Applying Classical Market Analysis to Sector Investing

Ned Davis Research | Special Report

ROB ANDERSON, CFA, U.S. SECTOR STRATEGIST
DANIEL CHIN, PhD, SENIOR RESEARCH ANALYST, CUSTOM RESEARCH SOLUTIONS

NDR
NED DAVIS RESEARCH

NOVEMBER 4, 2024

Applying Classical Market Analysis to Sector Investing

Special Report

Table of Contents

1 Executive summary
2 Macro and Fundamental
7 Technical and Sentiment
10 Conclusions

Executive summary

For new research hires at NDR, several books are required reading. It is probably of little surprise that *Being Right or Making Money* by NDR's founder Ned Davis and *The Research Driven Investor* by NDR's Chief Global Investment Strategist Tim Hayes top the list.

Another book that sits near the top of the list is Norman Fosback's 1979 *Stock Market Logic*. Most of the ideas presented in the text have made their way into the NDR service and have stood the test of time, still generating good buy and sell signals decades later. The fact that many of the indicators remain included in several of NDR's key models is a testament to the sound rationale behind the concepts.

We went through the book and tested over a dozen of the concepts at the sector level. The eight that we found worked best for most sectors are featured in this report. The indicators span macro, fundamental, technical, and sentiment, covering NDR's four pillars of research. Some of the concepts included we have applied to sectors previously; others we have not.

At the end of the report, we tally up the results to determine if the message from the traditional "Logic" indicators is collectively more favorable for cyclical sectors or defensive sectors. We also compare the results to our more contemporary sector model to see if the views agree or conflict.

Toplines

Macro environment and fundamental considerations

- Real M2 money supply growth, distorted by the pandemic, remains in contraction territory, at levels historically supportive of defensive sector leadership.
- Yield curve normalization has contributed to a more favorable macro backdrop for cyclical sectors.
- Despite recent cyclical sector strength, earnings yields generally remain more attractive for cyclical sectors compared to their long-term histories.

Assessing the technical and sentiment messages

- Moving average evidence is mixed, but the High Low Logic Index sides with cyclical sectors.
- Sentiment, as measured by short interest and margin debt, also favor cyclical leadership.
- The majority of both the traditional "Logic" indicators and the indicators from our sector model now favor cyclical sector leadership.

Rob Anderson, CFA,
U.S. Sector Strategist

Dan Chin, PhD,
Senior Research Analyst, Custom Research Solutions

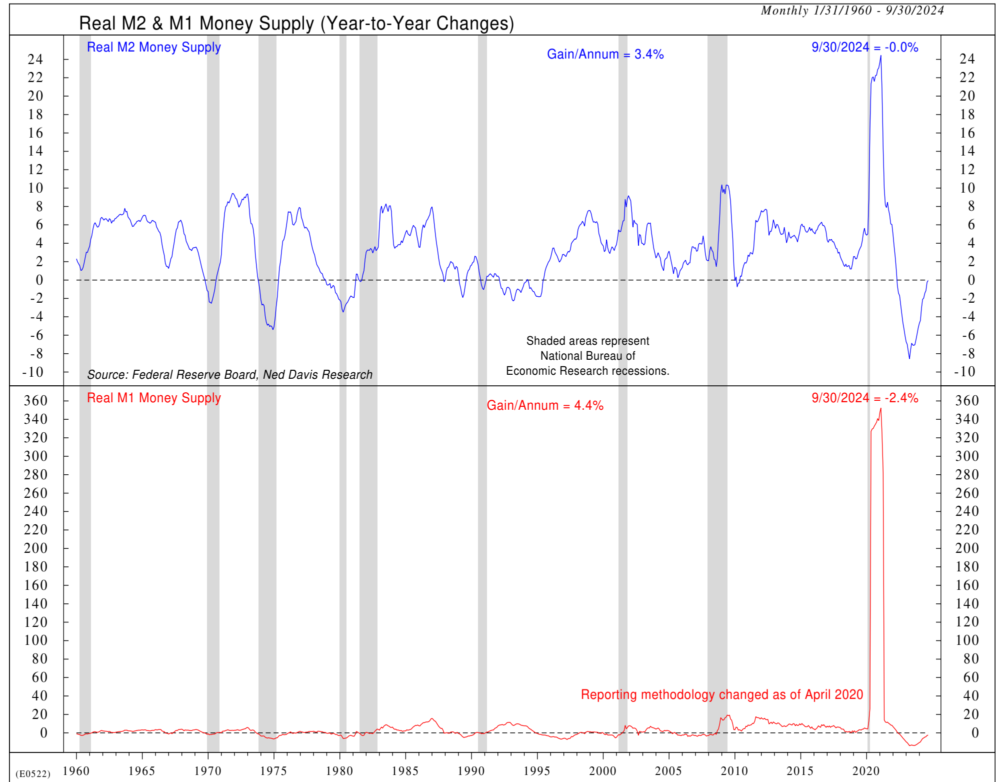
Please see important disclosures at the end of this report.

Macro environment and fundamental considerations

Key Takeaways

- Real M2 money supply growth, distorted by the pandemic, remains in contraction territory, at levels historically supportive of defensive sector leadership.
- Yield curve normalization has contributed to a more favorable macro backdrop for cyclical sectors.
- Despite recent cyclical sector strength, earnings yields generally remain more attractive for cyclical sectors compared to their long-term histories.

Money supply often contracts prior to recessions



The first section of this report features indicators representing the first two pillars of NDR's 360° approach: macroeconomics and fundamentals. These two pillars often depict the bigger picture and are key in developing the strategic outlook.

Eventually markets will react to macro conditions, like interest rates and money supply, and fundamentals, like earnings and valuation, but it is often not immediate. In contrast with the next section of the report that features indicators that reflect how the market **is** acting, the indicators presented in this section show how the market **should be** acting.

Macro

Money supply

One of the most fundamental, and often overlooked, drivers of the economy and financial markets is money supply. The money supply is the total amount of money—cash, coins, and balances in bank accounts—in circulation.

The narrowest measure of money supply is M1, which includes currency, demand deposits (primary checking accounts), and other liquid deposits (primary savings). A broader measure is M2, which includes all M1 as well as small-time deposits and retail money market funds.

Money supply is indirectly influenced by the Fed through open market operations, reserve requirements of member banks, and the discount rate. The relationships between money supply, the economy, inflation, and asset prices are complicated, but a simple example of the process may play out as follows:

1. Money growth drives business activity, leading to real economic growth and higher stock prices.
2. Inflation rises and monetary policy turns more restrictive to cool price growth.
3. Economy cools and falls into recession.

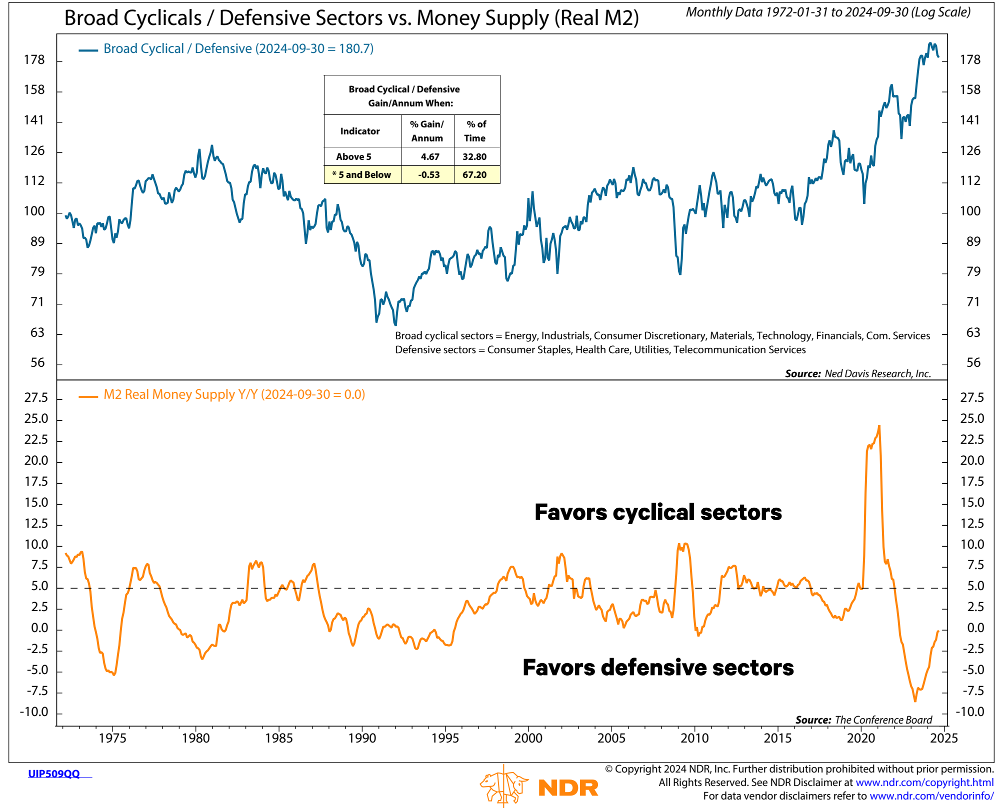
While the track record isn't perfect, the chart above shows that the y/y growth rate in real money supply (adjusted for inflation) has often fallen heading into recessions and has risen during and after recessions. 2020 and 2021 saw record money supply growth as the Fed engaged in massive levels

of quantitative easing and slashed reserve requirements to zero in response to the pandemic. The growth rate turned negative in 2022, coinciding with the bear market, and has since risen but remains negative.

Stocks have generally performed better when real M2 money supply is rising. Similarly, sector leadership has tended to be more cyclical when y/y growth has been at high levels.

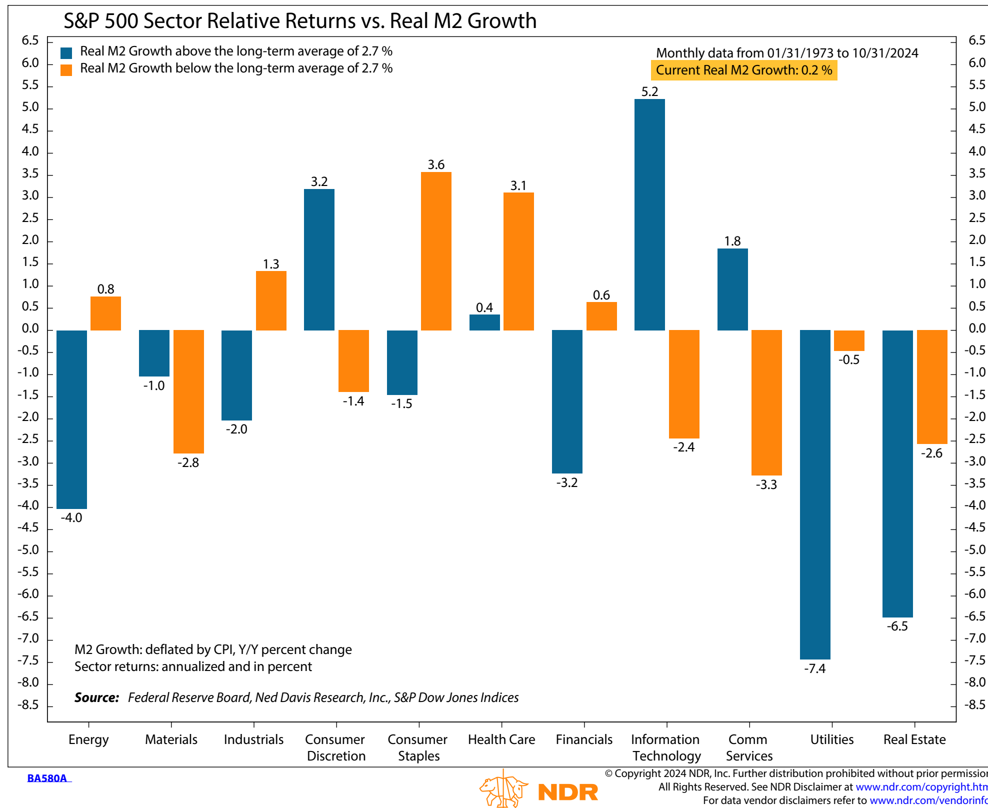
The chart at right shows our Broad Cyclical Sector Index has outperformed our Defensive SHUT Index by a little less than 5% per annum when real M2 y/y growth has been above 5%. Cyclical sectors have modestly underperformed when growth has been lower. While the growth rate has moved higher in 2024, it remains in contraction territory, at levels **supporting defensive sector leadership**.

Weak money supply growth favors defensive leadership



© Copyright 2024 NDR, Inc. Further distribution prohibited without prior permission. All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html
For data vendor disclaimers refer to www.ndr.com/vendorinfo/

Staples and Health Care best when M2 growth is below average



© Copyright 2024 NDR, Inc. Further distribution prohibited without prior permission. All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html
For data vendor disclaimers refer to www.ndr.com/vendorinfo/

The chart at left provides a breakdown for individual sectors. When real M2 growth has been above its long-term average of 2.7% (blue bars), cyclical Growth sectors of Technology, Consumer Discretionary, and Communication Services have been the top performers, while low-beta sectors of Utilities and Consumer Staples have underperformed. Real Estate, Energy, and Financials have also underperformed, on average, when money supply is growing rapidly.

When real M2 growth has been below its long-term average, **as is currently the case, leadership has been decidedly more defensive**, with Consumer Staples and Health Care the best performing sectors, while cyclical sectors of Communication Services, Materials, and Technology have been among the worst performers.

Yield curve

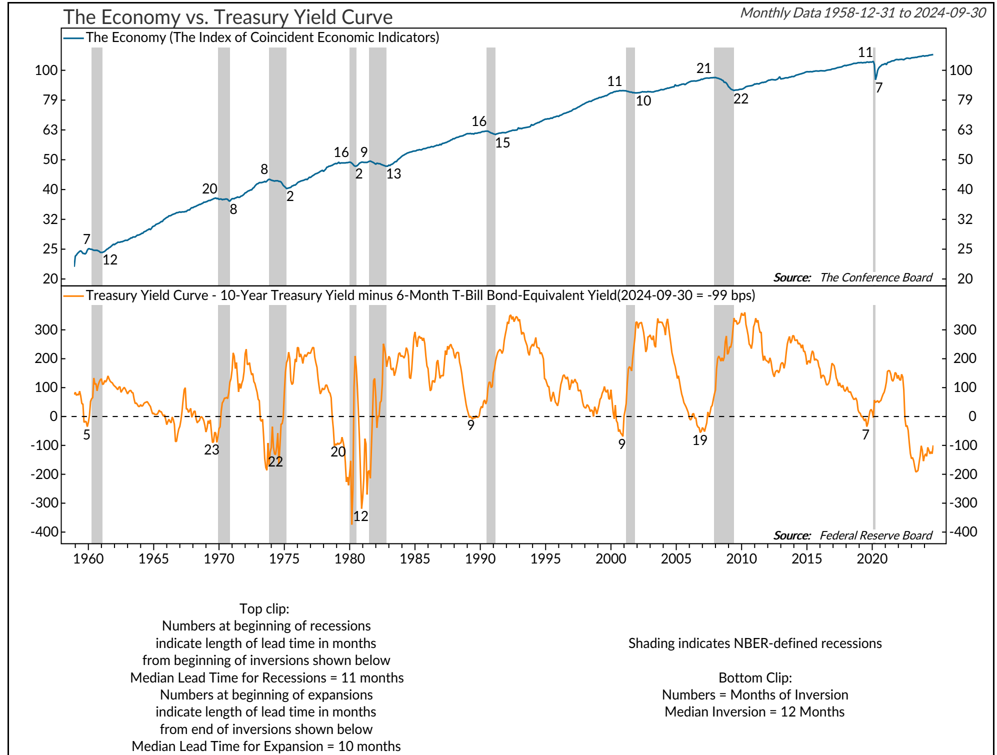
A yield curve is the relationship between interest rates and maturity length. Normally, the longer time to a maturity, the higher the yield.

There are several reasons for this. First, the longer the duration of the bond, the greater the risk that inflation runs ahead of expectations and erodes the real value of the interest payments and principal. Second, the longer the bond duration, the greater the risk that an unexpected liquidity demand forces a sale, which could result in loss. Finally, the chances that the bond issuer defaults on interest or principal payments are higher for longer maturity bonds. In summary, **the greater possibility of loss entitles the holder of longer-dated securities to a higher yield**.

Curve inversion, where short-term yields are higher than long-term yields, can signal problems with the economy and reflect investors' expectations that the Fed will step in and lower rates. Curve inversion can also occur during bouts of short-term inflationary pressures, as was the case coming out of the COVID lockdowns that resulted in the longest period of curve inversion on record. Depending on the yield curve observed, inversion has typically occurred 12 to 18 months prior to the start of recessions (chart, above).

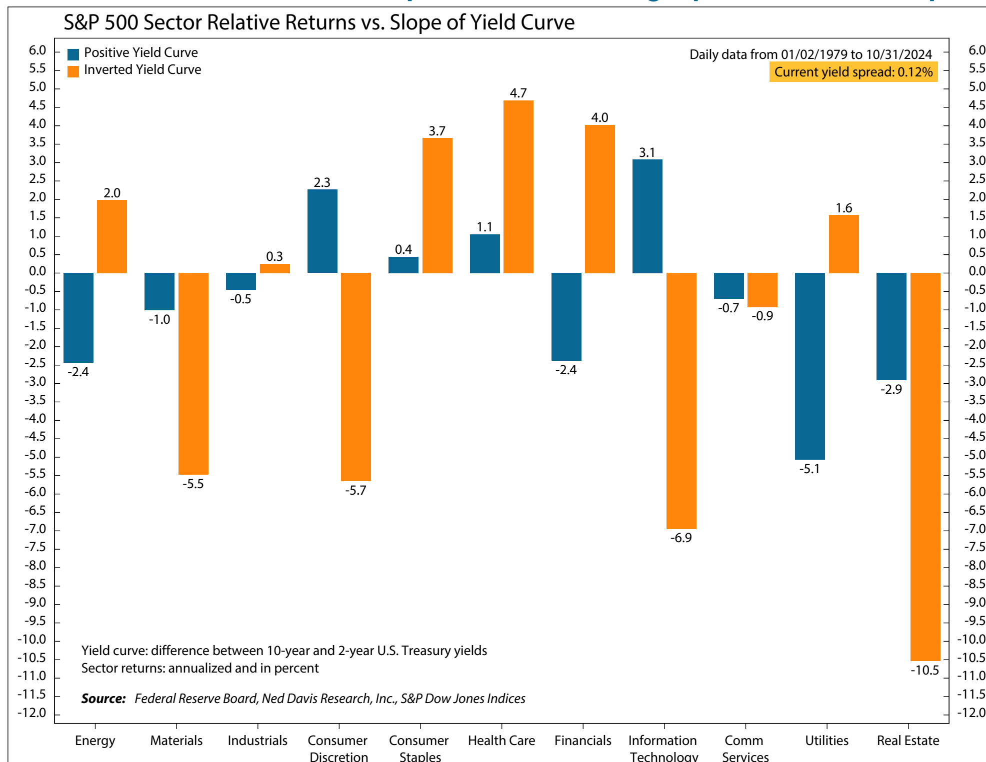
For sectors, **leadership has tended to lean more defensive when the curve has been inverted**. The chart at left shows that Consumer Staples, Health Care, and Utilities have all outperformed when the 10-2 Treasury yield curve has been inverted (orange bars). Note that the curve **disinverted in September**.

Curve inversion often precedes recessions



© Copyright 2024 Ned Davis Research, Inc. Further distribution prohibited without prior permission. All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html. For data vendor disclaimers refer to www.ndr.com/vendorinfo/

The 10-2 curve has turned positive, favoring cyclical leadership



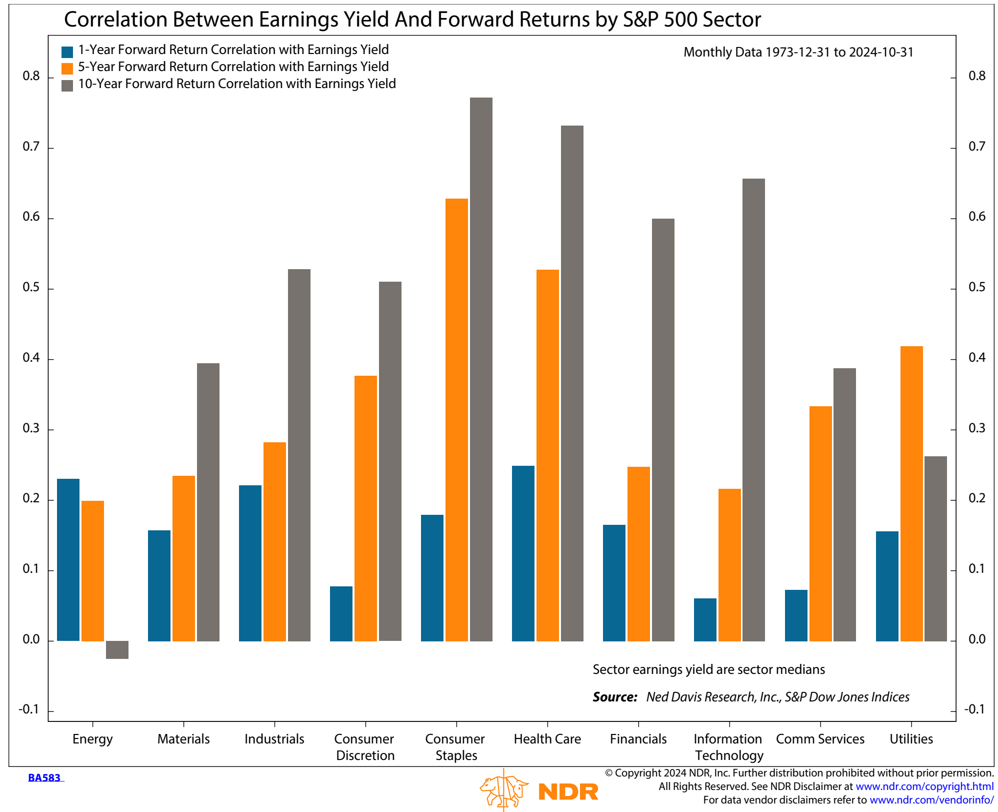
© Copyright 2024 NDR, Inc. Further distribution prohibited without prior permission. All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html For data vendor disclaimers refer to www.ndr.com/vendorinfo/

Fundamental
Absolute valuations

Valuations are notoriously poor tools for timing the market in the short term. Over longer time frames, however, the correlations between valuations and future returns are much more significant.

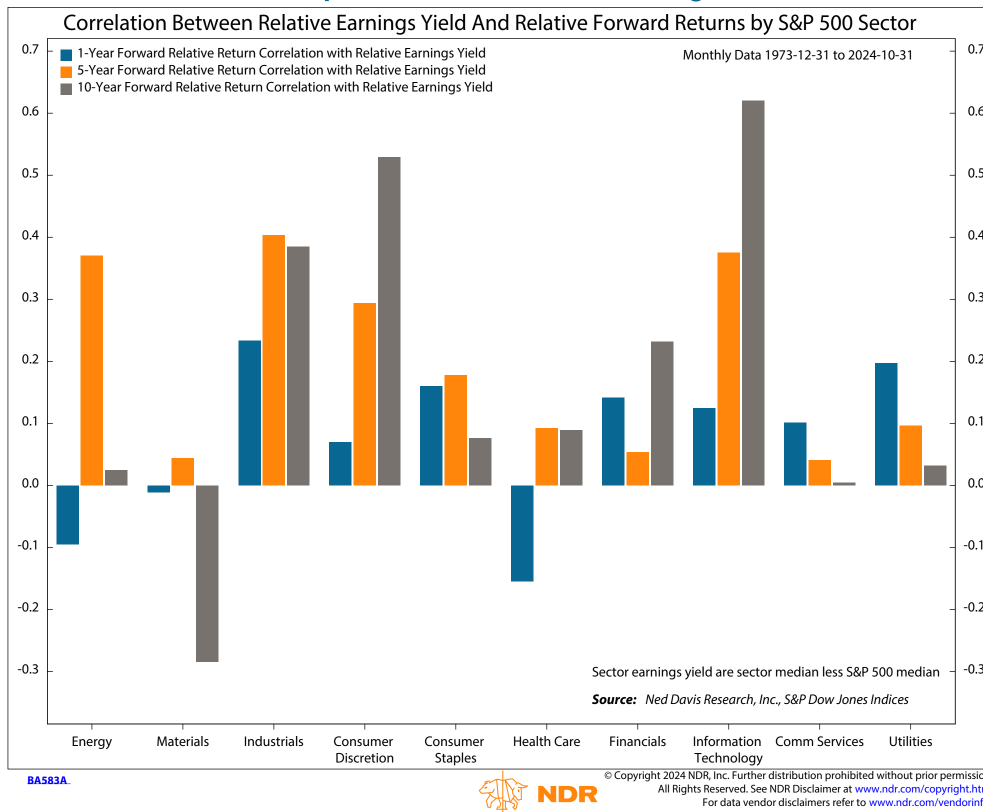
In general, the **conclusion extends to the sector level as well**. The chart at right shows that for most sectors, the correlation between earnings yields (inverse of P/E ratio) and forward returns rises as the return window widens from one year to 10 years. The predictive power of valuations on forward one-year returns has been particularly bad for the Growth sectors of Consumer Discretionary, Technology, and Communication Services. Energy has been the biggest exception, with oil prices frequently overriding other return influences, including valuations.

Sector valuations more useful in the long run



© Copyright 2024 NDR, Inc. Further distribution prohibited without prior permission.
All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html
For data vendor disclaimers refer to www.ndr.com/vendorinfo/

Relative correlations positive but not as strong as absolute



© Copyright 2024 NDR, Inc. Further distribution prohibited without prior permission.
All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html
For data vendor disclaimers refer to www.ndr.com/vendorinfo/

Relative Valuations

When utilizing a sector rotation strategy, with a goal of outperforming the broad market, relative sector returns are of more significance than absolute returns. The chart at left, therefore, compares the relative earnings yield to forward relative returns (versus the S&P 500) for each sector.

The results are not nearly as clean as the absolute version shown above. However, most of the bars are rising, indicating that the **correlations are positive for most sectors**. The correlations are highest for cyclical sectors of Industrials, Consumer Discretionary, and Technology, suggesting long-term outperformance (underperformance) from these sectors is more likely when valuations are relatively cheap (expensive).

The message from the charts is that **valuations are a valuable tool but have limitations**, suggesting complimenting them with macro, technical, and sentiment gauges can add value to the investment selection process.

The table at right shows absolute and relative earnings yields for each sector. Because some sectors naturally have higher or lower yields, we include the number of standard deviations the readings are from their long-term averages to standardize the analysis.

On an absolute basis, only Energy looks inexpensive, evident by its earnings yield being almost one standard deviation above its long-term average. Consumer Staples and Health Care look the most expensive on an absolute basis. Relative to the S&P 500, Energy and Communication Services look the most attractive, while Financials and Health Care look the least.

Earnings yields are generally more favorable for cyclical sectors

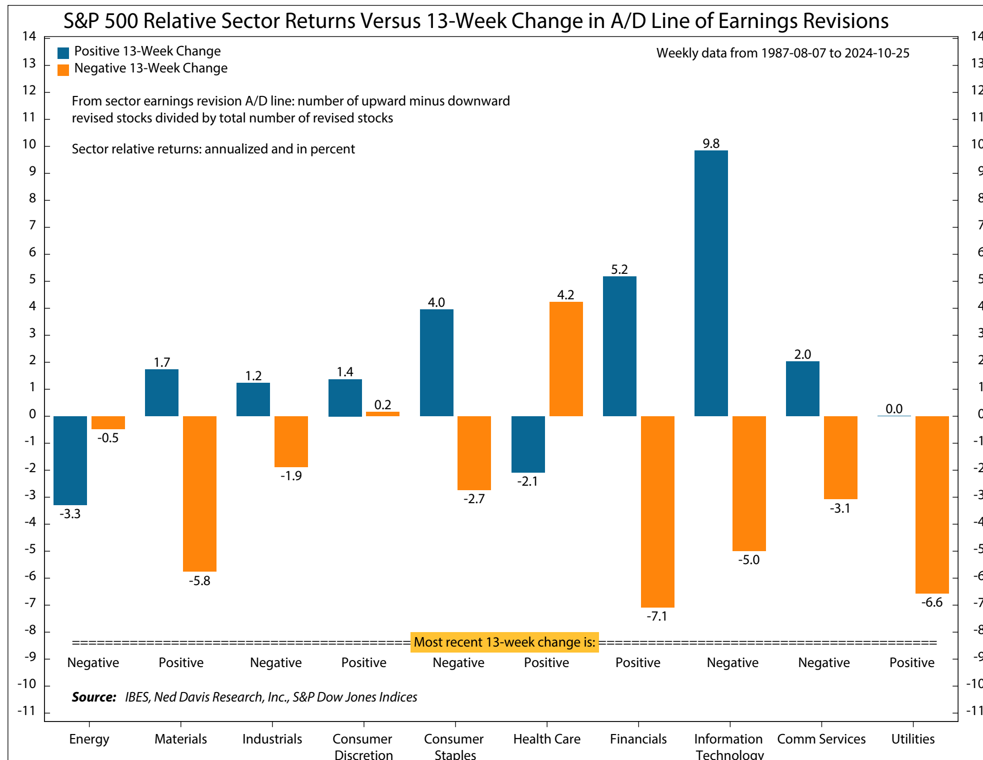
Absolute and Relative Earnings Yield by Sector

Sector	Earnings Yield	# Standard Deviations Earnings Yield is from LT Average	Relative Earnings Yield	# Standard Deviations Rel. Earnings Yield is from LT Average
Energy	7.7	0.7	4.2	1.2
Communication Services	3.5	-0.2	0.1	1.0
Real Estate	2.3	-0.4	-1.2	0.2
Consumer Discretionary	3.5	-1.0	0.1	0.1
Utilities	4.8	-1.0	1.2	0.0
Industrials	3.5	-1.3	-0.1	0.0
Materials	3.3	-0.6	-0.2	0.0
Information Technology	2.4	-1.0	-1.1	-0.1
Consumer Staples	3.3	-1.5	-0.2	-0.2
Financials	0.0	-0.6	-3.5	-0.3
Health Care	2.0	-1.6	-1.5	-0.4
S&P 500	**3.5**	**-1.2**	**NA**	**NA**

Green means the sector is among the least expensive versus its long-term average. Red means the sector is among the most expensive. Long-term averages based on data starting in 1985. Source: S&P Capital IQ Compustat, S&P DJ Indices and MSCI (GICS), NDR Multi-Cap. Institutional (Universe), Refinitiv.

Ned Davis Research | Excerpted from ESS_1900

Earnings revisions mixed for cyclical and defensive sectors



Earnings revisions

Earnings revisions indicate whether analysts, as a group, are turning more positive or negative on a company's fundamentals. For sectors, we aggregate the data via an advance/decline line, which is calculated as the difference between the number of stocks with upward revisions (advances) and downward revisions (declines) from one week to the next, divided by the total number of stocks with revisions.

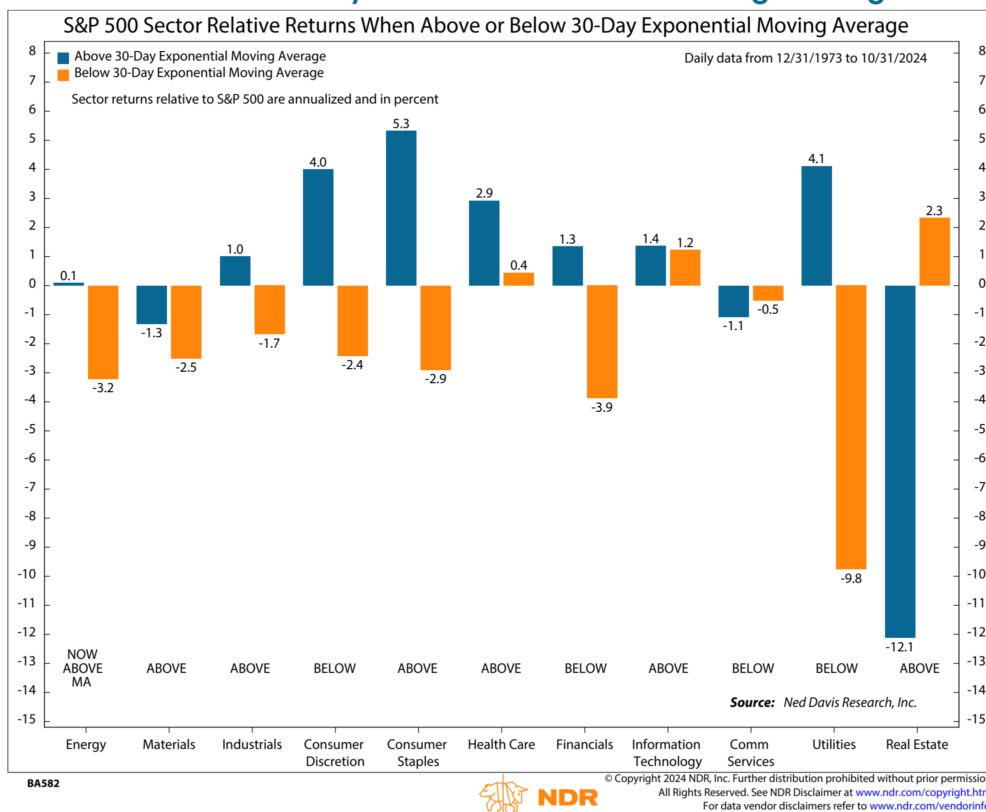
Sensitivity to revisions vary by sector, with returns for Technology and Financials tending to be the most influenced. **Revision trends are currently mixed**. Cyclical sectors of Materials, Consumer Discretionary, and Financials all have rising revision A/D lines, as do the defensive-oriented sectors of Health Care and Utilities.

Assessing the technical and sentiment messages

Key Takeaways

- Moving average evidence is mixed, but the High Low Logic Index sides with cyclical sectors.
- Sentiment, as measured by short interest and margin debt, also favor cyclical leadership.
- The majority of both the traditional "Logic" indicators and the indicators from our sector model now favor cyclical sector leadership.

Most sectors currently trade above their moving averages



The first section of the report highlighted macro and fundamental factors, which tend to be slower moving and are used to help create the strategic outlook. The next section features the last two pillars of the NDR 360° approach that are key in developing the tactical outlook: technicals and sentiment.

These two pillars measure the pulse of the market. They are faster-moving and encompass investor behavior, price action, volume, and volatility.

Technical

Moving averages

Moving averages are one of the most basic technical tools. The chief job of a moving average is to smooth out observations over a specific period to eliminate the noise of short-term price fluctuations and make the primary trend more obvious. Moving averages are valuable because **trends tend to persist in the stock market**.

The number of moving average strategies in use are too many to list. Some are based on whether a moving average is rising or falling, while others are based on the relationship of several moving averages of varying lengths. The three most basic and commonly used averages in market analysis are simple moving averages, weighted moving averages, and exponential weighted moving averages.

When testing, we found the 30-day exponential average, used in the chart above, worked well for most sectors going back to 1973, but results were good for most of the combinations tested and any should be useful in determining the primary trend for markets and sectors.

An exponential moving average gives more weight to recent data points and is therefore more sensitive to price movements than a simple moving average.

In general, sectors have tended to perform better when trading above their moving averages. That is the case now for **most sectors, not decisively favoring cyclical or defensive leadership**.

Given that markets and sectors tend to move in trends, moving average analysis has

proven to be an invaluable component of the NDR 360° approach.

High Low Logic Index

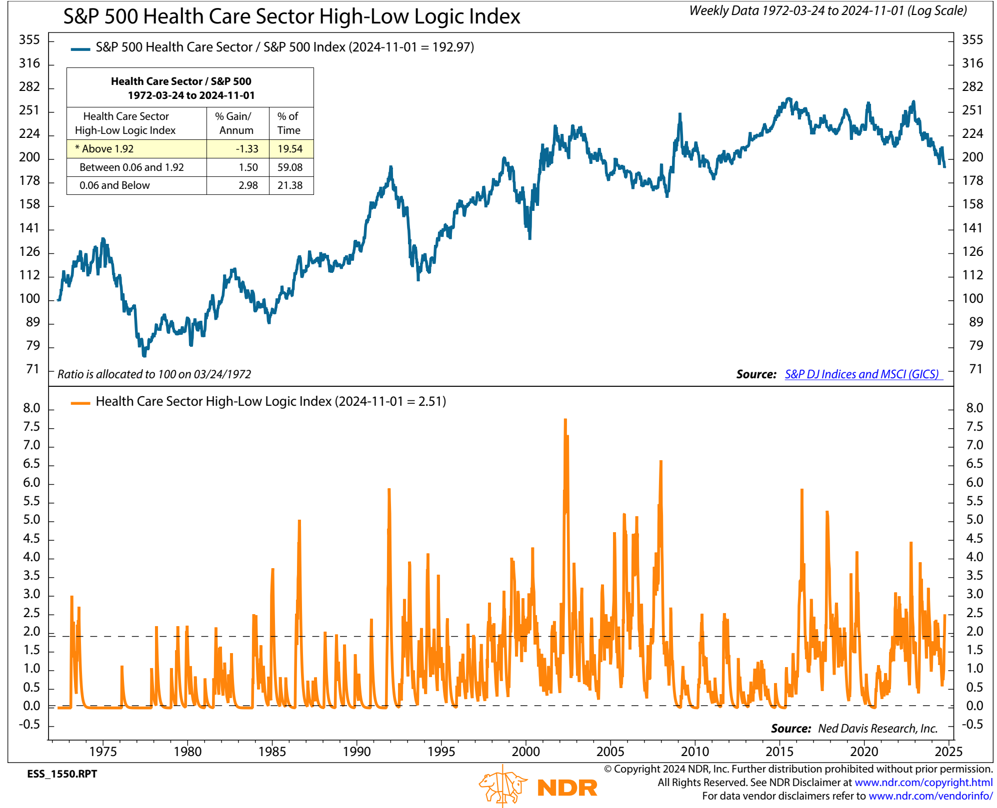
Created by Norman Fosback in 1979, the High Low Logic Index is a technical gauge of the stock market's health. The Index is usually computed with a very broad group of stocks, most often at the stock exchange level (NYSE, AMEX, NASDAQ, or all three).

The Index is simply the lesser of:

1. New Highs as a percent of issues traded.
2. New lows as a percent of issues traded.

The rationale behind the Index is that under normal conditions, a substantial number of stocks make either new 52-week highs or lows, but not both. As the Logic Index measures the lesser of the two readings,

High Low Logic Index is bearish for Health Care



High Low Logic Index sector overview

Sector	Reading
Energy	0.0 / 0.4 / 1.0
Materials **Bearish**	0.1 / 2.3 / 2.0
Consumer Discretionary **Bearish**	0.4 / 2.5 / 2.4
Consumer Staples **Bearish**	0.5 / 3.9 / 1.6
Health Care **Bearish**	0.1 / 2.5 / 1.9
Financials	0.0 / 0.4 / 1.0
Information Technology	0.3 / 1.2 / 1.3
Communication Services	0.0 / 0.4 / 0.1
Utilities	0.0 / 0.7 / 1.5
Real Estate	0.1 / 0.6 / 0.7

Excerpted from ESS_1550

high numbers signal that the market is "out of gear" and undergoing a period of extreme divergence, which has been bearish for stocks.

Low readings point to one of two bullish conditions: extreme selling, with almost no new highs, the sign of a very oversold market; or a selling vacuum with almost no new lows, the sign of a market with strong upside momentum.

We found that the concept translates to narrower groups of stocks and created report ESS_1550 to track the Logic Index at the sector level (table, left). The indicator **currently has a slight preference for cyclical leadership**, with Health Care (chart, above), Consumer Staples, Consumer Discretionary, and Materials signaling "out of gear" warnings, while all other sectors remain neutral.

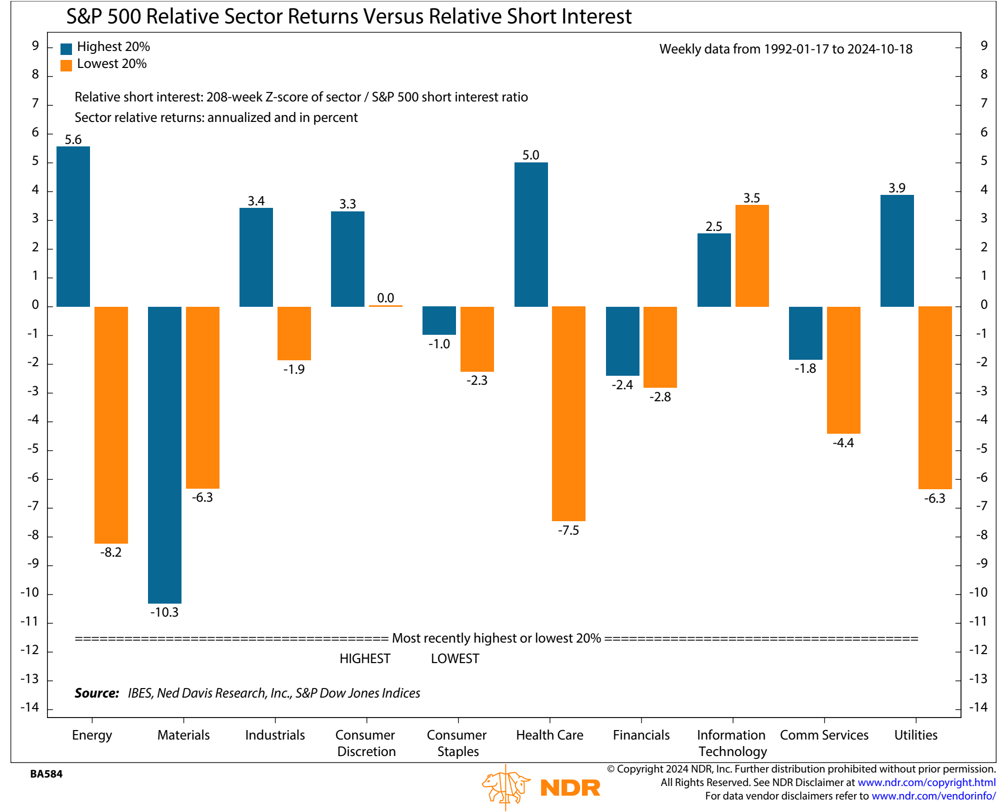
Sentiment

Short Interest Ratio

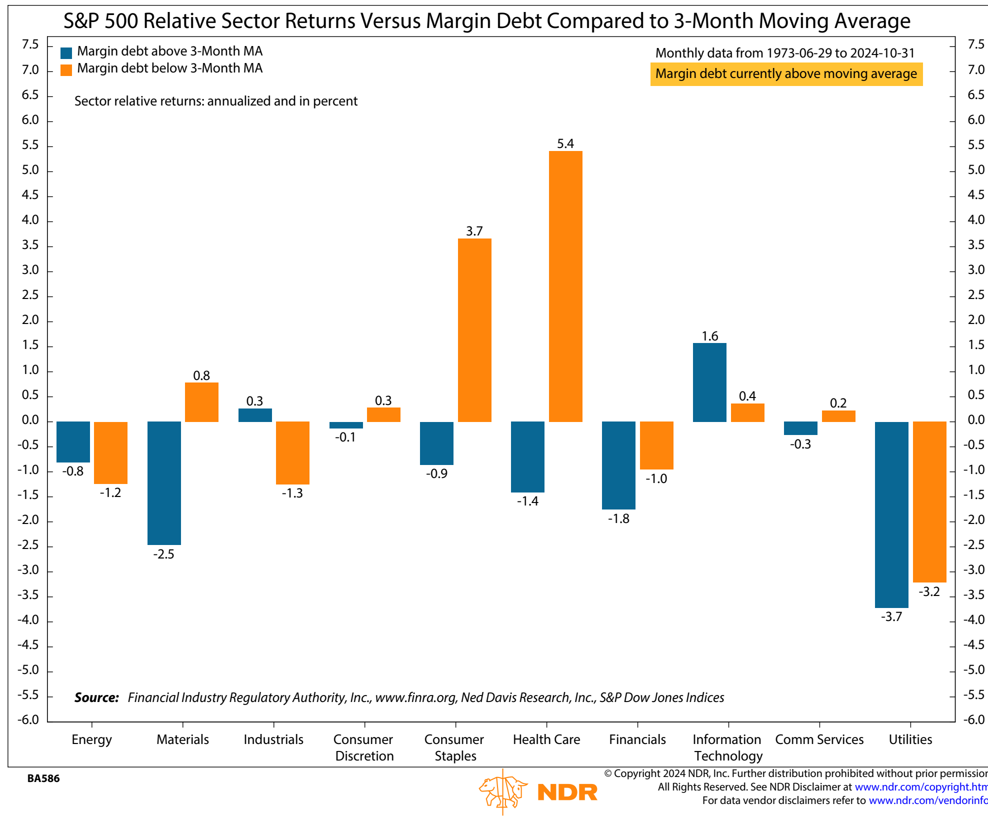
The short interest ratio is one of the oldest measures of market sentiment. The ratio is calculated by dividing the weekly number of shares that have been sold short (short interest) by the average daily trading volume over the preceding month. A high ratio indicates extreme pessimism by short sellers and can signal that the market is oversold. Shorts ultimately provide a source of demand when covered, helping to drive prices higher when the positions are closed.

The chart at right shows relative returns when the relative short interest ratio has been high and low (top and bottom 20% of observations). The results show that sectors tend to perform better when the ratio is high. **Readings are currently bullish for Consumer Discretionary and bearish for Consumer Staples.**

Short interest high for Discretionary, low for Staples



Rising margin debt favors cyclical leadership



Margin Debt

Margin debt represents the total amount owed to brokerage firms from customers who have borrowed funds to purchase securities. It is used by investors to take leveraged bets, and acts as a gauge for market sentiment and liquidity. Rising margin debt represents net buying from speculators and has been associated with higher returns from the stock market.

In general, **cyclical sectors have performed better when debt is trending higher, as is currently the case, while leadership has skewed more defensive when debt is trending lower**. The tendency is most obvious for the defensive sectors of Consumer Staples and Health Care. The sectors have been the top performers when margin debt is contracting and have both underperformed during periods when it is expanding. Technology

has been the best performer when debt is rising, while Utilities has been the worst.

Weighing the evidence
Logic indicators

The table at right summarizes the results from the Logic indicators highlighted in this report. While real M2 money supply growth has improved in recent months, the y/y reading remains negative and below its long-term average, historically more favorable for defensive leadership. Earnings revisions and moving averages are mixed enough to not decisively support one side or the other.

The remaining five indicators, however, are at levels that have been more supportive of cyclical sectors. **The weight of the evidence from the Logic indicators, therefore, sides with cyclical leadership.**

More indicators favor cyclical sectors than defensive

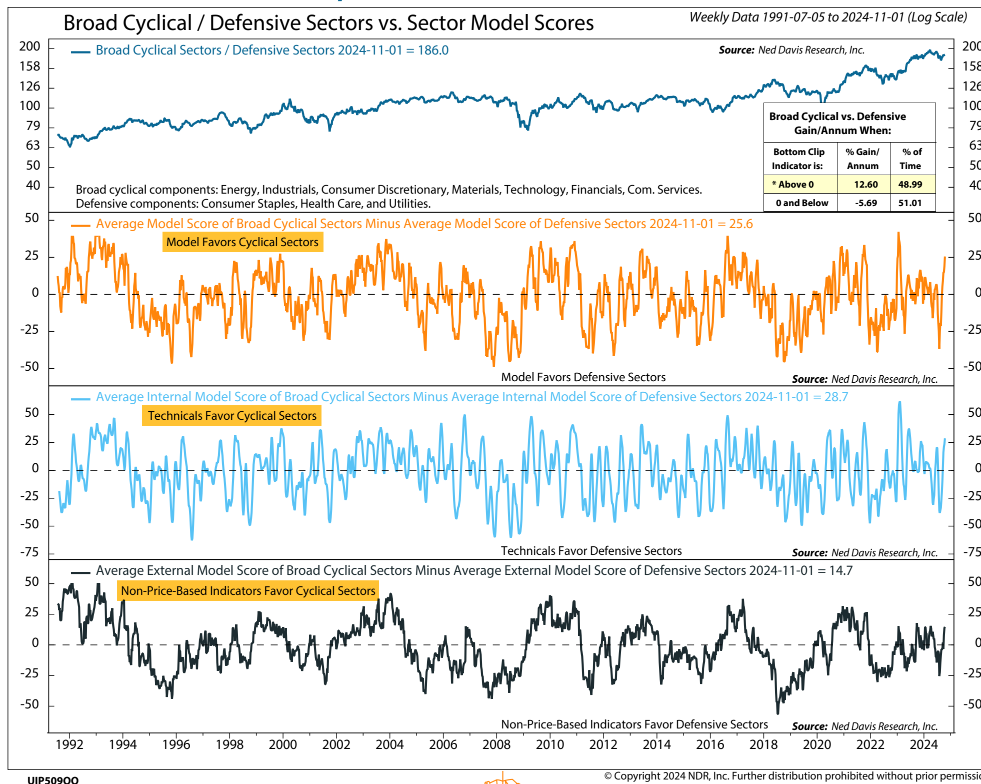
Summary of Market Logic Indicators

		Currently Favors:	
Indicator	**Type**	**Cyclical**	**Defensive**
Money Supply	Macro		X
Yield Curve	Macro	X	
Valuations	Fundamental	X	
Earnings Revisions	Fundamental	Inconclusive	
Moving Average	Technical	Inconclusive	
High Low Logic	Technical	X	
Short Interest Ratio	Sentiment	X	
Margin Debt	Sentiment	X	

Sources: Ned Davis Research

Ned Davis Research T_SP20241104.1

Sector model favors cyclical over defensive sectors



© Copyright 2024 NDR, Inc. Further distribution prohibited without prior permission.
All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html
For data vendor disclaimers refer to www.ndr.com/vendorinfo/

Sector model

As with most NDR models, our sector model utilizes all four of the pillars featured in this report. Price-based (technical) indicators are combined to form the internal composite for each sector. Macroeconomic, fundamental and sentiment indicators are combined to form the external composite for each sector. The sector component models are used in combination with Black-Litterman optimization to generate the 11-way tactical allocation weights.

The chart at left shows that both the internal (third clip) and external (fourth clip) model composites have trended in favor of cyclical sectors in recent weeks. The overall composite scores (second clip) favor cyclical sectors by their widest margin since February 2023, confirming the message from the Logic indicators that **the weight of the evidence now favors cyclical leadership**.

NED DAVIS RESEARCH
NDRsales@ndr.com
www.ndr.com
(800) 241-0621

SARASOTA

3665 Bee Ridge Road Suite 306

Sarasota, FL 34233

United States

800 241 0621 (U.S. & Canada)

941 412 2300

NEW YORK

1270 Avenue of the Americas

11th Floor

New York, NY 10020

(800) 241-0621

LONDON

4 Bouverie Street

Temple, London

EC4Y 8AX

+44 20 7779 8454

NDR
NED DAVIS RESEARCH

Disclaimer

The data and analysis contained herein are provided "as is" and without warranty of any kind, either expressed or implied. Ned Davis Research, Inc. (NDR), d.b.a. Ned Davis Research (NDR), any NDR affiliates or employees, or any third-party data provider, shall not have any liability for any loss sustained by anyone who has relied on the information contained in any NDR publication. NDR disclaims any and all express or implied warranties, including, but not limited to, any warranties of merchantability, suitability or fitness for a particular purpose or use.

NDR's past recommendations and model results are not a guarantee of future results. This communication reflects our analysts' opinions as of the date of this communication and will not necessarily be updated as views or information change. All opinions expressed herein are subject to change without notice. NDR or its affiliated companies or their respective shareholders, directors, officers and/or **employees, may have long or short positions in the securities discussed herein and may purchase or sell such securities without notice.**

Using any graph, chart, formula or other device to assist in deciding which securities to trade or when to trade them presents many difficulties and their effectiveness has significant limitations, including that prior patterns may not repeat themselves continuously or on any particular occasion. In addition, market participants using such devices can impact the market in a way that changes the effectiveness of such device.

Further distribution prohibited without prior permission.

Copyright 2024 (c) Ned Davis Research, Inc. All rights reserved.

Recommendations

NDR's sector team uses a quantitative sector model as the primary guide to deriving our recommendations. The model is designed to identify sectors and industries with the strongest fundamental (macro, economic, valuation, profitability) and technical price trends. Our team uses the model as the framework for our tactical shifts around longer-term fundamental themes. As a discipline, our recommendations are put on a "short leash" if they rank opposite the model's top and bottom quintiles, unless industry-specific influences can be shown to dominate.

Some sectors receive "over-," "market-," or "under-" weight recommendations, which means that the research firm recommends that more, the same, or less of the sector should be held in your portfolio than is held in the market.

ALPS Portfolio Solutions Distributor, Inc., a registered broker-dealer, is distributor for the Select Sector SPDR Trust

See the signals.™

Founded in 1980, Ned Davis Research Group is a leading independent research firm with clients around the globe. With a range of products and services utilizing a 360° methodology, we deliver award-winning solutions to the world's leading investment management companies. Our clients include professionals from global investment firms, banks, insurance companies, mutual funds, hedge funds, pension and endowment funds, and registered investment advisors.