RIVERSIDE ANALYTICS INC

DATE: July 31, 2025

RIVERSIDE ANALYTICS INC
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MONTH END STRATEGY UPDATE

RIVERSIDE'S LIVE WEEKLY BROADCAST

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- All trading / investing comes with risk.
- The insights contained in this presentation do not constitute advice, rather are meant for educational purposes from which you may make more educated decisions taking into account your individual risk profile and needs for return.
- At Riverside, we assess probabilities using systematic quantitative methodology. We do not provide advice. There are no guarantees for positive return. All investing/trading is at your own risk.
- Riverside is about helping active and affluent investors learn how to make better decisions in financial markets.
- All charts shown in this broadcast have been referenced from stockcharts.com, Amibroker or eSignal unless otherwise noted.

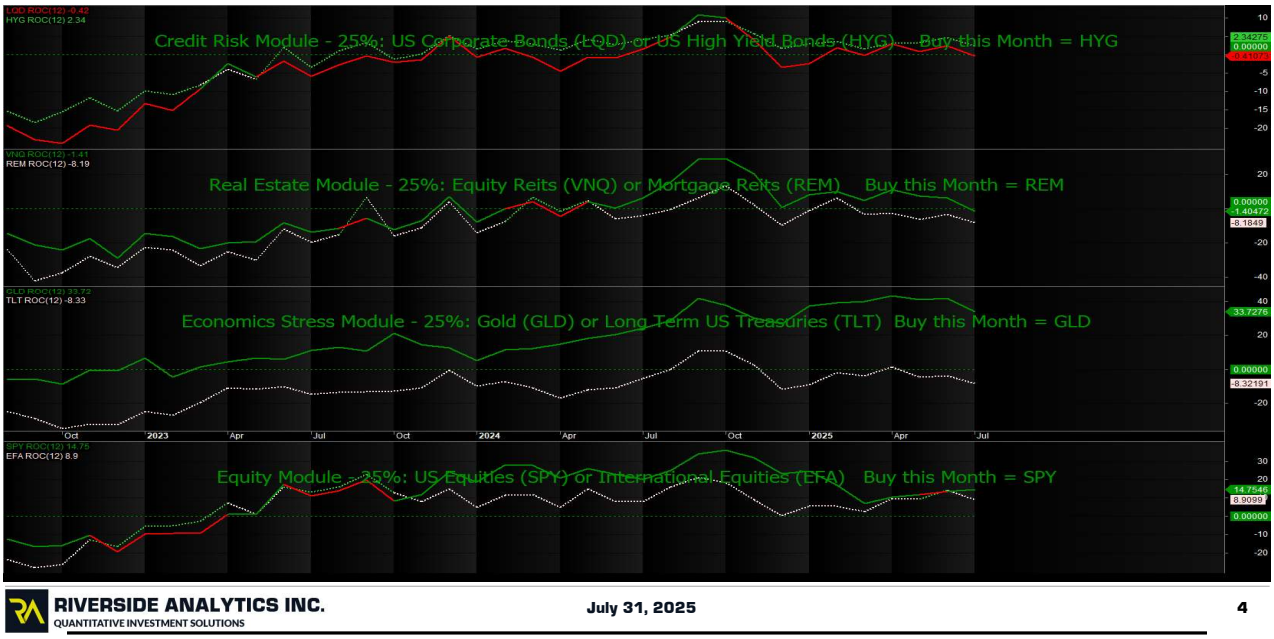
Good investing is <u>not</u> an "event" like finding the next growth opportunity or catching the next market turn. Rather, good investing is a disciplined process that converts research and training into a well-tested methodology, and then makes a habit of following that approach day after day.

John P. Hussman, Ph.D
President, Hussman Strategic Advisors

VARIOUS STRATEGIES

MECHANICAL SIGNALS

August 2025 ALLOCATION
COMPOSITE DUAL MOMENTUM
DUAL MOMENTUM SECTOR ROTATION
LEWIS GLENN'S PAIR SWITCHING
DUAL MOMENTUM PAIR SWITCHING



July 31– Real Estate posts a change – Last month was VNQ, this month it is REM.

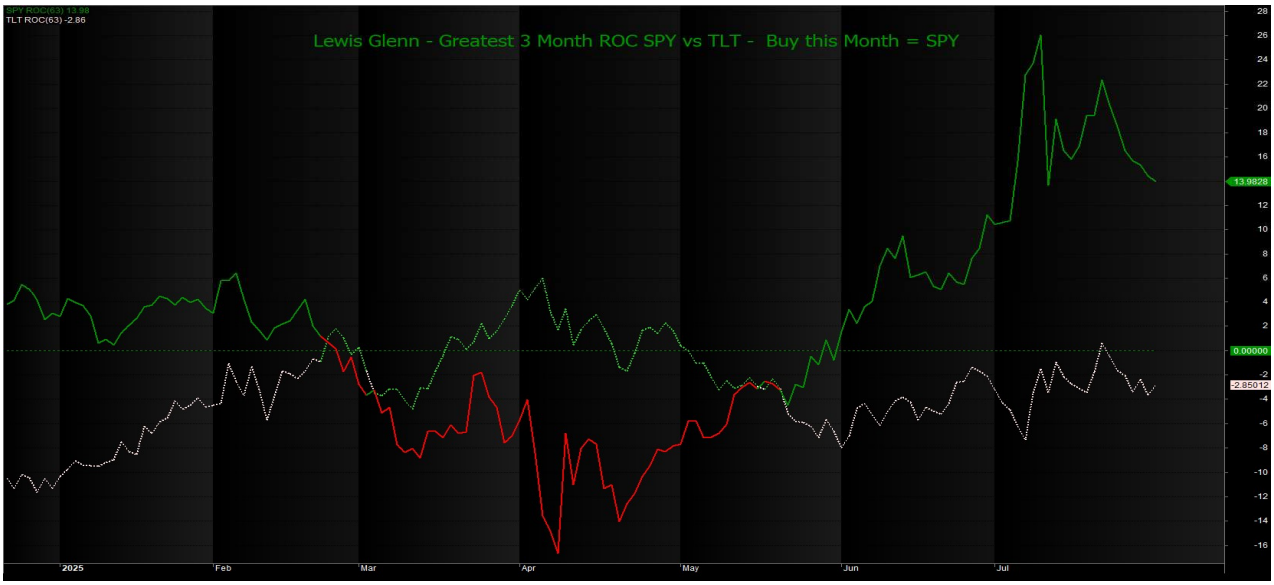
Use the monthly ROC

- Choose which ever one is higher for each category
- ROC (12) - Percent change SPY vs EFA
- ROC (12) - Percent change LQD vs

HYG

- ROC (12) - Percent change VNQ vs REM
- ROC (12) - Percent change GLD vs TLT

LEWIS GLENN'S PAIR SWITCHING (LGPS)
MONTHLY STRATEGY
SIGNAL DATE: July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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July 31 – No Change - SPY easily outshining TLT again this month.

Strategy Rules
This strategy trades once per month.

1) On the last trading day of the month, calculate the 3-month return of the two assets above (SPY & TLT). I chose 69
2) Invest 100% of the portfolio in the asset with the highest 3-month return.
3) Hold the position until the final trading day of the following month.

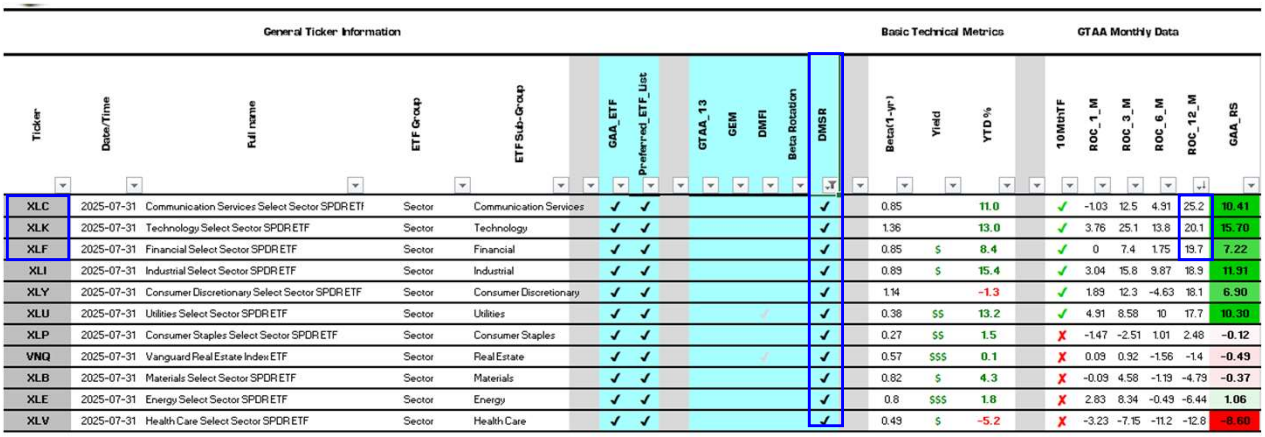
In doing this chart, I have noticed times in the past where both SPY and TLT produced negative ROCS at the same time. This is part of the reason I chose to display this as a chart, rather than a table. I am thinking about modifying

the algorithm slightly and going to cash or T-Bills if that condition arises.

DUAL MOMENTUM SECTOR ROTATION (DMSR)

MONTHLY STRATEGY

SIGNAL DATE: July 31, 2025 → STRATEGY ALLOCATION FOR August 2025



	General Ticker Information											Basic Technical Metrics			GTAA Monthly Data					
Ticker	Date/Time	Full name	ETF Group	ETF Sub-Group	GAA_ETF	Preferred_ETF_List	GTAA_13	GEM	DMFI	Beta Rotation	DMSR	Beta(1-yr)	Yield	YTD %	10MthTF	ROC_1_M	ROC_3_M	ROC_6_M	ROC_12_M	GAA_RS
XLC	2025-07-31	Communication Services Select Sector SPDR ETF	Sector	Communication Services	✓	✓					✓	0.85		11.0	✓	-1.03	12.5	4.91	25.2	10.41
XLK	2025-07-31	Technology Select Sector SPDR ETF	Sector	Technology	✓	✓					✓	1.36		13.0	✓	3.76	25.1	13.8	20.1	15.70
XLF	2025-07-31	Financial Select Sector SPDR ETF	Sector	Financial	✓	✓					✓	0.85	$	8.4	✓	0	7.4	1.75	19.7	7.22
XLI	2025-07-31	Industrial Select Sector SPDR ETF	Sector	Industrial	✓	✓					✓	0.89	$	15.4	✓	3.04	15.8	9.87	18.9	11.91
XLY	2025-07-31	Consumer Discretionary Select Sector SPDR ETF	Sector	Consumer Discretionary	✓	✓					✓	1.14		-1.3	✓	1.89	12.3	-4.63	18.1	6.90
XLU	2025-07-31	Utilities Select Sector SPDR ETF	Sector	Utilities	✓	✓			✓		✓	0.38	$$	13.2	✓	4.91	8.58	10	17.7	10.30
XLP	2025-07-31	Consumer Staples Select Sector SPDR ETF	Sector	Consumer Staples	✓	✓					✓	0.27	$$	1.5	✗	-1.47	-2.51	1.01	2.48	-0.12
VNQ	2025-07-31	Vanguard Real Estate Index ETF	Sector	Real Estate	✓	✓			✓		✓	0.57	$$$	0.1	✗	0.09	0.92	-1.56	-1.4	-0.49
XLB	2025-07-31	Materials Select Sector SPDR ETF	Sector	Materials	✓	✓					✓	0.82	$	4.3	✗	-0.09	4.58	-1.19	-4.79	-0.37
XLE	2025-07-31	Energy Select Sector SPDR ETF	Sector	Energy	✓	✓					✓	0.8	$$$	1.8	✗	2.83	8.34	-0.49	-6.44	1.06
XLV	2025-07-31	Health Care Select Sector SPDR ETF	Sector	Health Care	✓	✓					✓	0.49	$	-5.2	✗	-3.23	-7.15	-11.2	-12.8	-8.60

July 31 – **XLY is out, replaced by XLK**

Heatmap - US-ETF-GAA tab - Filter on DMSR, then Sort Largest to smallest ROC_12_M

SAMPLE STRATEGY REVIEW

MECHANICAL SIGNALS

July 2025 ALLOCATION
GLOBAL EQUITY MOMENTUM (GEM)
GTAA_AGG_6
DUAL MOMENTUM FIXED INCOME (DMFI)

STRATEGY #1 - GLOBAL EQUITY MOMENTUM (GEM)

MECHANICAL ALLOCATION

SIGNAL DATE: July 31, 2025 → STRATEGY ALLOCATION FOR August 2025

Monthly Strategy consisting of 3 ETF's (SPY, ACWX and BIL). Calculate the Monthly ROC (12) of each ETF . Select the strongest ETF. Go long the strongest ETF's if it's Monthly ROC (12) is > Monthly ROC (12) of BIL. Rebalance.

	General Ticker Information										Basic Technical Metrics			GTAA Monthly Data					
Ticker	Date/Time	Full name	ETF Group	ETF Sub-Group	GAA_ETF	Preferred_ETF_List	GTAA_13	GEM	DMFI Beta Rotation	DMSR	Beta(1-yr)	Yield	YTD %	10MthTF	ROC_1_M	ROC_3_M	ROC_6_M	ROC_12_M	GAA_RS
SPY	2025-07-31	SPDR S&P 500 Trust ETF	Broad Index	Benchmark	✓	✓			✓		1	$	7.9	✓	2.3	14	5.03	14.8	9.02
ACWX	2025-07-31	iShares MSCI ACWI ex US ETF	International	Global	✓	✓		✓			0.65	$$	15.5	✓	-1.12	5.81	11.6	11	6.84
BIL	2025-07-31	SPDR Bloomberg 1-3 Month T-Bill ETF	Fixed Income		✓	✓		✓	✓		0	$$$$	0.4	✓	0.02	0.03	0	-0.05	0.00

July 31 – ACWX is out, **replaced by SPY – a reversal from last month.**

HeatMap > US-ETF-GAA tab > Filter on GEM
then Sort Largest to smallest ROC_12_M

STRATEGY #2 - GTAA_AGG_6

MECHANICAL ALLOCATION

SIGNAL DATE: July 31, 2025 → STRATEGY ALLOCATION FOR August 2025

General Ticker Information											Basic Technical Metrics			GTAA Monthly Data					
Ticker	Date/Time	Full name	ETF Group	ETF Sub-Group	GAA_ETF	Preferred_ETF_List	GTAA_13	GEM	DMFI	Beta Rotation	DMSR	Beta(1-yr)	Yield	YTD %	10MoTF	ROC_1_M	ROC_3_M	ROC_6_M	ROC_12_M	GAA_RS
IVW	2025-07-31	iShares S&P 500 Growth ETF	Style		✓	✓	✓					1.17		12.2	✓	3.45	20.3	9.32	24.8	14.47
GLD	2025-07-31	SPDR Gold Shares ETF	Commodities		✓	✓	✓					0.06		25.1	✓	-0.61	-0.27	17.2	33.7	12.51
EEM	2025-07-31	iShares MSCI Emerging Markets ETF	International	Global	✓	✓	✓					0.65	$$	16.1	✓	0.66	11	13.7	13.1	9.59
EFA	2025-07-31	iShares MSCI EAFE ETF	International	Global	✓	✓	✓					0.67	$$	15.8	✓	-2.09	3.27	10.5	8.91	5.14
DBC	2025-07-31	Invesco DB Commodity Index Tracking ETF	Commodities		✓	✓	✓					0.26	$$$	5.0	✓	2.93	9.14	2.18	-0.58	3.42
IVE	2025-07-31	iShares S&P 500 Value ETF	Style		✓	✓	✓					0.73	$	3.2	✓	0.8	7.39	0.41	3.29	2.97
LQD	2025-07-31	iShares iBoxx $ Investment Grade Corporate Bonc	Fixed Income		✓	✓	✓					0.13	$$$	2.1	✓	-0.46	1.05	1.54	-0.41	0.43
IJT	2025-07-31	iShares S&P Small-Cap 600 Growth ETF	Style		✓	✓	✓					1.06	$	-1.2	✓	0.49	10.5	-4.93	-5.52	0.14
BNDX	2025-07-31	Vanguard Total International Bond Index ETF	Fixed Income		✓	✓	✓	✓				-0.01	$$$	0.6	✗	-0.32	-0.4	0.37	-0.52	-0.22
IEF	2025-07-31	iShares 7-10 Year Treasury Bond ETF	Fixed Income		✓	✓	✓	✓				-0.02	$$$	2.7	✓	-0.91	-1.22	2.02	-1.22	-0.33
IJS	2025-07-31	iShares S&P Small-Cap 600 Value ETF	Style		✓	✓	✓					1.04	$	-7.1	✗	1.38	9.85	-8.7	-7.25	-1.18
TLT	2025-07-31	iShares 20+ Year Treasury Bond ETF	Fixed Income		✓	✓	✓					0.04	$$$$	-0.5	✗	-1.51	-2.85	-0.96	-8.32	-3.41

STRATEGY RULES

1) Calculate the 1, 3, 6 and 12 month rate of change (ROC).
2) Calculate the Avg Return → Relative Strength (RS)
3) Determine if assets are above or below their 10-month moving average

STRATEGY RULES (Cont'd)

4) Rank Assets based on their Relative Strength
5) Select the Top Six Assets
6) Each position is equal weighted

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

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July 31 – **IJT is out.** replaced by **DBC**

June – was GLD, IVW, EEM, EFA, IVE and IJT

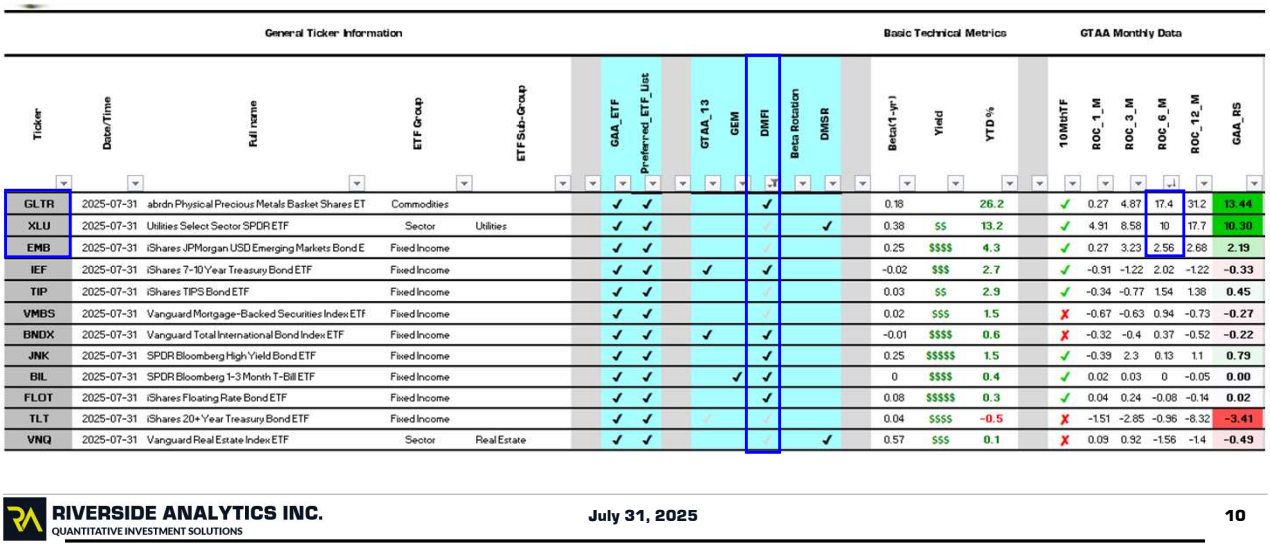
Heatmap - US-ETF-GAA tab - filter on GTAA_13 – Sort GAA_R5 largest to smallest

STRATEGY #3 - DUAL MOMENTUM FIXED INCOME (DMFI)

MECHANICAL ALLOCATION

SIGNAL DATE: July 31, 2025 → STRATEGY ALLOCATION FOR August 2025

Calculate the Monthly ROC (6) of each ETF. Select the strongest three ETF's. Go long the strongest three ETF's if their Monthly ROC (6) is > Monthly ROC (6) of BIL.



General Ticker Information											Basic Technical Metrics			GTAA Monthly Data					
Ticker	Date/Time	Full name	ETF Group	ETF Sub-Group		GAA_ETF	Preferred_ETF_List	GTAA_13	GEM	DMFI	Beta Rotation	DMSR	Beta(1-yr)	Yield	YTD %	10MthTF	ROC_1_M	ROC_3_M	ROC_6_M	ROC_12_M	GAA_RS
GLTR	2025-07-31	abrdn Physical Precious Metals Basket Shares ET	Commodities			✓	✓			✓			0.18		26.2	✓	0.27	4.87	17.4	31.2	13.44
XLU	2025-07-31	Utilities Select Sector SPDR ETF	Sector	Utilities		✓	✓					✓	0.38	$$	13.2	✓	4.91	8.58	10	17.7	10.30
EMB	2025-07-31	iShares JPMorgan USD Emerging Markets Bond E	Fixed Income			✓	✓						0.25	$$$$	4.3	✓	0.27	3.23	2.56	2.68	2.19
IEF	2025-07-31	iShares 7-10 Year Treasury Bond ETF	Fixed Income			✓	✓	✓		✓			-0.02	$$$	2.7	✓	-0.91	-1.22	2.02	-1.22	-0.33
TIP	2025-07-31	iShares TIPS Bond ETF	Fixed Income			✓	✓						0.03	$$	2.9	✓	-0.34	-0.77	1.54	1.38	0.45
VMBS	2025-07-31	Vanguard Mortgage-Backed Securities Index ETF	Fixed Income			✓	✓						0.02	$$$	1.5	✗	-0.67	-0.63	0.94	-0.73	-0.27
BNDX	2025-07-31	Vanguard Total International Bond Index ETF	Fixed Income			✓	✓	✓		✓			-0.01	$$$$	0.6	✗	-0.32	-0.4	0.37	-0.52	-0.22
JNK	2025-07-31	SPDR Bloomberg High Yield Bond ETF	Fixed Income			✓	✓			✓			0.25	$$$$$	1.5	✓	-0.39	2.3	0.13	1.1	0.79
BIL	2025-07-31	SPDR Bloomberg 1-3 Month T-Bill ETF	Fixed Income			✓	✓		✓	✓			0	$$$$	0.4	✓	0.02	0.03	0	-0.05	0.00
FLOT	2025-07-31	iShares Floating Rate Bond ETF	Fixed Income			✓	✓			✓			0.08	$$$$$	0.3	✓	0.04	0.24	-0.08	-0.14	0.02
TLT	2025-07-31	iShares 20+ Year Treasury Bond ETF	Fixed Income			✓	✓						0.04	$$$$	-0.5	✗	-1.51	-2.85	-0.96	-8.32	-3.41
VNQ	2025-07-31	Vanguard Real Estate Index ETF	Sector	Real Estate		✓	✓					✓	0.57	$$$	0.1	✗	0.09	0.92	-1.56	-1.4	-0.49

July 31 – **No Change, and order is identical !**

Heatmap - US-ETF-GAA tab - filter on DMFI – Sort ROC_6_M largest to smallest, take the top three.

SAMPLE STRATEGY Summary
MECHANICAL SIGNALS

MECHANICAL STRATEGY SIGNALS FOR THE MONTH OF August 2025

- **GEM → ACWX is out, replaced by SPY – a reversal from last month.**
  GTAA_AGG_6 → IJT is out. replaced by DBC
- **DMFI → No Change, and order is identical**

February 28

GIC INVESTMENT OPTIONS

TD SPECIAL OFFER GIC – July 31 – 18 month decreases 0.17%

Canadian Guaranteed Investment Certificate (GIC) and Term Deposit rates

TD offers a wide range of **GICs** and Term Deposits, so you can easily choose the one that best meets your investing goals. All GIC and Term Deposit interest rates are per annum, unless otherwise indicated.

Compare TD's Featured GIC rates in Canada

GIC	Term	Interest Rate	
TD Special Offer GIC ›	100-days	Earn up to **2.25%**	**0.0**
TD Special Offer GIC ›	18-month	Earn up to **3%**	**- 0.17**
TD Canadian Banking & Utilities GIC ›	3 Years	Earn up to **30%**[1]	

https://www.td.com/ca/en/personal-banking/personal-investing/products/gic/gic-rates-canada

July –- 100 day GIC holds at 2.25%. **The 18 month reverses last months change dropping from 3.17 to 3.0%**

The banking and utilities GIC got a little more aggressive earning UP TO 30% rather than 25%.

WEEKEND TREND TRADER

CURRENT POSITIONS/SIGNALS

RIVERSIDE's WEEKEND TREND TRADER STRATEGY

MAJOR INDEX ETF'S AS OF THE CLOSE ON THURSDAY July 31, 2025

Riverside's Weekend Trend Trader Strategy - Major Index ETF's

Ticker	Date/Time	Full name	Beta(1-yr)	YTD %	Buy	Sell	ROC(5)	Mkt Trend	In-Trade?	W.Count	BuyPrice	Close	ITM(%)	20wk High	Stop_Dist(%)	Trail Stop	Risk(%)
XIU.ca	2025-07-31	iShares S&P/TSX 60 ETF	1	9.42	0	0	2.32	Up	Yes	12	38.06	41.1	7.99	41.47	6.01	38.98	5.16
EFA	2025-07-31	iShares MSCI EAFE ETF	0.69	14.99	0	0	-2.04	Up	Yes	11	86.09	87.52	1.66	91.57	9.54	82.84	5.35
SPY	2025-07-31	SPDR S&P 500 Trust ETF	0.98	6.23	0	0	2.79	Up	Yes	11	581.47	632.08	8.7	637.58	8.46	583.63	7.67
ACWX	2025-07-31	iShares MSCI ACWI ex US ETF	0.67	14.58	0	0	-0.92	Up	Yes	11	58.44	60.26	3.11	62.63	9.44	56.72	5.88
EWC	2025-07-31	iShares MSCI Canada ETF	0.61	14.82	0	0	1.32	Up	Yes	13	42.05	46.18	9.82	47.23	7.99	43.46	5.9
DIA	2025-07-31	SPDR Dow Jones Industrial Average Trust	0.85	2.63	0	0	0.76	Up	Yes	11	422.96	441.33	4.34	450.25	9.07	409.42	7.23
VTI	2025-07-31	Vanguard Total Stock Market Index ETF	1	5.72	0	0	2.5	Up	Yes	11	286.78	310.89	8.41	313.93	8.62	286.86	7.73
IWM	2025-07-31	iShares Russell 2000 ETF	1.1	-1.35	0	0	1.81	Up	Yes	12	198.57	219.39	10.48	226.71	13.78	195.46	10.91
IJH	2025-07-31	iShares Core S&P Mid-Cap ETF	0.99	0.67	0	0	1.63	Up	Yes	12	58.18	63.03	8.34	64.44	11.82	56.82	9.85
QQQ	2025-07-31	Invesco QQQ Trust Series 1 ETF	1.19	8.12	0	0	3.09	Up	Yes	11	506.99	565.01	11.44	567.7	9.76	512.31	9.33
IJR	2025-07-31	iShares Core S&P Small-Cap ETF	1.04	-4.77	0	0	0.72	Up	Yes	12	102.19	110.28	7.92	114.8	13.57	99.22	10.03
EEM	2025-07-31	iShares MSCI Emerging Markets ETF	0.65	14.8	0	0	0.98	Up	Yes	11	46.02	48.56	5.52	49.96	9.26	45.33	6.64

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QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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July 31 – NOTE THIS IS FOR THURSDAY, SO TECHNICALLY THIS IS NOT AN END OF WEEK SIGNAL. I will publish my normal Friday night heatmap with the full week signals.

RIVERSIDE's WEEKEND TREND TRADER STRATEGY

US SECTOR ETF'S AS OF THE CLOSE ON THURSDAY July 31, 2025

Ticker	Date/Time	Full name	Beta(1-yr)	YTD %	Buy	Sell	ROC(5)	Mkt Trend	In-Trade?	D.Count	BuyPrice	Close	ITM(%)	20wk High	Stop_Dist(%)	Trail Stop	Risk(%)
SPY	2025-07-31	SPDR S&P 500 Trust ETF	0.98	6.23	0	0	2.79	Up	Yes	11	581.47	632.08	8.7	637.58	8.46	583.63	7.67
XLC	2025-07-31	Communication Services Select Sector SPI	0.89	9.42	0	0	-0.25	Up	Yes	11	99.5	107.41	7.95	109.7	10.74	97.92	8.84
VNQ	2025-07-31	Vanguard Real Estate Index ETF	0.54	0.44	0	0	0.73	Up	Yes	11	90.36	89.14	-1.35	92.18	11.15	81.90	8.12
XLE	2025-07-31	Energy Select Sector SPDR ETF	0.75	3.13	0	0	2.24	Up	Yes	11	85.48	87.21	2.02	89.44	11.72	78.96	9.46
XLB	2025-07-31	Materials Select Sector SPDR ETF	0.82	3.28	0	0	-0.18	Up	Yes	11	86.86	87.73	1	92.86	12.53	81.22	7.42
XLF	2025-07-31	Financial Select Sector SPDR ETF	0.93	7.43	0	0	0.83	Up	Yes	12	49.34	52.37	6.14	53.49	10.53	47.86	8.62
XLY	2025-07-31	Consumer Discretionary Select Sector SPI	1.03	-3.62	0	0	1.3	Up	Yes	12	199.81	221.43	10.82	226.89	11.95	199.77	9.78
XLI	2025-07-31	Industrial Select Sector SPDR ETF	1	14.07	0	0	3.56	Up	Yes	12	133.76	152.01	13.64	155.06	11.28	137.56	9.5
XLU	2025-07-31	Utilities Select Sector SPDR ETF	0.43	12.61	0	0	5.34	Up	Yes	89	60.19	85.67	42.33	86.02	11.24	76.35	10.88
XLP	2025-07-31	Consumer Staples Select Sector SPDR ETF	0.26	0.61	0	0	-0.96	Up	Yes	24	79.56	79.78	0.28	83.19	8.6	76.04	4.69
XLK	2025-07-31	Technology Select Sector SPDR ETF	1.41	10.63	0	0	4.77	Up	Yes	12	214.75	262.74	22.35	263.01	12.4	230.40	12.31
XLV	2025-07-31	Health Care Select Sector SPDR ETF	0.51	-6.13	0	0	-2.61	Up	No	26		130.43		137.76			

July 31 – NOTE THIS IS FOR THURSDAY, SO TECHNICALLY THIS IS NOT AN END OF WEEK SIGNAL. I will publish my normal Friday night heatmap with the full week signals.

RIVERSIDE's WEEKEND TREND TRADER STRATEGY

TSX SECTOR ETF'S AS OF THE CLOSE ON THURSDAY July 31, 2025

Riverside's Weekend Trend Trader Strategy - TSX Sector ETF's

Ticker	Date/Time	Full name	Beta(1-yr)	YTD %	Buy	Sell	ROC(5)	Mkt Trend	In-Trade?	D.Count	BuyPrice	Close	ITM(%)	20wk High	Stop_Dist(%)	Trail Stop	Risk(%)
XEG.ca	2025-07-31	iShares S&P/TSX Capped Energy ETF	1.16	9.83	0	0	3.38	Up	Yes	12	15.41	17.64	14.45	18.49	14.67	15.78	10.54
XIT.ca	2025-07-31	iShares S&P/TSX Capped Information Tecl	1.91	8.51	0	0	5.41	Up	Yes	11	68	75.25	10.66	74.55	15.99	62.63	16.77
XFN.ca	2025-07-31	iShares S&P/TSX Capped Financials ETF	0.94	9.5	0	0	1.81	Up	Yes	12	59.92	65.83	9.86	66.95	7.36	62.02	5.78
XMA.ca	2025-07-31	iShares S&P/TSX Capped Materials ETF	1.05	27.82	0	0	1.42	Up	Yes	72	17.23	27.11	57.34	28.29	15.47	23.91	11.79
ZIN.ca	2025-07-31	BMO Equal Weight Indsustrials ETF	1.11	6.7	0	0	3.13	Up	Yes	12	38.37	45.54	18.69	46.44	7.42	42.99	5.59
XGD.ca	2025-07-31	iShares S&P/TSX Global Gold ETF	0.86	47.58	0	0	4.55	Up	Yes	27	22.97	31.7	38.01	32.71	20.28	26.08	17.74
ZRE.ca	2025-07-31	BMO Equal Weight REITs Index Series Un	0.71	6.27	0	0	-0.18	Up	Yes	11	21.28	21.94	3.1	22.69	8.03	20.87	4.89
XIC.ca	2025-07-31	iShares Core S&P/TSX Capped Composite	1	9.69	0	0	2.47	Up	Yes	12	39.95	43.57	9.06	43.93	6.1	41.25	5.32
XST.ca	2025-07-31	iShares S&P/TSX Capped Consumer Staple	0.29	9.35	0	0	1.73	Up	Yes	80	44.39	60.02	35.22	61.38	9.66	55.45	7.62
ZUT.ca	2025-07-31	BMO Equal Weight Utilities Index Series U	0.65	10.39	0	0	3.31	Up	Yes	64	19.46	24.64	26.62	25.25	7.88	23.27	5.58

July 31 – NOTE THIS IS FOR THURSDAY, SO TECHNICALLY THIS IS NOT AN END OF WEEK SIGNAL. I will publish my normal Friday night heatmap with the full week signals.

DISCRETIONARY COMMENTARY

A SYSTEMATIC APPROACH

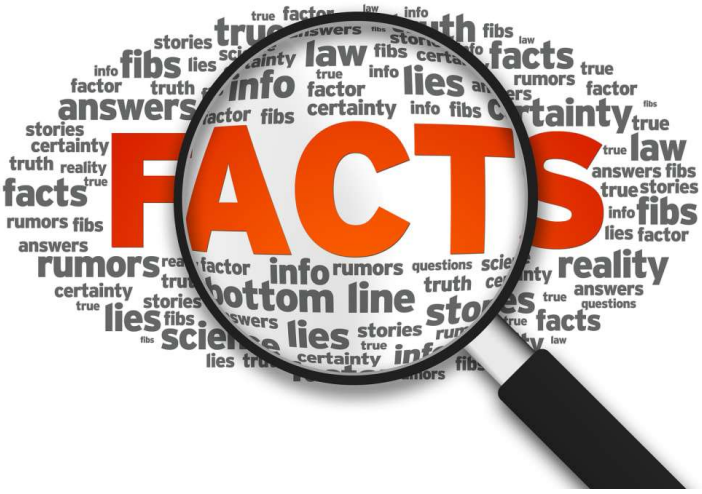


Image by: https://vocal.media/fyi/50-useless-facts

DIRECTIONAL THESIS

ASSESSING THE FACTS IN HAND

WE REVIEW THE FACTS TO DEVELOP A THESIS ON MARKET DIRECTION

WE USE THIS THESIS TO NAVIGATE THE MARKET FOR THE WEEK AHEAD

AT ANY POINT THE FACTS CAN CHANGE

WHEN WE REVIEW THE FACTS…..

DO THE FACTS SUPPORT OUR CURRENT MARKET THESIS??

DO THE FACTS REFUTE OUR CURRENT MARKET THESIS??

WHEN THE FACTS CHANGE…..SO MUST THE THESIS

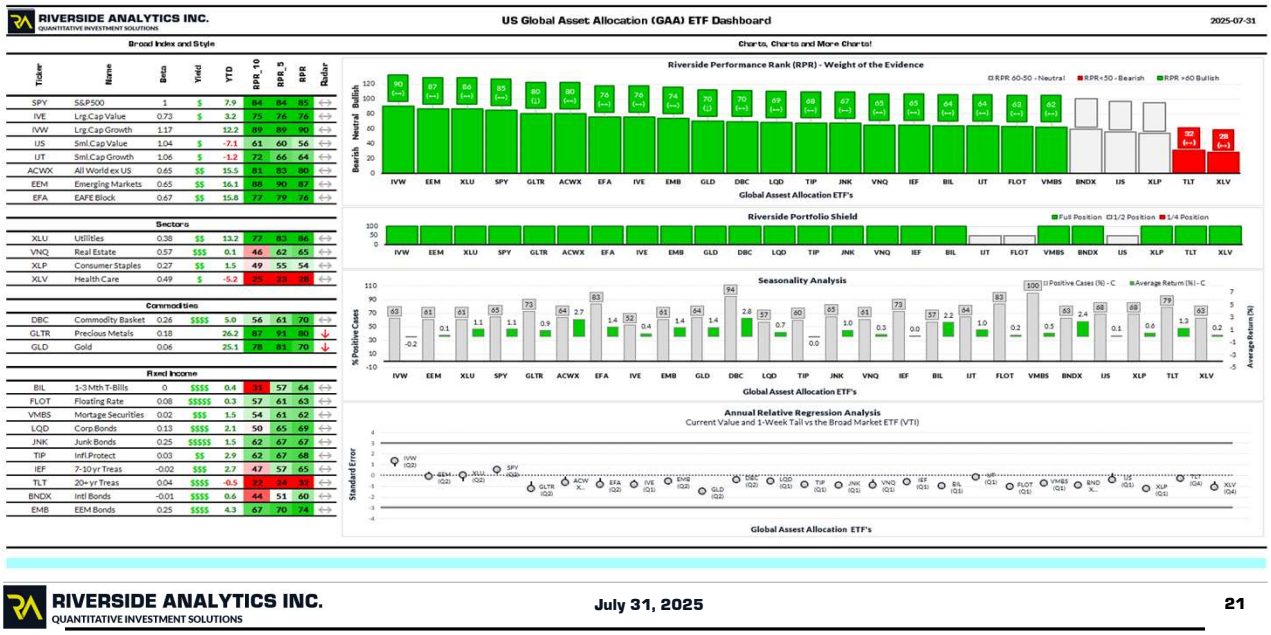
HEAT MAP METRICS

AND A FEW THINGS TO KEEP IN MIND

US ETF GTAA ASSET BASKET

PORTFOLIO SHIELD ANALYSIS

SHIELD METRICS UPDATED AS THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

US Global Asset Allocation (GAA) ETF Dashboard

2025-07-31

Broad Index and Style

Ticker	Name	Beta	Yield	YTD	RPR_10	RPR_5	RPR	Radar
SPY	S&P500	1	$	7.9	84	84	85	↔
IVE	Lrg.Cap Value	0.73	$	3.2	75	76	76	↔
IVW	Lrg.Cap Growth	1.17		12.2	89	89	90	↔
IJS	Sml.Cap Value	1.04	$	-7.1	61	60	56	↔
IJT	Sml.Cap Growth	1.06	$	-1.2	72	66	64	↔
ACWX	All World ex US	0.65	$$	15.5	81	83	80	↔
EEM	Emerging Markets	0.65	$$	16.1	88	90	87	↔
EFA	EAFE Block	0.67	$$	15.8	77	79	76	↔
Sectors								
XLU	Utilities	0.38	$$	13.2	77	83	86	↔
VNQ	Real Estate	0.57	$$$	0.1	46	62	65	↔
XLP	Consumer Staples	0.27	$$	1.5	49	55	54	↔
XLV	Health Care	0.49	$	-5.2	25	25	28	↔
Commodities								
DBC	Commodity Basket	0.26	$$$$	5.0	56	61	70	↔
GLTR	Precious Metals	0.18		26.2	87	91	80	↓
GLD	Gold	0.06		25.1	78	81	70	↓
Fixed Income								
BIL	1-3 Mth T-Bills	0	$$$$	0.4	31	57	64	↔
FLOT	Floating Rate	0.08	$$$$$	0.3	57	61	63	↔
VMBS	Mortage Securities	0.02	$$$	1.5	54	61	62	↔
LQD	Corp Bonds	0.13	$$$$	2.1	50	65	69	↔
JNK	Junk Bonds	0.25	$$$$$	1.5	62	67	67	↔
TIP	Infl.Protect	0.03	$$	2.9	62	67	68	↔
IEF	7-10 yr Treas	-0.02	$$$	2.7	47	57	65	↔
TLT	20+ yr Treas	0.04	$$$$	-0.5	22	24	32	↔
BNDX	Intl Bonds	-0.01	$$$$	0.6	44	51	60	↔
EMB	EEM Bonds	0.25	$$$$	4.3	67	70	74	↔

Charts, Charts and More Charts!

Riverside Performance Rank (RPR) - Weight of the Evidence

RPR 60-50 - Neutral RPR<50 - Bearish RPR >60 Bullish

Bullish / Neutral / Bearish

IVW EEM XLU SPY GLTR ACWX EFA IVE EMB GLD DBC LQD TIP JNK VNQ IEF BIL IJT FLOT VMBS BNDX IJS XLP TLT XLV

Global Asset Allocation ETF's

Riverside Portfolio Shield

Full Position 1/2 Position 1/4 Position

IVW EEM XLU SPY GLTR ACWX EFA IVE EMB GLD DBC LQD TIP JNK VNQ IEF BIL IJT FLOT VMBS BNDX IJS XLP TLT XLV

Seasonality Analysis

Positive Cases (%) - C Average Return (%) - C

% Positive Cases Average Return (%)

IVW EEM XLU SPY GLTR ACWX EFA IVE EMB GLD DBC LQD TIP JNK VNQ IEF BIL IJT FLOT VMBS BNDX IJS XLP TLT XLV

Global Asset Allocation ETF's

Annual Relative Regression Analysis

Current Value and 1-Week Tail vs the Broad Market ETF (VTI)

Standard Error

Global Asset Allocation ETF's

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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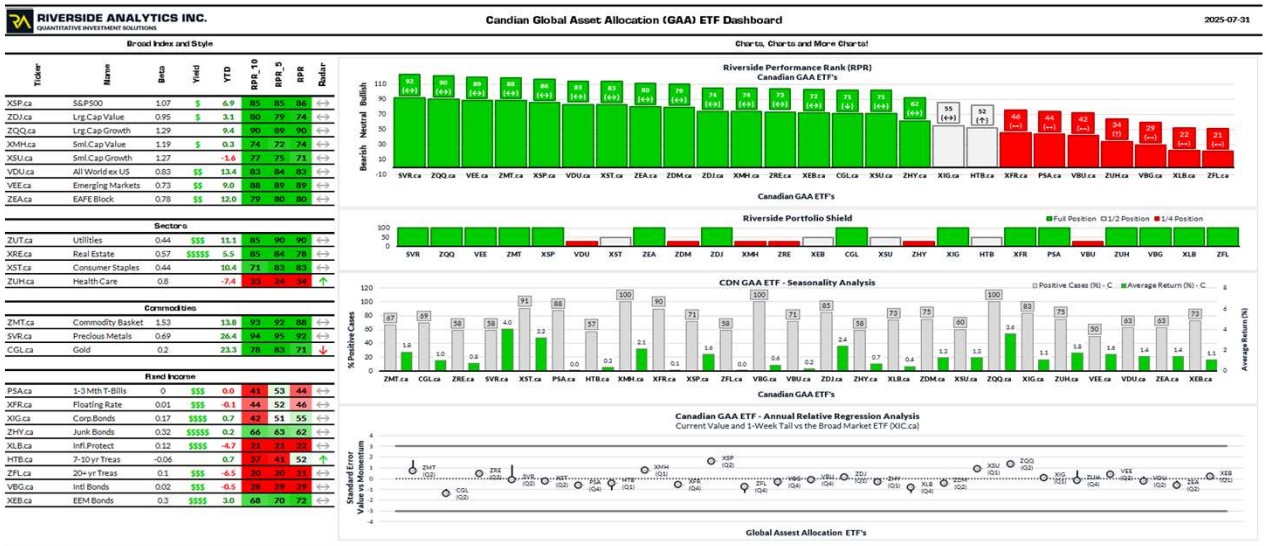
July 31– The overall US Performance Rankings are Greens improved from 14 to 20, Neutrals decreased from 5 to 3, and bears are down from 6 to 2!

The top 5 last month were EEM, IVW, GLTR, SPY, and ACWX

CDN ETF GTAA ASSET BASKET

PORTFOLIO SHIELD ANALYSIS
SHIELD METRICS UPDATED AS THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

Candian Global Asset Allocation (GAA) ETF Dashboard

2025-07-31

Broad Index and Style

Ticker	Name	Beta	Yield	YTD	RPR_10	RPR_5	RPR	Radar
XSP.ca	S&P500	1.07	$	6.9	85	85	86	↔
ZDJ.ca	Lrg.Cap Value	0.95	$	3.1	80	79	74	↔
ZQQ.ca	Lrg.Cap Growth	1.29		9.4	90	89	90	↔
XMH.ca	Sml.Cap Value	1.19	$	0.3	74	72	74	↔
XSU.ca	Sml.Cap Growth	1.27		-1.6	77	75	71	↔
VDU.ca	All World ex US	0.83	$$	13.4	83	84	83	↔
VEE.ca	Emerging Markets	0.73	$$	9.0	88	89	89	↔
ZEA.ca	EAFE Block	0.78	$$	12.0	79	80	80	↔
Sectors								
ZUT.ca	Utilities	0.44	$$$	11.1	85	90	90	↔
XRE.ca	Real Estate	0.57	$$$$$	5.5	85	84	78	↔
XST.ca	Consumer Staples	0.44		10.4	71	83	83	↔
ZUH.ca	Health Care	0.8		-7.4	53	24	34	↑
Commodities								
ZMT.ca	Commodity Basket	1.53		13.8	93	92	88	↔
SVR.ca	Precious Metals	0.69		26.4	94	95	92	↔
CGL.ca	Gold	0.2		23.3	78	83	71	↓
Fixed Income								
PSA.ca	1-3 Mth T-Bills	0	$$$	0.0	41	53	44	↔
XFR.ca	Floating Rate	0.01	$$$	-0.1	44	52	46	↔
XIG.ca	Corp.Bonds	0.17	$$$$	0.7	42	51	55	↔
ZHY.ca	Junk Bonds	0.32	$$$$$	0.2	66	63	62	↔
XLB.ca	Infl.Protect	0.12	$$$$	-4.7	21	21	22	↔
HTB.ca	7-10 yr Treas	-0.06		0.7	37	41	52	↑
ZFL.ca	20+ yr Treas	0.1	$$$	-6.5	20	20	21	↔
VBG.ca	Intl Bonds	0.02	$$$	-0.5	28	29	29	↔
XEB.ca	EEM Bonds	0.3	$$$$	3.0	68	70	72	↔

Charts, Charts and More Charts!

Riverside Performance Rank (RPR)
Canadian GAA ETF's

Riverside Portfolio Shield

CDN GAA ETF - Seasonality Analysis

Canadian GAA ETF - Annual Relative Regression Analysis
Current Value and 1-Week Tail vs the Broad Market ETF (XIC.ca)

Global Assest Allocation ETF's

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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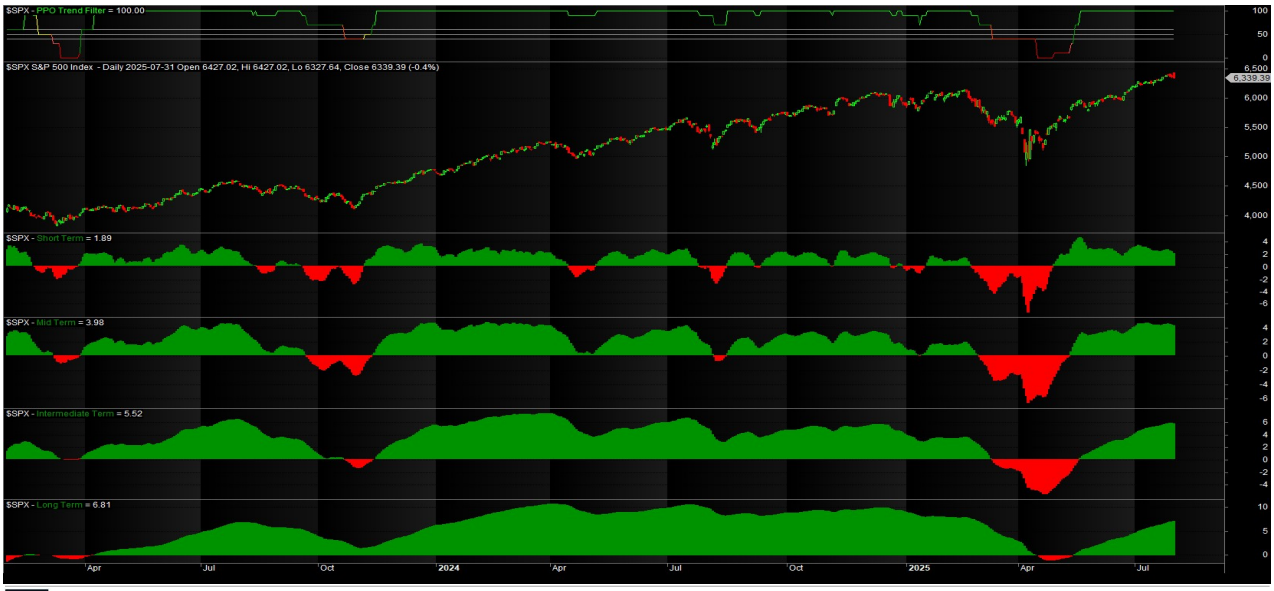
July – **The Canadian Performance Rank has improved again this month**. Greens improved from 13 to 16, neutrals increased from 3 to 2, 9 reds reduced to 7 !
Last month top 5 were – SVR, ZMT, ZQQ, VDU and ZEA

PORTFOLIO SHIELD

BASIC CONCEPTS AND APPLICATION
SYSTEMATIC DISCRETIONARY APPROACH

S&P 500 TREND – Bullish

PPO TREND FILTER – LONG TERM TIMEFRAME AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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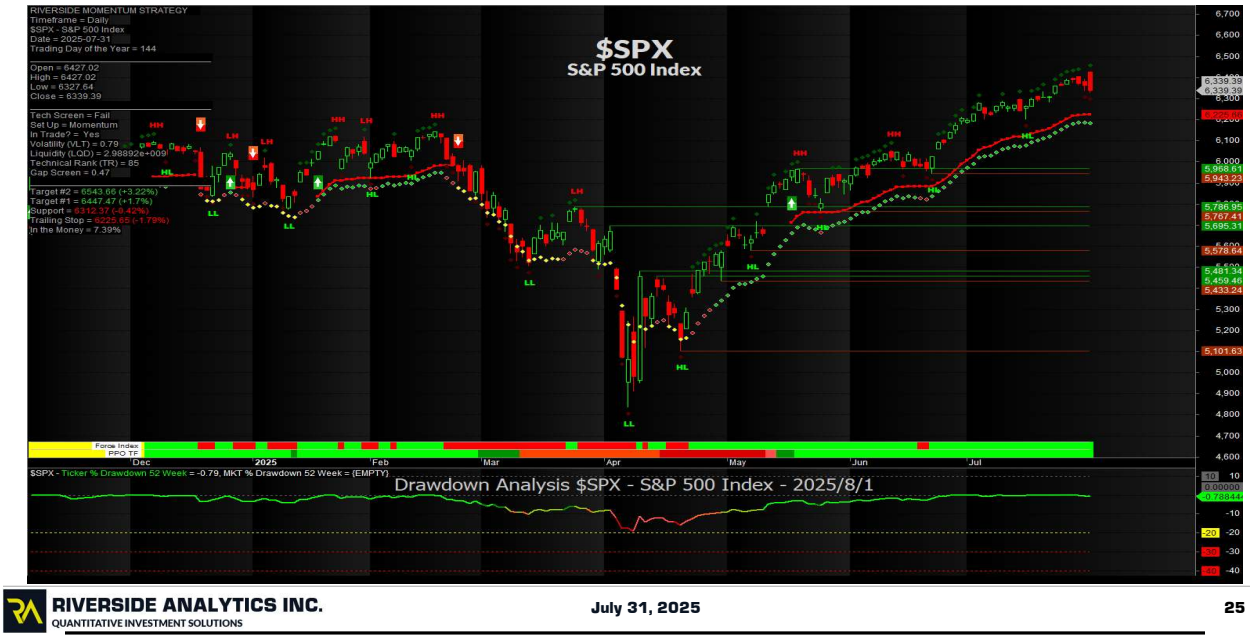
July 27 – **PPOs Trend summary remains solidly bullish this month.**

$SPX RIVERSIDE BREADTH INDICATORS – Bullish

2025 WEEKLY VIEW AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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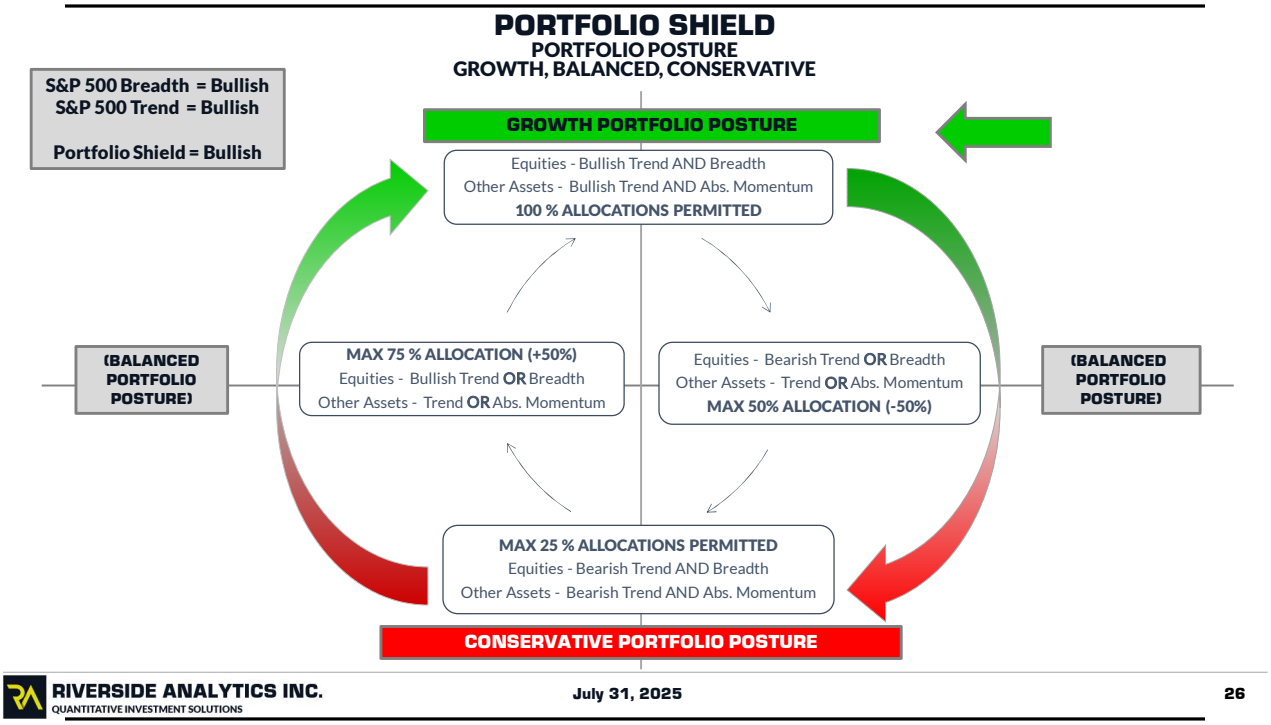
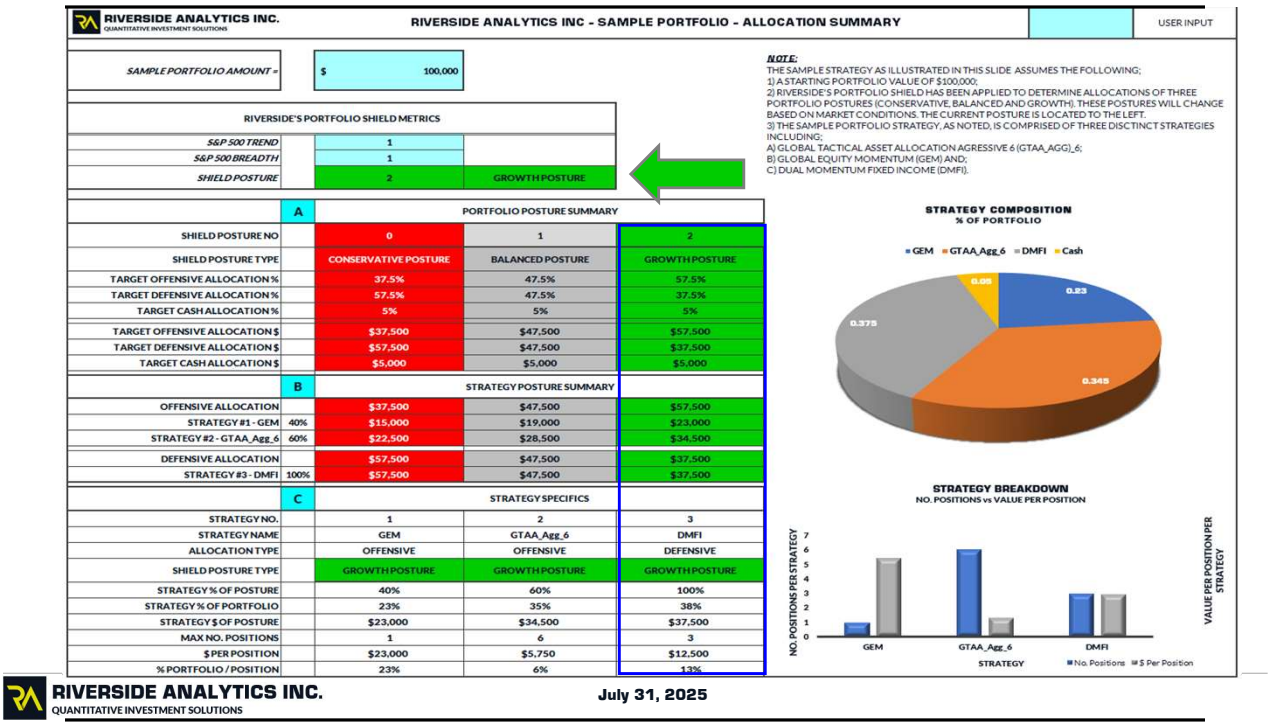
July 31- SP500 breadth is in BULLISH territory – **a change from last month**



July 31 - SP500 breadth is Bullish, and PPO is bullish, therefore Portfolio Posture is BULLISH



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

RIVERSIDE ANALYTICS INC - SAMPLE PORTFOLIO - ALLOCATION SUMMARY

USER INPUT

SAMPLE PORTFOLIO AMOUNT = $ 100,000

NOTE:
THE SAMPLE STRATEGY AS ILLUSTRATED IN THIS SLIDE ASSUMES THE FOLLOWING;
1) A STARTING PORTFOLIO VALUE OF $100,000;
2) RIVERSIDE'S PORTFOLIO SHIELD HAS BEEN APPLIED TO DETERMINE ALLOCATIONS OF THREE PORTFOLIO POSTURES (CONSERVATIVE, BALANCED AND GROWTH). THESE POSTURES WILL CHANGE BASED ON MARKET CONDITIONS. THE CURRENT POSTURE IS LOCATED TO THE LEFT.
3) THE SAMPLE PORTFOLIO STRATEGY, AS NOTED, IS COMPRISED OF THREE DISCTINCT STRATEGIES INCLUDING;
A) GLOBAL TACTICAL ASSET ALLOCATION AGRESSIVE 6 (GTAA_AGG)_6;
B) GLOBAL EQUITY MOMENTUM (GEM) AND;
C) DUAL MOMENTUM FIXED INCOME (DMFI).

RIVERSIDE'S PORTFOLIO SHIELD METRICS		
S&P 500 TREND	1	
S&P 500 BREADTH	1	
SHIELD POSTURE	2	GROWTH POSTURE

		PORTFOLIO POSTURE SUMMARY		
SHIELD POSTURE NO		0	1	2
SHIELD POSTURE TYPE		CONSERVATIVE POSTURE	BALANCED POSTURE	GROWTH POSTURE
TARGET OFFENSIVE ALLOCATION %		37.5%	47.5%	57.5%
TARGET DEFENSIVE ALLOCATION %		57.5%	47.5%	37.5%
TARGET CASH ALLOCATION %		5%	5%	5%
TARGET OFFENSIVE ALLOCATION $		$37,500	$47,500	$57,500
TARGET DEFENSIVE ALLOCATION $		$57,500	$47,500	$37,500
TARGET CASH ALLOCATION $		$5,000	$5,000	$5,000
	B	STRATEGY POSTURE SUMMARY		
OFFENSIVE ALLOCATION		$37,500	$47,500	$57,500
STRATEGY #1 - GEM	40%	$15,000	$19,000	$23,000
STRATEGY #2 - GTAA_Agg_6	60%	$22,500	$28,500	$34,500
DEFENSIVE ALLOCATION		$57,500	$47,500	$37,500
STRATEGY #3 - DMFI	100%	$57,500	$47,500	$37,500
	C	STRATEGY SPECIFICS		
STRATEGY NO.		1	2	3
STRATEGY NAME		GEM	GTAA_Agg_6	DMFI
ALLOCATION TYPE		OFFENSIVE	OFFENSIVE	DEFENSIVE
SHIELD POSTURE TYPE		GROWTH POSTURE	GROWTH POSTURE	GROWTH POSTURE
STRATEGY % OF POSTURE		40%	60%	100%
STRATEGY % OF PORTFOLIO		23%	35%	38%
STRATEGY $ OF POSTURE		$23,000	$34,500	$37,500
MAX NO. POSITIONS		1	6	3
$ PER POSITION		$23,000	$5,750	$12,500
% PORTFOLIO / POSITION		23%	6%	13%

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

July 31 - SP500 breadth is bullish and trend is bullish, therefore the posture is growth

MARKET BREADTH

CURRENT VIEW

SPX % STOCKS ABOVE EMA

AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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July 31 – The short and medium term have both declined from their peaks. I have noticed a decline in the industry breath, which will be published August 1st evening.

The 20 MA declined from 66 to 39.

The 50 MA declined from 70.1 to 55

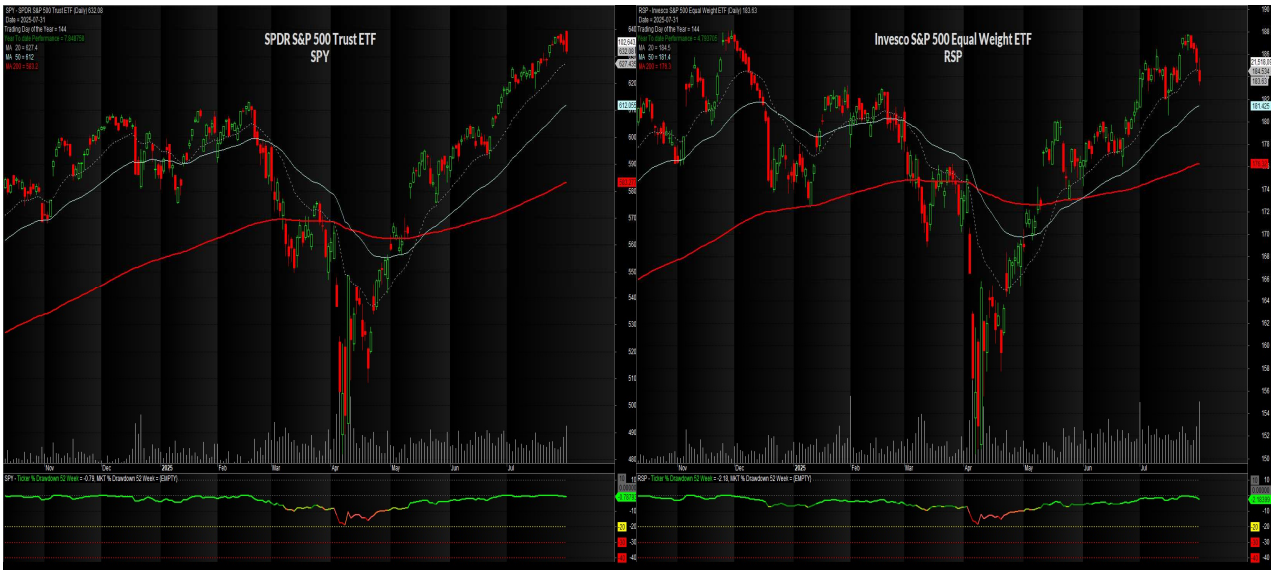
The 200 MA improved from 51 to 56

RISK APPETITE

RATIO REVIEW

MAJOR INDEX's vs EQUAL WEIGHTS

DAILY VIEW AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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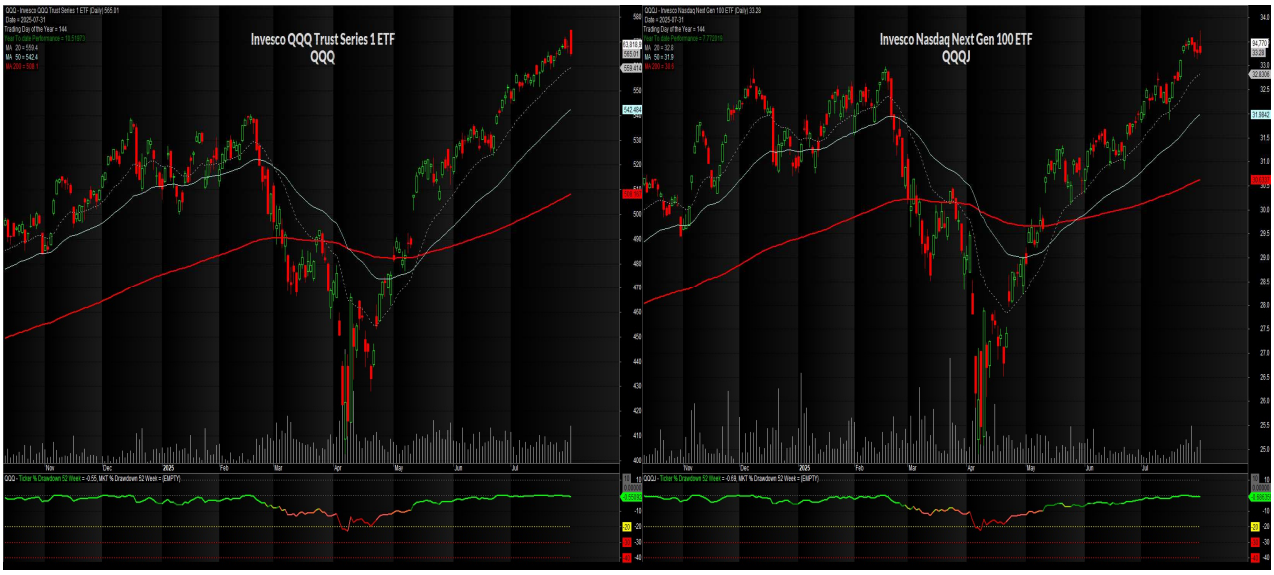
July 31
SPY YTD return = 7.8 up from 4.9 last month
RSP YTD return = 4.7 up from 3.2 last month

MAJOR INDEX's vs EQUAL WEIGHTS

DAILY VIEW AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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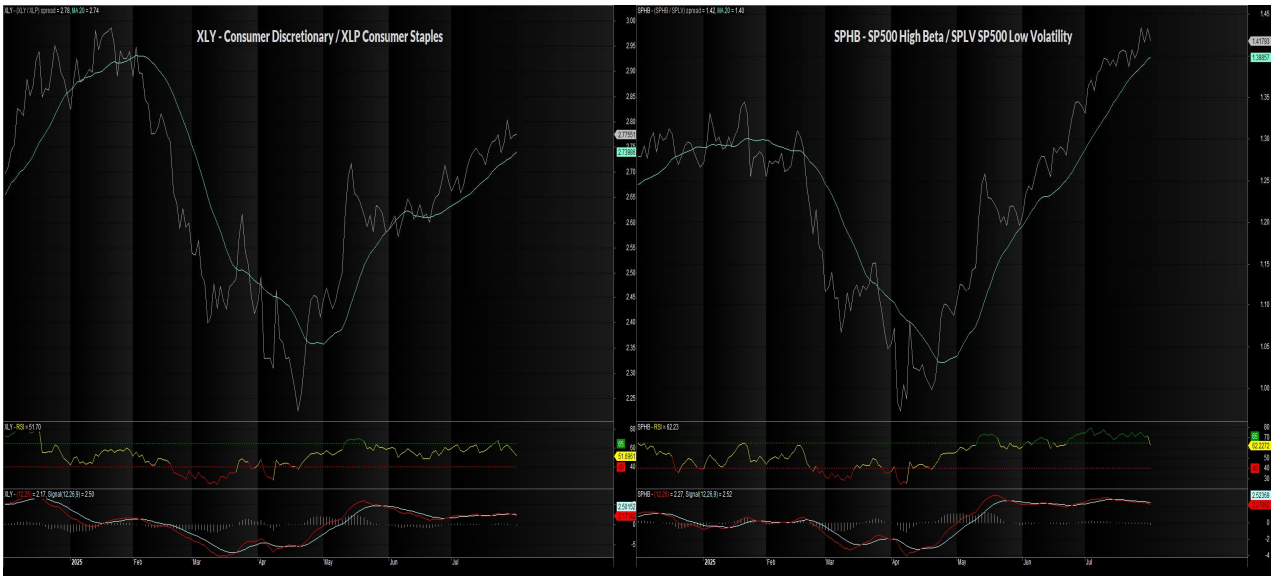
July 31
QQQ YTD = 10.5 up from 7.2 last month
QQQJ YTD = 7.7 up from 3.0 last month

THE RATIOS

RATIO ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

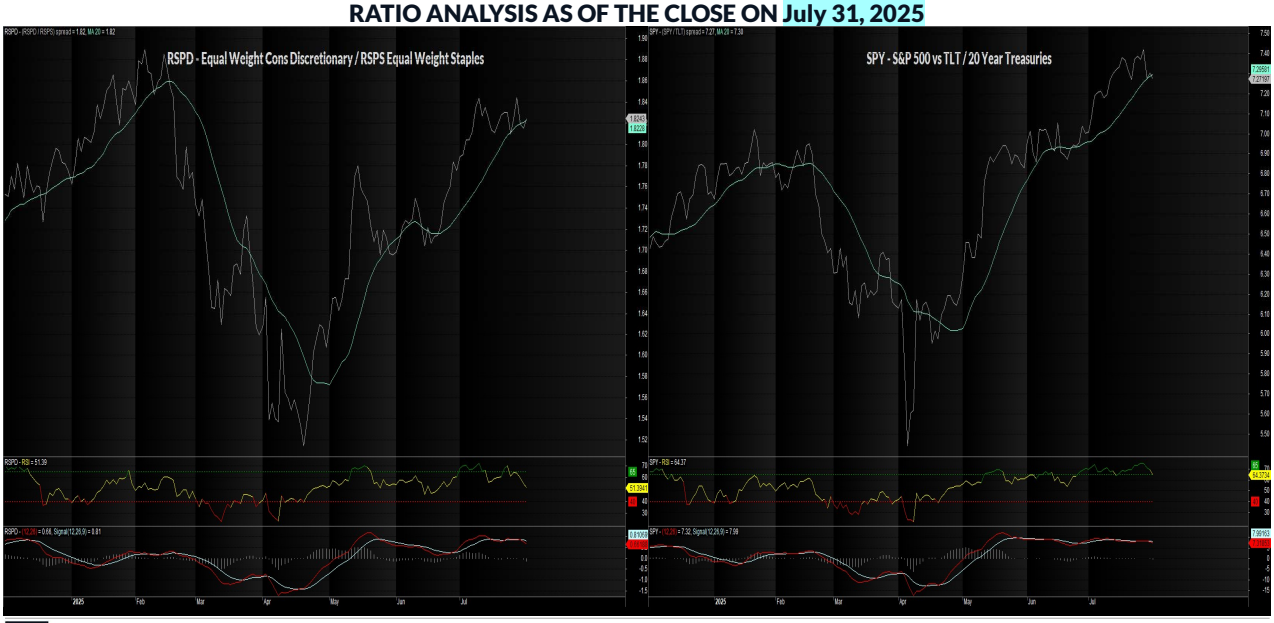
July 31, 2025

33

If you are like me, ratios bother my brain a whole bunch. The chart moving up means the numerator is winning the race. Note, that can happen a couple ways, so if you are playing with these, always check the source charts to see what is going on. A down trend with the numerator falling slower can produce a similar result to an up trend with the numerator rising quicker !

THE RATIOS

RATIO ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

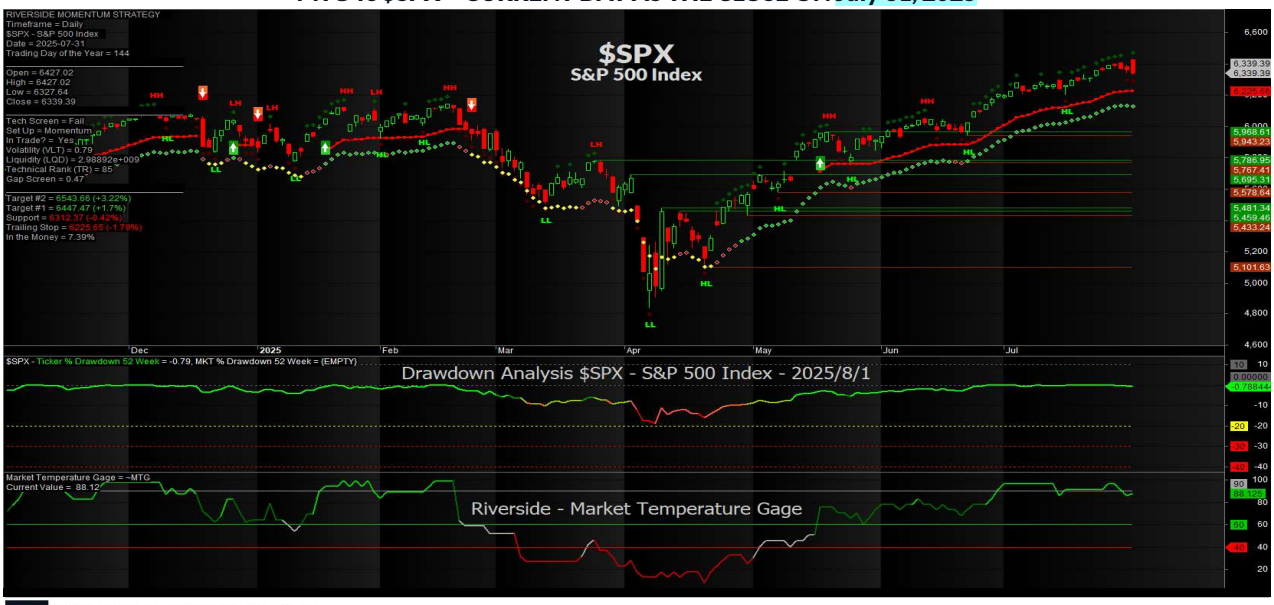
July 31, 2025

34

If you are like me, ratios bother my brain a whole bunch. The chart moving up means the numerator is winning the race. Note, that can happen a couple ways, so if you are playing with these, always check the source charts to see what is going on. A down trend with the numerator falling slower can produce a similar result to an up trend with the numerator rising quicker !

MARKET TEMPERATURE GAGE (MTG)

MTG vs $SPX – CURRENT DAY AS THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

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July 31– MTG doing just fine !

SEASONAL TENDENCIES

1ST YEAR OF THE PRESIDENTIAL CYCLE

S&P 500 YEARLY RETURNS

AVERAGE YEAR vs YEAR #1 OF THE US PRESIDENTIAL CYCLE

US Presidential Election Cycle - S&P 500 Performance Analysis

	Jan%	Feb%	Mar%	Apr%	May%	Jun%	Jul%	Aug%	Sep%	Oct%	Nov%	Dec%	Yr. Profit%
Average Year 1	0.76	-1.66	0.61	2.45	1.90	0.56	2.28	-0.04	-1.52	-0.59	0.68	0.54	6.63
Average Year 2	0.47	0.01	0.11	0.26	-0.76	-1.32	1.01	-0.45	-1.48	2.16	2.03	1.19	3.11
Average Year 3	3.40	1.58	0.57	2.55	-0.17	2.07	1.24	-0.02	-1.08	0.84	-0.50	2.24	13.51
Average Year 4	0.05	-0.25	0.36	-0.12	-1.23	1.69	2.19	2.90	-0.50	-0.34	1.14	1.51	6.56
Democrats Avg Year 1	0.56	-1.64	1.14	3.79	2.72	1.06	2.71	1.04	-0.92	-0.70	1.25	0.71	12.89
Democrats Avg Year 2	0.46	-0.08	-1.38	1.29	-1.57	-0.25	1.80	-1.52	-0.46	1.85	1.61	2.72	3.29
Democrats Avg Year 3	2.25	0.52	0.28	2.46	0.23	1.08	2.53	-0.71	0.99	2.07	-0.18	2.60	14.68
Democrats Avg Year 4	0.32	-0.55	2.48	0.00	-0.23	2.72	0.78	1.08	0.64	1.64	0.64	0.27	9.77
Republicans Avg Year 1	1.00	-1.68	-0.03	0.86	0.95	-0.02	1.76	-1.33	-2.23	-0.45	0.00	0.33	-0.76
Republicans Avg Year 2	0.47	0.12	1.88	-0.96	0.19	-2.59	0.07	0.81	-2.67	2.50	2.48	-0.47	2.89
Republicans Avg Year 3	4.66	2.72	0.89	2.65	-0.61	3.16	-0.16	0.73	-3.94	-0.51	-0.85	1.84	12.23
Republicans Avg Year 4	-0.25	0.07	-1.96	-0.26	-2.33	0.57	3.73	4.88	-1.65	-2.32	1.63	2.75	3.35

What does year 1 of Republican Presidency tend to bring ?

July 27 – Republican Year 1, August tends to be a poor month !

MAJOR ASSET ETF's
Seasonal Tendencies

RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

US ETF Seasonality Summary

Avg Return >0.5%
Avg Return <0.5% and >0%
Avg Return <0%

ETF Information					Seasonal Average % Return											
ETF Main Category	ETF Sub Category	Symbol	Description	ETF Group	January	February	March	April	May	June	July	August	September	October	November	December
1	1100	SPY	SPDR S&P 500 Trust ETF	Broad Index	0.10	-0.21	0.07	1.87	0.47	-0.68	0.94	0.04	-0.78	0.78	1.79	0.19
9	9100	UUP	Invesco DB US Dollar Index Bullish ETF	Currencies	0.26	0.31	-0.33	-0.87	1.25	-0.73	-0.71	0.45	0.03	0.56	0.86	-0.95
8	8100	GLD	SPDR Gold Shares ETF	Commodities	3.65	1.39	-0.86	1.73	-0.83	0.43	1.20	1.90	-0.11	0.07	0.67	0.57
8	8100	DBC	Invesco DB Commodity Index Tracking ETF	Commodities	0.95	1.48	0.79	2.25	0.39	0.97	-0.19	-0.68	-1.21	-0.48	0.93	-0.21
6	6100	IEF	iShares 7-10 Year Treasury Bond ETF	Fixed Income	0.75	0.13	0.27	-0.23	0.39	-0.10	0.13	1.18	0.29	-0.54	0.20	-0.29
3	3200	ACWX	iShares MSCI ACWI ex US ETF	International	-0.63	-0.12	0.99	3.65	-1.00	-1.86	2.41	-1.55	-0.28	-0.58	0.52	0.73

July 31 – Gold and Bonds - tend to do well in August

VOLATILITY

$VIX ANALYSIS

CBOE VOLATILITY INDEX ($VIX)

CLOSE ON July 31, 2025



MAJOR INDEX ETF's

MAJOR NORTH AMERICAN ETF's - TECHNICAL ANALYSIS
MAJOR GLOBAL ETF's – TECHNICAL ANALYSIS

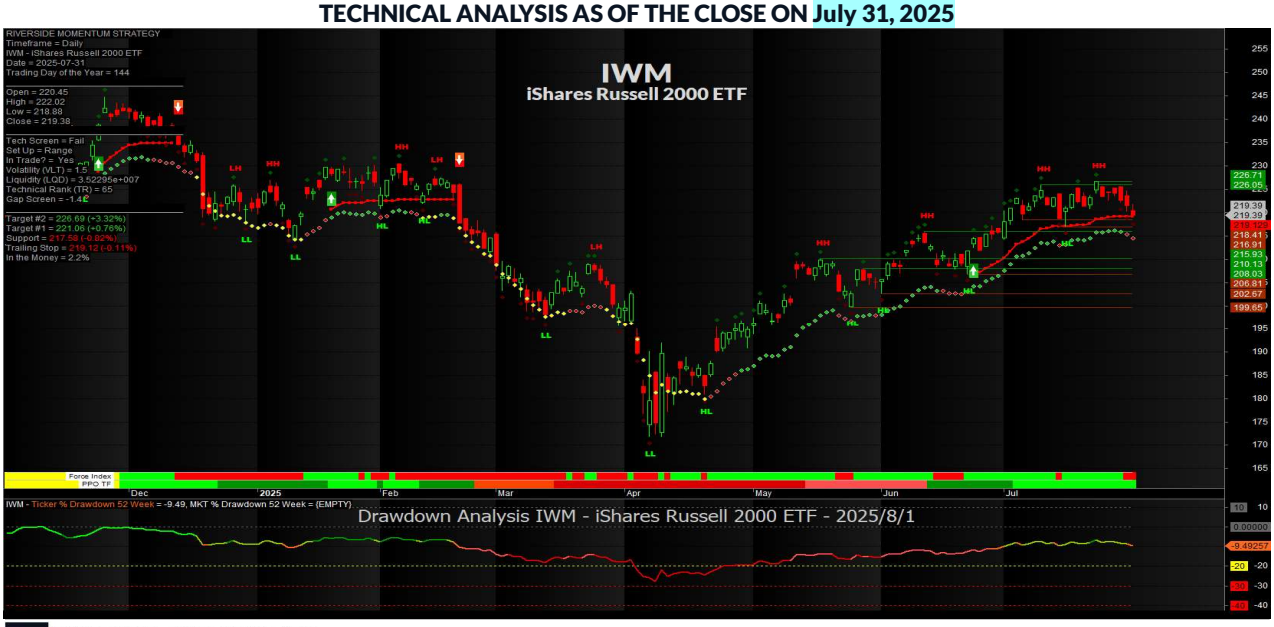
MAJOR NORTH AMERICAN INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



MAJOR NORTH AMERICAN INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

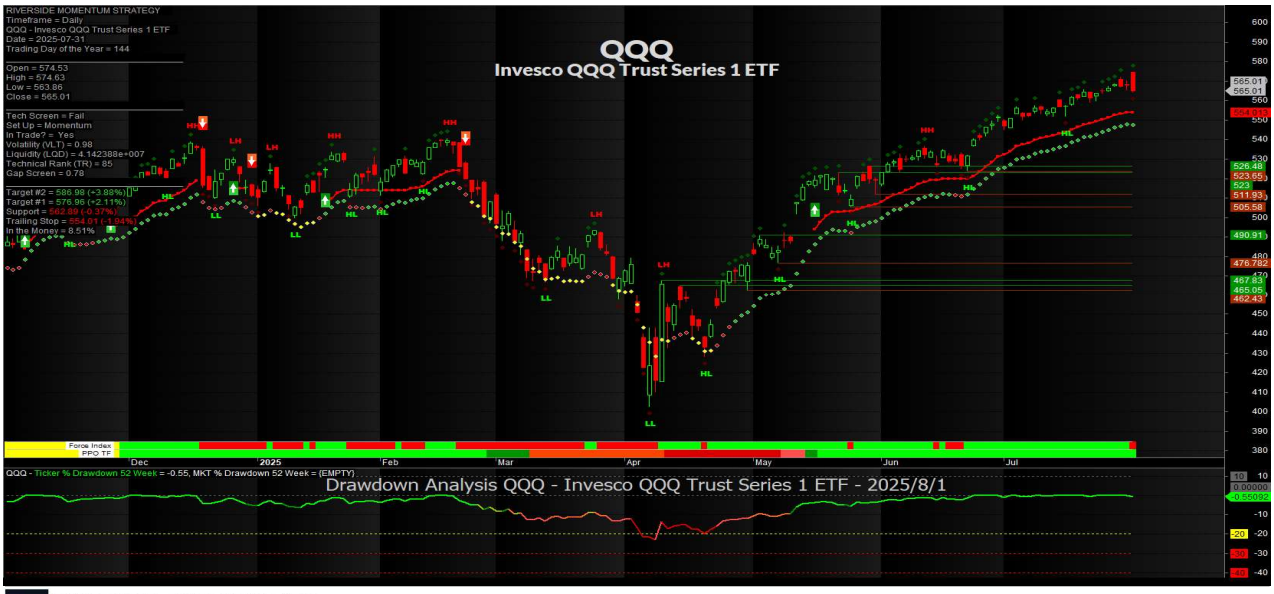
July 31, 2025

43

This was part of a quad chart set on one slide. It has been separated to single slides.

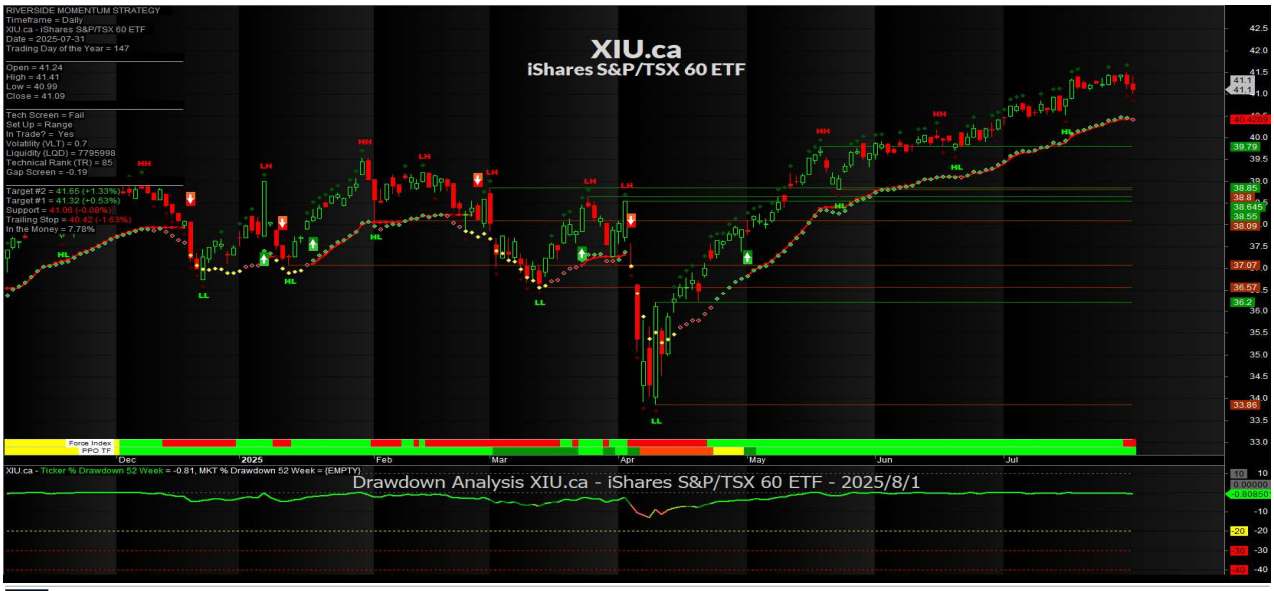
MAJOR NORTH AMERICAN INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



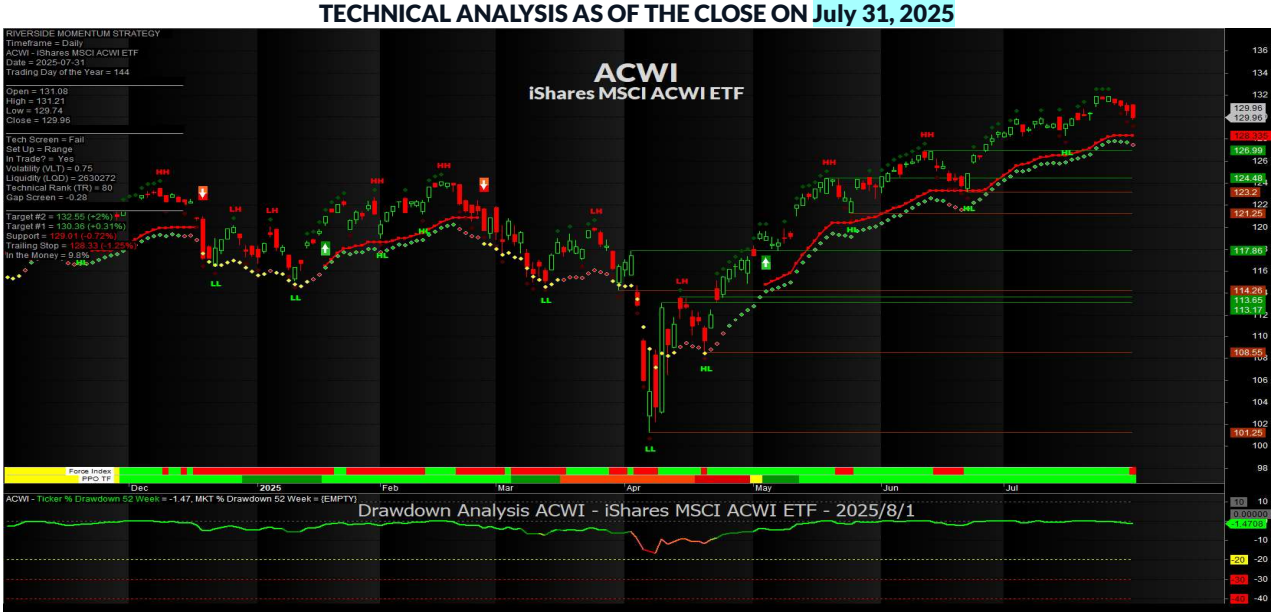
MAJOR NORTH AMERICAN INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



MAJOR GLOBAL INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



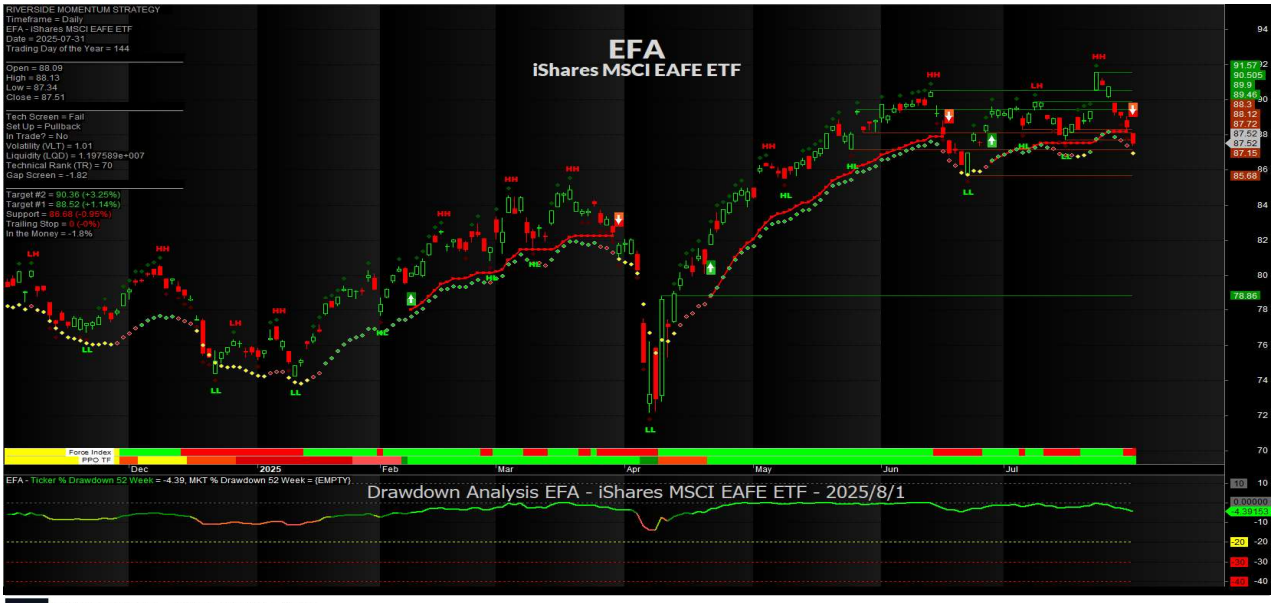
MAJOR GLOBAL INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



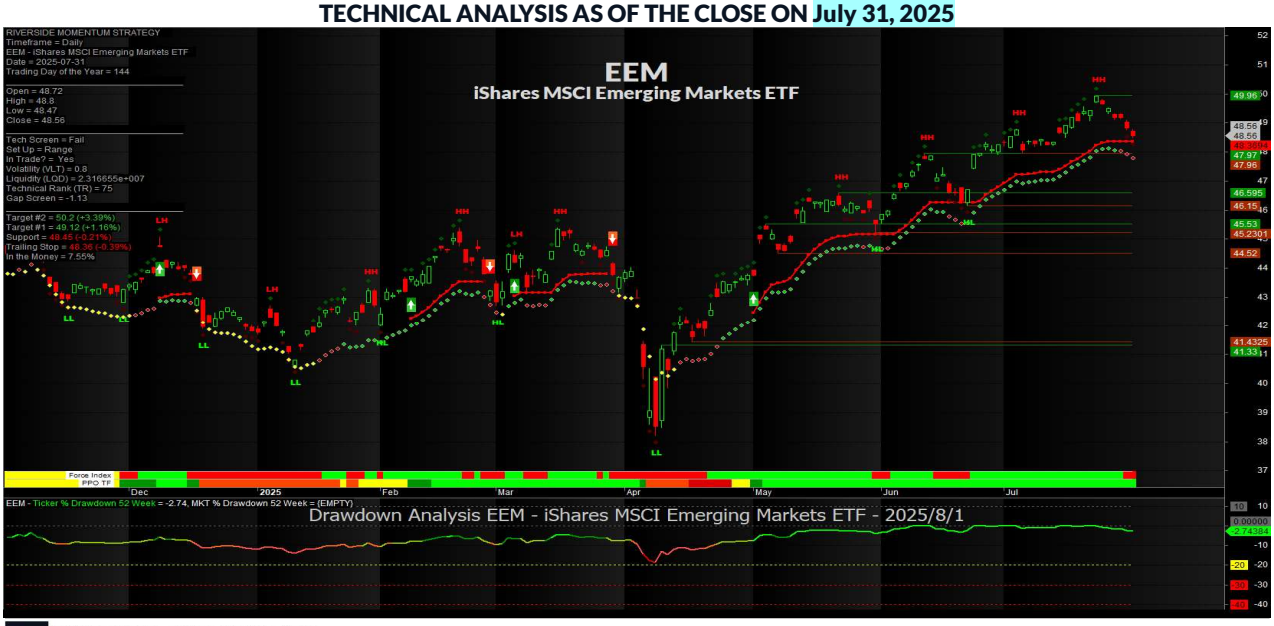
MAJOR GLOBAL INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



MAJOR GLOBAL INDEX ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



CURRENCY MARKET

CURRENT MARKET ETF's – TECHNICAL ANALYSIS

US DOLLAR ($USDX)

DAILY VIEW AS OF THE CLOSE ON July 31, 2025



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USD/CAD PAIR (CADUSD)

AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

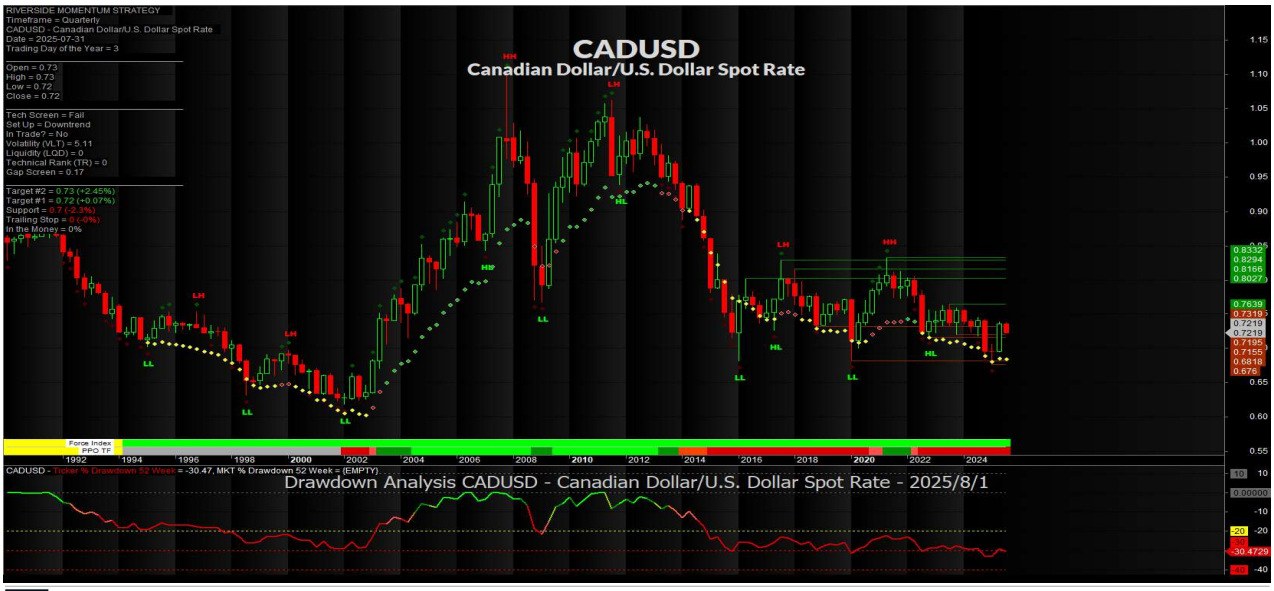
July 31, 2025

53

July 31– Quite the reversal from last month. If it breaks the sell line, next support is about 71.5 cents

USD/CAD PAIR (CADUSD) – Long View - Quarterly Candles

AS OF THE CLOSE ON July 31, 2025



July 31 – **Long term view.** (even though it says 8/1, I made the copy at 12:30 in the morning !)

CAD to Mexican Peso

AS OF THE CLOSE ON August 1 , 2025



August 1 – Some softness continues in this pair !

https://www.google.com/finance/quote/CAD-MXN?sa=&window=1Y

Japanese Yen to CAD PAIR
AS OF THE CLOSE ON August 1, 2025



August 1 – unchanged from last month. (down another 0.0001 does not count !)

https://www.google.com/finance/quote/JPY-CAD?window=1Y

Chinese Yuan to CAD PAIR – 5 Year

AS OF THE CLOSE ON August 1 , 2025



August 1– A range bound trade it is ! The wiggles are very tiny !

https://www.google.com/finance/quote/CNY-CAD?window=5Y

CAD to Euro PAIR – 1 Year

AS OF THE CLOSE ON August 1 , 2025



August 1 – last month was 0.6235 – same comment as last month - as more interest in trading with Europe progresses, this will be interesting to follow. This will make it cheaper to sell our exports across the pond.

https://www.google.com/finance/quote/CAD-EUR?window=1Y

BOND MARKET

YIELD CURVE

BOND MARKET ETF's – TECHNICAL ANALYSIS

Yield Curve

AS OF THE CLOSE ON August 1, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

60

August 1 – Last month was 0.56 - Another month of essentially not much changed. This likely stays flat until very late in the year.
https://fred.stlouisfed.org/series/T10Y2Y

Yield Curve – 5 Year

AS OF THE CLOSE ON August 1, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

61

August 1 – Powel is stand pat therefore so is this ratio !

CME FedWatch Tool

TARGET RATE PROBABILITIES AS OF June 27, 2025

FED FUND FUTURES												
ZQM5	ZQN5	ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6	ZQH6	ZQJ6	ZQK6	ZQM6
95.6700	95.6750	95.7200	95.8200	95.9550	96.1200	96.2550	96.3250	96.4300	96.4900	96.5800	96.6600	96.7150

	CME FEDWATCH TOOL - CONDITIONAL MEETING PROBABILITIES										
MEETING DATE	175-200	200-225	225-250	250-275	275-300	300-325	325-350	350-375	375-400	400-425	425-450
7/30/2025						0.0%	0.0%	0.0%	0.0%	18.6%	81.4%
9/17/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.6%	74.8%	8.6%
10/29/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.7%	57.7%	28.1%	2.5%
12/10/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	47.3%	34.7%	8.3%	0.6%
1/28/2026	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	26.9%	41.5%	22.4%	4.7%	0.3%
3/18/2026	0.0%	0.0%	0.0%	0.0%	2.5%	17.6%	35.5%	30.3%	12.0%	2.1%	0.1%
4/29/2026	0.0%	0.0%	0.0%	0.8%	7.5%	23.5%	33.7%	24.2%	8.7%	1.5%	0.1%
6/17/2026	0.0%	0.0%	0.4%	4.3%	15.8%	28.8%	28.8%	16.2%	4.9%	0.7%	0.0%
7/29/2026	0.0%	0.1%	1.7%	8.0%	20.0%	28.8%	24.7%	12.6%	3.6%	0.5%	0.0%
9/16/2026	0.0%	0.6%	3.8%	12.0%	22.9%	27.5%	20.7%	9.6%	2.6%	0.4%	0.0%
10/28/2026	0.1%	0.9%	4.3%	12.7%	23.2%	27.0%	19.9%	9.1%	2.4%	0.3%	0.0%
12/9/2026	0.1%	1.0%	4.6%	13.0%	23.3%	26.8%	19.6%	8.9%	2.4%	0.3%	0.0%

https://www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.html

June 27 – Probable rate decrease in September, then targets rates get muddy !

CME FedWatch Tool

Aggregated Meeting PROBABILITIES AS OF June 27, 2025

FED FUND FUTURES												
ZQM5	ZQN5	ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6	ZQH6	ZQJ6	ZQK6	ZQM6
95.6700	95.6750	95.7200	95.8200	95.9550	96.1200	96.2550	96.3250	96.4300	96.4900	96.5800	96.6600	96.7150

	CME FEDWATCH TOOL - AGGREGATED MEETING PROBABILITIES						
MEETING DATE	275-300	300-325	325-350	350-375	375-400	400-425	425-450
7/30/2025	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	18.60 %	81.40 %
9/17/2025	0.00 %	0.00 %	0.00 %	0.00 %	8.05 %	91.95 %	0.00 %
10/29/2025	0.00 %	0.00 %	0.00 %	0.00 %	78.60 %	21.40 %	0.00 %
12/10/2025	0.00 %	0.00 %	0.00 %	56.10 %	43.90 %	0.00 %	0.00 %
1/28/2026	0.00 %	0.00 %	2.60 %	97.40 %	0.00 %	0.00 %	0.00 %
3/18/2026	0.00 %	0.00 %	61.50 %	38.50 %	0.00 %	0.00 %	0.00 %
4/29/2026	0.00 %	0.00 %	94.60 %	5.40 %	0.00 %	0.00 %	0.00 %
6/17/2026	0.00 %	46.53 %	53.47 %	0.00 %	0.00 %	0.00 %	0.00 %
7/29/2026	0.00 %	78.60 %	21.40 %	0.00 %	0.00 %	0.00 %	0.00 %
9/16/2026	11.96 %	88.04 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
10/28/2026	18.60 %	81.40 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
12/9/2026	21.42 %	78.58 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %

The Fedwatch tool's "Aggregated" view compares the rates implied by CME's Fed Funds futures with the current target rate range as set by the Federal Reserve. As such, it provides a view into the cumulative number of hikes or cuts that the market is pricing by a certain point in the future. This is provided in addition to the traditional "Conditional" view of probabilities, familiar to long-term users of the FedWatch tool.

June 27 – September quarter point cut pretty close to a sure thing, then a good chance of another 25 point decline in October.

Powell is in charge until May 2026, after that, it is anyone's guess what will happen. It I interesting that there are 4 quarter point drops between now and then !

CME FedWatch Tool

TARGET RATE PROBABILITIES AS OF August 1, 2025

FED FUND FUTURES												
ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6	ZQH6	ZQJ6	ZQK6	ZQM6	ZQN6	ZQQ6
95.6788	95.7775	95.8925	96.0625	96.1925	96.2625	96.3575	96.4075	96.4825	96.5525	96.6175	96.7025	96.7800

	CME FEDWATCH TOOL - CONDITIONAL MEETING PROBABILITIES										
MEETING DATE	175-200	200-225	225-250	250-275	275-300	300-325	325-350	350-375	375-400	400-425	425-450
9/17/2025						0.0%	0.0%	0.0%	0.0%	80.8%	19.2%
10/29/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.7%	36.0%	5.2%
12/10/2025	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	44.6%	41.5%	12.6%	1.3%
1/28/2026	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.8%	43.3%	29.4%	7.9%	0.7%
3/18/2026	0.0%	0.0%	0.0%	0.0%	0.0%	9.2%	30.8%	36.5%	18.8%	4.4%	0.4%
4/29/2026	0.0%	0.0%	0.0%	0.0%	2.7%	15.5%	32.4%	31.3%	14.6%	3.2%	0.3%
6/17/2026	0.0%	0.0%	0.0%	1.5%	10.1%	25.3%	31.8%	21.7%	8.0%	1.5%	0.1%
7/29/2026	0.0%	0.0%	0.5%	4.4%	15.1%	27.4%	28.4%	17.1%	5.9%	1.0%	0.1%
9/16/2026	0.0%	0.2%	1.9%	8.3%	19.6%	27.8%	24.4%	13.1%	4.1%	0.7%	0.0%
10/28/2026	0.0%	0.5%	3.1%	10.4%	21.1%	27.2%	22.2%	11.4%	3.5%	0.6%	0.0%
12/9/2026	0.1%	1.1%	4.6%	12.7%	22.4%	26.1%	19.9%	9.7%	2.9%	0.5%	0.0%

https://www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.html

August 1 – End of October, there is a decent chance for a 25 point cut. Idle speculation – if inflation starts to kick in as US companies are forced to pass on tariffs, this potential decline, may end up going in the other direction, and he who shall not be named, probably blows a gasket !

CME FedWatch Tool

Aggregated Meeting PROBABILITIES AS OF August 1, 2025

FED FUND FUTURES											
ZQQ5	ZQU5	ZQV5	ZQX5	ZQZ5	ZQF6	ZQG6	ZQH6	ZQJ6	ZQK6	ZQM6	ZQN6	ZQQ6
95.6788	95.7775	95.8925	96.0625	96.1850	96.2525	96.3525	96.4000	96.4775	96.5475	96.6100	96.6975	96.7750

	CME FEDWATCH TOOL - AGGREGATED MEETING PROBABILITIES						
MEETING DATE	275-300	300-325	325-350	350-375	375-400	400-425	425-450
9/17/2025	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	80.81 %	19.19 %
10/29/2025	0.00 %	0.00 %	0.00 %	0.00 %	53.50 %	46.50 %	0.00 %
12/10/2025	0.00 %	0.00 %	0.00 %	25.21 %	74.79 %	0.00 %	0.00 %
1/28/2026	0.00 %	0.00 %	0.00 %	69.50 %	30.50 %	0.00 %	0.00 %
3/18/2026	0.00 %	0.00 %	18.53 %	81.47 %	0.00 %	0.00 %	0.00 %
4/29/2026	0.00 %	0.00 %	47.50 %	52.50 %	0.00 %	0.00 %	0.00 %
6/17/2026	0.00 %	5.36 %	94.64 %	0.00 %	0.00 %	0.00 %	0.00 %
7/29/2026	0.00 %	38.50 %	61.50 %	0.00 %	0.00 %	0.00 %	0.00 %
9/16/2026	0.00 %	74.68 %	25.32 %	0.00 %	0.00 %	0.00 %	0.00 %
10/28/2026	0.00 %	93.50 %	6.50 %	0.00 %	0.00 %	0.00 %	0.00 %
12/9/2026	13.23 %	86.77 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %

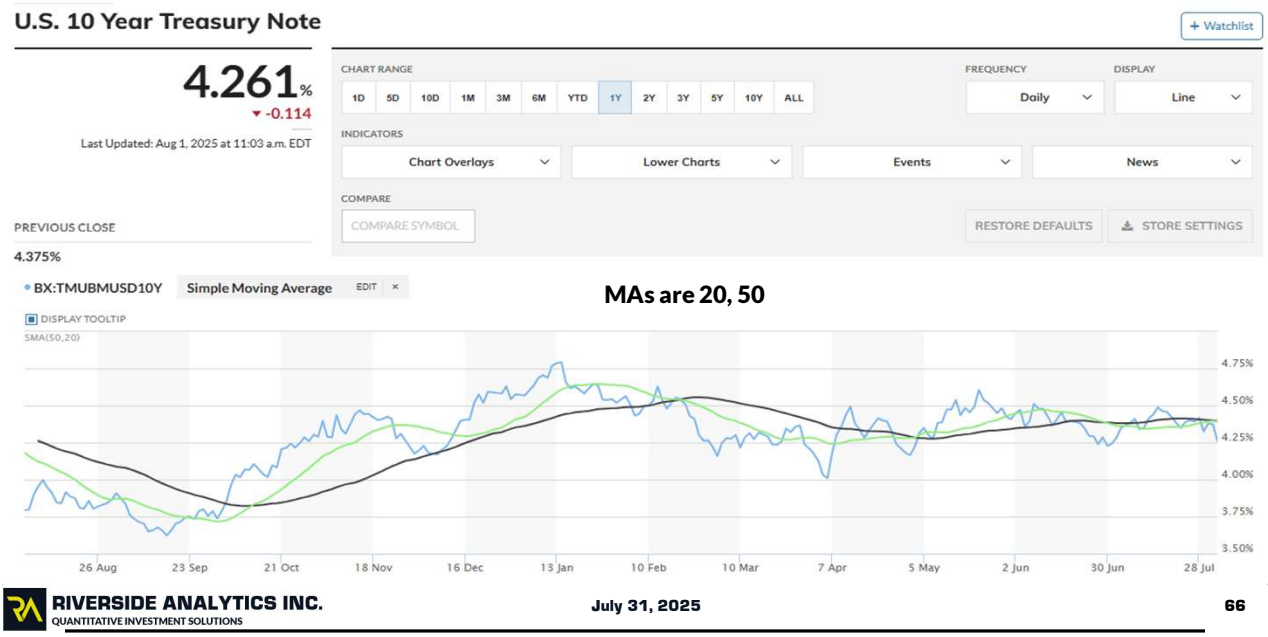
The Fedwatch tool's "Aggregated" view compares the rates implied by CME's Fed Funds futures with the current target rate range as set by the Federal Reserve. As such, it provides a view into the cumulative number of hikes or cuts that the market is pricing by a certain point in the future. This is provided in addition to the traditional "Conditional" view of probabilities, familiar to long-term users of the FedWatch tool.

August 1 – the December rate drop from last month has been cancelled, as is the April 2026 potential drop. The market is predicting that rate drops will be slower, likely in anticipation of tariff inflation.

Source : https://www.cmegroup.com/markets/interest-rates/cme-fedwatch-tool.html

10-YEAR US Government Bond YIELD

AS OF THE CLOSE ON August 1, 2025



MAs are 20, 50

August 1 –Last month was 4.285 essentially no change from last month

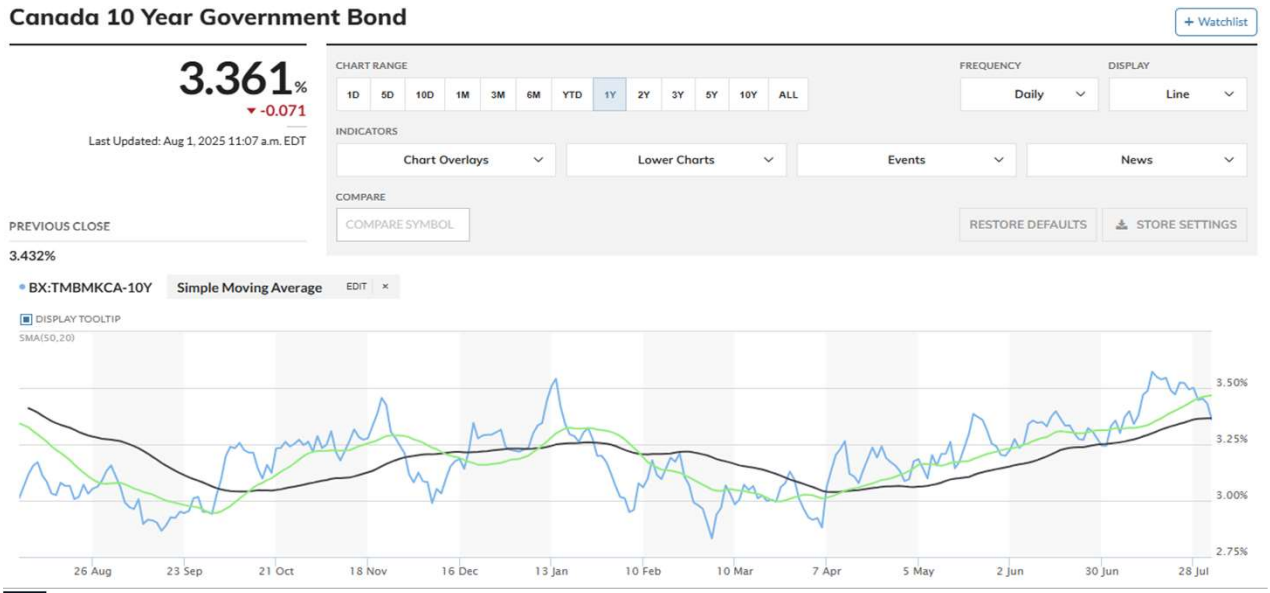
The MAs are the 20, and 50 day.

Chart Credit – Market Watch.

https://www.marketwatch.com/investing/bond/tmubmusd10y/charts?countrycode=bx&mod=mw_quote_advanced

10-YEAR Canadian Government Bond YIELD

AS OF THE CLOSE ON August 1, 2025

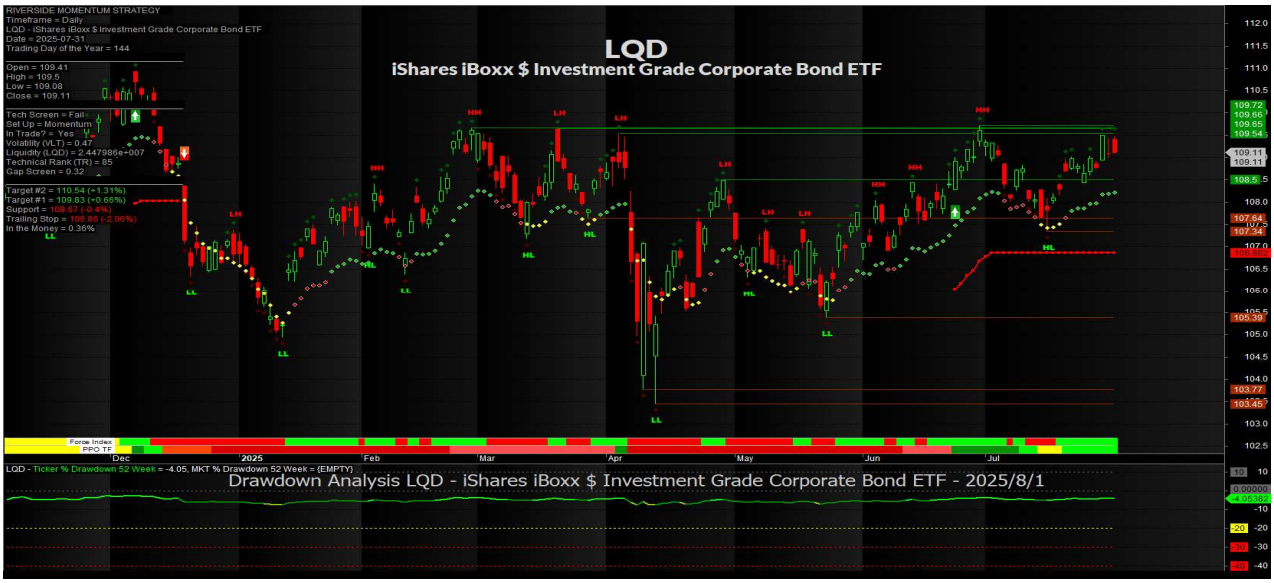


August – **up 1/10th** from last month. Another month with very little happening.
Chart Credit – Market Watch.

https://www.marketwatch.com/investing/bond/tmbmkca-10y/charts?countrycode=bx&mod=mw_quote_tab

BOND MARKET ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

68

July 31 – Yield is 4.41% - essentially unchanged from last month – Note, the date in Drawdown is the date I copied the chart, not the chart closing date.

BOND MARKET ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

69

July 31 – yield is 6.55% - flat from last month – Note, the date in Drawdown is the date I copied the chart, not the chart closing date.

BOND MARKET ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

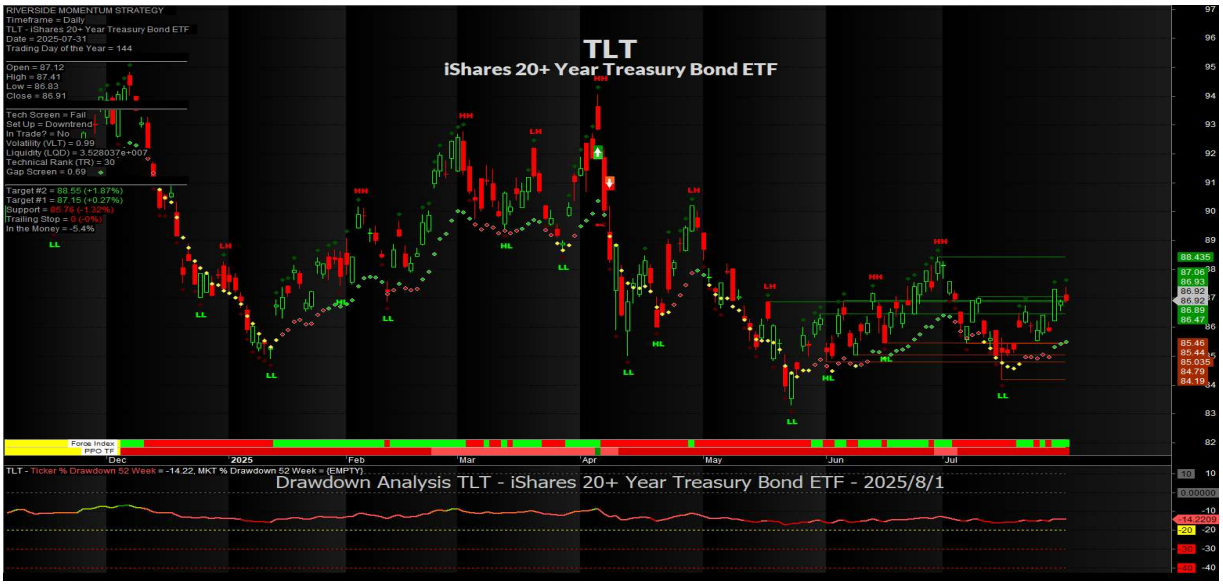
July 31, 2025

70

July 31– yield 3.42% - essentially unchanged from last month – Note, the date in Drawdown is the date I copied the chart, not the chart closing date.

BOND MARKET ETF's

TECHNICAL ANALYSIS AS OF THE CLOSE ON July 31, 2025



RIVERSIDE ANALYTICS INC.
QUANTITATIVE INVESTMENT SOLUTIONS

July 31, 2025

71

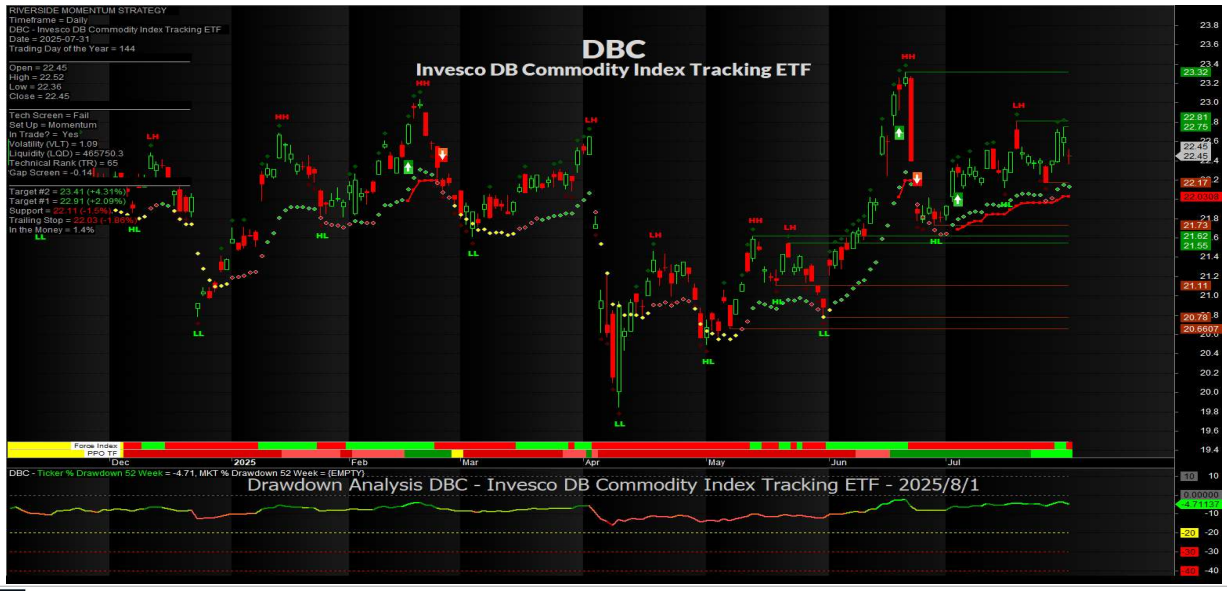
July 31– yield is up slightly from 4.34% to 4.41% - essentially flat ! – Note, the date in Drawdown is the date I copied the chart, not the chart closing date.

COMMODITY MARKET

DBC TECHNICAL ANALYSIS
GLD TECHNICAL ANALYSIS
BOND MARKET ETF's – TECHNICAL ANALYSIS

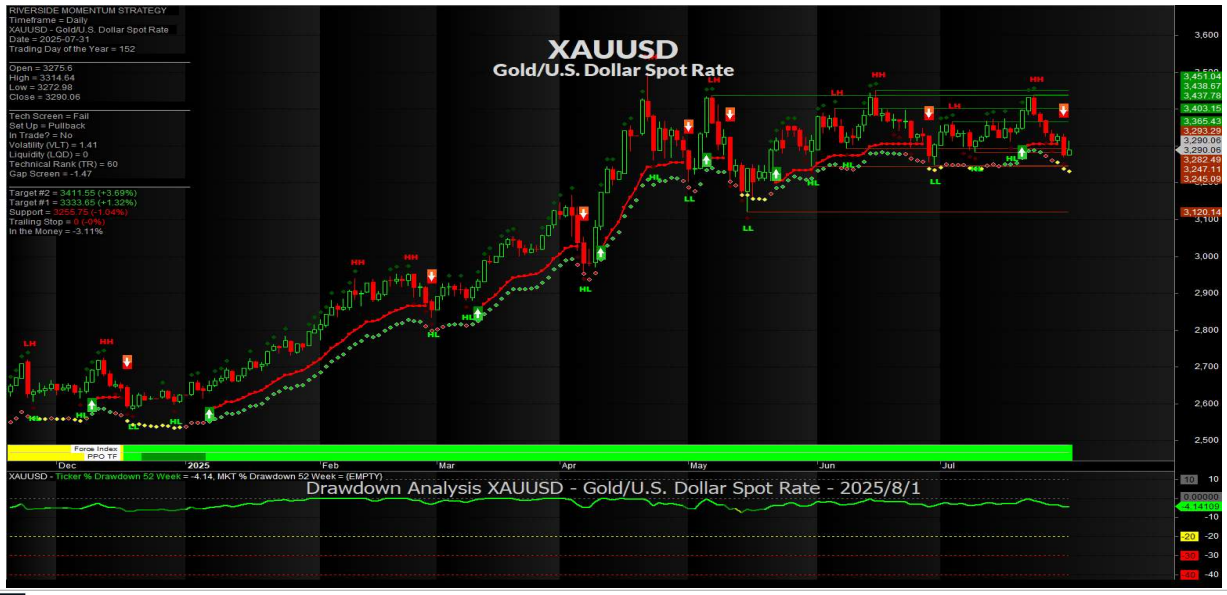
COMMODITY BASKET ETF (DBC)

AS OF THE CLOSE ON July 31, 2025

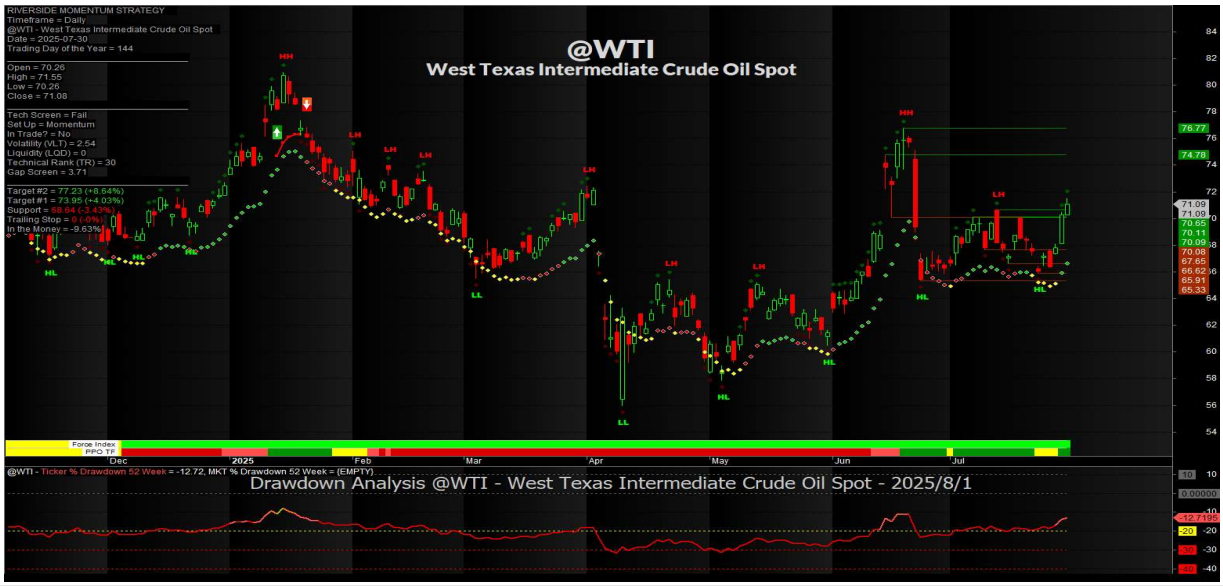


GOLD

AS OF THE CLOSE ON July 31, 2025

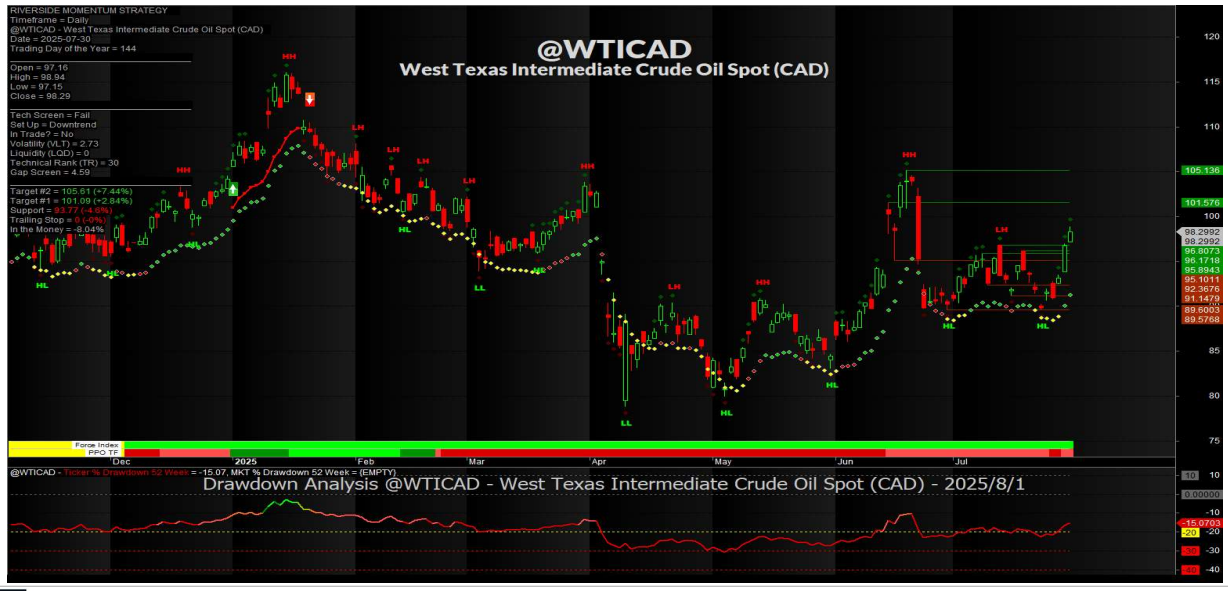


WTI
AS OF THE CLOSE ON July 31, 2025



West Texas Intermediate in CAD

AS OF THE CLOSE ON July 31, 2025



Gasoline – New York Harbour – USD / Gallon

AS OF THE CLOSE ON August 1, 2025



Source : Market Watch.

Copper
AS OF THE CLOSE ON August 1, 2025



August 1 – Copper peaked at 5.81 on July 23rd. Yes, that drop on Wednesday was White House generated ! That was $1.08 drop

Mining.com – "The move to differentiate between refined metal and semi-processed products in the tariff policy follows lobbying from the copper industry, with some key players arguing that the US did not have sufficient capacity to replace all of its copper imports immediately."

Full article is here > https://www.mining.com/copper-price-collapses-by-20-as-us-excludes-refined-metal-from-tariffs/

Credit: Market Watch

Copper – 5 Day look at the huge drop

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Credit: Market Watch

Aluminum

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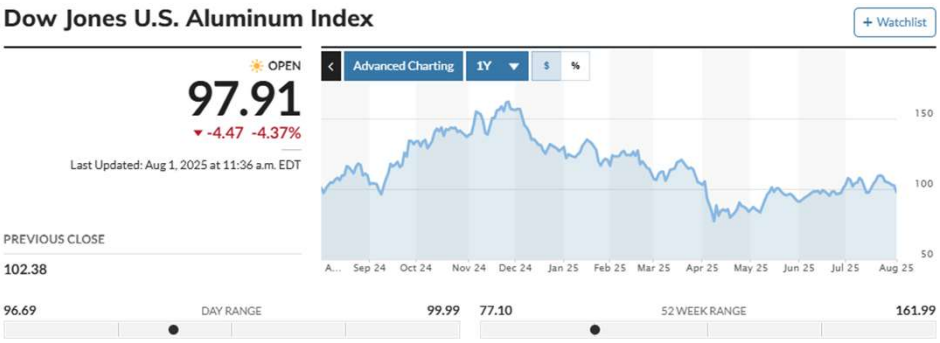


August 1 – Last month was 91.26

Credit: Market Watch

Silver

AS OF THE CLOSE ON August 1, 2025

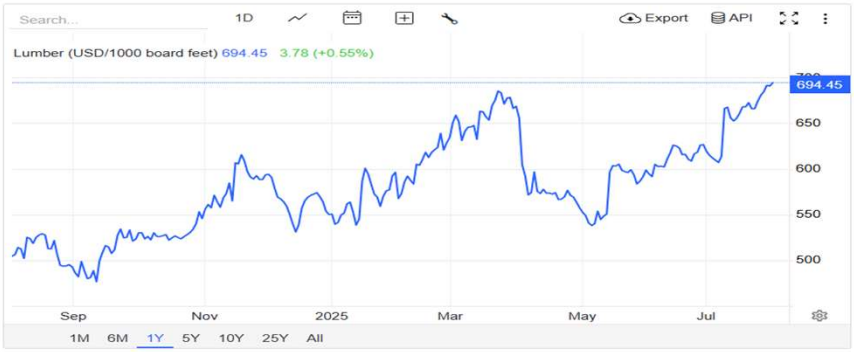


August 1 – Last month was 36.165

Lumber – 1 YEAR - Daily Candles

AS OF THE CLOSE ON August 1, 2025

Lumber futures traded above $660 per thousand board feet, approaching the two-and-a-half-year peak of $685 recorded on March 24th, driven by a squeeze on supply meeting unfaltering construction demand. On the demand front, US housing starts held surprisingly steady at an annualized 1.6 million units in June even as existing-home sales slipped 2.7% to a nine-month low, ensuring that framing requirements remained robust. At the same time, US softwood lumber tariffs on Canadian imports continue to add roughly 9% to landed costs, while Pacific Northwest mills have withdrawn nearly 20% of regional capacity for mid-season maintenance, sharply curtailing shipments to distributors. Internationally, imports from Europe and New Zealand are throttled by 25% duties on Russian lumber and persistent ocean-freight bottlenecks, collectively depleting distributor inventories to their lowest levels in more than two years and reinforcing today's sharp advance in futures prices.

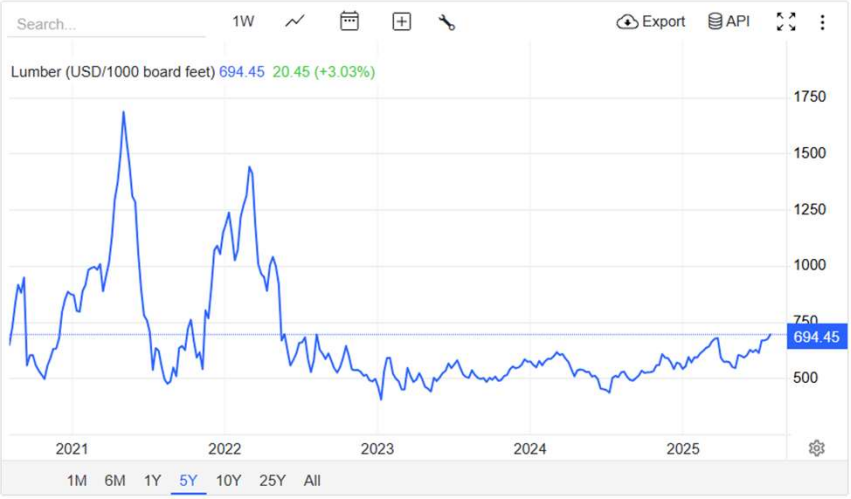


August 1

Source : Trading Economics

Lumber – 5 YEARS - Weekly Candles

AS OF THE CLOSE ON August 1, 2025



Source : https://tradingeconomics.com/commodity/lumber

August 1


THAT'S IT FOR TODAY!
The End
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QUANTITATIVE INVESTMENT SOLUTIONS
July 31, 2025
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RIVERSIDE'S Monthly Strategy Update

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- Riverside is about helping active and affluent investors learn how to make better decisions in financial markets.
- All charts shown in this broadcast have been referenced from stockcharts.com, Amibroker or eSignal unless otherwise noted.

Good investing is <u>not</u> an "event" like finding the next growth opportunity or catching the next market turn. Rather, good investing is a disciplined process that converts research and training into a well-tested methodology, and then makes a habit of following that approach day after day.

John P. Hussman, Ph.D
President, Hussman Strategic Advisors



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