

The Informed InvestorSM

BULL MARKET YEAR 3: *SIZING UP THE OPPORTUNITY*

SPX 2024 YE 6,100 | SPX 2025 YE 6,600

A timely analysis of sector/microgroup trends
for the professional investor

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THE INFORMED INVESTOR

A Timely Analysis of *MicroGroup*/Sector Trends for the Professional Investor

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Bull Market Year 3: Sizing Up the Opportunity

SPX 2024 YE 6,100 | SPX 2025 YE 6,600

TECHNICAL TAKEAWAYS:

- We carefully analyzed our charts and weighed the technical evidence, "*Sizing Up the Opportunity*," for the remainder of 2024 and the year ahead, and are raising our SPX 2024 YE price objective to 6,100 from 5,800 and establishing a 2025 YE price objective of 6,600.
- Our bullish outlook is based on the following:
 - The current bull market is relatively young in comparison to all bull markets post-WWII—at just 507 trading days.
 - Market breadth is broadening. Our 40-Week Technique and 26-Week New Highs indicators are in buy positions and improving.
 - "Bull Markets Grow on Skepticism," and it is widely believed the only way to change investor pessimism is through new highs in the major averages—SPX has made 47 new highs this year.
 - Market leadership has started to shift away from the Magnificent Seven and into SMID-cap stocks—historically, a bullish sign for equity markets.
 - Post U.S. Presidential elections, the SPX has had a median return of 1.78% from election day to year-end.
 - The primary trend for all the popular market averages remains up, and our research shows that new highs often lead to more new highs.
- We expect Financials, Technology, and Industrials to remain leaders at the sector level, with SMID-Cap outperforming Mega-cap stocks.

RECOMMENDATIONS/MODEL TAKEAWAYS:

- No sector recommendation changes.
- Model Changes: Based on our trend work, we made the following changes:
 - Adds: GLW, HWM, ILMN, INTA, MRVL, ONON, TOST, SMG, UNFI
 - Deletes: DKNG, KLAC, LLY, MSFT, PM, SKX
- Piper Sandler Technical Opportunities Portfolio YTD performance: **+24.45%**

Piper Sandler Technical Research Sector Weighting Recommendations			
Overweight	Underweight	Neutral	
Financials	Basic Materials	Energy	Healthcare
Industrials	Consumer Staples	Utilities	Consumer Cyclical
Technology	Transportation	Services	Communications/Media

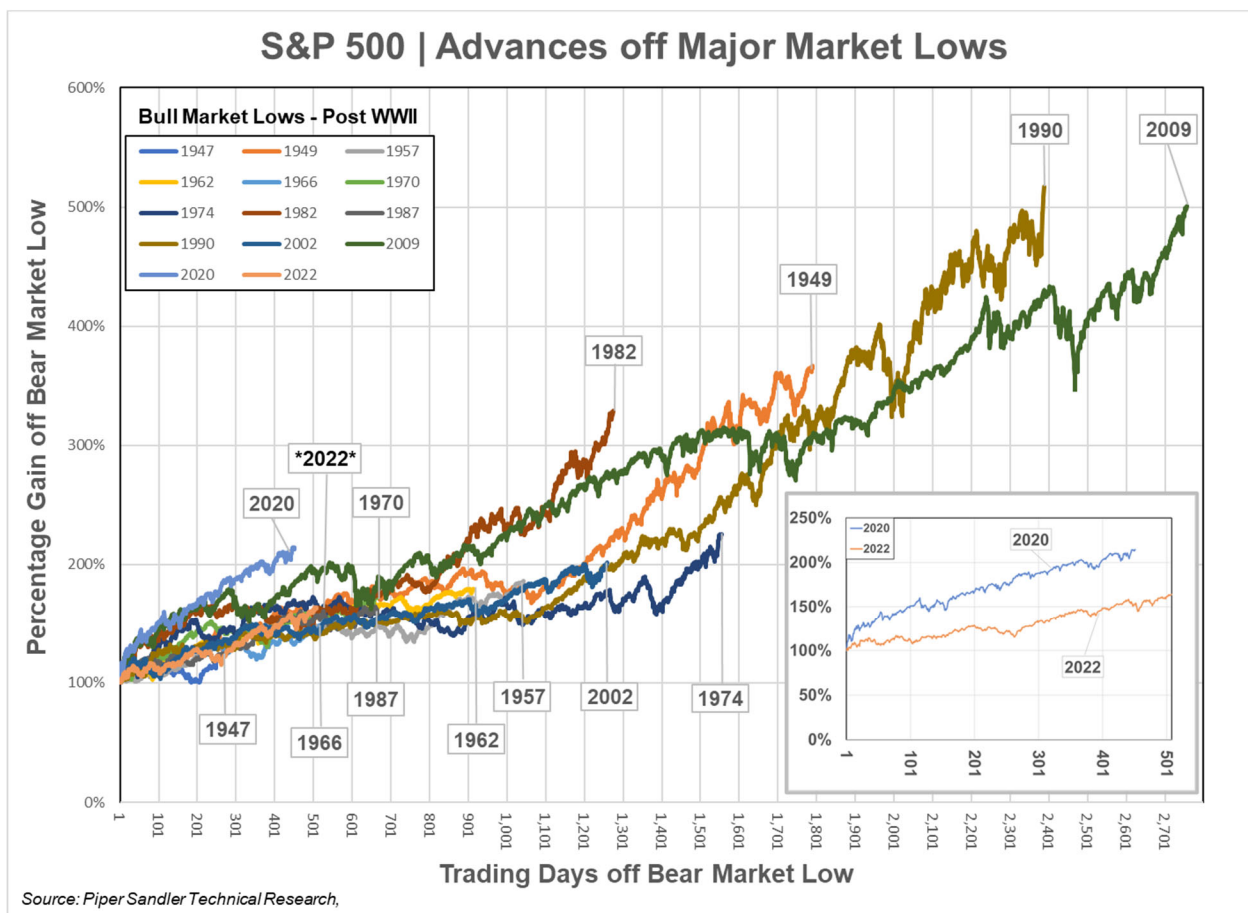
Bull Market Year 3: Sizing Up the Opportunity

The old Wall Street adage "Bull Markets Climb a Wall of Worry" sums up the narrative of this market well. For the past two years, equity markets managed to maintain a steady upward trajectory despite a series of pullbacks/corrections, economic concerns, geopolitical tensions, fears of inflation, rising interest rates, and pessimistic headlines. As this Bull Market enters its third year, the combination of a well-telegraphed shift in Fed policy, normalization of the yield curve, and a shift in market leadership suggests it is poised to keep running and broadening out in the year ahead.

We carefully analyzed our charts and weighed the technical evidence, "Sizing Up the Opportunity," for the remainder of 2024 and the year ahead. Based on our analysis, we are raising our SPX 2024 YE price objective to 6,100 from 5,800 and establishing a 2025 YE price objective of 6,600.

Our bullish outlook is based on the following:

- Historically, advances off bull market lows have a median and average duration of 979 and 1,147 trading days. This bull market started on October 12, 2022, and is just 507 trading days old—less than half as old as the average bull market advance post WWII (see the chart below).
- Our measure of market breadth, the 40-Week Technique, remains in a buy position and is starting to broaden. Our 26-Week New Highs indicator has been in a buy position for the past 14 weeks.
- "Markets Grow on Skepticism," and it is widely believed the only way to change investor pessimism is through new highs—SPX has made 47 new highs thus far in 2024.
- Market leadership off the October 2022 lows has been broader than just the Magnificent Seven stocks. Only two Magnificent Seven stocks, NVDA and META, were among the 50 best-performing stocks off the lows.



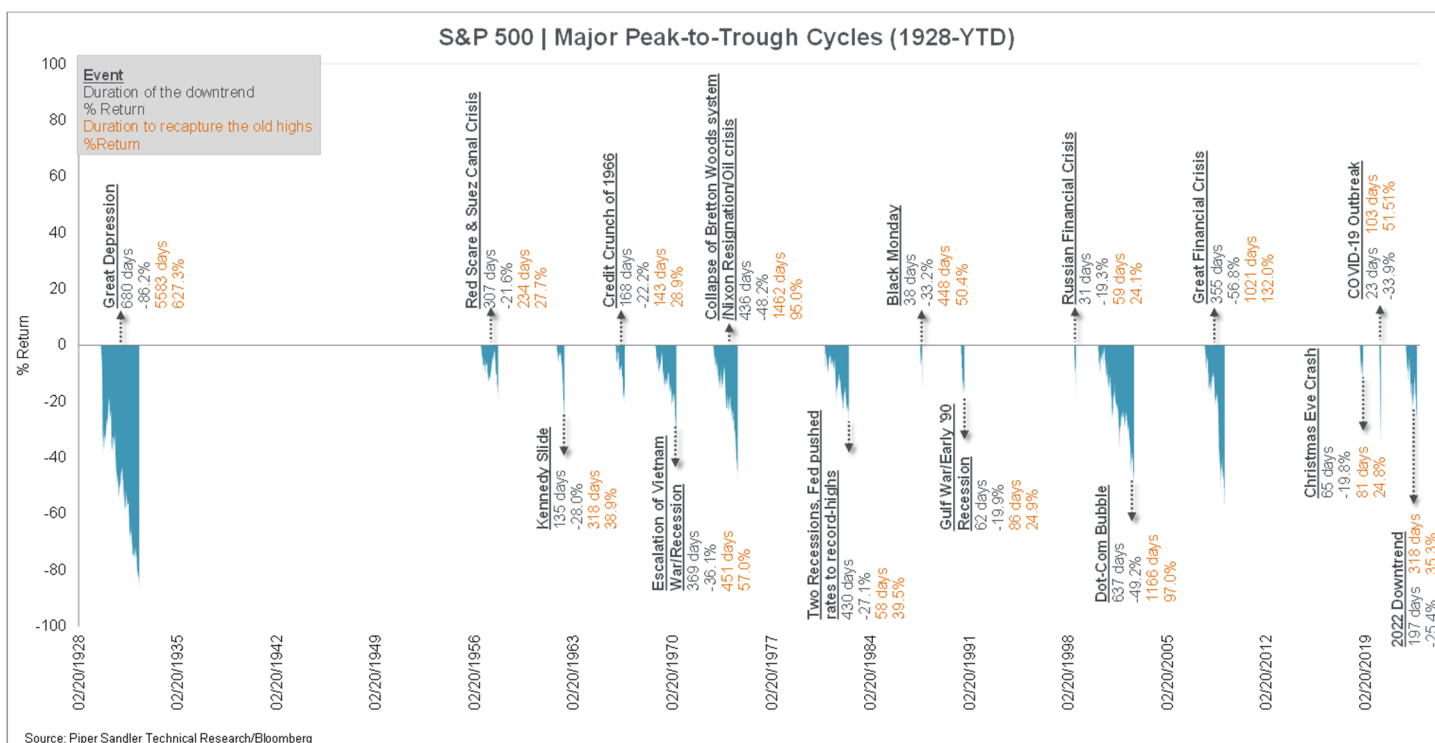
Bull Markets Over Time

The table below highlights the percentage change for each year of a bull market advance post-WWII. Historically, the strongest years of any bull market have been the first and last years, should they last longer than three years. The median trading days a bull market has lasted was 979 trading days. We observe the longest advances occurred after WWII, after the Dot.com bubble, and after the GFC—all environments with a lot of fiscal stimulus.

Bull Market Start	Bull Market End	S&P 500 12-Month Price Change off Bear Market Low											Trading Days	
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11		
5/17/1947	6/15/1948	18.9%	X											269
6/13/1949	8/2/1956	42.1%	11.9%	13.1%	-2.3%	20.0%	38.6%	17.2%	X				1,790	
10/22/1957	12/12/1961	31.0%	9.7%	-4.8%	28.4%	X							1,043	
6/26/1962	2/9/1966	32.7%	17.4%	2.0%	X								914	
10/7/1966	11/29/1968	32.9%	6.6%	X									517	
5/26/1970	1/11/1973	43.7%	11.1%	X									666	
10/3/1974	11/28/1980	38.0%	21.2%	-7.1%	6.1%	6.8%	18.0%	X					1,556	
8/12/1982	8/25/1987	58.3%	2.0%	13.4%	29.7%	36.6%	X						1,275	
12/4/1987	7/16/1990	21.4%	29.3%	X									660	
10/11/1990	3/24/2000	29.1%	5.6%	14.5%	1.1%	24.4%	20.9%	38.0%	1.8%	35.6%	X		2,389	
10/9/2002	10/9/2007	33.7%	8.0%	6.6%	12.9%	15.9%	X						1,259	
3/9/2009	2/19/2020	68.6%	15.7%	3.9%	13.2%	21.1%	10.7%	-4.3%	18.9%	17.8%	-1.6%	23.4%	2,757	
3/23/2020	1/3/2022	74.8%	X										451	
10/12/2022	10/13/2024	21.6%	33.7%	-	-	-	-	-	-	-	-	-	507	
Average		39.1%	14.4%	5.2%	12.7%	20.8%	22.1%	16.9%	10.3%	26.7%	-1.6%	23.4%	1,147	
Median		33.3%	11.5%	5.2%	12.9%	20.5%	19.5%	17.2%	10.3%	26.7%	-1.6%	23.4%	979	
Min		18.9%	2.0%	-7.1%	-2.3%	6.8%	10.7%	-4.3%	1.8%	17.8%	-1.6%	23.4%	269	
Max		74.8%	33.7%	14.5%	29.7%	36.6%	38.6%	38.0%	18.9%	35.6%	-1.6%	23.4%	2,757	

Source: Piper Sandler Technical Research, Bloomberg

The chart below illustrates the peak-to-trough market cycles since 1928 and puts the "2022 Downtrend" into a historical perspective regarding time and percent return.



Source: Piper Sandler Technical Research/Bloomberg

Trending Bull Market: Year 3

The SPX has maintained a steady upward trajectory for the past two years. It remains in a multi-year price channel and above its 200-day MA.

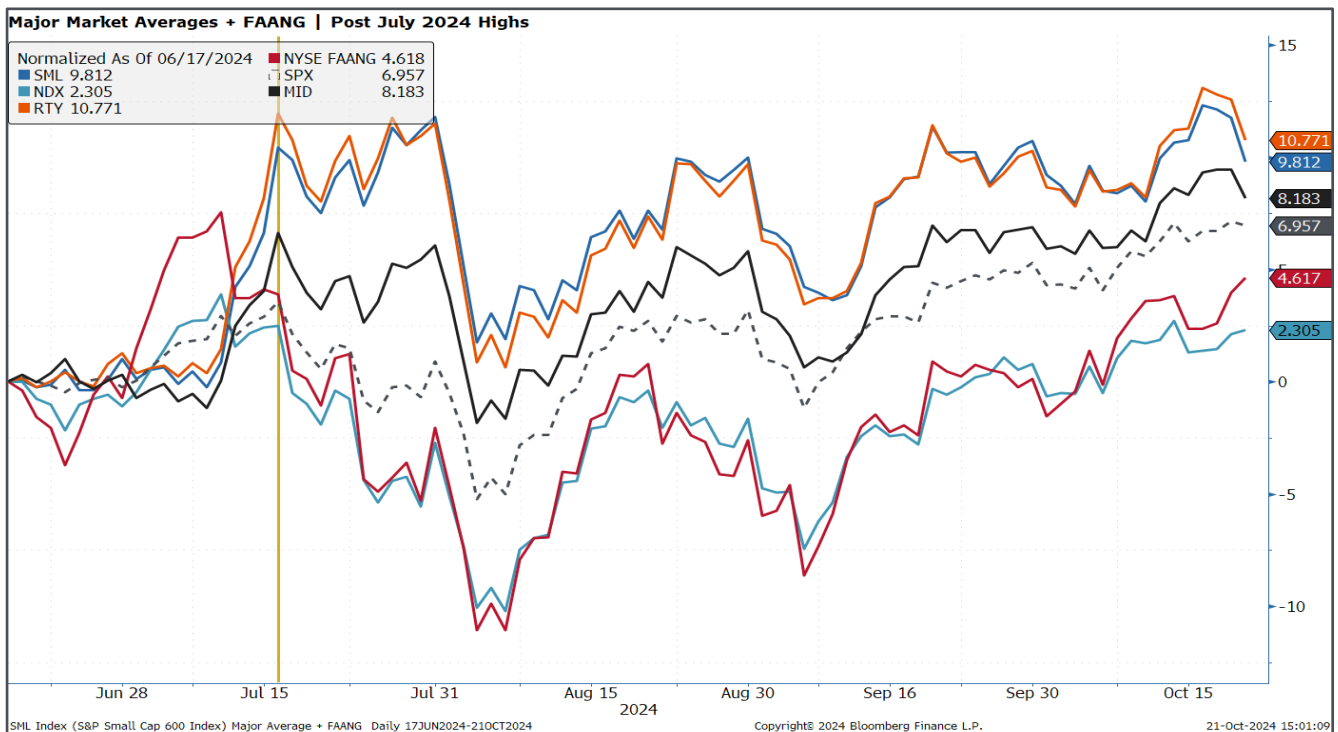
The SPX has made 47 new highs this year, and we expect that trend to continue. Since 1928, the median return for the SPX has been 1.78% post-U.S. presidential elections to year-end.

We expect Financials, Technology, and Industrials to remain leaders at the sector level, with SMID-Cap outperforming Mega-cap stocks.



SMID-Cap Stocks Leading:

Market leadership has shifted down-cap toward SMID-cap stocks over the last several months. The chart below shows the rotation, with FAANG stocks leading into the mid-July '24 highs and now MID-cap stocks (SML, MID, and RTY) outperforming afterward. This sort of "Style Shift" would be consistent with prior Fed rate cuts dating back to the late 1980s.



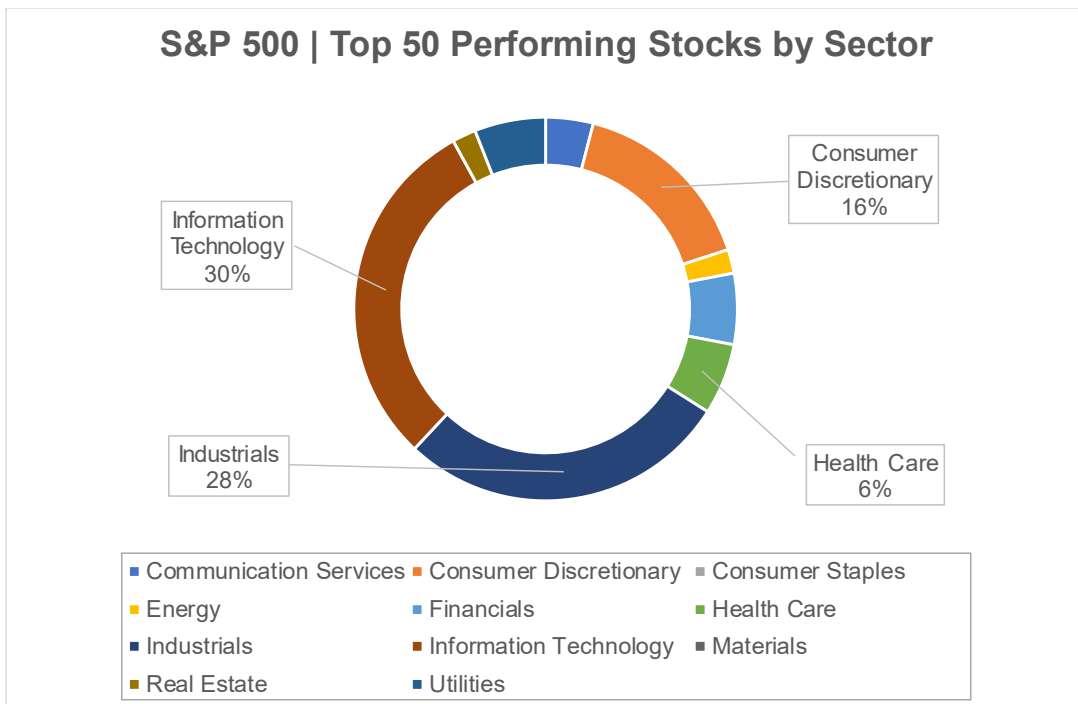
Source: Piper Sandler Technical Research/Bloomberg

Market Leadership off 2022 Lows:

The best-performing stocks during the first 2-years of this bull market have been concentrated in the Technology and Industrial sectors.

However, only two Magnificent 7 stocks were among the top 50.

Economic-sensitive stocks such as BLDR, PHM, URI, CAT, and GE were on the list, indicating the equity rally encompassed a broader representation of the U.S. economy than most investors thought.

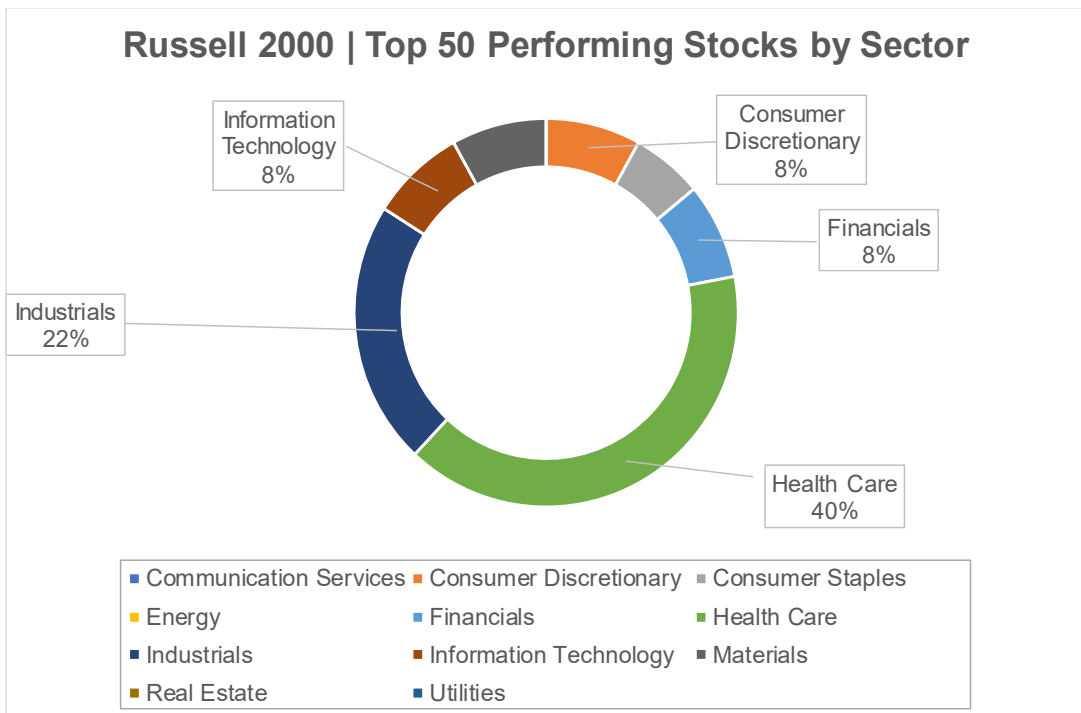


Source: Piper Sander Technical Research/Bloomberg

Healthcare and Industrial stocks dominated the 50 best-performing stocks in the RTY over the past 2-years of this bull market. Also, the 50-best RTY stocks outpaced the 50-best SPX stocks by a meaningful margin.

The top 50 RTY stocks had a median return of 414%, compared to the top 50 SPX stocks' median return of 182.7%.

The median market cap in the RTY top 50 list was \$1.5 billion, while SPX's was \$80.5 billion.



Source: Piper Sander Technical Research/Bloomberg

SMID-Cap, Not Mega-Cap, Stocks Leading:

The market leadership has been broader than most investors realize. The table below shows the 50 best-performing stocks off the October 12, 2022, lows. We highlighted in yellow the only two Magnificent 7 stocks to make the list. While the SPX appreciated 62.6% over the past 2-years of this bull market, the median return for the 50 best-performing stocks was 182.7% and had a median market cap of \$80.5 billion.

Best S&P 500 Stocks 2-Year Bull Market Run						
<i>Date: 10/12/2022 - 10/11/2024</i>						
Symbol	Company	Price	Market Cap (in Billions)	Performance Since Oct. 12, 2022	Sector	Industry
1 NVDA	NVIDIA Corp	\$134.80	\$3,306,644,000	1072.2%	Information Technology	Semiconductors & Semiconductor
2 SMCI	Super Micro Computer Inc	\$47.80	\$27,990,020	811.9%	Information Technology	Technology Hardware, Storage &
3 VST	Vistra Corp	\$125.29	\$43,044,808	484.4%	Utilities	Independent Power and Renewabl
4 PLTR	Palantir Technologies Inc	\$43.51	\$97,413,773	439.2%	Information Technology	Software
5 FICO	Fair Isaac Corp	\$2,031.00	\$49,797,141	401.1%	Information Technology	Software
6 GE	General Electric Co	\$191.16	\$207,276,894	374.5%	Industrials	Aerospace & Defense
7 META	Meta Platforms Inc	\$589.95	\$1,492,644,882	362.7%	Communication Services	Interactive Media & Services
8 RCL	Royal Caribbean Cruises Ltd	\$195.69	\$50,374,587	331.4%	Consumer Discretionary	Hotels, Restaurants & Leisure
9 AVGO	Broadcom Inc	\$181.48	\$847,616,148	321.5%	Information Technology	Semiconductors & Semiconductor
10 ANET	Arista Networks Inc	\$416.93	\$130,979,758	302.2%	Information Technology	Communications Equipment
11 DELL	Dell Technologies Inc	\$127.73	\$90,387,088	278.2%	Information Technology	Technology Hardware, Storage &
12 AXON	Axon Enterprise Inc	\$434.98	\$32,873,328	260.7%	Industrials	Aerospace & Defense
13 PHM	PulteGroup Inc	\$139.20	\$28,887,345	256.9%	Consumer Discretionary	Household Durables
14 UBER	Uber Technologies Inc	\$86.34	\$181,394,920	232.3%	Industrials	Ground Transportation
15 NFLX	Netflix Inc	\$722.79	\$310,195,892	227.2%	Communication Services	Entertainment
16 CEG	Constellation Energy Corp	\$266.22	\$83,891,496	224.0%	Utilities	Electric Utilities
17 HWM	Howmet Aerospace Inc	\$103.82	\$42,373,781	223.3%	Industrials	Aerospace & Defense
18 BLDR	Builders FirstSource Inc	\$193.00	\$22,475,702	207.2%	Industrials	Building Products
19 KKR	KKR & Co Inc	\$135.59	\$120,327,973	205.5%	Financials	Capital Markets
20 URI	United Rentals Inc	\$819.00	\$54,165,278	196.1%	Industrials	Trading Companies & Distributo
21 KLAC	KLA Corp	\$803.73	\$107,680,395	192.5%	Information Technology	Semiconductors & Semiconductor
22 MPWR	Monolithic Power Systems Inc	\$938.47	\$45,752,289	190.6%	Information Technology	Semiconductors & Semiconductor
23 AMD	Advanced Micro Devices Inc	\$167.89	\$271,726,917	190.2%	Information Technology	Semiconductors & Semiconductor
24 LLY	Eli Lilly & Co	\$932.06	\$885,853,851	187.2%	Health Care	Pharmaceuticals
25 DECK	Deckers Outdoor Corp	\$161.25	\$24,584,728	185.9%	Consumer Discretionary	Textiles, Apparel & Luxury Goo
26 CCL	Carnival Corp	\$20.43	\$26,316,937	179.5%	Consumer Discretionary	Hotels, Restaurants & Leisure
27 TDG	TransDigm Group Inc	\$1,410.42	\$79,140,631	176.6%	Industrials	Aerospace & Defense
28 TT	Trane Technologies PLC	\$399.86	\$90,236,499	175.8%	Industrials	Building Products
29 ORCL	Oracle Corp	\$175.77	\$487,069,763	175.6%	Information Technology	Software
30 AMAT	Applied Materials Inc	\$205.06	\$169,052,302	169.8%	Information Technology	Semiconductors & Semiconductor
31 IRM	Iron Mountain Inc	\$120.34	\$35,300,033	165.1%	Real Estate	Specialized REITs
32 ISRG	Intuitive Surgical Inc	\$484.78	\$172,268,597	160.2%	Health Care	Health Care Equipment & Suppli
33 DHI	DR Horton Inc	\$182.82	\$59,606,650	156.6%	Consumer Discretionary	Household Durables
34 LRCX	Lam Research Corp	\$82.89	\$107,434,949	155.8%	Information Technology	Semiconductors & Semiconductor
35 BKNG	Booking Holdings Inc	\$4,284.73	\$143,642,951	155.7%	Consumer Discretionary	Hotels, Restaurants & Leisure
36 TRGP	Targa Resources Corp	\$165.76	\$36,314,653	155.6%	Energy	Oil, Gas & Consumable Fuels
37 NOW	ServiceNow Inc	\$938.59	\$193,349,540	154.3%	Information Technology	Software
38 ETN	Eaton Corp PLC	\$341.39	\$135,907,359	152.0%	Industrials	Electrical Equipment
39 PH	Parker-Hannifin Corp	\$637.15	\$81,982,317	151.7%	Industrials	Machinery
40 ACGL	Arch Capital Group Ltd	\$114.40	\$43,021,017	151.1%	Financials	Insurance
41 PWR	Quanta Services Inc	\$309.42	\$45,586,780	144.9%	Industrials	Construction & Engineering
42 PNR	Pentair PLC	\$97.63	\$16,157,544	140.6%	Industrials	Machinery
43 PANW	Palo Alto Networks Inc	\$373.20	\$121,513,920	140.3%	Information Technology	Software
44 NVR	NVR Inc	\$9,534.19	\$29,342,356	137.8%	Consumer Discretionary	Household Durables
45 UHS	Universal Health Services Inc	\$214.33	\$14,298,631	136.8%	Health Care	Health Care Providers & Servic
46 CARR	Carrier Global Corp	\$81.61	\$73,673,585	134.0%	Industrials	Building Products
47 LEN	Lennar Corp	\$178.19	\$47,966,182	132.9%	Consumer Discretionary	Household Durables
48 ERIE	Erie Indemnity Co	\$534.70	\$27,959,392	131.5%	Financials	Insurance
49 NRG	NRG Energy Inc	\$89.75	\$18,522,590	125.8%	Utilities	Electric Utilities
50 CAT	Caterpillar Inc	\$402.02	\$194,938,741	124.0%	Industrials	Machinery
SPX	S&P 500 INDEX			62.6%		
Average			\$220,139	238.9%		
Median			\$80,561	182.7%		

Source: Piper Sandler Technical Research and Bloomberg

Major Averages | Primary Trend is Up:

S&P 500: Since late 2023, the SPX has trended to all-time new highs and has appreciated about 22.50% year-to-date.

We have raised our 2024 YE price objective to 6,100 from 5800 and established a 2025 YE price objective of 6,600.

Dow Jones Industrial Average: The index is up approximately 14% year-to-date, reaching all-time new highs above 43,000.

The current bull cycle remains intact above key support near the 40,000 level.

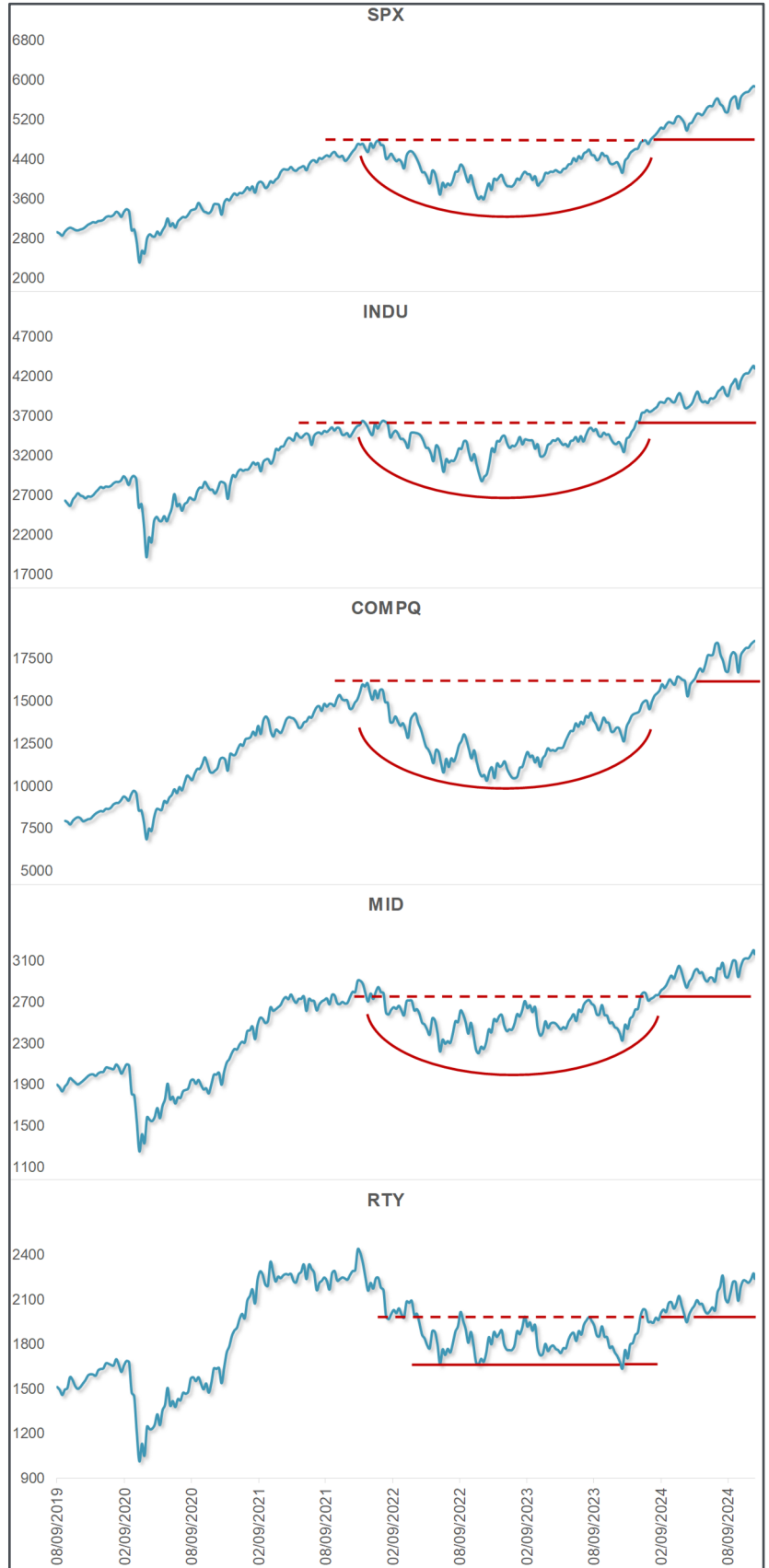
Nasdaq Composite: Although the tech-heavy index outperforms with almost a 24% YTD gain, its upward momentum has significantly waned since July 2024.

The key support area to watch is 16,000, the price around the previous years' highs and August lows.

S&P 400 Mid-cap: The index has recently advanced to an all-time high, registering a 13% gain year-to-date.

Add to positions as a new uptrend appears underway above 2,800.

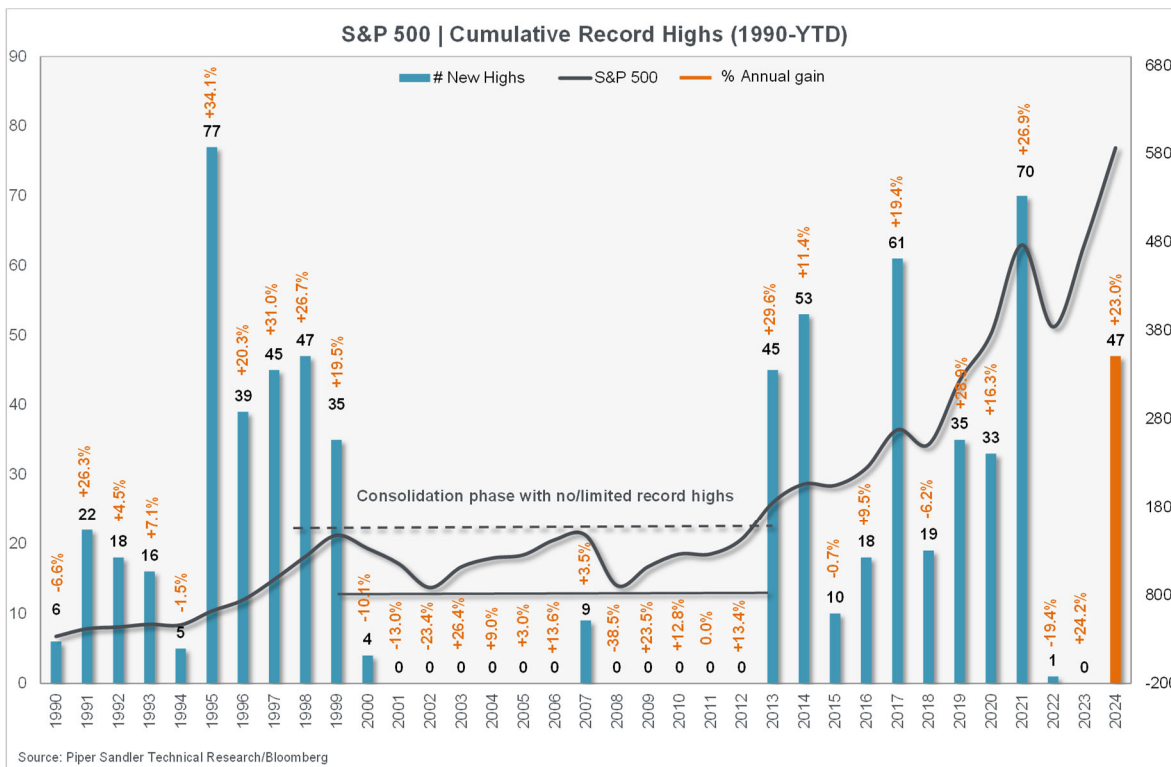
Russell 2000 Small Cap: The index is trending higher out of a two-year consolidation. However, the RTY remains 9% away from an all-time new high.



Source: Piper Sandler Technical Research/Bloomberg

New Highs Lead to New Highs – S&P 500

The S&P 500 has notched 47 record highs so far this year. The chart below depicts the S&P 500's annual returns and the number of associated record highs generated within each calendar year since 1990. As you may have noticed, 2007 appears to be an anomaly on the chart, as it marked both the final recovery from the dot-com bubble and the start of the global financial crisis. The chart also shows that record-high momentum can continue for an extended period of time.



Return Metric	# of New Highs	Annual Return	Maximum Drawdown	+1-Year Return
Average (Since '90)	31	12.29%	-11.49%	9.78%
2024*	47	23.00%	8.50%	-
Median	33	13.85%	-9.03%	13.85%
% Positive	-	73%	0%	68%
Maximum	77	34.11%	-2.53%	34.11%
Minimum	1	-19.40%	-33.90%	-38.49%

Source: Piper Sandler Technical Research/Bloomberg

SUMMARY

Since 1990, we found 23 other years when the S&P 500 recorded at least one record high. During this timeframe, the index recorded an average of 31 record highs within a year.

The highest number of record highs in a single year was observed in 1995, which included 77 all-time new highs (the highest level on record and equivalent to roughly a new record high every 3.3 trading days). Finally, we analyzed the maximum drawdown observed during each record-high year and the following year's annual return. Average drawdowns were around -11.5%, while forward annual returns averaged 9.8%.

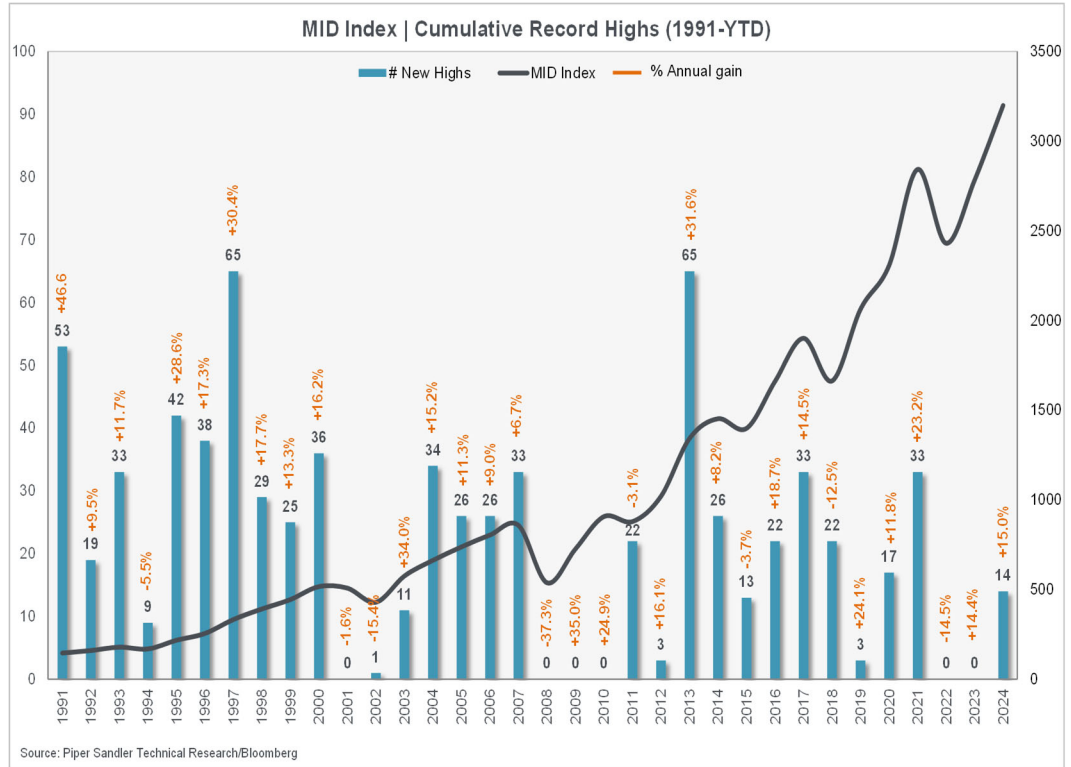
The table to the left shows various return metrics for years when the S&P 500 recorded an all-time high. Below is a summary of our observations.

New Highs Lead to New Highs – Mid-cap 400 and Russell 2000

The S&P 400 MID index made new highs in 27 of the past 34 years.

The highest record (65) was observed in 1997 and 2013, with the MID gaining 30.4% and 31.6%, respectively.

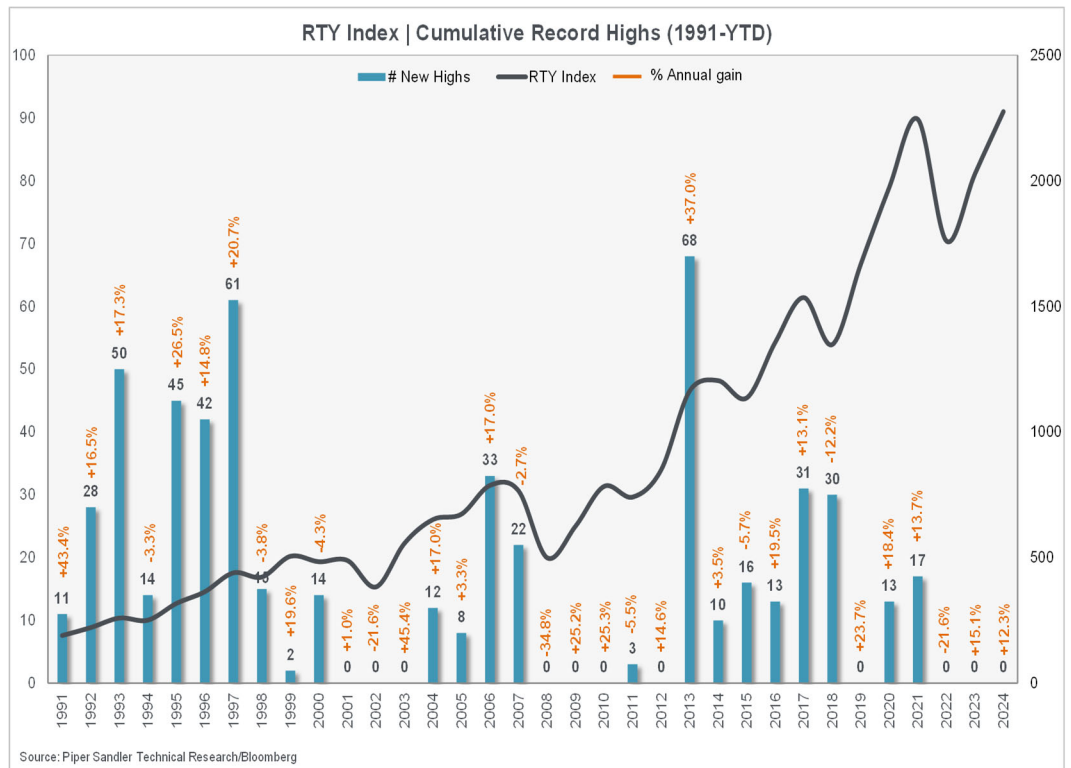
The average drawdown was 13.50%, and forward 1-year returns were 10.8%.



The Russell 2000 made new highs in 23 of the past 34 years.

The highest record was observed in 2013, at 68, which resulted in a 37% annual gain for the RTY.

The RTY has not reached a record high in three years. Prior three-year droughts (01-'03 and '08-'10) resulted in significant returns over the next three years, averaging 20.5%.

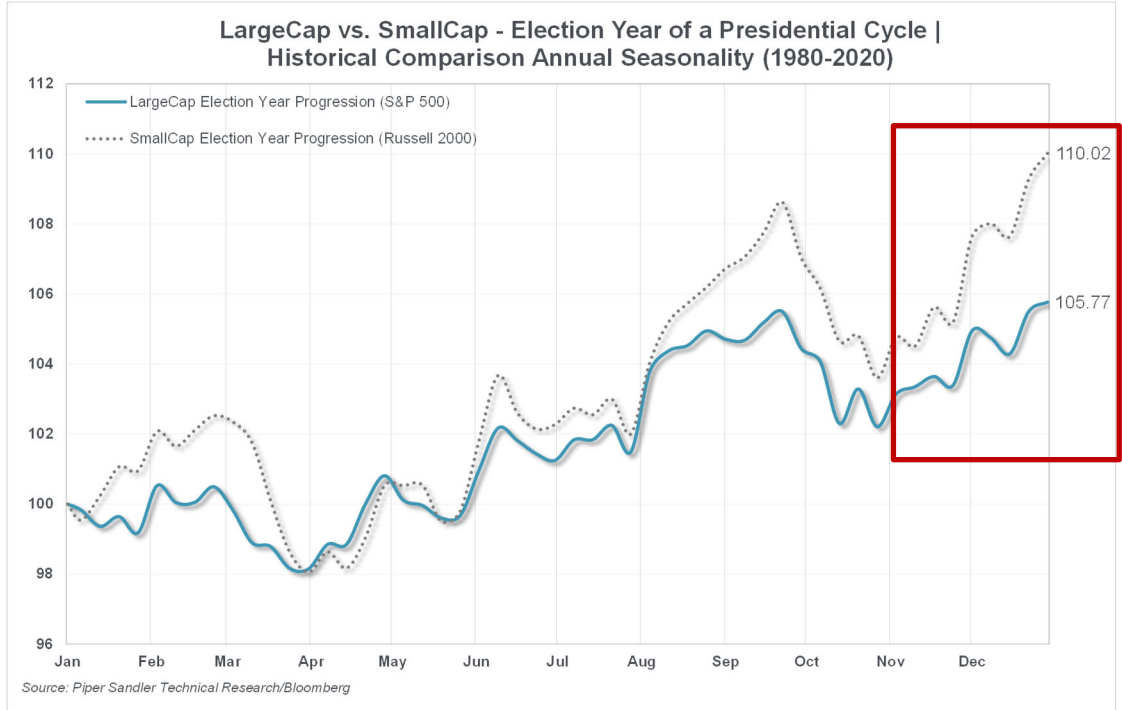


SMID-Cap's Outperform During Election Years:

Since 1980, small-cap stocks have historically outperformed large-cap stocks during election years.

Small-cap outperformance tends to widen even more after the election.

Historically, RTY has outpaced the SPX by approximately 400 basis points in the last two months of the year.

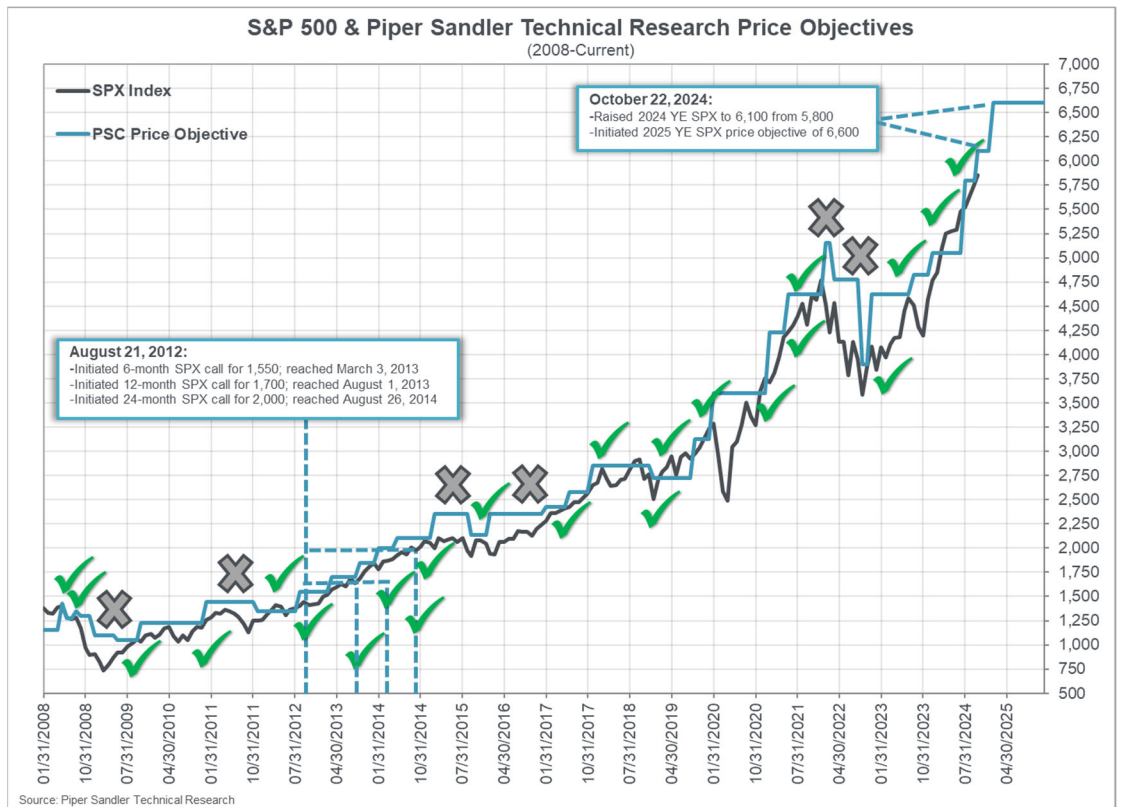


Conclusion:

We raised our SPX 2024 YE price objective to 6,100 from 5,800 and established a 2025 FY price objective of 6,600.

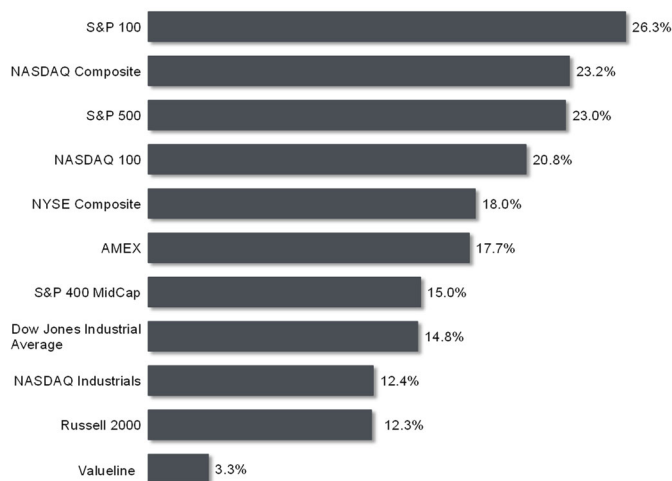
The chart to the right highlights our SPX track record since 2008 and the success of our bottom's P&F-based model.

In sum, based on the weight of the technical evidence, we believe this bull market has more room to run— "pessimism historically fuels bull markets."



Top-Down Analysis | Index & Sector Performance YTD

Market Performance (YTD) - Popular Averages

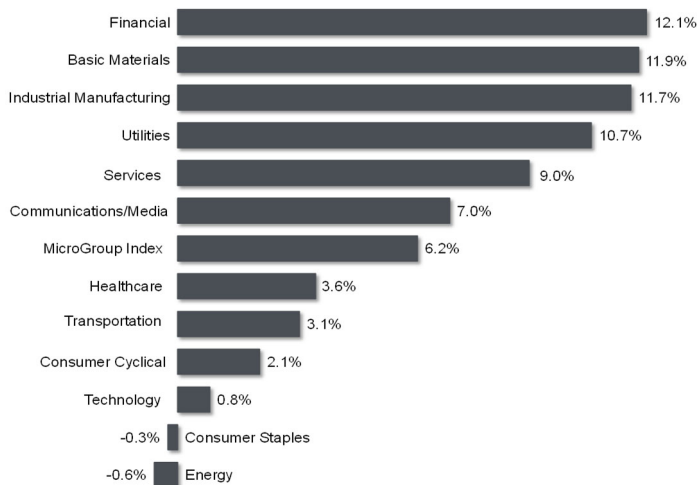


From a performance perspective, the S&P 100, S&P 500, *NASDAQ 100*, and *NASDAQ Composite* have led equities higher, advancing at least 20.8% YTD.

The *Dow Industrials* index is up 9.8% YTD.

The *Value line* and *AMEX* are at the bottom of the index leaderboard, up at least 3.3% YTD.

Market Performance (YTD) - Unwtd Sectors

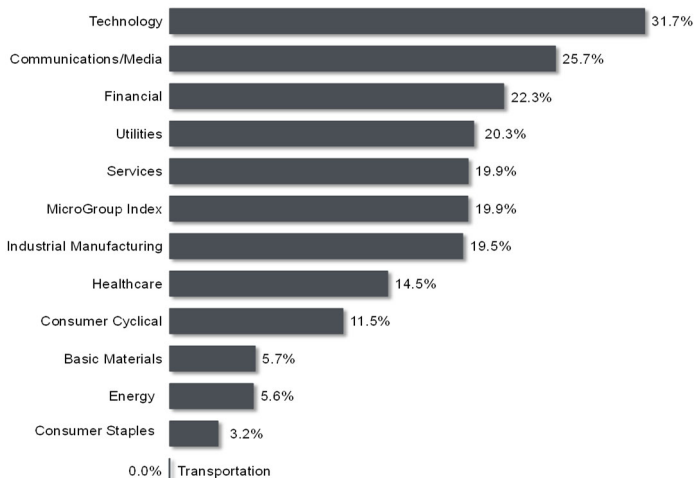


Ten of the twelve Piper Sandler sectors were positive YTD on an unweighted basis (equally weighted).

Financial have outperformed with 12.1% gain.

Energy and *Consumer Staples* are the worst performing sectors YTD, with at least -0.3% decline.

Market Performance (YTD) - Wtd Sectors



On a weighted sector basis (market-cap weighted), *Communications/Media* and *Technology* are leading with at least a 25.7% return YTD.

Note the performance deltas between select unweighted and weighted sectors. For example, the weighted or large-cap focused *Technology* sector was up 31.7%, while its unweighted counterpart had advanced 0.8%. The 30.9% performance gap illustrates why we look at our sector work on both an Unwtd and Wtd basis.

Source: Piper Sandler Technical Research

Top-Down Analysis | Best & Worst Industry Groups YTD

The table below highlights the best/worst-performing MicroGroups (MGs) YTD. On the leadership side (left), MGs are the most prevalent in the *Services* and *Healthcare* sectors. *Technology* sector MG comprised most of the YTD laggards list.

Leaders & Laggards - YTD							
Rank	MG	Name	Leaders	Rank	MG	Name	Laggards
1	836	Cannabis, Pri.	101.45%	416	1002	Automobile Manufacturers, Sec.	-65.84%
2	533	Tech/Engr. Svcs., Telecomm	86.79%	415	1038	Extreme Value Stores	-49.11%
3	1213	Network Infrastructure, Sec.	83.47%	414	1225	Sftwr., Educational/e-learning	-46.65%
4	532	Tech/Engr/Constr Svcs, Sec	74.47%	413	921	Drugstore Chains	-43.80%
5	218	Gold & Silver, North & South Amer, Pri.	70.03%	412	1235	Robotics/Machine Vision	-42.72%
6	1236	Satellite Equipment/Services	68.48%	411	1231	3-D Printing	-36.09%
7	1406	Wireless Service Providers Non-U.S.	68.08%	410	530	Educ/Training/Productivity Svcs.	-35.61%
8	332	Railroad Equipment	59.53%	409	823	Diagnostic Reagents/Test Kits	-35.48%
9	220	Gold & Silver, North & South Amer, Emrg.	57.96%	408	1024	Jewelry, Watches & Gifts	-33.06%
10	815	Nursing Homes/Assisted Living	57.21%	407	1224	Sftwr., Customer/Contact Mgmt.	-31.02%
11	1405	Wireless Service Providers	56.42%	406	916	Toiletries & Cosmetics, Pri.	-29.96%
12	325	Electrical Equipment	54.83%	405	1208	Semiconductors, Micro Cap	-29.33%
13	668	Discount/Internet Brokers	54.56%	404	923	Agricultural Biotechnology	-28.84%
14	321	Pollution Control Equipment	53.30%	403	1242	Alternative Energy Sources	-27.21%
15	535	Waste Management, Sec.	52.20%	402	914	Housewares	-25.64%
16	536	Transportation Equipment Leasing	51.63%	401	1230	Imaging Systems	-25.46%
17	512	Federal Gov't IT Services	51.29%	400	829	Genomics/Proteomics, Sec.	-24.52%
18	1258	Wireless Comp. & Subsystems	49.69%	399	1053	Health Products/Services	-23.13%
19	807	Medical Supplies, Sec.	47.51%	398	827	Drug Delivery	-23.08%
20	1055	Pet Supplies & Services	46.55%	397	1410	Broadcasting, Radio/TV, Sec.	-22.97%
21	1402	Telecommunications, Sec.	45.19%	396	522	Temporary Staffing, Pri.	-22.66%
22	219	Gold & Silver, North & South Amer, Sec.	44.71%	395	811	Orthopedic Devices	-22.59%
23	664	Insurance, Non-Standard Auto	43.10%	394	203	Steel, International	-22.55%
24	822	Healthcare Inf. Sys./Svcs., Sec.	42.78%	393	1232	Digital Animation/Video/Audio	-21.96%
25	907	Natural Foods	42.67%	392	808	Dental Products/Supplies	-20.70%

Source: Piper Sandler Technical Research

Top-Down Analysis | Best & Worst S&P 500 Constituents YTD

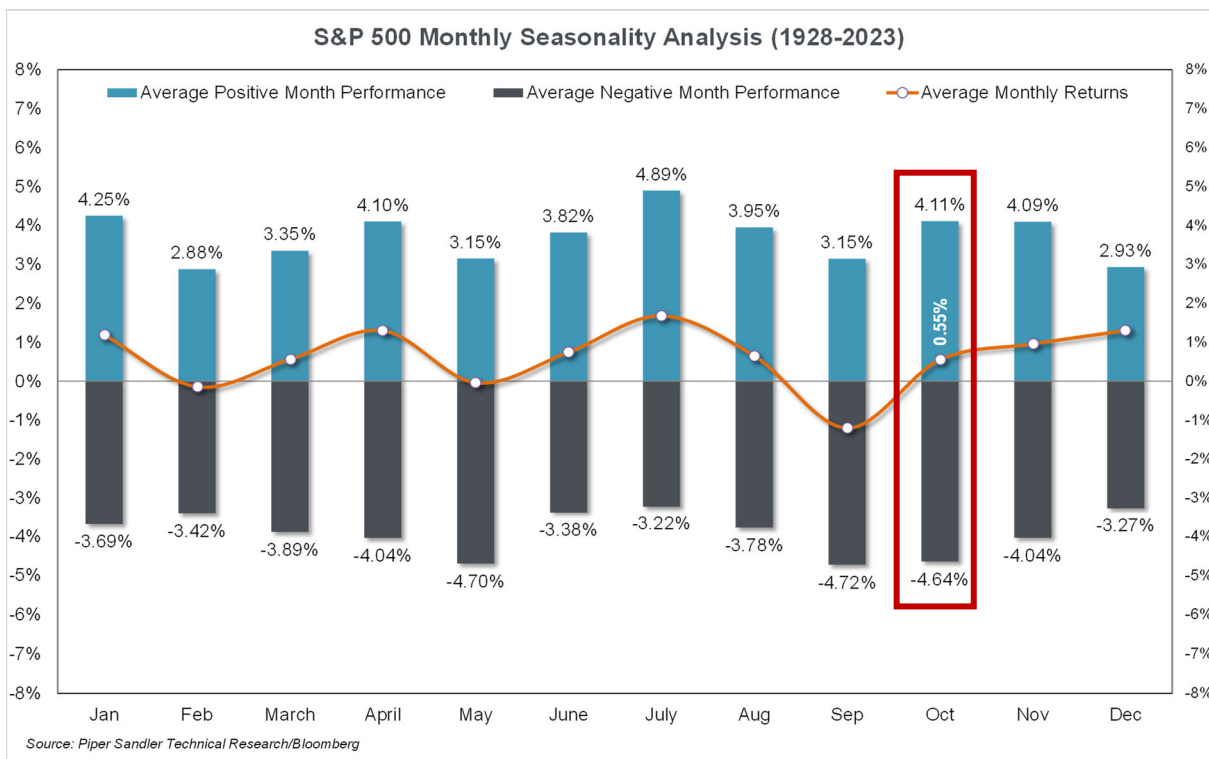
We also drilled down to the S&P 500 constituent level, and the table below highlights the best/worst-performing stocks within the index YTD. *Vistra (VST)* topped its *Utilities* peers with a 240.50% rally. *Walgreens Boots Alliance (WBA)* has been the worst-performing stock in the index, declining 58.67% YTD.

S&P 500 Top & Bottom 10 YTD Performance							
Ticker	Name	Sector	% Change	Ticker	Name	Sector	% Change
VST	Vistra Corp	Utilities	240.50%	WBA	Walgreens Boots Alliance Inc	Consumer Staples	-58.67%
NVDA	NVIDIA Corp	Information Technology	178.66%	INTC	Intel Corp	Information Technology	-54.69%
PLTR	Palantir Technologies Inc	Information Technology	150.26%	DLTR	Dollar Tree Inc	Consumer Staples	-51.99%
CEG	Constellation Energy Corp	Utilities	131.12%	MRNA	Moderna Inc	Health Care	-45.60%
HWM	Howmet Aerospace Inc	Industrials	95.01%	LULU	Lululemon Athletica Inc	Consumer Discretionary	-42.96%
GE	General Electric Co	Industrials	89.22%	DXCM	Dexcom Inc	Health Care	-41.67%
TRGP	Targa Resources Corp	Energy	87.35%	HUM	Humana Inc	Health Care	-41.65%
UAL	United Airlines Holdings Inc	Industrials	79.71%	DG	Dollar General Corp	Consumer Staples	-40.71%
IRM	Iron Mountain Inc	Real Estate	79.71%	BA	Boeing Co/The	Industrials	-40.54%
ANET	Arista Networks Inc	Information Technology	70.69%	EL	Estee Lauder Cos Inc/The	Consumer Staples	-38.43%

As of: 10/18/2024

S&P 500 Seasonality Analysis | October

The chart below shows the average monthly performance of the S&P 500 (SPX) since 1928. Historically, the index has generated average returns of 0.5% in October and finished the month in positive territory 59% of the time, or 57 out of the last 96 years. When returns were positive during the month, they historically averaged 4.1%. Conversely, the SPX declined an average of -4.6% when October was down.



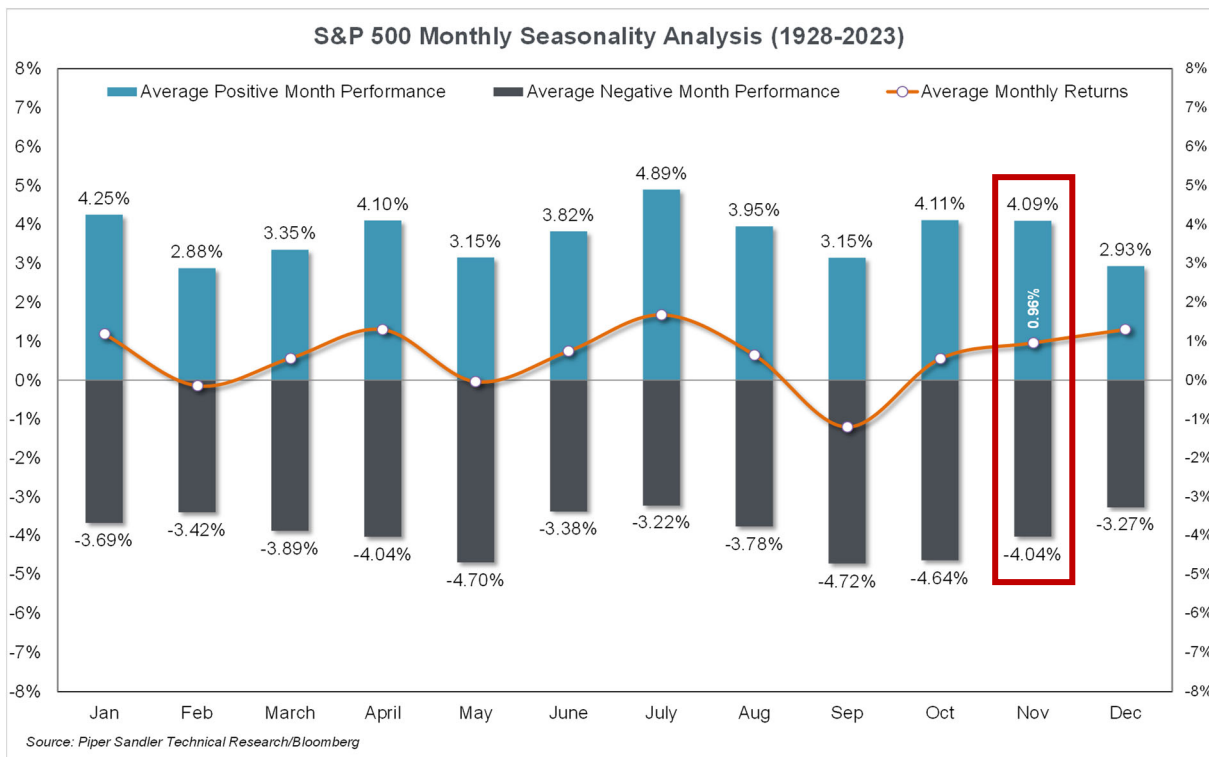
The table below shows the performance of Piper Sandler's proprietary sectors during October based on data dating back to 1969. Historically, *Utilities* outperformed with an average monthly gain of 0.6%. The *Healthcare* sector has underperformed, with an average return of -1.6%.

October Seasonality Analysis (1969-2023)					
	Avg. Returns	% Positive	Max	Min	Std. Deviation
Energy	-0.06%	46%	22.82%	-33.52%	10.27%
Basic Materials	-1.52%	44%	20.75%	-37.85%	9.08%
Industrials	-1.02%	44%	20.75%	-36.64%	8.51%
Utilities	0.56%	57%	7.82%	-16.07%	4.56%
Services	-0.85%	54%	15.67%	-39.38%	8.60%
Financials	-0.20%	54%	12.89%	-28.93%	6.68%
Transportation	-0.04%	52%	17.50%	-38.77%	8.91%
Healthcare	-1.56%	41%	18.54%	-42.55%	9.24%
Consumer Staples	-0.55%	43%	9.97%	-32.58%	6.67%
Consumer Cyclical	-0.81%	43%	15.88%	-37.74%	8.57%
Technology	-0.63%	54%	19.68%	-40.77%	9.76%
Communication	-0.24%	50%	13.74%	-30.65%	7.96%
S&P 500	1.07%	59%	16.30%	-21.76%	6.26%

Source: Piper Sandler Technical Research/Bloomberg

S&P 500 Seasonality Analysis | November

The chart below shows the average monthly performance of the S&P 500 (SPX) since 1928. Historically, the index has generated average returns of +1.0% in November and finished the month in positive territory 61% of the time, or 59 out of the last 96 years. When returns were positive during the month, they historically averaged 4.1%. Conversely, the SPX declined an average of -4.0% when November was down.



The table below shows the performance of Piper Sandler's proprietary sectors during November based on data dating back to 1969. Historically, *Technology* outperformed with an average monthly gain of 1.9%. The *Energy* sector has underperformed, with an average return of -0.6%.

November Seasonality Analysis (1969-2023)						
	Avg. Returns	% Positive	Max	Min	Std. Deviation	
Sector	Energy	↓ -0.66%	43%	36.32%	-19.24%	8.68%
	Basic Materials	0.76%	63%	15.29%	-16.46%	6.74%
	Industrials	0.99%	67%	21.06%	-19.10%	6.68%
	Utilities	0.85%	54%	8.61%	-9.76%	3.67%
	Services	1.02%	57%	21.02%	-19.51%	6.71%
	Financials	0.85%	65%	19.12%	-12.86%	5.62%
	Transportation	0.95%	59%	24.05%	-19.18%	7.64%
	Healthcare	0.90%	54%	13.64%	-14.79%	6.72%
	Consumer Staples	0.99%	67%	14.49%	-15.05%	4.84%
	Consumer Cyclical	1.24%	67%	22.26%	-23.39%	7.42%
	Technology	↑ 1.94%	61%	29.05%	-20.87%	9.95%
	Communication	1.18%	65%	19.59%	-17.53%	7.24%
	S&P 500	1.48%	69%	10.75%	-11.39%	4.53%

Source: Piper Sandler Technical Research/Bloomberg

Major Averages and PSC Sector Performance | September to December (Election Years)

From a style perspective, the Russell 1000 Growth Index had significantly underperformed the Russell 1000 Value Index and the S&P 500 during election years since 1979. The Value index was up an average of 3.6% with a median of 5.5% approximately 91% of the time.

Style Performance September to December (1979-YTD)						
Stat Metric	All-Years			4th Year of a Presidential Cycle		
	Russell 1000 Growth	Russell 1000 Value	S&P 500	Russell 1000 Growth	Russell 1000 Value	S&P 500
Average	4.07%	3.13%	3.57%	-0.24%	3.58%	1.39%
Median	4.09%	3.60%	3.64%	5.86%	5.49%	5.24%
% Positive	75.56%	73.33%	75.56%	63.64%	90.91%	81.82%
Maximum	36.03%	22.45%	28.41%	15.48%	13.33%	13.61%
Minimum	-32.17%	-28.80%	-29.59%	-32.17%	-28.80%	-29.59%

Source: Piper Sandler Technical Research/Bloomberg

Evaluating the same parameters from a market-cap performance, large-caps significantly underperformed SMID-caps by 3% to 6% during election years since 1994.

Market-Cap Performance September to December (1994-YTD)						
Stat Metric	All-Years			4th Year of a Presidential Cycle		
	Large-cap	Mid-cap	Small-cap	Large-cap	Mid-cap	Small-cap
Average	4.13%	5.17%	5.43%	-2.08%	2.46%	5.15%
Median	5.26%	5.09%	4.36%	3.27%	6.12%	9.97%
% Positive	76.67%	73.33%	73.33%	71.43%	71.43%	71.43%
Maximum	28.19%	39.56%	29.02%	14.35%	19.73%	24.49%
Minimum	-26.96%	-34.00%	-30.62%	-26.96%	-34.00%	-30.62%

Source: Piper Sandler Technical Research/Bloomberg

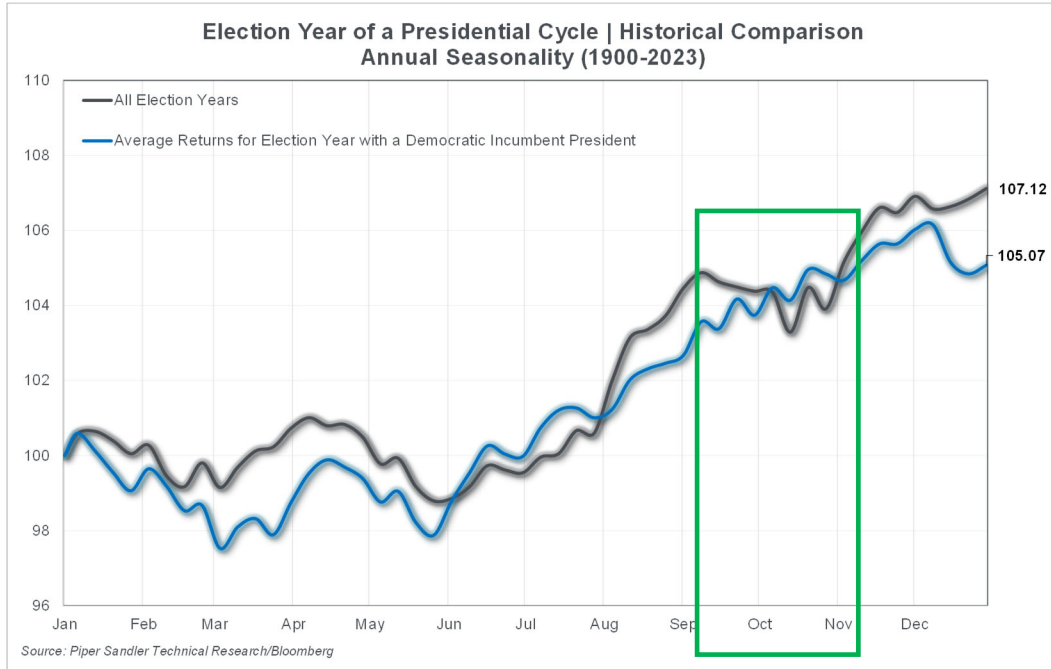
Our research showed that the best four-month performance between September and December among our PSC sectors during an election year since 1969 has been *Financials* (up an average of 6.4% with an 84% positivity rate), while the weakest sector has been *Technology* (down 2.9% with a 69% positivity).

PSC Sector Performance September to December (1969-YTD)										
Sector	All-Years					4th Year of a Presidential Cycle				
	Average	Median	%Positive	Maximum	Minimum	Average	Median	%Positive	Maximum	Minimum
Energy	↓ -0.48%	1.99%	52.73%	30.10%	-71.28%	3.31%	13.05%	69.23%	24.42%	-71.28%
Basic Materials	0.46%	0.26%	54.55%	30.91%	-51.79%	0.34%	1.71%	69.23%	21.14%	-51.79%
Industrials	0.90%	1.15%	52.73%	27.33%	-47.88%	2.39%	6.49%	76.92%	23.36%	-47.88%
Utilities	2.12%	2.70%	63.64%	16.94%	-25.80%	3.52%	2.75%	76.92%	15.91%	-25.80%
Services	2.09%	3.57%	61.82%	35.03%	-39.48%	1.90%	4.62%	69.23%	21.20%	-39.48%
Financials	↑ 1.28%	2.74%	61.82%	24.73%	-30.62%	↑ 6.41%	8.35%	84.62%	20.30%	-29.36%
Transportation	0.37%	2.07%	56.36%	29.71%	-49.29%	1.78%	5.27%	69.23%	23.17%	-49.29%
Healthcare	↑ 2.59%	5.42%	61.82%	35.58%	-35.75%	-0.10%	-0.46%	46.15%	17.07%	-35.75%
Consumer Staples	1.27%	2.72%	63.64%	26.73%	-28.24%	2.49%	3.90%	76.92%	12.31%	-28.24%
Consumer Cyclical	0.72%	1.86%	52.73%	36.50%	-47.97%	1.41%	3.65%	61.54%	22.66%	-47.97%
Technology	2.51%	3.38%	63.64%	48.46%	-57.46%	↓ -2.93%	4.28%	69.23%	25.83%	-57.46%
Communications	1.80%	2.68%	58.18%	30.97%	-53.58%	-2.12%	3.77%	69.23%	16.31%	-53.58%
S&P 500	3.05%	3.18%	70.91%	28.41%	-29.59%	2.00%	5.24%	84.62%	13.61%	-29.59%

Source: Piper Sandler Technical Research/Bloomberg

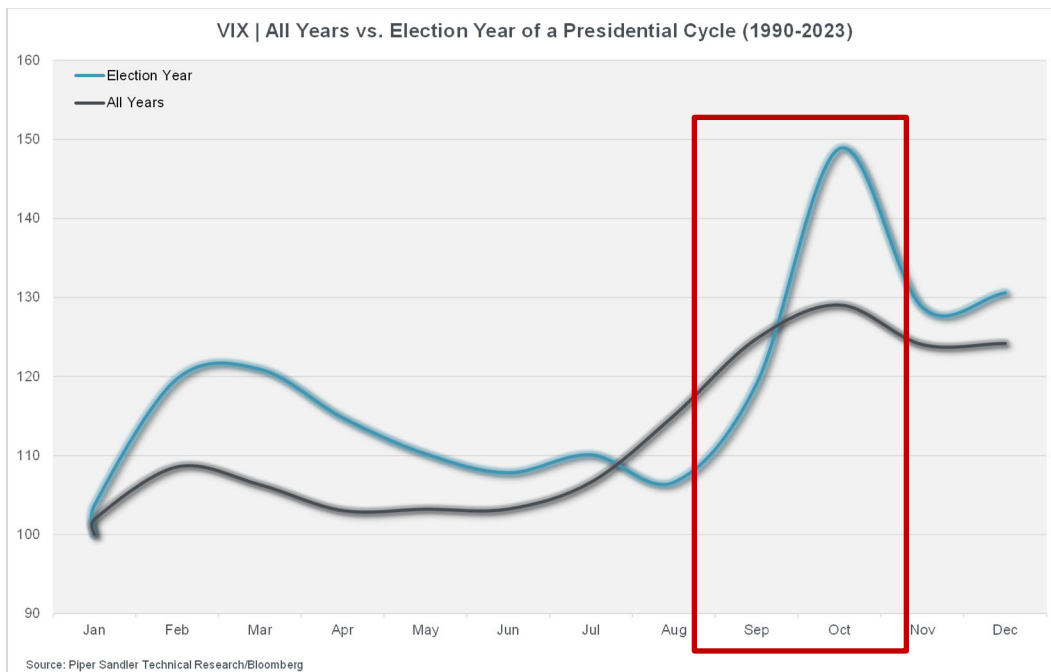
DJIA | Election Year Analysis

In election years when there was a Democratic incumbent, the DJIA historically experienced a choppy uptrend leading into November. Volatility may rise around the election, but we expect equities to rise into year-end.



Volatility Index (VIX) | All Years vs Election Years

The chart below compares the historical volatility, as measured by the VIX index, for all years and election years since 1990. For election years, volatility increases significantly about three months before the election. Once the election results are known, volatility often diminishes during the rest of Q4 until year-end.



Price Action Into & Out of an Election – Since 1900

This study analyzes the performance of the DJIA index going into and out of an election on a +/- 3-month basis. In summary:

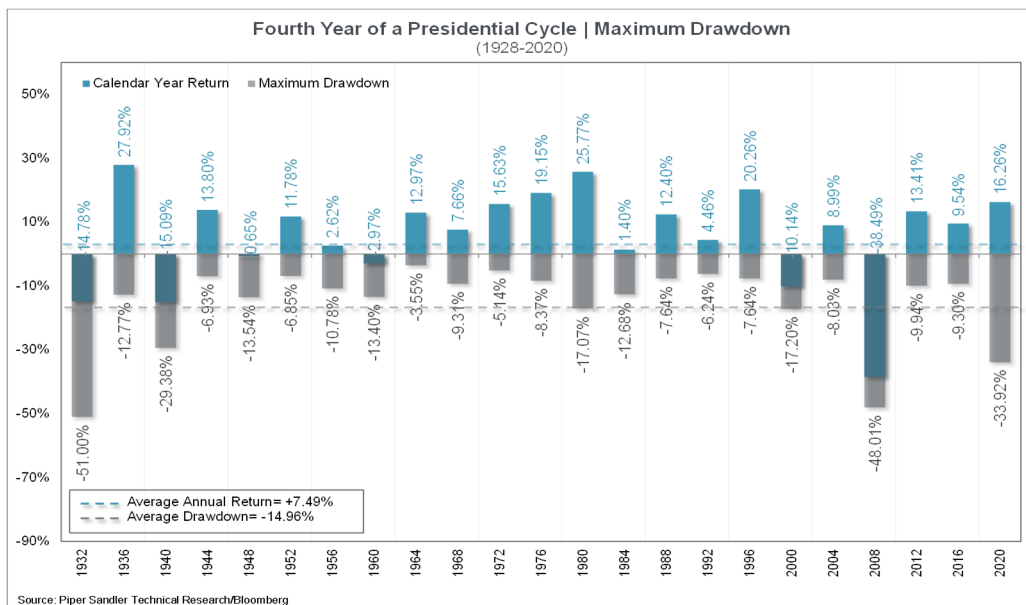
- Incumbent (Republican and Democrat): Average returns going into an election usually start strong in August, followed by a near-flat return in the next two months. November is generally a strong comeback month, especially when a Republican is the incumbent.
- Incumbent (Republican): After a strong August, average returns going into an election (-1/-2 months particularly) are negative. Once the election is finalized, November is generally a comeback month.
- Incumbent (Democrat): Average returns going into an election (-1/-2/-3 months) are often positive, but November posted relatively small average returns, around 0.5% after the election.
- From a performance perspective, the highest average returns are observed during August, followed by November (suggesting a positive environment for stocks after the election results).

INDU Market Performance During U.S. Elections (1900-2020)							
Incumbent (Both Republican and Democrat)	-3 month (Aug.)	-2 month (Sep.)	-1 month (Oct.)	Election (Nov.)	+1 month (Dec.)	+2 month (Jan.)	+3 month (Feb.)
Average	2.88%	-0.22%	0.34%	2.25%	1.08%	0.45%	-1.25%
Median	1.47%	-0.92%	0.24%	2.44%	1.90%	0.51%	-1.01%
% Positive	71%	39%	61%	65%	61%	61%	42%
Maximum	35.76%	12.44%	9.45%	16.35%	8.47%	8.01%	5.36%
Minimum	-4.56%	-7.32%	-14.06%	-10.63%	-10.35%	-8.84%	-15.62%
# of occurrences: 31							
Incumbent (Republican)	-3 month (Aug.)	-2 month (Sep.)	-1 month (Oct.)	Election (Nov.)	+1 month (Dec.)	+2 month (Jan.)	+3 month (Feb.)
Average	4.42%	-1.54%	-0.47%	3.71%	2.44%	-0.34%	-2.00%
Median	1.96%	-1.26%	0.06%	2.91%	2.56%	-1.78%	-1.01%
% Positive	76%	29%	59%	65%	71%	47%	35%
Maximum	35.76%	5.53%	9.45%	16.35%	8.47%	8.01%	5.36%
Minimum	-4.56%	-7.32%	-14.06%	-8.97%	-3.71%	-8.84%	-15.62%
# of occurrences: 17							
Incumbent (Democrat)	-3 month (Aug.)	-2 month (Sep.)	-1 month (Oct.)	Election (Nov.)	+1 month (Dec.)	+2 month (Jan.)	+3 month (Feb.)
Average	1.02%	1.38%	1.32%	0.47%	-0.57%	1.41%	-0.34%
Median	0.62%	0.45%	1.17%	0.92%	0.23%	0.98%	-0.72%
% Positive	64%	50%	64%	64%	50%	79%	50%
Maximum	6.59%	12.44%	5.60%	8.17%	3.58%	5.81%	4.77%
Minimum	-1.62%	-5.03%	-2.54%	-10.63%	-10.35%	-5.34%	-4.32%
# of occurrences: 14							

- Post-WWII, the average and median returns for the SPX from after the U.S. Presidential election to year-end have been 1.64% and 1.78%, respectively.
- When a Republican won the presidency, the median return into year-end was 3.75% with a positivity rate of 67%.
- When a Democrat won the presidency, the median return into year-end was 0.57% with a positivity rate of 54%.
- The largest increase from the election into year-end was 11.48%, occurring in 2016 with Trump.
- The largest decline from the election into year-end was -10.19%, occurring in 2008 with Obama.

Election Year Analysis | Presidential Cycle: S&P 500 Fourth-Year Maximum Drawdowns

Many investors have asked about the magnitude of pullbacks/corrections in the S&P 500 (SPX) Index during Presidential Election years. This study analyzed the SPX's election-year performance and identified maximum drawdowns and annual returns. We then calculated the forward returns after each maximum drawdown to provide perspective on the recovery period.



The bar chart to the left breaks down the average annual returns and maximum drawdowns observed within the fourth year of the Presidential Cycle.

Historically, annual SPX returns have averaged 7.5%, with yearly maximum average drawdowns of -15.0% and a median drawdown of -9%.

Fourth Year of a Presidential Cycle S&P 500 Returns Following a Maximum Drawdown (1928-2020)									
Year	High Date	High	Low Date	Low	Maximum Drawdown	Forward Returns Following a Maximum Drawdown			
						+4-Weeks	+13-Weeks	+26-Weeks	+52-Weeks
1928	05/14/1928	20.44	06/12/1928	18.34	-10.27%	5.94%	14.94%	23.99%	38.66%
1932	03/08/1932	8.98	06/01/1932	4.40	-51.00%	2.50%	90.68%	48.86%	119.09%
1936	04/06/1936	15.51	04/29/1936	13.53	-12.77%	6.58%	17.96%	25.20%	18.18%
1940	01/04/1940	12.73	06/10/1940	8.99	-29.38%	10.57%	17.02%	18.02%	7.45%
1944	07/12/1944	13.27	09/14/1944	12.35	-6.93%	5.34%	6.40%	13.93%	29.15%
1948	06/15/1948	17.06	11/30/1948	14.75	-13.54%	2.24%	-0.27%	-3.80%	8.61%
1952	08/08/1952	25.55	10/22/1952	23.8	-6.85%	6.43%	9.62%	2.77%	1.64%
1956	08/02/1956	49.74	11/29/1956	44.38	-10.78%	4.44%	-2.52%	6.15%	-7.05%
1960	01/05/1960	60.39	10/25/1960	52.3	-13.40%	6.54%	15.58%	24.86%	29.98%
1964	11/20/1964	86.28	12/15/1964	83.22	-3.55%	2.87%	4.70%	1.53%	10.41%
1968	01/12/1968	96.72	03/05/1968	87.72	-9.31%	5.61%	14.43%	13.22%	13.22%
1972	08/14/1972	112.55	10/16/1972	106.77	-5.14%	6.68%	10.93%	4.37%	3.07%
1976	09/21/1976	107.83	11/10/1976	98.81	-8.37%	5.33%	1.94%	-0.03%	-5.90%
1980	02/13/1980	118.44	03/27/1980	98.22	-17.07%	6.29%	18.30%	31.05%	38.74%
1984	01/06/1984	169.28	07/24/1984	147.82	-12.68%	13.54%	13.04%	18.71%	30.26%
1988	04/13/1988	271.57	05/23/1988	250.83	-7.64%	7.22%	2.45%	6.14%	28.37%
1992	01/15/1992	420.77	04/08/1992	394.5	-6.24%	5.65%	4.00%	2.47%	12.23%
1996	05/24/1996	678.51	07/24/1996	626.65	-7.64%	6.13%	12.87%	25.47%	49.46%
2000	03/24/2000	1527.46	12/20/2000	1264.74	-17.20%	5.12%	-11.28%	-3.29%	-9.11%
2004	02/11/2004	1157.76	08/13/2004	1064.8	-8.03%	5.55%	11.21%	13.19%	15.55%
2008	01/03/2008	1447.16	11/20/2008	752.44	-48.01%	17.65%	3.52%	18.06%	45.51%
2012	04/02/2012	1419.04	06/01/2012	1278.05	-9.94%	6.58%	10.06%	10.81%	27.60%
2016	01/05/2016	2016.71	02/11/2016	1829.08	-9.30%	8.77%	12.85%	19.50%	26.18%
2020	02/19/2020	3386.15	03/23/2020	2237.4	-33.92%	22.31%	39.35%	46.65%	74.78%
Average					-14.96%	7.33%	13.24%	15.33%	25.25%
Median					-10.10%	6.21%	11.07%	13.58%	22.18%
% Positive					0.0%	100.0%	87.5%	87.5%	87.5%
Maximum					-3.55%	22.31%	90.68%	48.86%	119.09%
Minimum					-51.00%	2.24%	-11.28%	-3.80%	-9.11%
Std. Deviation					12.76%	4.61%	19.06%	14.06%	28.14%

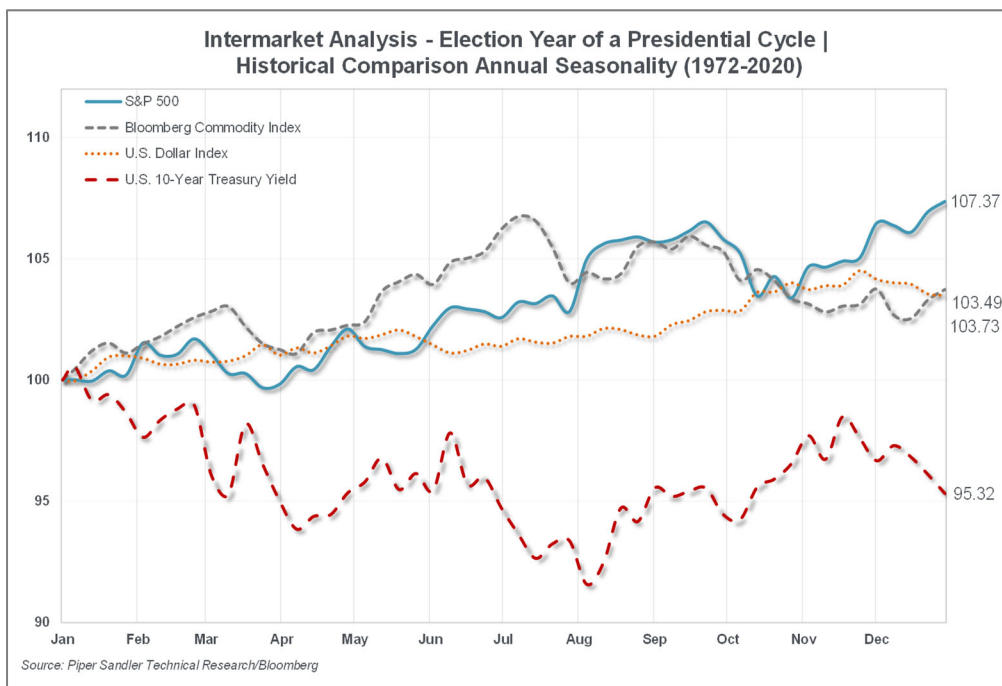
The table to the left shows the SPX's forward performance after a maximum drawdown was recorded (during the fourth year of the Presidential Cycle).

Our research shows that after a maximum drawdown was observed, the index posted positive returns of 7.3% over the next four weeks.

We also found that the SPX generated average returns of 13.2% and 15.3% over the following 13- and 26-week periods, respectively.

Source: Piper Sandler Technical Research/Bloomberg

Election Years | Intermarket Analysis (1972-2020)



The chart on the left compares the average progression of different asset classes during election years since 1972.

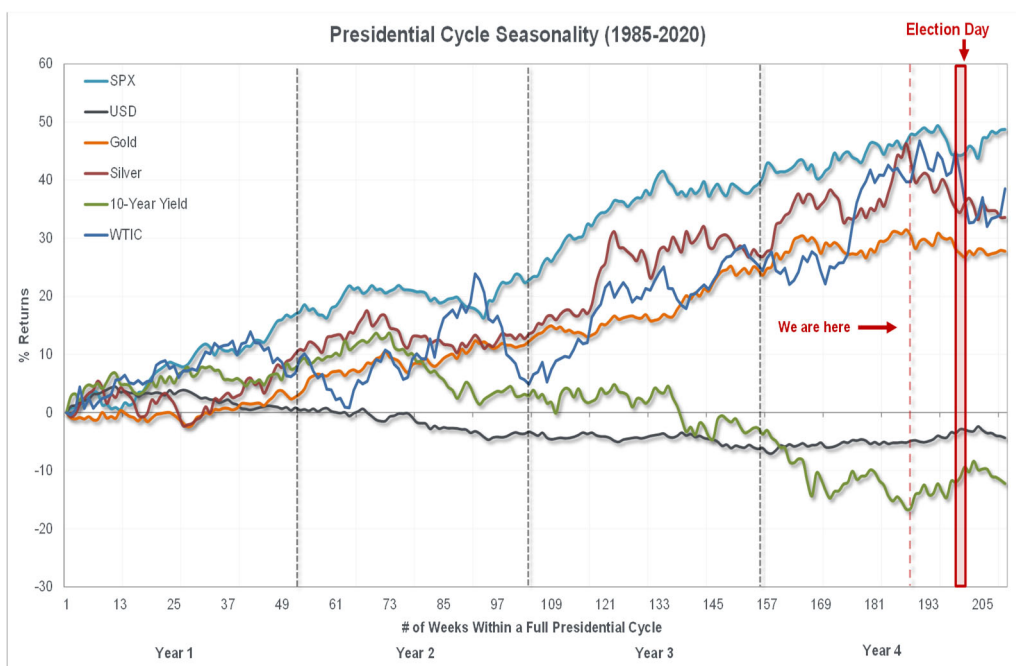
Typically, equities (S&P 500) have outperformed with a 7.4% return.

Commodities (BCI) outperformed during the first half of the year but tend to retreat in the second half.

The U.S. Dollar has generally seen a moderate rise throughout most election years.

The benchmark 10-year U.S. Treasury yield historically decreased during the first eight months of election years, and then recovered some of those losses during late Q2 and early Q3, but slipped again into year-end.

Intermarket Seasonality during a 4-year Presidential Cycle



The chart on the left displays the average progression of various asset classes throughout a 4-year Presidential cycle since 1985.

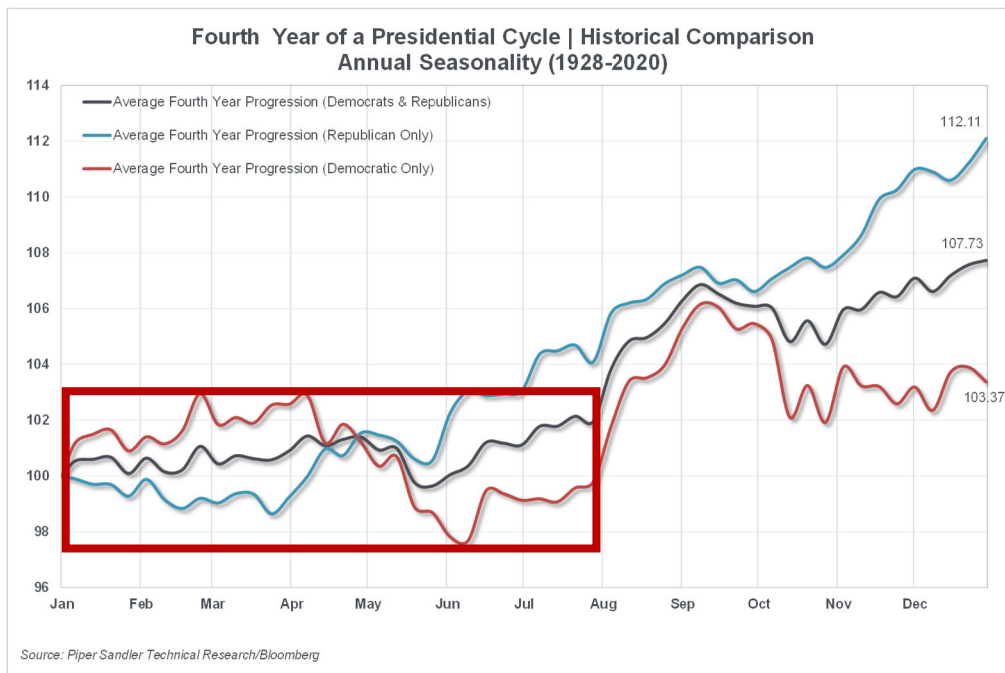
In the first half of Year 4, equities are predicted to outperform other asset classes. This will be followed by advances in Commodities (Silver, Gold, and Oil, etc).

During the second half of Year 4, Commodities are likely to retreat while equities maintain their relative strength.

Furthermore, during Year 4 of a Presidential cycle, the U.S. Dollar tends to gradually rise until after Election Day.

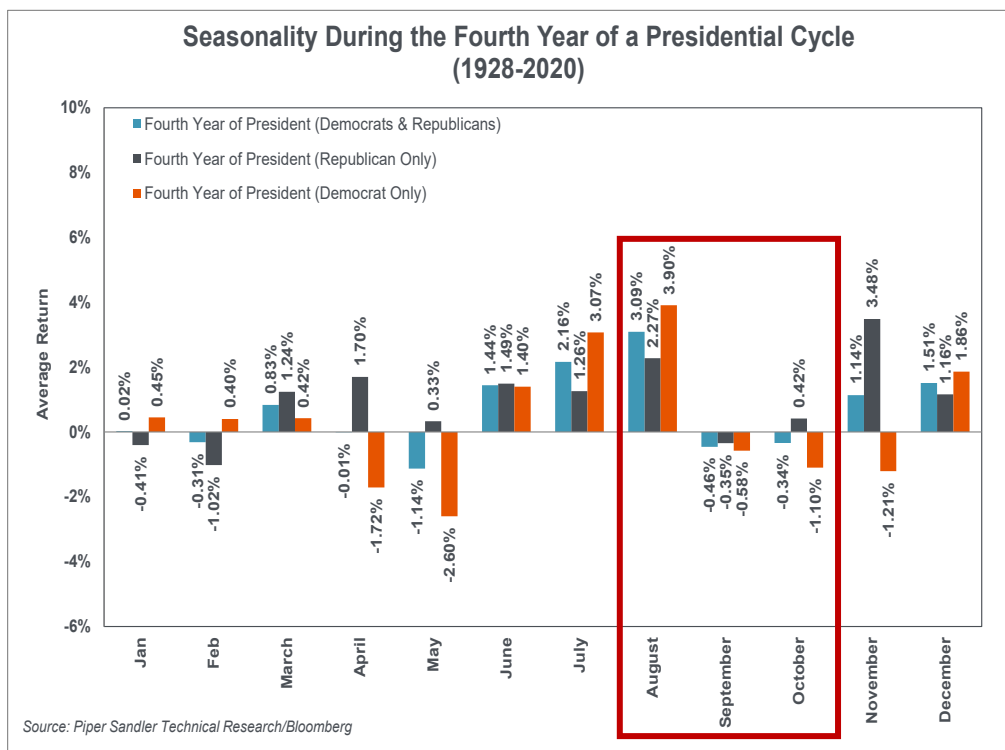
The benchmark 10-year UST yield has typically declined in the first half of the year and then rebounded around the November election.

Fourth (Election) Year of a Presidential Cycle by Political Party



The chart on the left displays the average S&P progression during the fourth year of the presidential cycle. It covers performance for all years, including those under Democratic and Republican presidents.

Since 1928, the S&P 500 has averaged 3.4% during Democratic-led years. Q1 has often outperformed the historical average but underperformed the rest of the year, especially during Q2 and Q4.

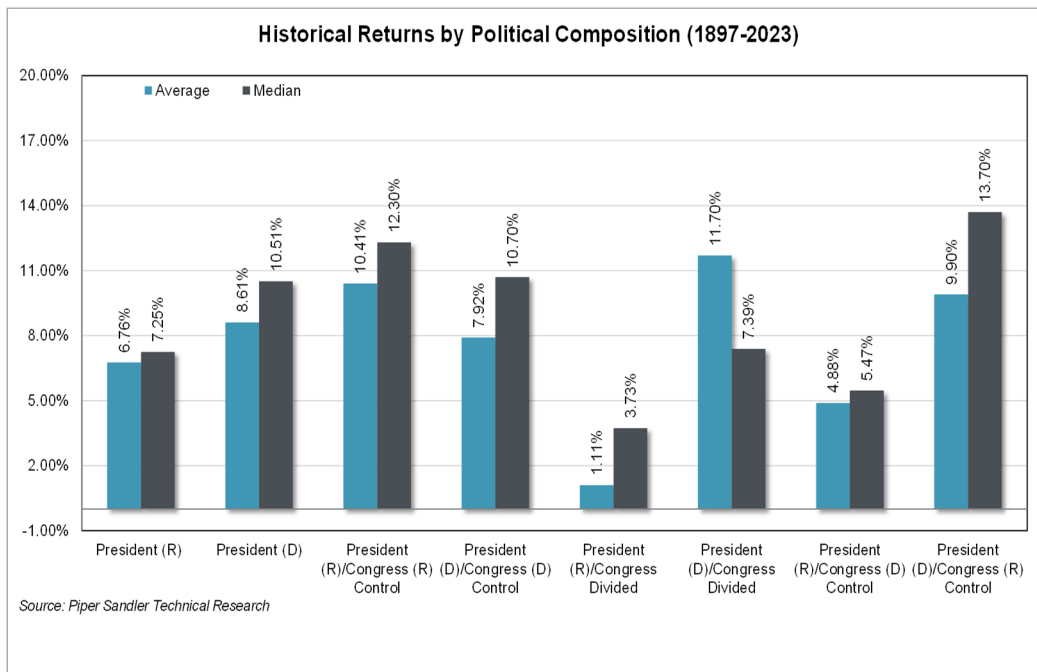


The table to the left compares the historical monthly returns during the fourth year of each party's presidency.

The greatest returns occurred between the June and August timeframe, especially under a Democratic presidency.

However, some of the worst returns also occurred under a Democratic presidency, especially in the April-May and October-November timeframes.

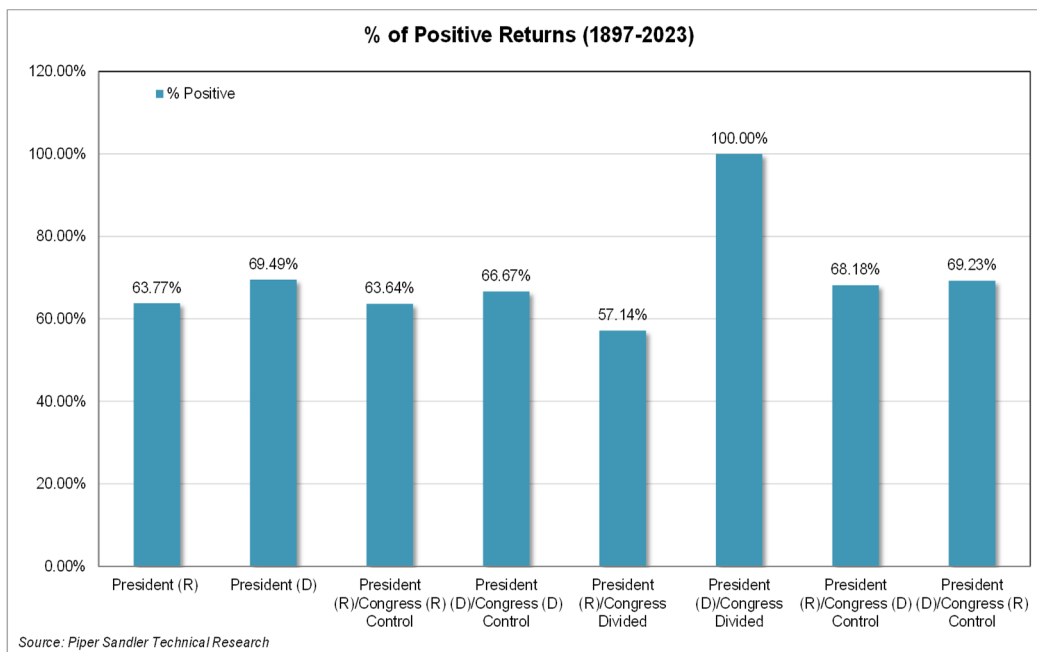
Historical Returns by Political Composition



The stock market experienced its strongest median returns during both a Democrat and Republican presidency with a Republican-controlled Congress.

On the other hand, the market's performance underperformed during a Republican presidency in combination with either a divided or Democrat-controlled Congress.

Conclusion—The party that controls Congress has had a significant impact on the stock market's performance. Historically, a Republican-controlled Congress produced the strongest returns.



The chart on the left shows the positivity rate of stock returns categorized by which political party controlled the Presidency and Congress.

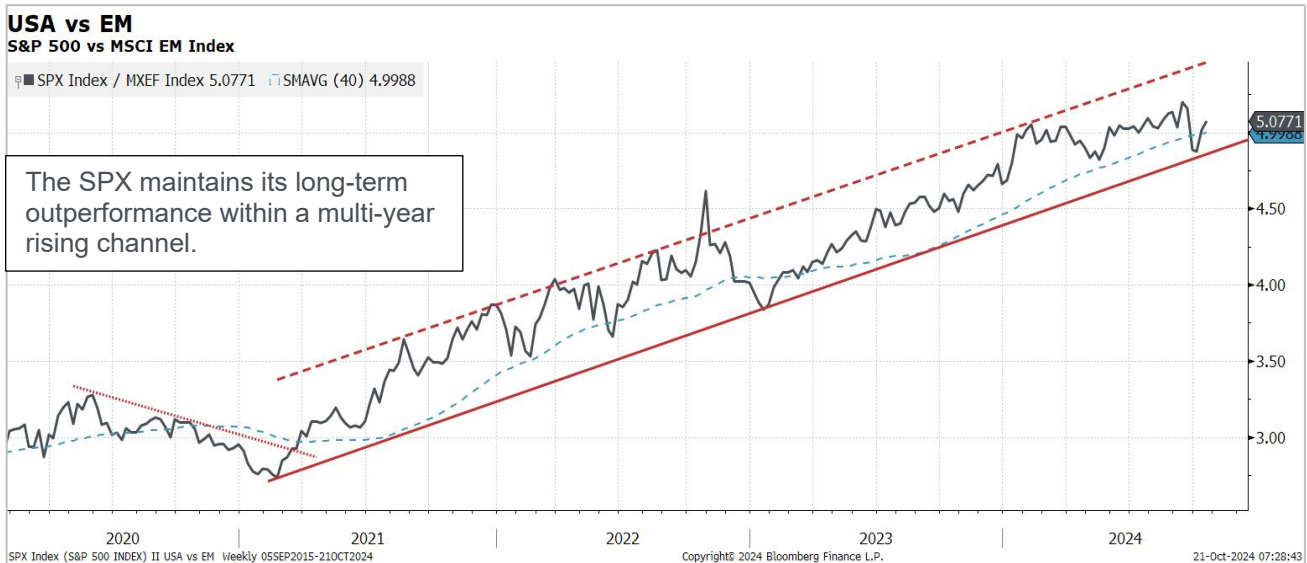
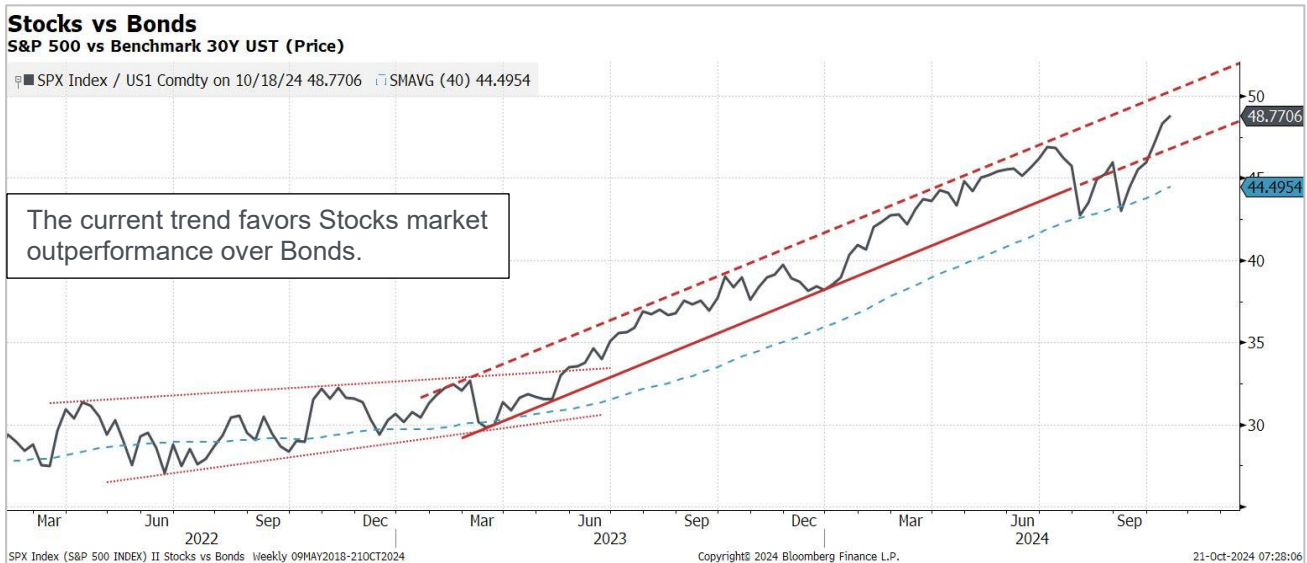
In sum, the stock market experienced a 100% positivity when there was a Democrat president paired with a divided-Congress.

Market Style | Ratio Chart Analysis

Ratio charts provide a visually transparent snapshot of relative performance between two time-series data sets. They are one of the simplest and most powerful ways to analyze investment style and macro-level trends. The following ratio charts provide an overview of current market trends related to investment style, market cap, and relative performance across developed and emerging markets.



Market Style | Ratio Chart Analysis



Trend Analysis | Technical Indicator Snapshot

The tables below provide an overview of the absolute and relative strength sector trends based on our Moving Average Cycle Evaluation (MACE). As a reminder, MACE uses the relative position of short-term (S), intermediate-term (M), and longer-term (L) moving averages to classify a current trend. Based on the position of each moving average, trends are broken down into the following categories:

- **Uptrends:** U1=possible uptrend | U2=confirmed uptrend | U3=well-defined uptrend
- **Downtrends:** D1=possible downtrend | D2=confirmed downtrend | D3=well-defined downtrend

We also included a snapshot of several other sentiment and momentum indicators we closely monitor.

Sector Absolute Trend

Sector Absolute Trend (M.A.C.E)					
Sector	Unwtd	Wtd	Sector	Unwtd	Wtd
Energy	U1	U2	Transportation (UW)	U2	U2
Basic Materials (UW)	U2	U2	Healthcare	D1	D1
Industrial Manufacturing (OW)	U3	U3	Consumer Staples (UW)	U3	U3
Utilities	U3	U3	Consumer Cyclicals	U3	U3
Services	U3	U3	Technology (OW)	U2	U3
Financials (OW)	U3	U3	Communications / Media	U3	U3

Sector RS Trend

Sector RS Trend (M.A.C.E)					
Sector	Unwtd	Wtd	Sector	Unwtd	Wtd
Energy	D2	D3	Transportation (UW)	D2	D3
Basic Materials (UW)	D2	U1	Healthcare	D2	D2
Industrial Manufacturing (OW)	D2	U3	Consumer Staples (UW)	D2	D3
Utilities	D2	U3	Consumer Cyclicals	D2	U1
Services	D2	U3	Technology (OW)	D2	U1
Financials (OW)	D2	U3	Communications / Media	D2	U2

Market Relative Trend

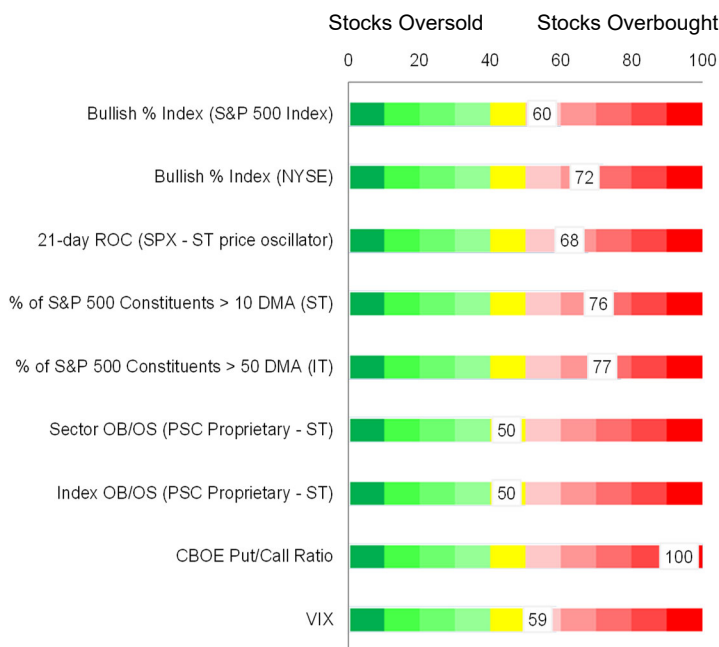
RS	Benchmark	RS	Benchmark
↑	Large-cap vs. Small-cap (OEX/SML)	↑	SPX vs. Bonds (SPX/IEF)
↑	SPX vs. EAFE Index (SPX/EFA)	↑	SPX vs. Commodities (SPX/CRB)
↑	SPX vs. Emerging Mkts (SPX/EEM)	↓	SPX vs. Gold (SPX/GLD)
↑	SPX vs. Europe/Pacific (SPX/VEA)	↑	SPX vs. USD (SPX/USD)

As of 10/18/2024

SUMMARY

- **Size Matters:** Based on our MACE trend model, absolute Wtd sector trends add to the evidence of large-cap outperformance. For example, 8 out of 12 Wtd sectors remain in a well-defined uptrend (U3), while only 7 of 12 Unwtd sectors have the same rating.
- **Asset Classes:** The S&P 500 is outperforming bonds, Emerging markets, Europe/Pacific, EAFE, commodities (except Gold), and the U.S. Dollar. Large-cap stocks are outperforming small-cap stocks.
- **Sentiment & Momentum:** The CBOE put/call ratio has violated the 50-/200-day MAs, which indicates a risk-on backdrop.
- **Bullish Percent:** The Bullish Percent Index has improved. Bullish Percent tracks how many stocks are bullish within an index based on point and figure analysis (P&F). The current percentage of P&F buy signals for the S&P 500 and NYSE Composite is 60% and 72%, respectively.

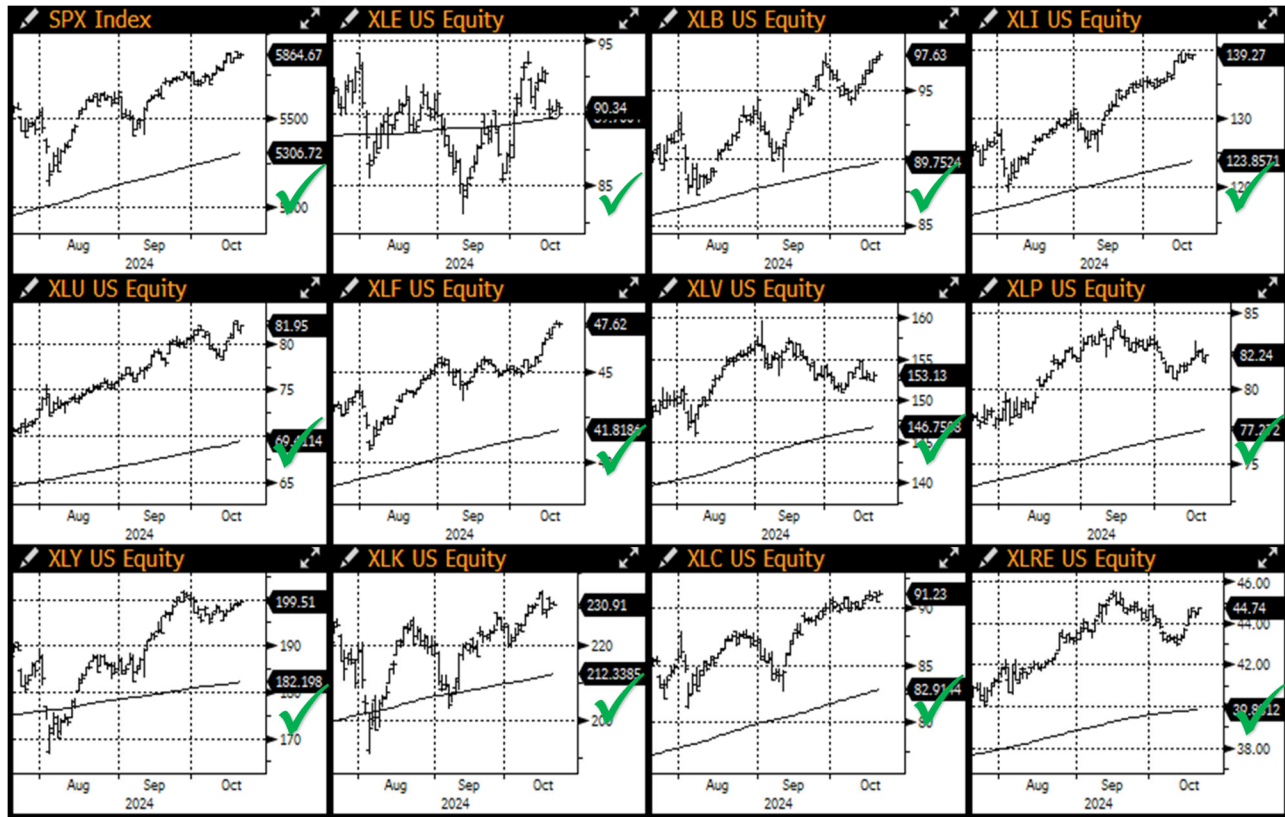
Sentiment & Momentum Indicators



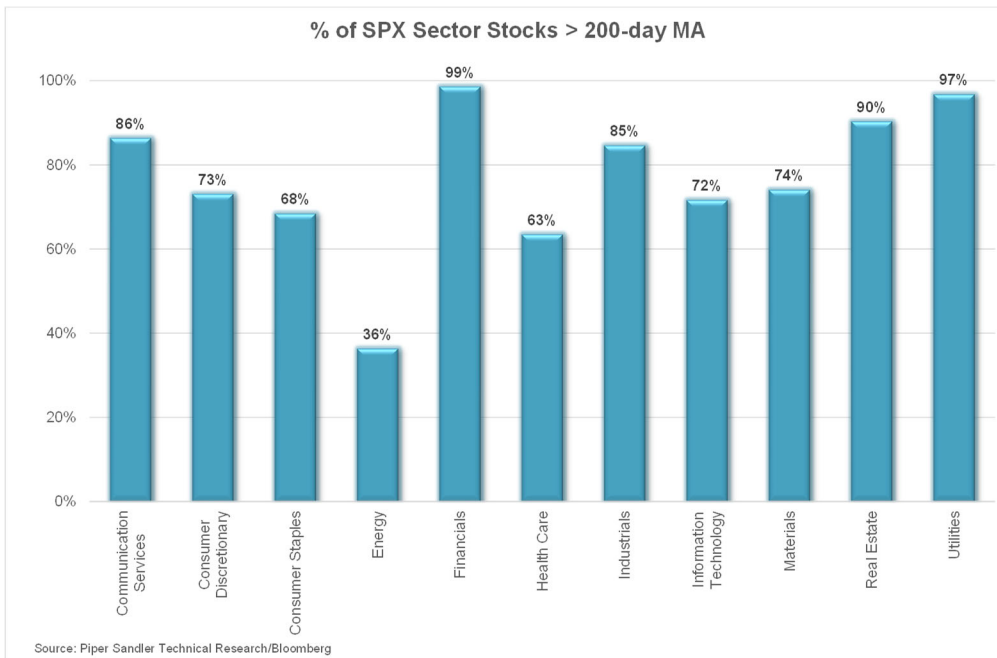
Abbreviations: ST=Short-term, IT=Intermediate-term

S&P 500 | Sector Stocks > 200-day SMA

The chart montage below highlights the S&P sector's price compared to its 200-day SMA. Eleven sectors are above their 200-day MA as of October 18, 2024.



Source: Piper Sandler Technical Research/Bloomberg



Source: Piper Sandler Technical Research/Bloomberg

The table to the left shows the percentage of stocks in each SPX sector that are above their 200-day MA.

Financials have the highest percentages at 99%, followed by *Utilities* and *Real Estate* with at least 90%.

Energy has the fewest percentage of stocks above their 200-day MA.

Key Risks to Our Market Narrative and Equity Markets

The stock market has been climbing a wall of worry for the last two years, off the October 2022 low. We expect this bull market to continue into the new year, with SMID-cap stocks leading. However, there are several key risks listed below that could disrupt our bullish market outlook:

1. Election Uncertainty: The U.S. Presidential election could impact various market sectors, depending on which political party wins. An unexpected sweep by Democrats or Republicans could significantly jolt markets, leading managers to adjust their portfolio's risk exposure.
2. Higher Energy Prices: Energy trends are neutral to bearish. A sudden spike—likely due to geopolitical turmoil that disrupts supply chains—could negatively affect the economy and corporate profit margins.
3. Unwinding Concentration Risk: The S&P 500 is heavily influenced by the top mega-cap stocks, comprising about 28% of the index. A sharp decline in these stocks could adversely impact the major market indices (DJIA, SPX, CCMP, MID, and RUT).
4. A Slowdown in Earnings Growth: Lower revenue and sales guidance will likely negatively impact stock prices and truncate this bull market.
5. A Higher Unemployment Rate: The U.S. unemployment rate is at its highest in three years, 4.1%. While a higher unemployment rate may eventually spur the Fed to cut rates more quickly, it could dampen consumer spending trends, resulting in slower overall economic growth, lower corporate profits, and weaker stock prices.
6. Sticky Inflation/Higher For Longer Interest Rates: Although inflation has retreated toward the Federal Reserve's 2% target, high prices tend to be sticky. A data-dependent Fed might postpone rate cuts, disappointing the market's expectations.
7. A "Bumpy" Economic Landing: Although our macroeconomic teams have scaled back their outlook for a hard landing and recession, they still anticipate a bumpy path forward and a bifurcated economy. The Federal Reserve must carefully navigate between cutting rates that are too much/too fast and not enough/too slow to achieve their soft landing.
8. Yield Curve Normalization/Economic Recession: The benchmark U.S. bond 10/2-year spread recently normalized after being inverted for over two years. Our research suggests that recessions are often *declared* several months after an inverted yield curve normalizes.
9. Geopolitical Risk:
 - a. The Israel-Hamas conflict keeps fears elevated around the Eastern Mediterranean, with turmoil sporadically scattering to other countries (i.e., Iran) in the region.
 - b. The Russia-Ukraine war remains a destabilizing geopolitical factor with no resolution in sight.
 - c. Tensions between the U.S. and China remain a wildcard, especially regarding tariffs and Taiwan's sovereignty.

CONCLUSION

We believe markets will remain volatile until the U.S. Election is completed in early November. Additionally, based on the weight of the technical evidence, we believe that SMID caps will continue outperforming large caps. We raised this year's S&P 500 price objective to 6,100 and established a 2025 year-end price objective of 6,600.

The Trend is Your Friend,

Craig W. Johnson, CMT, CFA

Scott K. Smith, CMT

October 23, 2024

October 2024 – MicroGroup Summary/Overview

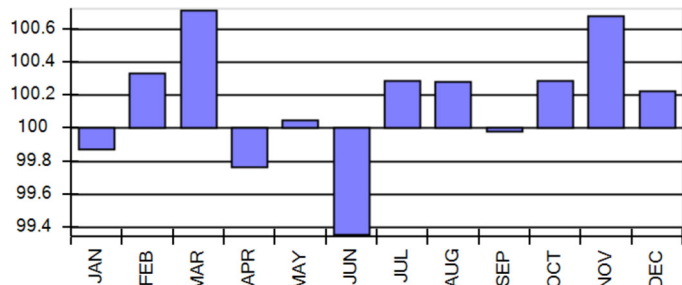
The following table highlights some actionable-looking *MicroGroups* (M.G.) in this month's publication. The ↑/↓ arrows denote a rating change in that M.G. since our last publication. The symbols (+), (-), (=), (PB), (BF), and (RR) denote Positive, Negative, Neutral, Pullback Opportunity, Bottom Fishing, and Relief Rally, respectively.

MicroGroup Sectors	Positive Relative Rated Groups		Negative Relative Rated Groups	
	Groups	Tickers	Groups	Tickers
Energy (Sector weight = 1.0x)	↑114 – Pipelines, Pri. (pg. 67) ↑118 – Gas Gathering & Marketing, Pri. (pg. 68) ↑122 – Oil & Gas Roy. Trusts, Pri. (pg. 69)	KMI (+) LNG (PB) VNOM (+)	↓106 – Oil Drilling (pg. 64) ↓107 – Oil Equipment & Services, Pri. (pg. 65)	VAL (-) SLB (-)
Basic Materials (Sector weight = 0.6x)	↑204 – Steel, Specialty. (pg. 76) ↑209 – Plastics & Rubber/Prod. (pg. 77) ↑217 – Copper Mining (pg. 79) ↑218 – Gold & Silver, N&S Amer, Pri. (pg. 80)	CRS (PB) BERY (+) SCCO (PB) NEM (+)	None	
Industrial Mfg. (Sector weight = 1.0x)	↑316 – Containers - Metal, Glass & Plastic (pg. 89) ↑324 – Electrical Components (pg. 91) ↑325 – Electrical Equipment (pg. 92) ↑326 – Adhesives & Coatings (pg. 93)	CCK (+) VRT (+) GNRC (BF) RPM (+)	None	
Utilities (Sector weight = 0.4x)	↑401 – Electric, Heavy Nuclear (pg. 101) ↑402 – Electric, East (pg. 102) ↑403 – Electric, Midwest (pg. 103) ↑407 – Electric, Merchant (pg. 104) ↑409 – Gas, Mid-Continent (pg. 105)	PCG (+) ED (+) LNT (+) NRG (PB) ATO (+)	None	
Services (Sector weight = 2.4x)	↑501 – Payroll/Payment Processors, Pri. (pg. 113) ↑507 – IT Sol./Svcs, Pri. (pg. 114) ↑526 – Com. Maintenance Svcs. (pg. 117) ↑531 – Tech/Engr/Con Svcs, Pri. (pg. 118) ↑542 – Advisory/Credit-Ratings Services (pg. 120)	ADP (+) TYL (+) ECL (+) GLOB (+) SPGI (+)	None	
Financial (Sector weight = 1.3x)	↑602 – Banks, Super-Regional (pg. 129) ↑614 – Banks, Western, Pri. (pg. 130) ↑650 – REITs, Healthcare (pg. 134) ↑657 – Insurance, Full Line (pg. 135) ↑668 – Discount/Internet Brokers (pg. 137)	RF (+) COLB (+) OHI (+) MET (+) HOOD (+)	None	
Transportation (Sector weight = 0.7x)	↑701 – Airlines, Legacy (pg. 144)	DAL (+)	↓709 – Trucking, Truckload Carriers (pg. 146) ↓711 – Express Freight Carriers (pg. 147)	MRTN (-) FDX (-)
Healthcare (Sector weight = 0.7x)	↑804 – Pharmaceuticals, Sec. (pg. 155) ↑830 – Molecular Diagnostics (pg. 162) ↑836 – Cannabis, Pri. (pg. 165)	EOLS (+) EXAS (+) IIPR (BF)	↓809 – Medical Devices, Specialty (pg. 158) ↓811 – Orthopedic Devices (pg. 160) ↓831 – Biotechnology, Pri (pg. 163)	TNDM (-) SNN (-) REGN (-)
Consumer Staples (Sector weight = 0.3x)	↑903 – Processors, Fruits & Vegetables (pg. 173) ↑905 – Food Products, Sec (pg. 174) ↑907 – Natural Foods (pg. 175)	DOLE (PB) POST (+) UNFI (BF)	↓917 – Toiletries & Cosmetics, Sec (pg. 177)	EPC (-)
Consumer Cyclical (Sector weight = 0.5x)	↑1017 – Home Improvement/Building Material (pg. 186) ↑1044 – Rest., Limited Service (pg. 188) ↑1045 – Hotels & Motels, Pri (pg. 189) ↑1051 – Cruise Lines (pg. 191)	LOW (+) MCD (+) MAR (+) CCL (+)	None	
Technology (Sector weight = 0.7x)	↑1201 – Computer Systems (pg. 200) ↑1215 – Sftwr., Ent. Apps., Pri (pg. 204) ↑1221 – Sftwr., ERP (pg. 205) ↑1254 – Network/Internet Security, Pri. (pg. 208) ↑1256 – Wireless/Com. Devices (pg. 209) ↑1260 – Cloud Computing (pg. 210)	HPQ (+) PLTR (+) ORCL (+) FTNT (+) TRMB (BF) NTRX (+)	None	
Comm./Media (Sector weight = 0.9x)	↑1401 – Telecommunications, Pri.(pg. 217) ↑1404 – Non-U.S. Telecomm. Svcs (pg. 218) ↑1416 – Internet Content, Asia (pg. 222)	VZ (+) VIV (PB) CPNG (+)		

Bullish November Seasonality: Several Consumer Cyclical and Technology sector MGs have historically had a strong relative performance compared to our MicroGroup Index in November.

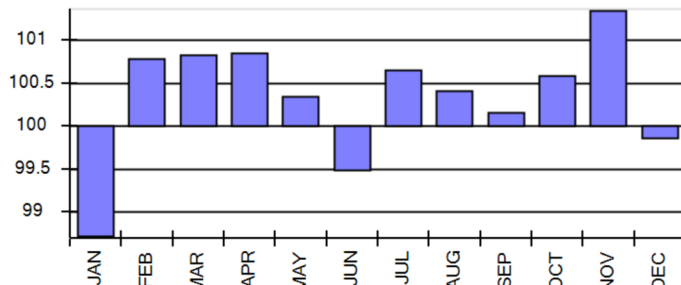
1013, Lawn & Garden

Average Relative Perf. vs. MicroGroup Index (Unwtd)



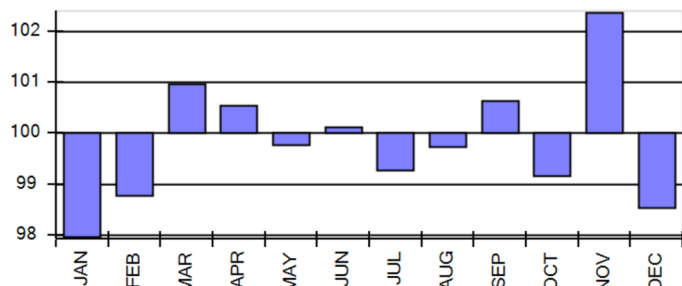
1028, Designer Label Apparel

Average Relative Perf. vs. MicroGroup Index (Unwtd)



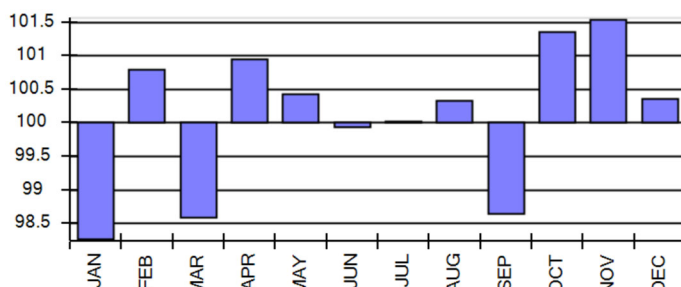
1041, Specialty Retailers

Average Relative Perf. vs. MicroGroup Index (Unwtd)



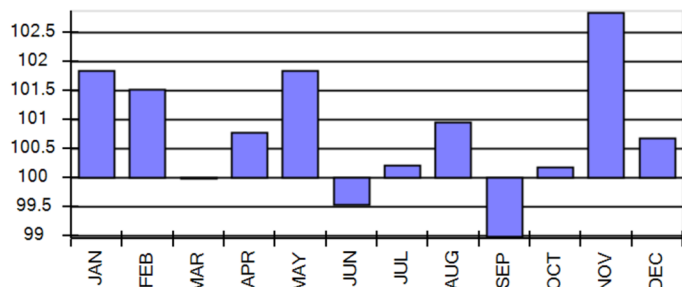
1047, Theme Parks/Resorts

Average Relative Perf. vs. MicroGroup Index (Unwtd)



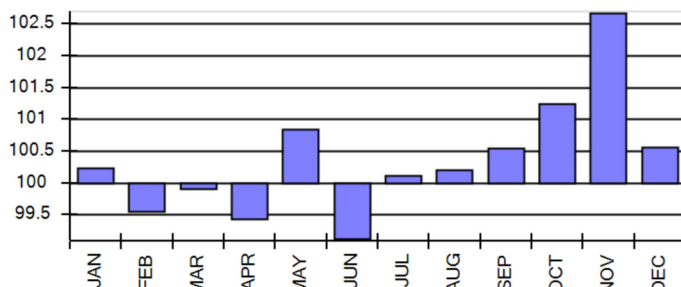
1209, Semiconductors Suppliers, Pri.

Average Relative Perf. vs. MicroGroup Index (Unwtd)



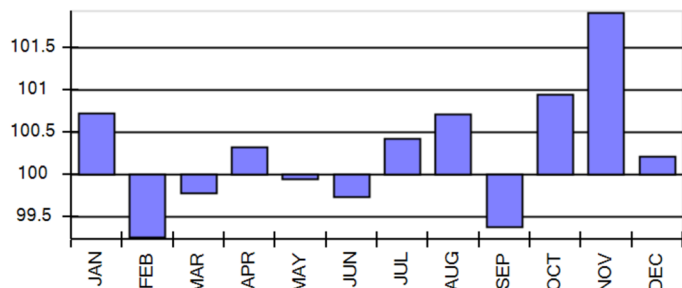
1212, Network Infrastructure, Pri.

Average Relative Perf. vs. MicroGroup Index (Unwtd)



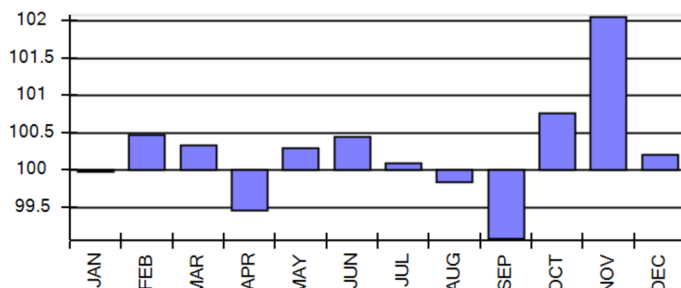
1229, Specialized Display

Average Relative Perf. vs. MicroGroup Index (Unwtd)



1240, Optical Equip./Components, Pri.

Average Relative Perf. vs. MicroGroup Index (Unwtd)

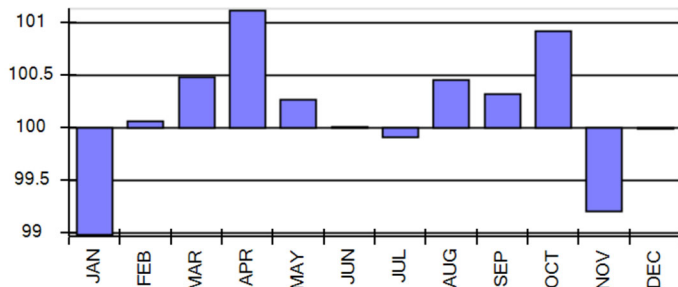


Past performance is not indicative of the future. Such matters as future earnings, dividends, or price action cannot be predicted with certainty.

Bearish November Seasonality: Select *Energy* and *Financial* sector MGs have historically underperformed relative to our MicroGroup Index during November.

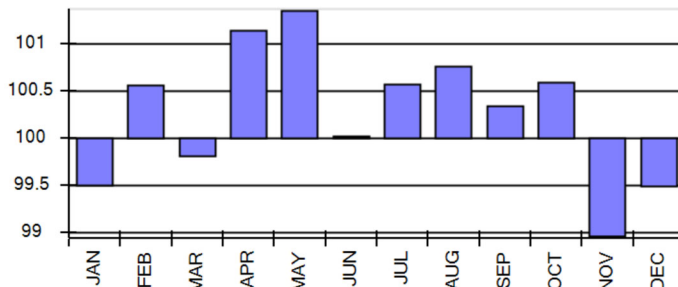
101, Oil, Integrated

Average Relative Perf. vs. MicroGroup Index (Unwtd)



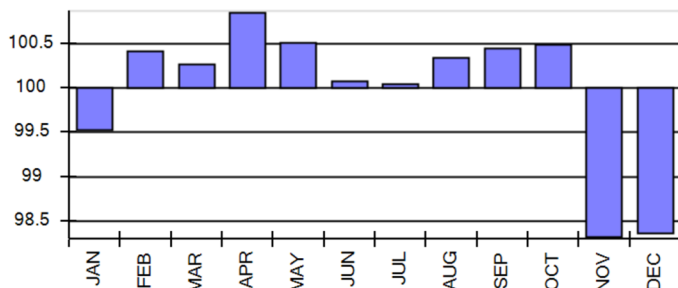
118, Gas Gathering & Marketing, Pri.

Average Relative Perf. vs. MicroGroup Index (Unwtd)



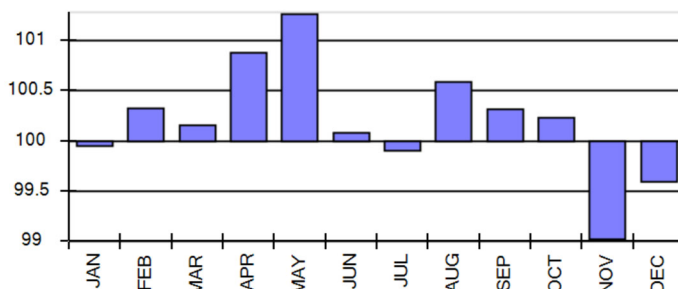
122, Oil & Gas Royalty Trusts, Pri.

Average Relative Perf. vs. MicroGroup Index (Unwtd)



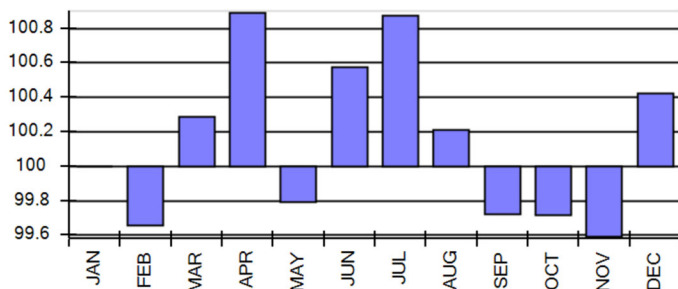
124, Oil & Gas, Canadian

Average Relative Perf. vs. MicroGroup Index (Unwtd)



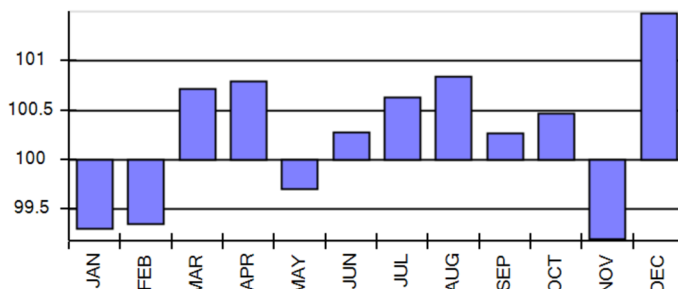
641, REITs, Office/Industrial, Pri.

Average Relative Perf. vs. MicroGroup Index (Unwtd)



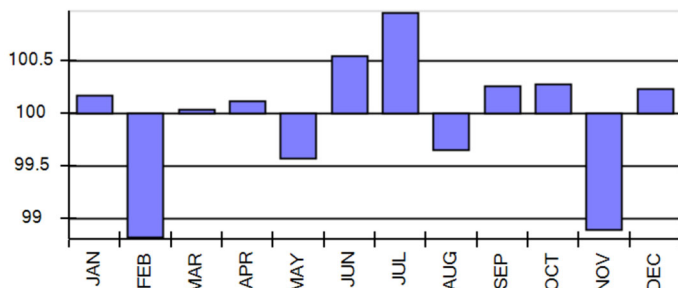
645, REITs, Storage

Average Relative Perf. vs. MicroGroup Index (Unwtd)



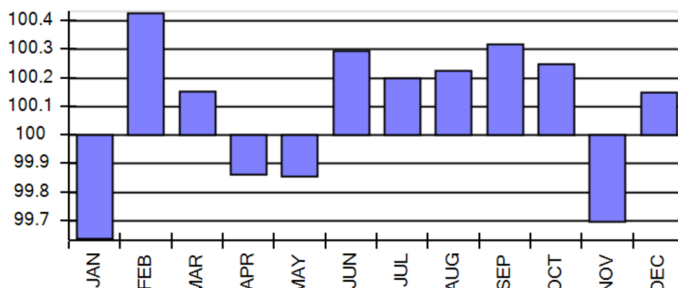
650, REITs, Healthcare

Average Relative Perf. vs. MicroGroup Index (Unwtd)



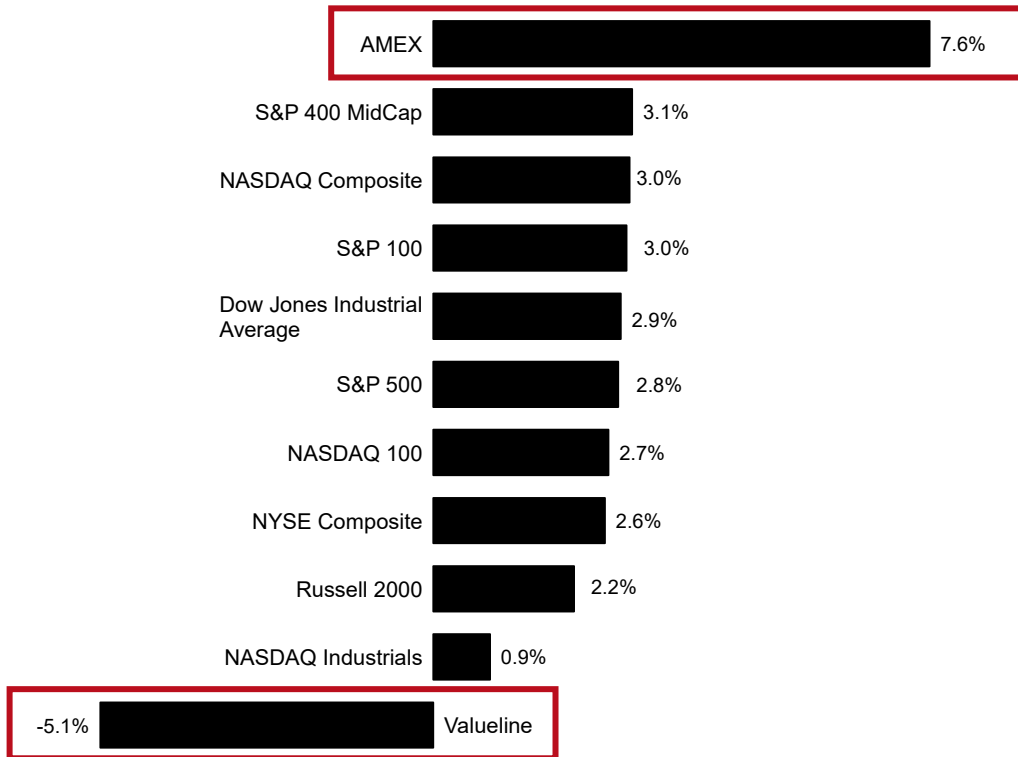
661, Insurance, Property & Casualty, Sec.

Average Relative Perf. vs. MicroGroup Index (Unwtd)

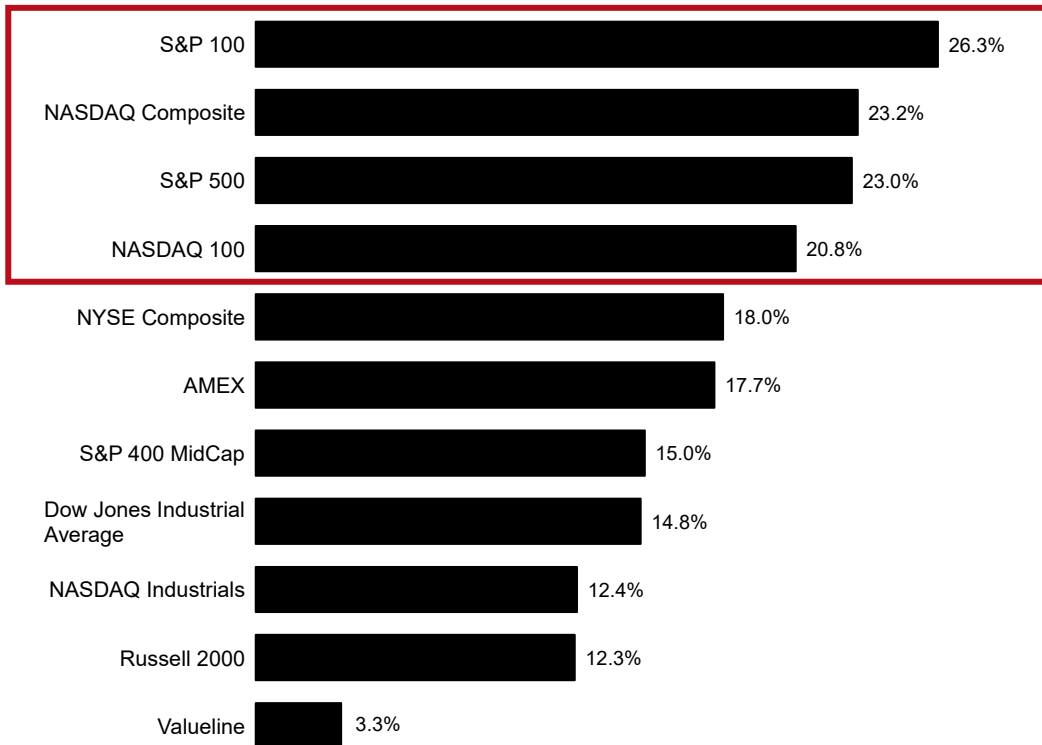


Past performance is not indicative of the future. Such matters as future earnings, dividends, or price action cannot be predicted with certainty.

MARKET PERFORMANCE
4-Week

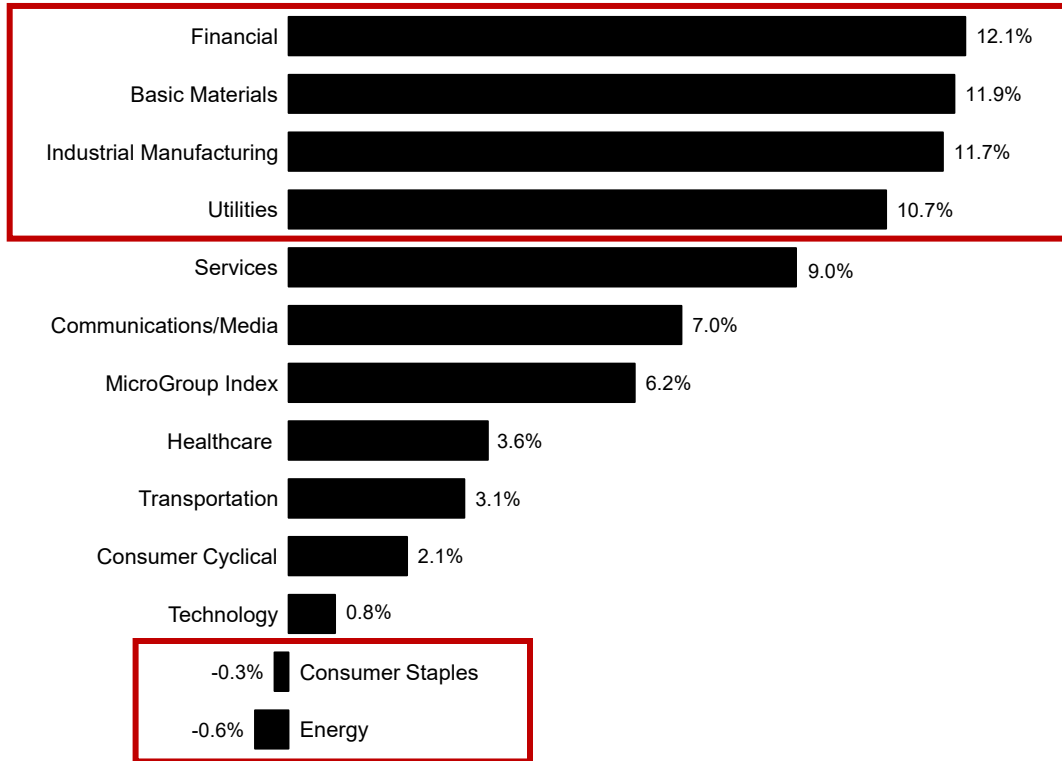


MARKET PERFORMANCE
YTD

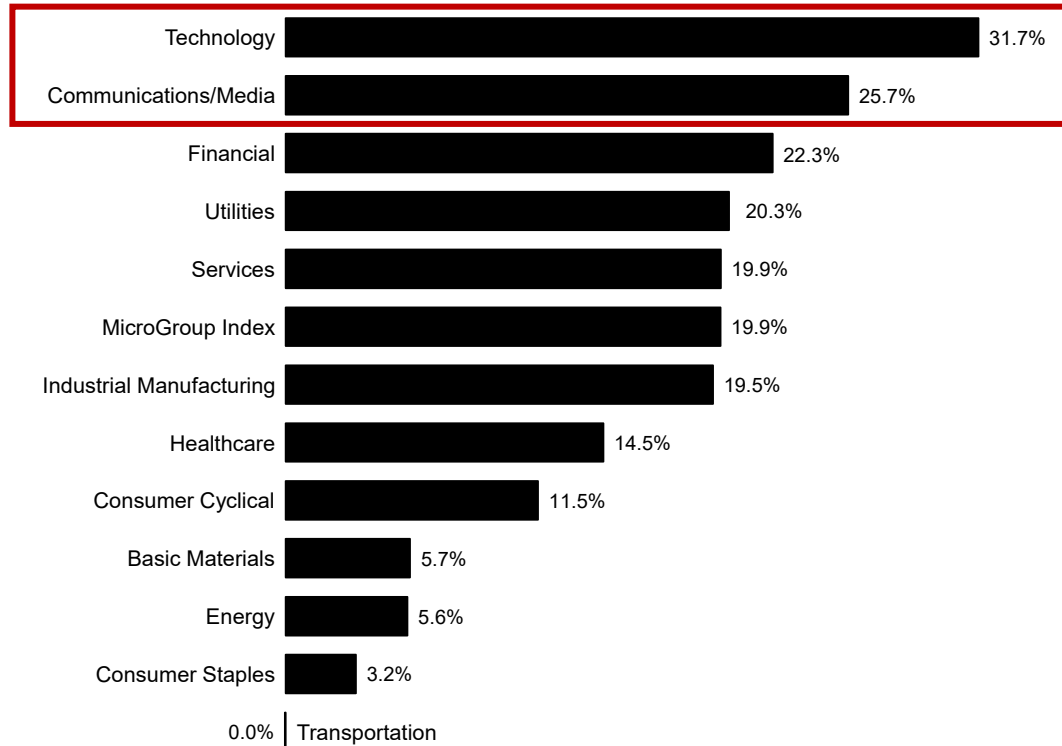


As of 10/18/2024

**UNWTD SECTOR PERFORMANCE
YTD**



**WTD SECTOR PERFORMANCE
YTD**



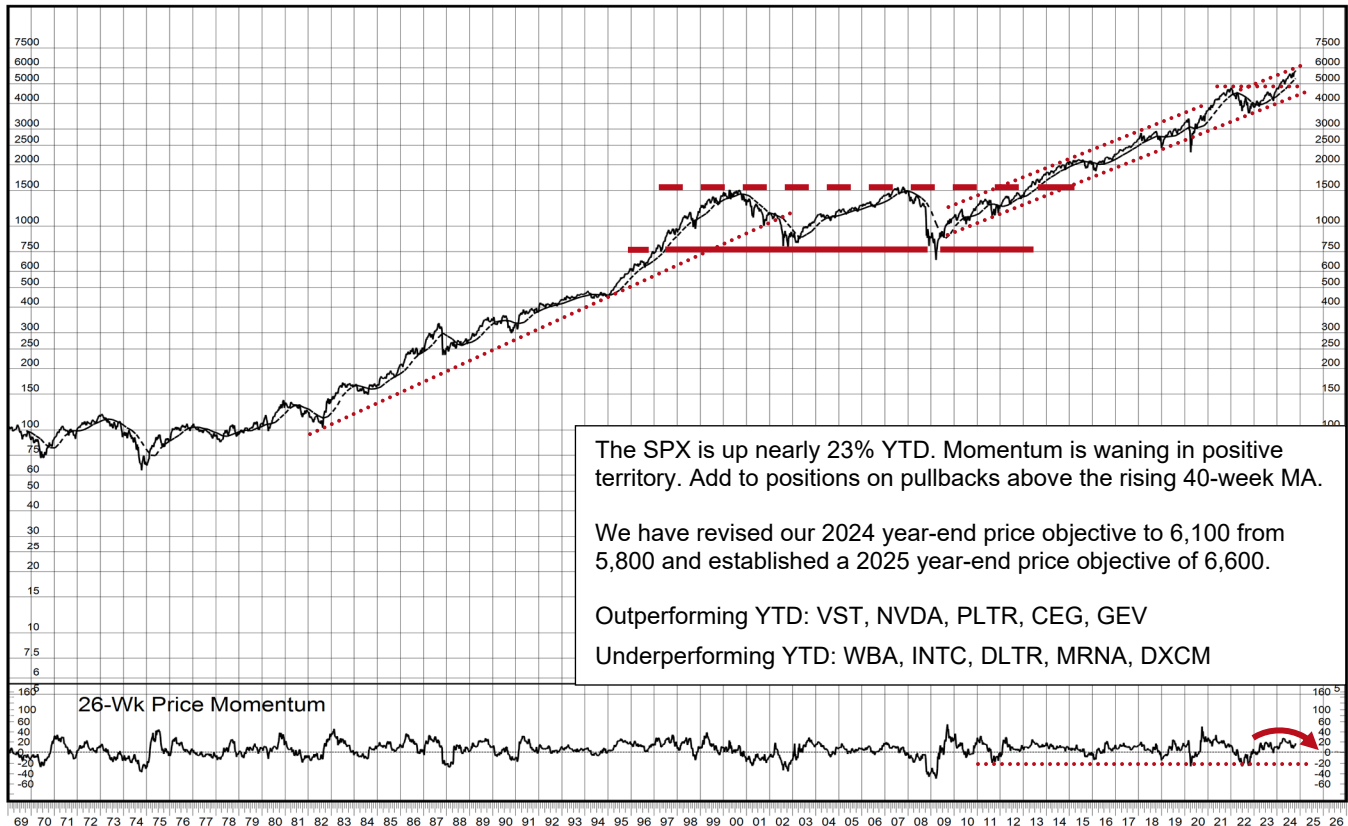
As of 10/18/2024

Sector Performance Sorted by TechniGrade

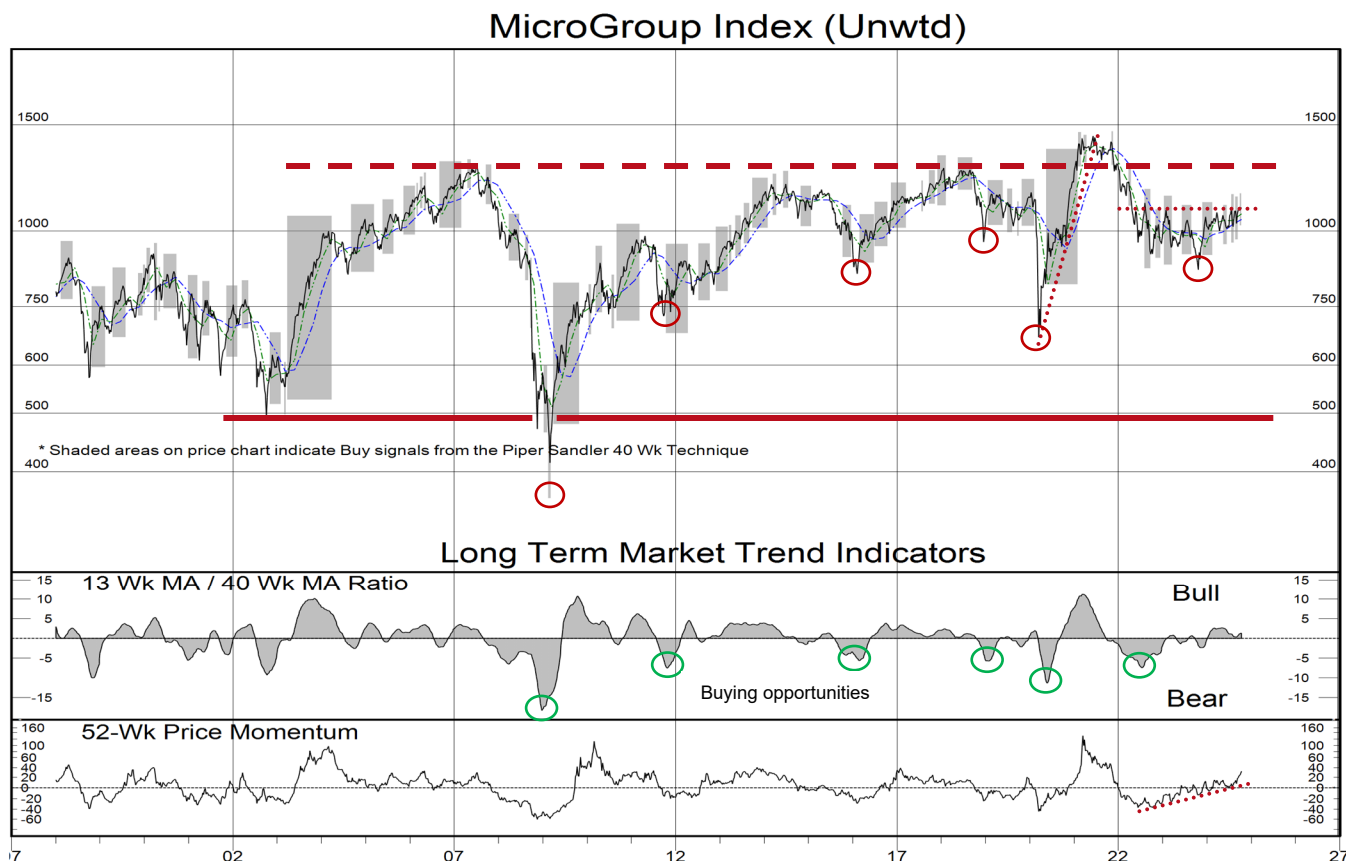
Sectors (Unweighted)		Current	TechniGrade				Absolute Performance					
Sector Name			1 wk	2 wk	3 wk	4 wk	1 wk	4 wk	13 wk	26 wk	52 wk	YTD
600	Financial (Unwtd)	7	8	8	7	6	2.86%	2.29%	6.89%	19.52%	36.5%	12.07%
1400	Communications/Media (Unwtd)	8	8	8	8	11	1.9%	5.73%	8.06%	18.52%	21.89%	7.01%
200	Basic Materials (Unwtd)	8	9	9	9	13	2.14%	6.29%	7.72%	8.83%	27.31%	11.87%
400	Utilities (Unwtd)	10	11	8	6	7	2.53%	0.34%	8.01%	15.71%	24.23%	10.65%
500	Services (Unwtd)	10	11	12	13	11	2.05%	3.4%	4.55%	12.47%	30.06%	9.05%
300	Industrial Manufacturing (Unwtd)	11	10	10	11	11	1.18%	2.78%	4.96%	9.57%	32.02%	11.67%
1200	Technology (Unwtd)	12	11	13	13	15	0.74%	4.79%	2.38%	11.29%	19.85%	0.83%
1000	Consumer Cyclical (Unwtd)	12	12	11	10	11	1.52%	1.88%	4.71%	10.02%	21.19%	2.11%
800	Healthcare (Unwtd)	13	15	15	15	12	3.05%	0.28%	2.0%	8.31%	29.51%	3.55%
700	Transportation (Unwtd)	14	13	13	13	15	-0.02%	2.53%	1.07%	4.62%	19.86%	3.13%
900	Consumer Staples (Unwtd)	15	15	15	14	14	0.58%	0.22%	2.54%	2.31%	11.46%	-0.25%
100	Energy (Unwtd)	18	15	15	19	17	-3.48%	0.12%	-6.37%	-6.2%	-5.52%	-0.6%

Sectors (Weighted)		Current	TechniGrade				Absolute Performance					
Sector Name			1 wk	2 wk	3 wk	4 wk	1 wk	4 wk	13 wk	26 wk	52 wk	YTD
500	Services (Wtd)	6	5	6	8	7	0.91%	4.08%	10.9%	18.3%	41.83%	19.89%
400	Utilities (Wtd)	7	7	4	4	4	2.72%	1.68%	14.4%	21.83%	35.68%	20.26%
600	Financial (Wtd)	7	7	8	8	7	2.52%	3.48%	9.7%	18.79%	45.43%	22.26%
300	Industrial Manufacturing (Wtd)	8	6	7	7	9	0.79%	4.08%	10.2%	14.38%	42.37%	19.53%
1400	Communications/Media (Wtd)	10	7	4	7	11	-0.54%	4.02%	7.28%	16.6%	36.92%	25.71%
1200	Technology (Wtd)	10	8	9	11	11	0.63%	4.35%	4.61%	25.79%	52.83%	31.66%
1000	Consumer Cyclical (Wtd)	12	11	8	8	11	0.36%	0.86%	4.39%	10.0%	29.15%	11.54%
200	Basic Materials (Wtd)	12	11	10	9	14	0.82%	5.0%	6.05%	4.52%	21.91%	5.68%
700	Transportation (Wtd)	13	13	15	14	15	0.95%	2.5%	1.51%	-0.37%	12.98%	-0.04%
800	Healthcare (Wtd)	14	13	14	13	10	0.16%	-1.43%	3.62%	12.5%	22.74%	14.52%
900	Consumer Staples (Wtd)	15	14	14	12	12	0.13%	-0.46%	3.2%	5.26%	11.99%	3.2%
100	Energy (Wtd)	17	13	13	18	17	-2.75%	1.45%	-2.25%	-3.9%	0.26%	5.56%

S&P 500



MicroGroup Index | Breadth & Momentum Indicator Overlay



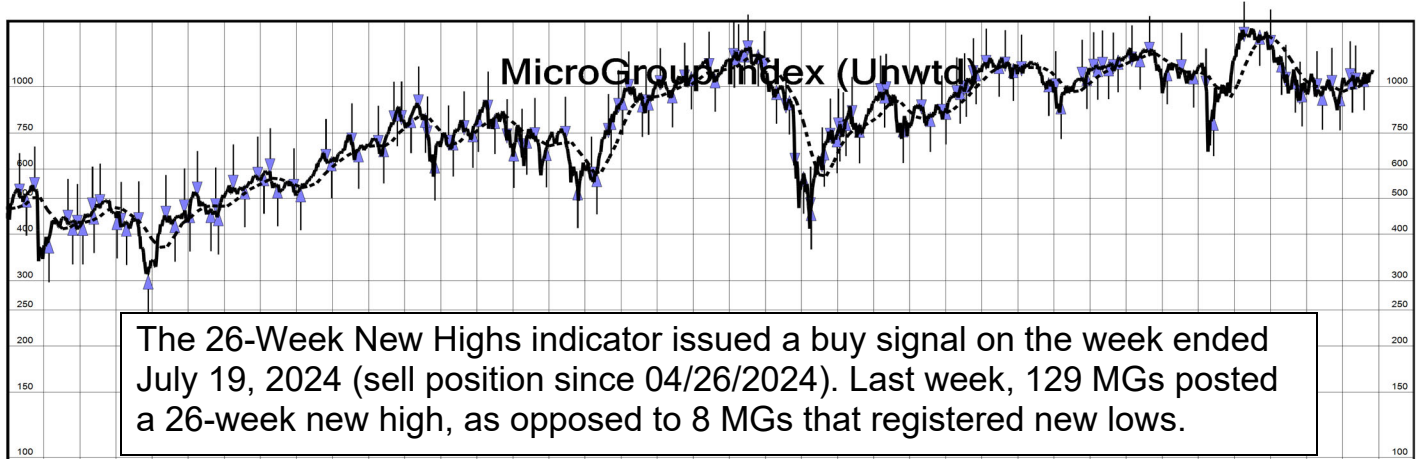
Fund Flow Activity (in \$ billions)

As of 10/16/2024

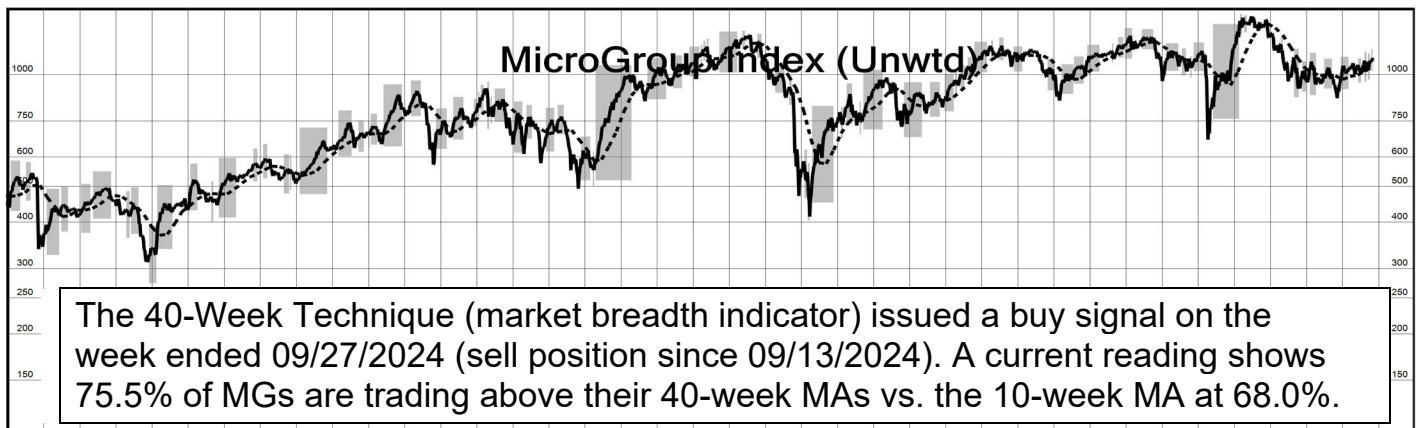
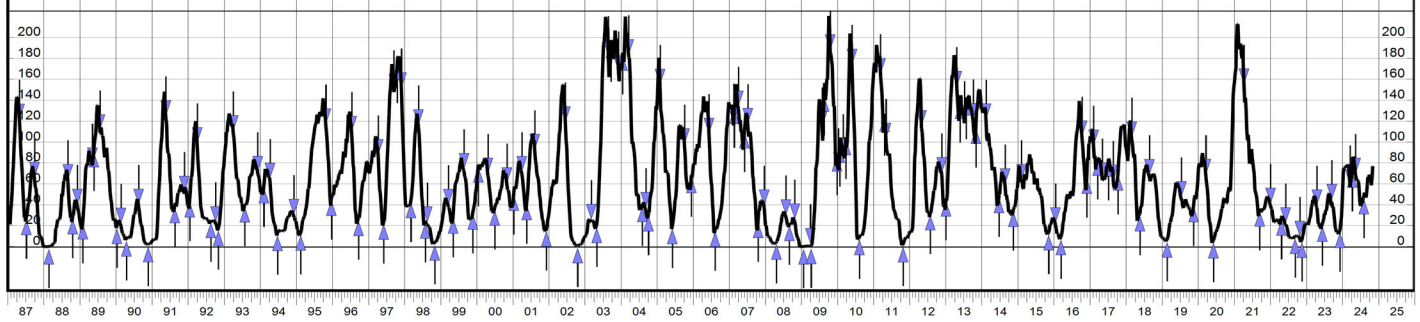
Name	Total Net Assets	Estimated Net Flows	Flows as Percent of TNA
Include ETFs			
Equity	11,313,881.00	20,073.20	0.18
Money Market	5,779,236.00	(11,789.36)	(0.20)
Bond	3,624,133.29	9,795.28	0.27
Exclude ETFs (3)			
Money Market	5,779,236.00	(11,789.36)	(0.20)
Equity	5,713,582.10	(6,741.60)	(0.12)
Bond	2,343,193.04	1,468.27	0.06
Only ETFs (3)			
Equity	5,600,298.90	26,814.80	0.49
Bond	1,280,940.25	8,327.01	0.66

Source: Refinitiv/Lipper

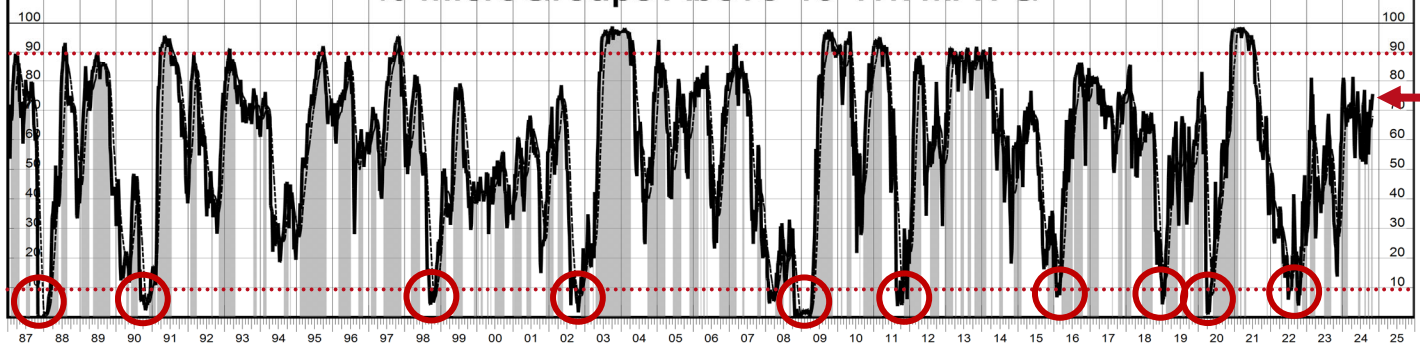
- For the week ending 10/6/2024, U.S. equity funds saw an estimated net inflow of \$20 billion, bonds saw an estimated net inflow of \$9.8 billion, and money markets saw a net outflow of -\$11.8 billion.
- Excluding ETFs, domestic equity and money markets saw outflows, while bonds reported an inflow.
- For only ETFs, equities had a solid inflow of \$26.8 billion, while bonds had a large inflow of \$8.3 billion.
- Money Markets reported a moderate estimated outflow of \$11.8 billion, or 0.20% of its Total Net Assets. Excluding ETFs, Money Markets are above Equities net assets and is more than double Bonds assets.



26 Week New Highs: 10-Wk MAVG

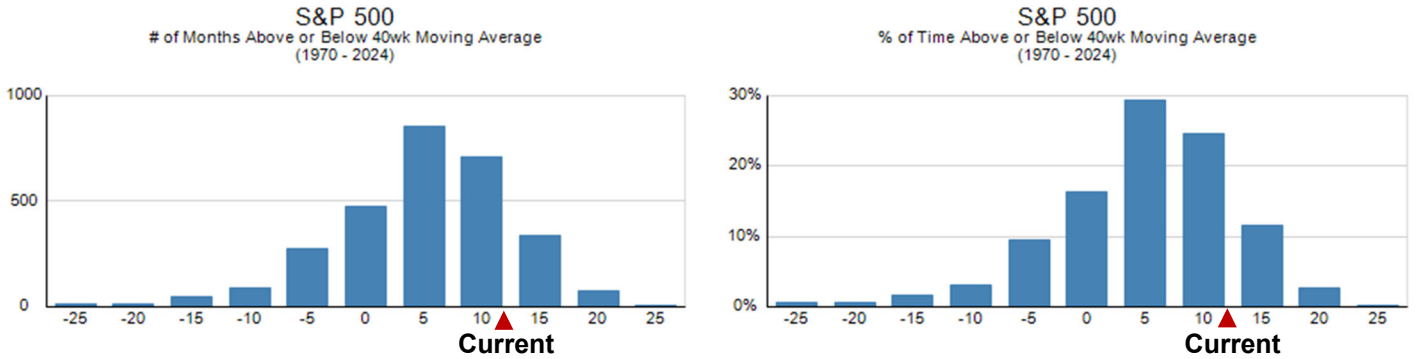


% MicroGroups Above 40-Wk MAVG

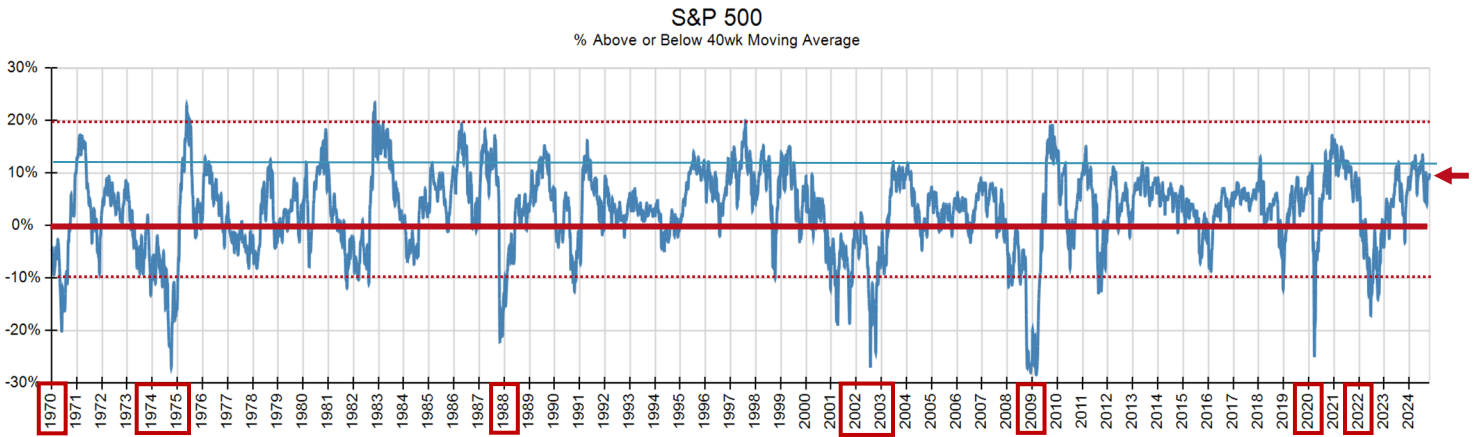


S&P 500 Price Relative to the 40-week MA:

The S&P 500 has traded above the 40-week MA for the last one year. Historically, the index has traded above the 40-week MA for an average timeframe of around five months.



The S&P 500 trades at an 8.6% premium to its 40-week MA (shown in the chart below), which is above the historical average 5% premium that the index has traded over the 40-week MA since 1970.

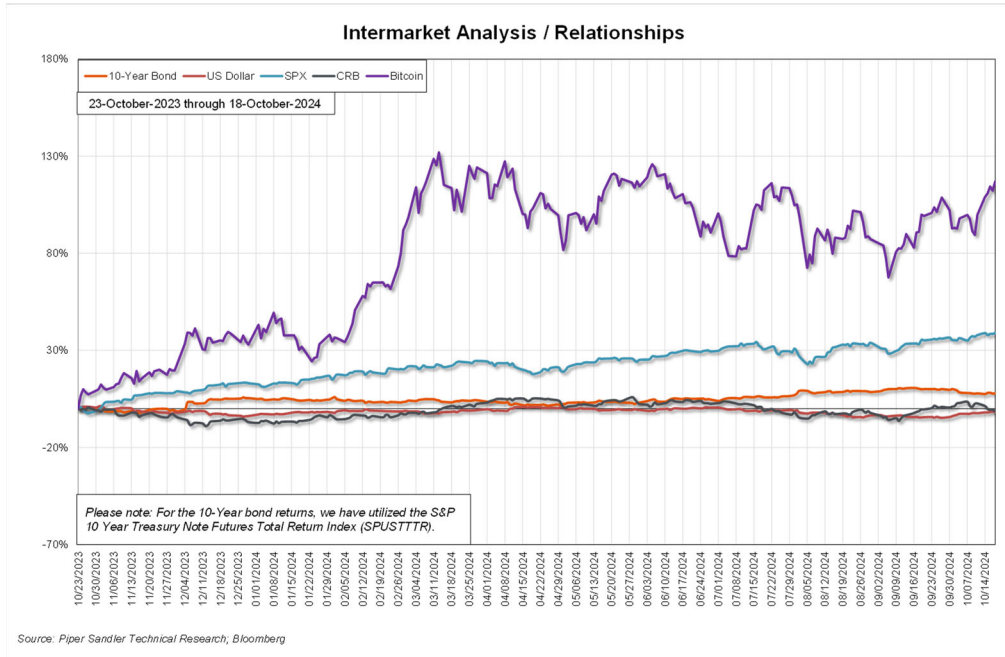


MACE Sector Analysis: Currently, 77% of stocks within the S&P 500 are trading in some form of a MACE-defined uptrend (U1, U2, or U3 rating), as opposed to 72% at the time of our last publication on 09/18/2024.

Sector	U1	U2	U3	D1	D2	D3	Uptrend	Downtrend	Technigrade	Relative Rating	Absolute Rating
100 Energy	15%	10%	27%	3%	10%	34%	53%	47%	18	3	D
200 Basic Materials	18%	18%	40%	2%	8%	15%	75%	25%	8	4	D
300 Industrial Manufacturing	10%	11%	48%	4%	4%	23%	68%	32%	11	2	B
400 Utilities	2%	2%	69%	15%	6%	6%	72%	28%	10	3	C
500 Services	7%	8%	44%	7%	10%	24%	59%	41%	10	3	C
600 Financial	3%	5%	57%	17%	7%	11%	65%	35%	7	2	B
700 Transportation	20%	16%	28%	8%	10%	19%	64%	36%	14	4	D
800 Healthcare	8%	5%	46%	10%	11%	40%	39%	61%	13	3	C
900 Consumer Staples	8%	8%	39%	9%	10%	30%	51%	49%	15	4	D
1000 Consumer Cyclical	10%	11%	41%	7%	8%	23%	61%	39%	12	3	C
1200 Technology	14%	9%	38%	5%	8%	27%	60%	40%	12	2	C
1400 Communications/Media	8%	7%	48%	6%	14%	18%	62%	38%	8	3	C
S&P 500	9%	8%	60%	10%	3%	10%	77%	23%	10		

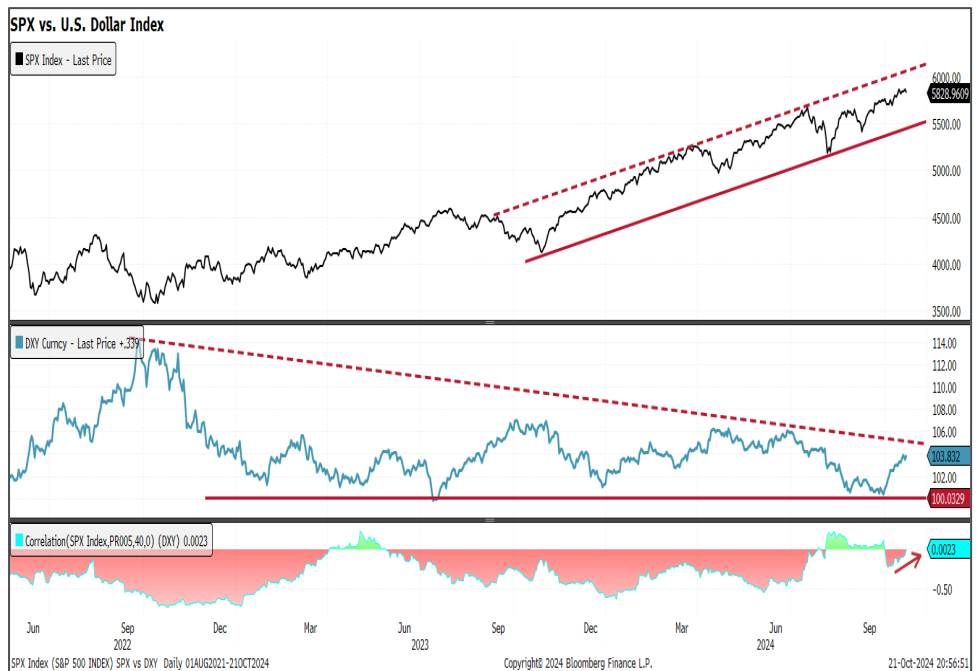
Intermarket Analysis:

- The DJIA and S&P 500 have risen to all-time highs as investors broaden their portfolios by rotating “down-cap” from mega-cap leadership. The S&P 400 Mid-caps (MID) also reached an all-time high, and the Russell Small-caps are on the verge of a new uptrend, while the Nasdaq lags under its July/YTD highs.
- Commodities (CRB) have mostly declined since mid-year. WTI Crude Oil is in a six-month downward price channel, below its 50-/200-day MAs. Meanwhile, Gold and Silver futures have reached new highs.
- The U.S. Dollar and 10-year Treasury yields rebounded in October from 52-week lows to challenge their 200-day MAs. Bitcoin reversed a multi-month downtrend, setting up a breakout of over \$70K to new highs.



U.S. Dollar Index & S&P 500 Correlation:

- The 40-day correlation between the U.S. Dollar and the S&P 500 index recently turned negative during its October relief rally.
- Slower economic data and higher unemployment caused the Fed to cut rates by 50 basis points in September.
- We expect the relationship between the dollar and equities to remain around neutral for the coming months as prices back and fill between support around 100 and downtrend resistance around 104.



Fixed Income Market:

- The Federal Reserve cut its Fed fund rate by 50 basis points in September based on slowing economic growth. In return, the 10/2 yield curve has normalized for the first time in over two years. Historically, a recession has been *declared* several months after the yield curve normalized.
- During October, the benchmark 10-year UST yield rebounded from its 52-week lows at 3.60% and reversed a five-month downtrend. We view this as a relief rally with the next resistance at its 200-day MA and prior uptrend resistance between 4.17% and 4.35%.

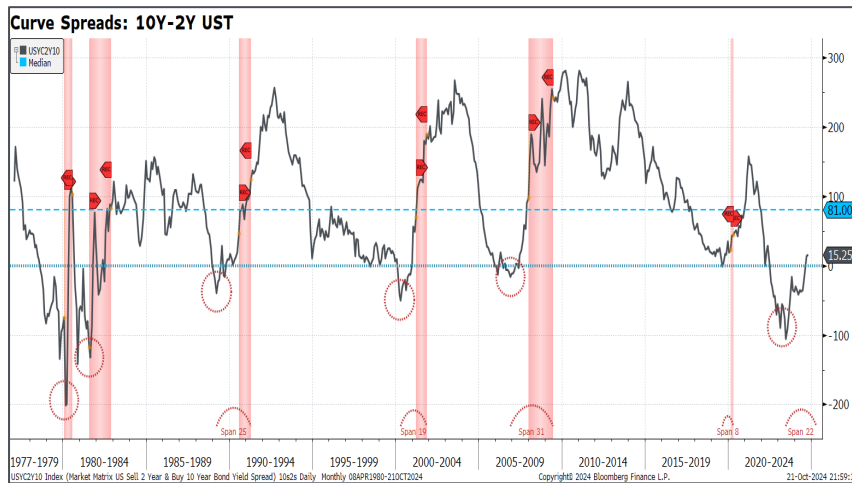


In October, the benchmark yield reversed a multi-month downtrend and recaptured its 50-day MA. It has been consolidating near its July low and 200-day MA, around 4.17%.

We suspect any further upside will be limited to around the 4.35% area as the Fed plans to loosen its monetary policy in the coming months.



Both Investment Grade and High Yield credit spreads have fallen to multi-year lows, indicating that investors have very little concern about default/credit risks.



The 10/2s yield curve normalized in September after being inverted for over two years.

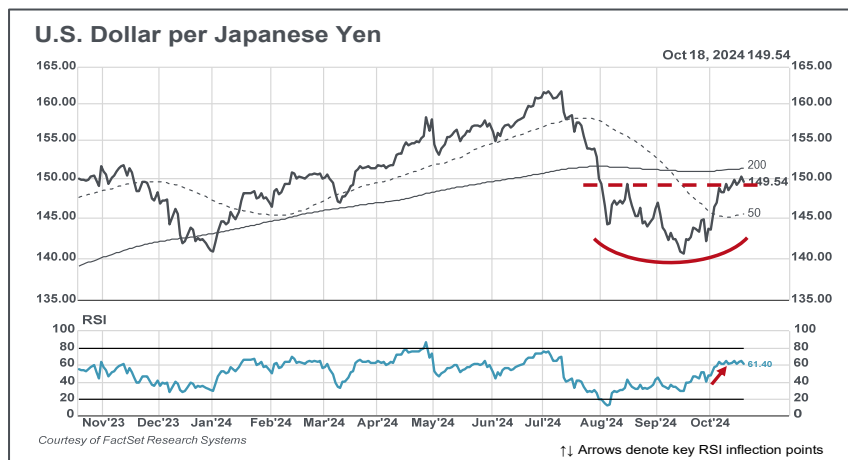
Historically, a recession was declared several months after its normalization, so it remains unclear if the Fed can engineer their soft-landing for the economy.

FX Market:

- The Federal Reserve cut interest rates by 50 basis points in September and is expected to continue with cuts of 25 basis points in November and December, taking the Fed fund rates below 5.0% by year-end.
- The *U.S. Dollar* has been rising throughout October, reversing a three-month downtrend and recapturing its 50-day MA. It confronts resistance around the 103.50 to 104 area around its 200-day MA. We suspect this is just a relief rally within its two-year range and recommend reducing positions below 104 resistance.
- The *Japanese Yen* is consolidating near its 200-day MA after it reversed a multi-year downtrend against the U.S. dollar in August. Meanwhile, the Mexican Peso is trending lower against the U.S. Dollar.



The dollar has reversed a downtrend; back above the 50-day MA; constructive RSI trend; a close above the 200-day MA should open the door to a new leg higher.



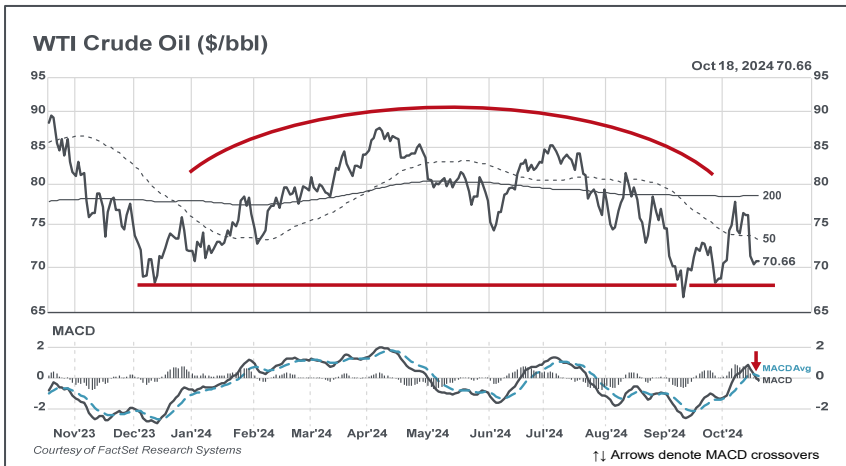
The pair has surpassed overhead resistance near 149; back above the 50-day MA; RSI remains in bullish territory; a close above the 200-day MA should open the door to a new leg higher.



The pair has broken out from a bullish pennant formation; above the rising 50-/200-day MAs; RSI is confirming the breakout; add to positions.

Commodities:

- Although inflationary pressures have eased in the last several months, high prices tend to be sticky. Our macroeconomic team expects a “bumpy” landing amid a bifurcated economy. With unemployment rising to a two-year high above 4%, consumer demand may decline, resulting in lower commodity prices.
- The October relief rally in Crude Oil stalled at the 200-day MA resistance around \$78 and retreated under its 50-day MA. Support below \$65 lies near \$62-\$63/barrel. Gold futures climbed to an all-time high above \$2,750/oz, benefiting from a weaker U.S. Dollar and ongoing geopolitical turmoil.



WTI crude oil has violated support at the 50-day MA; recent sell signal in MACD; reduce positions, a retest of the December '23 lows appears likely.

Below the \$65 lows, the next level of support lies near \$62-\$63/barrel.



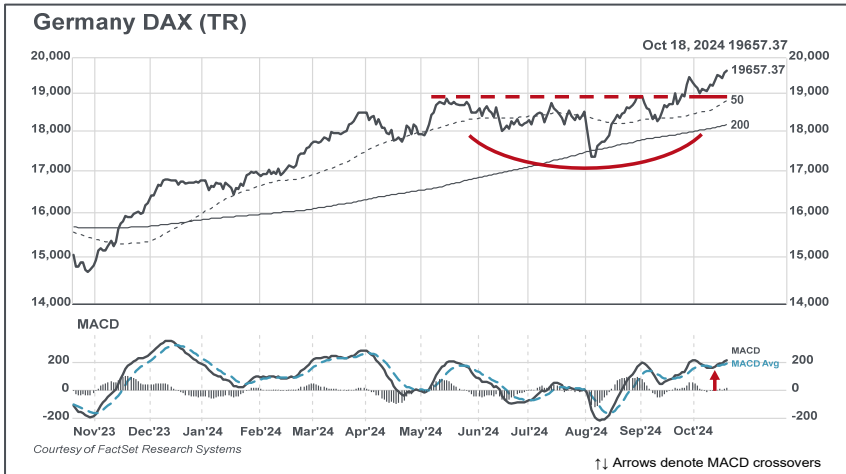
Gold has broken out from a bullish flag formation; above the rising 50-/200-day MAs; recent buy signal in MACD: add to positions within its rising price channel.



Silver is approaching resistance off the May highs; above the rising 50-/200-day MAs; add to positions on a topside breakout above \$33/oz.

Foreign Markets:

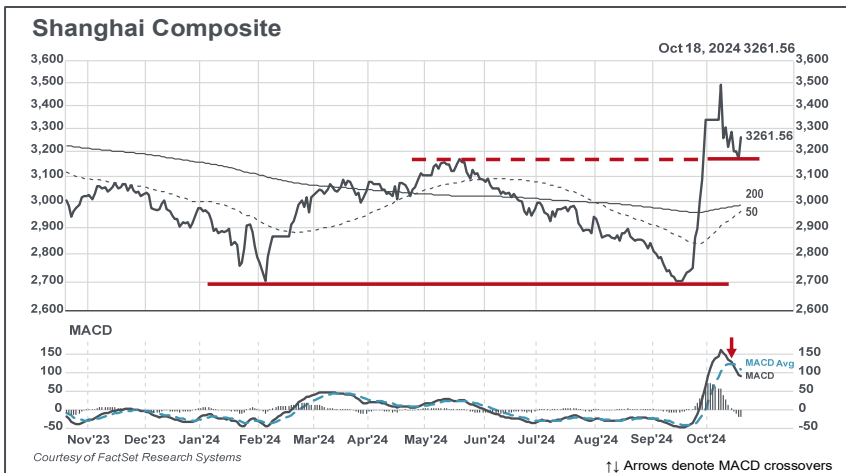
- The German DAX and Spain IBEX are hitting new highs and outperforming other European bourses year-to-date. Meanwhile, France’s CAC 40 has underperformed as it consolidates under its 200-day MA.
- Among APAC markets, Japan’s Nikkei and TOPIX are slowly recovering from their August sell-off. China’s Hang Seng and Shanghai indices are digesting gains from the short-squeeze rally during September and October. Australia and New Zealand indices are breaking out to new highs. Conversely, South Korea’s KOSPI is consolidating in a bearish pennant formation below its 200-day MA.



The index has broken out from a multi-month rounding bottom; above the rising 50-/200-day MAs; recent buy signal in MACD; add to positions.

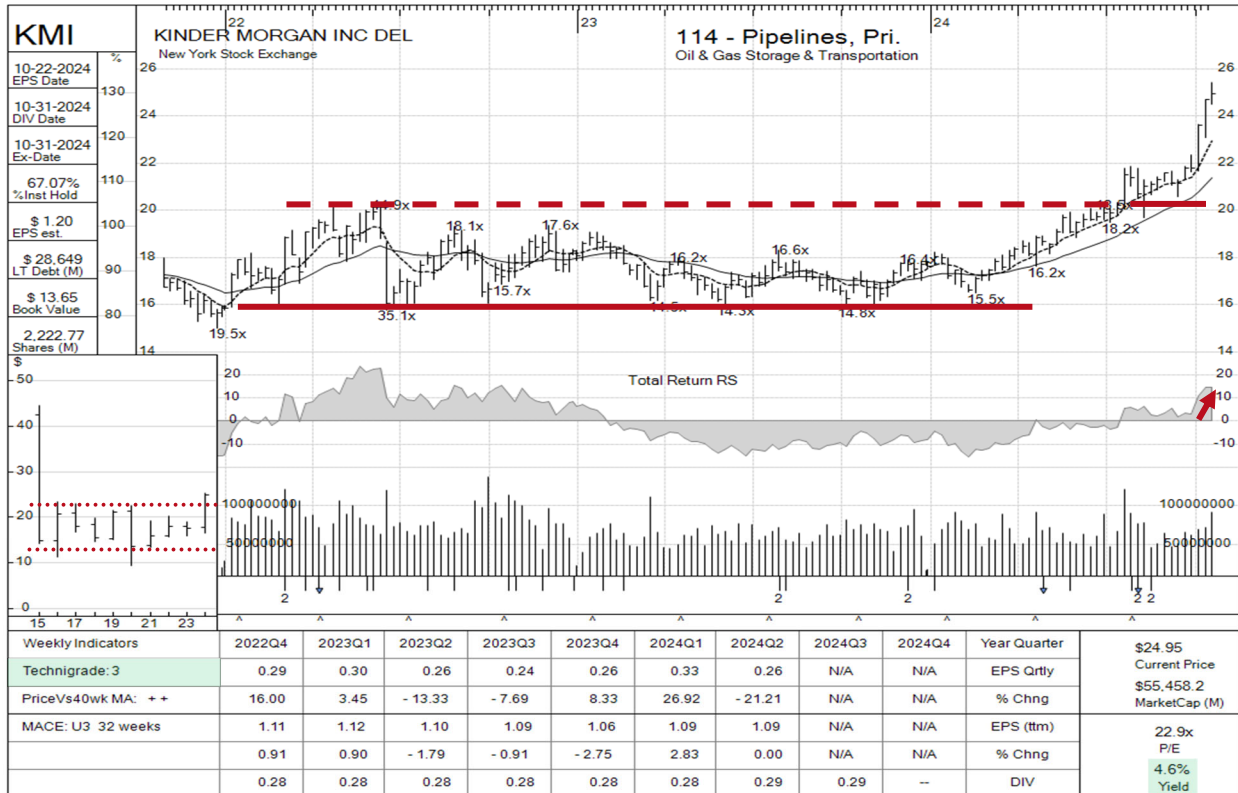
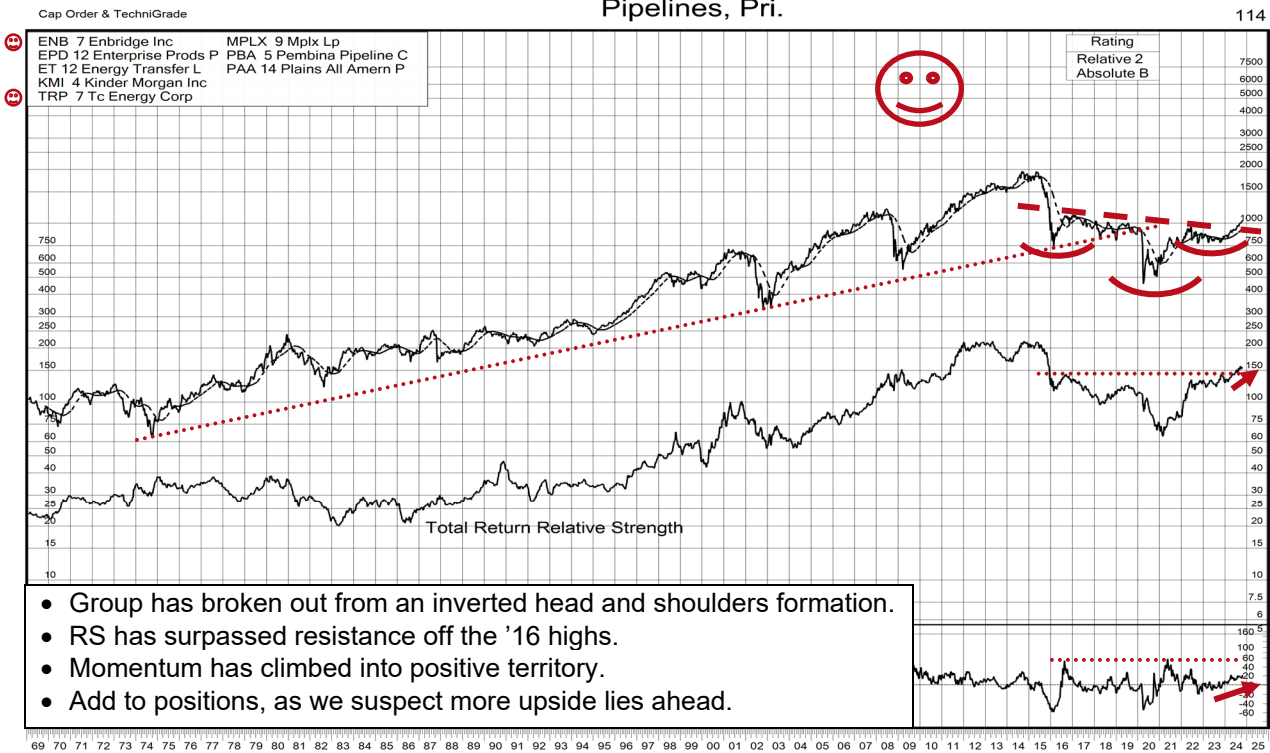


The index looks distributional; back below the 50-/200-day MAs; reduce positions on a violation of support.

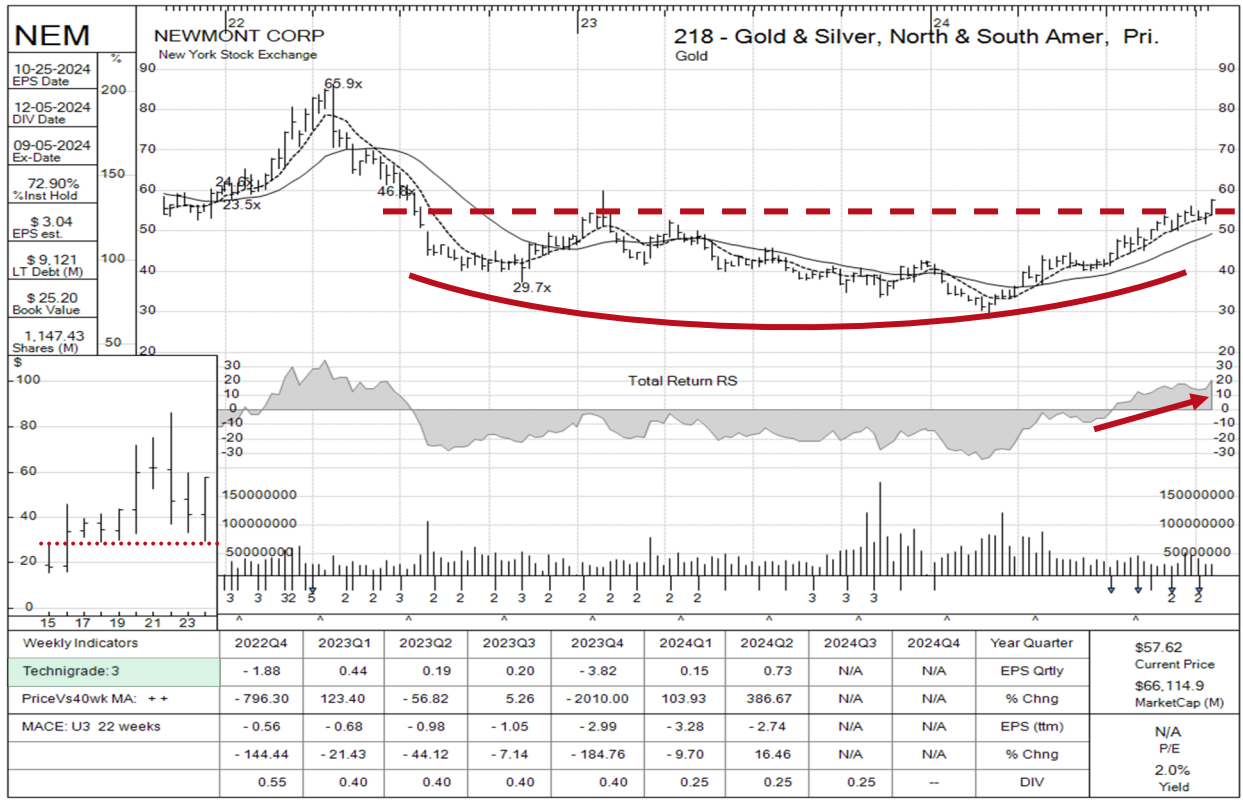
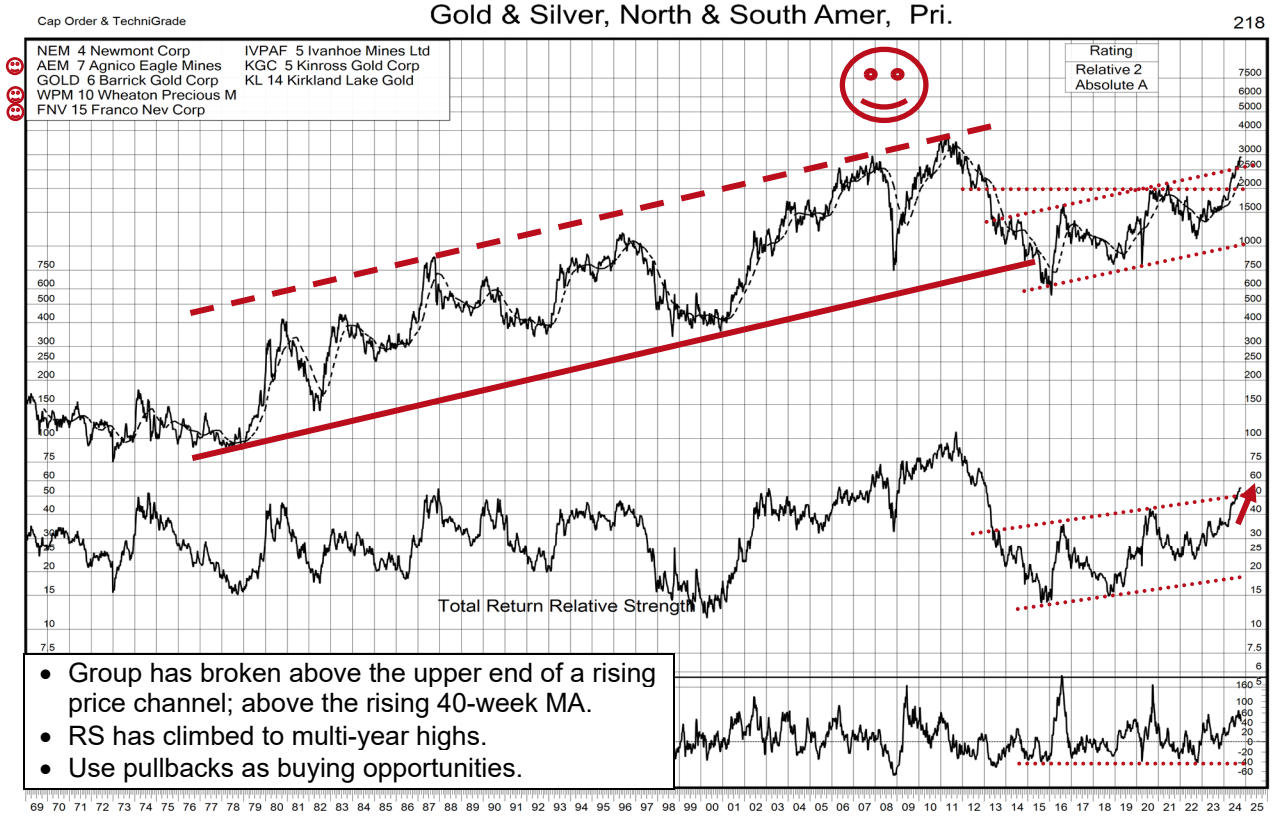


The index has confirmed support off a prior breakout level; above the rising 50-/200-day MAs; add to positions, a new leg higher appears to be underway.

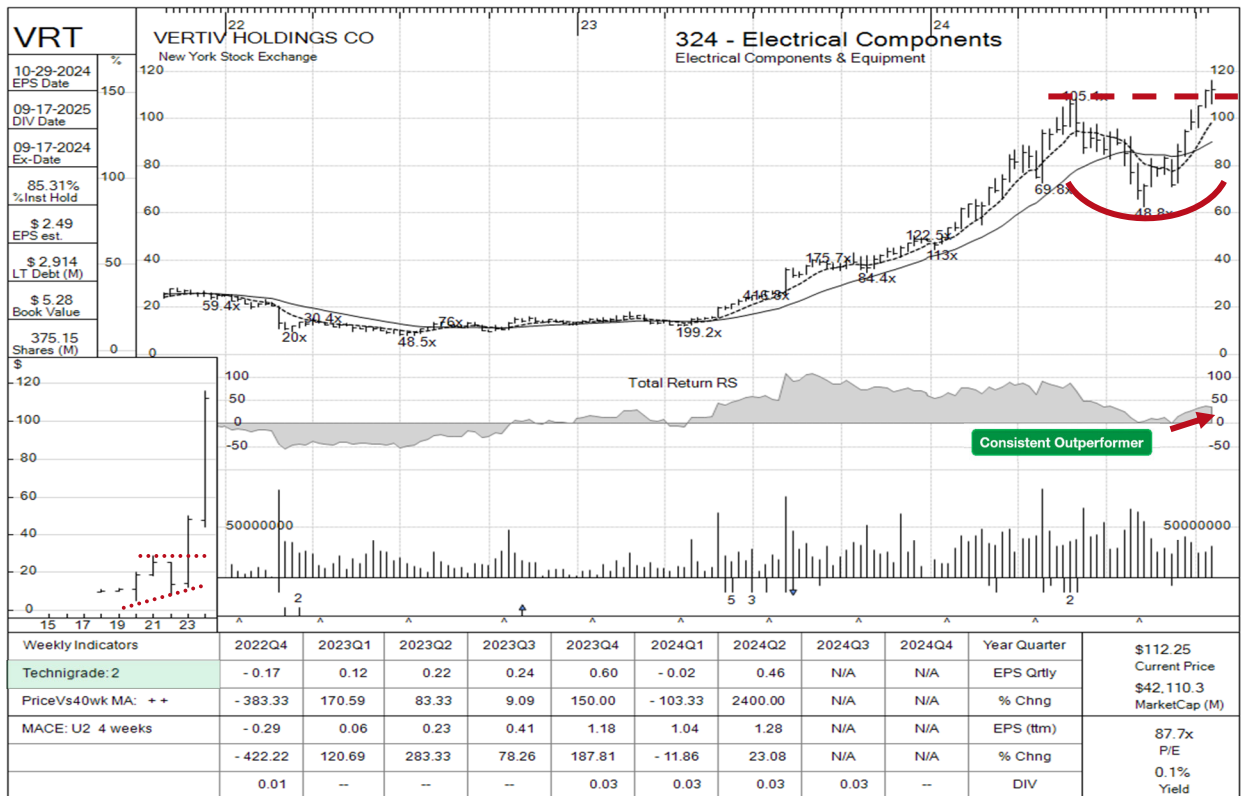
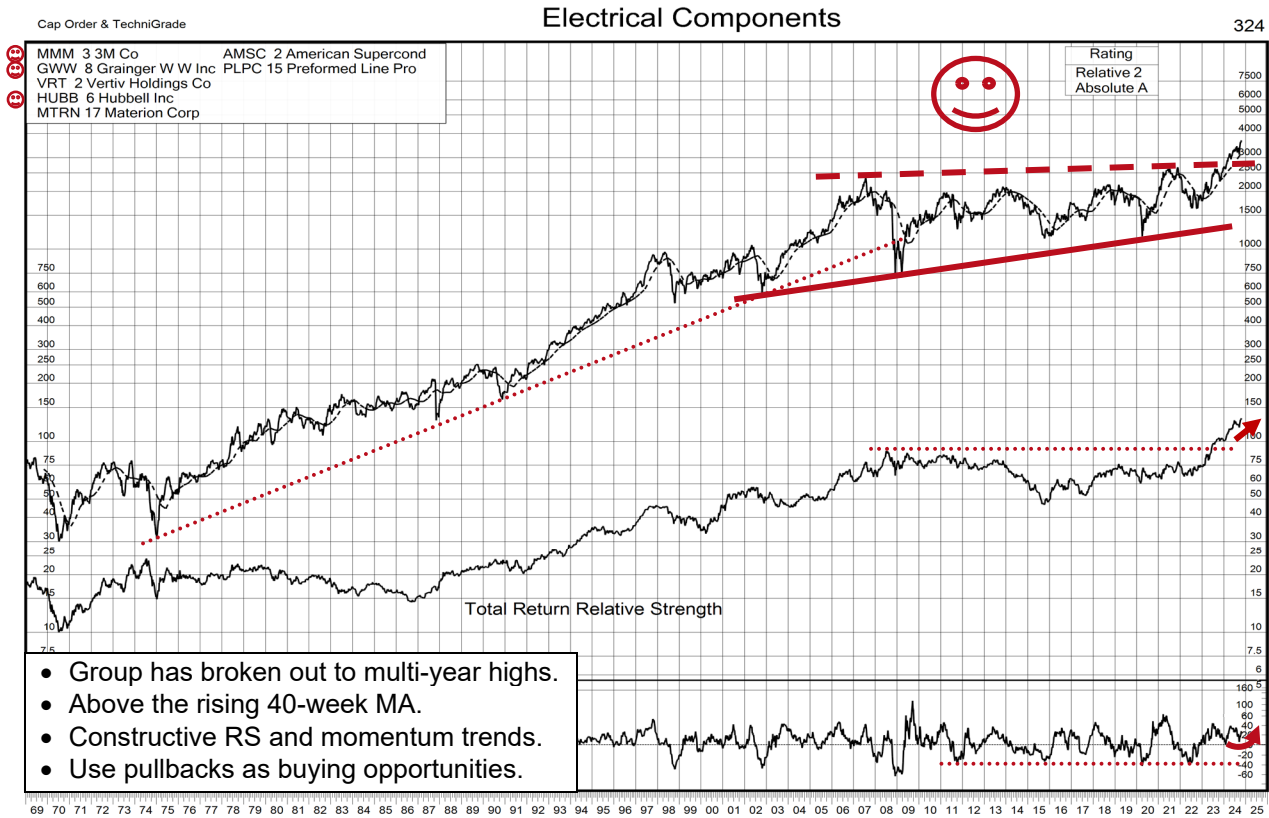
MicroGroup Highlights: This section includes several of our favorite bullish trade ideas in this month's Informed Investor publication.



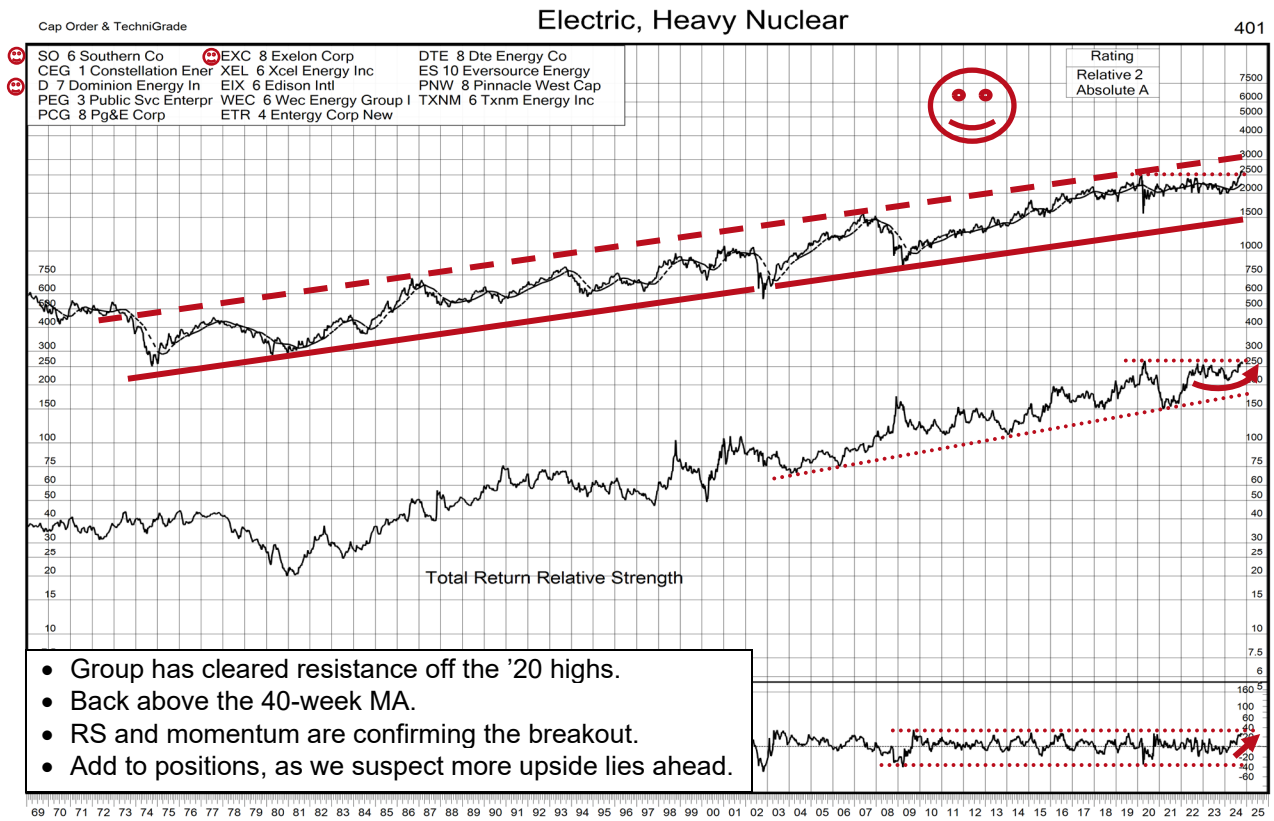
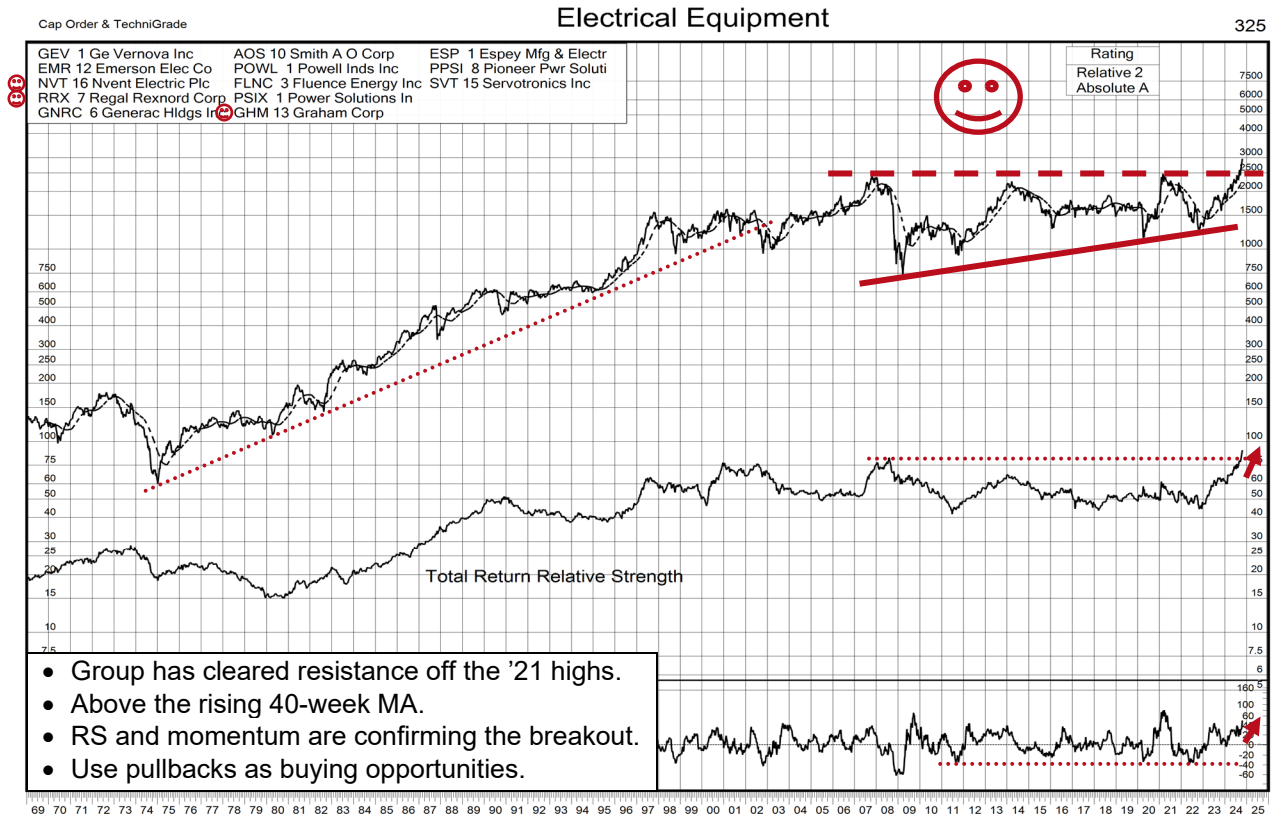
- KMI—Shares have broken out from a LT consolidation range.
- Above the rising 10-/30-week WMAs.
- RS has climbed to multi-year highs and impressive TechniGrade ranking.
- Use pullbacks as buying opportunities.

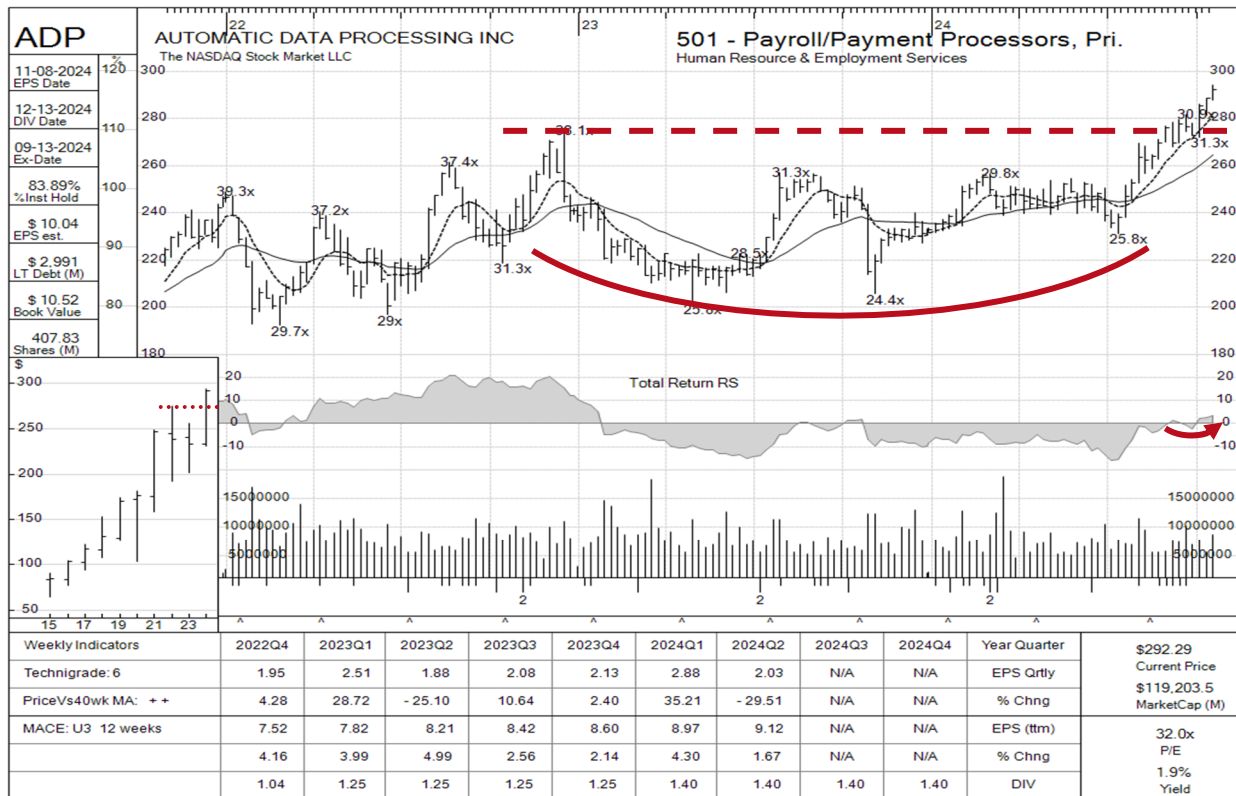
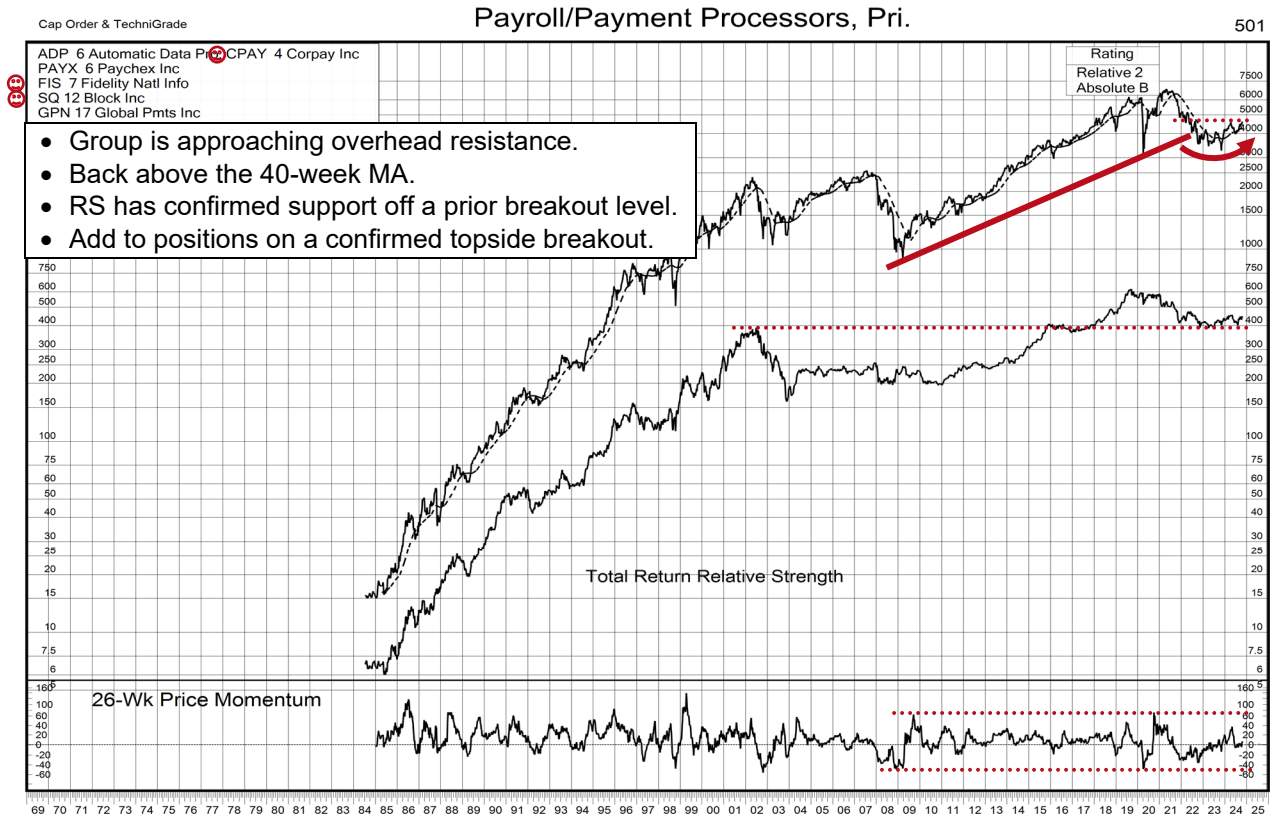


- NEM—Shares have surpassed overhead resistance near \$54.
- Above the rising 10-/30-week WMAs.
- Constructive/confirming RS trend and impressive TechniGrade ranking.
- Add to positions, as we suspect more upside lies ahead.

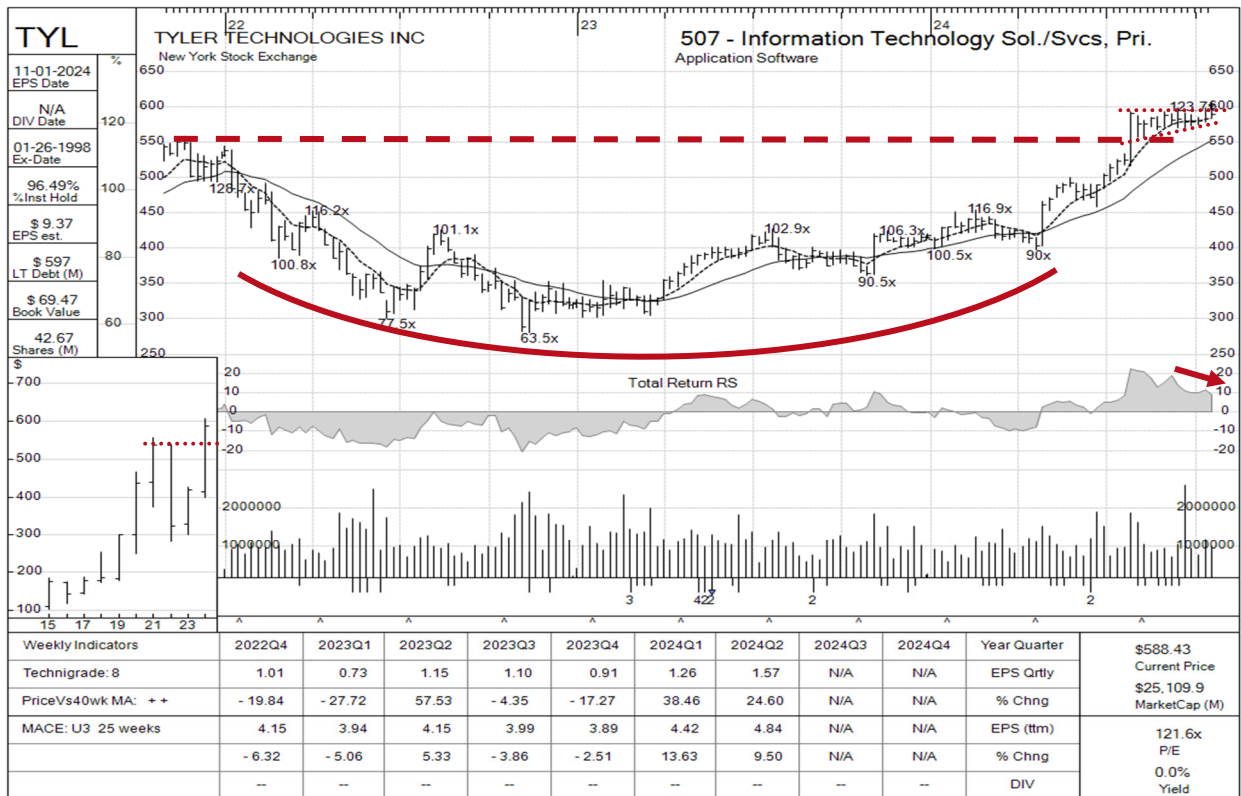
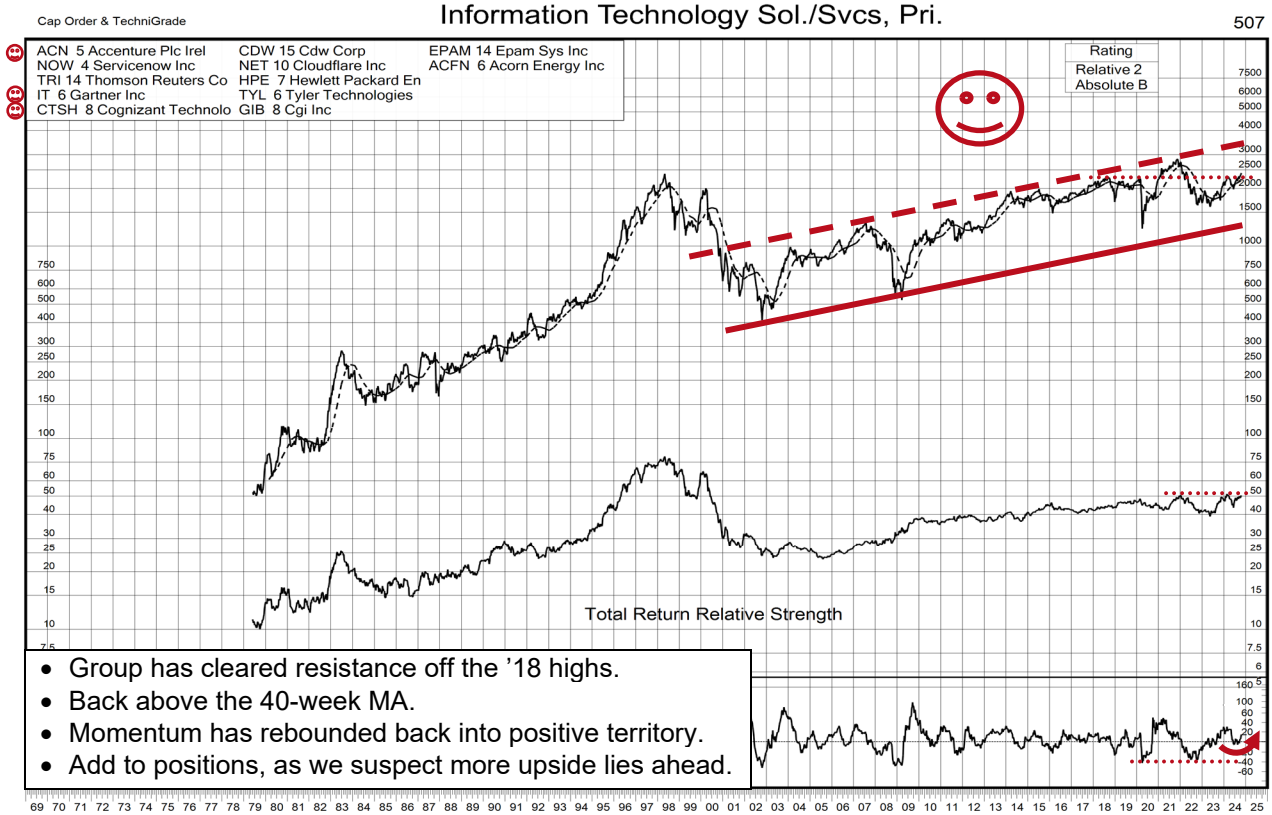


- VRT—Shares have cleared resistance off the May highs.
- Recent bullish crossover between the 10-/30-week WMAs.
- RS is confirming the breakout and impressive TechniGrade ranking.
- Add to positions, as we suspect more upside lies ahead.

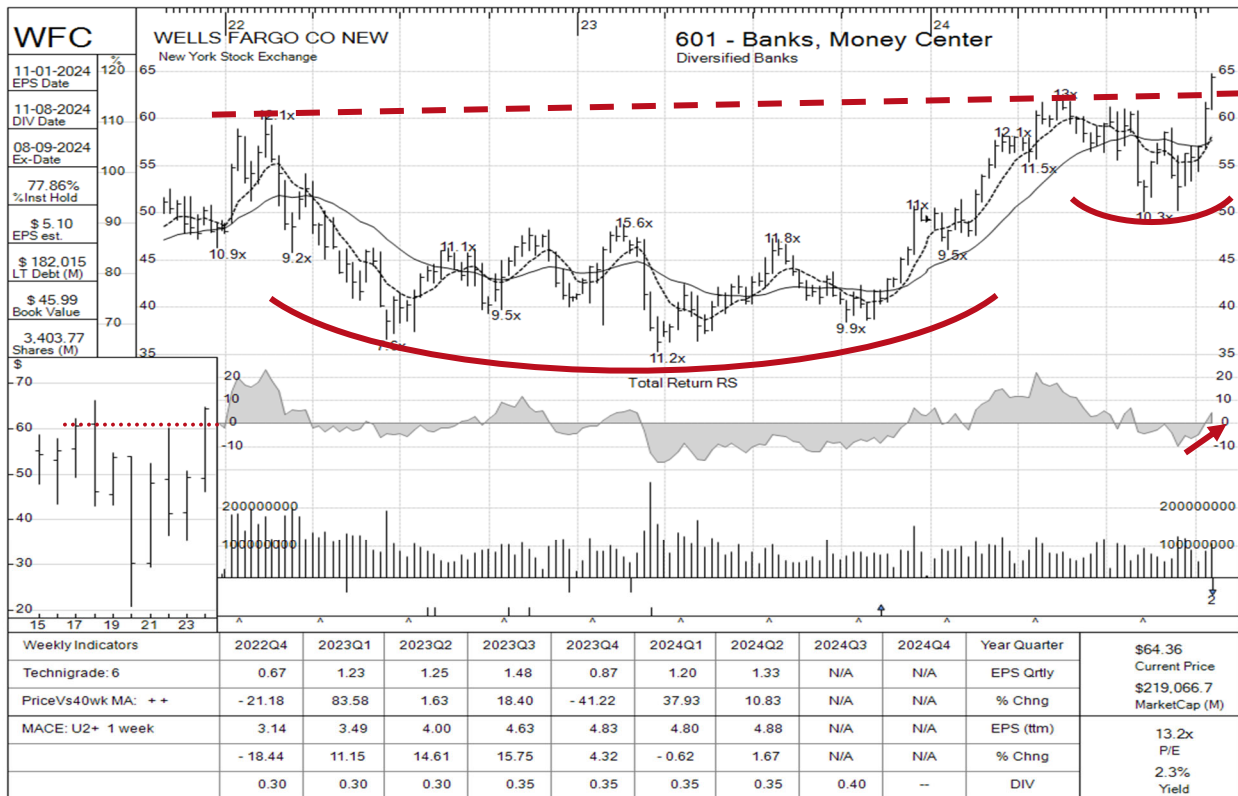
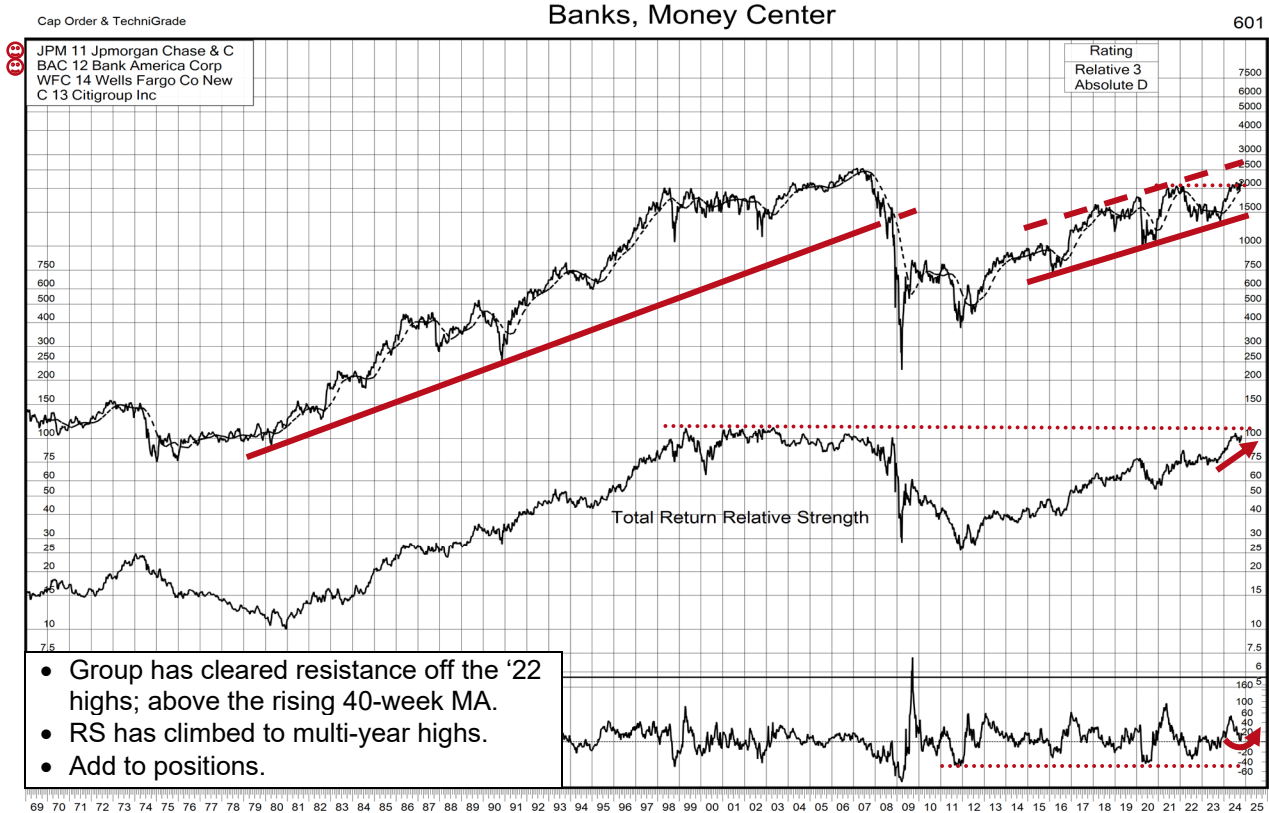




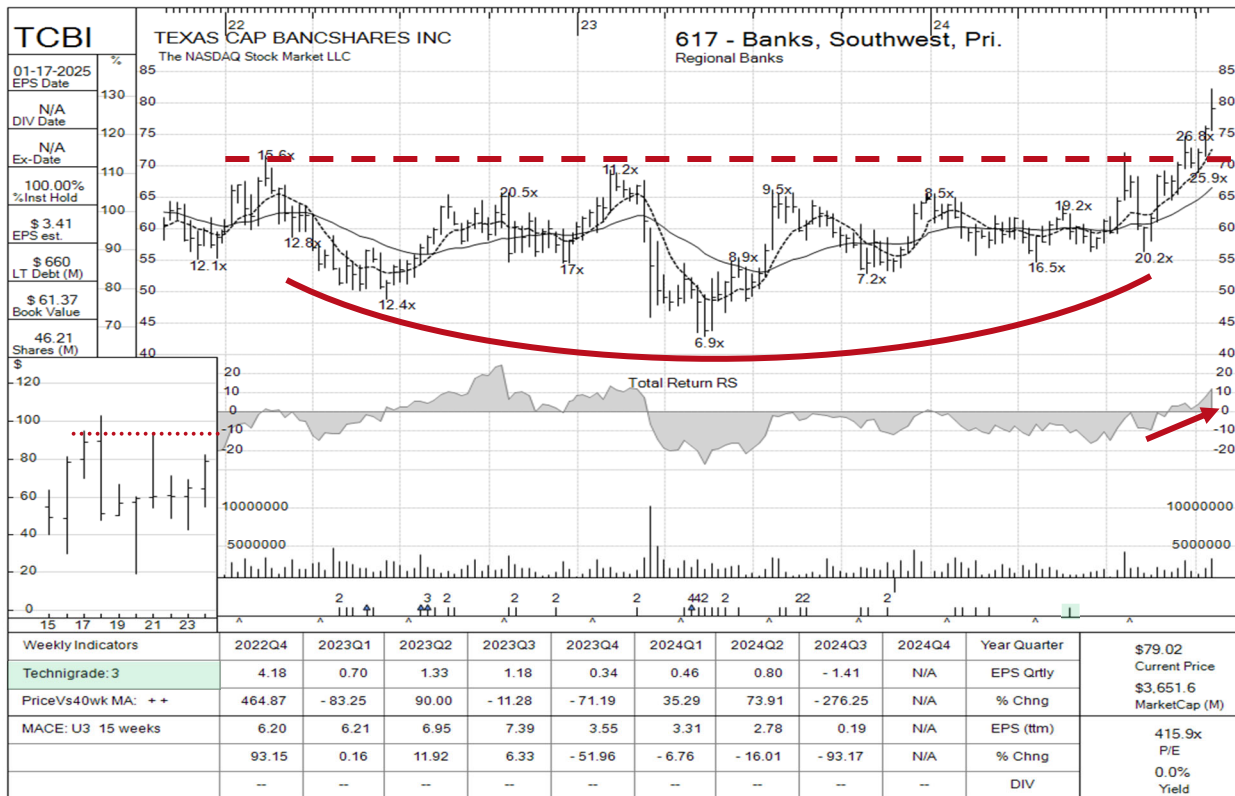
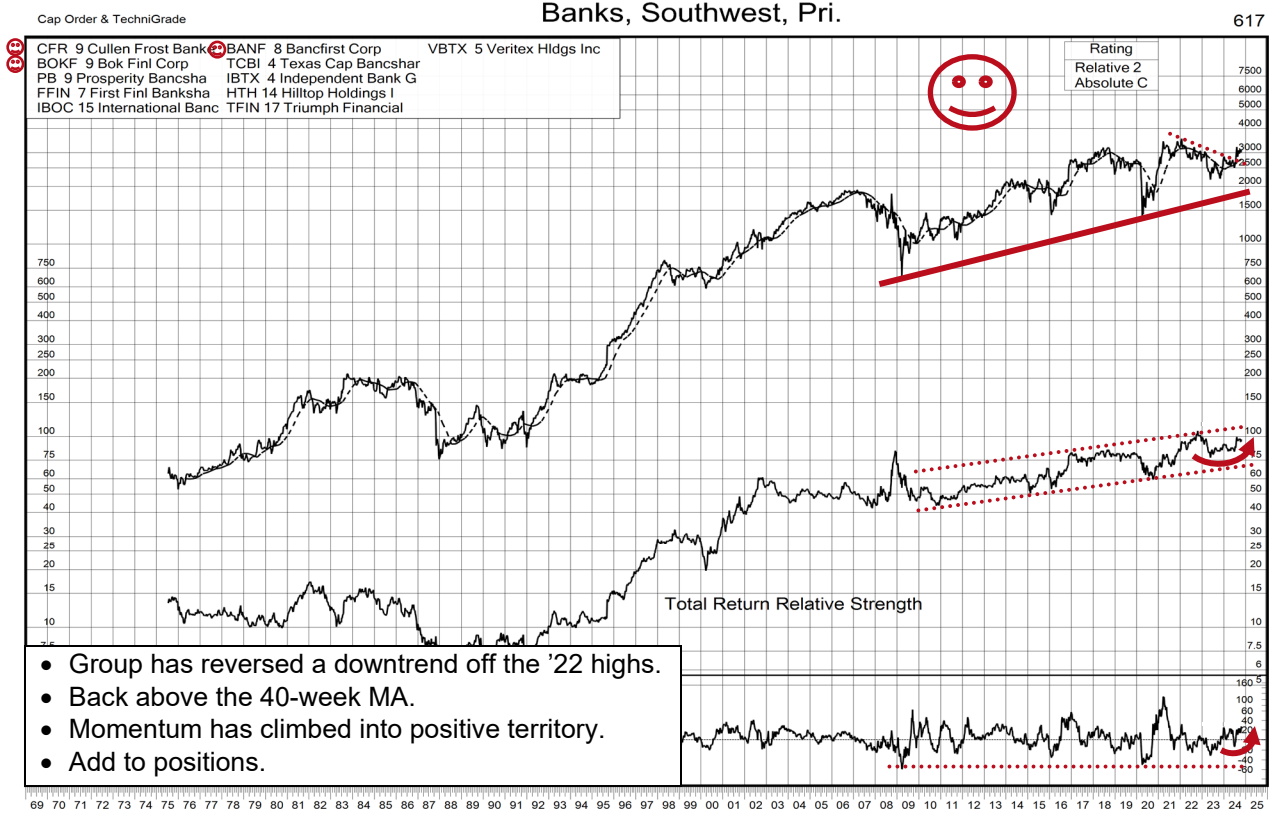
- ADP—Shares have cleared resistance off the '22 highs.
- Above the rising 10-/30-week WMAs.
- RS has climbed back into positive territory.
- Add to positions, as we suspect more upside lies ahead.



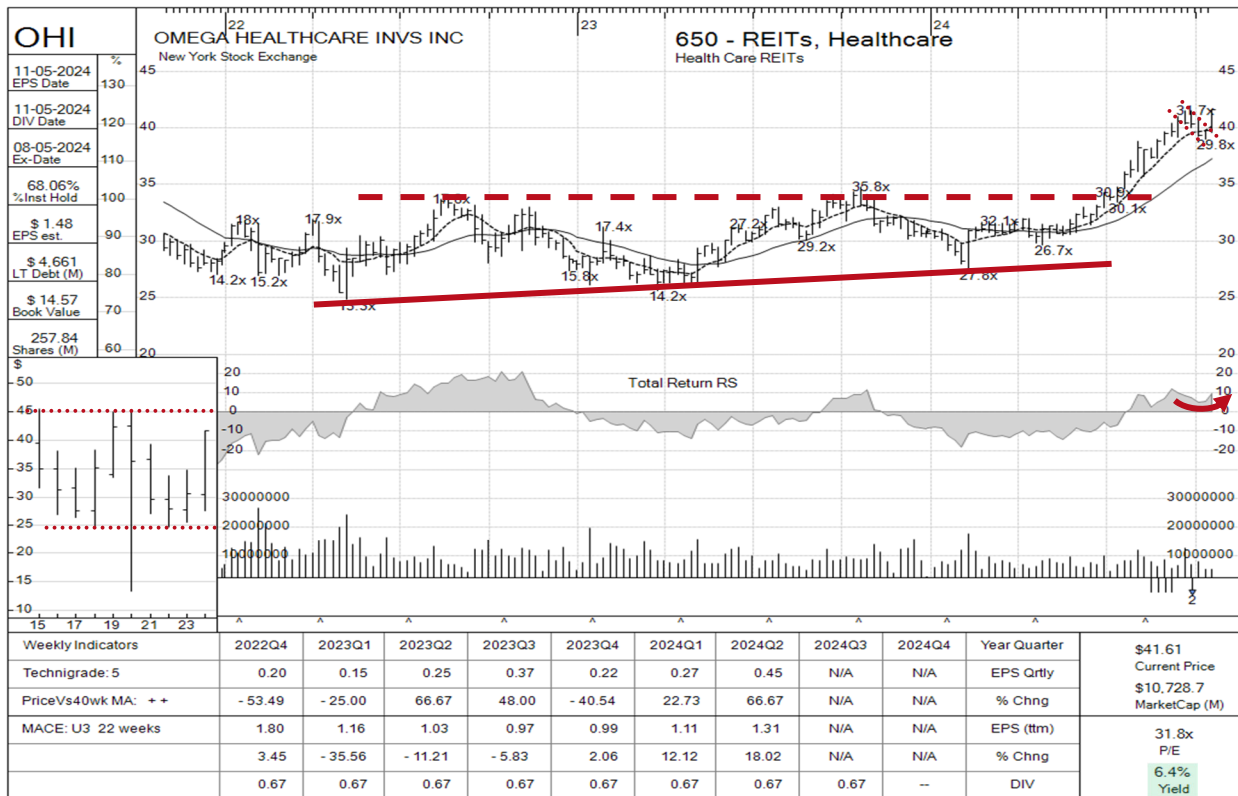
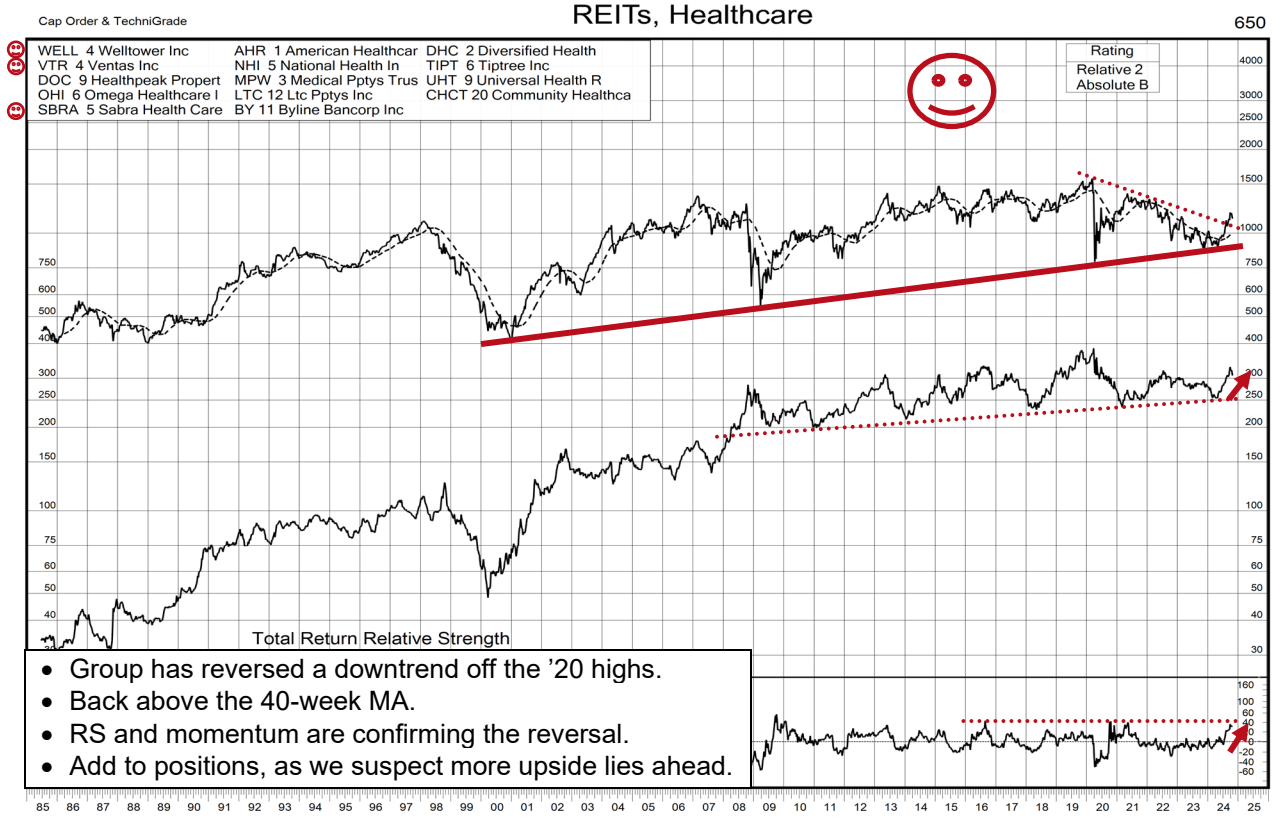
- TYL—Shares are consolidating within a ST ascending triangle.
- Back above the 10-/30-week WMAs.
- RS remains in positive territory.
- A close above \$594 should open the door to a new leg higher.



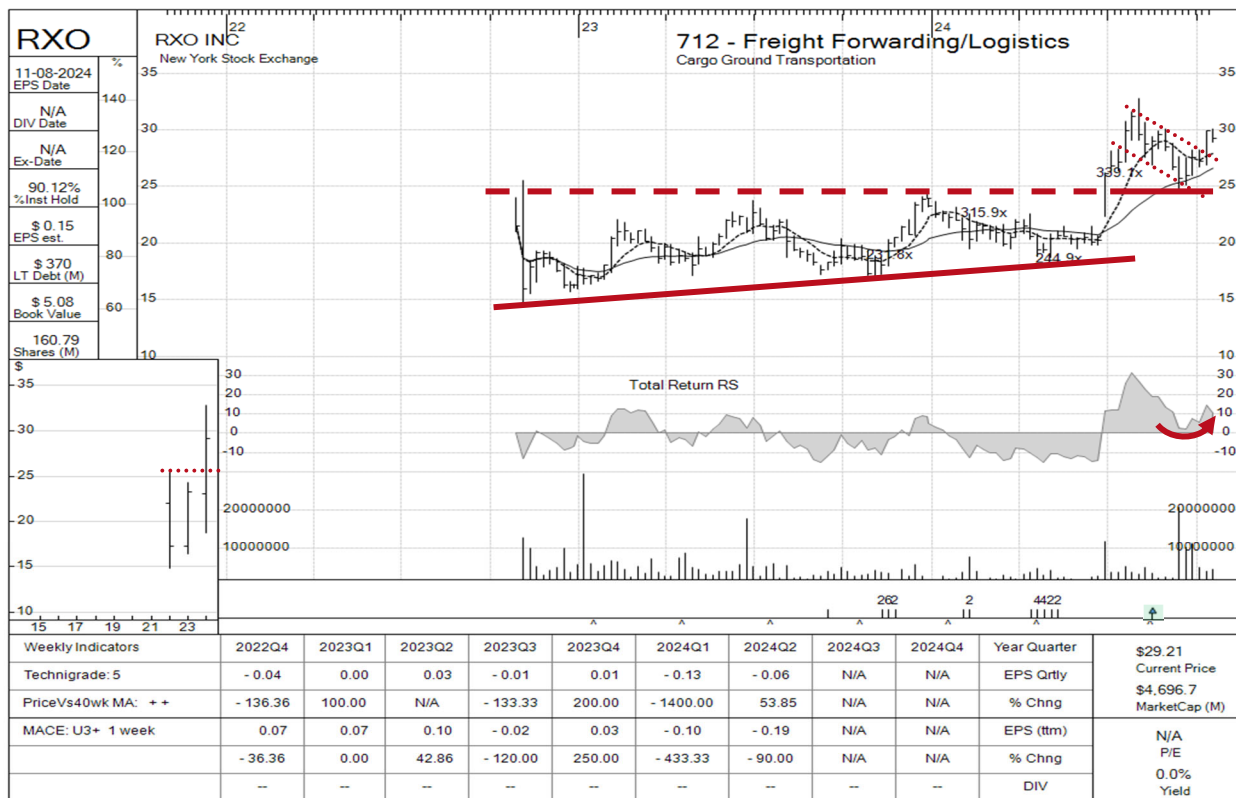
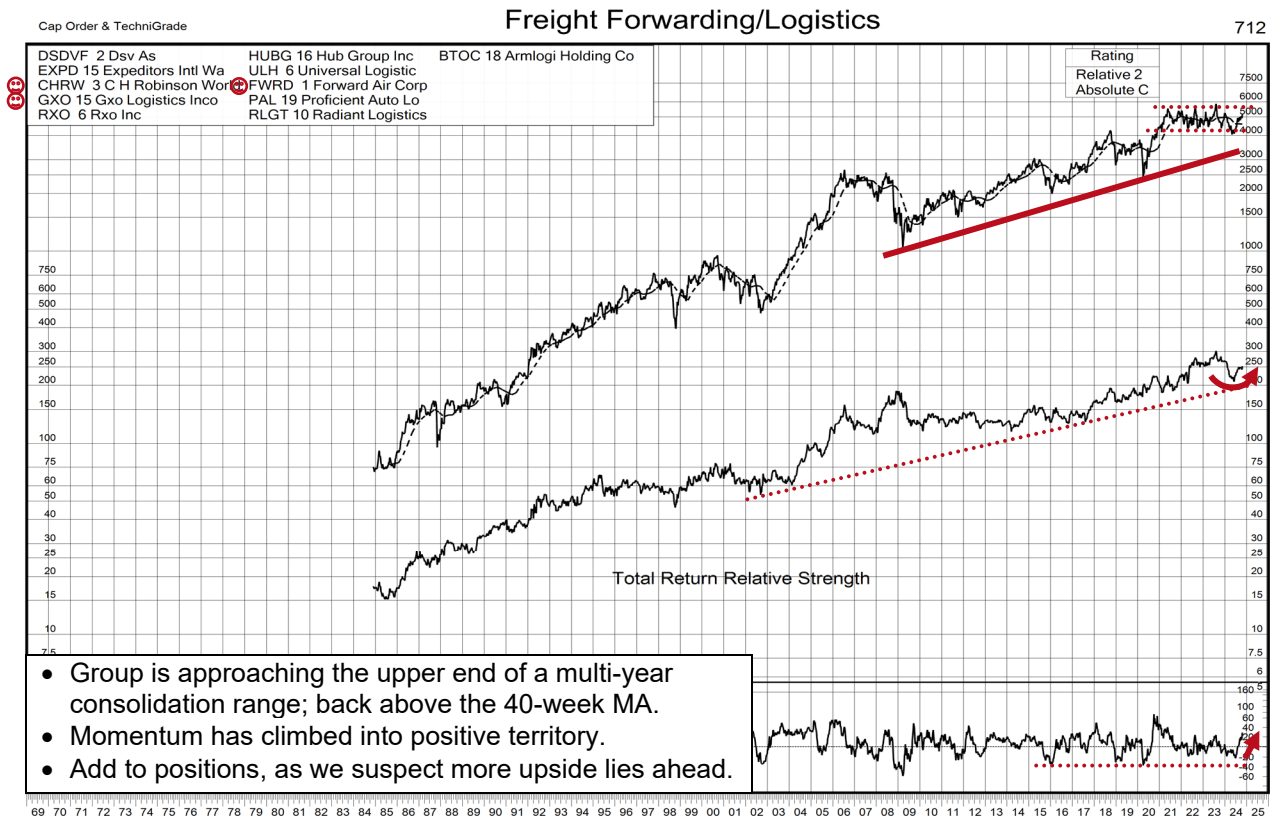
- WFC—Shares have broken out from a bullish cup and handle formation.
- Recent bullish crossover between the 10-/30-week WMAs.
- RS has climbed out of negative territory.
- Add to positions, as we suspect more upside lies ahead.



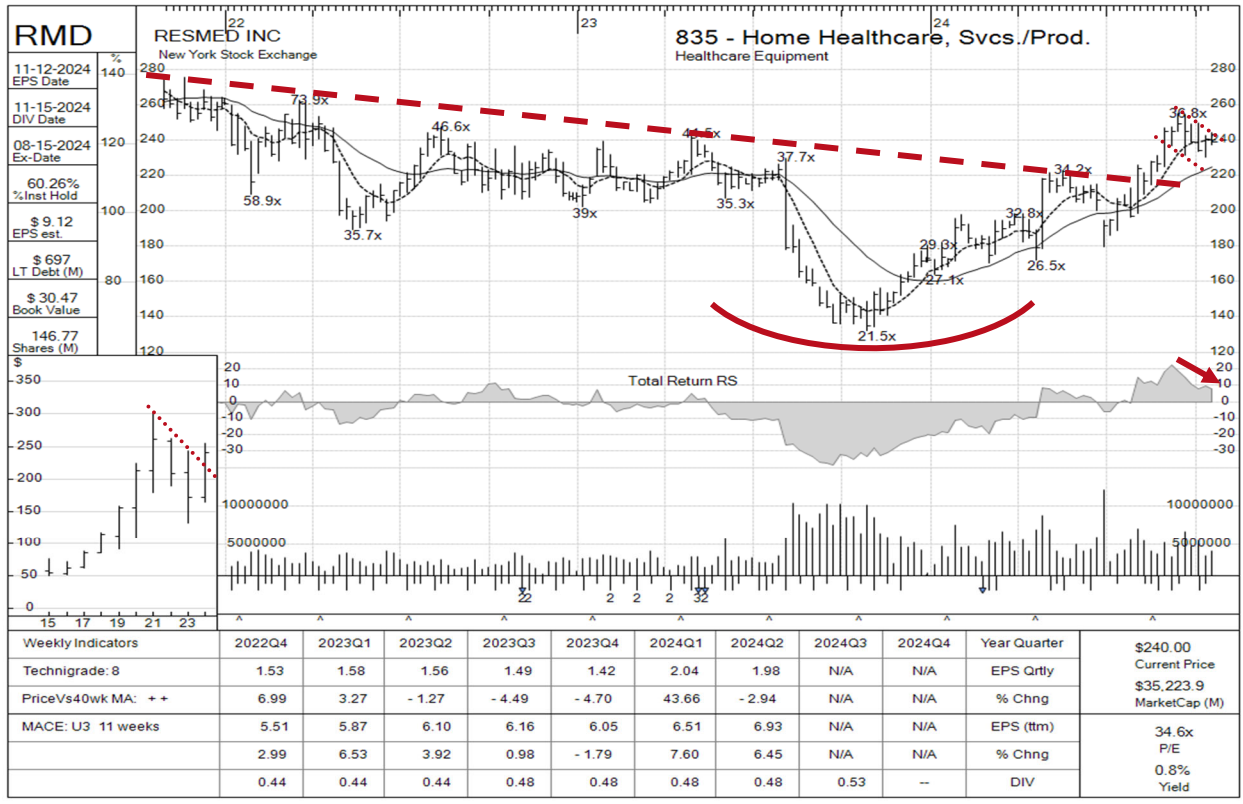
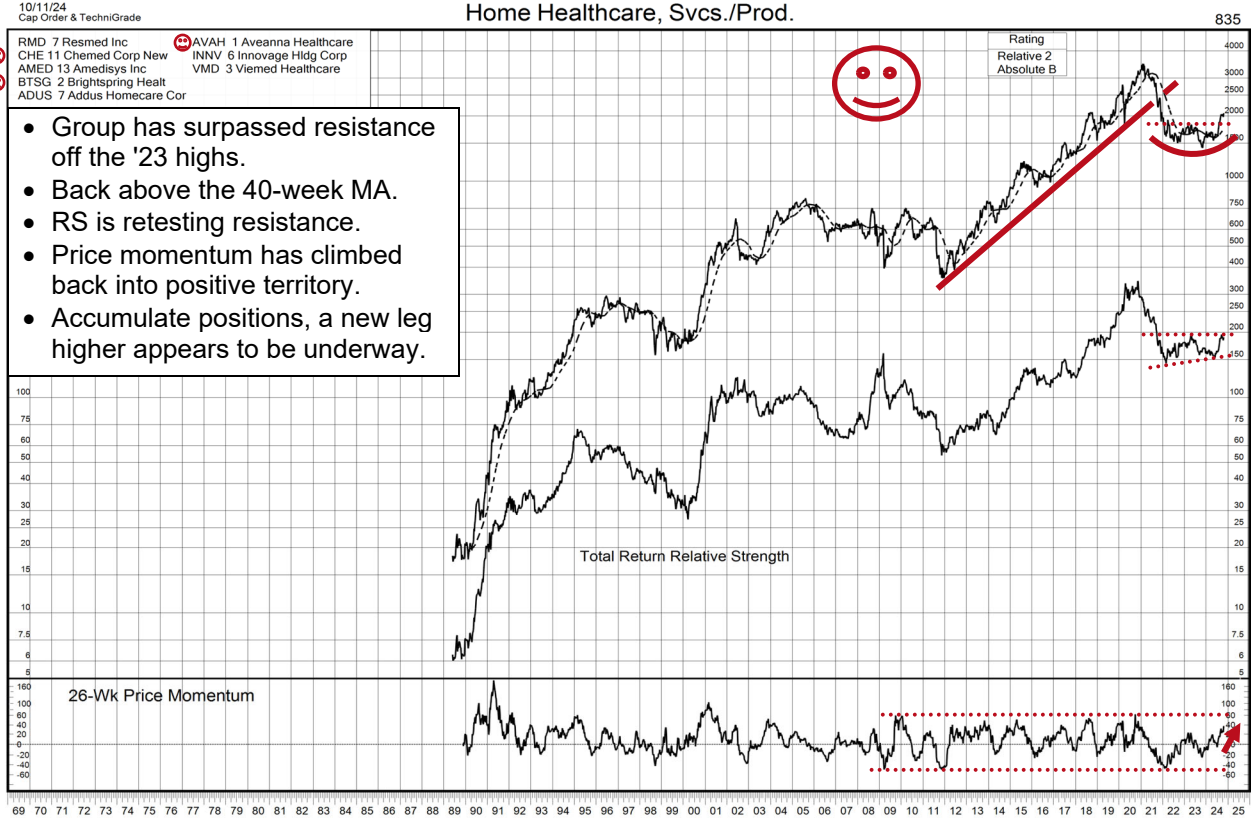
- TCBI—Shares have broken out from a LT rounding bottom.
- Above the rising 10-/30-week WMAs.
- RS has climbed into positive territory and impressive TechniGrade ranking.
- Add to positions, as we suspect more upside lies ahead.



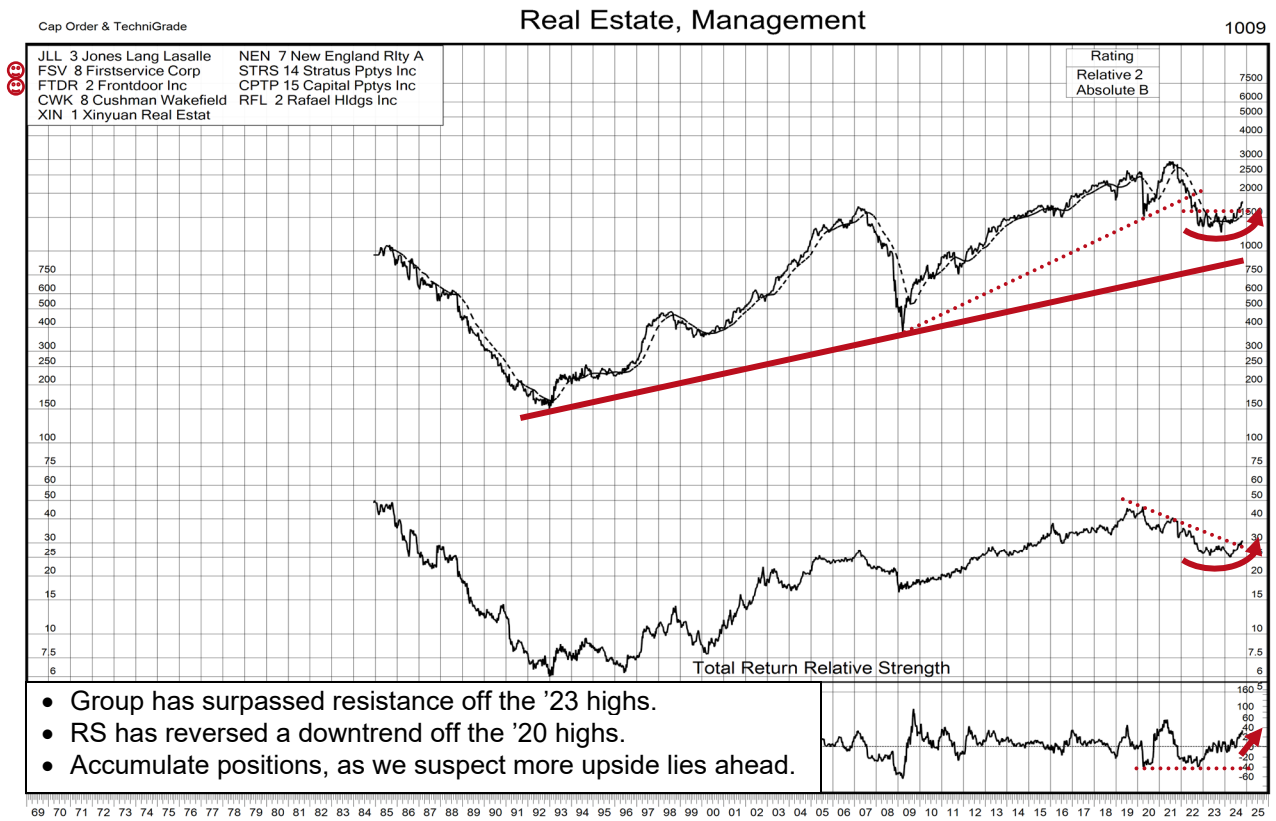
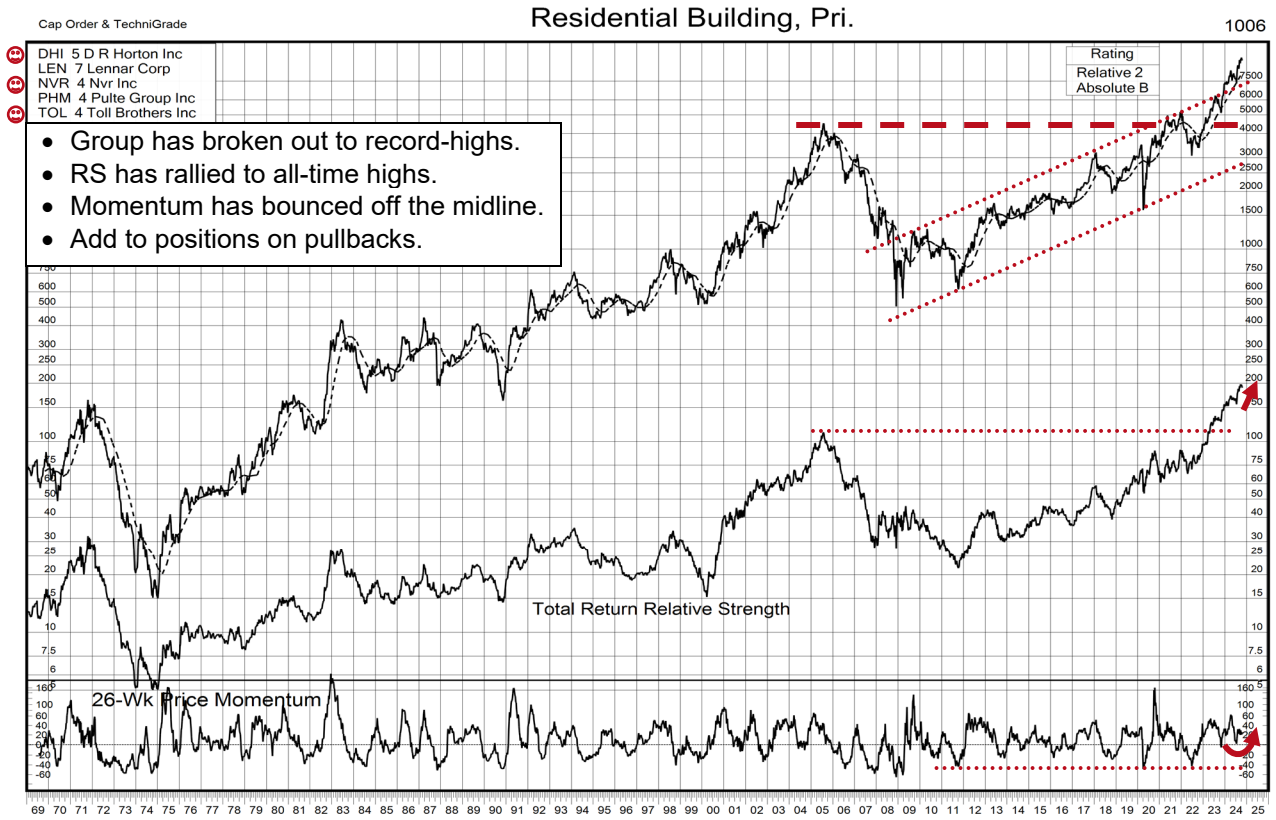
- OHI—Shares have broken out from a bullish flag formation.
- Back above the 10-/30-week WMAs.
- RS has inflected higher in positive territory and attractive dividend yield.
- Add to positions, a new leg higher appears to be underway.

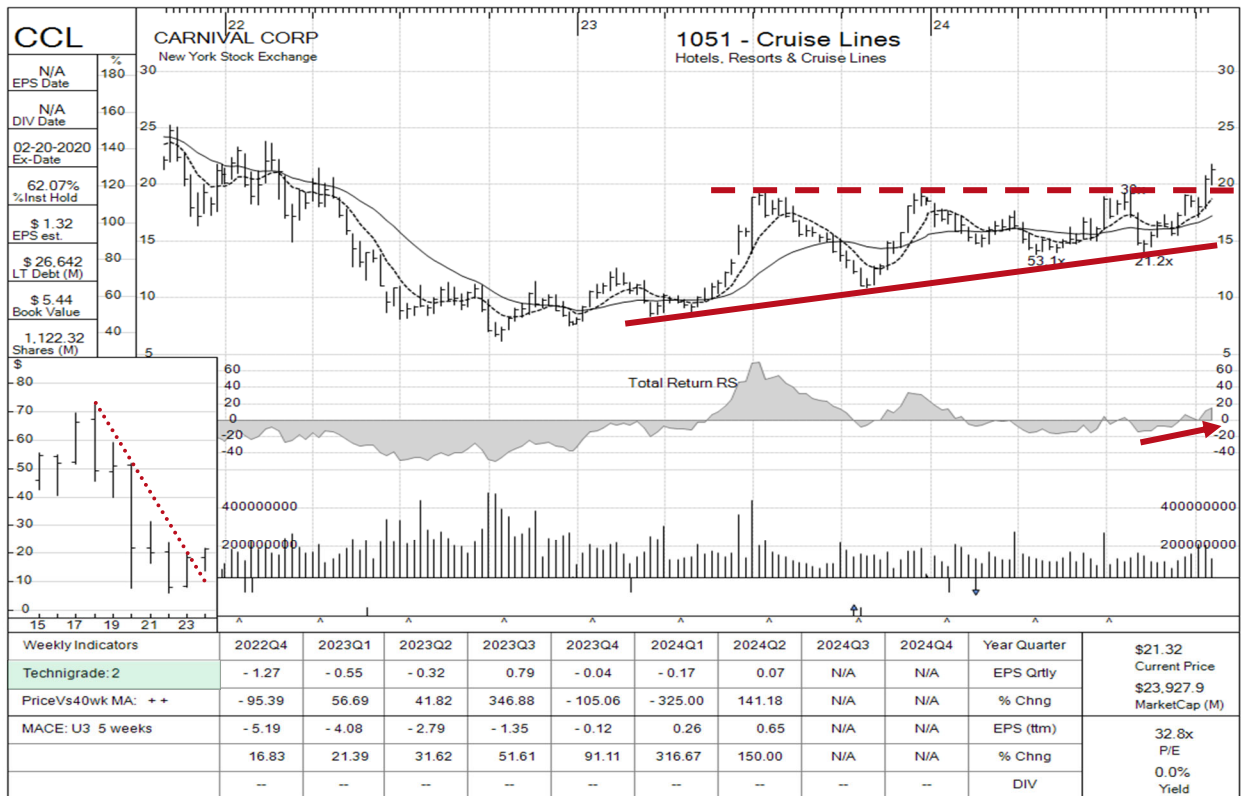
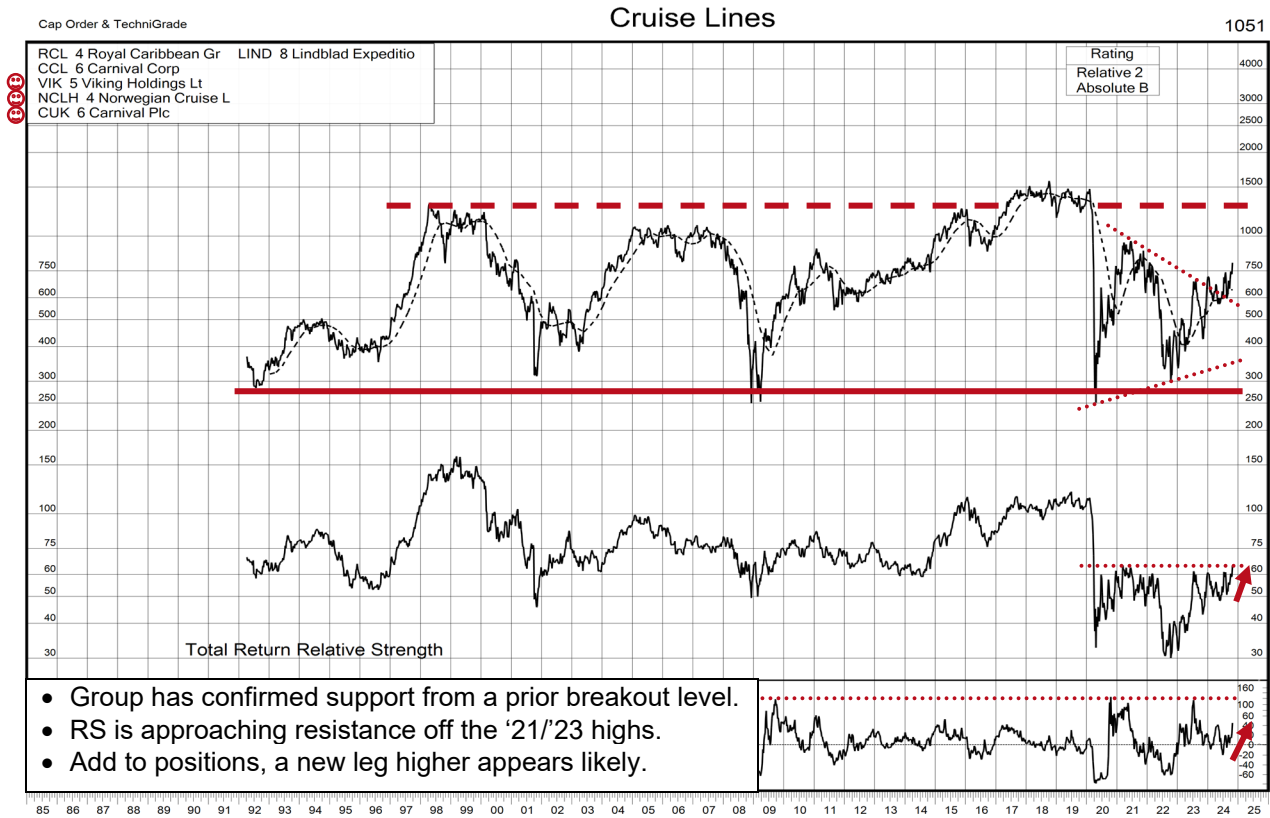


- RXO—Shares have broken out from a bullish flag formation.
- Back above the 10-/30-week WMAs.
- RS is confirming the breakout and recent insider buying activity.
- Add to positions, a retest of the July highs near \$33 appears likely.

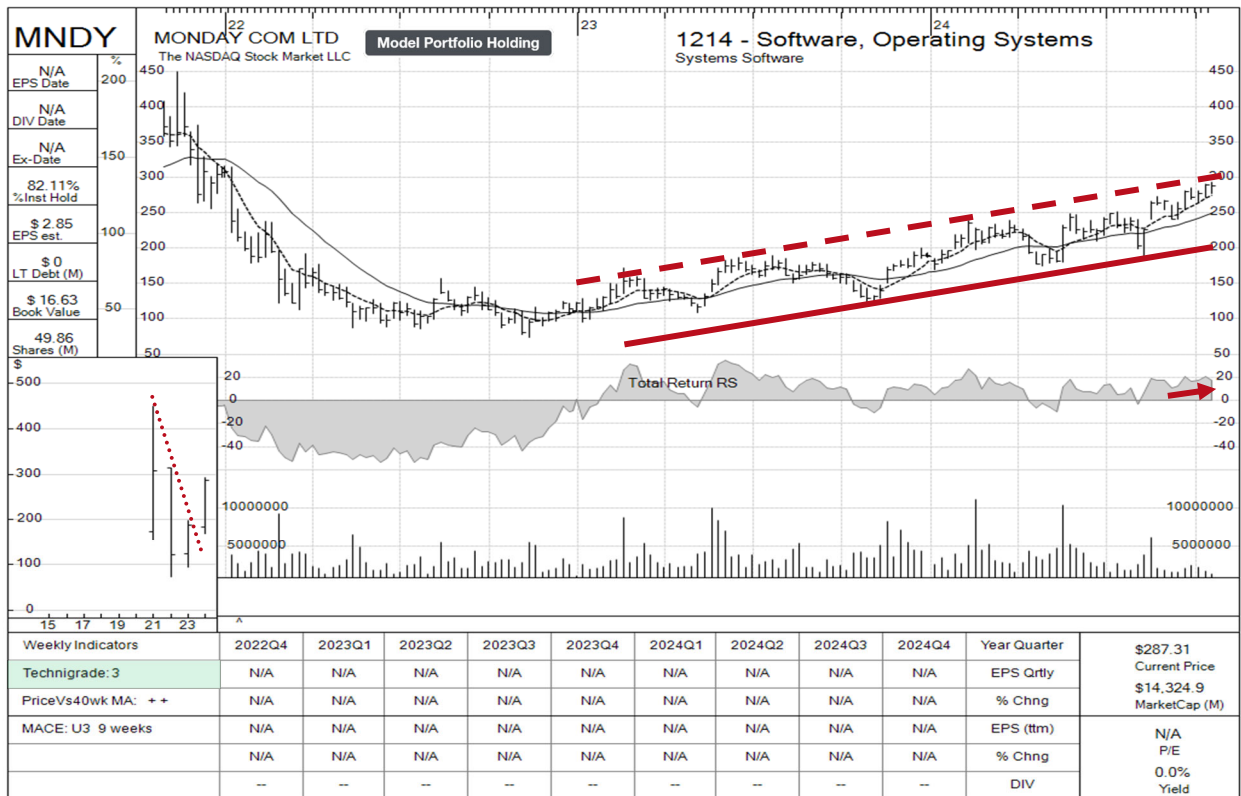
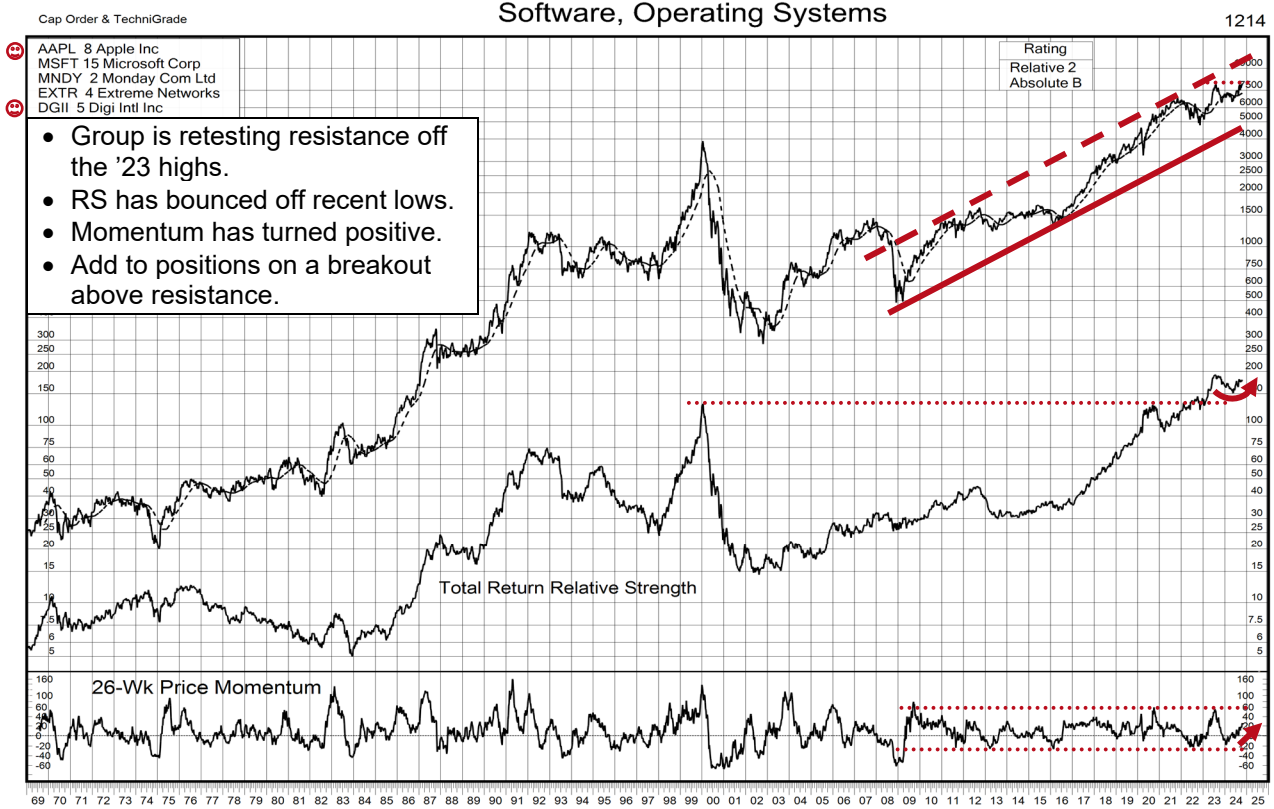


- RMD—Shares are consolidating within a bullish flag formation.
- Above the rising 10-/30-week WMAs.
- RS has eased but remains in positive territory.
- Add to positions on a breakout above resistance near \$250.

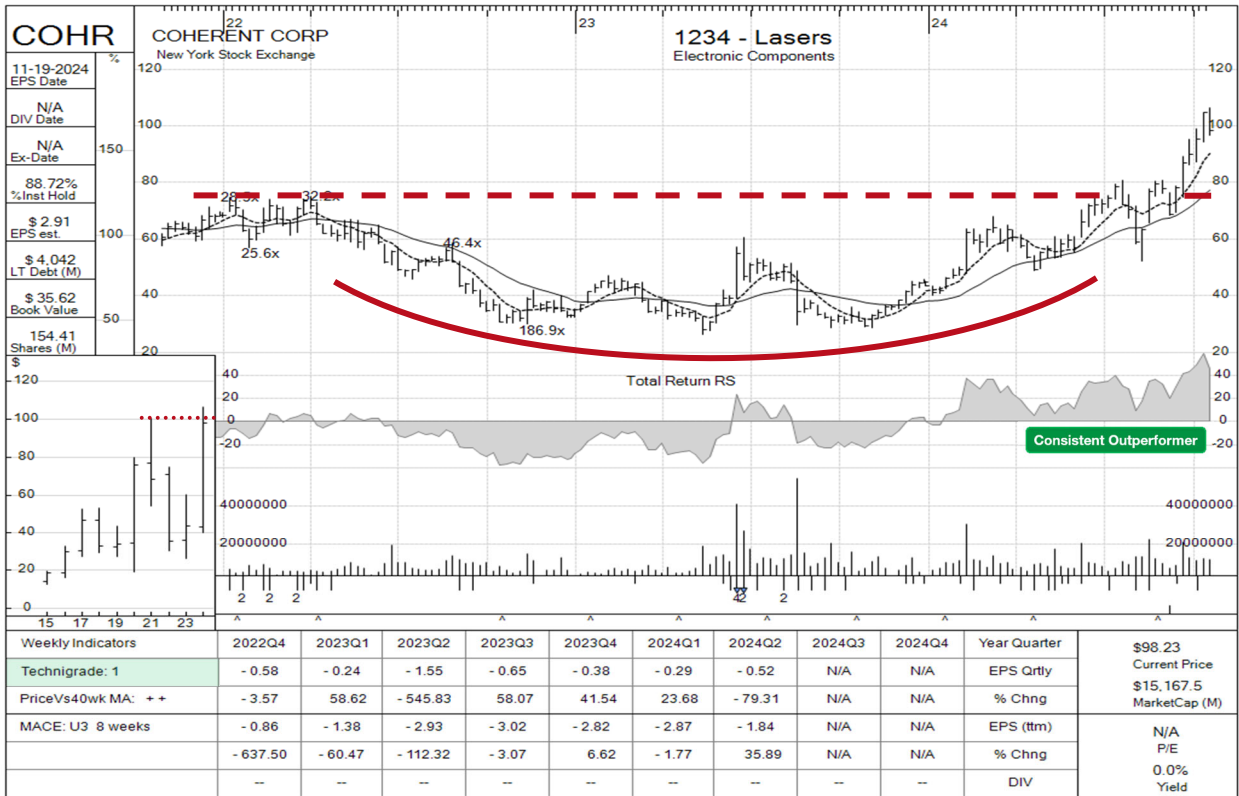
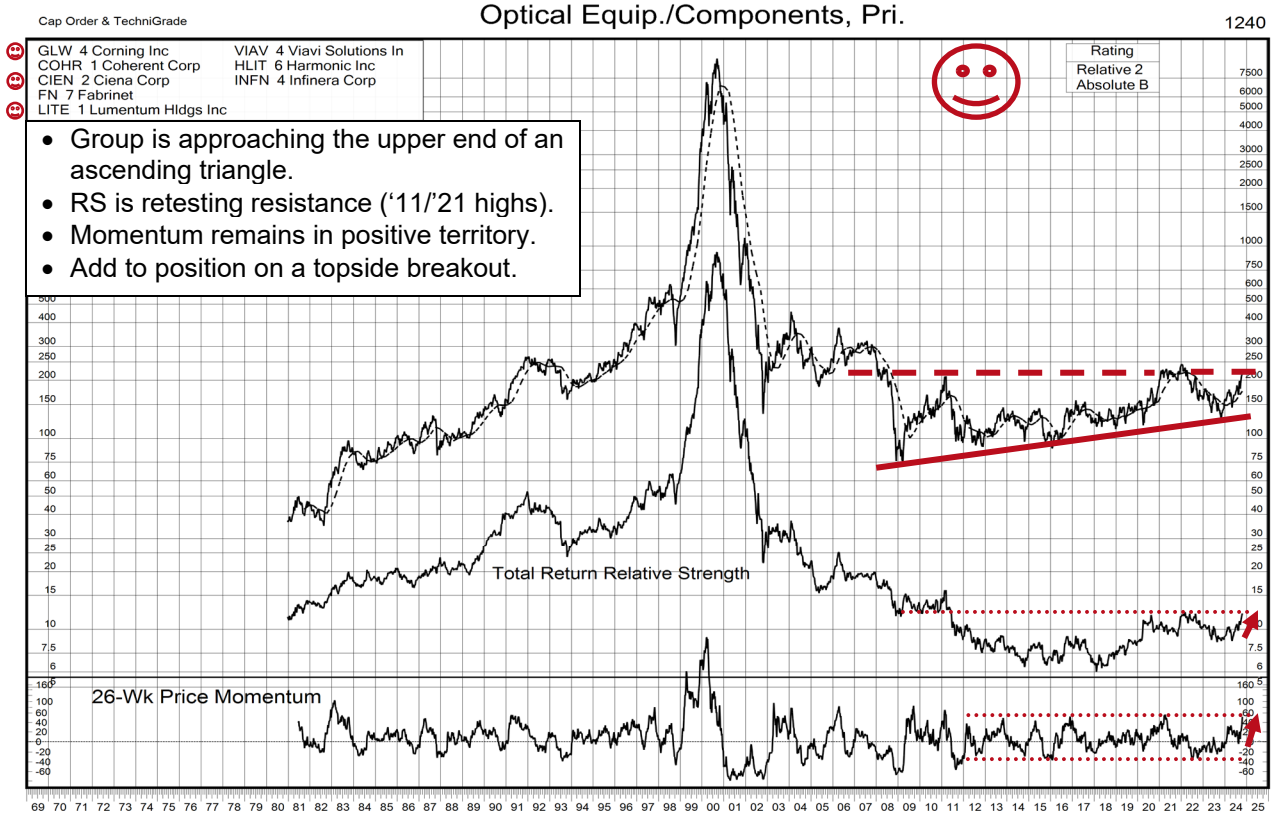




- CCL—Shares have broken out from an ascending triangle.
- Back above the 10-/30-week WMAs (bullish crossover).
- RS is confirming the breakout and impressive TechniGrade ranking.
- Add to positions, as we suspect more upside lies ahead.



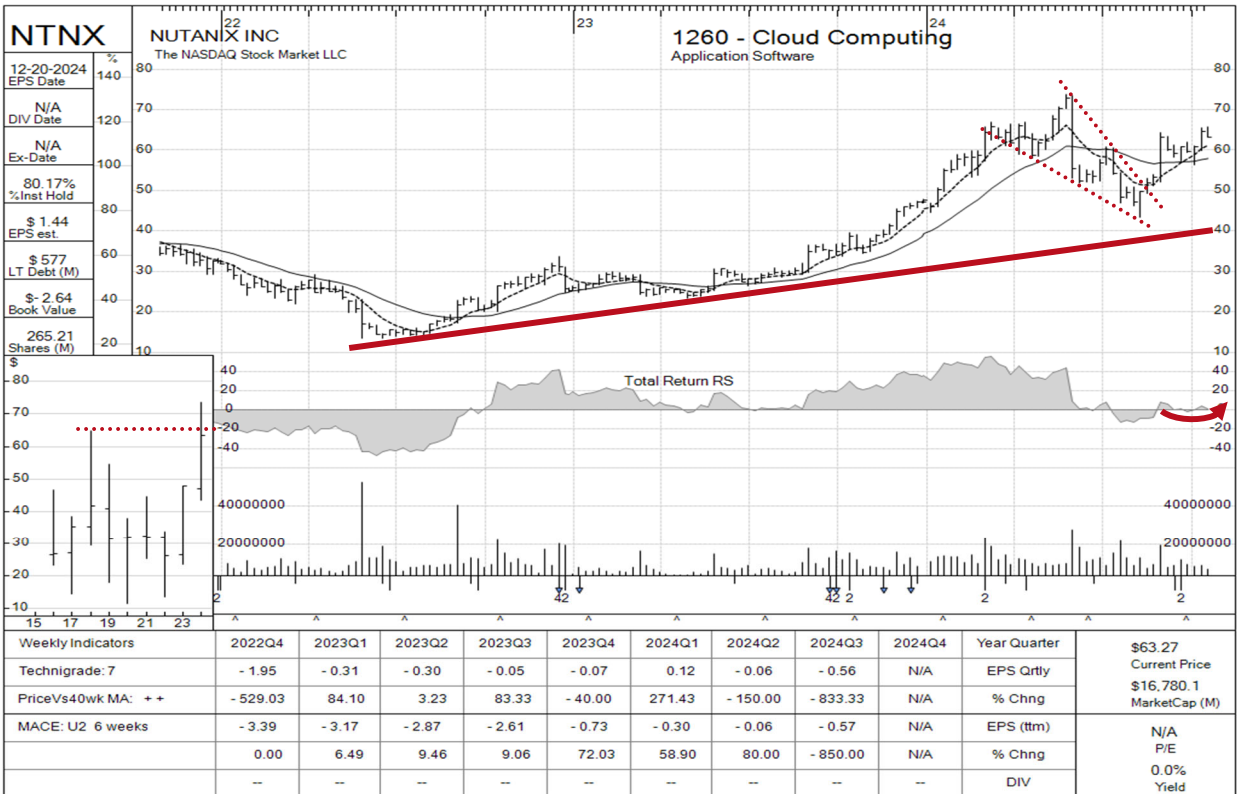
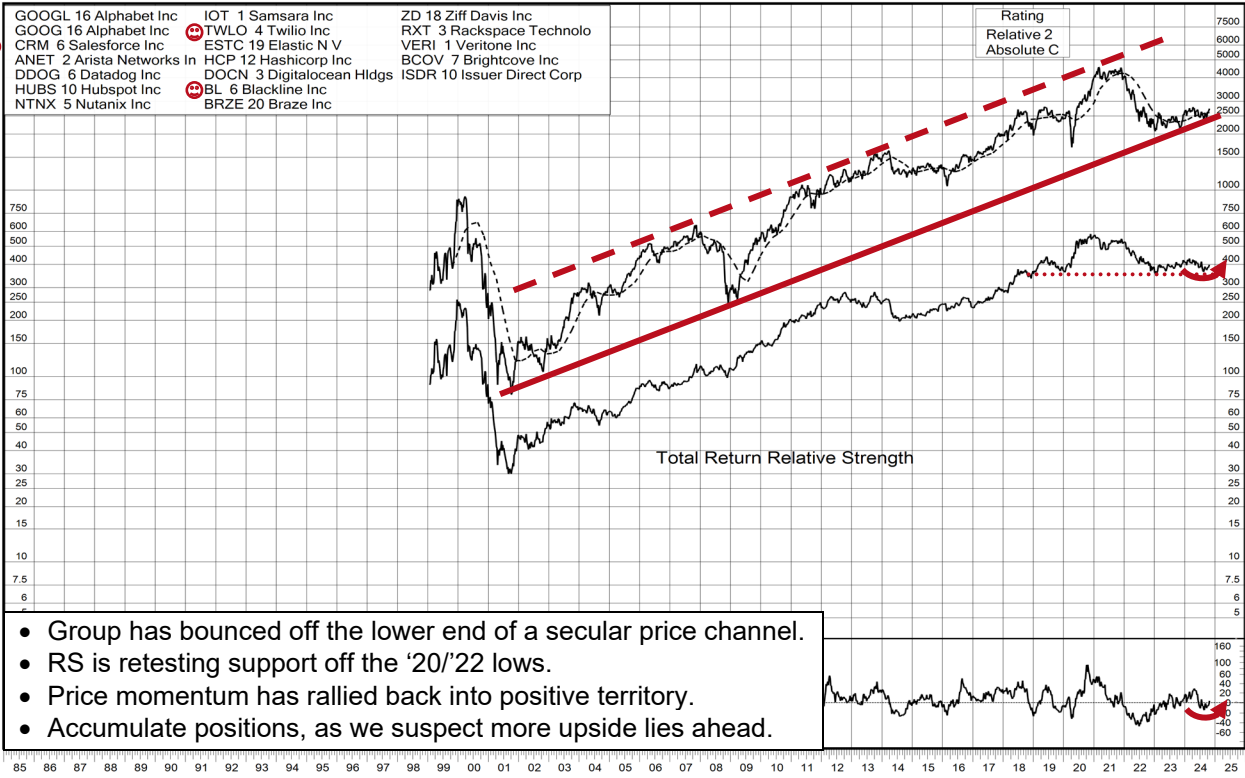
- MNDY—Shares are approaching the upper end of a rising price channel.
- Back above the 10-/30-week WMAs (bullish crossover).
- RS remains in positive territory and impressive TechniGrade ranking.
- Use pullbacks within the price channel to add to positions.



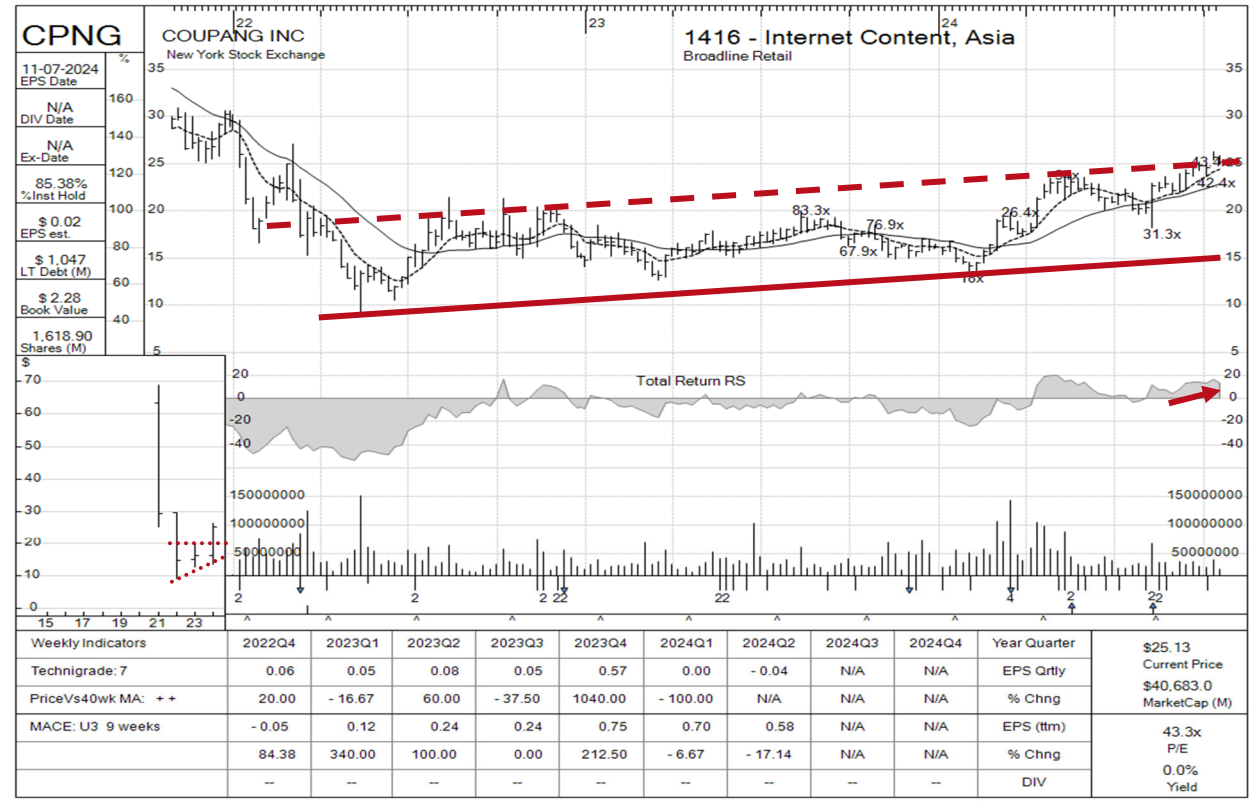
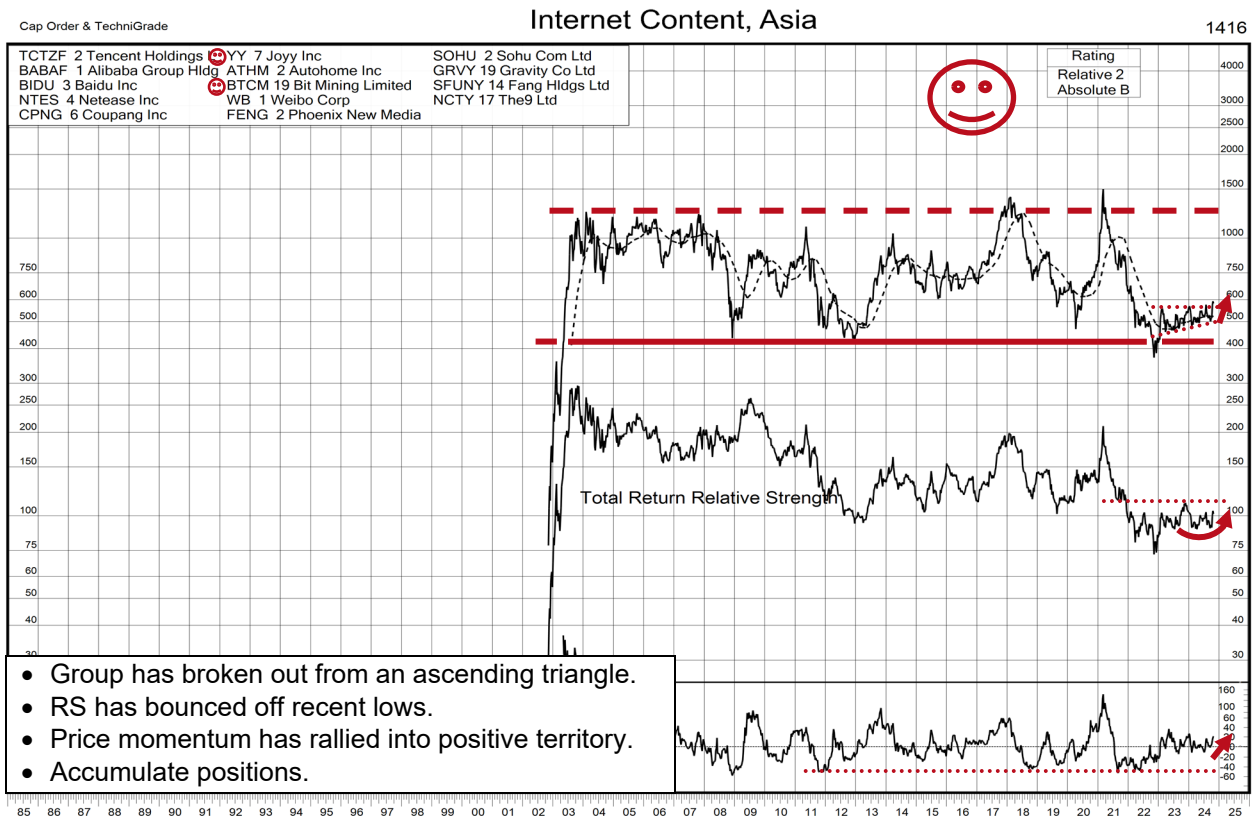
Cap Order & TechniGrade

Cloud Computing

1260

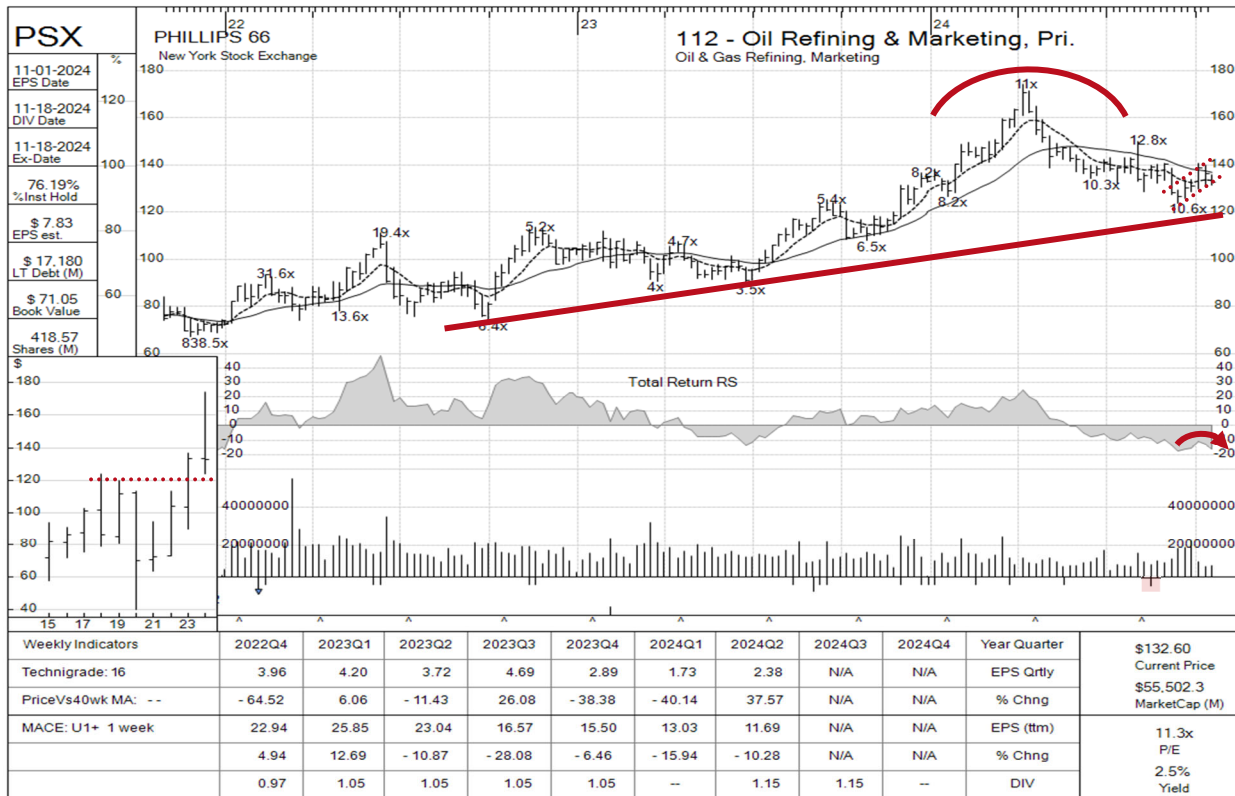
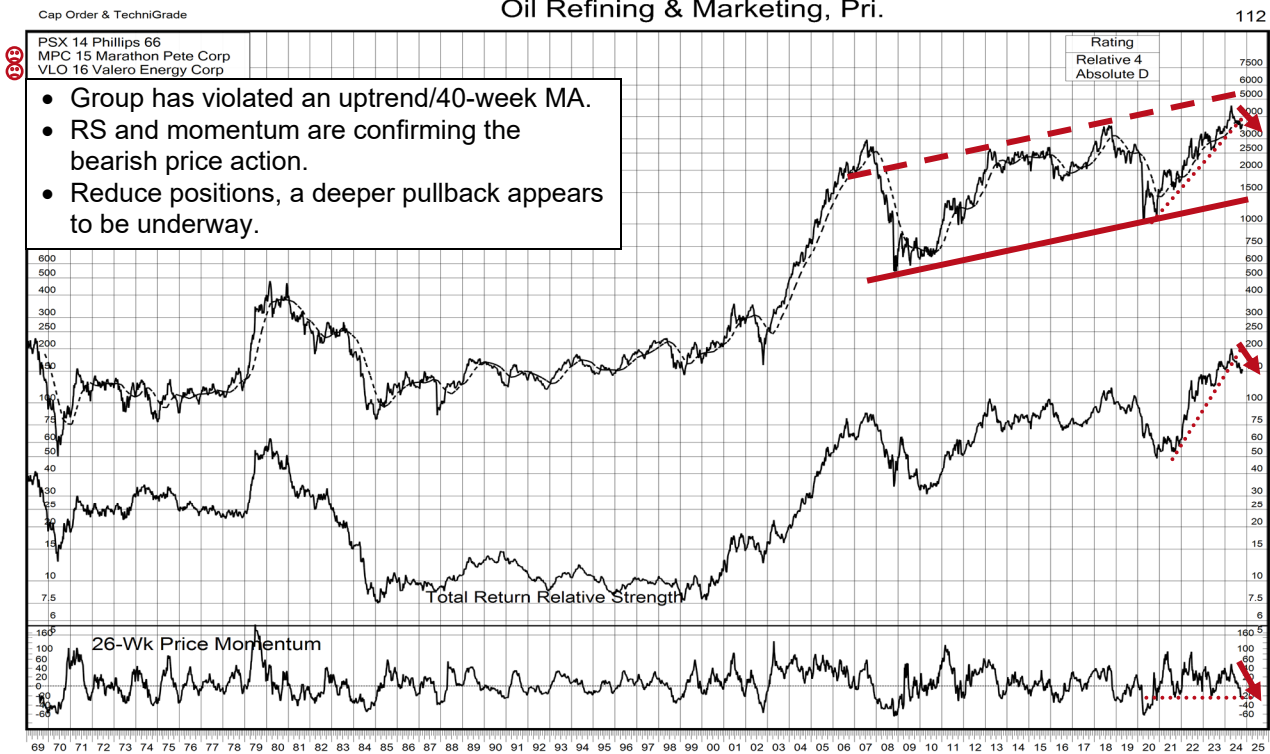


- NTNX—Shares have broken out from a falling wedge formation.
- Recent bullish crossover between the 10-/30-week WMAs.
- RS has inflected higher off the midline.
- Add to positions, a retest of the May highs near \$74 appears likely.

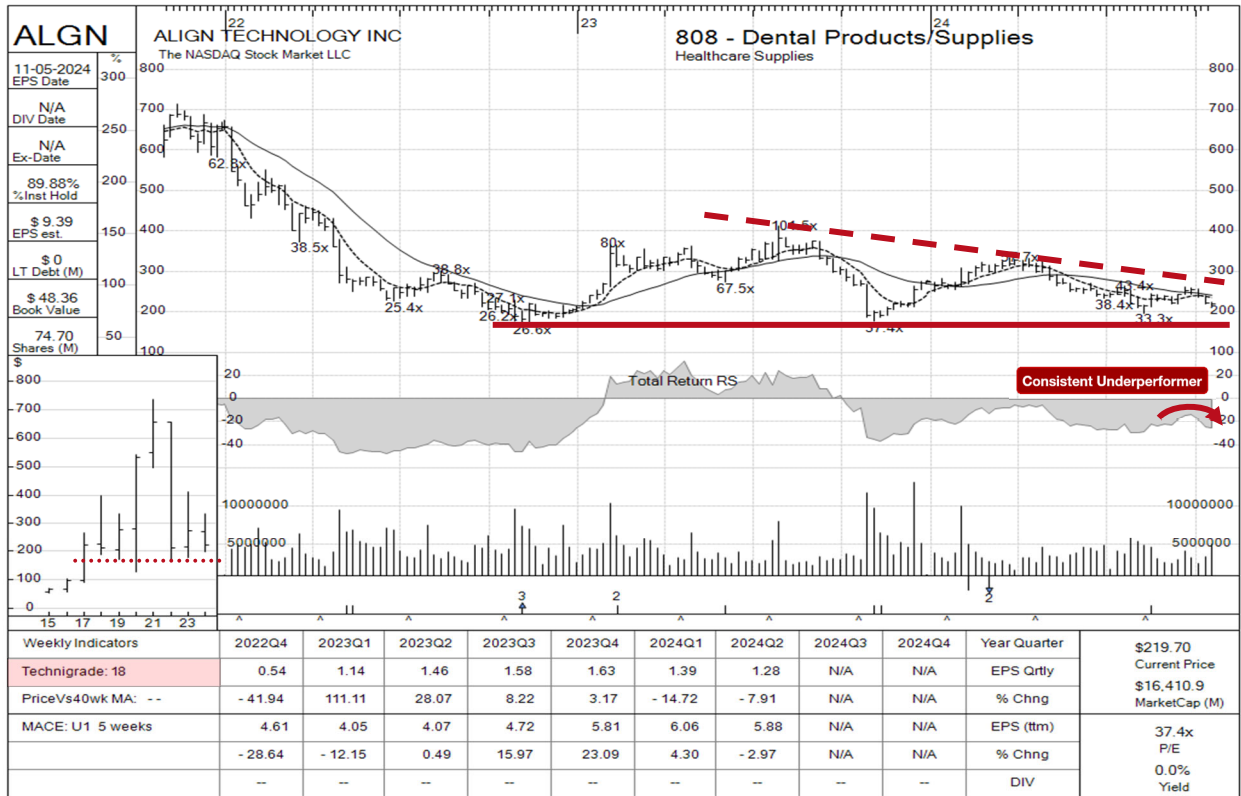
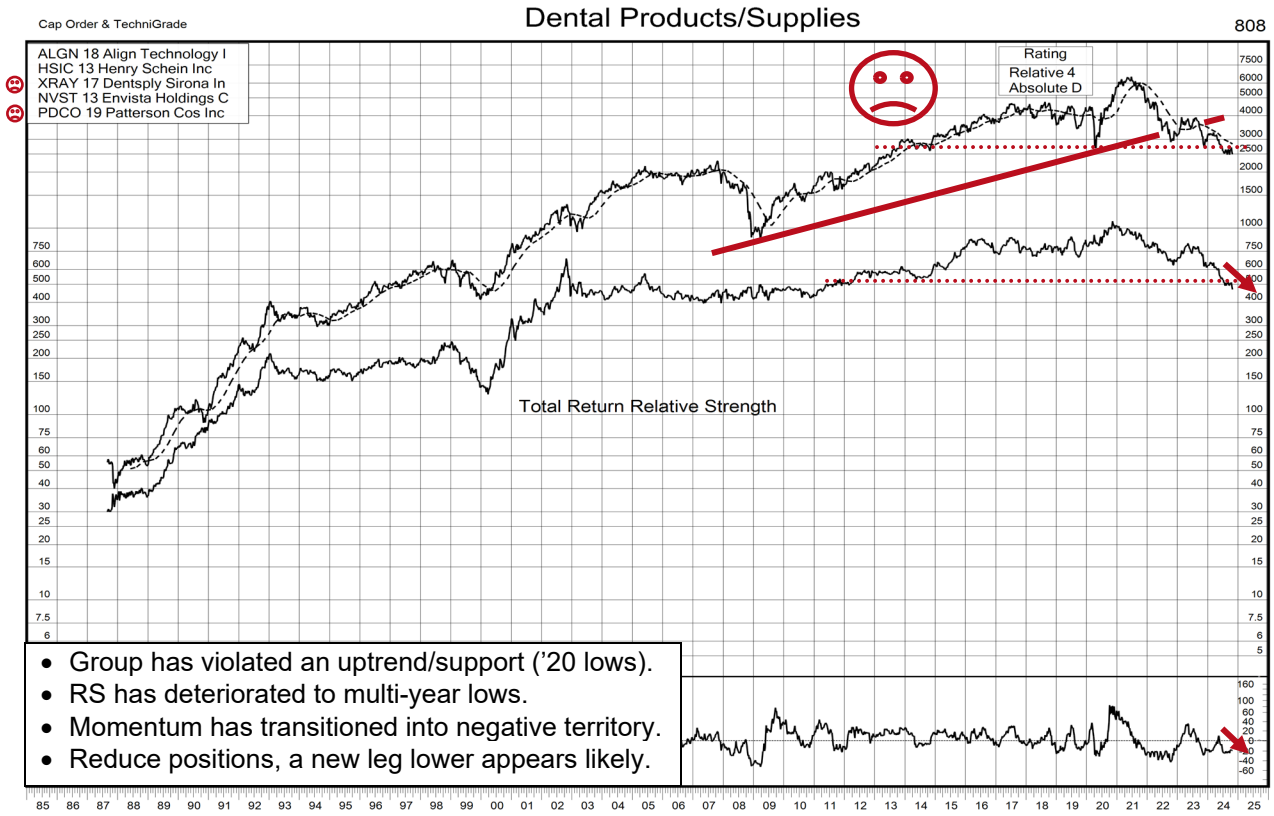


- CPNG—Shares are retesting the upper end of a rising price channel.
- Back above the 10-/30-week WMAs.
- RS has climbed into positive territory.
- Use pullbacks within the price channel to add to positions.

MicroGroup Highlights: This section includes several of our favorite bearish trade ideas in this month's Informed Investor publication.



- PSX—Shares are consolidating within a bearish flag formation.
- Back below the 10-/30-week WMAs.
- RS has deteriorated to multi-year lows and insider selling activity.
- Reduce positions on a break below support near \$129.



- ALGN—Shares are trading near the midpoint of a descending triangle.
- Back below the 10-/30-week WMAs.
- Consistent RS underperformer and weak TechniGrade ranking.
- Reduce positions, a retest of the '22/'23 lows appears likely.

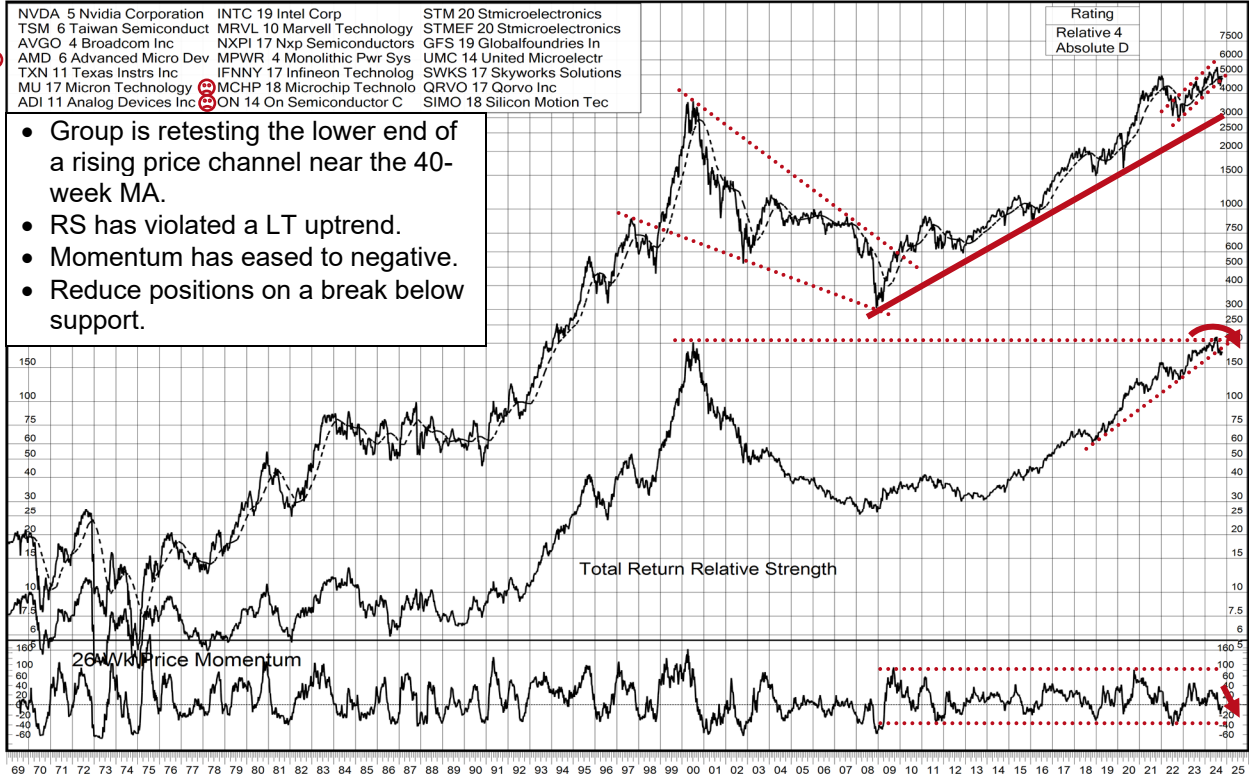
Cap Order & TechniGrade

Semiconductors, Pri.

1206

NVDA 5 Nvidia Corporation	INTC 19 Intel Corp	STM 20 Stmicroelectronics
TSM 6 Taiwan Semiconductor	MRVL 10 Marvell Technology	STMEF 20 Stmicroelectronics
AVGO 4 Broadcom Inc	NXPI 17 Nxp Semiconductors	GFS 19 Globalfoundries In
AMD 6 Advanced Micro Dev	MPWR 4 Monolithic Pwr Sys	UMC 14 United Microelectr
TXN 11 Texas Instrs Inc	FNNY 17 Infineon Technolog	SWKS 17 Skyworks Solutions
MU 17 Micron Technology	MCHP 18 Microchip Technolo	QRVO 17 Qorvo Inc
ADI 11 Analog Devices Inc	ON 14 On Semiconductor C	SIMO 18 Silicon Motion Tec

- Group is retesting the lower end of a rising price channel near the 40-week MA.
- RS has violated a LT uptrend.
- Momentum has eased to negative.
- Reduce positions on a break below support.



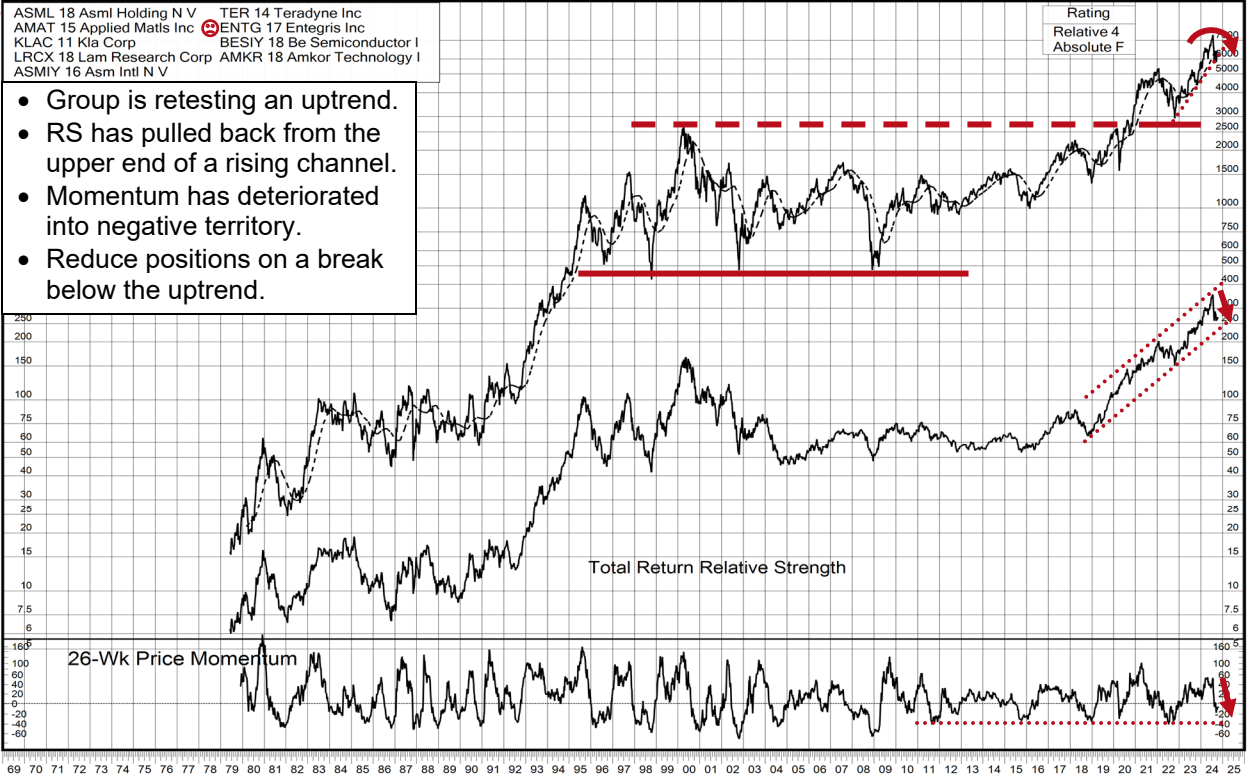
Cap Order & TechniGrade

Semiconductors Suppliers, Pri.

1209

ASML 18 Asml Holding N V	TER 14 Teradyne Inc
AMAT 15 Applied Matis Inc	ENTG 17 Entegris Inc
KLAC 11 Kla Corp	BESIY 18 Be Semiconductor I
LRCX 18 Lam Research Corp	AMKR 18 Amkor Technology I
ASMIY 16 Asm Intl N V	

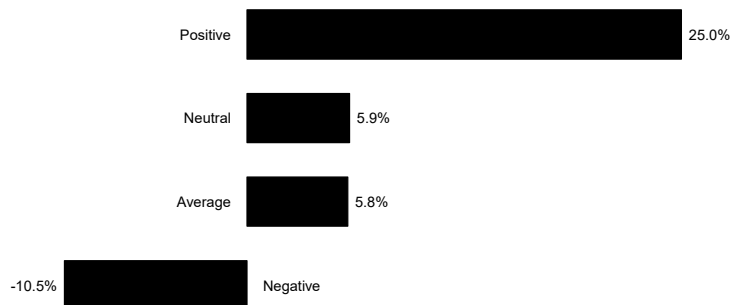
- Group is retesting an uptrend.
- RS has pulled back from the upper end of a rising channel.
- Momentum has deteriorated into negative territory.
- Reduce positions on a break below the uptrend.



Relative & Absolute Ratings:

All the numerical data in this publication is computer-generated, e.g., M.A.C.E, TechniGrade, etc., except for the MicroGroup and Sector Rating System. Each Group and Sector is subjectively rated on a relative and absolute basis, relying on many inputs, including fundamental and technical data. While the allowable relative ratings will be skewed to represent a bell-shaped curve, i.e., 30% outperform, 40% neutral, 30% underperform, the absolute ratings can, in theory, and may in practice, be highly skewed toward a decidedly bullish or bearish position.

UNWEIGHTED RELATIVE RATING -- YTD
2024 YTD — 10/18/24



Relative Ratings:

A numerical relative ranking from two through four signifies projected performance compared to the entire market.

Since the spectrum of securities prices can be said to be normally distributed (a bell curve), it follows that at any given juncture, a full range of performances from worst to best will be available. Thus, when assigning relative ratings, we adhere to these constraints by maintaining guideline allowable percentages for each number as outlined below:

Positives:

2= Outperform the market
(30.0 % of MicroGroups)

Neutral:

3= Perform in line with the market
(40.0% of MicroGroups)

Negatives:

4= Underperform the market
(30.0% of MicroGroups)

Absolute Rating

- A Buy
- B Accumulate on weakness
- C Hold
- D Sell on strength
- F Sell

UNWEIGHTED RELATIVE RATING -- CUMULATIVE

12/31/77 — 10/18/24



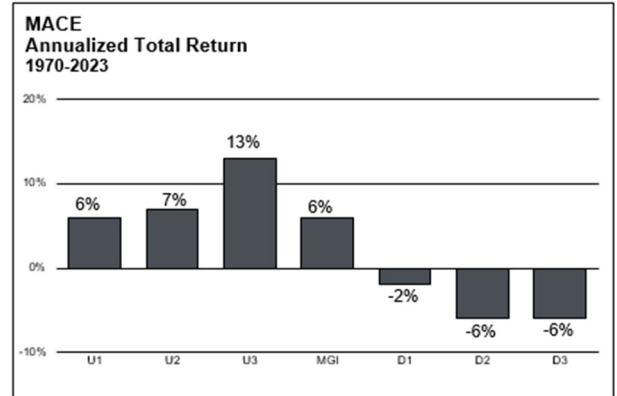
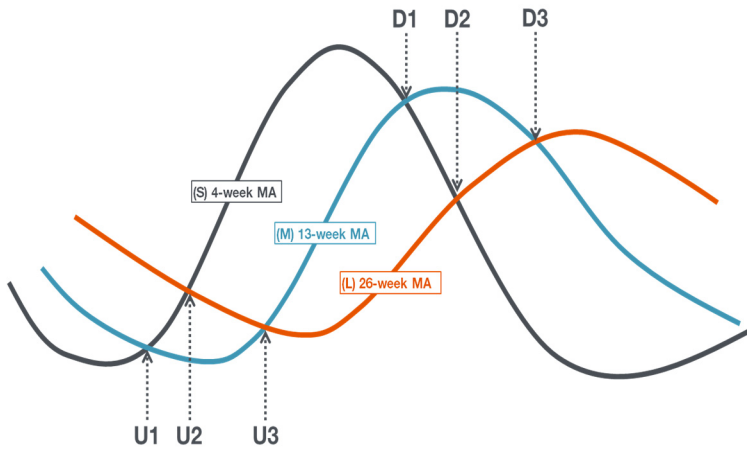
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DEFINITIONS

INDICATOR DEFINITIONS & HISTORICAL PERFORMANCE

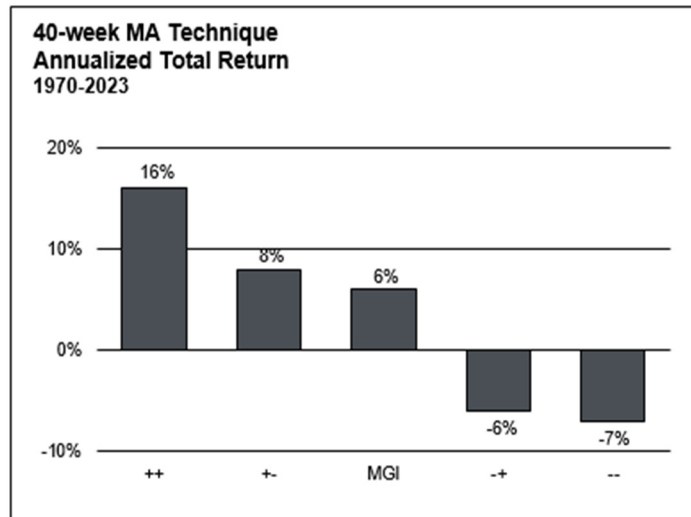
MACE (Moving Average Cycle Evaluation)

Entails looking at precise position of each Group's short (4-week, denoted by an "S"), intermediate (13-week, "M"), and longer term (26-week, "L") moving averages and related crossovers.



- U1 Possible uptrend (L > S > M)
 - U2* Confirmed uptrend (S > L > M)
 - U3* Well-defined uptrend (S > M > L)
 - D1 Possible downtrend (M > S > L)
 - D2 Confirmed downtrend (M > L > S)
 - D3 Well-defined downtrend (L > M > S)
- * Historically best performance

40-WEEK TECHNIQUE



Definitions

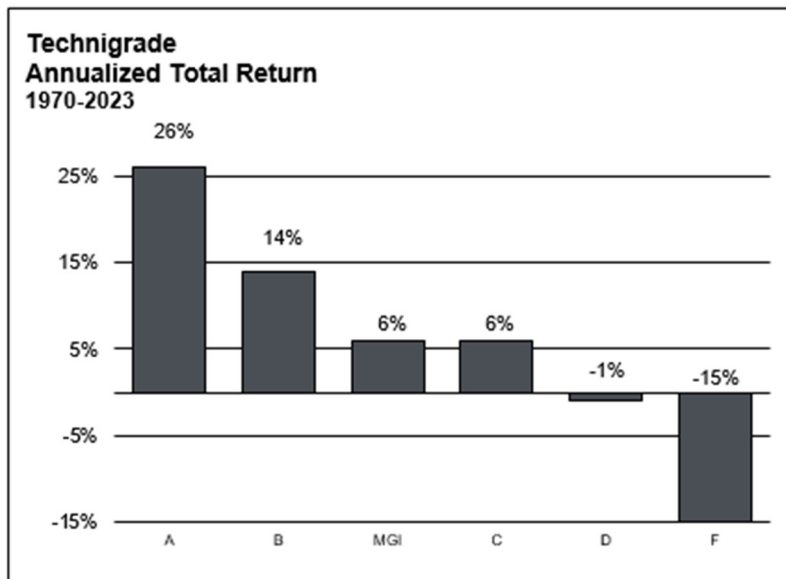
Price Avg. Explanation

- + + Price is above a rising 40-week Moving Average*
- + - Price is above a falling 40-week Moving Average*
- + Price is below a rising 40-week Moving Average
- - Price is below a falling 40-week Moving Average

* Historically best performance

TECHNIGRADE

The “*TechniGrade*” concept is simply a numerical way of looking at the relative (comparative) Performance of each Sector, *MicroGroup*, and issue over time. With this concept, the performance of each *MicroGroup* is compared to the performance of the *MicroGroup* universe of nearly 6,000 stocks, known as the “*MicroGroup Index*.” This process is then repeated until a ratio has been calculated over the last six-month period that supplies a heavier weighting to the most recent weeks. Based on these computer calculations, a *TechniGrade* rating from 1 (top 5% of performers) to 20 (bottom 5% of performers) is automatically assigned to each *MicroGroup* on an ongoing basis.



KEY

TechniGrade

A ranking from 1 (best) to 20 (worst) based on relative performance. Historically Groups with a *TechniGrade* of 1 - 4 give the best performance, but the trend in *TechniGrade* is also important. Read from the right to the left to identify the *TechniGrade* trend.

MACE

U1 Possible uptrend
 *U2 Confirmed uptrend
 *U3 Well-defined uptrend
 D1 Possible downtrend
 D2 Confirmed downtrend
 D3 Well-defined downtrend

40-Week Moving Average

P* A* Explanation
 + + Price is above a rising 40-week Moving Average**
 + - Price is above a falling 40-week Moving Average**
 - + Price is below a rising 40-week Moving Average
 - - Price is below a falling 40-week Moving Average

* Historically best performance

* P= Price, A=Average
 ** Historically best performance

COMPANY INDEX

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Bloomberg
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New York, NY 10022

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(213) 820-7011

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Thomson Reuters Group PLC
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St. Louis, MO 63122

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Auburn, MA 01501

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Redmond, WA 98052 USA

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Westmont, IL 60559

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