

# S&P Dow Jones Indices

A Division of **S&P Global**

INDEX INVESTMENT STRATEGY

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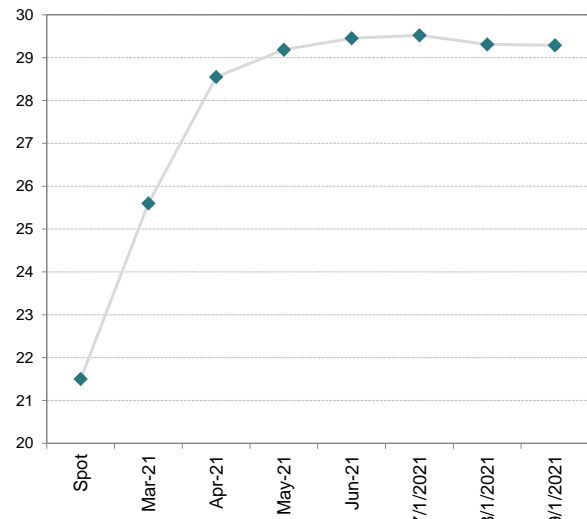
Index Dashboard: Risk & Volatility February 17, 2021

## VOLATILITY MEASURES

US Equity	VIX	1m ±	200D Ave	Realized (1Yr)
Cboe Volatility Index® (VIX®)	21.50	-0.08	26.50	35.00
Cboe Short-Term Volatility (VIX9D)	18.41	-0.44	24.34	35.00
Cboe 3-month Volatility (VXV)	27.52	1.80	29.74	35.00
Cboe 1-Year Volatility (VIX1Y)	29.40	1.74	30.20	35.00
Cboe DJIA Volatility (VXD)	19.67	-1.33	26.38	37.23
Global Equity				
VSTOXX® (V2X)	21.83	1.55	26.05	32.67
S&P/ASX 200 VIX (A-VIX)	15.26	1.24	18.84	30.51
S&P/BMV IPC VIX (SPBMVVIX)	12.08	-1.38	15.71	25.25
HSI Volatility (VHSI)	22.92	1.44	23.35	23.66
Cboe EM ETF (VXEEM)	23.02	-2.33	26.43	34.69
Cboe China ETF (VXFXI)	25.44	0.37	26.93	32.29
Interest Rate				
Cboe 20+ Yr US Treasury ETF (VXTLT)	18.40	5.96	16.63	5.07
Cboe IR Swap Volatility (SRVIX)	73.79	7.73	65.09	128.61
S&P/JPX JGB VIX® (SPJGB)	2.15	0.80	1.70	2.21
Currency				
Cboe Euro ETF (EVZ)	6.57	0.34	7.47	7.51
Commodity				
Cboe Gold ETF Volatility (GVZ)	20.49	1.54	20.87	20.38
Cboe Oil ETF Volatility (OVX)	36.90	1.23	48.80	74.04
Volatility of VIX				
Cboe VIX of VIX (VVIX)	122.83	8.66	116.94	149.69
INVESTABLE VOLATILITY INDICES				
Index	1m ±	YTD	12m ±	
S&P VIX Mid-Term Futures Index	10.14%	13.86%	112.86%	
S&P Dynamic VIX Index	6.33%	8.28%	123.52%	
S&P 500 Dynamic VEQTOR Index	1.89%	5.2%	20.4%	
Cboe S&P 500 Put-write Index	1.26%	3.2%	3.3%	
S&P 500 VEQTOR Switch Index	1.43%	3.22%	23.37%	
Cboe S&P 500 Buy-write Index	1.31%	3.14%	-1.80%	
S&P Daily Inverse Short-Term VIX	-2.36%	-1.3%	-71.9%	
S&P VIX Short-Term Futures Index	-4.64%	-7.36%	16.08%	
<b>S&amp;P 500®</b>	2.20%	4.88%	18.41%	

## TERM STRUCTURE & SKEW

### VIX Futures Term Structure



### VIX Futures Indices Roll Costs (Monthly)

Short-term futures	11.52%
Mid-term futures	-0.19%
Skew	
Level	1M
Cboe Skew Index (SKEW)	144.45
	-1.51%
	8.88%

## REALIZED MEASURES

S&P 500 Correlations (Month-end)	1 Year	3 Year	10 Year
S&P Europe 350®	0.91	0.88	0.84
S&P Emerging BMI	0.87	0.83	0.75
S&P 500 Bond	0.69	0.50	0.35
S&P GSCI Commodity	0.65	0.64	0.55
U.S. Dollar Index	-0.61	-0.43	-0.38
S&P 500 Single Stocks			
	21-Day	12M Ave	3Y Ave
Dispersion (annualized)	26.76%	25.44%	22.03%
Volatility (annualized)	30.13%	40.47%	30.10%
Correlation (pairwise)	0.10	0.34	0.30

## COMMENTARY

- VIX briefly visited the high 30s during a sudden market-wide de-risking that occurred in response to a short squeeze in a small-cap stock, GameStop, at the turn of the month. This was an unexpected event risk for market participants, but it was a flurry, not a storm for the broader outlook, and VIX returned to the low 20s thereafter.
- With realized S&P 500 volatility relatively grounded, and the U.S. vaccine program continuing at pace, it is notable that neither VIX nor its longer-term equivalents have yet returned to more normal levels. The VIX futures curve remains unusually steep for a spot level above 20, while the 1-year implied volatility index (VIX1Y) continues to hover around 30, a level that it did not breach above for more than seven years prior to 2020.
- Historic highs in small cap dispersion and rising large-cap dispersion pushed realized volatility up, helping to keep longer-dated implied volatility levels high. But average correlations between S&P 500 constituent daily returns remain low – coming in at 0.1 over the past 21 trading days, and exercising a dampening effect on realized vol. Meanwhile, a new-found investor enthusiasm for call options has added pressure on premiums.
- An indicator of the market's perception of potential "tail risks", the SKEW index also continues to be historically elevated – closing yesterday near the top of its typical range at 144.
- Also on the volatility market's mind, longer-dated U.S. Treasury yields have risen steeply since the turn of the year, in part driven by rising expectations for medium-term inflation. Since our prior dashboard, the Cboe 20+ Yr US Treasury ETF Volatility Index has risen by nearly 6 points to 18.4, the largest proportional increase of any of our reported indicators.

**Sources:** S&P Dow Jones Indices LLC and/or its affiliates, Cboe, U.S. Federal Reserve (Dollar index and 10Yr Swap Rate), VIX Network members, Bloomberg LLC all as of Feb. 17, 2021. **Volatility measures:** respective VIX and changes in those levels Jan. 20, 2021 to Feb. 17, 2021. 200D Average is the moving average based on trading days, colour coded by whether current respective VIX is above or below average. 1 year realized volatility calculated according to previous 1 years daily returns, annualised. **Investable Index performance** based on total return. **Index Correlations** of monthly returns between total return indices, in USD to month-end Jan. 2021. **Stock Correlations, Dispersion and Volatility** based on index-weighted averages as of Feb. 17, 2021. VIX futures **monthly roll costs** are expressed as the weighted sum of the percentage difference in price between each future and the future next closer to expiry, expressed as a fraction of that futures price and weighted according to that future's weight in the either the S&P VIX Short-Term Futures Index, or the S&P VIX Mid-Term Futures Index, as appropriate. Charts and graphs are provided for illustrative purposes. Past performance is no guarantee of future results. For more information, please visit our website at [www.spdji.com](http://www.spdji.com)

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S&P Dow Jones Indices defines various dates to assist our clients in providing transparency on their products. The First Value Date is the first day for which there is a calculated value (either live or back -tested) for a given index. The Base Date is the date at which a given index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of a given index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via S&P Dow Jones Indices' public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the index's public release date.

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