

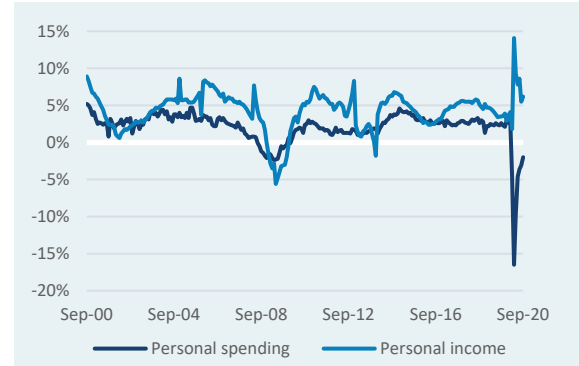
Capital Markets Snapshot

October 19th to October 30th, 2020

U.S. Economy

- Real U.S. GDP grew at an annualized quarterly pace of 33.1% (-2.9% YoY) in the third quarter, its fastest pace ever. Strong consumer spending, residential and business fixed investment, and restocking of inventories supported the Q3 bounce back.
- Personal incomes grew 6.2% YoY in September, while spending shrank -2.0%, as savings rates remained elevated (14.3%) relative to pre-pandemic levels (8.3% in February). Strong growth in Q4 will likely hinge on consumers' willingness to spend down savings.
- Continuing claims data indicated slow-and-steady improvement in the U.S. labor market – claims fell from 9.0 million to 7.4 million.

PERSONAL INCOME AND SPENDING (% YOY)

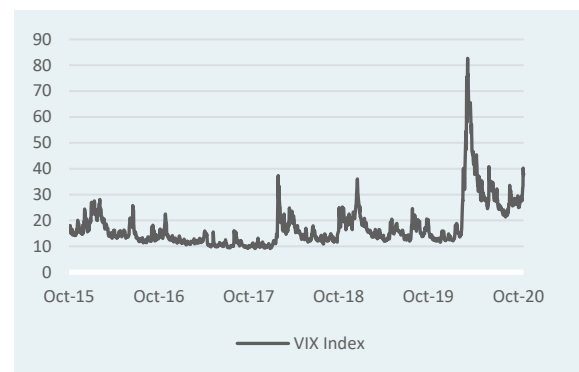


Source: Bureau of Economic Analysis, as of 9/30/20

U.S. Markets

- Large-cap U.S. equities took a step back and declined -6.1% over the period. Though most of big tech managed to beat revenue and earnings expectations, discouraging guidance and COVID-19 case growth in Europe helped to push investors' risk appetite lower.
- The Cboe VIX Index, which measures the market's expectation of 30-day forward looking volatility on the S&P 500 Index, rose as high as 40.3 and ended the period at 38.0, a four-month high.
- Despite the generally risk-off flows evident in global financial markets, 10-year Treasury bonds sold off, and yields grinded upward to 0.87%, their highest level since early June of this year.

IMPLIED VOLATILITY

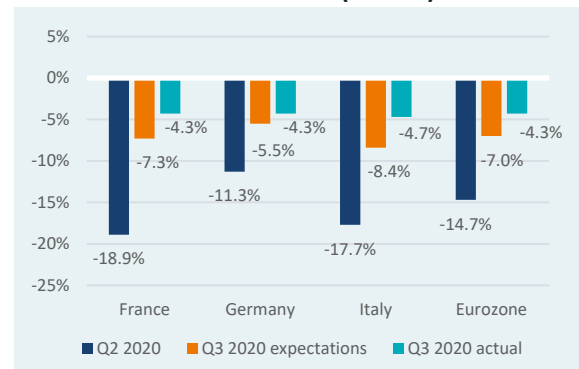


Source: Cboe, Bloomberg, as of 10/30/20

International Economy

- COVID-19 case growth continued to accelerate across Europe, and the seven-day average daily case growth for the E.U. and the U.K. combined rose from 118K to 201K. France and Ireland entered second lockdowns and most of the continent reintroduced curbs.
- Eurozone GDP bounced back by more than analysts expected in the third quarter but remained below Q3 2019 levels. GDP grew at an annualized quarterly rate of 12.7% in Q3, (exp. +9.6%) up from -11.8% in Q2, but YoY growth remained negative (-4.3%).
- The European Central Bank left policy unchanged but strongly hinted that further support will be announced in December.

EUROZONE GDP GROWTH (% YOY)



Source: Bloomberg as of 9/30/20

International Markets

- In a down-period for global risk assets, emerging market equities (-1.8%) outperformed international developed (-5.4%) and U.S. equities (-6.1%) in U.S. dollar-terms. Chinese equities (MSCI China +0.0%) remained buoyant and provided support.
- Hard-currency denominated emerging market debt (JPM EMBI -1.6%) underperformed riskier U.S. credit (Bloomberg Barclays Corporate High Yield Index -0.9%) over the prior two weeks.
- Brent crude oil delivered a total return of -12.3%, and spot prices fell to \$37.94/bbl. European demand concerns and higher-than-expected Libyan output likely contributed to the declines.

BRENT CRUDE OIL PRICES (\$/BARREL)



Source: Bloomberg, as of 10/30/20



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Capital Markets Snapshot

MARKET PERFORMANCE

Last Two Weeks 10/19/2020 - 10/30/2020		October		QTD		YTD	
Return	Std Dev	Return	Std Dev	Return	Std Dev	Return	Std Dev
-6.10	22.70	-2.66	20.90	-2.66	20.90	2.77	37.24
-5.82	23.59	2.09	22.67	2.09	22.67	-6.77	45.40
-5.48	16.70	-2.43	16.08	-2.43	16.08	-1.09	29.80
-5.41	13.71	-3.99	14.53	-3.99	14.53	-10.80	25.50
-1.81	10.78	2.06	11.50	2.06	11.50	0.87	25.55

Equities

S&P 500 TR USD	-6.10	22.70
Russell 2000 TR USD	-5.82	23.59
MSCI ACWI NR USD	-5.48	16.70
MSCI EAFE NR USD	-5.41	13.71
MSCI EM NR USD	-1.81	10.78

Fixed Income

Barclays US Treasury US TIPS TR USD	-0.72	2.38	-0.65	2.33	-0.65	2.33	8.52	7.85
Barclays US Treasury TR USD	-0.55	2.81	-0.94	3.01	-0.94	3.01	7.88	6.53
Barclays Long Term US Treasury TR USD	-1.79	9.73	-3.01	10.24	-3.01	10.24	17.69	21.07
Barclays US Agg Bond TR USD	-0.46	2.21	-0.45	2.30	-0.45	2.30	6.32	4.99
Barclays US Credit TR USD	-0.77	3.47	-0.22	3.63	-0.22	3.63	6.15	8.35
Barclays High Yield Corporate TR USD	-0.89	3.24	0.51	3.39	0.51	3.39	1.13	11.36
JPM EMBI Global Diversified TR USD	-1.57	2.76	-0.03	3.91	-0.03	3.91	-0.54	13.02

Other

Bloomberg Commodity TR USD	-2.10	12.03	1.41	13.02	1.41	13.02	-10.85	17.64
Wilshire US REIT TR USD	-5.31	20.65	-2.46	21.58	-2.46	21.58	-18.79	45.91
MSCI Currency Factor Mix ER USD	-0.04	1.96	-0.12	1.73	-0.12	1.73	-1.29	3.18

Source: Morningstar, Data as of last available market close, Top/bottom two highlighted.

ECONOMIC DATA - RELEASED

Date	Country	Event	Freq	Period	Surv(M)	Actual	Surprise
10/19/20	US	NAHB Housing Market Index	M	Oct	83.0	85.0	1.3
10/20/20	US	Housing Starts	M	Sep	1465k	1415k	-1.6
10/20/20	UK	CPI Core YoY	M	Sep	1.3%	1.3%	0.0
10/29/20	US	Continuing Claims	W	17-Oct	7775k	7756k	-0.1
10/22/20	US	Existing Home Sales	M	Sep	6.30m	6.54m	1.5
10/22/20	US	Kansas City Fed Manf. Activity	M	Oct	11	13	1.6
10/23/20	EC	Markit Eurozone Manufacturing PMI	M	Oct P	53.0	54.4	1.8
10/23/20	EC	Markit Eurozone Services PMI	M	Oct P	47.0	46.2	-0.8
10/23/20	US	Markit US Manufacturing PMI	M	Oct P	53.5	53.3	-0.5
10/23/20	US	Markit US Services PMI	M	Oct P	54.6	56.0	4.8
10/27/20	US	Durable Goods Orders	M	Sep P	0.5%	1.9%	1.4
10/27/20	US	Conf. Board Consumer Confidence	M	Oct	102.0	100.9	-0.6
10/28/20	US	Advance Goods Trade Balance	M	Sep	-\$84.5b	-\$79.4b	3.1
10/29/20	US	GDP Annualized QoQ	Q	3Q A	32.0%	33.1%	0.4
10/30/20	US	Personal Spending	M	Sep	1.0%	1.4%	1.5

ECONOMIC DATA - NEXT TWO WEEKS

Date	Country	Event	Freq	Period	Prior	Surv(M)	Std Dev
11/02/20	IT	Markit Italy Manufacturing PMI	M	Oct	53.2	53.7	1.1
11/02/20	US	ISM Manufacturing	M	Oct	55.4	55.8	0.6
11/03/20	US	Factory Orders	M	Sep	0.7%	1.0%	0.3
11/04/20	IT	Markit Italy Services PMI	M	Oct	48.8	47.1	1.0
11/04/20	US	Trade Balance	M	Sep	-\$67.1b	-\$63.9b	2.3
11/04/20	US	ISM Services Index	M	Oct	57.8	57.5	0.5
11/05/20	EC	Retail Sales YoY	M	Sep	3.7%	2.8%	0.6
11/05/20	UK	BOE Asset Purchase Program Total	D	5-Nov	745b	845b	137.8
11/06/20	US	Change in Nonfarm Payrolls	M	Oct	661k	600k	139.5
11/06/20	US	Unemployment Rate	M	Oct	7.9%	7.7%	0.2
11/06/20	US	Average Hourly Earnings YoY	M	Oct	4.7%	4.6%	0.1
11/06/20	US	Labor Force Participation Rate	M	Oct	61.4%	61.5%	0.0
11/06/20	US	Underemployment Rate	M	Oct	12.8%	10.8%	1.6
11/06/20	US	Consumer Credit	M	Sep	-\$7.220b	\$8.250b	14.7
11/13/20	US	Mortgage Delinquencies	Q	3Q	8.2%	--	--

Source: Bloomberg



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