

4Q21 Market Environment

US Equity Performance – Fourth Quarter

Returns grind higher despite mounting concerns

- S&P 500 posted a strong 11.0% gain in 4Q21; large cap growth (Russell 1000 Growth) was the top performer, which contrasted with the worst-performing asset class, small cap growth (Russell 2000 Growth).
- The new Omicron variant, continued supply chain disruptions, and renewed fears of persistent inflation pushed investors into the perceived safety of the largest stocks.
- S&P 500 sector results were mixed, with Real Estate (+17.5%) posting the top returns alongside Technology (+16.7%) and Materials (+15.2%); Communication Services (0.0%) and Financials (+4.6%) lagged broad returns.
- In 2021, small value outperformed small growth by over 2,500 bps (Russell 2000 Value: 28.3% vs. Russell 2000 Growth: 2.8%), a stark reversal from 2020 and a pattern consistent with periods of robust GDP growth.

Index concentration driving positive returns...

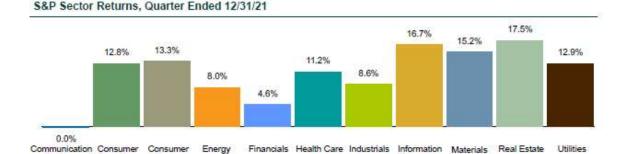
- The 10 largest stocks in the S&P 500 comprised 30.5% of the index but accounted for 65% of the 2021 return.
- During 4Q21, top 10 weights accounted for ~40% of return.

...but this may be hiding underlying weakness

– Nearly 10% of Russell 3000 stocks fell by 35% or more in 2021, which is unusual for a year when market returns were in excess of 25%.

Market capitalization, style driving divergence in returns

- Mega-cap growth (Russell Top 200 Growth) was the strongest performer in both 4Q21 and 2021.
- Growth style returns highly correlated with market capitalization in both 4Q21 and 2021 (higher market capitalization = high return).
- Within micro-, small-, and smid-cap growth, Health Care (especially biotech/pharma) was biggest detractor to returns.
- Value returns correlated with market capitalization in 4Q21; for 2021, value returns did not experience much divergence.

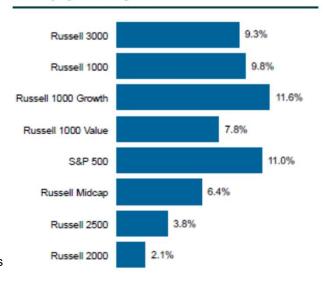


Technology

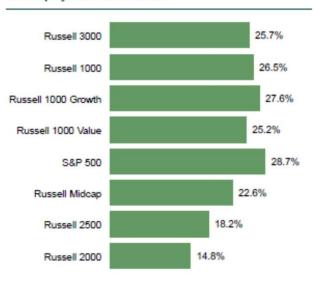
Sources: S&P Dow Jones Indices

Services Discretionary Staples

U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&P Dow Jones Indices



Global ex-U.S. Equity Performance – Fourth Quarter

Omicron takes center stage

- A recovery-driven market shifted back to COVID favorites, boosting Information Technology stocks.
- Small cap underperformed large amid global growth concerns.
- Emerging markets struggled relative to developed markets as China experienced significant pressure from an economic slowdown and its regulatory crackdown.

Stalled recovery

- As the new variant took hold, Energy and Communication Services lagged on fear of restrained growth.
- Japan suffered from both supply chain issues and economic constraints from COVID-19.
- Growth and momentum factors outperformed in developed markets but not in emerging markets.

U.S. dollar vs. other currencies

 The U.S. dollar rose against other major currencies as tapering accelerated alongside the expectation for 2022 rate hikes, which notably detracted from global ex-U.S. results.

Growth vs. value

 Inflationary pressures and the ultimate rebound from COVID-19 supported value's leadership for the full year, despite the shift to growth in 4Q21.

Regulation has spooked Chinese market

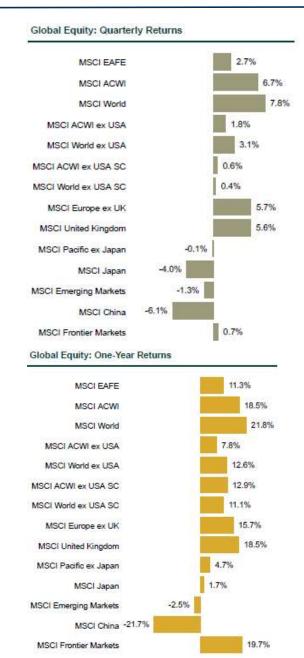
- Although regulation is not new in China, the duration, scope, and intensity of the current regime are unprecedented.
- Regulations have been centered on antitrust, financial markets, data/national security, and social welfare to enhance sustainability of its economy.
- Regulatory uncertainty should subside as China focuses on implementation.

Inflation is expected to normalize in a few years

- Forecasted year-over-year core CPI is expected to reach its peak between 1Q22 and 2Q22.
- Inflationary environment by and large has shifted central banks to contractionary policy.

Rise in inflation expectations tends to stoke value

- Correlation between cyclical sectors and inflation/interest rate expectations generally has been positive.
- Growth relative to value is more vulnerable as interest rates normalize.
- Global recovery from COVID and deficit in Energy should support value.



Source: MSCI



U.S. Fixed Income Summary – Fourth Quarter

Treasury yields again unchanged

- 10-year at 1.52% at 9/30 and 12/31, up slightly from 1.45% on 6/30.
- TIPS outperformed nominal Treasuries and 10-year breakeven spreads widened to 2.56%.
- Real yields remain solidly in negative territory.

Bloomberg Aggregate was flat, literally

- Spread sectors (Agencies, ABS, CMBS, MBS, and Credit) all underperformed UST by a modest amount (but positive YTD).
- Yield curve flattened; curve positioning had a meaningful impact on returns in 4Q.

High yield and leveraged performed relatively well

- Spreads remain near historic tights.
- High yield issuers' default rate declined to a record low in December (J.P. Morgan).
- New issuance hit a record for the second year in a row as issuers looked to finance at relatively low rates.

Munis outperformed Treasuries

- Lower-quality bonds continued their trend of outperformance as investors sought yield.

Inflation is being felt, indicated by several measures

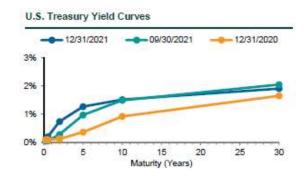
- Annual CPI jumped to 7.0% in December—its eighth consecutive reading above 5% and the largest 12-month increase since
 the period ending June 1982.
- Increases for shelter and for used cars/trucks were the largest contributors to the seasonally adjusted all-items increase.
- Even service inflation, which had declined initially, has since recovered and is on an upward trend.

Fed has turned more hawkish than expected

- Fed announced a doubling of the pace of tapering and an upward revision to the anticipated path of rate hikes.
- FOMC participants now expect three rate hikes in 2022 to bring the targeted range to 0.75%-1.0% by year-end.

Spreads have returned to tights

- Fundamentals remain strong and default expectations low.
- Revenue, profits, and free cash flow at or near cycle highs.
- Gross and net leverage trending lower while interest coverage trends higher.



U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns





Non-U.S. Fixed Income Performance – Fourth Quarter

Global fixed income flat on a hedged basis

- Returns were muted and U.S. dollar strength eroded returns for unhedged U.S. investors in both 4Q and 2021.
- Yen was a notable underperformer in developed markets, falling 10% for the year.

Emerging market debt posted negative returns

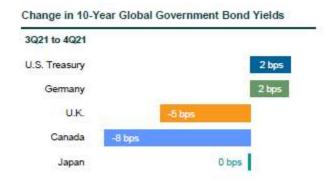
- Emerging market debt indices underperformed most other fixed income sectors in 2021.
- Currencies fared the worst vs. the U.S. dollar; the Turkish lira sank 44% on spiking inflation.

Global outlook may shift lower with regional variance

Moderating and differentiated outlook for various regions reflects certain DM and EM economies shifting to tightening balanced by others managing legacy issues.

Central bank policy is mixed

- The U.K. has led the way with interest rate hikes as the BOE expects inflation to peak in April 2022.
- Europe and Japan continue to have below-target inflation and are expected to maintain relatively accommodating monetary policy.
- EM central banks, having moved early to battle inflation, may be moving to a more latecycle posture.









Returns for Various Periods – December 31, 2021

4		October	November	December	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
	1 Russell:3000 Index	6.76	(1.52)	3.94	9.28	25.66	25.66	25.79	17.97	16.30	10.59
	2 Russell:1000 Index	6.94	(1.34)	4.05	9.78	26.45	26.45	26.21	18.43	16.54	10.74
	3 Russell:1000 Growth	8.66	0.61	2.11	11.64	27.60	27.60	34.08	25.32	19.79	13.72
	4 Russell:1000 Value	5.08	(3.52)	6.31	7.77	25.16	25.16	17.64	11.16	12.97	7.51
	5 Russell:Midcap Index	5.95	300000	4.08	6.44	22.58	22.58	23.29	15.10	14.91	10.22
			(3.48)	0.35	2.85	12.73	12.73	27.46	19.83	16.63	11.69
	6 Russell:Midcap Growth	7.01	(4.23)								
	7 Russell:Midcap Value	5.32	(3.04)	6.28	8.54	28.34	28.34	19.62	11.22	13.44	8.78
RQUITY	8 Russell:2500 Index	4.90	(4.17)	3.28	3.82	18.18	18.18	21.91	13.75	14.15	9.67
	9 Russell:2500 Growth	5.13	(5.15)	0.49	0.20	5.04	5.04	25.09	17.65	15.75	11.29
	10 Russell:2500 Value	4.75	(3.48)	5.20	6.36	27.78	27.78	18.31	9.88	12.43	7.91
	11 Russell:2000 Index	4.25	(4.17)	2.23	2.14	14.82	14.82	20.02	12.02	13.23	8.69
	12 Russell:2000 Growth	4.68	(4.88)	0.44	0.01	2.83	2.83	21.17	14.53	14.14	9.97
	13 Russell:2000 Value	3.81	(3.42)	4.08	4.36	28.27	28.27	17.99	9.07	12.03	7.19
	14 S&P:500	7.01	(0.69)	4.48	11.03	28.71	28.71	26.07	18.47	16.55	10.66
	15 S&P:400 Mid Cap	5.89	(2.94)	5.08	8.00	24.76	24.76	21.41	13.09	14.20	10.45
	16 S&P:600 Small Cap	3.43	(2.29)	4.53	5.64	26.82	26.82	20.11	12.42	14.50	10.15
	17 MSCI:ACWI ex US	2.39	(4.50)	4.13	1.82	7.82	7.82	13.18	9.61	7.28	3.77
	18 MSCI:EAFE	2.46	(4.65)	5.12	2.69	11.26	11.26	13.54	9.55	8.03	3.60
	19 MSCI:EM	0.99	(4.08)	1.88	(1.31)	(2.54)	(2.54)	10.94	9.88	5.49	4.45
8 /	20 MSCI:ACWI	5.10	(2.41)	4.00	6.68	18.54	18.54	20.38	14.40	11.85	7.05
	21 Blmbg:Aggregate	(0.03)	0.30	(0.26)	0.01	(1.54)	(1.54)	4.79	3.57	2.90	4.09
	22 Blmbg:Gov/Credit	0.05	0.46	(0.32)	0.18	(1.75)	(1.75)	5.50	3.99	3.13	4.26
	23 Blmbg:Credit	0.22	0.08	(0.08)	0.22	(1.08)	(1.08)	7.17	5.05	4.45	5.23
ш	24 Blmbg:Corporate High Yld	(0.17)	(0.97)	1.87	0.71	5.28	5.28	8.83	6.30	6.83	7.07
S	25 Blmbg:Municipal Bond	(0.29)	0.85	0.16	0.72	1.52	1.52	4.73	4.17	3.72	4.22
FIXED INCOME	26 Blmbg:USTIPS	1.13	0.89	0.32	2.36	5.96	5.96	8.44	5.34	3.09	4.69
XE	27 Blmbg:Glob Agg ex USD	(0.39)	(0.72)	(0.07)	(1.18)	(7.05)	(7.05)	2.46	3.07	0.82	2.65
ш	28 S&P:LSTA Levg Loan	0.27	(0.16)	0.64	0.75	5.20	5.20	5.63	4.27	4.69	4.51
	29 ML:US Treasuries 1-3 Yrs	(0.30)	0.02	(0.25)	(0.53)	(0.55)	(0.55)	2.02	1.61	1.09	1.95
	30 LIBOR - 3 Month	0.01	0.01	0.02	0.04	0.16	0.16	1.05	1.35	0.88	1.25
	31 3 Month T-Bill	0.00	0.01	0.01	0.01	0.05	0.05	0.99	1.14	0.63	0.91
REAL ASSETS	32 Blmbg:Commodity TR ldx	2.58	(7.31)	3.53	(1.56)	27.11	27.11	9.86	3.66	(2.85)	(2.59)
	33 GS Commodity Index	5.80	(10.82)	7.59	1.51	40.35	40.35	7.99	2.80	(5.50)	(4.60)
	34 MSCI:US REIT Index	7.74	(0.72)	8.74	16.32	43.06	43.06	18.50	10.78	11.32	6.87
	35 Alerian:MLP Index	4.98	(7.51)	3.56	0.55	40.17	40.17	2.12	(2.70)	(0.26)	4.34
	36 DJB:Glbl Infrastructure	4.16	(4.10)	7.60	7.49	19.87	19.87	12.80	8.90	8.72	7.43
	37 US DOL:CPI All Urban Cons	0.83	0.49	-	-	_	-	-	-	-	-

