

### Retail Sector Rises to Top of Attractiveness Rankings

Higher catalytic scores, providing an indication of an improved fundamental outlook, have resulted in the retail sector rising to the top of our attractiveness rankings. The ranking for the transportation sector has also moved up due to improved catalytic properties. Moving in the opposite direction, the business services sector has fallen out of the top 5 group due to lower valuations cores. See Tables 5 and 6 for top-ranked names from the most attractive sectors and bottom-ranked names from the least attractive sectors.

**Table 1 – Current Sector Rankings and Change from Last Report (as of December 12, 2022)**

Sector	Previous Integrated Rank	Current Integrated Rank	Change In Rank	Behavioral Preference Rank
RETAIL-WHOLESALE	7	1	6	5
TRANSPORTATION	8	2	6	2
HEALTHCARE	2	3	-1	11
AUTO-TIRES-TRUCKS	5	4	1	7
ENERGY	1	5	-4	6
FINANCIALS	4	6	-2	3
INDUSTRIAL PRODUCTS	11	7	4	8
AEROSPACE DEFENSE	9	8	1	15
BUSINESS SERVICES	3	9	-6	16
TECHNOLOGY	6	10	-4	10
CONSUMER STAPLES	10	11	-1	12
BASIC MATERIALS	13	12	1	9
CONSUMER DISCRETIONARY	15	13	2	14
CONSTRUCTION	12	14	-2	1
CONGLOMERATES	16	15	1	4
UTILITIES	14	16	-2	13

**Table 2 – Current Sector Rankings with Rankings for Absolute-Scale & Relative-Scale Metrics**

Sector	Current Integrated Rank	Behavioral Preference Rank	ABSOLUTE-SCALE METRICS		RELATIVE-SCALE METRICS			
			Technical Outlook Rank	Fundamental Outlook Rank	Current Relative Scale Rank	Valuation Rank	Technical Rank	Catalytic Rank
RETAIL-WHOLESALE	1	5	11	2	5	10	11	2
TRANSPORTATION	2	2	3	4	4	13	3	5
HEALTHCARE	3	11	4	1	14	1	4	1
AUTO-TIRES-TRUCKS	4	7	10	9	8	5	10	9
ENERGY	5	6	1	12	10	14	1	13
FINANCIALS	6	3	9	3	2	16	9	3
INDUSTRIAL PRODUCTS	7	8	12	5	6	7	12	4
AEROSPACE DEFENSE	8	15	2	8	13	8	2	8
BUSINESS SERVICES	9	16	6	10	15	2	6	11
TECHNOLOGY	10	10	13	6	11	4	13	6
CONSUMER STAPLES	11	12	5	7	16	3	5	7
BASIC MATERIALS	12	9	8	16	7	12	8	15
CONSUMER DISCRETIONARY	13	14	14	15	12	6	14	16
CONSTRUCTION	14	1	16	13	1	9	16	10
CONGLOMERATES	15	4	15	14	3	11	15	14
UTILITIES	16	13	7	11	9	15	7	12

**Table 3 – Corresponding Model Scores for Current Sector Rankings**

Sector	Current Integrated Score	Behavioral Preference Score	ABSOLUTE-SCALE METRICS		RELATIVE-SCALE METRICS			
			Technical Outlook Score	Fundamental Outlook Score	Current Relative Scale Score	Valuation Score	Technical Score	Catalytic Score
RETAIL-WHOLESALE	0.248	0.174	0.093	0.110	0.299	-0.104	0.021	0.487
TRANSPORTATION	0.191	0.430	0.319	0.064	0.311	-0.487	0.246	0.459
HEALTHCARE	0.164	-0.049	0.270	0.118	-0.281	0.532	0.198	0.506
AUTO-TIRES-TRUCKS	0.092	0.147	0.122	-0.061	0.011	0.174	0.050	0.335
ENERGY	0.087	0.158	0.711	-0.125	-0.084	-0.516	0.639	0.262
FINANCIALS	0.060	0.277	0.132	0.104	0.393	-0.792	0.060	0.481
INDUSTRIAL PRODUCTS	0.032	0.076	0.068	0.042	0.166	0.052	-0.004	0.466
AEROSPACE DEFENSE	0.003	-0.538	0.325	-0.058	-0.218	-0.013	0.253	0.341
BUSINESS SERVICES	-0.022	-0.549	0.243	-0.089	-0.395	0.361	0.171	0.294
TECHNOLOGY	-0.091	0.056	0.028	-0.021	-0.133	0.285	-0.044	0.378
CONSUMER STAPLES	-0.141	-0.145	0.266	-0.038	-0.448	0.301	0.194	0.364
BASIC MATERIALS	-0.226	0.061	0.212	-0.257	0.092	-0.203	0.140	0.207
CONSUMER DISCRETIONARY	-0.238	-0.466	0.022	-0.205	-0.161	0.086	-0.050	0.190
CONSTRUCTION	-0.307	0.514	-0.326	-0.133	0.433	-0.076	-0.398	0.312
CONGLOMERATES	-0.411	0.208	-0.110	-0.155	0.320	-0.138	-0.182	0.259
UTILITIES	-0.491	-0.460	0.230	-0.105	-0.041	-0.632	0.158	0.263

**Table 4 – Current versus Historical Sector Rankings (last 12 months)**

Sector	Current Rank 10/24/2022	Nov 2022	Oct 2022	Sep 2022	Aug 2022	Jul 2022	Jun 2022	May 2022	Apr 2022	Mar 2022	Feb 2022	Jan 2022	Dec 2021	Avg Hist Rank	Curr vs. Hist
RETAIL-WHOLESALE	1	7	14	13	9	8	12	10	10	10	14	1	7	9.6	8.6
HEALTHCARE	3	2	3	10	8	11	16	9	8	12	10	10	11	9.2	6.2
AUTOS-TIRES-TRUCKS	4	5	4	7	5	15	13	15	12	9	16	11	9	10.1	6.1
AEROSPACE DEFENSE	8	8	16	11	13	16	14	4	14	8	15	14	15	12.3	4.3
TRANSPORTATION	2	4	7	4	3	2	3	2	6	11	12	13	4	5.9	3.9
CONSUMER STAPLES	11	11	13	16	11	10	15	12	16	15	13	12	16	13.3	2.3
INDUSTRIAL PRODUCTS	7	10	6	15	10	9	7	6	11	5	3	8	13	8.6	1.6
TECHNOLOGY	10	9	5	14	6	13	10	14	7	14	8	7	14	10.1	0.1
BUSINESS SERVICES	9	6	8	6	7	7	9	11	15	16	6	3	10	8.7	-0.3
ENERGY	5	1	1	1	2	1	8	1	4	2	5	4	1	2.6	-2.4
FINANCIALS	6	3	12	2	4	4	1	5	3	4	1	2	2	3.6	-2.4
CONSUMER DISCRETIONARY	13	14	11	9	15	6	11	13	9	7	11	9	3	9.8	-3.2
BASIC MATERIALS	12	15	9	12	14	3	2	3	5	3	9	6	8	7.4	-4.6
CONGLOMERATES	15	16	10	5	16	12	4	16	1	6	2	16	5	9.1	-5.9
CONSTRUCTION	14	13	15	8	12	14	5	8	2	1	7	5	6	8.0	-6.0
UTILITIES	16	12	2	3	1	5	6	7	13	13	4	15	12	7.8	-8.3

**Table 5 – Highlighted Names from Most and Least Attractive Sectors (December 12, 2022)**

Most Attractive Names from the Top-Ranked Sectors			Least Attractive Names from the Bottom-Ranked Sectors		
Polaris All-Cap Core Universe			Polaris All-Cap Core Universe		
	Company	Ticker		Company	Ticker
<b>RETAIL-WHOLESALE</b>			<b>UTILITIES</b>		
1	Jumia Tech-Adr	JMIA	1	Southern Co	SO
2	Fiverr Intl Ltd	FVRR	2	Wec Energy Grp	WEC
3	Rite Aid Corp	RAD	3	Alliant Engy Cp	LNT
<b>TRANSPORTATION</b>			<b>CONGLOMERATES</b>		
1	Ardmore Shippin	ASC	1	Icahn Enterpris	IEP
2	Frontline Ltd	FRO	2	3M Co	MMM
3	Expeditors Intl	EXPD	3	Danaher Corp	DHR
<b>HEALTHCARE</b>			<b>CONSTRUCTION</b>		
1	Surgery Partnrs	SGRY	1	Rayonier Inc	RYN
2	Inovio Pharmac	INO	2	Louisiana Pac	LPX
3	Quest Diagnostc	DGX	3	Kb Home	KBH
<b>AUTO-TIRES-TRUCKS</b>			<b>CONSUMER DISCRETIONARY</b>		
1	Nikola Corp	NKLA	1	Six Flags Entmt	SIX
2	Cnh Industrial	CNHI	2	Cedar Fair	FUN
3	Rivian Automotv	RIVN	3	Fox Corp-A	FOXA
<b>ENERGY</b>			<b>BASIC MATERIALS</b>		
1	Tellurian Inc	TELL	1	Compass Minerls	CMP
2	Consol Energy	CEIX	2	Rio Tinto-Adr	RIO
3	Bp Plc	BP	3	Wheaton Prc Mtl	WPM

**Table 6 – Model Scores for Highlighted Names (December 12, 2022)**

**SECTOR CODES:**

1-Staples, 2-Discretionary, 3-Retail, 4-Medical, 5-Auto, 6-Materials, 7-Industrials, 8-Construction, 9-Conglomerates, 10-Technology, 11-Aerospace, 12-Energy, 13-Financials, 14-Utilities, 15-Transportation, 16-Business Services

**MOST ATTRACTIVE STOCKS FROM MOST ATTRACTIVE SECTORS**

	COMPANY	SECTOR	TICKER	PRICE	YIELD	IPSCORE	Behavioral Preference Factor	ABSOLUTE-SCALE METRICS			RELATIVE-SCALE METRICS					MKT CAP	DAYS2TR	
								ABS DCOORD	TECH OUTLK	FUNDA OUTLK	REL DCOORD	rPSCORE	VTCAVG	VSCORE	TSCORE			CSCORE
1	Jumia Tech-Adr	3	JMIA	3.94	0.00	1.57	1.55	1	-0.35	2.12	4	1.99	0.20	-0.73	-0.14	2.09	393.52	2.95
1	Fiverr Intl Ltd	3	FVRR	31.13	0.00	1.57	1.55	1	-0.35	1.63	4	1.99	-0.03	-1.16	-0.14	1.81	1144.37	1.53
1	Rite Aid Corp	3	RAD	4.55	0.00	1.57	-0.70	1	1.32	2.12	1	1.90	3.38	6.08	1.53	2.09	257.24	2.59
2	Ardmore Shippin	15	ASC	15.19	0.00	1.51	0.48	1	1.56	1.66	3	1.33	0.77	-0.02	1.48	1.39	607.36	1.92
2	Frontline Ltd	15	FRO	14.23	4.22	1.51	0.48	1	1.56	1.66	3	1.33	0.56	-0.49	-0.30	1.39	18026.97	0.12
2	Expeditors Intl	15	EXPD	113.28	1.18	1.51	0.72	1	-0.22	1.51	2	1.33	0.74	0.35	1.48	1.39	3167.92	0.36
3	Surgery Partnrs	4	SGRY	25.41	0.00	1.47	1.11	1	-0.07	1.97	4	2.11	0.42	-0.03	-0.15	1.94	2285.65	0.74
3	Inovio Pharmac	4	INO	1.84	0.00	1.45	1.27	1	-0.07	1.66	4	1.78	0.33	-0.09	-0.15	1.68	459.06	2.62
3	Quest Diagnostc	4	DGX	149.00	1.77	1.45	1.27	1	-0.22	1.51	4	1.78	0.31	-0.01	-0.29	1.68	16969.23	0.17
4	Nikola Corp	5	NKLA	2.34	0.00	1.67	1.30	1	-0.37	1.66	4	1.66	0.10	-0.44	-0.15	2.19	1120.51	1.25
4	Cnh Industrial	5	CNHI	15.98	0.00	1.66	0.24	1	1.57	1.51	3	1.41	0.92	-0.09	1.80	2.19	21484.79	0.42
4	Rivian Automotv	5	RIVN	25.61	0.00	1.64	0.18	1	-0.37	1.63	2	0.97	0.68	0.74	-0.15	2.19	23585.68	0.09
5	Tellurian Inc	12	TELL	2.28	0.00	1.70	1.13	1	1.98	1.66	3	1.52	0.50	-0.66	0.86	1.58	1287.78	1.33
5	Consol Energy	12	CEIX	70.54	5.95	1.70	1.13	1	1.81	1.63	3	1.52	0.44	-0.76	0.69	1.58	2459.83	0.60
5	Bp Plc	12	BP	34.10	4.17	1.70	1.13	1	1.81	1.51	3	1.52	0.39	-0.87	0.69	1.58	105705.30	0.09

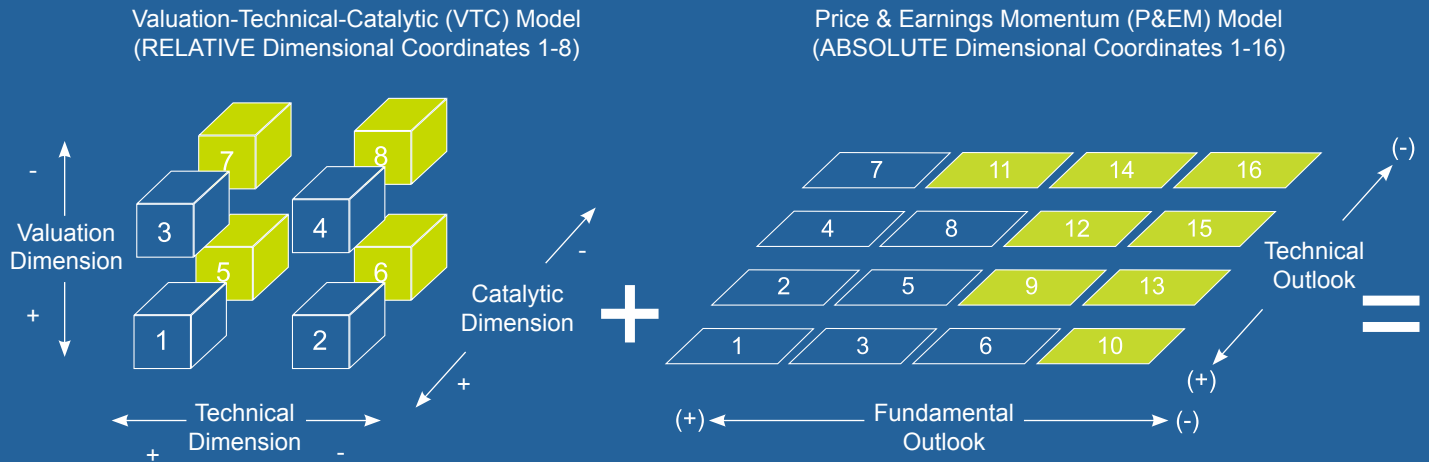
**LEAST ATTRACTIVE STOCKS FROM LEAST ATTRACTIVE SECTORS**

	COMPANY	SECTOR	TICKER	PRICE	YIELD	IPSCORE	Behavioral Preference Factor	ABSOLUTE-SCALE METRICS			RELATIVE-SCALE METRICS					MKT CAP	DAYS2TR	
								ABS DCOORD	TECH OUTLK	FUNDA OUTLK	REL DCOORD	rPSCORE	VTCAVG	VSCORE	TSCORE			CSCORE
1	Southern Co	14	SO	71.03	3.83	-1.07	-0.34	16	0.45	-1.24	7	-2.20	-0.70	-1.28	0.18	-0.47	14200.30	0.37
1	Wec Energy Grp	14	WEC	97.87	2.97	-1.07	-0.34	16	0.45	-1.24	7	-2.20	-0.62	-1.07	0.18	-0.81	30871.58	0.18
1	Alliant Engy Cp	14	LNT	56.57	3.02	-1.04	-0.45	16	0.45	-1.24	7	-1.46	-0.14	-0.14	0.18	-0.81	77328.42	0.08
2	Icahn Enterpris	9	IEP	50.55	15.83	-0.97	1.08	15	-0.80	-0.97	8	-0.88	-1.29	-1.62	-0.87	0.00	199090.52	0.04
2	3M Co	9	MMM	126.85	4.70	-0.72	0.55	14	-1.38	-0.32	6	-0.67	-0.37	0.74	-1.16	-1.02	70115.44	0.08
2	Danaher Corp	9	DHR	273.49	0.37	-0.70	0.95	14	-1.09	0.14	4	-0.39	-1.50	-2.89	-0.58	-2.05	17059.31	0.92
3	Rayonier Inc	8	RYN	35.04	3.25	-1.19	-0.22	16	0.08	-0.78	7	-1.50	-0.47	-1.96	0.45	-0.74	2711.31	0.92
3	Louisiana Pac	8	LPX	64.95	1.35	-1.19	-0.85	16	0.23	-0.97	5	-1.42	-0.07	0.40	0.45	-0.74	4656.62	0.45
3	Kb Home	8	KBH	31.68	1.89	-1.17	-0.99	16	0.23	-1.05	5	-1.00	0.03	1.08	0.30	-0.74	5130.70	2.05
4	Six Flags Entmt	2	SIX	21.87	0.00	-1.23	-2.02	16	0.34	-0.97	1	-1.51	0.14	0.05	0.41	0.00	1818.63	0.71
4	Cedar Fair	2	FUN	40.45	2.97	-1.23	-2.02	16	0.07	-0.97	1	-1.51	0.10	0.21	0.14	0.00	2199.77	2.62
4	Fox Corp-A	2	FOXA	31.53	1.59	-1.23	-2.02	16	0.07	-0.78	1	-1.51	0.05	0.02	0.14	0.00	17111.13	0.35
5	Compass Minerls	6	CMP	43.92	1.37	-1.25	0.13	16	-1.35	-1.50	6	-1.93	-0.74	0.55	0.43	-0.68	88869.92	0.11
5	Rio Tinto-Adr	6	RIO	71.13	7.49	-1.25	-1.52	16	0.64	-1.01	5	-1.75	0.35	0.77	0.00	-0.68	17671.75	0.34
5	Wheaton Prc MI	6	WPM	39.10	1.53	-1.25	-1.52	16	0.21	-0.97	5	-1.75	0.15	0.70	-1.56	-1.69	1500.35	1.69

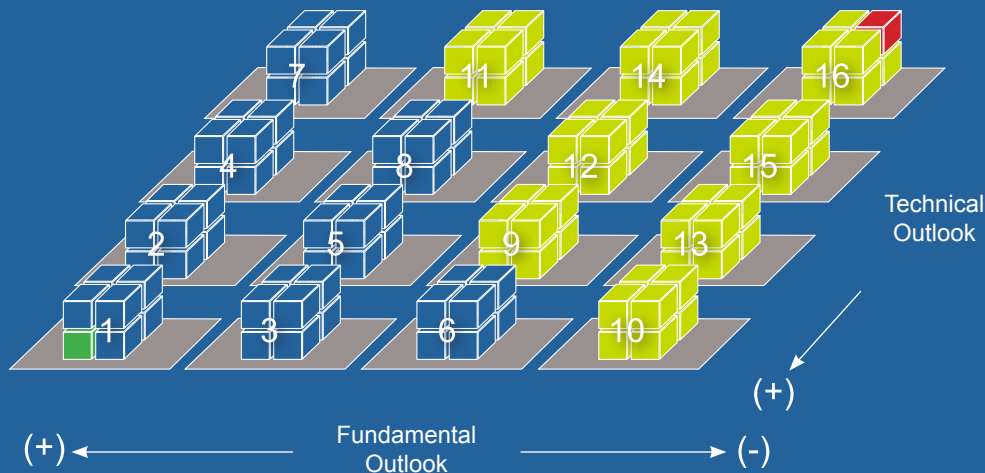
## Description of Table 6 Report Headings

<b>iPScore</b>	Composite multi-factor score based on integrated relative-scale and absolute-scale metrics. Positive (+) or negative (-) number indicates standard deviation units above or below peer group average.
<b>Behavioral Preference</b>	Behavioral preference factor for stock based on investor behavior pattern recognition. Positive (+) or negative (-) number indicates expected favor or disfavor towards stock expressed in standard deviation units.oup average.
<b>ABS DCOORD</b>	Absolute-scale dimensional coordinate (1-16) based on combined measures of fundamental outlook and technical outlook. for each stock. (1 = most attractive, 16 = least attractive)
<b>TECH OUTLK</b>	Technical outlook for stock based on proprietary price oscillator and money flow factors. Positive (+) or negative (-) number indicates standard deviation units above or below peer group average.
<b>FUNDA OUTLK</b>	Fundamental outlook for stock based on proprietary measure of earnings expectations. Positive (+) or negative (-) number indicates standard deviation units above or below peer group average.
<b>REL DCOORD</b>	Relative-scale dimensional coordinate (1-8) based on 3-dimensional positioning of stock indicated by valuation, technical and catalytic scores. Also used to determine qualitative characterizations of stocks
<b>rPScore</b>	Composite multi-factor score based on relative-scale valuation, technical and catalytic scores. Positive (+) or negative (-) number indicates standard deviation units above or below peer group median.
<b>VTCavg</b>	Sector-specific, optimally-weighted average of relative-scale valuation, technical and catalytic scores. Positive (+) or negative (-) number indicates standard deviation units above or below peer group median.
<b>VScore</b>	Sector-specific composite score based on optimal combination of various VALUATION factors. Positive (+) or negative (-) number indicates standard deviation units above or below peer group median.
<b>TScore</b>	Composite multi-factor score based on optimal combination of various TECHNICAL factors. Positive (+) or negative (-) number indicates standard deviation units above or below peer group median.
<b>CScore</b>	Composite multi-factor score based on optimal combination of various CATALYTIC factors. Positive (+) or negative (-) number indicates standard deviation units above or below peer group median.
<b>DAYS2TR</b>	Days-to-Trade - A standardized liquidity measure indicating the number of trading days required to trade a \$25 million position at the average daily trading volume for the stock.

**POLARIS Integrated Model Structure**



**Qubit Multi-factor Model**



■ Most Attractive Stocks

On an Absolute Scale:

- Positive **Technical Outlook**
- Positive **Fundamental Outlook**

Relative to Peer Group Stocks:

- Favorable **Valuation** Properties
  - Favorable **Technical** Properties
  - Favorable **Catalytic** Properties
- (Favorable = More Positive or Less Negative)

■ Least Attractive Stocks


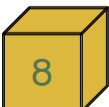

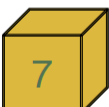

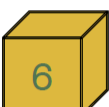

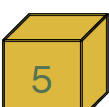
On an Absolute Scale:

- Negative **Technical Outlook**
- Negative **Fundamental Outlook**

Relative to Peer Group Stocks:

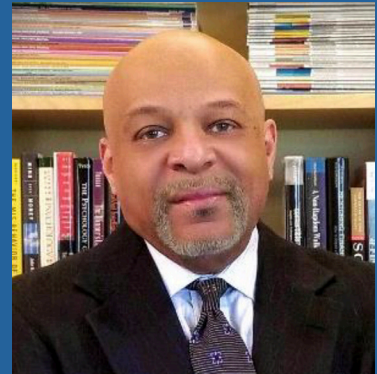
- Unfavorable **Valuation** Properties
  - Unfavorable **Technical** Properties
  - Unfavorable **Catalytic** Properties
- (Unfavorable = Less Positive or More Negative)

Characterizations based on Relative-Scale Dimensional Coordinates

	<p>Cheap with Positive Catalytic and Positive Technical properties = <b>“Ideal Overweight”</b></p>	
	<p>Expensive with Negative Catalytic and Negative Technical properties = <b>“Ideal Underweight”</b></p>	
	<p>Cheap with Positive Catalytic properties, but has Negative Technical properties = <b>“Early/Late Value Stock” (has Timing Risk)</b></p>	
	<p>Expensive with Negative Catalytic properties, but has Positive Technical properties = <b>“Momentum Stock”</b></p>	
	<p>Expensive but has Positive Catalytic and Positive Technical properties = <b>“Timely Growth Stock”</b></p>	
	<p>Cheap but has Negative Catalytic and Negative Technical properties = <b>“Value Trap Stock”</b></p>	
	<p>Expensive with Positive Catalytic properties but has Negative Technical properties = <b>“Early/Late Growth Stock” (has Timing Risk)</b></p>	
	<p>Cheap with Negative Catalytic properties but has Positive Technical properties = <b>“Mean Reversion Stock”</b></p>	



**Brian T. Hannon, CFA**  
**Founder, Director of Quantitative Equity Research**  
**Qubit Research, LLC**



With an academic background in engineering and economics, Brian Hannon began his career in the chemicals industry at the Dupont Company where he held various positions in research & development, project management, and corporate finance. An early indication of his innovative nature occurred while in R&D; as Brian was awarded a patent for his role in the development of a reverse osmosis process for purifying chemicals used in the production of semiconductor devices (Patent# 4,879,043: Manufacture of High Purity Hydrogen Peroxide by Using Reverse Osmosis”).

Pursuing his interest in the stock market, Brian made the transition to the investment management profession as a research analyst covering chemicals industry companies at the DuPont Pension Fund. He subsequently joined ASB Capital Management where he originated the unique approach to structuring multi-factor models that Polaris is based on. Brian moved on to Macquarie Investments (formerly Delaware Investment Management) where he produced an exceptional track record while serving as a senior portfolio manager on the institutional large-cap value team. After Brian left Macquarie, he founded Qubit Investments, LLC to launch an equity market neutral fund. The fund utilized an updated version of the Polaris multi-factor model, integrated with a systematic portfolio construction algorithm that Brian developed. He later became the director of equity research at Sturdivant & Co. and then Quoin Capital, LLC, which was prior to his current role as founder of Qubit Research, LLC, an independent equity research boutique. Brian holds a BS degree in chemical engineering and a BS in economics from Carnegie-Mellon University. He is also a CFA charter holder.

**DISCLOSURES AND DEFINITIONS**

Qubit Research, LLC and its employees, officers, and members may participate as an agent in transactions involving the securities referred to herein (or options or other instruments related thereto), including in transactions which may be contrary to any recommendations contained herein. This publication does not constitute an offer to sell or solicitation to buy of any transaction in any securities referred to herein. Any recommendation contained herein may not be suitable for all investors. Although the information contained in the subject report (not including disclosures contained her in) has been obtained from sources we believe to be reliable, the accuracy and completeness of such information and the opinions expressed herein cannot be guaranteed. This publication and any recommendation contained herein speak only as of the date hereof and are subject to change without notice. Qubit Research, LLC and its employees shall have no obligation to update or amend any information or opinion contained herein. This publication is being furnished to you for informational purposes only and on the condition that it will not form the sole basis for any investment decision. Each investor must make their own determination of the appropriateness of an investment in any securities referred to herein based on the tax, or other considerations applicable to such investor and its own investment strategy. By virtue of this publication, neither Qubit Research, LLC nor any of its employees shall be responsible for any investment decision. This report may not be reproduced, distributed, or published without the prior consent of Qubit Research, LLC All rights reserved by Qubit Research, LLC This report may discuss numerous securities, some of which may not be qualified for sale in certain states and may therefore not be offered to investors in such states. This document should not be construed as providing investment services. Investing in non-U.S. securities including ADRs involves significant risks such as fluctuation of exchange rates that may have adverse effects on the value or price of income derived from the security. Securities of some foreign companies may be less liquid and prices more volatile than securities of U.S. companies. Securities of non-U.S. issuers may not be registered with or subject to Securities and Exchange Commission reporting requirements; therefore, information regarding such issuers may be limited.