MarketDesk U.S. Risk Demand Indicator (USRDI)

A Simple Data-Driven Framework for Managing Portfolios

Primer Report

March 14, 2025

What is the U.S. Risk Demand Indicator?

The U.S. Risk Demand Indicator (USRDI) is a quantitative tool built to measure investors' risk appetite in real-time. Understanding risk regimes is crucial, as they impact asset class returns and inform asset allocation decisions. By tracking key market trends, the indicator defines the current environment and answers a fundamental question: What beta exposures should we own?

Knowing the Current Risk Regime Is Key to Managing Portfolios

USRDI classifies the market into two risk environments: "Risk-On" (increase portfolio beta) and "Risk-Off" (decrease portfolio beta). The two regimes impact markets differently, including asset class returns, market volatility, and drawdown risk. Knowing the current risk environment helps investors manage equity and credit beta exposures, such as cyclical vs defensive sectors, high beta vs low volatility stocks, and investment grade vs high yield bonds. Adjusting your portfolio's beta exposure to match the current risk environment can enhance risk-adjusted returns and reduce drawdowns. In contrast, mismanaging betas can lead to missing out on gains in bull markets and participating in selloffs during bear markets. This primer explains USRDI, discusses how each risk regime impacts markets, and provides a roadmap for managing portfolios.

How to Monitor and Implement USRDI into Your Process?

The USRDI is updated every Friday and can be tracked in the MarketDesk Weekly Note. It's designed to be a quick reference. Most of the time, there's no immediate action required—if your portfolio is already well-positioned, you can stay the course. However, during major market shifts, typically once a year or every other year, USRDI becomes a powerful tool. When it comes to implementation, each investment committee meeting should start by reviewing the latest USRDI reading. Tracking the indicator helps establish a structured framework for understanding market conditions and offers insight into the potential for volatility and drawdown risk. The key is to maintain a big-picture focus and compare your portfolio's beta exposures to the preferred betas for the current regime. (Note: The USRDI signal flows into the MarketDesk Stock Models, helping to automate risk management. The MarketDesk ETF Models are updated as the USRDI signal changes so that equity and credit exposures align with the current risk demand reading.)

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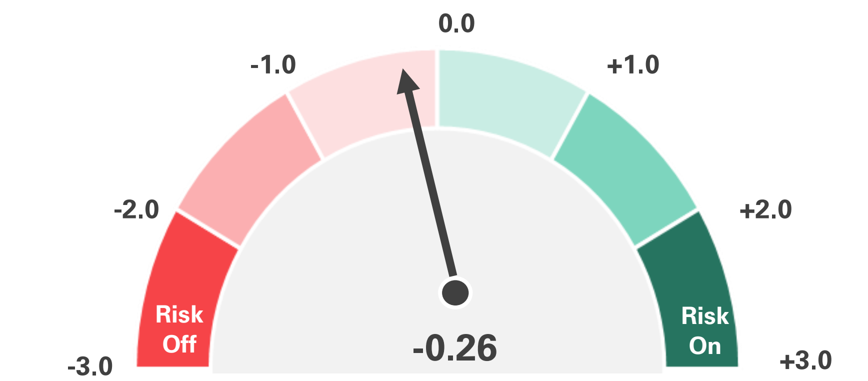
Figure 1 – MarketDesk U.S. Risk Demand Indicator (USRDI)

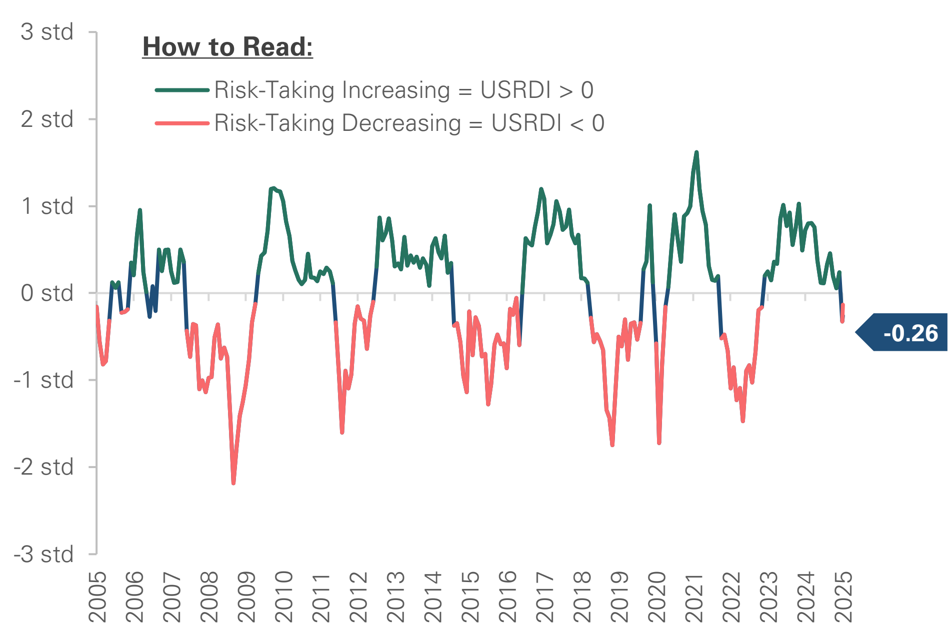


Indicator Inputs (Equal-Weighted)	Reading	Status
Equity Markets	-1.0	Risk-Off
Equity Volatility	-0.6	Risk-Off
FX / Currencies	-0.3	Risk-Off
Credit Markets	+0.8	Risk-On

Source: MarketDesk Quant Pack. As of 3/14/2025.

Figure 2 – MarketDesk U.S. Risk Demand Indicator (USRDI)

Historical USRDI Readings Since 2005



Source: MarketDesk Quant Pack. As of 3/14/2025.

USRDI Signal History and Model Track Record

USRDI provides a real-time measure of investors' risk appetite. When USRDI is above zero, it signals a risk-on environment, which favors cyclical sectors, high beta stocks, high yield corporate bonds, and hybrid bonds (convertible bonds). In contrast, a reading below zero signals a risk-off environment, which favors defensive sectors, low volatility stocks, and U.S. Treasury bonds. Figure 3 shows USRDI's monthly risk demand signal since 2000. Figure 4 shows the performance of various models that incorporate the signal, with more in-depth statistics on page 11, and Figure 5 tracks the performance of a simple stock/bond model. The next page discusses how USRDI is constructed and the average length of risk-on and risk-off regimes.

Figure 3: USRDI Model Signal History (Risk-On vs Risk-Off)

The table shows the indicator's historical model signal for each month since 2000.

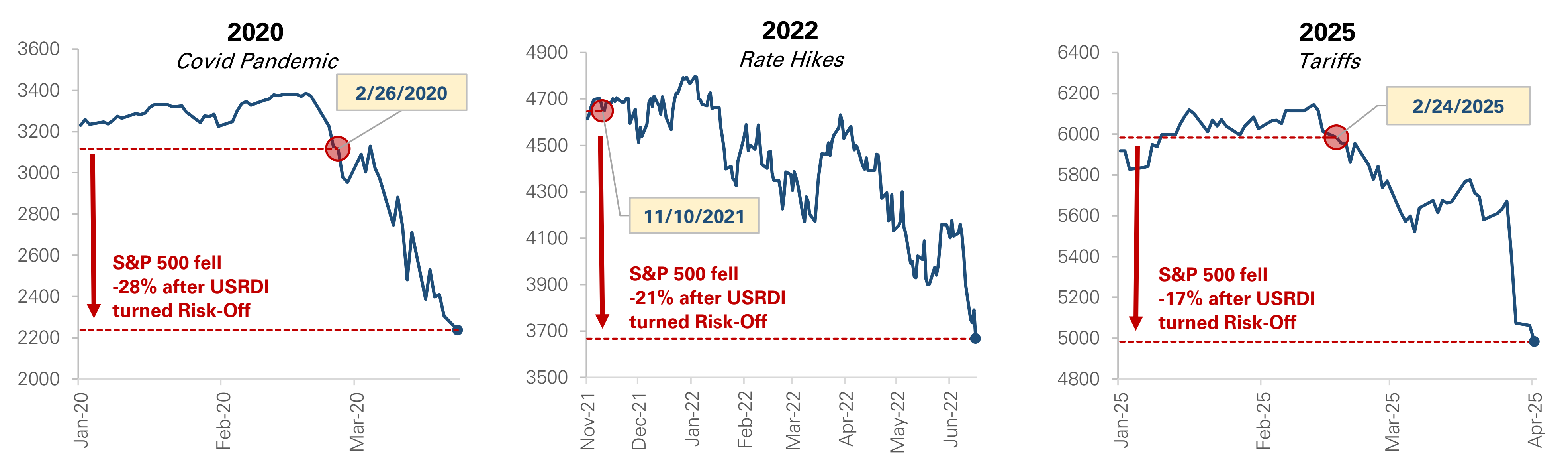
	USRDI Model Signals (Implemented at the Start of the Month)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2000	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2001	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On
2002	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-On	Risk-On	Risk-On
2003	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2004	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On
2005	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off
2006	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-On	Risk-Off	Risk-On	Risk-On
2007	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2008	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2009	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2010	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2011	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2012	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-On
2013	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2014	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off
2015	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2016	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2017	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2018	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2019	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On	Risk-On
2020	Risk-On	Risk-On	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2021	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-Off
2022	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off	Risk-Off
2023	Risk-Off	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2024	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On	Risk-On
2025	Risk-On	Risk-On	Risk-Off	Published 3/14/25 – Start Your Free Trial to See Latest Reading								

Figure 4: Annual Model Returns

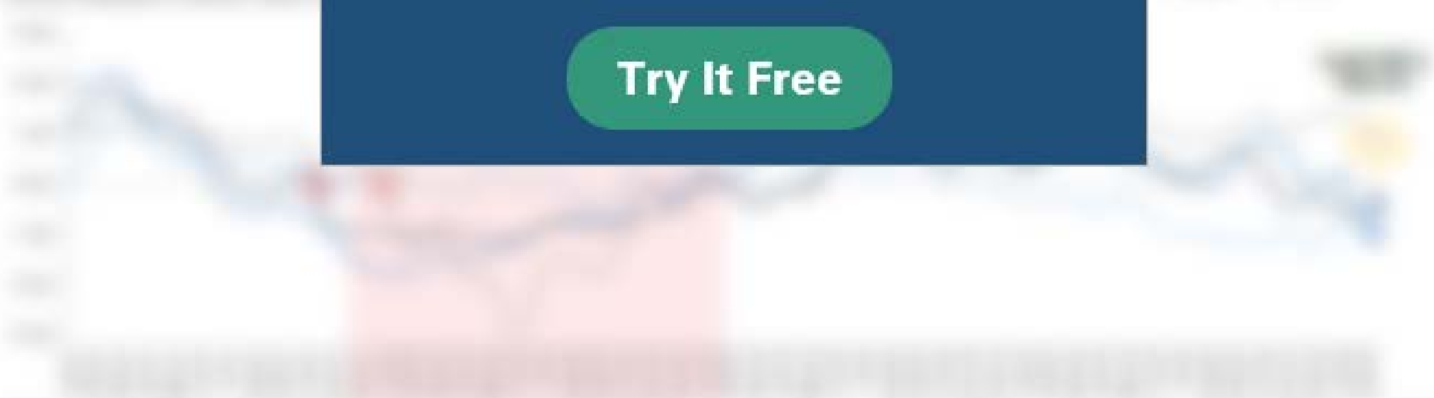
See page 11 for additional statistics for each model.

S&P 500	U.S. Sector Rotation	U.S. Credit Rotation	High Beta/ Low Vol
-4%	49%	12%	47%
-12%	-15%	8%	2%
-22%	-15%	1%	-32%
29%	36%	30%	85%
11%	5%	8%	11%
5%	6%	4%	1%
16%	25%	10%	-1%
5%	19%	8%	6%
-37%	-22%	16%	-21%
26%	29%	17%	32%
15%	26%	17%	27%
2%	10%	17%	5%
16%	16%	10%	21%
32%	36%	14%	41%
14%	14%	11%	19%
1%	3%	0%	4%
12%	17%	15%	33%
22%	23%	11%	18%
-4%	7%	3%	5%
31%	25%	16%	40%
18%	16%	25%	16%
29%	31%	4%	49%
-18%	0%	-20%	-5%
26%	12%	13%	15%
25%	16%	8%	9%
-5%	-1%	0%	-5%

Figure 5 – S&P 500 Performance the Last Three Times USRDI Turned Risk-Off



Source: MarketDesk Quant Pack



Past Regimes, Asset Class Performance, and Average S&P 500 Return Path

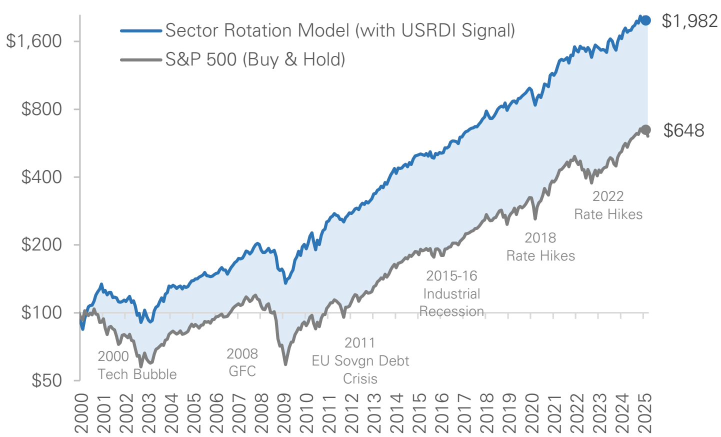
Market Volatility and Historical Drawdowns

[illegible]

Corporate Fundamentals – Trends in Earnings Growth & Valuation Changes

Sample Equity and Credit Models Based on USRDI Signal

Figure 23: Total Returns – U.S. Sector Rotation Model



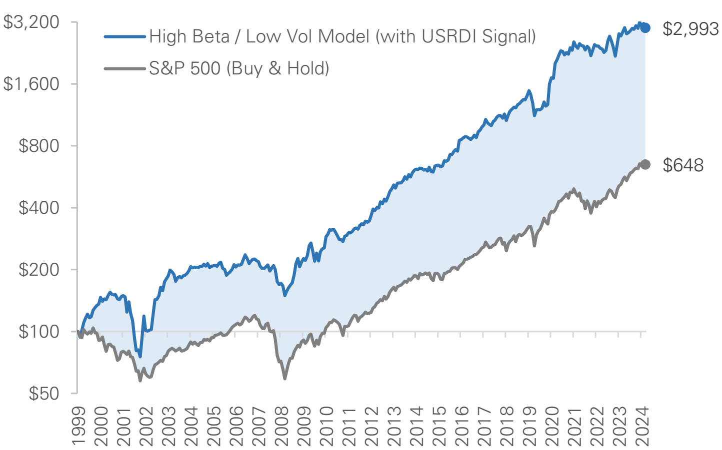
Source: MarketDesk Quant Pack. Own Defensive Sector ETFs during Risk-Off Regimes (XLU, XLV, XLP) and Cyclical Sector ETFs during Risk-On Regimes (XLB, XLI, XLY). The portfolio is rebalanced monthly.

Figure 24: Performance Statistics – U.S. Sector Rotation Model

Annual Statistics of Returns & Risks	S&P 500 (Benchmark)	U.S. Sector Rotation Model
Average Return	9.4%	13.7%
Strategy CAGR	**6.5%**	**12.3%**
Max Drawdown	-51%	-34%
% of Positive Years	**76%**	**88%**
Up Capture	100%	105%
Down Capture	**100%**	**11%**
Net Capture	-	+95%
Max Positive Year	32%	36%
Max Negative Year	-37%	-22%
Max Risk / Reward	0.9	1.6

Source: MarketDesk Quant Pack

Figure 25: Total Returns – High Beta/Low Vol Rotation Model



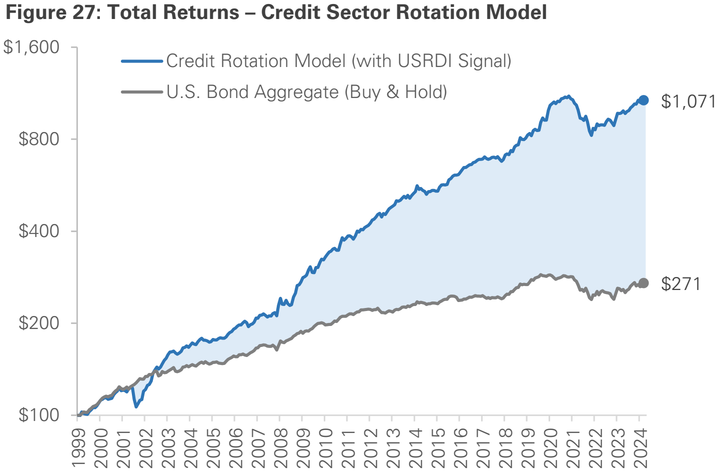
Source: MarketDesk Quant Pack. Own 100% S&P 500 Low Volatility factor during Risk-Off Regimes and 100% S&P 500 High Beta factor during Risk-On Regimes. The portfolio is rebalanced monthly.

Figure 26: Performance Statistics – High Beta/Low Vol Model

Annual Statistics of Returns & Risks	S&P 500 (Benchmark)	High Beta / Low Vol Model
Average Return	9.4%	17.0%
Strategy CAGR	**6.5%**	**14.6%**
Max Drawdown	-51%	-52%
% of Positive Years	**76%**	**84%**
Up Capture	100%	128%
Down Capture	**100%**	**5%**
Net Capture	-	+123%
Max Positive Year	32%	85%
Max Negative Year	-37%	-32%
Max Risk / Reward	0.9	2.6

Source: MarketDesk Quant Pack

Figure 27: Total Returns – Credit Sector Rotation Model



Source: MarketDesk Quant Pack. Own High-Quality Credit Sectors during Risk-Off Regimes (10Y U.S. Treasuries & MBS) and Low-Quality Credit Sectors during Risk-On Regimes (High Yield, Fallen Angels, Convertibles). The portfolio is rebalanced monthly.

Figure 28: Performance Statistics – Credit Sector Rotation Model

Annual Statistics of Returns & Risks	Bond Aggregate (Benchmark)	Credit Sector Rotation Model
Average Return	4.1%	10.3%
Strategy CAGR	**4.1%**	**9.9%**
Max Drawdown	-17%	-26%
% of Positive Years	**88%**	**96%**
Up Capture	100%	220%
Down Capture	**100%**	**14%**
Net Capture	-	+206%
Max Positive Year	12%	30%
Max Negative Year	-13%	-20%
Max Risk / Reward	0.9	1.5

Source: MarketDesk Quant Pack

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