

TPA-RRG Report

- What is hot and what is not.
 - TPA-RRG captures the inevitable movement of stocks into and out of favor.
- Scores and ranking
 - Clients can quickly see which stocks are showing the <u>best and worst relative</u> <u>strength characteristics</u>. TPA found that using RRG's was very beneficial, but 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 more in-depth explanations and links to instructional videos below.

THE REPORT

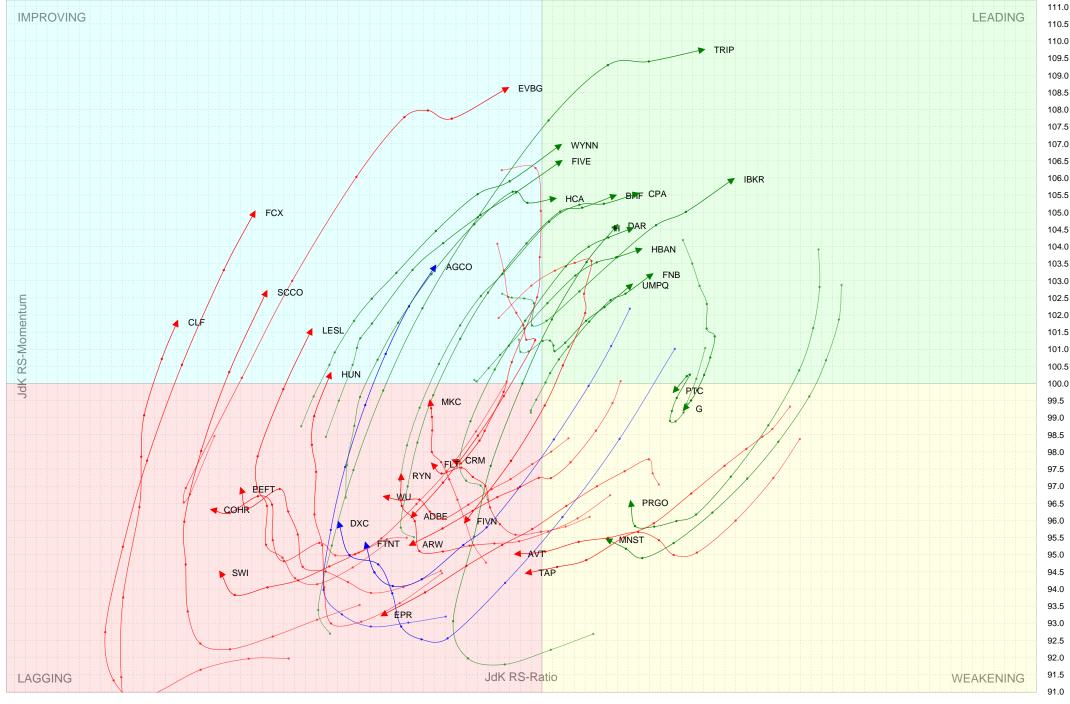
TPA-RRG TOP 20 & BOTTOM 20 (table below)

Buy	Prices as of	10/10/22						STOCK	SECTOR	TOTAL
Sell				TOP 20				TPA-RRG	TPA-RRG	TPA-RRG
Code	Name	Last	RRG Ratio	RRG Momentum	Quadrant	Mkt Cap (\$MIL)	TPA Sector	<u>SCORE</u>	<u>SCORE</u>	<u>SCORE</u>
FIVE	Five Below Inc	140.10	100.85	106.48	Leading	\$7,777	Retail	4.79	1.73	6.52
BHF	Brighthouse Financial Inc	46.99	103.37	105.48	Leading	\$3,375	Financial	4.46	1.76	6.22
DAR	Darling Ingredients Inc	73.19	103.46	104.60	Leading	\$11,738	Agribusiness	4.27	1.71	5.98
WYNN	Wynn Resorts Ltd.	73.09	100.83	106.95	Leading	\$8,313	Consumer Discretionary	4.84	1.08	5.92
СРА	Copa Holdings S.A.	72.04	104.42	105.54	Leading	\$2,996	Industrial	4.39	1.02	5.41
н	Hyatt Hotels Corporation	82.78	104.16	104.53	Leading	\$9,034	Consumer Discretionary	4.27	1.08	5.35
EVBG	Everbridge Inc	31.64	98.37	108.62	Improving	\$1,251	Cyber Security	3.53	1.73	5.27
AGCO	AGCO Corp.	106.15	95.02	103.41	Improving	\$7,919	Agribusiness	3.43	1.71	5.14
LESL	Leslies Inc	14.62	89.27	101.55	Improving	\$2,676	Retail	3.27	1.73	5.00
HCA	HCA Healthcare Inc	200.46	100.57	105.40	Leading	\$57,537	Health Care	4.53	0.43	4.97
HBAN	Huntington Bancshares Inc.	13.21	104.56	103.92	Leading	\$19,051	Financial	3.19	1.76	4.94
scco	Southern Copper Corporation	47.91	87.18	102.66	Improving	\$37,039	Materials	3.31	1.62	4.93
TRIP	TripAdvisor Inc.	22.88	107.47	109.74	Leading	\$3,200	Communication Services	4.39	0.52	4.90
CLF	Cleveland-Cliffs Inc	14.83	83.04	101.79	Improving	\$7,672	Metals and Mining	3.11	1.79	4.90
VRM	Vroom Inc.	1.13	102.20	121.07	Leading	\$156	Retail	3.14	1.73	4.87
FCX	Freeport-McMoRan Inc	28.95	86.63	104.98	Improving	\$41,377	Materials	3.23	1.62	4.85
IBKR	Interactive Brokers Group Inc - Ordi	69.69	108.86	105.96	Leading	\$7,167	Financial	3.09	1.76	4.84
UMPQ	Umpqua Holdings Corp	17.17	104.13	102.87	Leading	\$3,727	Financial	3.08	1.76	4.84
FNB	F.N.B. Corp.	12.23	105.08	103.17	Leading	\$4,290	Financial	3.06	1.76	4.82
HUN	Huntsman Corp	25.34	90.16	100.27	Improving	\$5,104	Materials	3.20	1.62	4.82

Buy	Prices as of	10/10/22						STOCK	SECTOR	TOTAL
Sell			В	ОТТОМ 2	0			TPA-RRG	TPA-RRG	TPA-RRG
<u>Code</u>	Name	Last	RRG Ratio	RRG Momentum	Quadrant	Mkt Cap (\$MIL)	TPA Sector	SCORE	SCORE	SCORE
swi	SolarWinds Corp	8.45	85.07	94.47	Lagging	\$1,360	Tech-Software	-2.06	-0.97	-3.03
мкс	McCormick & Co. Inc Ordinary Sh	73.44	94.81	99.47	Lagging	\$19,704	Consumer Staples	-2.04	-1.00	-3.04
MNST	Monster Beverage Corp.	90.29	103.05	95.44	Weakening	\$47,573	Consumer Staples	-2.10	-1.00	-3.10
RYN	Rayonier Inc.	31.48	93.45	97.31	Lagging	\$4,609	Real Estate	-2.13	-0.98	-3.11
PRGO	Perrigo Company PLC	38.09	104.13	96.52	Weakening	\$5,128	Pharmaceutical	-1.92	-1.61	-3.54
ADBE	Adobe Inc	288.77	93.98	96.12	Lagging	\$134,249	Technology	-1.99	-1.65	-3.64
COHR	Coherent Corp	36.84	84.69	96.31	Lagging	\$4,821	Technology	-2.02	-1.65	-3.67
G	Genpact Ltd	44.16	106.62	99.26	Weakening	\$8,103	Technology	-2.05	-1.65	-3.69
EEFT	Euronet Worldwide Inc	77.71	86.02	96.91	Lagging	\$3,853	Technology	-2.05	-1.65	-3.70
CRM	Salesforce Inc	150.29	95.90	97.75	Lagging	\$150,290	Technology	-2.06	-1.65	-3.71
wυ	Western Union Company	13.47	92.71	96.69	Lagging	\$5,196	Technology	-2.06	-1.65	-3.71
PTC	PTC Inc	110.17	106.15	99.78	Weakening	\$12,941	Technology	-2.08	-1.65	-3.73
FLT	FleetCor Technologies Inc	179.59	94.92	97.64	Lagging	\$13,472	Technology	-2.09	-1.65	-3.74
FTNT	Fortinet Inc	51.47	91.81	95.31	Lagging	\$40,585	Technology	-2.11	-1.65	-3.76
DXC	DXC Technology Co	26.56	90.56	95.91	Lagging	\$6,106	Technology	-2.12	-1.65	-3.77
EPR	EPR Properties	35.80	92.60	93.24	Lagging	\$2,686	Real Estate	-3.18	-0.98	-4.16
FIVN	Five9 Inc	76.97	96.45	95.97	Lagging	\$5,396	Tech-Software	-3.27	-0.97	-4.23
TAP	Molson Coors Brewing Company	47.02	99.32	94.47	Lagging	\$10,191	Consumer Staples	-3.43	-1.00	-4.43
ARW	Arrow Electronics Inc.	95.54	93.92	95.30	Lagging	\$6,131	Technology	-3.14	-1.65	-4.79
AVT	Avnet Inc.	37.91	98.82	95.02	Lagging	\$3,589	Technology	-3.45	-1.65	-5.10

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://vimeo.com/manage/videos/758702784/privacy



75.5 76.0 77.7 77.5

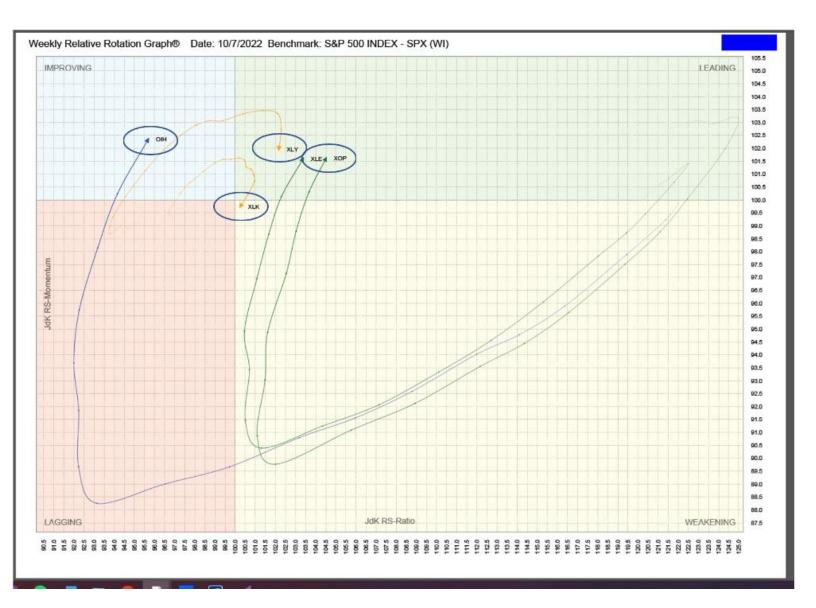
TPA-RRG Weekly Commentary

Sectors:

Clients should be wary of the large quick positive moves in energy (OIH, XLE, XOP) and the large quick negative moves in Consumer and TECH (XLY, XLK). OIH has moved from the worst to the best sector in 7 weeks. XLK has moved from the best to the worst sector in 7 weeks. XLY has moved from the #1 to the #12 sector in just 4 weeks.

It is important to look at the longer term moves of the RRG. The RRG below shows that the Energy sectors took many weeks to move from the extreme in the Leading quadrant to the Lagging quadrant. The TECH and Consumer sectors had moved from Lagging, through Improving, and into the Leading quadrant before this recent change. There are times when RRG can give us a head fake.

TPA-	RRG U.	.S. SECT	OR & SL	JBSECTO	R ETFS -	HISTOR	Υ													
	2/21/22	2/28/22	3/7/22	3/13/22	3/20/22	4/10/22	4/18/22	4/25/22	5/2/22	5/9/22	5/16/22	5/23/22	5/30/22	6/6/22	6/13/22	6/20/22	6/27/22	7/4/22	7/10/22	7/17/22
Rank	<u>Code</u>	<u>Code</u>	Code	5/13/22 Code	5/20/22 Code	4/10/22 Code	4/18/22 Code	4/23/22 Code	Code	Code	5/16/22 Code	Code	2/30/22 Code	Code	Code	Code	Code	Code	7/10/22 Code	Code
1	OIH	OIH	ITA	XLI	XLV	IYR	IYR	IYR	IYR	XLI	SOCL	SOCL	XLB	TAN	TAN	TAN	TAN	ITB	ITB	ITB
2	XLP	XLF	XLV	ITA	ITA	TAN	XLI	XLV	CLOU	CLOU	CLOU	CLOU	XLU	SOCL	ITB	ITB	SMH	TAN	XLK	IGV
3	XLF	XLP	MOO	XLV	XLI	HACK	HACK	CLOU	XLV	XLU	XLC	IGV	XOP	IGV	XRT	SMH	ITB	XLK	TAN	XLK
4 5	PPH MOO	PPH XME	PPH XLI	MOO PPH	HACK MOO	XLI MOO	TAN XRT	XLU XRT	IGV XLU	XLB XRT	XRT XLB	XLC XLB	XLP XLE	XRT XLC	SOCL XLB	XRT IGV	XLK	IGV XLC	XLC IGV	XLC FDN
6	XLU	MOO	IYR	XLF	XME	CLOU	CLOU	FDN	XLB	XOP	FDN	FDN	TAN	XLL	IGV	SOCL	IGV SOCL	SOCL	SMH	SMH
7	ITA	ITA	XME	HACK	XLU	XME	FDN	XLP	XOP	XLE	XLP	PPH	XLI	XLP	PPH	XLC	XRT	SMH	XLI	XLV
8	XLB	XLV	XLU	XME	IYR	FDN	XME	XLI	XLC	XLP	XME	XLP	IYR	XLE	XLP	XLI	XLB	XLV	PPH	TAN
9	IYR	XLU	XLF	OIH	XLF	XLV	MOO	HACK	FDN	IYR	ITA	IYR	MOO	MOO	XOP	XLV	XOP	XLI	XLV	CLOU
10	XME	XLB	OIH	XLU	PPH	IGV	XLV	ITA	XLP	ITA	IYR	ITA	XLV	IYR	XLE	XLU	XLI	XLP	CLOU	SOCL
11	XLE	XLE	IYT	XLE	XLP	XRT	XLC	TAN	XLI	XME	XLI	XLI	PPH	XLV	XLI	PPH	XLP	PPH	SOCL	XRT
12 13	XOP	XOP IYT	XLE XLB	IYT XLC	OIH	XLU XLB	IGV XLU	XME MOO	HACK TAN	XLV MOO	XLV MOO	MOO XLU	SOCL	XLB XLU	IYR XLU	XLB XOP	PPH XLV	CLOU XRT	XRT FDN	HACK XLY
14	XLV	XLI	XOP	XOP	XLE	ITA	XLP	OIH	ITA	PPH	XLU	XOP	IGV	PPH	XLV	XLP	CLOU	FDN	IYT	IYT
15	XLI	IYR	XLP	XLB	XOP	OIH	XLB	XLE	XME	TAN	OIH	XLV	XLC	XOP	XLC	XLE	XLC	XLY	XLF	XLF
16	XLC	XRT	XLC	XLP	XLB	PPH	ITA	PPH	МОО	OIH	XOP	XLE	XRT	CLOU	CLOU	CLOU	IYT	HACK	ITA	PPH
17	XRT	FDN	TAN	IYR	XLC	XLP	XLE	XOP	OIH	XLC	PPH	XRT	HACK	ITB	XLF	IYT	HACK	IYT	XLU	XLU
18	FDN	SOCL	HACK	TAN	TAN	XLE	OIH	XLB	PPH	FDN	XLE	TAN	FDN	HACK	SMH	XLK	XLY	XLU	XLY	IYR
19	SOCL	XLC	SOCL	SOCL	IGV	XOP	PPH	IGV	XLE	IGV	TAN	HACK	XLY	FDN	HACK	HACK	FDN	XLF	HACK	XLP
20 21	HACK IGV	HACK IGV	FDN IGV	FDN IGV	XRT SOCL	SOCL	XOP SOCL	XLC XLY	XRT SOCL	HACK SOCL	IGV HACK	SMH XLY	OIH XLK	XLY OIH	FDN XLY	FDN ITA	XLE	ITA XLE	XLE	ITA XOP
22	XLK	XLK	XRT	XRT	FDN	XLC	ITB	SOCL	XLY	XLY	XLY	XLK	SMH	XLK	ITA	XLY	XLF	XOP	OIH	XLE
23	SMH	SMH	SMH	XLY	XLY	ITB	XLK	ITB	ITB	SMH	XLK	ITB	ITB	ITA	OIH	OIH	ITA	OIH	XLP	MOO
24	XLY	XLY	XLY	ITB	ITB	XLF	SMH	XLK	SMH	XLK	ITB	OIH	ITA	SMH	XLK	МОО	OIH	XLB	моо	XME
25	TAN	TAN	XLK	XLK	XLK	IYT	XLY	SMH	XLK	ITB	SMH	XME	XME	XME	MOO	XME	MOO	MOO	XME	OIH
26				SMH	SMH	XLK	IYT	IYT	IYT	XLF	XLF	XLF	IYT	IYT	XME	XLF	XME	XME	XLB	XLB
27						SMH	XLF	XLF	XLF	IYT	IYT	IYT	XLF	XLF	IYT	IYR	IYR	IYR	IYR	XLI
	7/25/22	7/31/22	8/8/22	8/15/22	8/22/22	8/29/22	9/5/22	9/12/22	9/19/22	9/26/22	10/3/22	10/10/22								
Rank	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code								
1	HACK	XLK																		
2			XLY	XLY	XLK	ITB	IYT	XLY	XLY	XLF	XME	OIH								
3	XLK	XLY	XLK	XLK	IYT	XLY	ITB	SMH	XLF	IYT	XME OIH	OIH XME								
	IGV	IGV	XLK HACK	XLK XRT	IYT XLY	XLY XLK	ITB XLF	SMH IYT	XLF IYT	IYT XLY	OIH MOO	OIH XME XLF								
4	IGV XLY	IGV HACK	XLK HACK FDN	XLK XRT FDN	IYT XLY FDN	XLY XLK IYT	ITB XLF XLK	SMH IYT XRT	XLF IYT XRT	IYT XLY XRT	XME OIH MOO XLF	OIH XME XLF HACK								
5	IGV XLY CLOU	IGV HACK FDN	XLK HACK FDN CLOU	XLK XRT FDN CLOU	IYT XLY FDN XRT	XLY XLK IYT FDN	ITB XLF XLK XLY	SMH IYT XRT XLF	XLF IYT XRT XLK	IYT XLY XRT CLOU	XME OIH MOO XLF XLY	OIH XME XLF HACK XRT								
5 6	IGV XLY CLOU FDN	IGV HACK FDN XRT	XLK HACK FDN CLOU XRT	XLK XRT FDN CLOU HACK	IYT XLY FDN XRT TAN	XLY XLK IYT FDN TAN	ITB XLF XLK XLY TAN	SMH IYT XRT XLF XLK	XLF IYT XRT XLK SMH	IYT XLY XRT CLOU XLI	XME OIH MOO XLF XLY CLOU	OIH XME XLF HACK XRT MOO								
5	IGV XLY CLOU	IGV HACK FDN	XLK HACK FDN CLOU	XLK XRT FDN CLOU	IYT XLY FDN XRT	XLY XLK IYT FDN	ITB XLF XLK XLY	SMH IYT XRT XLF	XLF IYT XRT XLK	IYT XLY XRT CLOU	XME OIH MOO XLF XLY	OIH XME XLF HACK XRT								
5 6 7 8 9	IGV XLY CLOU FDN SMH ITB TAN	IGV HACK FDN XRT ITB TAN CLOU	XLK HACK FDN CLOU XRT IGV TAN ITB	XLK XRT FDN CLOU HACK ITB TAN IGV	IYT XLY FDN XRT TAN IGV ITB CLOU	XLY XLK IYT FDN TAN IGV XRT CLOU	ITB XLF XLK XLY TAN FDN SMH XRT	SMH IYT XRT XLF XLK ITB FDN XLI	XLF IYT XRT XLK SMH XLI ITB FDN	IYT XLY XRT CLOU XLI ITB XLK FDN	XME OIH MOO XLF XLY CLOU XLI TAN ITB	OIH XME XLF HACK XRT MOO CLOU XLB ITB								
5 6 7 8 9	IGV XLY CLOU FDN SMH ITB TAN XLV	IGV HACK FDN XRT ITB TAN CLOU SMH	XLK HACK FDN CLOU XRT IGV TAN ITB SMH	XLK XRT FDN CLOU HACK ITB TAN IGV XLC	IYT XLY FDN XRT TAN IGV ITB CLOU HACK	XLY XLK IYT FDN TAN IGV XRT CLOU SMH	ITB XLF XLK XLY TAN FDN SMH XRT CLOU	SMH IYT XRT XLF XLK ITB FDN XLI IGV	XLF IYT XRT XLK SMH XLI ITB FDN CLOU	IYT XLY XRT CLOU XLI ITB XLK FDN SMH	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP								
5 6 7 8 9 10	IGV XLY CLOU FDN SMH ITB TAN XLV XLC	IGV HACK FDN XRT ITB TAN CLOU SMH XLC	XLK HACK FDN CLOU XRT IGV TAN ITB SMH SOCL	XLK XRT FDN CLOU HACK ITB TAN IGV XLC SMH	IYT XLY FDN XRT TAN IGV ITB CLOU HACK XLC	XLY XLK IYT FDN TAN IGV XRT CLOU SMH XLC	ITB XLF XLK XLY TAN FDN SMH XRT CLOU	SMH IYT XRT XLF XLK ITB FDN XLI IGV CLOU	XLF IYT XRT XLK SMH XLI ITB FDN CLOU IGV	IYT XLY XRT CLOU XLI ITB XLK FDN SMH IGV	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK XOP	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP XLE								
5 6 7 8 9 10 11	IGV XLY CLOU FDN SMH ITB TAN XLV XLC XRT	IGV HACK FDN XRT ITB TAN CLOU SMH XLC SOCL	XLK HACK FDN CLOU XRT IGV TAN ITB SMH SOCL XLC	XLK XRT FDN CLOU HACK ITB TAN IGV XLC SMH SOCL	IYT XLY FDN XRT TAN IGV ITB CLOU HACK XLC SMH	XLY XLK IYT FDN TAN IGV XRT CLOU SMH XLC HACK	ITB XLF XLK XLY TAN FDN SMH XRT CLOU IGV HACK	SMH IYT XRT XLF XLK ITB FDN XLI IGV CLOU XME	XLF IYT XRT XLK SMH XLI ITB FDN CLOU IGV XME	IYT XLY XRT CLOU XLI ITB XLK FDN SMH IGV MOO	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK XOP FDN	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP XLE XLY								
5 6 7 8 9 10 11 12 13	IGV XLY CLOU FDN SMH ITB TAN XLV XLC XRT SOCL	IGV HACK FDN XRT ITB TAN CLOU SMH XLC SOCL	XLK HACK FDN CLOU XRT IGV TAN ITB SMH SOCL XLC	XLK XRT FDN CLOU HACK ITB TAN IGV XLC SMH SOCL	IYT XLY FDN XRT TAN IGV ITB CLOU HACK XLC SMH SOCL	XLY XLK IYT FDN TAN IGV XRT CLOU SMH XLC HACK XLF	ITB XLF XLK XLY TAN FDN SMH XRT CLOU IGV HACK XLE	SMH IYT XRT XLF XLK ITB FDN XLI IGV CLOU XME SOCL	XLF IYT XRT XLK SMH XLI ITB FDN CLOU IGV XME OIH	IYT XLY XRT CLOU XLI ITB XLK FDN SMH IGV MOO OIH	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK XOP FDN IYT	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP XLE XLY FDN								
5 6 7 8 9 10 11 12 13	IGV XLY CLOU FDN SMH ITB TAN XLV XLC XRT SOCL	IGV HACK FDN XRT ITB TAN CLOU SMH XLC SOCL IYT XLF	XLK HACK FDN CLOU XRT IGV TAN ITB SMH SOCL XLC IYT XLI	XLK XRT FDN CLOU HACK ITB TAN IGV XLC SMH SOCL IYT XLF	IYT XLY FDN XRT TAN IGV ITB CLOU HACK XLC SMH SOCL XLF	XLY XLK IYT FDN TAN IGV XRT CLOU SMH XLC HACK XLF	ITB XLF XLK XLY TAN FDN SMH XRT CLOU IGV HACK XLE	SMH IYT XRT XLF XLK ITB FDN XLI IGV CLOU XME SOCL XOP	XLF IYT XRT XLK SMH XLI ITB FDN CLOU IGV XME OIH MOO	IYT XLY XRT CLOU XLI ITB XLK FDN SMH IGV MOO OIH XME	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK XOP FDN IYT XRT	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP XLE XLY FDN								
5 6 7 8 9 10 11 12 13	IGV XLY CLOU FDN SMH ITB TAN XLV XLC XRT SOCL	IGV HACK FDN XRT ITB TAN CLOU SMH XLC SOCL	XLK HACK FDN CLOU XRT IGV TAN ITB SMH SOCL XLC	XLK XRT FDN CLOU HACK ITB TAN IGV XLC SMH SOCL	IYT XLY FDN XRT TAN IGV ITB CLOU HACK XLC SMH SOCL	XLY XLK IYT FDN TAN IGV XRT CLOU SMH XLC HACK XLF	ITB XLF XLK XLY TAN FDN SMH XRT CLOU IGV HACK XLE	SMH IYT XRT XLF XLK ITB FDN XLI IGV CLOU XME SOCL	XLF IYT XRT XLK SMH XLI ITB FDN CLOU IGV XME OIH	IYT XLY XRT CLOU XLI ITB XLK FDN SMH IGV MOO OIH	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK XOP FDN IYT	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP XLE XLY FDN								
5 6 7 8 9 10 11 12 13 14 15 16	IGV XLY CLOU FDN SMH ITB TAN XLV XLC XRT SOCL IYT ITA XLF PPH	IGV HACK FDN XRT ITB TAN CLOU SMH XLC SOCL IYT XLF ITA XLP XLU	XLK HACK FDN CLOU XRT IGV TAN ITB SMH SOCL XLC IYT XLI XLF ITA XLP	XLK XRT FDN CLOU HACK ITB TAN IGV XLC SMH SOCL IYT XLF XLI XLP ITA	IYT XLY FDN XRT TAN IGV ITB CLOU HACK XLC SMH SOCL XLF XLI XLP XLU	XLY XLK IYT FDN IGV XRT CLOU XRT CLOU HACK XLF SOCL XLI XLU XOP	ITB XLF XLK XLY TAN FDN SMH XRT CLOU IGV HACK XLE XLU XOP XLI XLU	SMH IYT XRT XLF ITB FDN XLI ITB FCN XLI SOCL XME SOCL XOP HACK XLC XLE	XLF IYT XRT XLK SMH XLI ITB FDN CLOU IGV XME OIH MOO XLB XLU XLE	IYT XLY XRT CLOU XLI ITB XLK FDN SMH IGV MOO OIH XME XLB SOCL HACK	XME OIH MOO XLF XLY CLOU XLI TAN ITB XLK XOP FDN IYT XRT XLE IGV SMH	OIH XME XLF HACK XRT MOO CLOU XLB ITB XOP XLE XLY FDN IYT XLI XLC SOCL								
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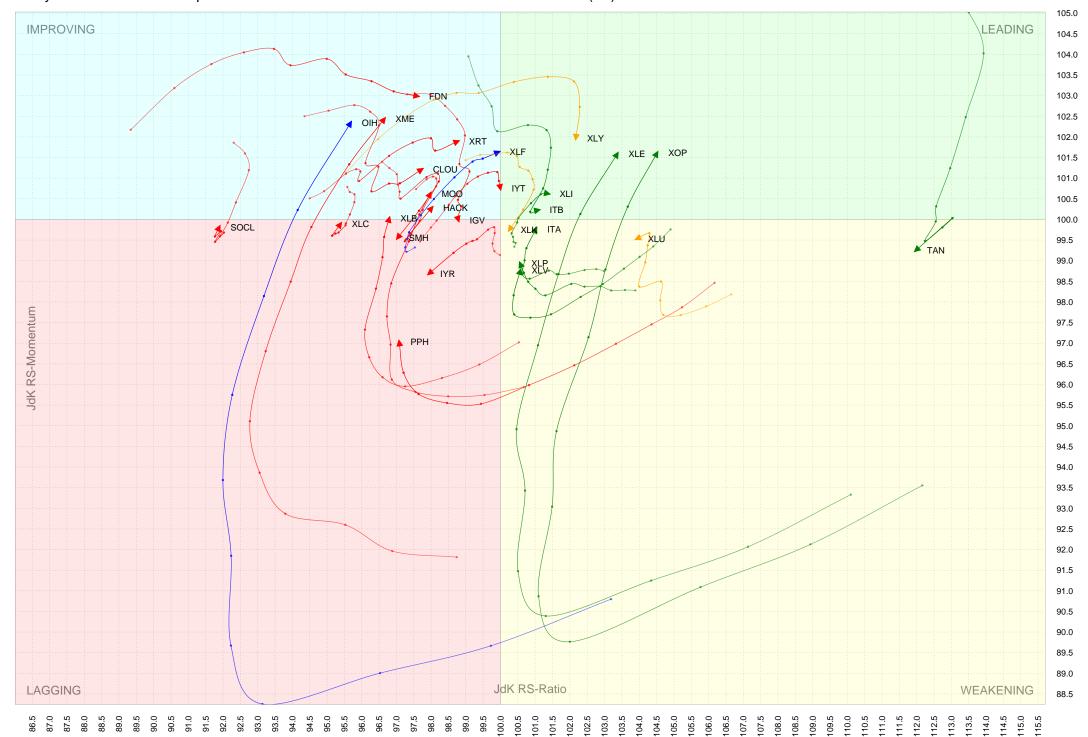


TPA-RRG 25 SECTOR ETFS

TPA-R	RRG U.S. SECTOR & SUBSECTOR ETFS		10/10/22			
						TPA-RRG
<u>Code</u>	<u>Name</u>	Last	RRG Ratio	RRG Momentum	Quadrant	<u>SCORE</u>
ОІН	Oil Services	247.29	95.68	102.34	Improving	3.79
XME	Metals & Mining	45.59	96.65	102.44	Improving	3.57
XLF	Financials	30.89	99.94	101.63	Improving	3.51
НАСК	Cyber Security	44.15	98.02	100.28	Improving	3.47
XRT	Retail	58.26	98.77	101.89	Improving	3.46
моо	Agribusiness	82.94	97.98	100.63	Improving	3.43
CLOU	Cloud Computing	16.20	97.73	101.21	Improving	3.34
XLB	Materials	69.46	96.79	100.03	Improving	3.23
ITB	Home Construction	54.80	101.09	100.23	Leading	3.01
ХОР	Oil&Gas E&P	142.58	104.51	101.61	Leading	2.56
XLE	Energy	81.80	103.37	101.59	Leading	2.34
XLY	Consumer Discretionary	140.65	102.17	101.97	Leading	2.16
FDN	Internet	129.11	97.61	102.99	Improving	2.12
IYT	Transportation	200.02	100.00	100.75	Improving	2.05
XLI	Industrial	85.16	101.38	100.62	Leading	2.04
XLC	Communications	48.73	95.39	99.89	Lagging	1.03
SOCL	Social Media	28.18	91.89	99.81	Lagging	1.02
XLV	Health Care	122.62	100.57	98.76	Weakening	0.87
ITA	Aerospace & Defense	95.21	101.02	99.77	Weakening	0.70
SMH	SEMI	188.60	97.03	99.55	Lagging	-1.73
IGV	Software	256.65	98.79	99.98	Lagging	-1.94
IYR	Real Estate	78.63	97.94	98.69	Lagging	-1.97
XLP	Staples	66.50	100.57	98.93	Weakening	-1.99
XLU	Utilities	63.76	103.93	99.53	Weakening	-2.05
TAN	Solar	71.05	111.97	99.25	Weakening	-2.07
PPH	Pharma	67.78	97.08	97.03	Lagging	-3.23
XLK	TECH	120.77	100.25	99.75	Weakening	-3.30

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

Also, use the following link that shows RRG over time - how sectors & subsectors move in and out of favor over time: https://vimeo.com/manage/videos/758688958/privacy



Click **HERE** for the entire Russell 1000 TPA-RRG Score and Rank Report.

What are RRG's?

Julius de Kempenaer developed Relative Rotational Graphs (RRG) in 2004 and thousands of investors use RRG's. "Relative Rotation Graphs, commonly referred to as RRGs, are a unique visualization tool for relative strength analysis. Chartists can use RRGs to analyze the relative strength trends of several securities against a common benchmark, and against each other. The real power of this tool is its ability to plot relative performance on one graph and show true rotation. We have all heard of sector and asset class rotation, but it is hard to visualize this "rotation" sequence on linear charts. RRGs use four quadrants to define the four phases of a relative trend. True rotations can be seen as securities move from one quadrant to the other over time." - Stockcharts

What are TPA-RRG scores?

TPA recognizes the power of RRG's to highlight stocks and sectors moving in and out of favor, but also notes the shortcoming of having to examine many RRG's to decide where to invest. TPA has developed TPA-RRG Scores to be able to rank stocks and sectors in terms of relative strength. TPA-RRG scores are constructed to focus on stocks and sectors as they move from negative to positive and positive to negative. Scoring also allows ranking so investors can focus on the best and worst areas of the market.

How are TPA-RRG scores created?

TPA uses not only the **RS Ratio** and **RS Momentum** of each stock to make its forecast, TPA also uses certain characteristics on each stock's RS to calcultate its score. The following measures are used to calculate the TPA-RRG score:

- 1. **RRG ANGLE** Represents the current position of the security on the RRG chart based on the points of the compass:
 - 0-90 Degrees = Leading Quadrant
 - 90-180 Degrees = Weakening Quadrant
 - ➤ 180-270 Degrees = Lagging Quadrant
 - 270-360 Degrees = Improving Quadrant
- 2. RRG DISTANCE. This number represents how far away the security is from the centre of the RRG chart (ie the benchmark). One of the observations is that higher alpha comes from those components that make bigger arcs around the benchmark. We will ignore those closest to the centre.
- 3. **RRG ANGLE ROC** The Angle Rate of Change measures the distance of the angle of the current data point of a security, to the previous data point. The greater the value, the larger the distance between the two data points.
- 4. **RRG HEADING** This is the direction that the arrow is pointing to (where the RS is headed), again based on the points of the compass, and is one of the most useful measures:

- > 0 degrees = North (up) positive
- 45 degrees = Northeast less positive
- > 90 degrees = East (right) positive
- ➤ 180 degrees = South (down) negative
- > 270 degrees = West (left) negative
- 5. **RRG VELOCITY** This is the vector difference or distance between the last two data points on the line; with the longest having the highest relative momentum:

How investors can use TPA-RRG

- 1. The Sector analysis lets clients focus on the best and avoid the worst areas of the market
- 2. TPA-RRG ranks the entire Russell 1000 and provides the Top 20 and Bottom 20 stocks so investors can see the best and worst stocks to make sure they are <u>taking advantage of</u> opportunities and not getting into trouble.
- 3. We also look at the top and bottom stocks through a standard technical analysis to <u>avoid stocks</u> that are overbought, oversold or at other technical trouble spots.
- 4. Finally, we provide TPA-RRG Scores and rankings for the stocks in the most used 25 sector and subsector ETFs. This analysis is especially helpful for investors who are focused on <u>specific areas</u> of the market.

You can learn more about RRG's with these links:

Relative Rotation Graphs (RRG) – explanation video

RRG – written explanation

Included in the Weekly TPA-RRG Report

- 1. The weekly TPA RRG Report will provide RRG Scores, Rankings, RRG's and a RRG Video for:
 - 25 Major Sector and Subsector ETFs
 - Top 20 & Bottom 20 stocks in the Russell 1000 based on TPA's RRG and Trend-Range analysis
- 2. The report will also include:
 - TPA RRG scores and rankings for the focus stocks in the 11 major sectors ETFs and 14 major subsectors ETFs. Provided in a separate PDF
- 3. Finally, TPA will provide a weekly commentary on TPA-RRG Scores and Rankings

Turning Point Analytics Disclaimer

Turning Point Analytics (TPA) is only one of many tools that an investor should use to make a final investment decision. TPA is an overlay on top of a client's good fundamental or macro analysis. TPA does not create or provide fundamental analysis. The information in this communication may include technical analysis. Technical analysis is a discipline that studies the past trading history of a security while trying to forecast future price action. Technical analysis does not consider the underlying fundamentals of the security in question and it does not provide information reasonably sufficient upon

which to base an investment decision. Investors should not rely on technical analysis alone while making an investment decision. Before making an investment decision, investors should consider reviewing all publicly available information regarding the security in question, including, but not limited to, the underlying fundamentals of the security and other information which is available in filings with the Securities and Exchange Commission. The information and analysis contained in reports provided by TPA are copyrighted and may not be duplicated or redistributed for any reason without the express written consent of TPA. The information in this communication is for institutional or sophisticated investors only. By accepting this communication, the recipient agrees not to forward, and/or copy the information to any other person, except as permitted, or required by law. TPA does not quarantee accuracy or completeness. TPA is a publisher of technical research and has no investment banking or advisory relationship with any company mentioned in any report. Reports are neither a solicitation to buy nor an offer to sell securities. Past performance is in no way indicative of future results. Opinions expressed are subject to change without notice. TPA will provide, upon request, the details of any past recommendations. TPA's analysis and recommendations should not be used as the sole reason to buy or sell any security. TPA may compensate brokers and intermediaries for sales and marketing services. You understand and acknowledge that there is a very high degree of risk involved in trading securities and/or currencies. The Company, the authors, the publisher, and all affiliates of Company assume no responsibility or liability for your trading and investment results. It should not be assumed that the methods, techniques, or indicators presented will be profitable or that they will not result in losses. Statements, data, and analysis made by TPA or in its publications, are made as of the date stated and are subject to change without notice. TPA and/or its officers and employees may, from time to time acquire, hold, or sell a position in the securities mentioned herein. Upon request, TPA will furnish specific information in this regard. TPA will not be held liable for losses caused by conditions and/or events that are beyond TPA's control, including, but not limited to, war, strikes, natural disasters, new government restrictions, market fluctuations, and communications disruptions.