



Patten & Patten, Inc.

4Q21 Market Outlook

October 5, 2021

520 Lookout Street, Chattanooga, TN 37403 Phone: 423.756.3480 www.patteninc.com

Market Commentary

- The Delta variant proved quite disruptive during the Third Quarter. Governments responded to rising case counts and hospitalizations by re-imposing restrictions that hindered global economic growth. Supply chain bottlenecks persisted, and shortages in vital inputs and materials affected numerous industries. The stock market resisted such pressures until September when each of the major indices experienced pull backs of approximately 5%.
- The magnitude of the Delta wave significantly increased the number of people who now have some form of immunity – i.e., natural immunity acquired through previous infection or acquired immunity through vaccination. This means the “susceptible” population – i.e., the number of remaining people who have been neither infected nor vaccinated – is now much smaller. We expect the smaller “susceptible” population will result in reduced transmissibility of the virus, including new variants.
- While we are quite optimistic that the worst of the pandemic is now behind us, our view is not intended to imply COVID-19 will soon disappear. That would require eradication of the virus. Instead, this virus is likely to transition from the current “acute” phase to becoming “endemic”. In epidemiology, endemic is defined as when a virus continues to circulate, but it remains in a “steady state” wherein transmission does not accelerate. The endemic phase should allow for a gradual normalization of all economic activity.
- As the virus transitions into the endemic phase, Merck’s recent announcement of a highly effective oral antiviral is unambiguously positive news. The drug is expected to be approved before yearend, which should greatly improve the arsenal of available and powerful therapeutics for physicians. It should be noted that the current standard of care has already significantly improved outcomes over 2020, and the arrival of new drugs should continue to enhance treatment regimens. The global effort to combat this disease has been remarkably successful, and the breakthroughs reflect a triumph of science.

Market Commentary, continued

- In 2019, the Federal Reserve was continuing a process of normalizing rates from levels that date back to the Great Financial Crisis. Certain money market funds paid as much as 2.0%, as an example. When the pandemic began, the Fed quickly and aggressively injected liquidity into the markets. In response, benchmark interest rates fell back to zero. Recently, the Fed indicated that monetary policy will slowly transition away from the emergency measures of 2020. Initially, this will involve reductions in liquidity support. Eventually, the Fed intends to resume increasing the benchmark policy rate.
- In terms of the timing and pace of the Fed's shift, much depends on economic growth and ongoing progress with the virus. Supply chain issues have contributed to recent inflation surges and rising inflation expectations. Generally, bottlenecks exist because the global approach to the virus has been inconsistent and uncoordinated. With a sustained drop in cases, supply chain bottlenecks should get resolved. This should help businesses rebuild overall inventories, which are near 25-year lows.
- Market expectations for inflation over the intermediate term also remain anchored around the Fed's target range, suggesting confidence in the Fed's policy approach. We would note that, unlike during First Quarter 2021, the recent increase in bond yields is more likely the result of rising growth expectations. Likewise, our optimism for improved economic activity is also rising.
- Finally, we are pleased to announce that Patten & Patten has signed a lease for office space in UNUM's headquarters building. Construction progress has been hindered by materials shortages, but we hope to take occupancy before the end of the year. We look forward to showing everybody our new office in the New Year.

Markets

Year to date and historical performance of select asset classes

Asset Class	YTD	1 year	3 Year Annualized	Total Returns since...	
				Trough*	Peak*
Domestic Equities					
S&P 500	17.26	30.79	16.30	99.54	32.12
S&P 500 Equal Weight (RSP)	20.38	42.01	14.62	116.91	32.31
Dow Jones Ind. Avg.	13.72	25.75	11.25	90.38	20.92
NASDAQ Comp	13.58	29.47	23.05	114.75	50.24
Russell 2000 (IWM)	14.10	47.46	11.53	127.12	34.73
International Equities					
Shanghai Composite (CIN)	4.02	12.90	14.56	42.03	29.48
Hedged Japan (DXJ)	16.33	30.99	4.57	64.27	23.71
Hedged Europe (HEDJ)	16.60	25.44	8.49	69.03	11.31
Asia Pacific ex. Japan (EPP)	3.43	22.34	6.12	73.83	9.06
Emerging Markets (EEM)	-2.17	14.77	7.71	67.83	16.15
Brazil (EWZ)	-9.40	22.31	1.97	64.52	-21.99
Canada (EWC)	19.51	35.35	10.40	113.55	22.46
India (EPI)	30.50	59.69	17.50	169.68	56.73
Mexico (EWW)	13.77	49.48	0.02	97.72	4.43
Bonds					
Long Treasuries (TLT)	-6.77	-9.70	9.82	-10.38	2.38
Inv. Grade Corporates (LQD)	-1.50	1.56	8.49	21.38	6.45
High Yield Corporates (HYG)	3.20	8.81	5.45	36.97	6.98
Commodities					
Gold (GLD)	-7.72	-7.90	13.50	12.50	8.43
Silver (SLV)	-15.22	-5.70	15.21	69.21	20.89

*Stock market trough at 03/23/2020. Stock market peak at 02/19/2020. YTD through 10/03/2021

Source: Thomson Reuters Datastream

Year to date and historical performance of select equity sectors

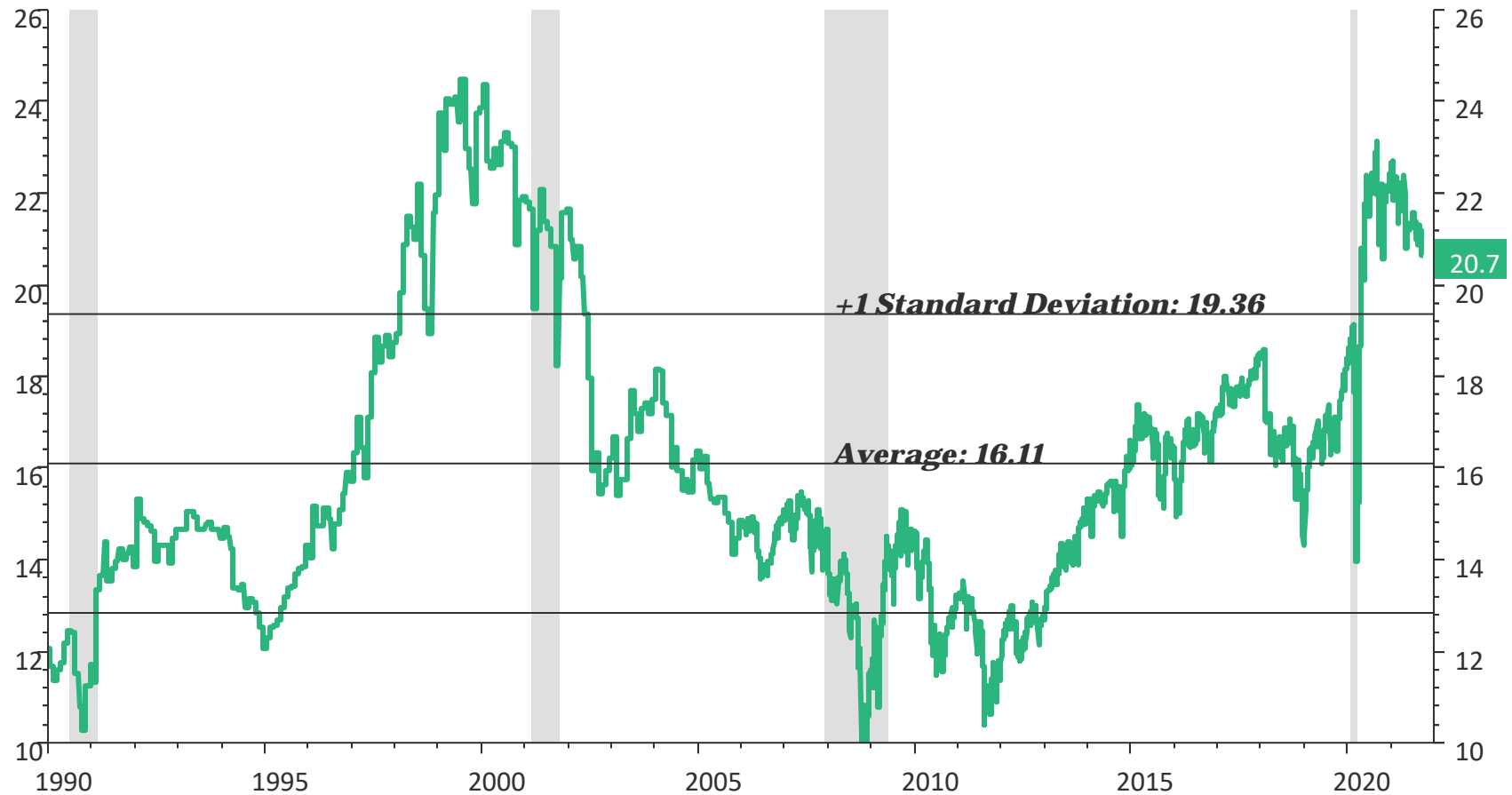
Domestic Equity Sectors	YTD	1 year	3 Year Annualized	Total Returns since...	
				Since Trough*	Since Peak*
Domestic Equities					
Consumer Discretionary	10.96	18.09	16.59	103.61	39.67
Retail	9.86	13.19	17.84	94.28	47.08
Consumer Staples	6.92	16.98	12.45	58.41	17.27
Energy	44.04	93.30	-5.64	157.42	15.23
Oil & Gas Exploration	76.49	139.72	-4.55	208.58	29.15
Financial Services	32.32	69.38	15.82	134.87	33.35
Regional Banks (KRE)	35.61	97.66	8.67	157.22	32.03
Health Care	11.56	23.28	13.00	79.92	29.62
Industrials	14.62	32.91	11.00	108.40	22.47
Materials	12.79	33.56	12.90	122.99	38.01
Technology	18.42	32.28	27.34	121.97	55.03
Communication Services	18.84	32.10	NA	112.86	49.54
Utilities	4.34	10.68	9.78	49.62	-4.64
Transportation (IYT)	13.38	26.15	7.86	110.77	29.77
Real Estate	22.29	31.85	12.52	92.13	8.74

*Stock market trough at 03/23/2020. Stock market peak at 02/18/2020. YTD through 10/03/2021

Source: Thomson Reuters Datastream

S&P 500 Valuation

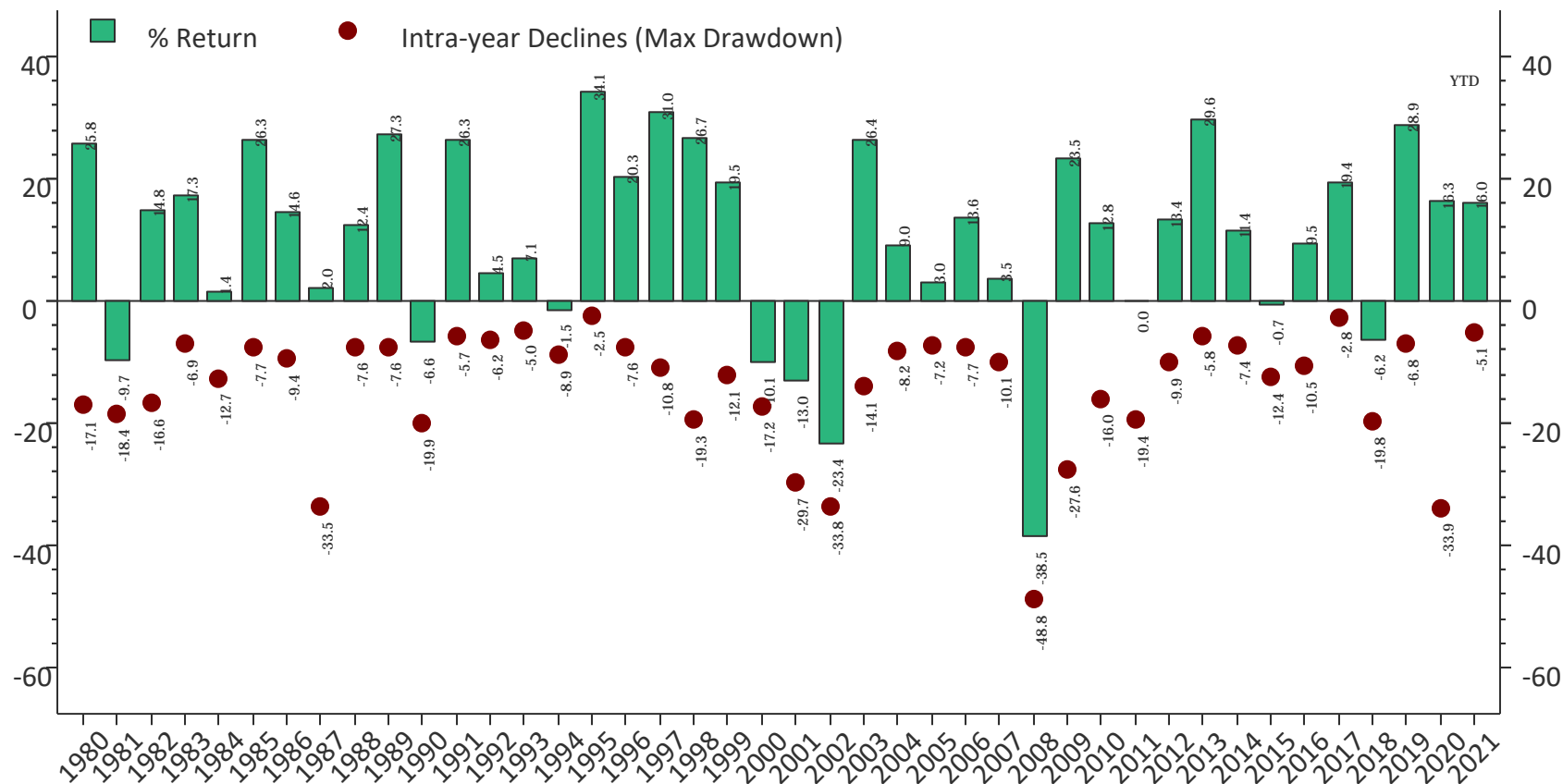
S&P 500 - PE NTM



Source: Refinitiv Datastream

Stock Market Performance and Max Drawdowns by Year

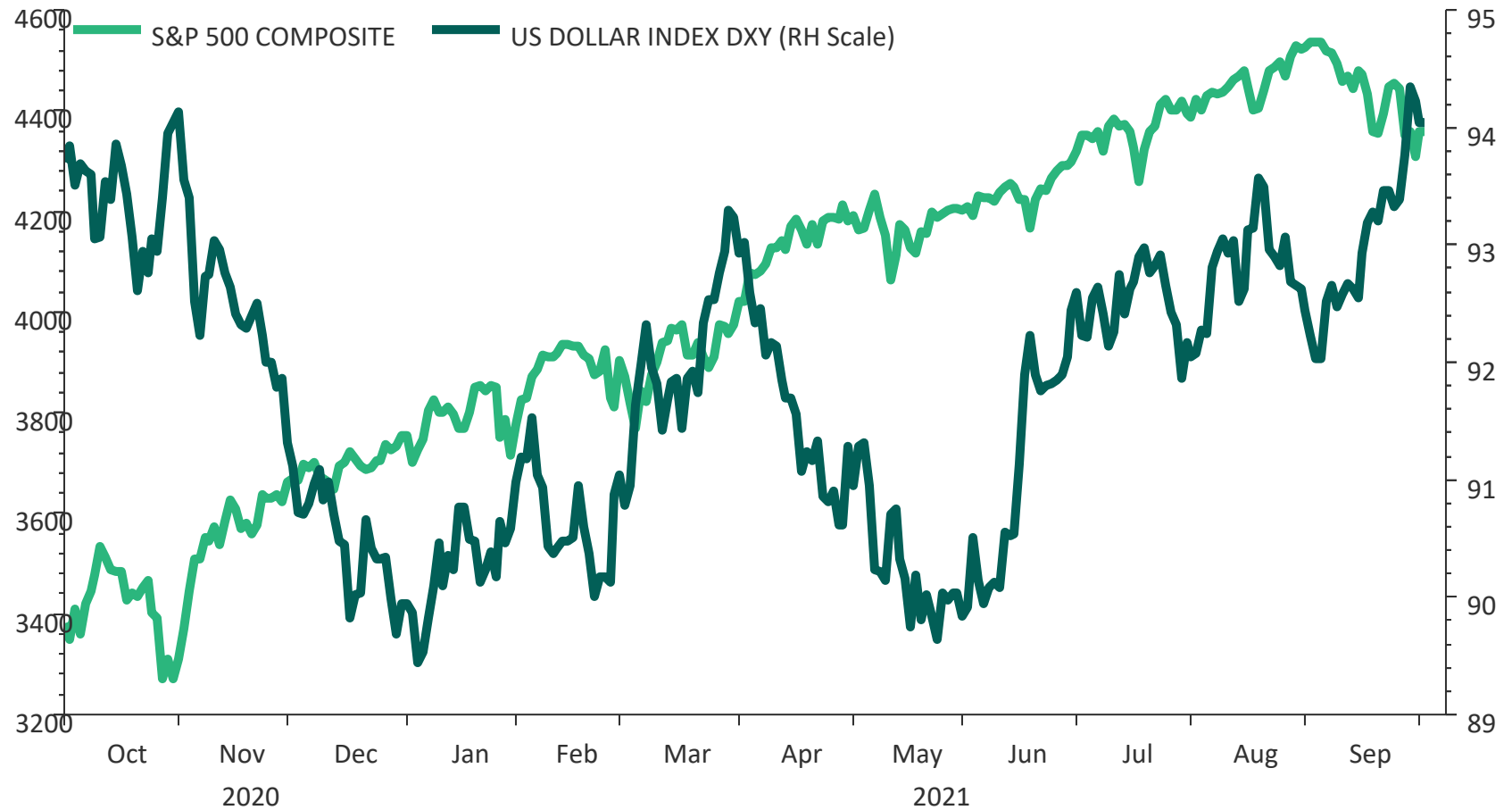
S&P 500 Intra-year Price Declines (Max Drawdown) vs. Yearly Price Returns



Source: Refinitiv Datastream

S&P 500 vs. the US Dollar

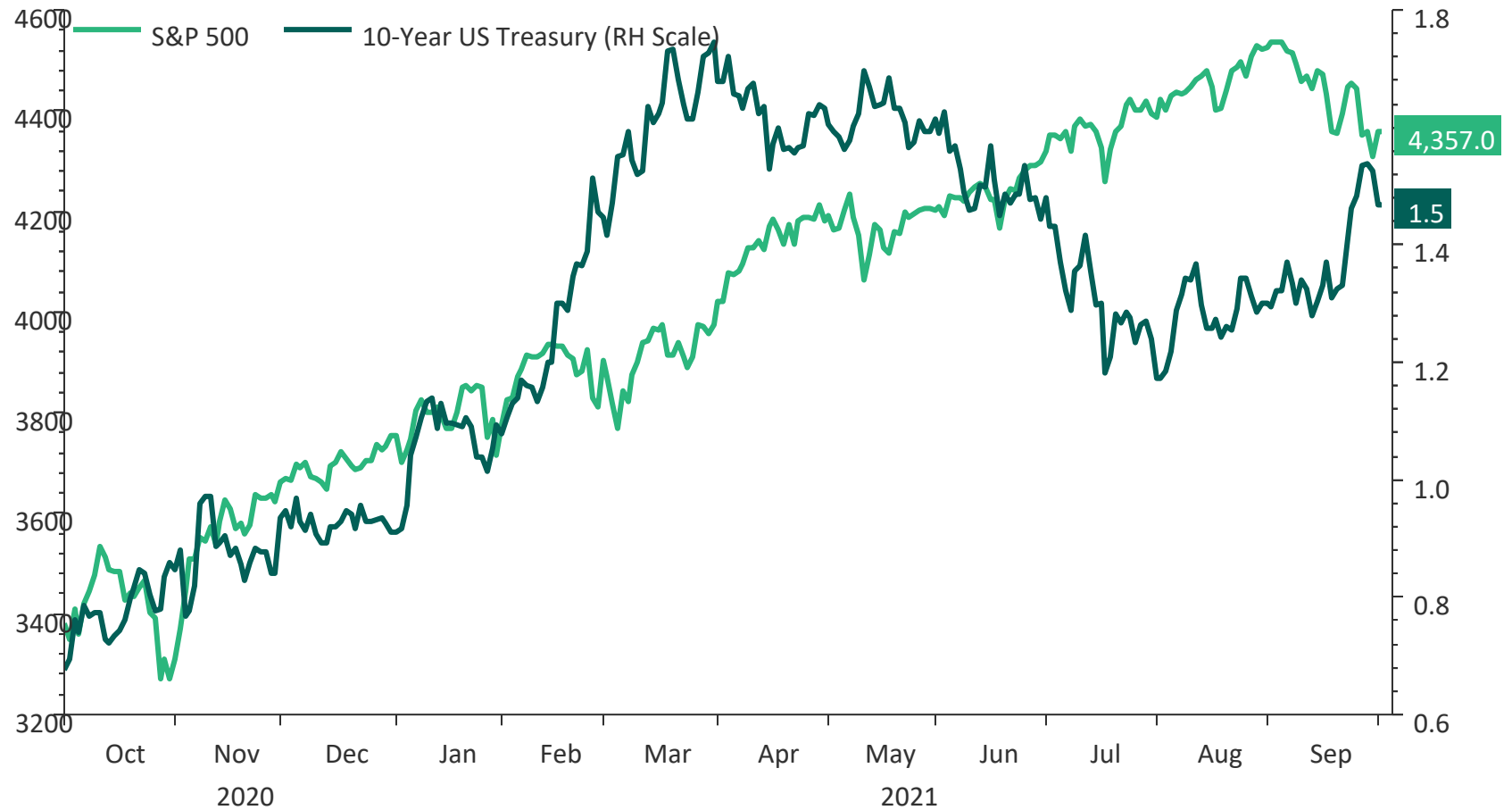
S&P 500 vs. the US Dollar



Source: Refinitiv Datastream

S&P 500 vs. the 10-Year Treasury

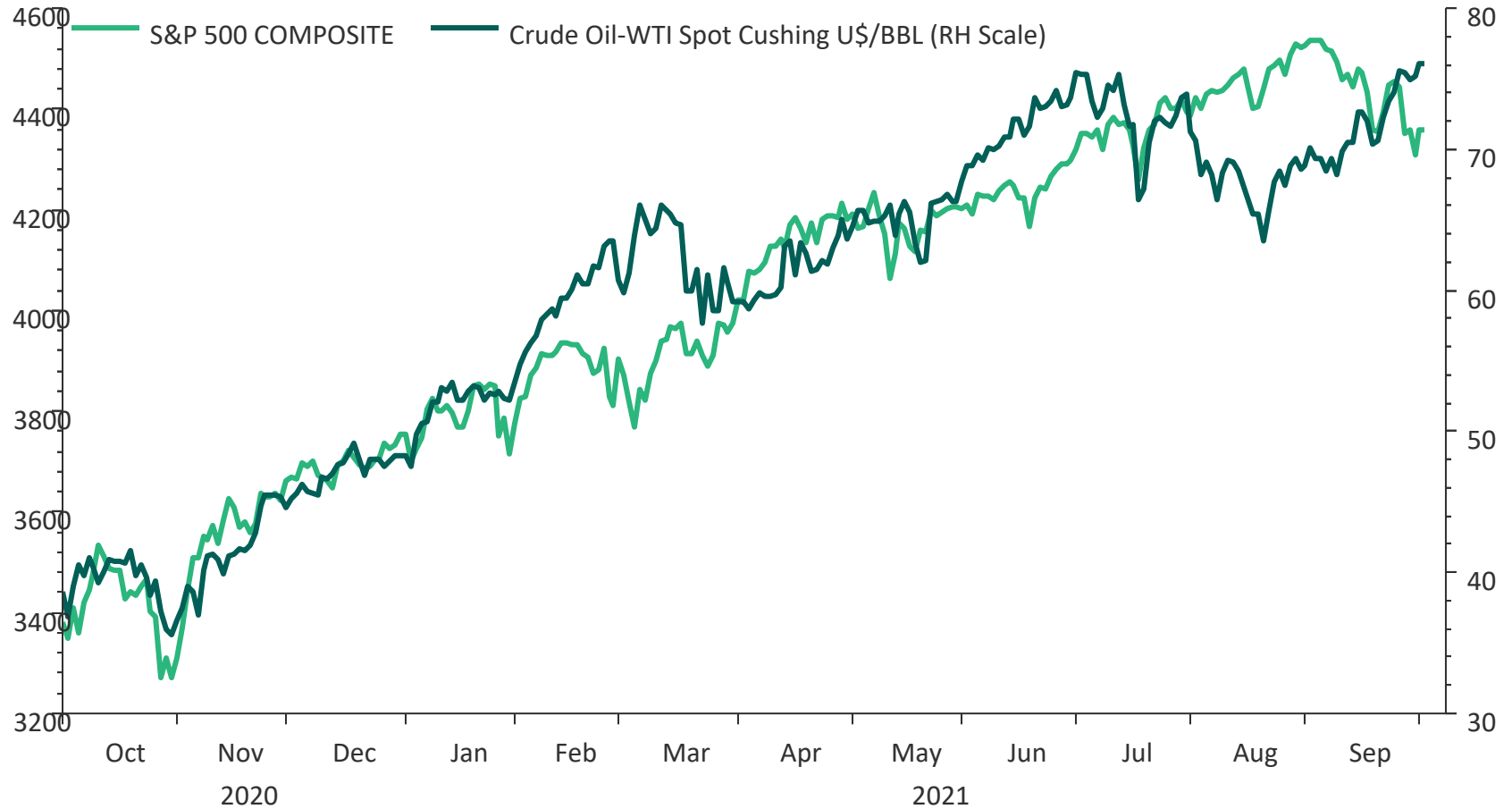
S&P 500 vs. the 10-Year Treasury



Source: Refinitiv Datastream

S&P 500 vs. the Price of Crude Oil

S&P 500 vs. WTI Crude Spot



Source: Refinitiv Datastream

Dr. Copper

LME Copper Spot Price

\$/MT



Source: Refinitiv Datastream

Interest Rate Outlook

Global Interest Rates

Global Bond Yields on October 4, 2021

Maturity	US	Canada	UK	Germany	Switzerland	Japan	Spain	Italy	Brazil	Greece
2 year	0.280	0.520	0.403	-0.705	-0.743	-0.120	-0.590	-0.474	9.620	NA
5 year	0.947	1.080	0.629	-0.575	-0.501	-0.093	-0.324	0.049	10.155	0.124
10 year	1.481	1.482	1.007	-0.216	-0.162	0.050	0.452	0.822	11.010	0.867
30 year	2.047	1.960	1.382	0.291	0.066	0.669	1.332	1.792	NA	NA

Change in Global Bond Yields since September 27, 2021

Maturity	US	Canada	UK	Germany	Switzerland	Japan	Spain	Italy	Brazil	Greece
2 year	0.014	0.006	-0.008	-0.011	0.026	-0.002	-0.006	-0.001	0.510	NA
5 year	0.015	0.002	-0.010	-0.011	0.003	0.005	-0.006	-0.004	-0.115	0.058
10 year	0.014	0.013	-0.013	0.003	0.028	-0.003	0.025	0.004	-0.150	0.029
30 year	0.007	0.003	0.004	0.007	0.042	0.013	0.009	0.009	NA	NA

Source: Patten & Patten

Forward Interest Rates

Forward Rate Analysis US Dollar Swap Curves

Maturity	Forward Rates						Chg (in bp)
	Current	6 Mo	1 year	2 year	5 year	10 year	
1 year	0.158%	0.299%	0.559%	1.181%	1.881%	2.106%	195
2 year	0.345%	0.591%	0.869%	1.349%	1.925%	2.106%	176
3 year	0.613%	0.851%	1.084%	1.478%	1.949%	2.106%	149
5 year	1.020%	1.195%	1.368%	1.653%	1.989%	2.103%	108
10 year	1.486%	1.589%	1.688%	1.849%	2.043%	2.078%	59
30 year	1.760%	1.813%	1.845%	1.893%	1.915%	1.824%	6
2 - 10 Curve	114	100	82	50	12	(3)	
1 - 30 Curve	160	151	129	71	3	(28)	

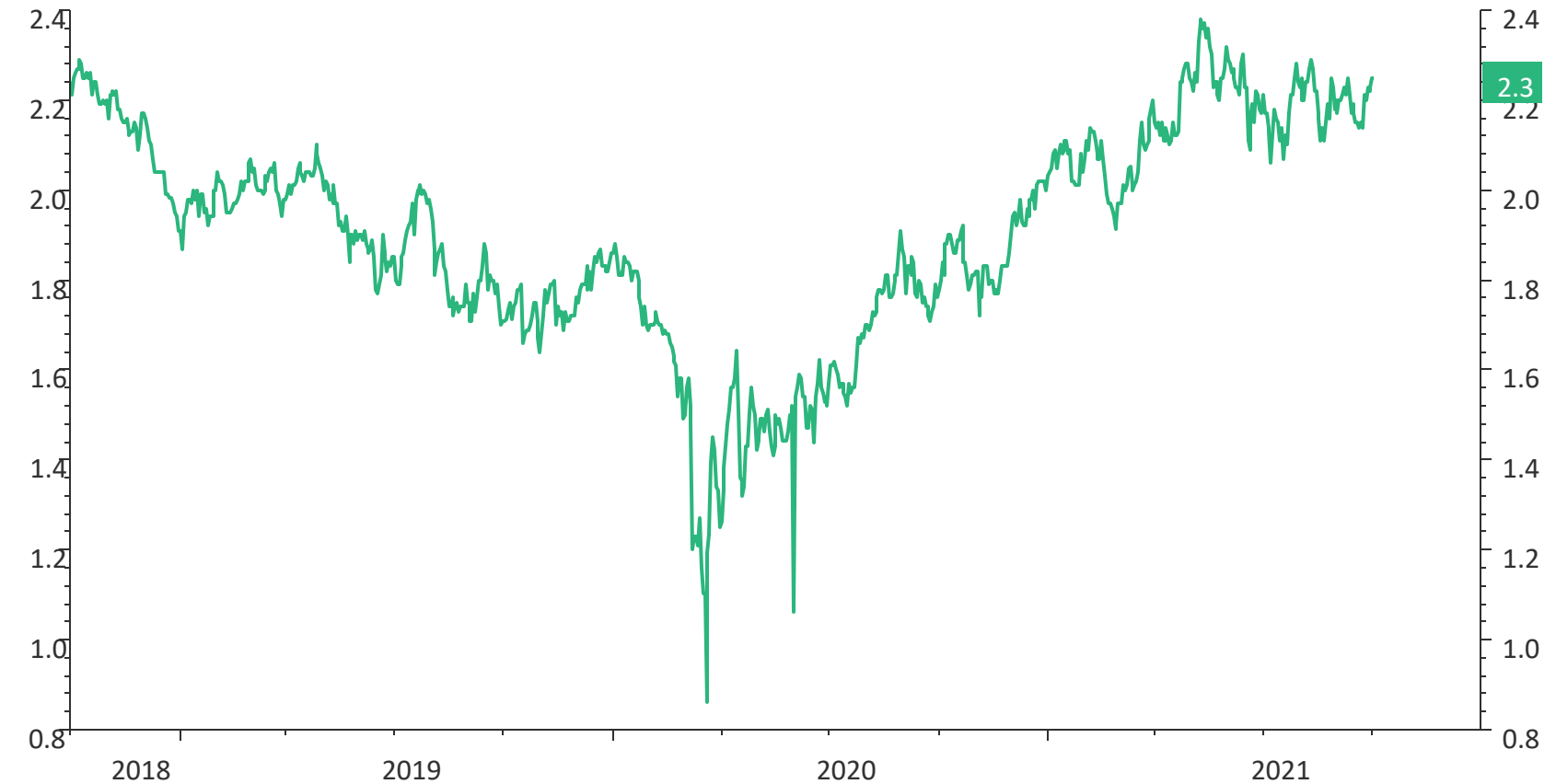
*market rates as of 10/04/2021 and based on 3 month LIBOR.

Source: Patten & Patten, US Census

Inflation Expectations

US 5y5y forward breakeven inflation rate

Per cent

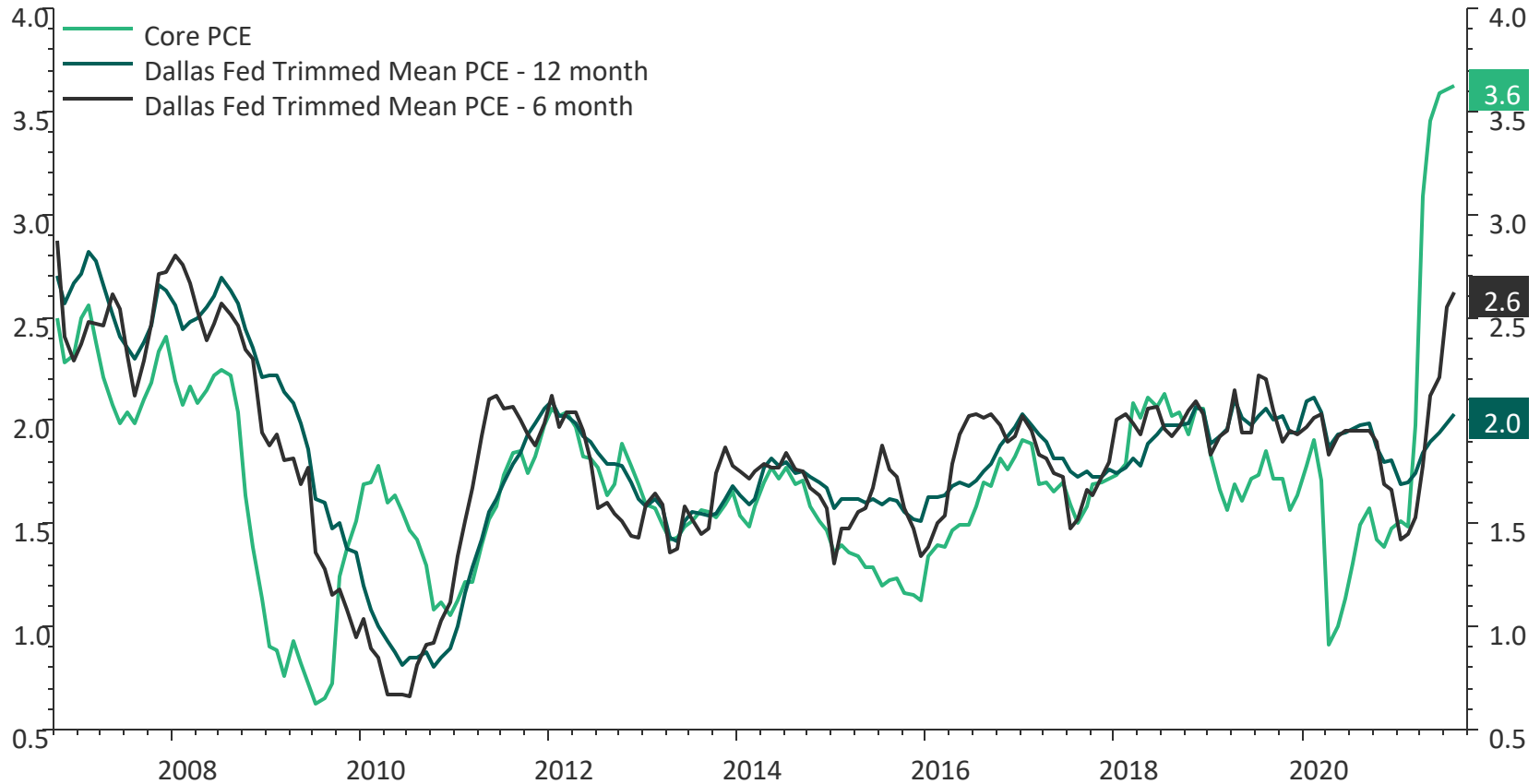


Source: Refinitiv Datastream

Distorted Inflation Data

Core PCE vs. Dallas Fed Trimmed Mean PCE

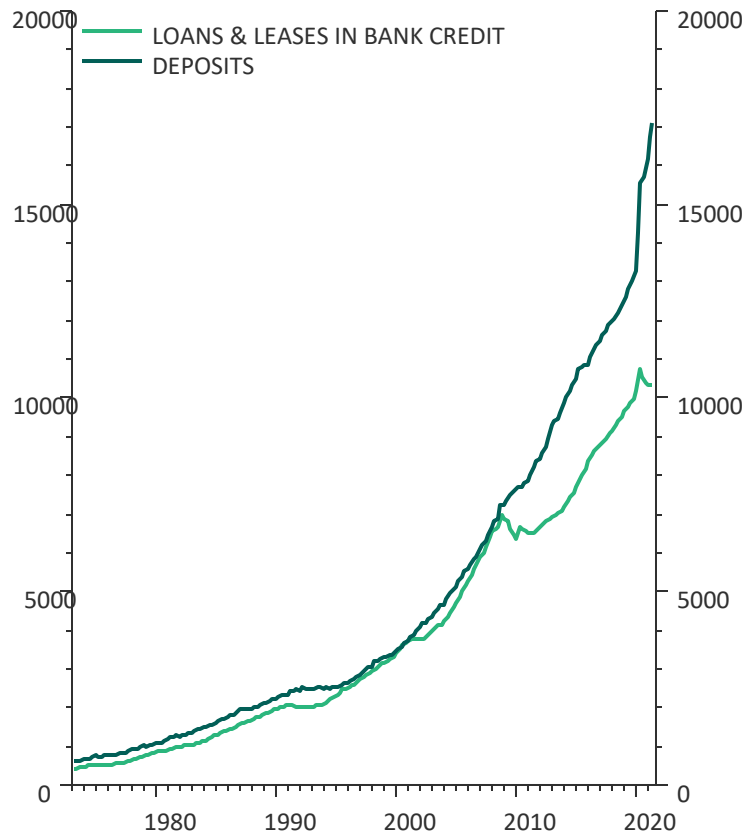
Year-over-Year Percent Change



Source: Refinitiv Datastream

Credit Growth has Lagged Deposit Growth

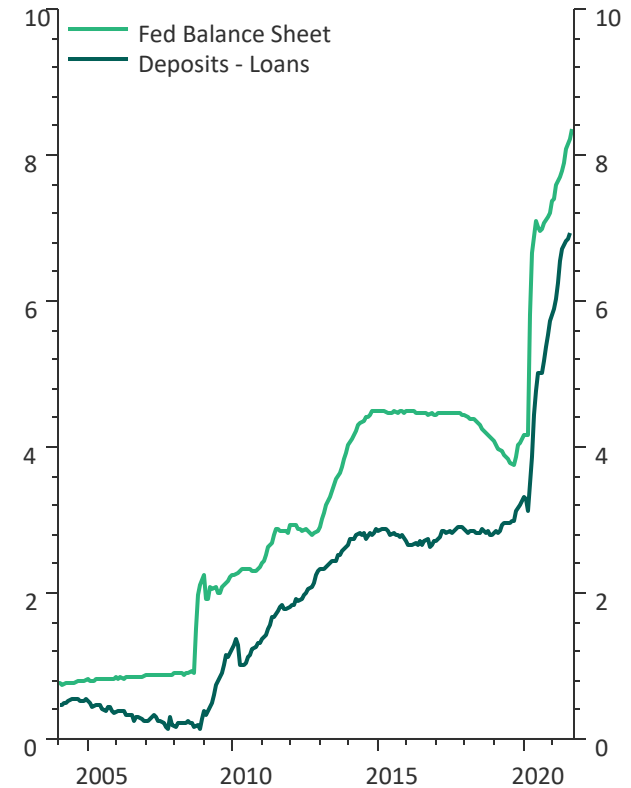
US Commercial Bank Loans and Deposits



Source: Refinitiv Datastream

Fed Balance Sheet and Deposit Growth

\$ Billions

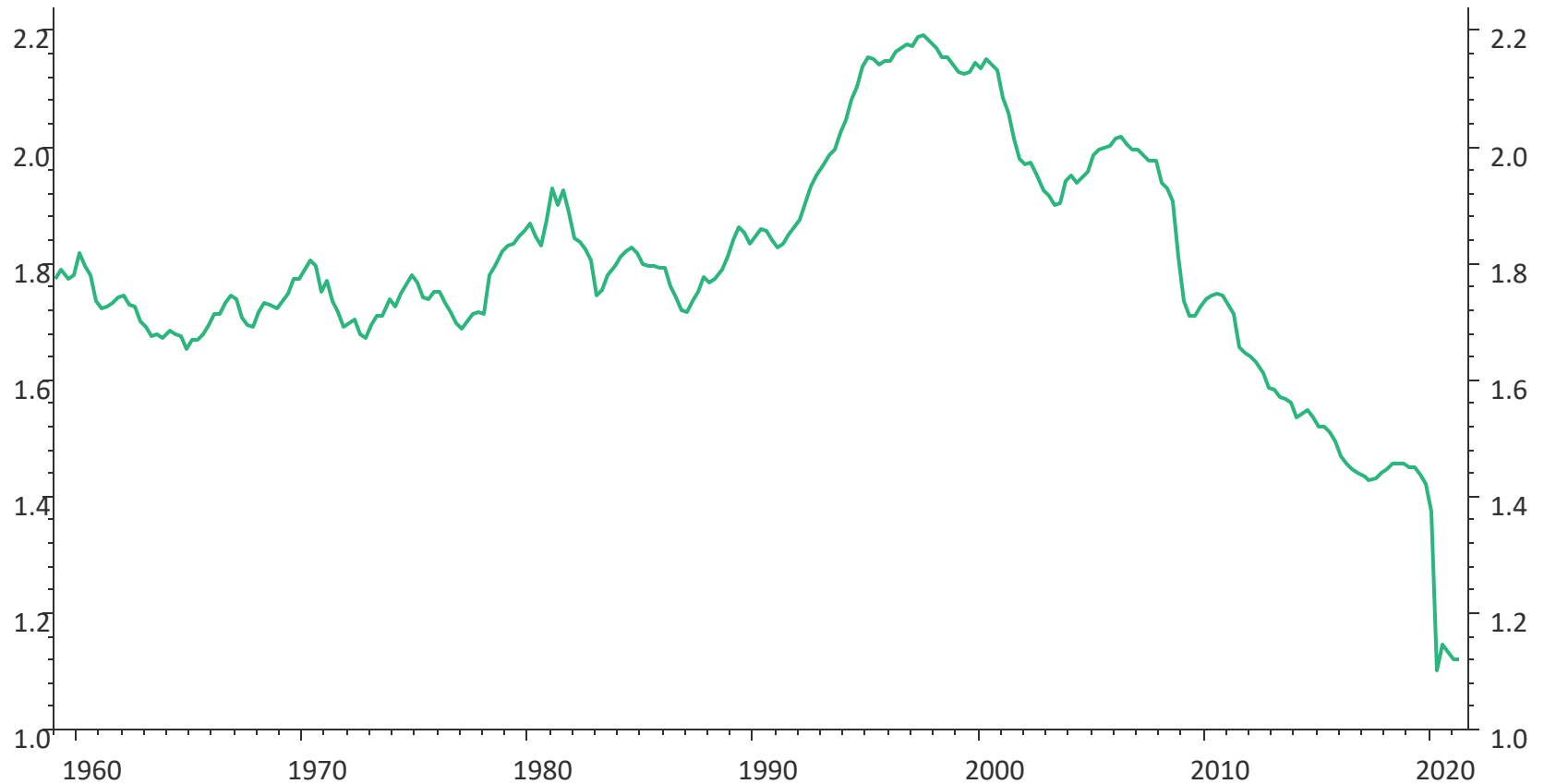


Source: Refinitiv Datastream

Velocity of Money Near All-Time Lows

Velocity of Money

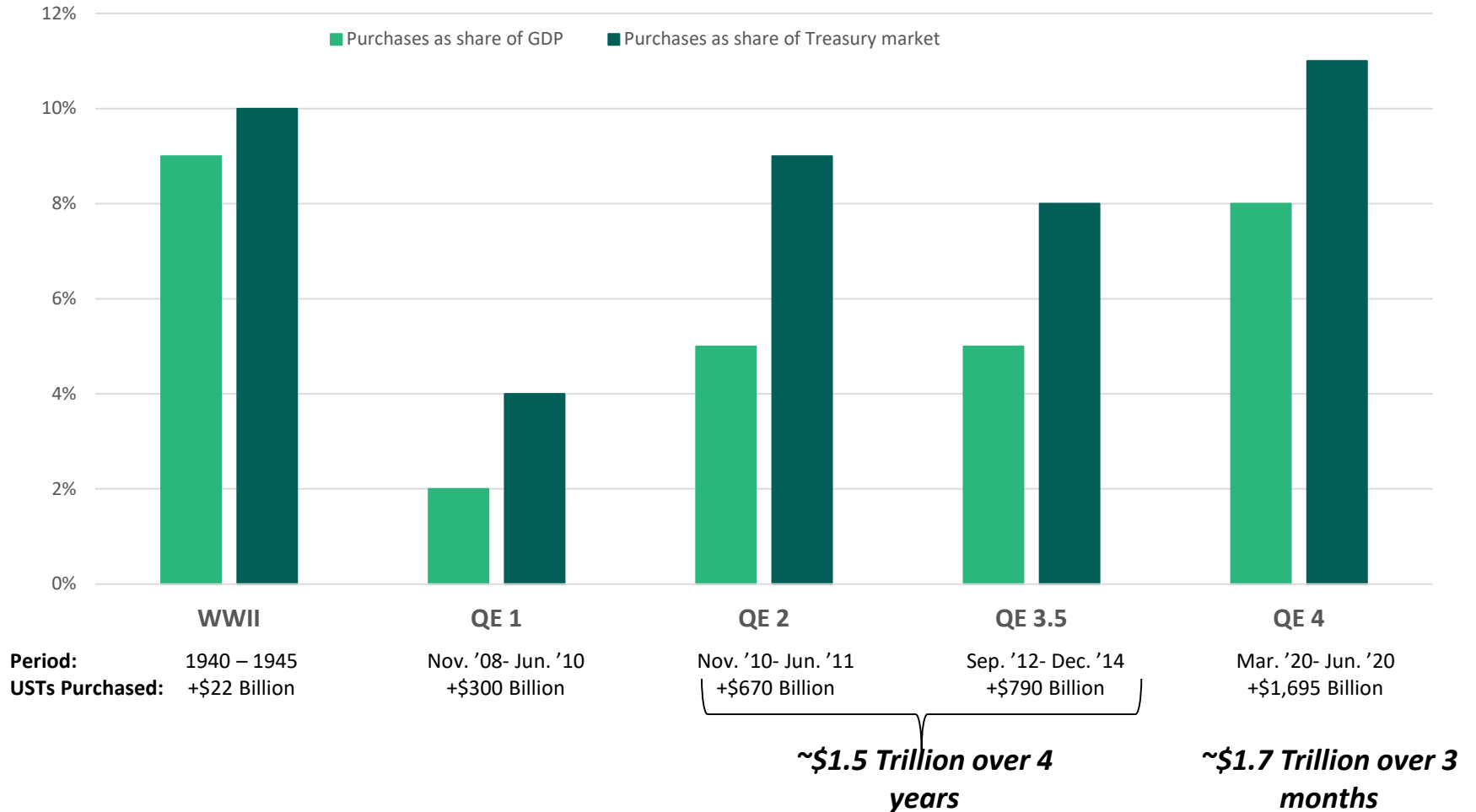
GDP/M2 Supply



Source: Refinitiv Datastream

Fed Purchases of Treasuries – Historical Context

Fed purchases of Treasuries during various QE programs as a share of nominal GDP and public debt outstanding; %



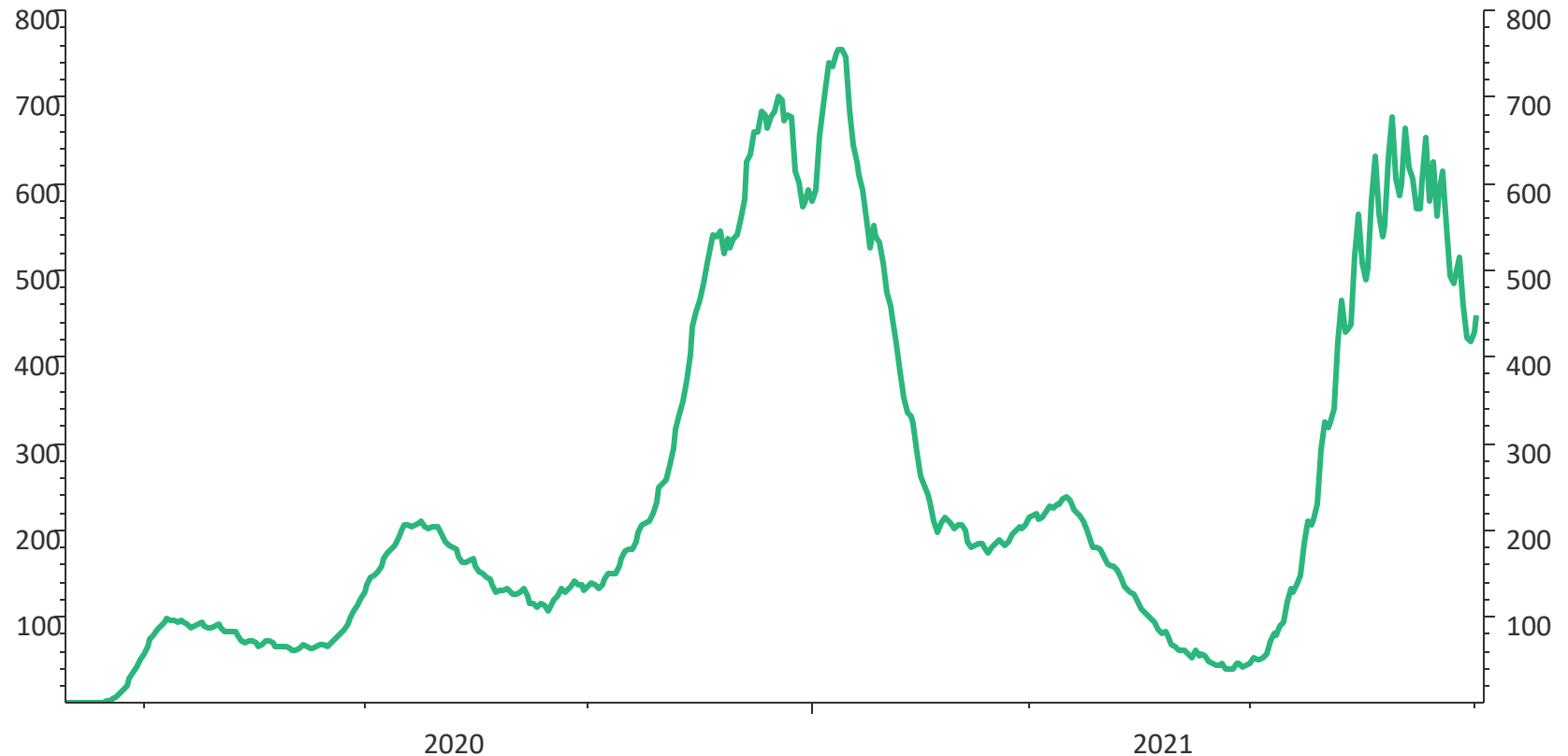
Source: Patten & Patten, Refinitiv

Economic Backdrop

New US COVID Cases

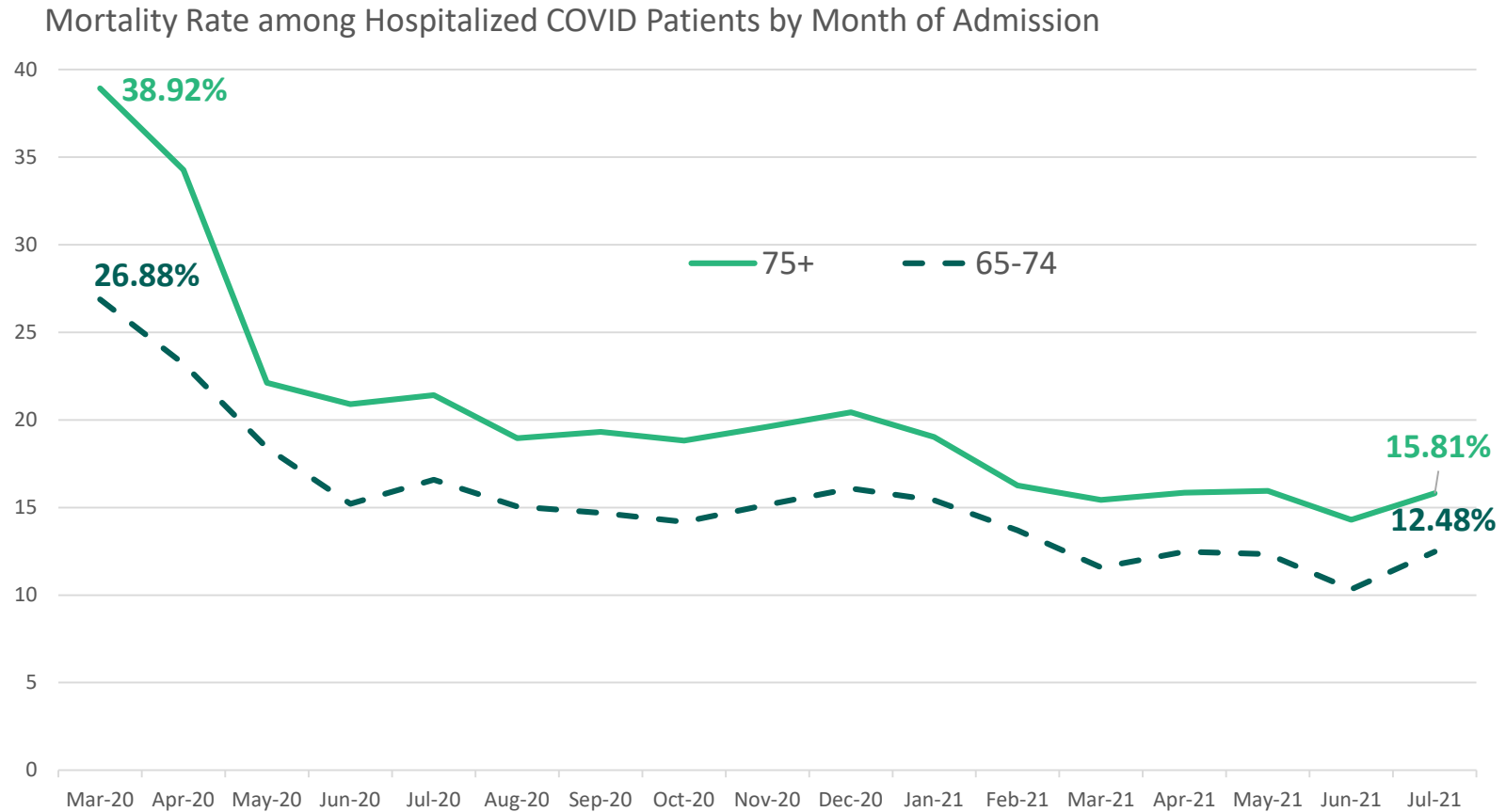
COVID-19 new daily cases

Number per million inhabitants, 7-DMA



Source: Refinitiv Datastream

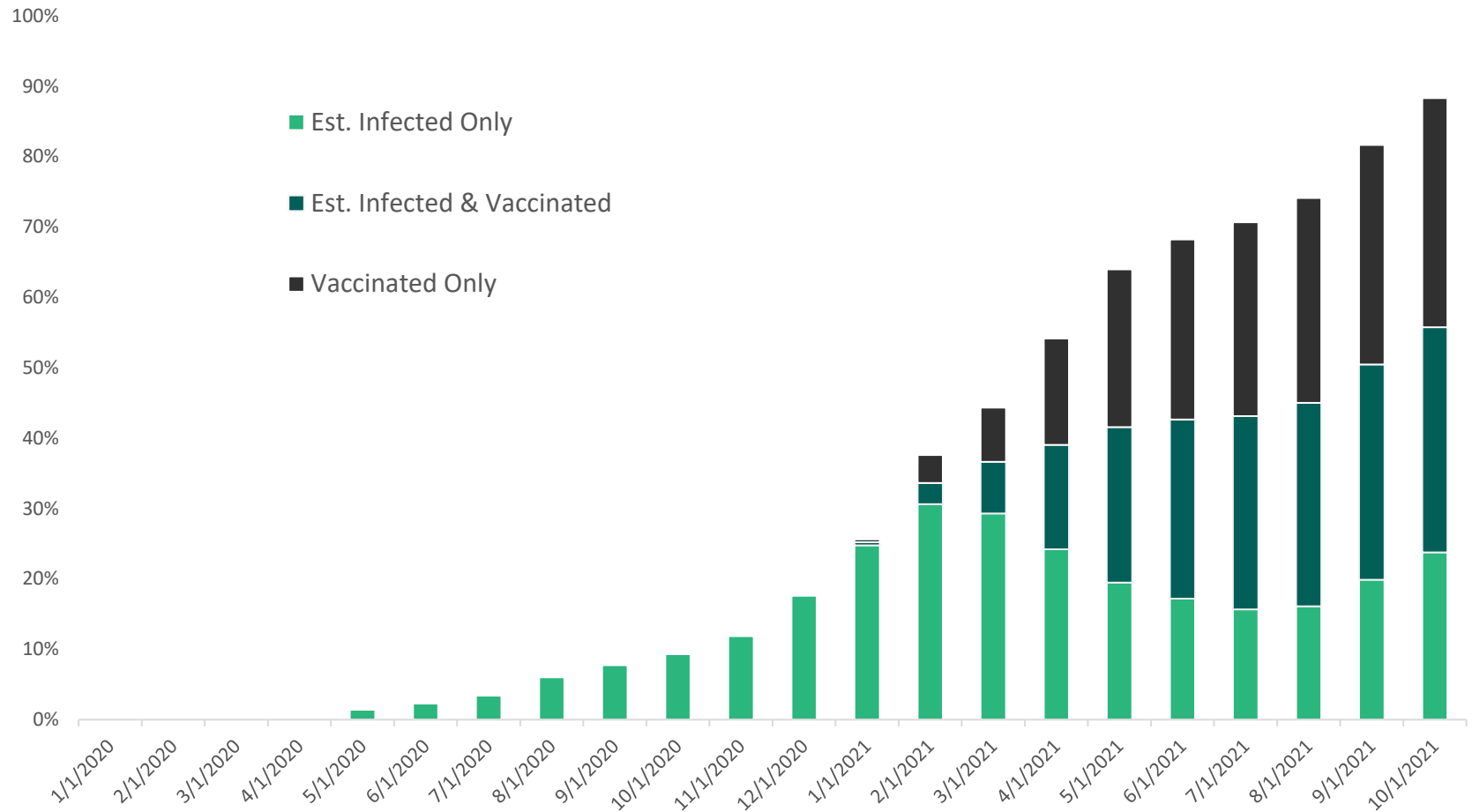
COVID Hospital Mortality Rate



Source: CDC

Endemic Phase

Progress Toward the Endemic Phase

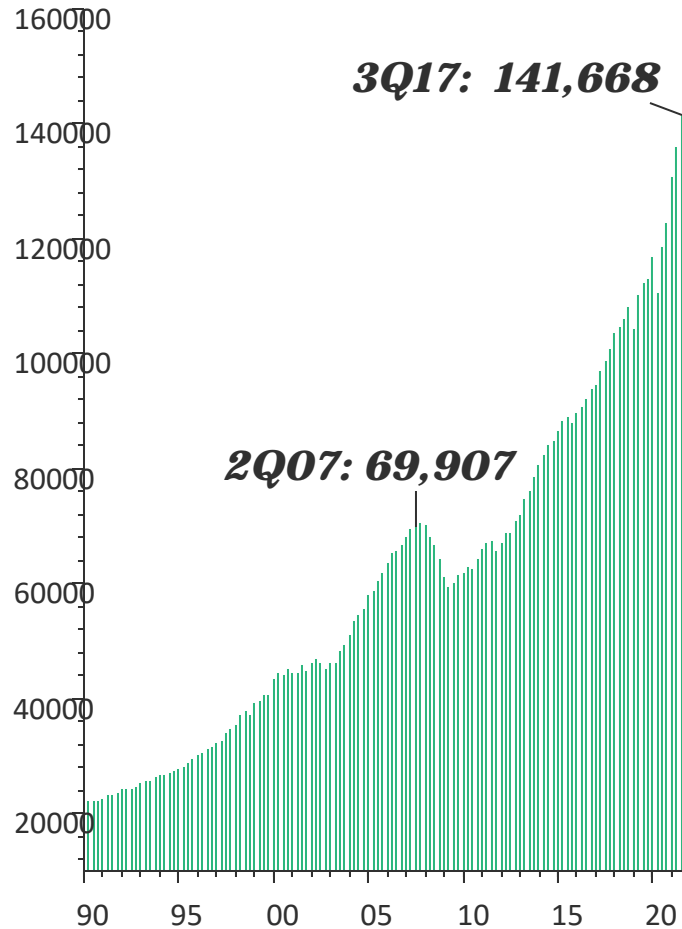


Source: JP Morgan, Reuters, Our World in Data, Patten & Patten

US Households in Good Shape

US Household Net Worth

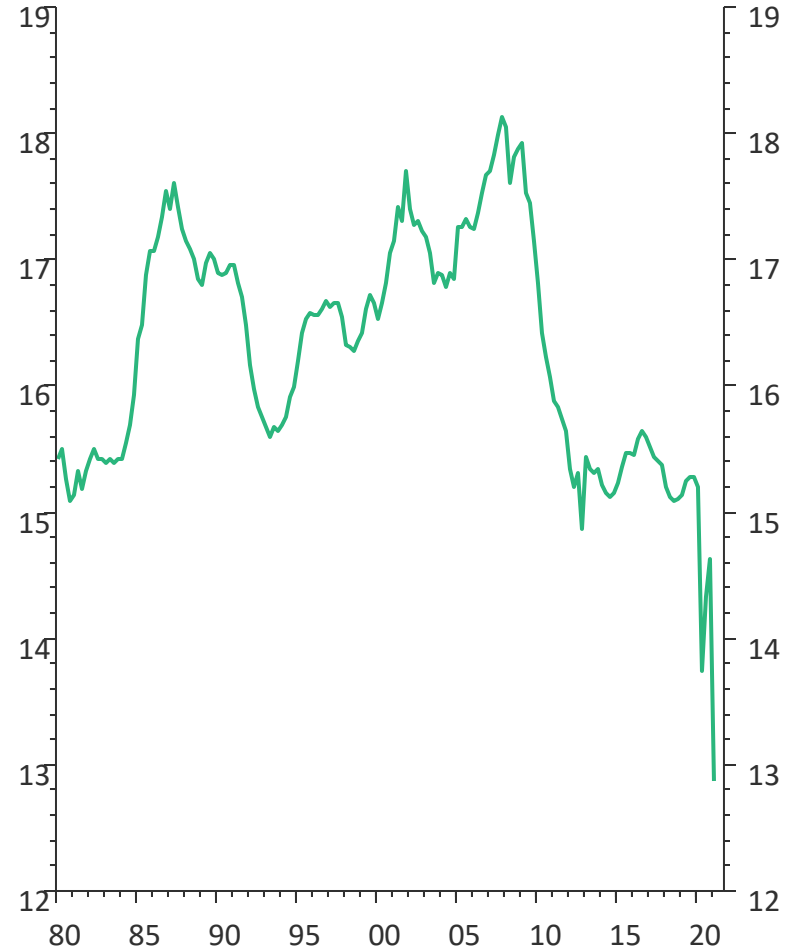
in \$ billions



Source: Refinitiv Datastream

Financial Obligations Ratio

(mortgage, auto, rent, homeowners' insurance & property tax as % of income)



Source: Refinitiv Datastream

Record Low Inventories

Retail Inventories/Sales Ratio (Mfg. & Trade)

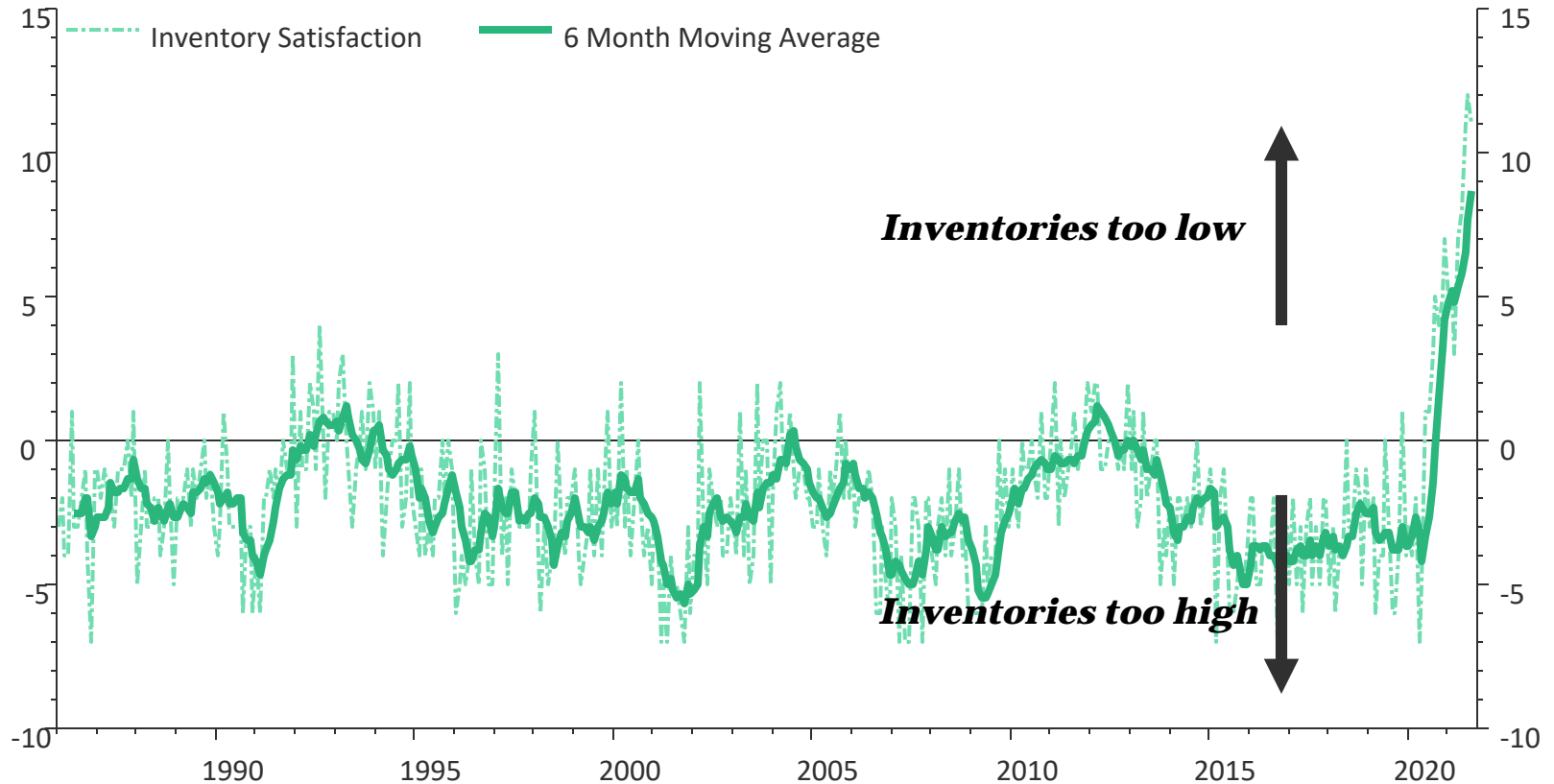


Source: Refinitiv Datastream

Inventory Replenishment Needed

NFIB Small Business Inventory Satisfaction

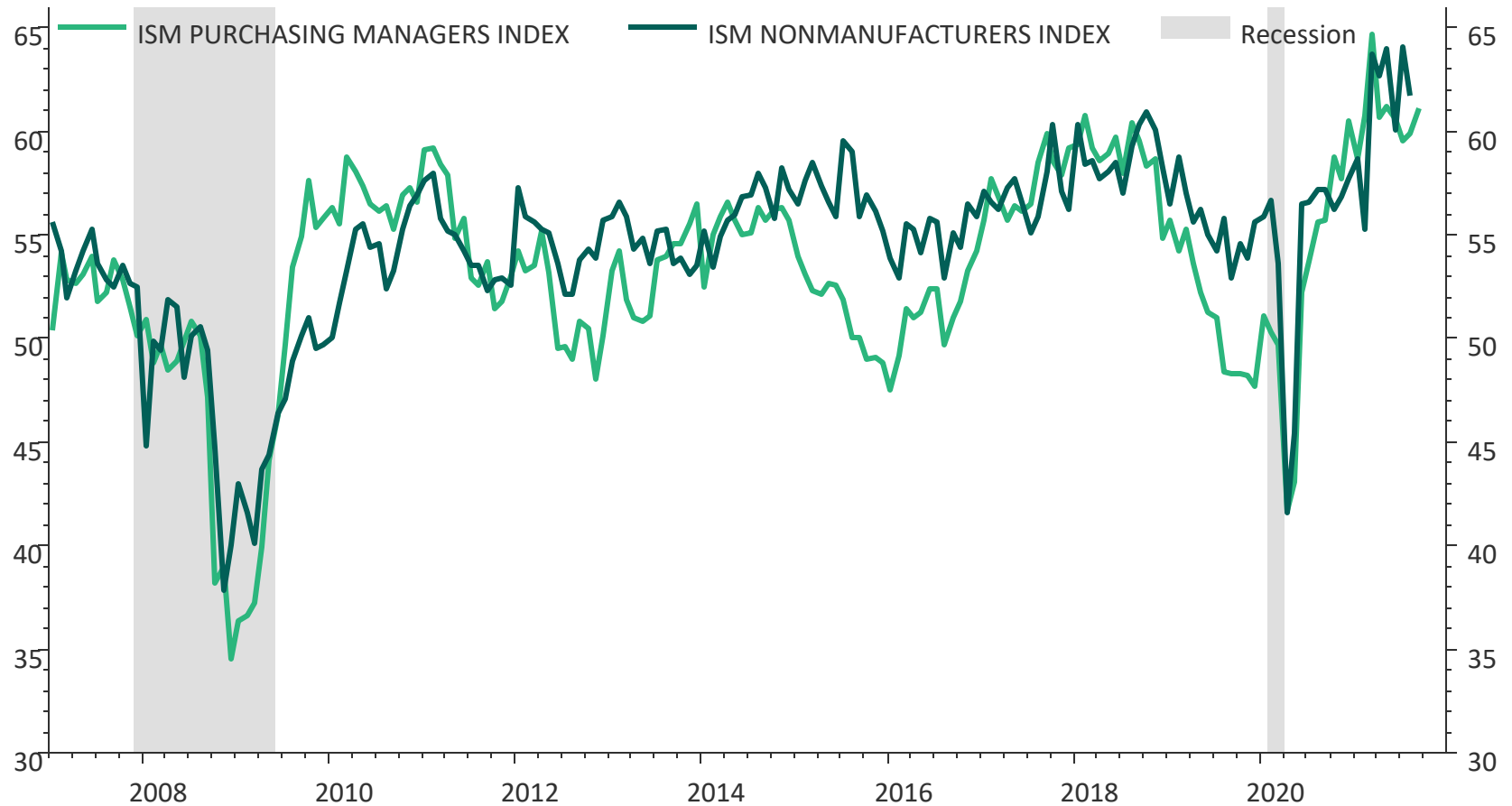
(Net Percent "Too Low minus Too High" at present time, s.a.)



Source: Refinitiv Datastream

Manufacturing and Services Sectors Expand

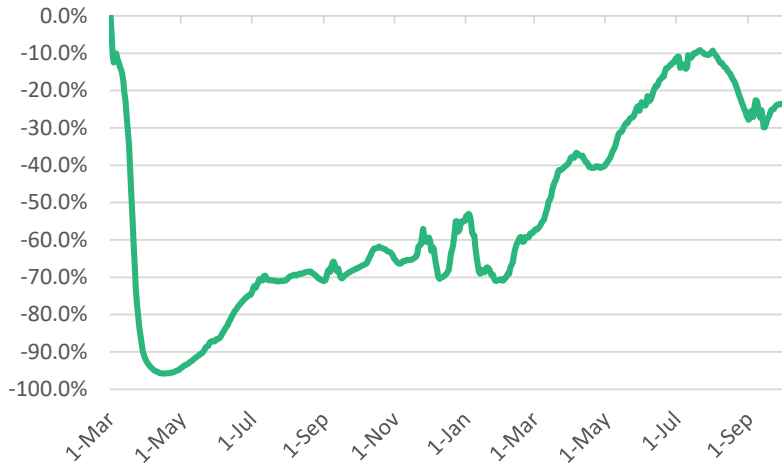
ISM Manufacturing PMI and Non-Manufacturing NMI



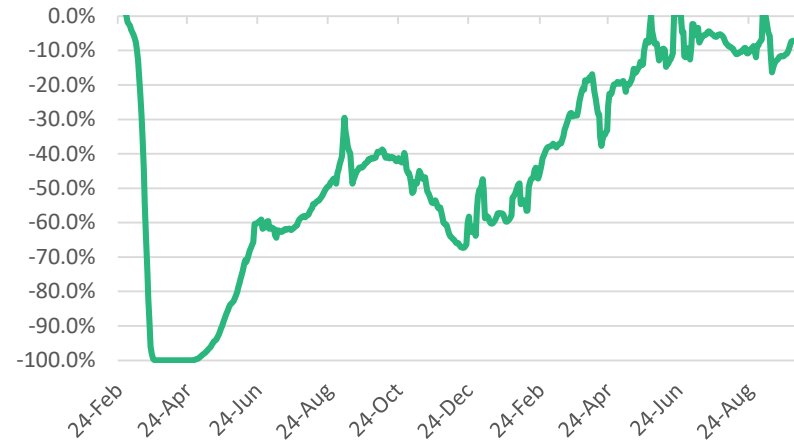
Source: Refinitiv Datastream

Consumer Activity

TSA Checkpoint Travel Numbers
Relative to 2019, 7-Day Moving Average



Open Table Seated Diners
Year-over-Year % Change, 7-Day Moving Avg.



U.S. Hotel Occupancy and Average Daily Rate

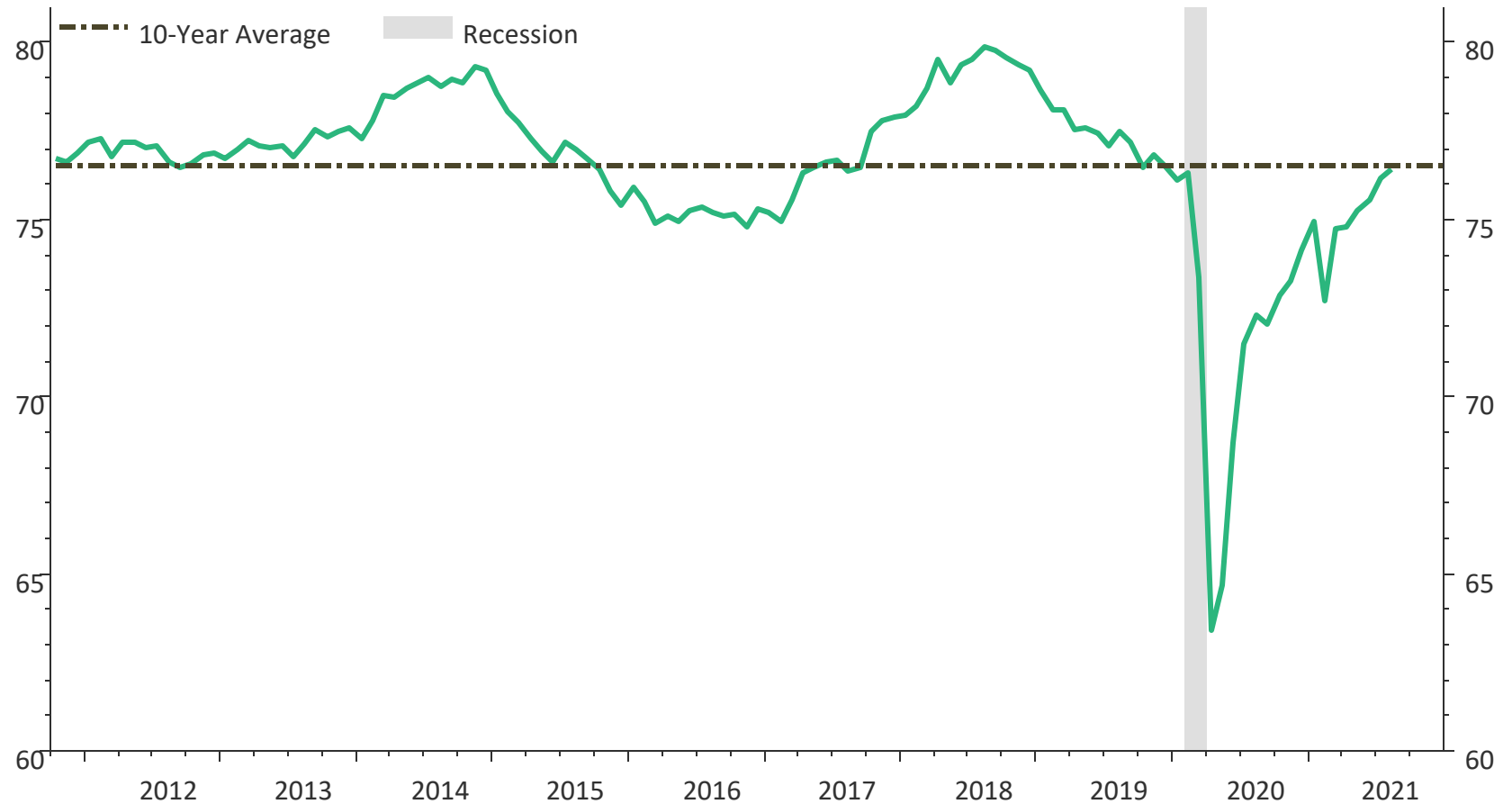
Weeks ending 22 February 2020-18 September 2021



Source: STR, 2011 © CoStar Realty Information, Inc.

Unutilized Capacity

Total Industry Capacity Utilization

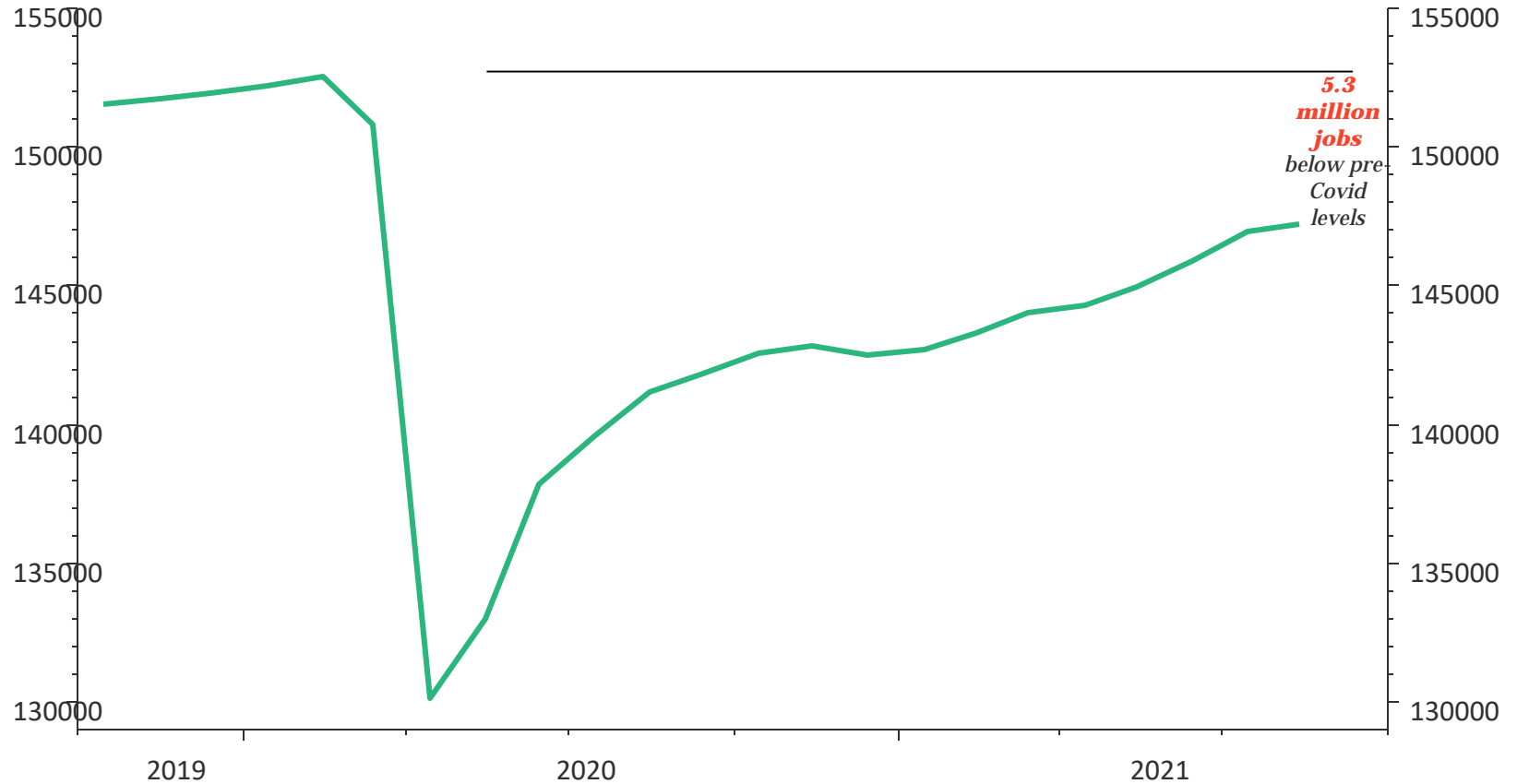


Source: Refinitiv Datastream

Significant Slack in the Labor Market

US Nonfarm Employment

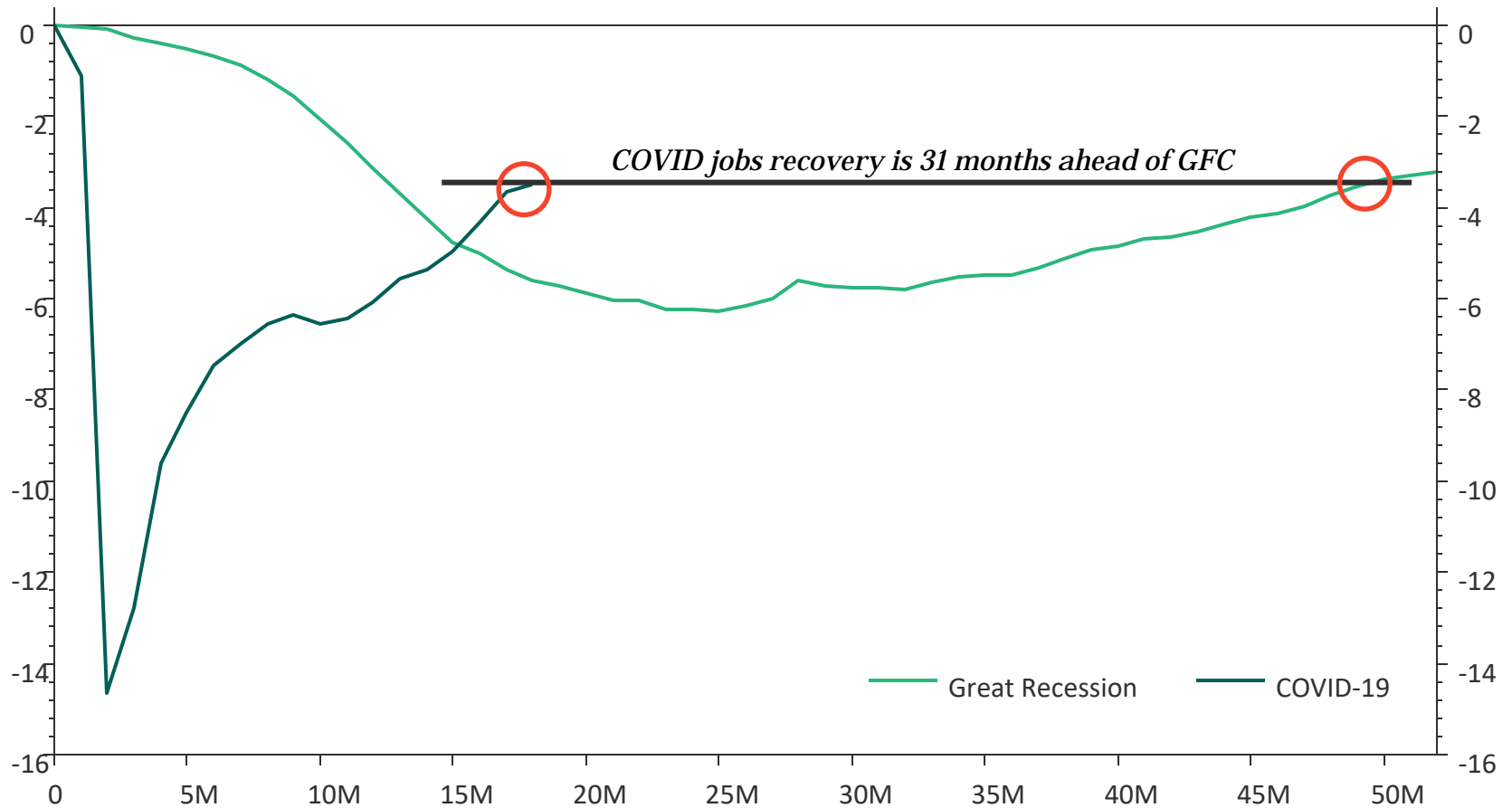
in thousands



Source: Refinitiv Datastream

Rapid Improvement in Labor Market

Change in Employment (%)

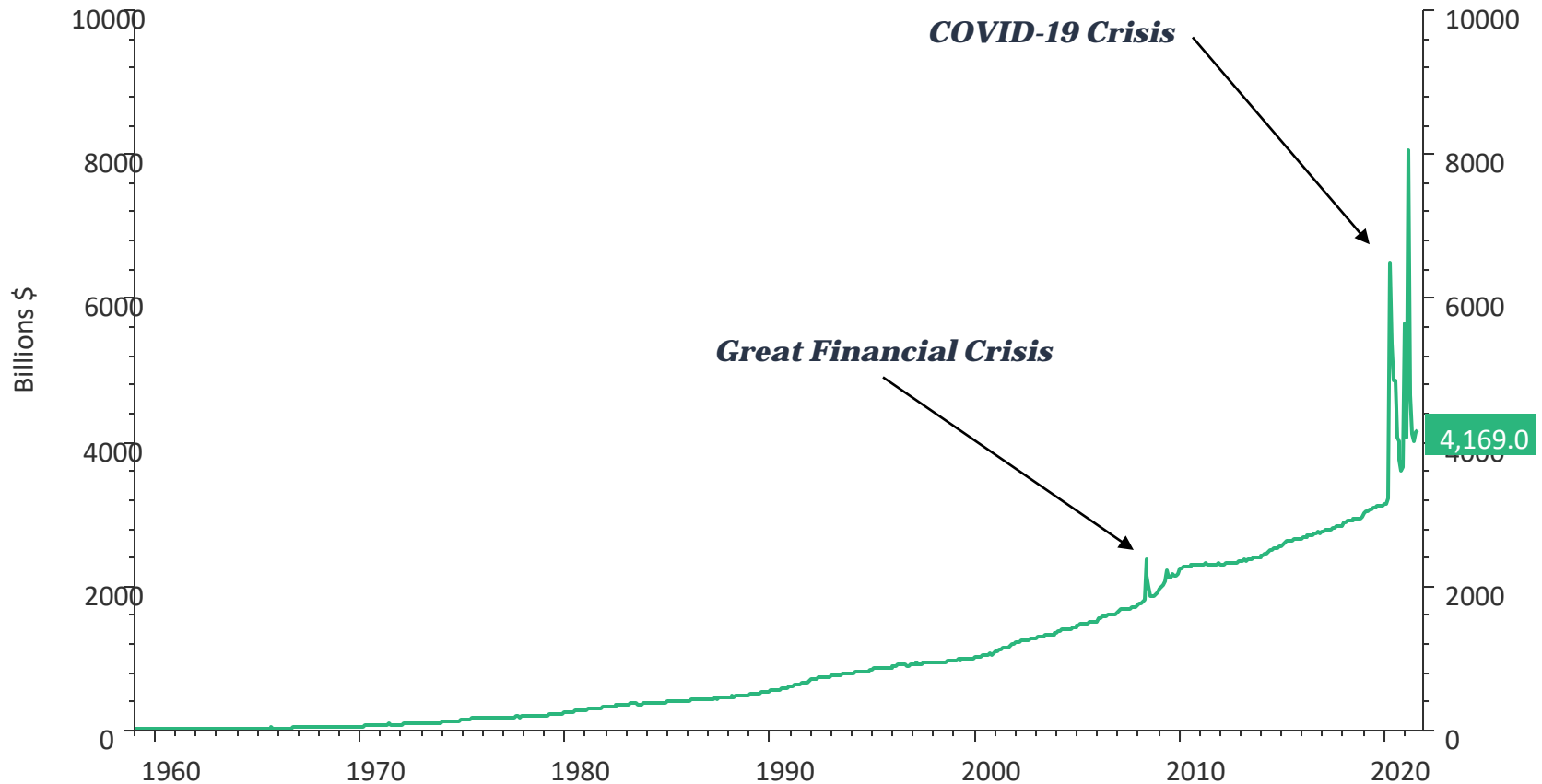


Source: Refinitiv Datastream

Rapid, Large-scale Support for the Economy

Government Social Benefits

Annualized Rate, Seasonally Adjusted

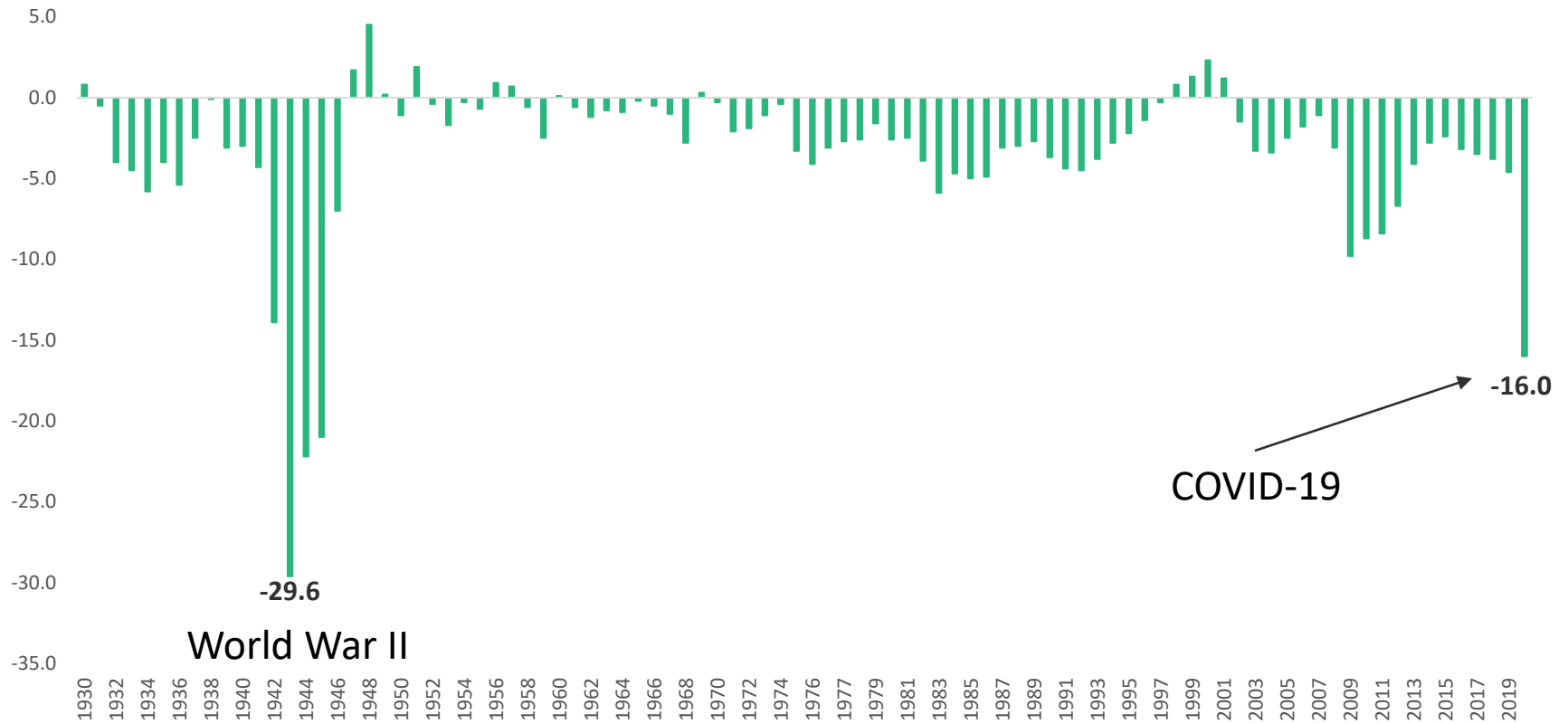


Source: Refinitiv Datastream

War-Time Posture

US Fiscal Deficit, % of GDP

1930-2020E

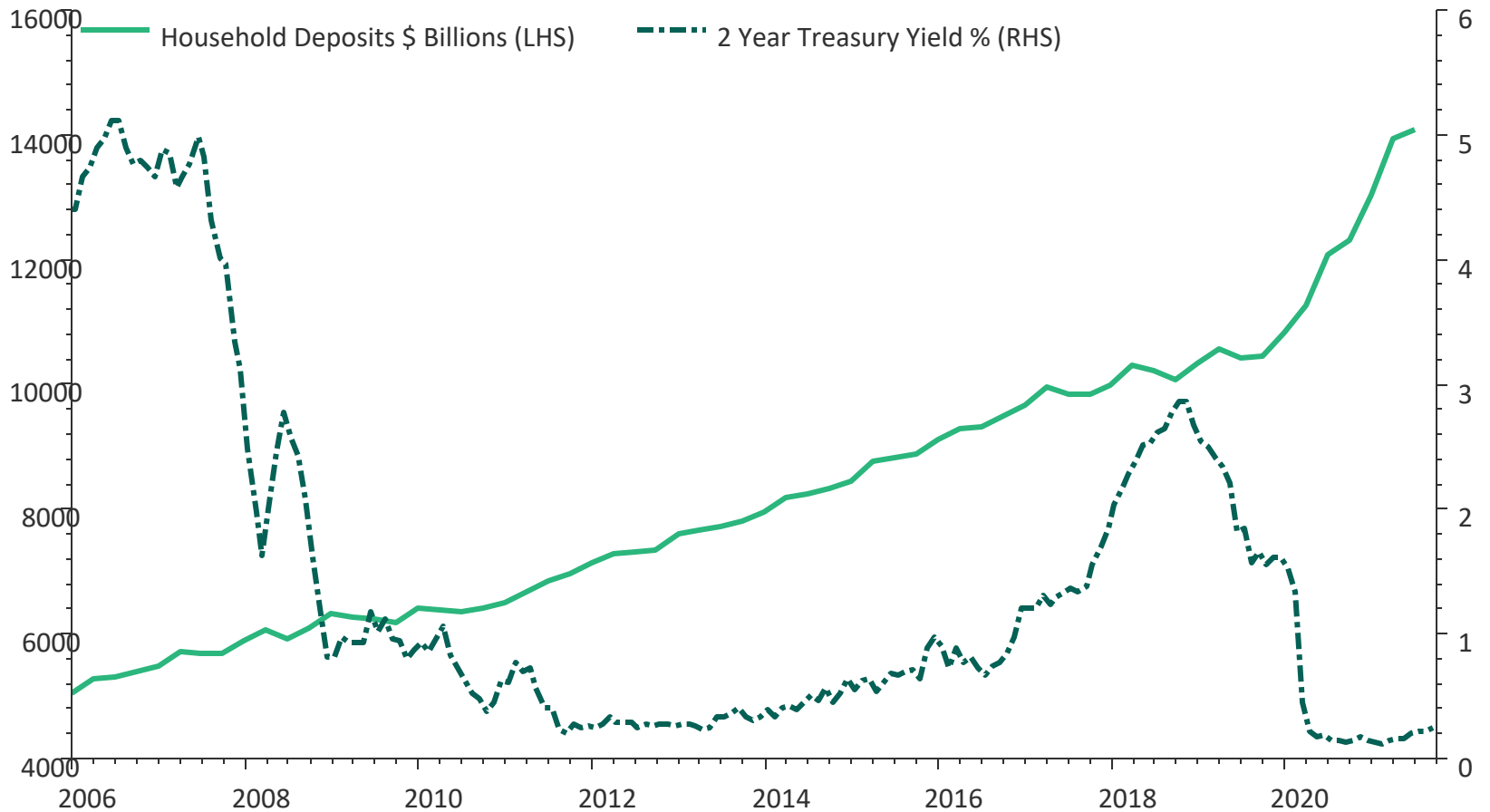


COVID-19

Source: US Treasury, Patten & Patten

Households Hoard Stimulus

Household Deposits vs. 2 Year Treasury Yield



Source: Refinitiv Datastream