# GRYNING | Quantitative

GRYNING | Quantitative is stock analytics powered by Explainable Artificial Intelligence. We rate stocks and ETFs with an easy-to-understand global AI Score, ranging from 1 to 10; the higher the score, the higher the probability of beating the market in the next 3 months. Our Artificial Intelligence calculates probabilities, not certainties. The AI Scores and the ratings/signals should be used as useful but not infallible information to complement your own investment decision process.
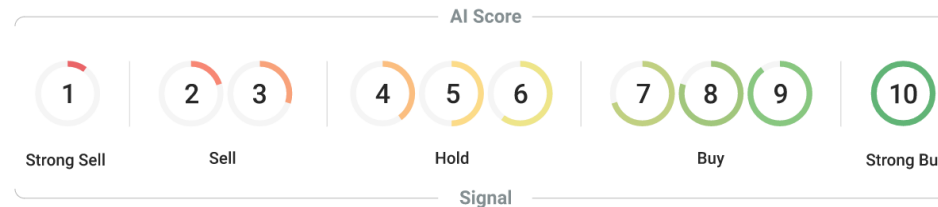
MOODY'S CHARTPACK | Downgraded Equity Summary

Stock Downgrades	Price	Fundamental	Technical	Sentiment	Low Risk	AI Score
PROSPERITY BANCSHARES, INC. (XNYS:PB)	60.52	6	9	6	8	8
M&T BANK CORPORATION (XNYS:MTB)	135.90	6	9	6	4	8
COMMERCE BANCSHARES, INC. (XNAS:CBSH)	52.68	6	9	5	8	8
BOK FINANCIAL CORPORATION (XNAS:BOKF)	86.85	6	8	6	6	8
PINNACLE FINANCIAL PARTNERS, INC. (XNAS:PNFP)	72.86	5	5	6	4	6
WEBSTER FINANCIAL CORPORATION (XNYS:WBS)	45.11	5	6	7	4	5
OLD NATIONAL BANCORP (XNAS:ONB)	16.89	5	5	5	6	5
FULTON FINANCIAL CORPORATION (XNAS:FULT)	13.98	5	5	5	6	5
ASSOCIATED BANC-CORP (XNYS:ASB)	18.58	5	5	4	5	5

PB | Prosperity Bancshares Inc

Fundamental 6 | Technical 9 | Sentiment 6 | Low Risk 8 | AI Score 8

#76 of 838 in Financials, #27 of 367 in Banks

Prosperity Bancshares (PB) has an AI Score of 8/10 (Buy) because its overall probability of beating the market (S&P 500) in the next 3 months (42.77%) is **+3.09%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Prosperity Bancshares (PB) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Fundamental	PEG	1.25	3	50.01	97/100
Technical	Momentum 180D	-13.47	2	49.89	97/100
Technical	APO 180D	-5.81	2	49.23	96/100
Technical	TRIX 90D	-0.11%	2	49.05	95/100
Technical	Upside Downside	-0.02	10	48.92	95/100
Fundamental	Free Cash Flow	479.45%	7	48.78	94/100
Fundamental	Cash per Share (mrq)	6.01%	6	48.78	93/100
Technical	ADXR 50D	16.10%	9	48.03	91/100
Technical	Midprice 180D	10.38%	7	47.64	89/100
Sentiment	Price Target Upside > 10%	100	n/a	47.40	87/100

MTB | M&T Bank Corporation

Fundamental 6 | Technical 9 | Sentiment 6 | Low Risk 4 | AI Score 8

#41 of 838 in Financials, #8 of 367 in Banks

M&T Bank (MTB) has an AI Score of 8/10 (Buy) because its overall probability of beating the market (S&P 500) in the next 3 months (43.80%) is **+4.12%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of M&T Bank (MTB) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Fundamental	EPS	353%	10	51.73	99/100
Technical	Momentum 180D	-35.51	1	51.08	98/100
Technical	APO 180D	-11.28	1	49.89	97/100
Fundamental	Diluted EPS (ttm)	16.93	10	49.53	96/100
Sentiment	EPS estimate next quarter	3.85	10	49.3	96/100
Technical	TRIX 90D	-0.15	2	49.05	96/100
Fundamental	Forward Rate of Return (Yackman)	18.66	8	48.35	95/100
Technical	ADXR 50D	16.33	9	48.03	93/100
Fundamental	Net - property,plant & equipment	1620.34	6	47.96	91/100
Technical	MACD histogram extended	-2	1	47.92	90/100

CBSH | Commerce Bancshares Inc

Fundamental 6 | Technical 9 | Sentiment 5 | Low Risk 8 | AI Score 8

#60 of 838 in Financials, #20 of 367 in Banks

Commerce Bancshares (CBSH) has an AI Score of 8/10 (Buy) because its overall probability of beating the market (S&P 500) in the next 3 months (43.18%) is **+3.50%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Commerce Bancshares (CBSH) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Technical	Momentum 180D	-20%	2	49.89	97/100
Fundamental	Annual Dividend Yield (%)	2.05	5	49.84	97/100
Technical	Absolute Price Oscillator 180D	-7.26	2	49.23	96/100
Technical	Midprice 180D	14.81%	8	49.18	95/100
Technical	TRIX 90D	-0.18	2	49.05	95/100
Fundamental	ROI (ttm)	31.60%	10	49.02	95/100
Technical	Money Flow Index 180D	45.52	2	48.21	92/100
Fundamental	Free Cash Flow	424.76	6	48.11	91/100
Technical	RSI 100	46.88	2	47.64	89/100
Fundamental	Total depreciation & amortisation (Q)	14.33	2	47.39	87/100

BOKF | BOK Financial Corporation

Fundamental 6 | Technical 8 | Sentiment 6 | Low Risk 6 | AI Score 8

#72 of 838 in Financials, #25 of 367 in Banks

BOK Financial (BOKF) has an AI Score of 8/10 (Buy) because its overall probability of beating the market (S&P 500) in the next 3 months (42.92%) is **+3.24%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of BOK Financial (BOKF) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Fundamental	PEG	1%	3	50.01	97/100
Technical	Momentum 180D	-18.83	2	49.89	97/100
Technical	Stock Beta	1.2	6	49.79	97/100
Technical	Absolute Price Oscillator 180D	-7.57%	2	49.23	96/100
Technical	Upside Drawdown	-0.01	10	48.92	95/100
Fundamental	Total depreciation & amortisation (Q)	29.50%	3	48.77	94/100
Technical	Volume	161118	1	48.14	92/100
Fundamental	Return on Investments	3.21%	7	47.8	90/100
Technical	Midprice 180D	5.71%	7	47.64	89/100
Sentiment	Price target upside > 10%	100	n/a	47.40	87/100

PNFP | Pinnacle Financial Partners, Inc

Fundamental 5 | Technical 5 | Sentiment 6 | Low Risk 4 | AI Score 6

#185 of 838 in Financials, #73 of 367 in Banks

Pinnacle Financial (PNFP) has an AI Score of 6/10 (Hold) because its overall probability of beating the market (S&P 500) in the next 3 months (40.61%) is **+0.93%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Pinnacle Financial (PNFP) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Fundamental	Common stock dividends paid (Q)	-0.17	9	50.01	97/100
Technical	Stock Beta	1.16	6	49.79	97/100
Fundamental	Dividend Payout Ratio % (ttm)	12.20%	3	49.65	97/100
Fundamental	Beneish M-Score	-2.28	7	49.45	96/100
Technical	Absolute Price Oscillator 180D	-7.37	2	49.23	96/100
Technical	Volatility Month	3.54%	7	49.07	95/100
Technical	TRIX 90D	-0.18	2	49.05	95/100
Fundamental	Total depreciation & amortisation (Q)	31.51	3	48.77	94/100
Fundamental	Annual Dividend Yield (%)	1.20%	3	48.15	92/100
Sentiment	Insider Transactions % (6m)	-1.42%	6	47.20	85/100

WBS | Webster Financial Corporation

Fundamental 5 | Technical 6 | Sentiment 7 | Low Risk 4 | AI Score 5
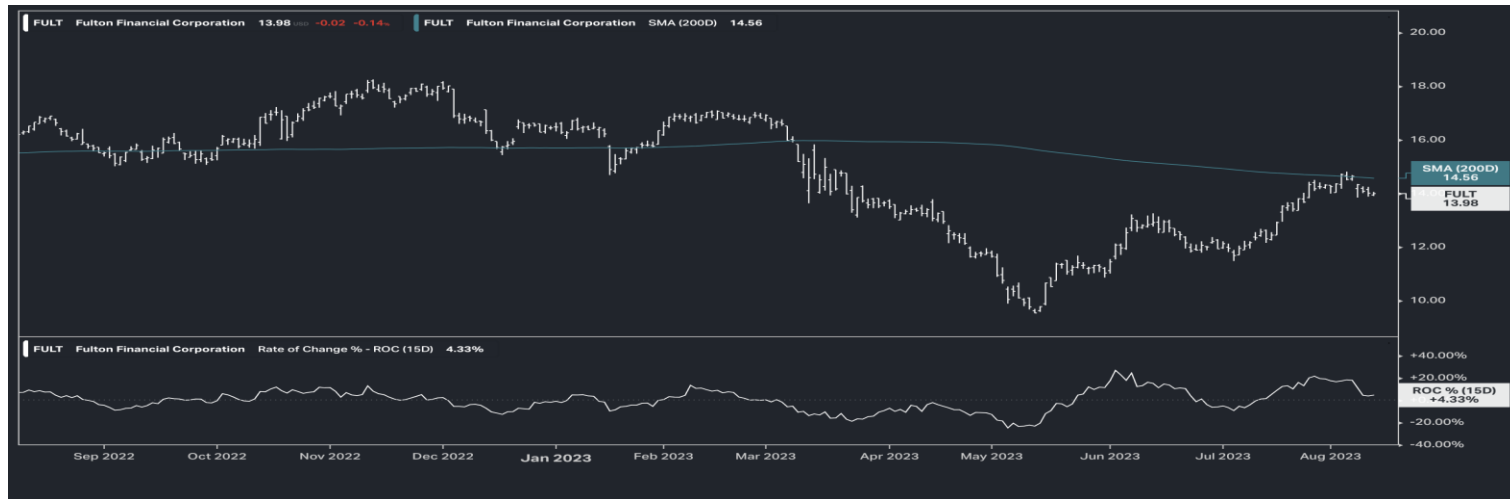
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Webster (WBS) has an AI Score of 5/10 (Hold) because its overall probability of beating the market (S&P 500) in the next 3 months (39.66%) is **-0.02%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Webster (WBS) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Fundamental	Forward rate of return (Yackman)	21.73	9	50.48	98/100
Technical	Stock Beta	1.27	7	49.7	97/100
Technical	Absolute Price Oscillator 180D	-4.63	2	49.23	96/100
Technical	TRIX 90D	-0.13	2	49.05	95/100
Sentiment	Standard deviation price target (3y) (%)	34.38%	8	49.01	95/100
Technical	Volatility Month	3.04%	6	48.78	94/100
Fundamental	Total depreciation & amortisation (Q)	25.74	3	48.77	94/100
Fundamental	Cash flow from operating activities (Q)	421.86	7	48.33	93/100
Technical	Average last decile decline	-10.87%	4	48.24	92/100
Technical	Money Flow Index 180D	45.53	2	48.21	92/100

ONB | Old National Bancorp

Fundamental 5 | Technical 5 | Sentiment 5 | Low Risk 6 | AI Score 5

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Old National Bancorp (ONB) has an AI Score of 5/10 (Hold) because its overall probability of beating the market (S&P 500) in the next 3 months (37.96%) is **-1.72%** vs. the average probability (39.68%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Old National Bancorp (ONB) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Technical	TRIX 90D	-0.12	2	49.05	95/100
Technical	Volatility Month	2.92%	5	48.78	94/100
Fundamental	Free cash flow	661.77	7	48.78	94/100
Fundamental	Cash per share (mrq)	6.78	6	48.5	93/100
Fundamental	Total long-term liabilities	3225.67	10	47.89	90/100
Technical	Momentum & Linear Regression Slope 60D	0.01	9	47.86	90/100
Fundamental	Sales past 5Y (%)	24%	4	47.73	89/100
Fundamental	Net - property, plant % equipment	588.02	6	47.32	86/100
Technical	Plus DI 180	19.96%	6	47.31	86/100
Fundamental	Free cash flow per share	2.26	5	46.87	86/100

FULT | Fulton Financial Corporation

Fundamental 5 | Technical 5 | Sentiment 5 | Low Risk 6 | AI Score 4

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Fulton Financial oration (FULT) has an AI Score of 4/10 (Hold) because its overall probability of beating the market (S&P 500) in the next 3 months (37.48%) is **-2.18%** vs. the average probability (39.66%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Fulton Financial oration (FULT) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Fundamental	Common stock dividends paid (Q)	-26.66	9	49.79	97/100
Sentiment	Institutional transactions (3M % chg)	0.12%	6	49.25	96/100
Technical	TRIX 90D	-0.17	2	49.03	95/100
Technical	ADXR 50D	17.82	9	47.97	91/100
Fundamental	Return on Investments	2.83%	7	47.62	89/100
Technical	Money Flow Index 90D	40.08	1	47.56	89/100
Fundamental	Cash per Share (mrq)	4.01	5	47.52	88/100
Fundamental	Asset turnover ratio	-0.06%	2	47.42	88/100
Fundamental	Long-term Debt/Equity (mrq)	22.00%	3	47.39	86/100
Fundamental	Profit Margin Pre-Tax	36.48%	9	47.23	86/100

ASB | Associated Banc-Corp

Fundamental 5 | Technical 5 | Sentiment 4 | Low Risk 5 | AI Score 4

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Associated Banc (ASB) has an AI Score of 4/10 (Hold) because its overall probability of beating the market (S&P 500) in the next 3 months (37.76%) is **-1.90%** vs. the average probability (39.66%) of US stocks analyzed by our Artificial Intelligence.

The AI-powered overall analysis of Associated Banc (ASB) is based on the 10 fundamental, technical, and sentiment features (alpha signals):

Type	Alpha Signal	Current Value	Bin (0-10)	Odds to Beat Market %	Signal Relevance
Technical	TRIX 90D	-0.15	2	49.03	95/100
Technical	Volatility Month	3.11%	6	48.81	95/100
Fundamental	Total depreciation & amortization (Q)	25.01	3	48.64	94/100
Fundamental	Free cash flow	676.89	7	48.45	93/100
Fundamental	Cash per Share (mrq)	6.20	6	48.45	93/100
Fundamental	Total long-term liabilities	4066.74	5	47.86	91/100
Technical	Midprice 180D	5.73%	7	47.61	89/100
Technical	Normalised Average True Range 90D	3.43	4	47.46	88/100
Fundamental	Net - property, plant & equipment	379.46	4	47.33	87/100
Sentiment	Insider Transactions % (6M)	-1.92%	6	47.16	86/100

Appendix:

AI Score: Global score rating the probability of beating the market in the next 3 months. The AI score is not the average of the sub-scores, it is a predictive score based on all available data for the ticker.

Fundamental: AI sub-score based only on the ticker's fundamentals for the next 3 months. Eg: Sales, Price to Book, EBITDA.
Technical: AI sub-score based only on the ticker's technical indicators for the next 3 months. Eg: RSI, Fibonacci, ATR, Price patterns.
Sentimant: AI sub-score based only on the ticker's sentiment indicators for the next 3 months. Eg: Analyst Price Targets, Hedge Fund Positioning.
Low Risk: Risk score based on the negative price fluctuations (semi-deviation) in the last 500 days. The higher the score, the lower the downside risk.

Type: Type of feature.
Alpha Signal: Feature with alpha potential.
Current Value: Current indicator, feature value.
Bin: Current feature bin in relation to the rest of the stocks of the investment universe.
Odds to Beat Market %: Odds of outperforming the market in three months.
Signal Relevance: Relevance of the feature, in percentile, based on odds of absolute alpha after three months.
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AUGUST 13, 2023