TPA-RRG Report

- **What is hot and what is not**.
 TPA-RRG captures the inevitable <u>movement of stocks into and out of favor</u>.
- **Scores and ranking**
  Clients can quickly see which stocks are showing the <u>best and worst relative strength</u> characteristics. TPA found that using RRG's was very beneficial, but it took some time to parse through, so we simplified the process by creating a score for each stock and sector.
- **The best of both worlds – RRG & TPA**
  Now, clients can use <u>TPA-RRG scores and rankings</u> to identify stocks that are not only moving into favor, but are also technically positive.
- ***TPA-RRG analyzes every stock in the Russell 1000 and 25 major sector & subsector ETFs***
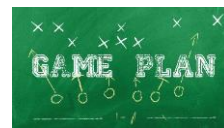
*Find links to more information and instructional videos below.*

THE REPORT

Top 20-Bottom 20

TECH-related + and Healthcare -. Pay special attention to sectors that have been beaten up – Cybersecurity and Cloud Computing.

Sectors

Cyber security and Cloud Computing are the strongest. The charts below show that investors are trying to find bargains as these sectors were down 28% and 39% in 2022, respectively, but are up 10% and 23% in the past 2 months. The S&P500 was only down 19% in 2022 and is only up 9% in the past 2 months.

Relative Performance - Cyber Security, Cloud, and S&P500 2022
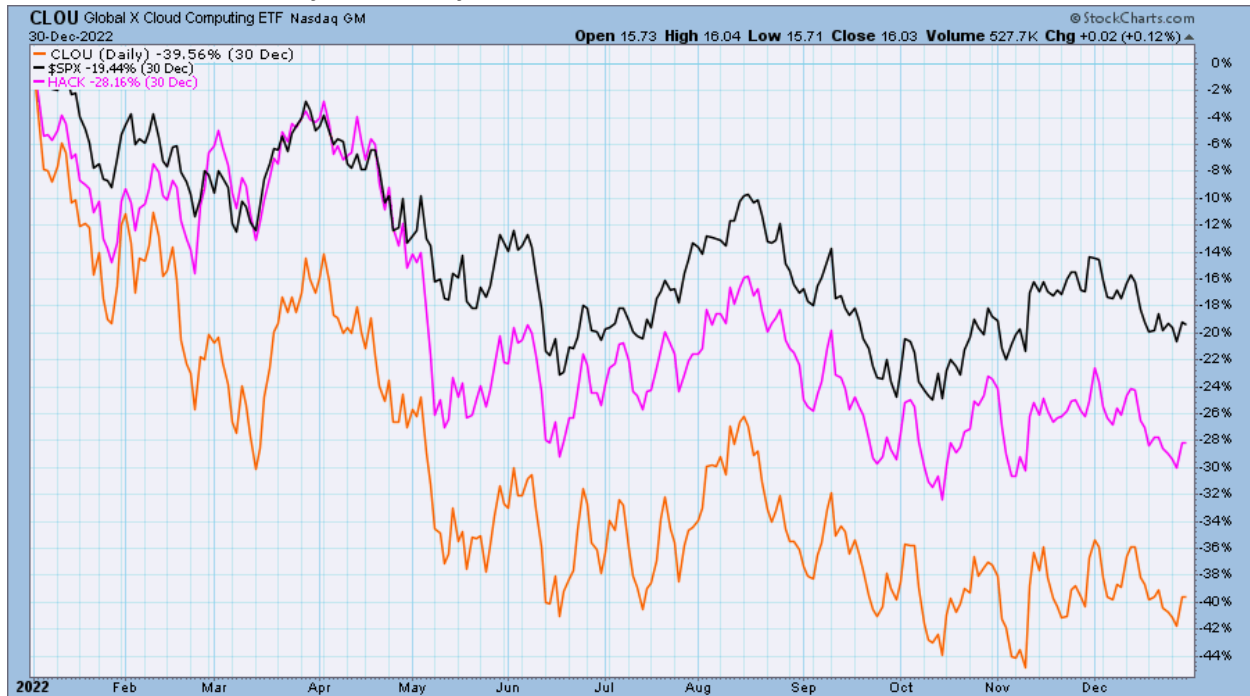
Relative Performance - Cyber Security, Cloud, and S&P500 the past 2 months
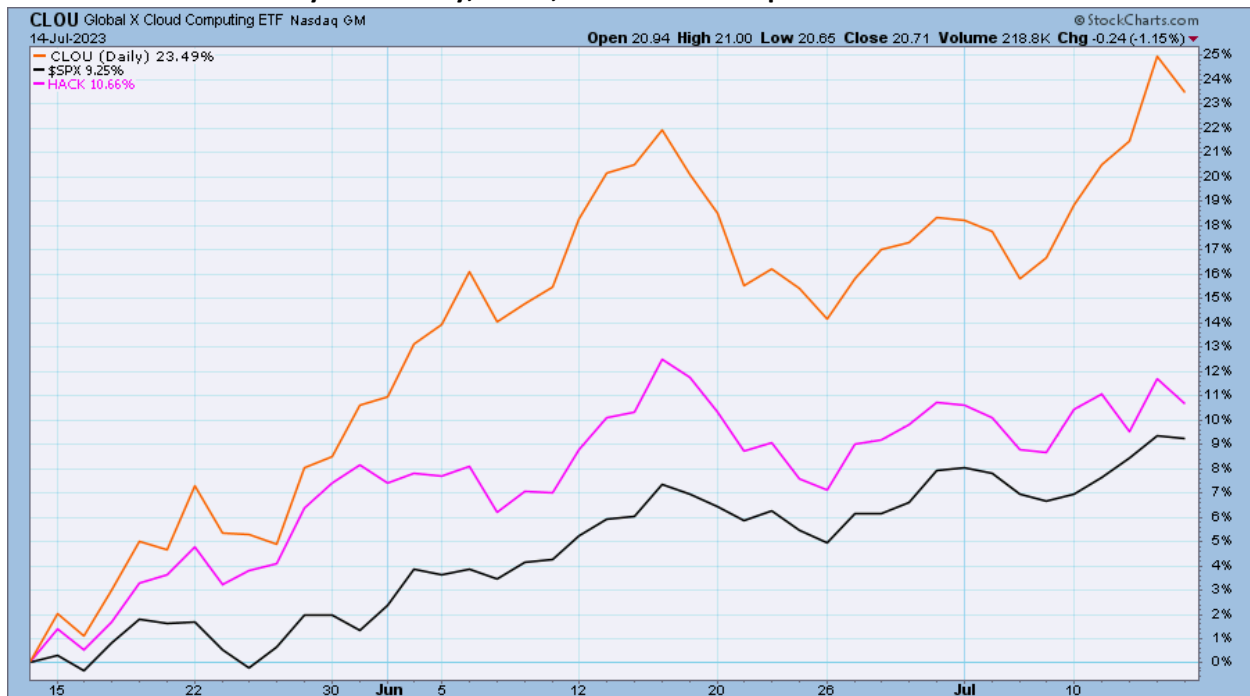
Market

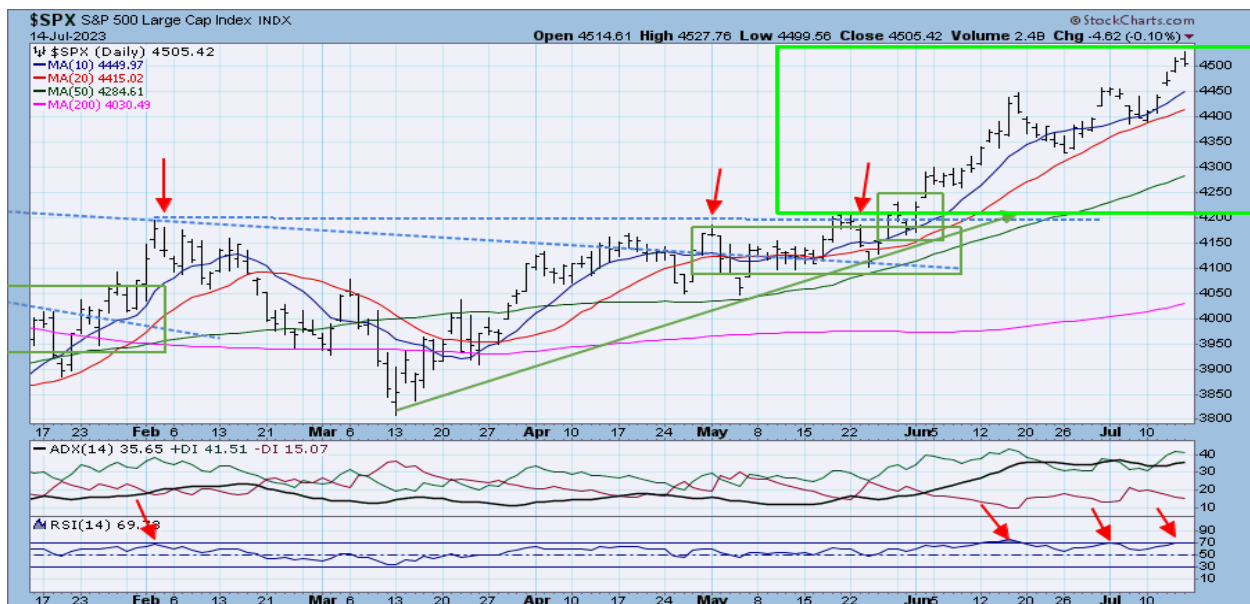TPA is still long-term positive on stocks, but it may be time to pause the buying.

1. The S&P500 is overbought. RSI is hovering just below RSI=-70. The charts below show that previously this has been a pull-back signal.
2. TPA notes that, on Friday, its Short-term Market Indicator and the Percent of stocks trading above their 50DMA (85%).

Stocks may be extended here.

S&P500

S&P500 – zoom

TPA MARKETSCOPE (most indicators use Top 1000 stocks, detailed explanation below)   Friday, July 14, 2023

Since 2009, TPA has used the indicators below to identify extreme inflection points in the market for institutional clients.

TURNING POINT ANALYTICS

INDICATORS	TODAY	EXTREME LIMITS		ALERT	HISTORICAL IMPORTANCE
		LOW	HIGH		
Short Term Market Score (SPY, see below)	3.2001	-3.50	4.00	STRONG SELL	Works better for the BUY side - accurate on the BUY side 4 out of 5 times since 2010.
Percent Stocks Above 2 STD DEV Bollinger Band	22.43%		40%		Valid short term indicator of an overbought market.
Percent Stocks Below 2 STD DEV Bollinger Band	1.21%	40%			Valid short term indicator of an oversold market.
Percent Stocks Above 50DMA	85.11%	15%	85%	Extreme	Very accurate on the BUY side. Effective irregularly on the SELL side.
Percent Stocks RSI above 70	16.80%		30%		Mildly successful on predicting short term tops.
Percent Stocks RSI below 30	0.80%	55%			Valid indicator of short term lows.
Percent Stocks 50DMA > 200DMA	53.52%	25%	70%		Medium term indicator of a low extreme and high extreme. (see note below)
Percent R1000 @ bottom 10% of 2 Std Dev BB Band	0.80%		40%		Monitor
Percent R1000 @ top 10% of 2 Std Dev BB Band	17.40%	40%			Monitor

TPA-RRG TOP 20 & BOTTOM 20 (table below)

Buy	Prices as of 7/14/23			TOP 20					STOCK	SECTOR	TOTAL
Sell									TPA-RRG	TPA-RRG	TPA-RRG
Code	Name	Last	RRG Ratio	RRG Momentum	Quadrant	Mkt Cap ($MIL)		TPA Sector	SCORE	SCORE	SCORE
SPLK	Splunk Inc	108.95	100.78	102.25	Leading	$18,042		Cyber Security	5.80	3.26	9.06
TEAM	Atlassian Corporation Plc	178.97	99.80	100.57	Improving	$46,186		Technology	6.02	1.01	7.02
EFX	Equifax Inc.	236.52	100.28	101.76	Leading	$29,008		Industrial	4.97	1.59	6.56
GLOB	Globant S.A.	191.72	101.23	105.52	Leading	$8,104		Technology	4.94	1.01	5.95
ZS	Zscaler Inc	145.43	109.44	111.99	Leading	$21,217		Tech-Software	4.41	1.45	5.87
FIVN	Five9 Inc	85.70	97.14	104.16	Improving	$6,100		Tech-Software	4.35	1.45	5.81
COHR	Coherent Corp	50.46	102.40	110.20	Leading	$7,550		Technology	4.66	1.01	5.66
MCHP	Microchip Technology Inc.	89.72	98.52	101.08	Improving	$48,838		Semiconductor	4.09	1.46	5.56
U	Unity Software Inc	44.34	105.96	110.74	Leading	$16,790		Technology	4.52	1.01	5.53
MKSI	MKS Instruments Inc.	107.43	100.41	103.52	Leading	$7,173		Technology	4.47	1.01	5.47
ACN	Accenture plc	315.77	102.25	102.31	Leading	$209,770		Technology	4.40	1.01	5.41
TER	Teradyne Inc.	113.09	98.61	100.78	Improving	$17,533		Technology	4.22	1.01	5.23
RNG	RingCentral Inc.	38.28	94.53	108.05	Improving	$3,660		Tech-Software	3.68	1.45	5.14
LUV	Southwest Airlines Co	36.36	93.57	105.23	Improving	$21,637		Transportation	3.39	1.64	5.03
ALK	Alaska Air Group Inc.	52.36	99.48	104.71	Improving	$6,697		Industrial	3.36	1.59	4.95
W	Wayfair Inc	69.51	109.80	113.80	Leading	$7,805		Retail	4.38	0.51	4.90
LYFT	Lyft Inc	11.30	85.13	102.38	Improving	$4,273		Transportation	3.23	1.64	4.87
TNL	Travel+Leisure Co	41.82	95.09	100.46	Improving	$3,191		Consumer Discretionary	3.26	1.53	4.79
NCNO	nCino Inc	31.03	99.80	105.68	Improving	$3,483		Technology	3.77	1.01	4.78
GNRC	Generac Holdings Inc	142.88	103.30	104.31	Leading	$8,886		Industrial	3.17	1.59	4.76

Buy	Prices as of 7/14/23			BOTTOM 20					STOCK	SECTOR	TOTAL
Sell									TPA-RRG	TPA-RRG	TPA-RRG
GWRE	Guidewire Software Inc	78.87	97.87	94.77	Lagging	$6,424		Tech-Software	-3.27	1.45	-1.82
LVS	Las Vegas Sands Corp	60.94	97.73	94.34	Lagging	$46,575		Consumer Discretionary	-3.36	1.53	-1.82
OLLI	Ollies Bargain Outlet Holdings Inc	69.00	101.24	97.18	Weakening	$4,264		Retail	-2.53	0.51	-2.01
FOUR	Shift4 Payments Inc	67.13	95.80	93.96	Lagging	$3,985		Technology	-3.22	1.01	-2.22
VRSN	Verisign Inc.	216.63	99.77	98.36	Lagging	$22,550		Internet	-3.94	1.42	-2.52
DKS	Dicks Sporting Goods Inc.	134.93	94.63	94.14	Lagging	$11,635		Retail	-3.27	0.51	-2.76
PEN	Penumbra Inc	314.93	110.16	98.29	Weakening	$12,047		Health Care	-2.11	-0.99	-3.10
LW	Lamb Weston Holdings Inc	112.71	103.07	96.89	Weakening	$16,422		Consumer Staples	-2.28	-1.00	-3.29
MKC	McCormick & Co. Inc. - Ordinary Sha	85.77	102.71	99.53	Weakening	$23,014		Consumer Staples	-2.38	-1.00	-3.39
EXEL	Exelixis Inc	19.39	100.92	97.09	Weakening	$6,314		Health Care	-2.43	-0.99	-3.42
BEPC	Brookfield Renewable Corporation -	32.06	100.30	96.61	Weakening	$11,838		Utilities	-2.60	-1.01	-3.61
MDLZ	Mondelez International Inc.	72.28	100.91	97.47	Weakening	$98,435		Consumer Staples	-2.72	-1.00	-3.72
MASI	Masimo Corp	149.57	91.02	90.41	Lagging	$7,894		Health Care	-3.24	-0.99	-4.23
BRKR	Bruker Corp	74.09	95.11	94.32	Lagging	$10,871		Health Care	-3.25	-0.99	-4.24
CHE	Chemed Corp.	538.44	97.48	97.09	Lagging	$8,087		Health Care	-3.26	-0.99	-4.25
CERT	Certara Inc	19.25	91.11	87.10	Lagging	$3,077		Health Care	-3.28	-0.99	-4.27
AXON	Axon Enterprise Inc	192.24	93.33	92.43	Lagging	$14,204		Aerospace & Defense	-3.29	-1.04	-4.33
NTRA	Natera Inc	49.56	96.34	93.07	Lagging	$5,665		Health Care	-3.36	-0.99	-4.36
ZTS	Zoetis Inc	172.19	97.81	95.79	Lagging	$79,571		Agribusiness	-3.59	-1.01	-4.60
INGR	Ingredion Inc	108.52	99.49	98.34	Lagging	$7,164		Consumer Staples	-3.73	-1.00	-4.73

Relative Rotation Graph for Top 20 and Bottom 20 is provided below.

Also, use the following link that shows RRG over time - how stocks move in and out of favor over time:
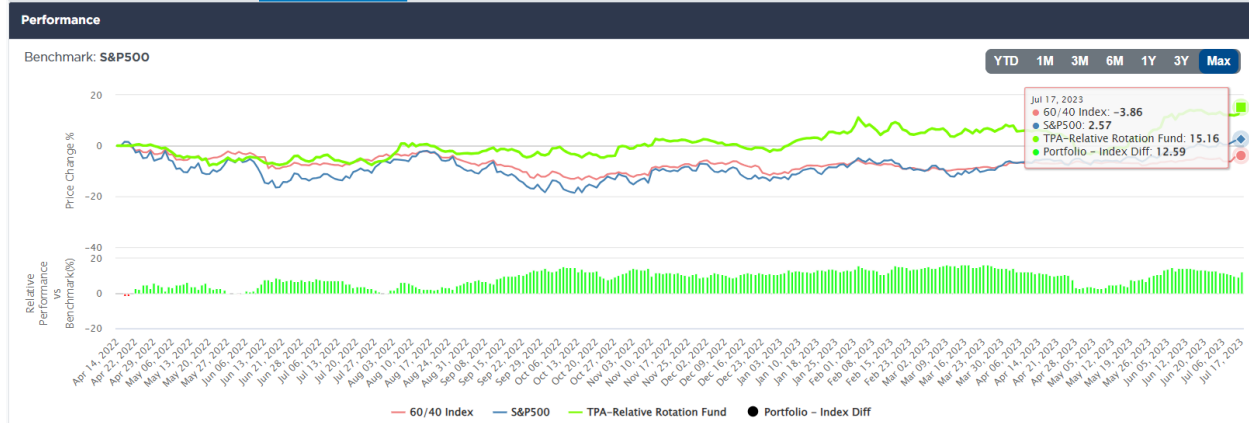*https://youtu.be/DlKUfKdF1xM*
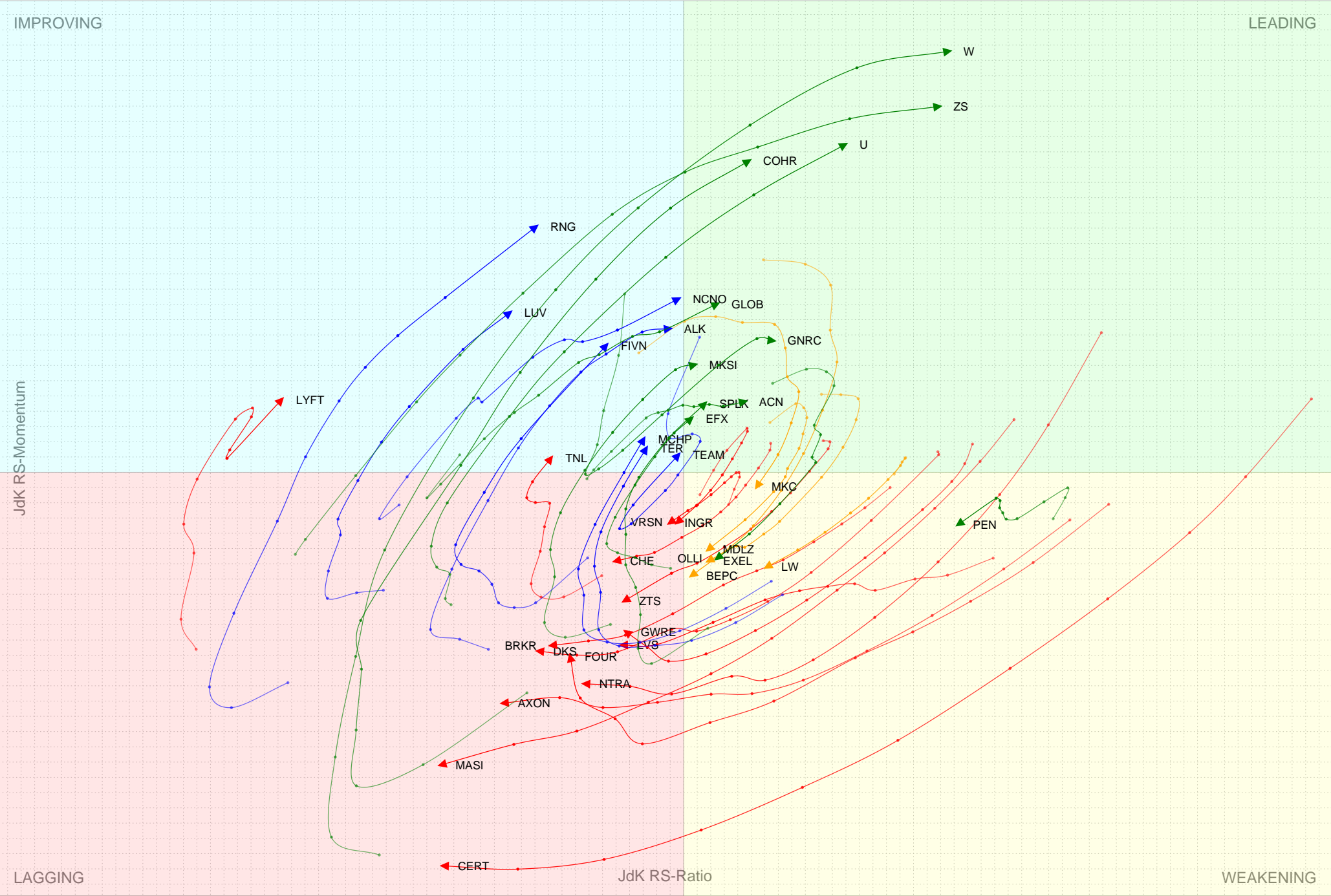
Weekly Relative Rotation Graph®   Date: 7/14/2023   Benchmark: S&P 500 INDEX - SPX (WI)

Relative Rotation Strategies (RSS)

1. The Relative Rotation Fund

Most recent performance:

<u>Since inception</u>

The Relative Rotation Fund is created using the weekly Top and Bottom ranked stocks in the TPA-RRG report. The fund holds 60 stocks; 30 long and 30 short. The portfolio is created by buying the Top 10 and selling short the Bottom 10 ranked stocks each week. Screens are used to ensure that overbought and oversold stocks are not included. Long positions have twice the weight of short positions. This is a nod to history, which has shown that stocks approximately go up twice as much as down on a daily basis. Since new stocks are added each week, each position is held for 3 weeks. Rebalancing occurs as close as possible to Friday's closing prices. (Trades and returns are hypothetical.)

2. Top 5 and Bottom 5 ETFs

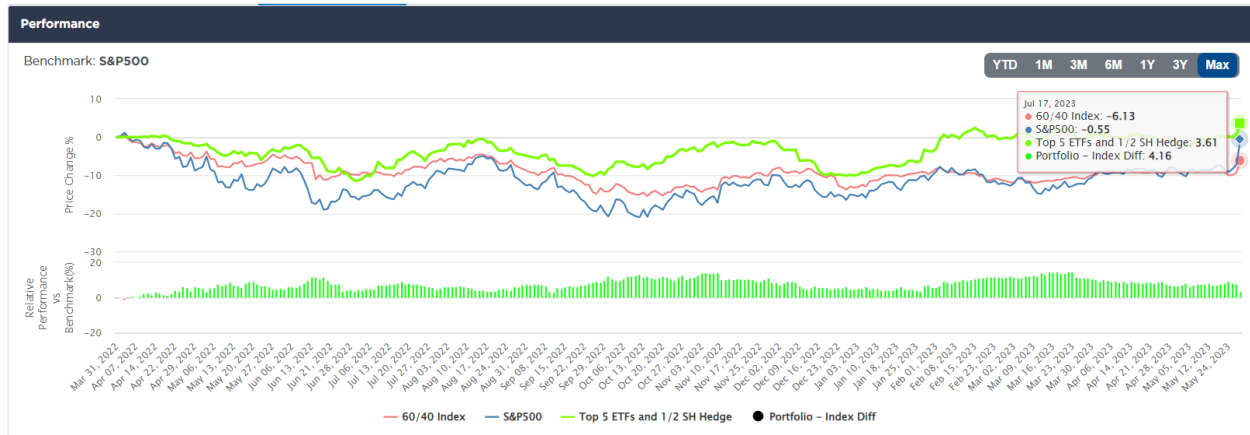Most recent performance:

<u>Since inception</u>
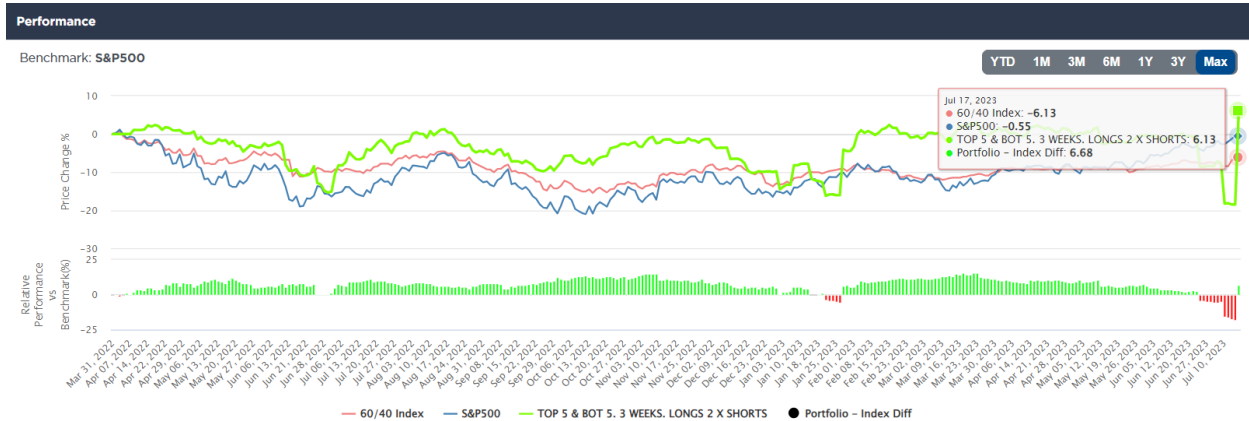
Top 5 and Bottom 5 ETFs – Buys the Top 5 ETFs and Sells short the Bottom 5 ETFs each week. Each position is held for 3 weeks. The 3-week holding period means that each week we trade out of the positions from 3 weeks ago and add the current week's TOP 5 and Bottom 5. Each week's trades account for approximately 1/3 of the portfolio. Shorts are always ½ the value of longs.

3. Top 5 ETFs and a S&P500 Hedge
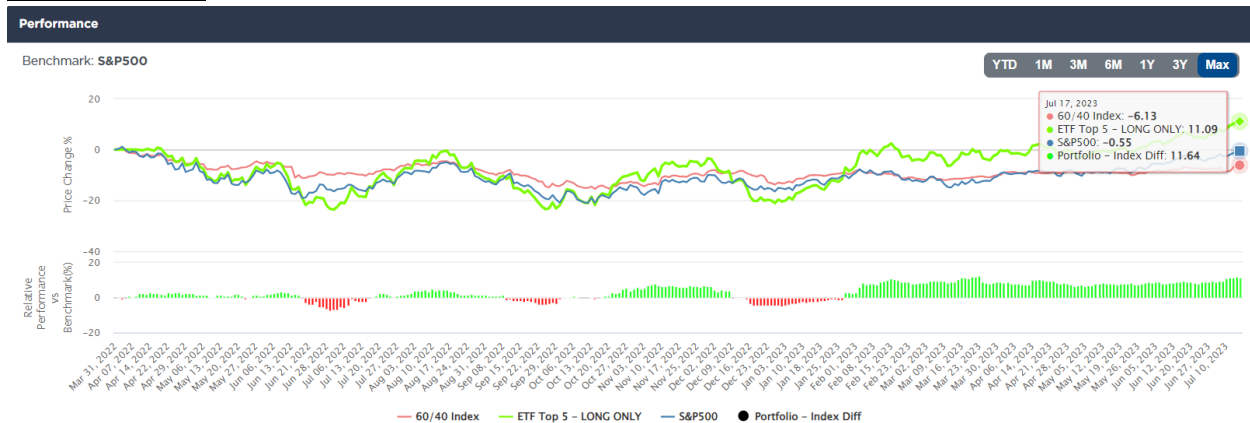
Most recent performance:

<u>Since inception</u>

Top 5 ETFs and a S&P500 Hedge *– Buys the Top 5 ETFs each week and maintains a long SH position that is ½ the value of the long ETFs.*

4. Top 5 ETFs – Long Only

Most recent performance:

<u>Since inception</u>

Top 5 ETFs – Long Only *– Each week the TOP 5 ETFs are purchased. The holding period is 3 weeks. Each week accounts for 1/3 of the portfolio.*

TPA-RRG 27 SECTOR ETFS

TPA-RRG U.S. SECTOR & SUBSECTOR ETFS — 7/15/23

Code	Name	Last	RRG Ratio	RRG Momentum	Quadrant	TPA-RRG SCORE
HACK	Cyber Security	50.54	100.00	100.73	Leading	6.52
CLOU	Cloud Computing	20.71	101.87	101.90	Leading	4.32
IYT	Transportation	254.54	98.24	101.01	Improving	3.28
OIH	Oil Services	320.67	90.86	101.58	Improving	3.25
XLI	Industrial	108.61	97.13	100.34	Improving	3.18
XOP	Oil&Gas E&P	129.07	91.76	100.79	Improving	3.07
XLY	Consumer Discretionary	174.92	103.33	101.78	Leading	3.07
XLF	Financials	34.25	93.14	100.49	Improving	3.03
SMH	SEMI	156.90	108.50	101.77	Leading	2.93
IGV	Software	358.69	106.11	100.92	Leading	2.91
FDN	Internet	170.60	104.40	100.78	Leading	2.83
XLK	TECH	175.99	107.24	100.68	Leading	2.01
XME	Metals & Mining	51.56	89.72	98.75	Lagging	1.04
TAN	Solar	70.72	91.04	98.46	Lagging	1.04
XRT	Retail	65.21	92.60	99.90	Lagging	1.03
ITB	Home Construction	88.92	105.95	99.94	Weakening	0.98
XLV	Health Care	131.70	94.76	98.76	Lagging	-1.99
XLC	Communications	67.15	105.05	99.39	Weakening	-1.99
XLP	Staples	74.28	95.49	97.90	Lagging	-2.01
IYR	Real Estate	89.15	93.96	99.61	Lagging	-2.02
XLU	Utilities	66.85	93.04	97.84	Lagging	-2.02
MOO	Agribusiness	83.64	90.76	98.30	Lagging	-2.02
XLE	Energy	81.45	91.04	98.45	Lagging	-2.03
PPH	Pharma	77.89	95.19	97.87	Lagging	-2.03
XLB	Materials	83.26	94.76	99.30	Lagging	-2.05
ITA	Aerospace & Defense	116.20	95.50	98.76	Lagging	-2.08
SOCL	Social Media	39.66	98.45	98.29	Lagging	-2.16

TPA-RRG U.S. SECTOR & SUBSECTOR ETFS - HISTORY

| Rank	12/9/22 Code	12/16/22 Code	12/23/22 Code	12/30/22 Code	1/6/23 Code	1/13/23 Code	1/20/23 Code	1/27/23 Code	2/3/23 Code	2/10/23 Code	2/17/23 Code	2/24/23 Code	3/3/23 Code	3/10/23 Code	3/17/23 Code	3/24/23 Code	3/31/23 Code	4/7/23 Code	4/14/23 Code	4/21/23 Code
1	MOO	PPH	PPH	IYT	IYT	SMH	SOCL	SOCL	SOCL	FDN	CLOU	XLK	XLK	XLK	IGV	IGV	HACK	HACK	XLU	XLP
2	XRT	XLB	XLB	PPH	SMH	IYT	XLU	CLOU	CLOU	XLK	IGV	IGV	IGV	IGV	FDN	XLK	CLOU	CLOU	HACK	XLU
3	XLB	IYT	SMH	XLU	XLU	SOCL	XLC	XLC	FDN	XLC	FDN	FDN	FDN	XLK	XLK	FDN	XLK	FDN	FDN	TAN
4	IYT	SMH	MOO	SMH	SOCL	CLOU	FDN	FDN	XLK	IGV	XLK	FDN	CLOU	XLY	HACK	FDN	FDN	IGV	XLC	HACK
5	SMH	MOO	SOCL	SOCL	IYR	XLC	SMH	IGV	IGV	SOCL	XLC	XLY	XLY	XLC	XLY	SMH	IGV	XLC	IGV	FDN
6	PPH	SOCL	IYR	IYR	PPH	XLK	IYT	IYR	XLK	HACK	XLY	CLOU	XLC	CLOU	XLC	IYT	SMH	XLK	SMH	XLY
7	SOCL	XRT	IYT	XRT	XLB	IYR	IYR	IYT	IYR	ITB	HACK	SMH	HACK	HACK	SMH	XLC	XLK	XLK	XLK	IGV
8	ITA	XLI	XRT	MOO	XME	XRT	IGV	SMH	ITB	IYT	XRT	XRT	SMH	SMH	CLOU	CLOU	XLY	XLY	XLY	SMH
9	XLI	ITB	ITA	XLI	ITB	ITB	PPH	ITB	XRT	CLOU	HACK	HACK	XRT	XRT	SOCL	XLC	SMH	XLP	XLP	XLK
10	ITB	XLP	XLI	XLP	XLP	MOO	XLK	XLK	IYT	SMH	SOCL	PPH	IYT	IYT	XRT	XLY	XLP	XLU	XLV	XLC
11	XLP	XME	ITB	ITB	XRT	XLP	MOO	MOO	SMH	XLB	SOCL	SOCL	SOCL	IYT	SOCL	IYR	IYR	XOP	XLP	XLV
12	XME	OIH	XME	XLB	MOO	ITA	XRT	XRT	XLP	IYR	SMH	IYT	ITB	ITB	ITB	ITA	MOO	TAN	TAN	IYR
13	XOP	XLE	XLV	XME	OIH	OIH	XLB	XRT	PPH	PPH	IYR	IYR	IYR	IYR	IYR	XLP	XOP	XOP	IYR	XOP
14	OIH	XLF	OIH	OIH	ITA	PPH	OIH	XLB	XME	XRT	ITB	ITB	TAN	TAN	XLU	TAN	MOO	TAN	ITA	ITB
15	XLF	ITA	XLE	ITA	XLV	XLB	XLI	XLI	XLU	XLU	XLU	XLU	XME	XME	MOO	XLU	TAN	ITA	PPH	MOO
16	XLV	XLV	XLF	XLF	XLF	XLI	ITA	PPH	HACK	XLY	XLF	OIH	XLU	XLU	TAN	ITB	ITB	MOO	MOO	XLE
17	XLE	IYR	XLP	XLV	XLI	XLF	ITB	XME	XLY	XLF	OIH	XLB	XLI	XOP	MOO	XLI	SOCL	ITB	SOCL	SOCL
18	XLK	XLK	XLU	TAN	XLC	XLU	XLP	XLU	OIH	ITA	XME	XLF	XLB	XME	XOP	XLV	XLV	XLE	XLE	ITA
19	IYR	HACK	XLK	HACK	TAN	XME	XME	TAN	ITA	ITA	XME	ITA	OIH	ITA	ITA	XME	XME	XLI	SOCL	CLOU
20	HACK	FDN	CLOU	FDN	HACK	FDN	TAN	XLY	XLI	XLE	XLI	MOO	XLI	XLI	IYT	IYT	XLI	XLI	XLI	XLF
21	CLOU	CLOU	TAN	CLOU	IGV	IGV	FDN	HACK	HACK	XLI	XLE	XLE	ITA	OIH	OIH	PPH	IYT	SOCL	IYR	PPH
22	FDN	IGV	FDN	XLC	IGV	TAN	HACK	ITA	XLV	XLB	XLB	XLB	XLE	XOP	XLB	OIH	OIH	XME	CLOU	XLB
23	IGV	XLC	XLC	XLK	CLOU	HACK	XLV	OIH	XLK	XLV	XLV	XLV	XLV	PPH	XLF	PPH	XLB	XRT	PPH	XRT
24	XLC	XLU	HACK	IGV	XLE	XLY	XLY	XLV	XLP	XLP	XLP	TAN	MOO	PPH	XLF	XLP	XLE	XLB	XLI	XLI
25	XLY	XOP	IGV	XLE	FDN	XLV	XLF	XLF	TAN	TAN	TAN	MOO	XOP	XLP	XLP	XLV	XLE	XLF	IYT	OIH
26	XLU	TAN	XLY	XLY	XLY	XLE	XLE	XLE	XOP	XOP	XOP	XLP	XLP	XLV	XLV	XLE	PPH	XLB	OIH	IYT
27	TAN	XLY	XOP	XOP	XOP	XOP	XOP	XOP	MOO	MOO	MOO	XLP	XLV	XLE	XLE	XLF	XLF	OIH	XRT	XME

TPA-RRG U.S. SECTOR & SUBSECTOR ETFS - HISTORY

Rank	4/27/23 Code	5/5/23 Code	5/12/23 Code	5/19/22 Code	5/26/23 Code	6/2/23 Code	6/9/23 Code	6/16/23 Code	6/23/23 Code	6/30/23 Code	7/7/23 Code	7/14/23 Code
1	XLP	XLP	XLV	XLY	XLY	XLY	XLY	XLY	XLY	CLOU	CLOU	HACK
2	XLU	XLU	XLV	XLC	XLC	XLC	XOP	XOP	XLY	IYT	HACK	CLOU
3	HACK	IGV	XLY	FDN	XLK	FDN	XLC	XLK	IGV	XLY	IYT	IYT
4	FDN	FDN	XLU	XLK	FDN	IGV	IGV	IGV	IGV	XLK	OIH	OIH
5	IGV	XLK	XLC	XLV	IGV	XLK	XLK	IYT	ITB	IGV	OIH	XLI
6	XLK	XLY	FDN	IGV	XLV	XLV	OIH	XLI	SMH	XLK	XLY	XOP
7	XLC	XLC	IGV	XLU	XLP	OIH	XLF	HACK	XOP	FDN	XLF	XLY
8	XLY	XLV	XLK	XLP	XLF	XLF	XLE	CLOU	SMH	XLK	XLK	XLF
9	XLV	ITB	PPH	TAN	XOP	XOP	ITB	FDN	IYT	XLF	IGV	SMH
10	ITB	HACK	ITB	HACK	XLE	IYT	XLP	ITB	ITB	FDN	FDN	IGV
11	TAN	TAN	HACK	MOO	XLE	XLE	XLU	SMH	SMH	SMH	SMH	FDN
12	IYR	MOO	TAN	ITB	XLU	IYR	SMH	XLP	XLV	XLI	XOP	XLK
13	MOO	XOP	XOP	PPH	PPH	XLP	XLV	XLV	XLV	XME	XME	XME
14	XOP	IYR	MOO	XOP	SMH	XLU	TAN	XLU	XLU	XLV	XRT	TAN
15	SOCL	SOCL	IYR	XLE	TAN	PPH	PPH	PPH	TAN	XLP	XLE	XRT
16	SMH	XLF	XLE	SMH	MOO	HACK	MOO	XLE	FDN	XLU	XLV	ITB
17	XLE	XLE	XLF	XLF	IYR	TAN	HACK	IYR	MOO	XLE	XLP	XLV
18	ITA	SMH	SMH	XRT	ITB	ITB	FDN	MOO	XLC	XLU	XLU	XLC
19	CLOU	CLOU	SOCL	PPH	XLB	SMH	IYR	TAN	OIH	TAN	PPH	XLP
20	XLF	ITA	XRT	OIH	XRT	MOO	XLB	XLB	HACK	PPH	IYR	IYR
21	XRT	XRT	OIH	SOCL	IYT	XLB	XME	XLC	IYR	MOO	MOO	XLU
22	XLB	IYT	IYT	CLOU	OIH	XRT	XRT	XME	XLB	IYR	XLC	MOO
23	OIH	OIH	XLB	XLB	SOCL	XME	XLI	XRT	XME	XRT	TAN	XLE
24	PPH	XLB	XLI	IYT	XLI	XLI	IYT	OIH	XLC	XLB	ITB	PPH
25	IYT	XME	XME	XLI	CLOU	SOCL	SOCL	ITA	XRT	ITA	XLB	XLB
26	XME	XLI	ITA	XME	XME	ITA	ITA	CLOU	ITA	XME	ITA	ITA
27	XLI	PPH	CLOU	ITA	ITA	CLOU	CLOU	SOCL	SOCL	SOCL	SOCL	SOCL

Code	Name	Last	RRG Ratio	RRG Momentum	Quadrant	TPA-RRG SCORE
HACK	Cyber Security	50.54	100.00	100.73	Leading	6.52
CLOU	Cloud Computing	20.71	101.87	101.90	Leading	4.32
IYT	Transportation	254.54	98.24	101.01	Improving	3.28
OIH	Oil Services	320.67	90.86	101.58	Improving	3.25
XLI	Industrial	108.61	97.13	100.34	Improving	3.18
XLE	Energy	81.45	91.04	98.45	Lagging	-2.03
PPH	Pharma	77.89	95.19	97.87	Lagging	-2.03
XLB	Materials	83.26	94.76	99.30	Lagging	-2.05
ITA	Aerospace & Defense	116.20	95.50	98.76	Lagging	-2.08
SOCL	Social Media	39.66	98.45	98.29	Lagging	-2.16

Relative Rotation Graph for 27 major sector & subsector ETFs is provided below.

Also, use the following link that shows RRG over time - how sectors & subsectors move in and out of favor over time: https://youtu.be/RCD0L1rwWrg

Weekly Relative Rotation Graph®   Date: 7/14/2023 Benchmark: S&P 500 INDEX - SPX (WI)
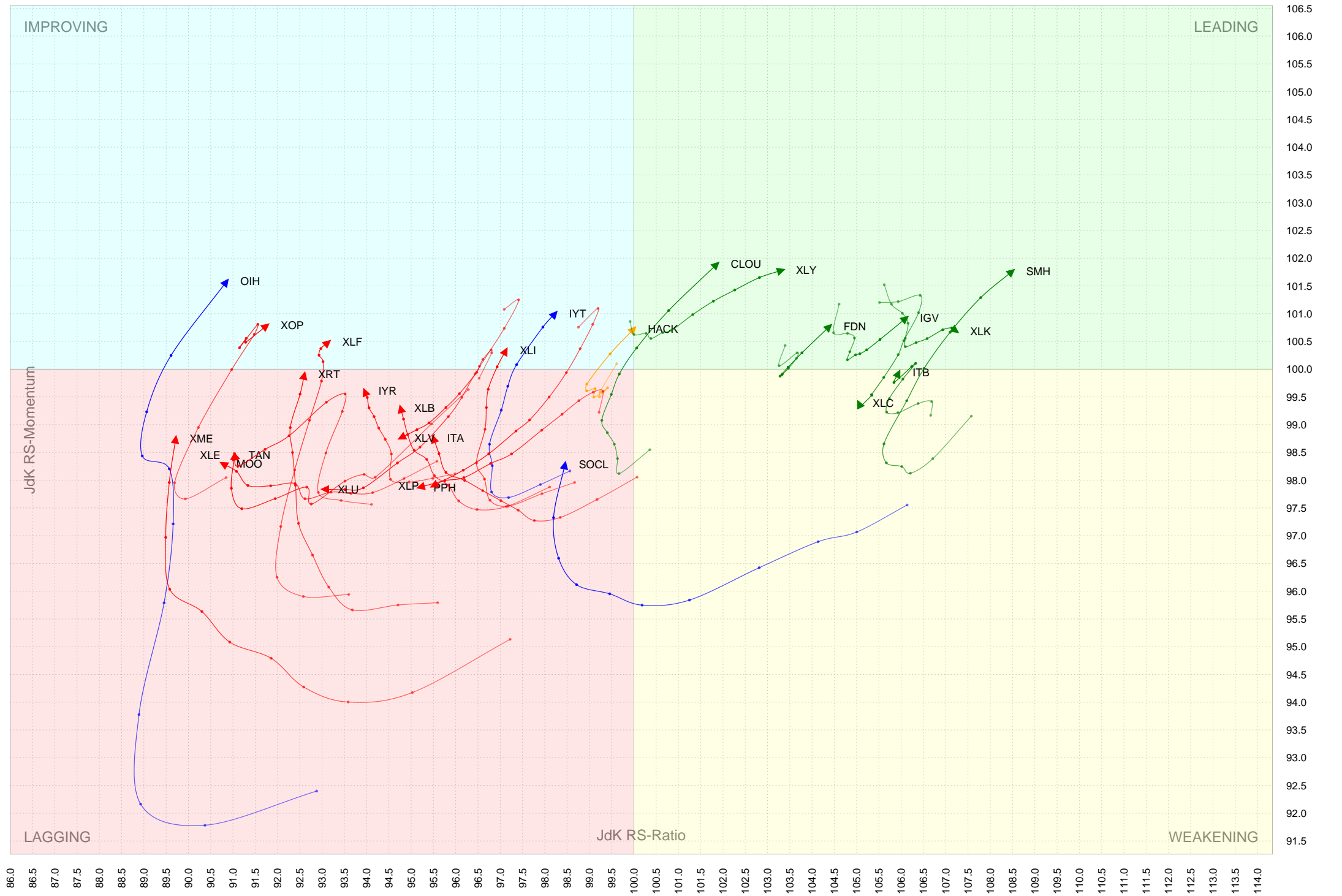
Click HERE for the entire Russell 1000 TPA-RRG Score and Rank Report.

You can learn more about RRGs with these links:
Relative Rotation Graphs (RRG) – explanation video (Less than 4 minutes)
What is TPA-RRG. What are RRGs.
RRG – written explanation

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are beyond TPA's control, including, but not limited to, war, strikes, natural disasters, new government restrictions, market fluctuations, and communications disruptions.