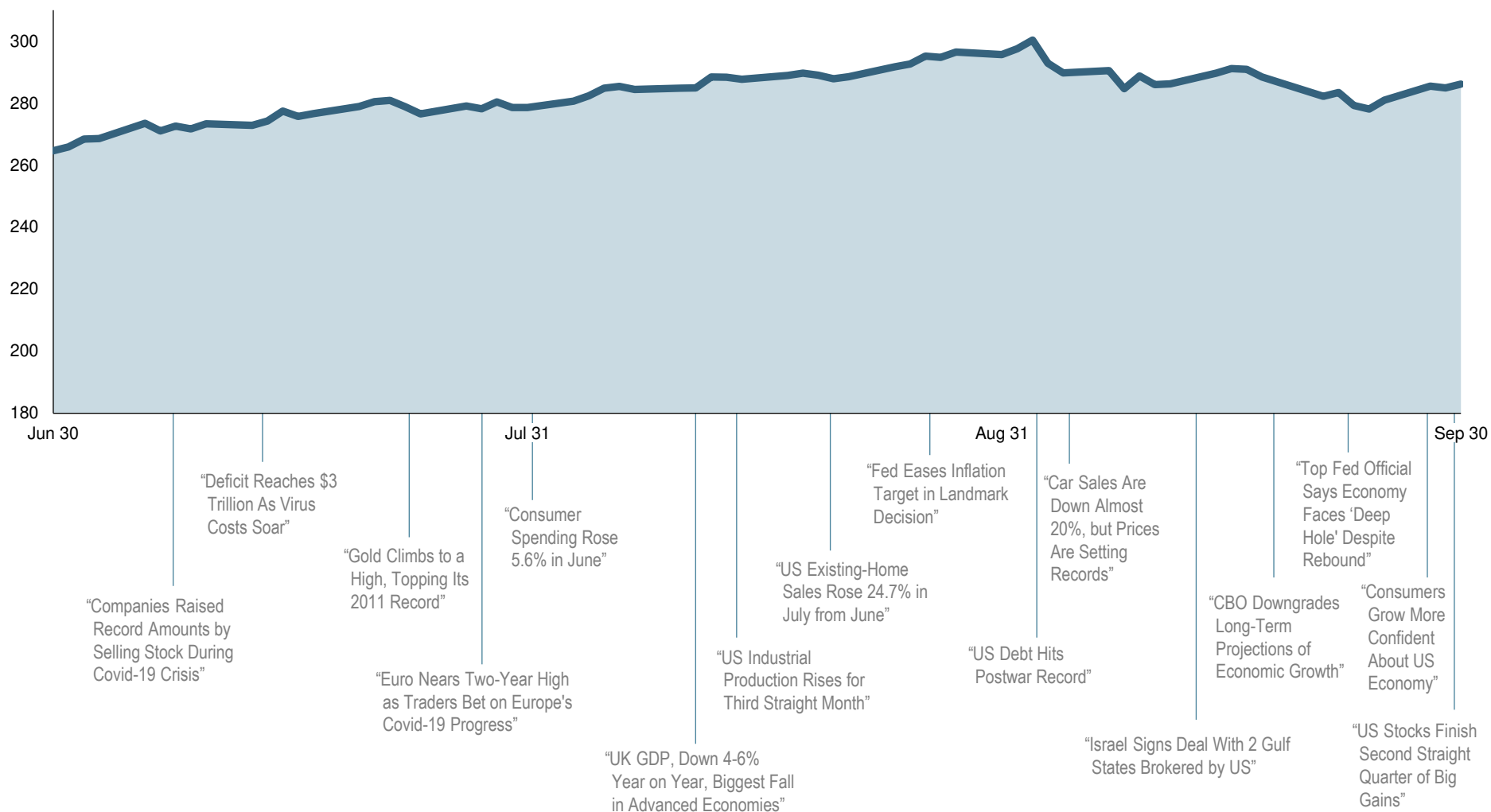
Index Returns

	US Large Cap	US Mid/Small Cap	International Developed	Emerging Markets		US Bond Market	US Dollar
Q3 2020	STOCKS					BONDS/DOLLAR	
	8.93%	9.47%	4.88%	9.70%		0.62%	-2.91%
							
Since Jan. 2001							
Avg. Quarterly Return	2.1%	2.7%	1.5%	2.7%		1.2%	0.4%
Best Quarter	20.5% Q2 2020	30.3% Q2 2020	25.8% Q2 2009	34.8% Q2 2009		4.6% Q3 2001	7.1% Q1 2020
Worst Quarter	-21.9% Q4 2008	-27.9% Q1 2020	-22.7% Q1 2020	-27.6% Q4 2008		-3.0% Q4 2016	-5.8% Q2 2009

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net div.]), Emerging Markets (MSCI Emerging Markets Index [net div.]), Global Real Estate (S&P Global REIT Index [net div.]), US Bond Market (Bloomberg Barclays US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Barclays Global Aggregate ex-USD Bond Index [hedged to USD]). S&P data © 2020 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2020, all rights reserved. Bloomberg Barclays data provided by Bloomberg.

World Stock Market Performance

MSCI All Country World Index with selected headlines from Q3 2020



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2020, all rights reserved.

It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**

High Frequency Economic Activity

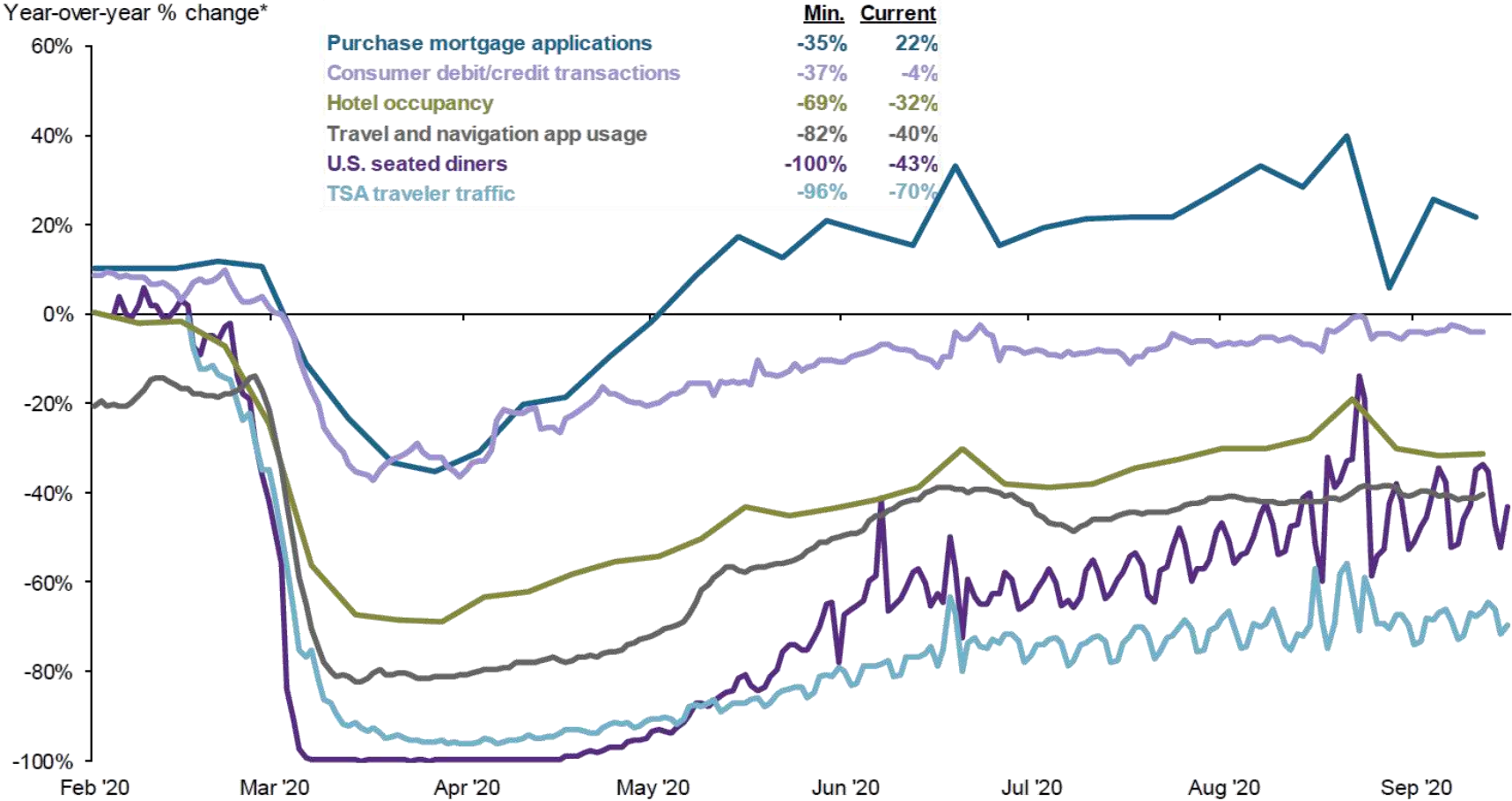
Third Quarter 2020



The chart below shows various “high frequency” economic data (that is, consumer activity that can be measured in near real-time) from February, just before the pandemic began. Note the differences across industries. While mortgage applications initially slowed with everything else, they recovered the quickest, helped by rock bottom interest rates. TSA traveler traffic and US seated diners, in contrast, were hit harder and have been slow to bounce back despite reopening efforts.

High-frequency data

Year-over-year % change*



Source: J.P. Morgan Asset Management.

App Annie data is compared to 2019 average and includes over 600 travel and navigation apps globally, including Google Maps, Uber, Airbnb and Booking.com. Consumer spending: This report uses rigorous security protocols for selected data sourced from Chase credit and debit card transactions to ensure all information is kept confidential and secure. All selected data is highly aggregated and all unique identifiable information—including names, account numbers, addresses, dates of birth, and Social Security Numbers—is removed from the data before the report’s author receives it.

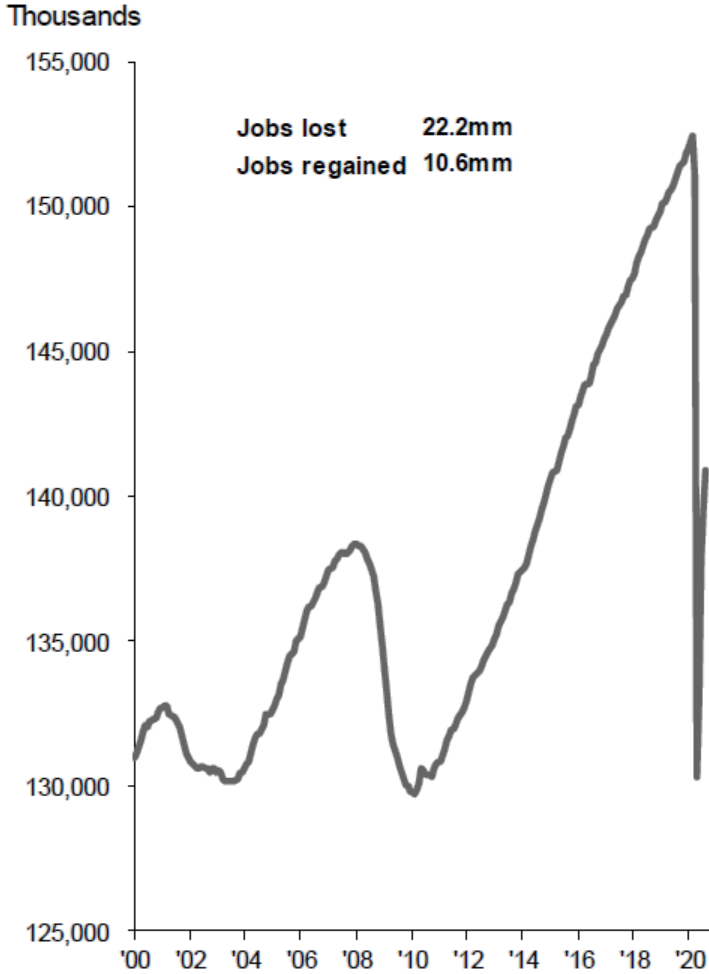
Payroll Employment

Third Quarter 2020

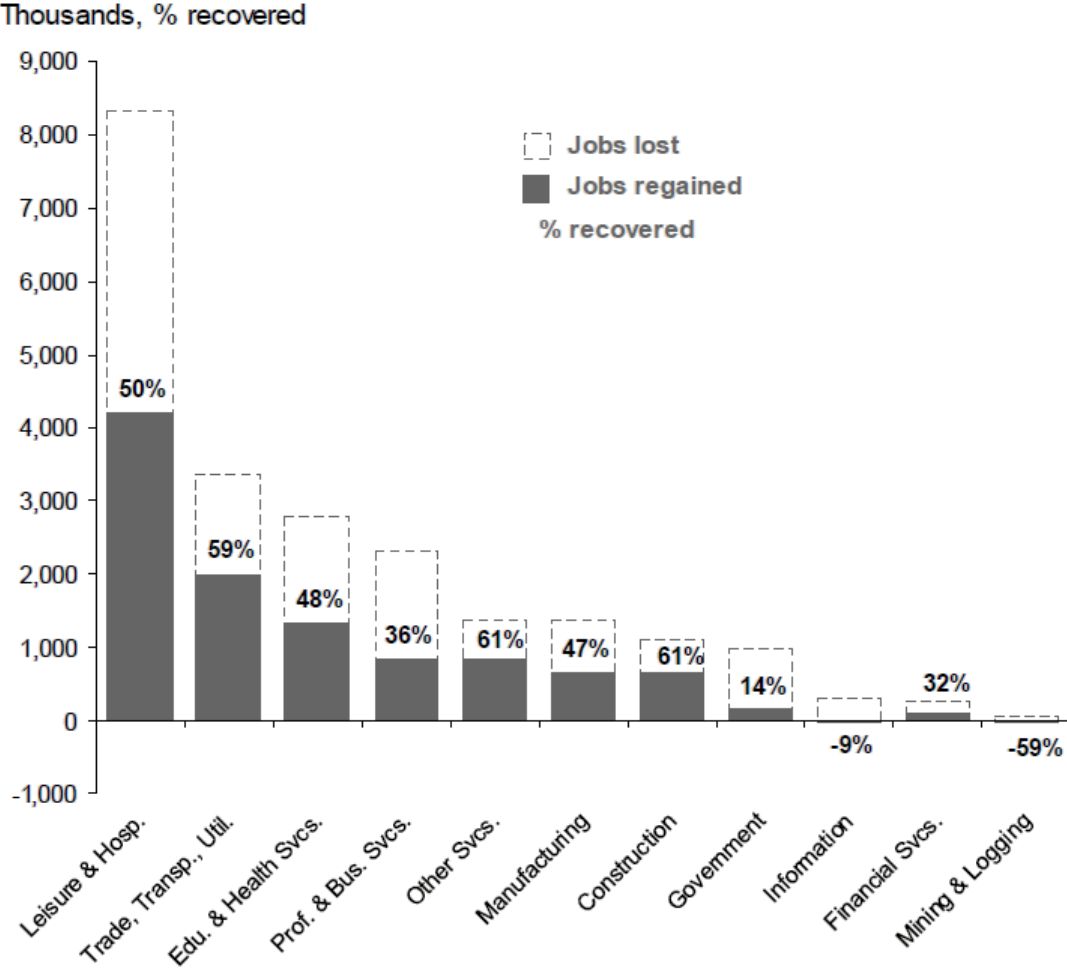


The bottom left chart shows the number of workers in the US economy since 2000. The pandemic's initial hit caused a staggering 22 million job losses, erasing all gains over the past 10 years. In a sharp but only partial snapback, a bit less than half as many jobs have been recovered. The bottom right chart shows jobs lost and regained by industry. Not surprisingly, leisure/hospitality was hit hardest, losing a net 4 million jobs this year.

Employees on total nonfarm payrolls



Payroll employment lost and regained by industry



Source: J.P. Morgan Asset Management.
Jobs lost from February 2020 to April 2020, jobs regained from April 2020 to present.

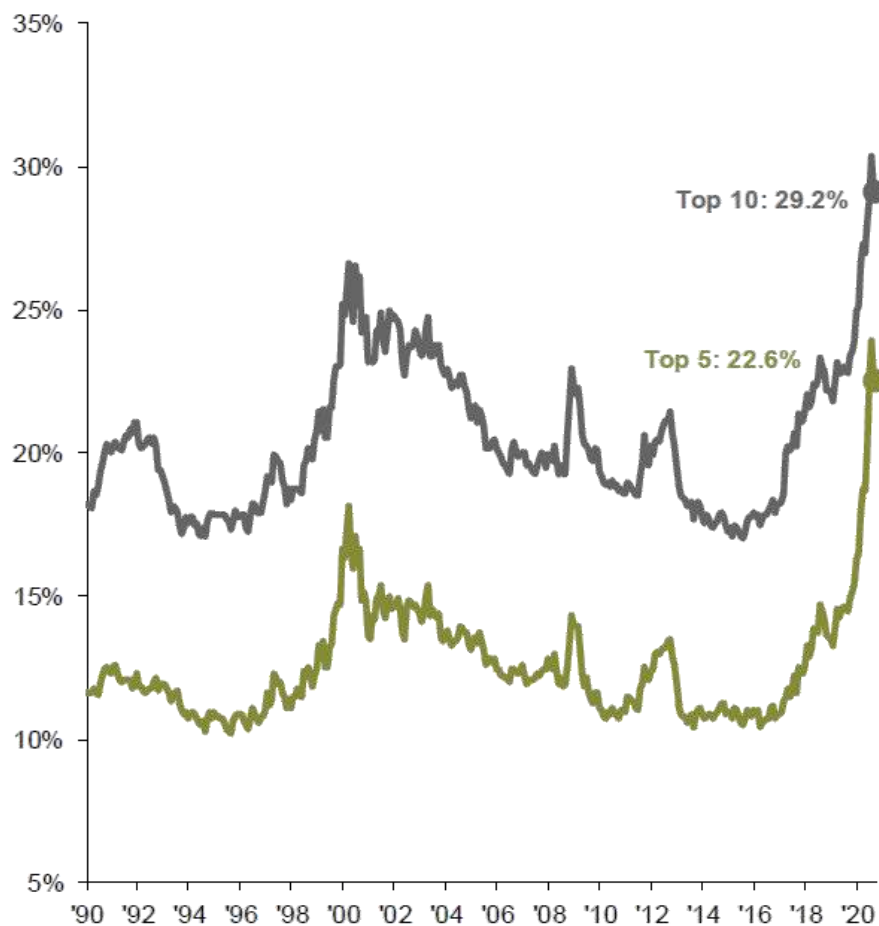
S&P 500: Index Concentration and Earnings

Third Quarter 2020

The left chart below shows how the 5 and 10 largest stocks in the S&P 500 account for a rapidly growing share of the market's total value. The right chart shows the tech sector's market value weight and earnings contribution in the index. Note that during the tech bubble of the late 1990s, tech stock valuation growth (their weight in the index) far outpaced their earnings growth. In contrast, over the past several years, tech stock valuations and earnings have largely risen in step, perhaps making the sector less vulnerable to a 2000-2002 type decline.

Weight of the top 5 and top 10 stocks in the S&P 500

% of market capitalization of the S&P 500



Info Tech. market cap vs. share of S&P 500 earnings

% market cap. of S&P 500 index, based on last 12 months earnings



Source: J.P. Morgan Asset Management.

Information Technology sector's peak weight in the S&P 500 during the Tech bubble was in 8/31/2000, and peak EPS contribution to the S&P 500 was in 10/31/2000.