

Global Laggards

October 10, 2019

Overview

In 1963, we began profiling the characteristics of top-performing stocks prior to their outstanding runs in market cycles dating back to the 1880s. Through our decades of research, we have produced powerful proprietary Ratings and Rankings that help identify leading and lagging stocks. These metrics form the foundation of our O'Neil Methodology (OM) and our evaluation services.

Our Global Laggards list comprises stocks that have poor O'Neil Ratings and Rankings. This list has been curated by our sector analysts to find stocks showing technical weakness. We believe these stocks are laggards relative to their own domestic markets. We recommend that they be underweighted as they may be vulnerable to further downside risk and underperformance.

Criteria used to build the list include:

- Our proprietary Relative Strength Rating gauges the market's top performers by looking at a stock's price change relative to all stocks within a country. The rating is calculated over 12 months, with higher weighting for more recent months. Stocks are ranked in order of greatest percentage price change and assigned a rank from 99 (best) to 1 (worst). Stocks on this list will usually show a low or declining RS Rating.
- Our proprietary Accumulation/Distribution Rating shows where money is flowing by tracking the relative degree of institutional buying and selling over the prior 13 weeks. It is a technical rating based on price and volume statistics, where A = best and E = worst. Stocks on this list will usually have a low or falling Accumulation/Distribution Rating, indicating institutional selling.
- Our unique Negative Alerts Score uses 11 monitoring characteristics to detect a stock's decline, allowing you to act early on weakening holdings. Stocks on this list will usually have multiple alerts, indicating a possible breakdown.

Stocks highlighted in yellow are believed by our analysts to warrant greater attention due to their vulnerability.

U.S. Market

Symbol	Name	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Short Interest, % of Float	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
LPX	Louisiana Pacific Corp	Basic Material	Bldg-Wood Prds	3,011	49,866	0.047	5	44	50	D
MOS	Mosaic Company	Basic Material	Chemicals-Agricultural	7,463	106,295	0.036	6	30	12	D-
NTR	Nutrien Ltd	Basic Material	Chemicals-Agricultural	28,546	54,785	0.009	5	49	40	E
SQM	Sociedad Quimica Y Minra	Basic Material	Chemicals-Agricultural	3,202	19,366	0.054	4	37	15	C-
WLK	Westlake Chemical Corp	Basic Material	Chemicals-Basic	7,767	34,663	0.088	5	24	19	D-
DD	DuPont de Nemours Inc	Basic Material	Chemicals-Basic	47,659	243,478	0.010	6	56	23	E
FUL	Fuller H B Co	Basic Material	Chemicals-Specialty	2,324	16,345	0.061	5	57	46	D-
ESI	Element Solutions Inc	Basic Material	Chemicals-Specialty	2,426	19,580	0.068	4	71	30	D-
CBT	Cabot Corp	Basic Material	Chemicals-Specialty	2,497	15,418	0.012	4	50	32	D+
GRA	Grace W R & Co	Basic Material	Chemicals-Specialty	4,327	35,242	0.011	6	64	29	D+
BVN	Buenaventura Comp Ads	Basic Material	Mining-Gold/Silver/Gems	3,617	18,601	0.027	6	19	32	E
TECK	Teck Resources Ltd	Basic Material	Mining-Metal Ores	8,777	40,971	0.021	5	60	10	C
FCX	Freeport McMoRan Inc	Basic Material	Mining-Metal Ores	13,203	181,033	0.029	6	5	13	D+
EAF	Graftech International	Basic Material	Steel-Specialty Alloys	3,208	15,132	0.286	4	26	29	C
ATI	Allegheny Technologies	Basic Material	Steel-Specialty Alloys	2,552	30,481	0.129	5	13	15	E
ERJ	Embraer Sa Adr	Capital Equipment	Aerospace/Defense	3,066	13,400	0.021	4	8	19	D-
AVAV	Aerovironment Inc	Capital Equipment	Aerospace/Defense	1,318	11,450	0.116	4	33	20	C+
HII	Huntington Ingalls Inds	Capital Equipment	Aerospace/Defense	8,660	59,962	0.023	5	58	35	E
GVA	Granite Construction Inc	Capital Equipment	Bldg-Heavy Construction	1,486	18,536	0.107	7	3	14	C
ROL	Rollins Inc	Capital Equipment	Bldg-Maintenance & Svc	11,292	46,906	0.052	4	73	30	B
ABM	A B M Industries Inc	Capital Equipment	Bldg-Maintenance & Svc	2,298	12,253	0.050	5	61	35	E
OMC	Omnicom Group	Capital Equipment	Comml Svcs-Advertising	16,451	118,139	0.125	8	71	46	E
RHI	Robert Half Intl Inc	Capital Equipment	Comml Svcs-Staffing	6,217	53,873	0.099	5	83	25	E
KFY	Korn Ferry	Capital Equipment	Comml Svcs-Staffing	1,965	16,625	0.014	5	79	22	C-
SON	Sonoco Products Co	Capital Equipment	Containers/Packaging	5,685	24,526	0.034	7	74	40	E
BERY	Berry Global Group Inc	Capital Equipment	Containers/Packaging	5,058	46,916	0.030	10	75	15	D
SEE	Sealed Air Corp	Capital Equipment	Containers/Packaging	6,132	53,284	0.038	6	80	54	C+
ETN	Eaton Corp Plc	Capital Equipment	Diversified Operations	33,115	181,054	0.026	5	82	54	D-
JEF	Jefferies Financial Grp	Capital Equipment	Diversified Operations	5,298	55,896	0.029	7	75	23	E
MMM	Three M Company	Capital Equipment	Diversified Operations	87,704	419,314	0.017	4	52	20	D
GE	General Electric Co	Capital Equipment	Diversified Operations	73,831	616,770	0.014	5	34	22	E
ABB	A B B Ltd	Capital Equipment	Electrical-Power/Equipmt	38,823	33,756	0.002	3	52	33	E
NVT	Nvent Electric Plc	Capital Equipment	Electrical-Power/Equipmt	3,277	28,110	0.024	5	92	16	E
ROK	Rockwell Automation Inc	Capital Equipment	Electrical-Power/Equipmt	18,224	142,921	0.024	4	76	37	D-
RBC	Regal Beloit Corp	Capital Equipment	Electrical-Power/Equipmt	2,943	21,748	0.026	6	64	26	E

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ENS	Energys	Capital Equipment	Electrical-Power/Equipmt	2,612	19,169	0.023	4	78	23	D-
CAT	Caterpillar Inc	Capital Equipment	Machinery-Constr/Mining	68,748	468,181	0.016	6	60	27	C-
CNHI	C N H Industrial Nv	Capital Equipment	Machinery-Constr/Mining	13,725	20,567	0.007	5	77	40	C-
TEX	Terex Corp	Capital Equipment	Machinery-Constr/Mining	1,694	22,206	0.093	7	44	15	D-
GGG	Graco Inc	Capital Equipment	Machinery-Gen Industrial	7,425	19,156	0.017	6	72	40	D+
RXN	Rexnord Corp	Capital Equipment	Machinery-Gen Industrial	2,772	18,850	0.061	5	73	37	D
FLOW	S P X Flow Inc	Capital Equipment	Machinery-Gen Industrial	1,507	10,549	0.026	6	31	37	D-
FLS	Flowserve Corp	Capital Equipment	Machinery-Gen Industrial	5,754	49,877	0.041	6	72	30	D-
ITT	I T T Inc	Capital Equipment	Machinery-Gen Industrial	4,995	30,449	0.019	7	81	46	D+
FTV	Fortive Corporation	Capital Equipment	Machinery-Gen Industrial	22,021	140,288	0.028	6	77	22	E
GDI	Gardner Denver Holdings	Capital Equipment	Machinery-Gen Industrial	5,635	41,897	0.042	8	25	50	D
PNR	Pentair plc	Capital Equipment	Machinery-Gen Industrial	6,119	41,808	0.020	5	33	33	D+
AIMC	Altra Industrial Motion	Capital Equipment	Machinery-Gen Industrial	1,645	10,141	0.032	5	67	15	D-
PRLB	Proto Labs Inc	Capital Equipment	Machinery-Mtl Hdlg/Autmn	2,656	16,692	0.106	5	63	25	C+
SSYS	Stratasys Ltd	Capital Equipment	Machinery-Mtl Hdlg/Autmn	1,072	10,334	0.120	8	53	20	E
KMT	Kennametal Inc	Capital Equipment	Machinery-Tools & Rel	2,382	19,616	0.031	6	56	17	D-
LECO	Lincoln Electric Hldgs	Capital Equipment	Machinery-Tools & Rel	5,091	26,865	0.032	4	60	50	D
XYL	Xylem Inc	Capital Equipment	Machinery-Tools & Rel	13,677	55,711	0.029	8	72	54	D+
HSC	Harsco Corp	Capital Equipment	Metal Proc & Fabrication	1,342	18,821	0.059	6	52	12	D+
AAXN	Axon Enterprise Inc	Capital Equipment	Security/Sfty	3,090	37,800	0.127	6	52	29	E
WAB	Wabtec Corp	Capital Equipment	Transportation-Equip Mfg	12,281	134,614	0.112	5	66	22	C-
OXM	Oxford Industries Inc	Consumer Cyclical	Apparel-Clothing Mfg	1,192	12,465	0.158	5	54	33	D+
UA	Under Armour Inc Cl C	Consumer Cyclical	Apparel-Clothing Mfg	4,070	36,100	0.047	9	58	30	E
GOOS	Canada Goose Hldgs Cl A	Consumer Cyclical	Apparel-Clothing Mfg	2,192	41,344	0.210	5	60	20	E
GIL	Gildan Activewear Inc	Consumer Cyclical	Apparel-Clothing Mfg	7,084	14,435	0.014	7	57	62	C-
TSLA	Tesla Inc	Consumer Cyclical	Auto Manufacturers	44,366	1,658,574	0.268	3	45	33	B-
BWA	Borg Warner Inc	Consumer Cyclical	Auto/Truck-Original Eqp	7,311	56,615	0.029	6	51	27	C
MTOR	Meritor Inc	Consumer Cyclical	Auto/Truck-Original Eqp	1,475	15,311	0.120	8	98	22	E
AOS	Smith A O Corp	Consumer Cyclical	Bldg-A/C & Heating Prds	6,415	74,041	0.056	5	70	43	C-
FIX	Comfort Systems U S A	Consumer Cyclical	Bldg-A/C & Heating Prds	1,563	16,837	0.023	5	87	20	B
MHK	Mohawk Industries Inc	Consumer Cyclical	Bldg-Constr Prds/Misc	8,880	86,991	0.064	5	47	26	D+
GCP	G C P Applied Tech Inc	Consumer Cyclical	Bldg-Constr Prds/Misc	1,360	13,036	0.069	5	39	15	B-
SNA	Snap On Inc	Consumer Cyclical	Bldg-Hand Tools	8,463	54,632	0.141	4	81	43	D
ENR	Energizer Holdings Inc	Consumer Cyclical	Consumer Prod-Specialty	2,719	40,941	0.193	6	29	22	B-
APHA	Aphria Inc	Consumer Cyclical	Consumer Prod-Specialty	1,237	27,970	0.113	7	36	11	D-
CRON	Cronos Group Inc	Consumer Cyclical	Consumer Prod-Specialty	2,738	34,708	0.129	6	77	8	D-
CGC	Canopy Growth Corp	Consumer Cyclical	Consumer Prod-Specialty	7,358	108,650	0.122	5	1	6	D-

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LAUR	Laureate Education Cl A	Consumer Cyclical	Consumer Svcs-Education	1,812	24,600	0.063	2	22	54	C-
LOPE	Grand Canyon Education	Consumer Cyclical	Consumer Svcs-Education	4,774	44,087	0.028	6	92	27	E
ATGE	Adtalem Global Education	Consumer Cyclical	Consumer Svcs-Education	1,971	18,844	0.067	5	62	15	E
MIDD	Middleby Corp	Consumer Cyclical	Hsehold-Appliances/Wares	6,190	42,220	0.050	7	88	27	E
WYNN	Wynn Resorts Ltd	Consumer Cyclical	Leisure-Gaming/Equip	11,605	241,659	0.041	6	30	22	D-
MLCO	Melco Resorts & Ent Ads	Consumer Cyclical	Leisure-Gaming/Equip	9,238	33,677	0.011	6	49	29	C
ERI	Eldorado Resorts Inc	Consumer Cyclical	Leisure-Gaming/Equip	3,094	62,493	0.236	8	31	23	D+
RRR	Red Rock Resorts Cl A	Consumer Cyclical	Leisure-Gaming/Equip	1,439	18,677	0.066	7	15	22	D-
H	Hyatt Hotels Corp Cl A	Consumer Cyclical	Leisure-Lodging	2,669	43,073	0.092	5	85	43	D+
MAR	Marriott International	Consumer Cyclical	Leisure-Lodging	39,190	222,915	0.022	6	79	35	E
HTHT	Huazhu Group Ads	Consumer Cyclical	Leisure-Lodging	9,607	36,691	0.141	4	71	54	D+
IQ	Iqiyi Inc Cl A Ads	Consumer Cyclical	Leisure-Movies & Related	4,996	106,236	0.269	5	22	15	D
NFLX	Netflix Inc	Consumer Cyclical	Leisure-Movies & Related	120,453	2,007,920	0.053	6	80	15	D-
CNK	Cinemark Holdings Inc	Consumer Cyclical	Leisure-Movies & Related	4,242	36,947	0.151	4	58	35	C
FOXF	Fox Factory Holding Corp	Consumer Cyclical	Leisure-Products	2,356	15,310	0.057	7	98	25	E
PII	Polaris Inc	Consumer Cyclical	Leisure-Products	5,215	55,524	0.060	4	36	40	C-
HTZ	Hertz Global Holdings	Consumer Cyclical	Leisure-Services	1,816	46,079	0.203	5	63	19	D-
MSG	Madison Square Garden Co	Consumer Cyclical	Leisure-Services	5,072	64,267	0.050	5	29	33	C+
CAR	Avis Budget Group Inc	Consumer Cyclical	Leisure-Services	2,042	32,124	0.093	5	66	22	D+
SEAS	SeaWorld Entertainment	Consumer Cyclical	Leisure-Services	2,062	40,741	0.122	5	62	35	D
PLNT	Planet Fitness Inc Cl A	Consumer Cyclical	Leisure-Services	4,826	75,233	0.048	6	98	30	D-
UBER	Uber Technologies Inc	Consumer Cyclical	Leisure-Services	49,249	303,686	0.041	7	2	11	D-
NCLH	Norwegian Cruise Lne Hld	Consumer Cyclical	Leisure-Services	10,392	99,604	0.023	3	94	37	C+
MAT	Mattel Inc	Consumer Cyclical	Leisure-Toys/Games/Hobby	3,773	49,151	0.228	4	48	25	C
TRIP	TripAdvisor Inc	Consumer Cyclical	Leisure-Travel Booking	4,798	64,213	0.145	7	60	16	D
CTRP	Ctrip.com Intl Ltd Adr	Consumer Cyclical	Leisure-Travel Booking	16,353	156,681	0.025	6	77	19	D-
SABR	Sabre Corporation	Consumer Cyclical	Leisure-Travel Booking	5,813	37,774	0.018	5	48	37	D+
JWA	Wiley John & Sons Cl A	Consumer Cyclical	Media-Books	2,042	12,431	0.045	4	42	27	C-
CBS	C B S Corp Cl B	Consumer Cyclical	Media-Diversified	13,371	180,630	0.045	7	79	13	D-
VIAB	Viacom Inc Cl B	Consumer Cyclical	Media-Diversified	8,035	132,741	0.039	6	42	14	D+
GHC	Graham Holdings Co Cl B	Consumer Cyclical	Media-Diversified	2,808	15,282	0.038	5	50	43	C
DISCA	Discovery Inc Cl A	Consumer Cyclical	Media-Radio/Tv	4,320	106,834	0.308	3	92	27	C
SBGI	Sinclair Broadcast Group	Consumer Cyclical	Media-Radio/Tv	2,700	37,111	0.115	5	84	62	E
AMCX	Amc Networks Inc	Consumer Cyclical	Media-Radio/Tv	2,117	22,520	0.223	4	91	20	E
DISCK	Discovery Inc Cl C	Consumer Cyclical	Media-Radio/Tv	9,506	67,980	0.062	4	93	30	D
NXST	Nexstar Media Group Cl A	Consumer Cyclical	Media-Radio/Tv	4,399	49,969	0.086	5	78	54	C-
HLF	Herbalife Nutrition Ltd	Consumer Staple	Cosmetics/Personal Care	5,813	56,983	0.058	5	38	18	C

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IFF	Intl Flavors & Fragrance	Consumer Staple	Cosmetics/Personal Care	12,245	158,953	0.127	7	38	22	B-
INGR	Ingredion Inc	Consumer Staple	Food-Grain & Related	5,266	42,899	0.049	5	52	25	C-
ADM	Archer Daniels Midland	Consumer Staple	Food-Grain & Related	22,301	142,686	0.022	7	24	29	E
CALM	Cal-Maine Foods Inc	Consumer Staple	Food-Meat Products	1,744	16,247	0.161	4	5	37	D+
SXT	Sensient Technologies Cp	Consumer Staple	Food-Misc Preparation	2,691	13,484	0.045	4	48	35	D+
HAIN	Hain Celestial Group	Consumer Staple	Food-Packaged	2,112	26,491	0.154	3	21	35	C-
THS	Treehouse Foods Inc	Consumer Staple	Food-Packaged	2,909	25,092	0.098	5	34	37	C
LANC	Lancaster Colony Corp	Consumer Staple	Food-Packaged	3,742	16,822	0.090	4	64	27	D
CLX	Clorox Co	Consumer Staple	Soap & Cng Preparatns	18,922	163,260	0.065	4	80	54	E
ARCH	Arch Coal Inc	Energy	Energy-Coal	1,260	20,174	0.217	5	72	25	D-
CSIQ	Canadian Solar Inc	Energy	Energy-Solar	1,102	14,326	0.068	3	37	54	D
FSLR	First Solar Inc	Energy	Energy-Solar	5,997	77,118	0.126	3	25	62	E
CVE	Cenovus Energy Inc	Energy	Oil&Gas-Integrated	9,943	30,518	0.019	5	77	26	D
YPF	Y P F Sociedad Anonima	Energy	Oil&Gas-Integrated	3,729	38,866	0.053	5	5	6	C-
PBRA	Petroleo Bras Ptr Adr Pf	Energy	Oil&Gas-Integrated	36,399	77,515	0.001	4	47	29	C
KOS	Kosmos Energy Ltd	Energy	Oil&Gas-Intl Expl&Prod	2,144	23,360	0.055	4	51	25	D+
GTLS	Chart Industries Inc	Energy	Oil&Gas-Machinery/Equip	2,068	23,027	0.090	6	73	17	D-
FTI	TechnipFmc plc	Energy	Oil&Gas-Machinery/Equip	10,189	92,747	0.021	5	35	29	C
DK	Delek U S Holdings Inc	Energy	Oil&Gas-Refining/Mktg	2,680	46,610	0.077	6	72	37	C-
UGI	U G I Corp Hldg Co	Energy	Oil&Gas-Refining/Mktg	8,424	102,329	0.021	4	76	30	D+
NBL	Noble Energy Inc	Energy	Oil&Gas-U S Expl&Prod	9,376	118,050	0.066	6	5	19	E
MGY	Magnolia O&G Corp Cl A	Energy	Oil&Gas-U S Expl&Prod	1,708	14,640	0.144	5	6	20	C
EOG	E O G Resources Inc	Energy	Oil&Gas-U S Expl&Prod	39,829	288,400	0.019	6	25	11	E
DVN	Devon Energy Corp	Energy	Oil&Gas-U S Expl&Prod	8,525	152,658	0.052	6	77	12	D+
COG	Cabot Oil & Gas Corp	Energy	Oil&Gas-U S Expl&Prod	7,234	147,303	0.060	6	77	12	E
FANG	Diamondback Energy Inc	Energy	Oil&Gas-U S Expl&Prod	13,337	161,763	0.042	5	77	14	D+
PE	Parsley Energy Inc Cl A	Energy	Oil&Gas-U S Expl&Prod	4,572	81,698	0.032	6	64	19	D-
BBD	Banco Bradesco Sa Adr pf	Financial	Banks-Foreign	20,629	107,719	0.011	8	86	27	C-
BAP	Credicorp Ltd	Financial	Banks-Foreign	16,320	68,156	0.007	7	81	27	E
ASB	Associated Banc Corp	Financial	Banks-Midwest	3,167	18,563	0.021	4	67	27	C
CBSH	Commerce Bancshares	Financial	Banks-Midwest	6,478	27,147	0.063	5	64	50	E
SMFG	Sumitomo Mitsui Finl Adr	Financial	Banks-Money Center	47,405	17,494	0.000	6	41	37	D+
GS	Goldman Sachs Group Inc	Financial	Banks-Money Center	72,082	439,035	0.018	3	51	50	D+
MS	Morgan Stanley	Financial	Banks-Money Center	68,284	412,080	0.008	5	71	35	D
BK	Bank Of New York Mellon	Financial	Banks-Money Center	41,110	214,171	0.012	3	61	32	D-
DB	Deutsche Bk Ag Adr	Financial	Banks-Money Center	14,936	44,949	0.035	3	16	22	D-
CBU	Community Bank System	Financial	Banks-Northeast	3,171	13,064	0.070	5	67	43	C-

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EGBN	Eagle Bancorp Inc	Financial	Banks-Northeast	1,461	11,270	0.044	3	82	18	C
OZK	Bank Ozk	Financial	Banks-Southeast	3,385	23,597	0.047	4	73	26	D+
CMA	Comerica Inc	Financial	Banks-Super Regional	9,601	116,330	0.028	5	87	20	C+
FITB	Fifth Third Bancorp	Financial	Banks-Super Regional	19,139	133,252	0.012	5	76	40	D-
NTRS	Northern Trust Corp	Financial	Banks-Super Regional	19,246	87,749	0.020	5	77	43	D-
SIVB	S V B Financial Group	Financial	Banks-Super Regional	10,063	102,028	0.025	4	98	22	D
EWBC	East West Bancorp Inc	Financial	Banks-West/Southwest	6,052	39,237	0.010	4	81	22	D-
UMPQ	Umpqua Holdings Corp	Financial	Banks-West/Southwest	3,445	17,146	0.014	3	75	26	C
ZION	Zions Bancorp NA	Financial	Banks-West/Southwest	7,678	94,558	0.159	5	80	33	D-
CIT	C I T Group Inc	Financial	Finance-Commercial Loans	4,096	33,694	0.042	4	99	27	D-
COF	Capital One Financial Cp	Financial	Finance-Consumer Loans	41,192	189,838	0.011	4	68	50	D
WRLD	World Acceptance Corp	Financial	Finance-Consumer Loans	1,093	16,788	0.186	4	46	30	E
ADS	Alliance Data Sys Corp	Financial	Finance-CrdtCard/PmtPr	6,172	127,290	0.035	5	66	12	E
CS	Credit Suisse Grp AG Adr	Financial	Finance-Invest Bnk/Bkrs	29,660	32,443	0.003	5	60	35	D-
IBKR	Interactive Brokers Grp	Financial	Finance-Invest Bnk/Bkrs	3,554	21,302	0.000	4	66	25	E
AMTD	T D Ameritrade Hldg Corp	Financial	Finance-Invest Bnk/Bkrs	19,028	147,207	0.032	5	95	10	D
BEN	Franklin Resources Inc	Financial	Finance-Investment Mgmt	13,473	88,872	0.069	6	34	20	E
BLK	Blackrock Inc	Financial	Finance-Investment Mgmt	65,440	257,602	0.015	5	57	37	D-
IIPR	Innovative Ind Prop	Financial	Finance-Property REIT	918	37,467	0.286	2	80	92	E
AMG	Affiliated Managers Grp	Financial	Finance-Investment Mgmt	3,730	39,405	0.035	5	49	12	D
RYN	Rayonier Inc Reit	Financial	Finance-Property REIT	3,657	14,897	0.017	4	24	35	C+
ESRT	Empire State Rlt Tr Cl A	Financial	Finance-Property REIT	2,438	18,129	0.032	4	33	29	E
JBGS	JBG Smith Properties	Financial	Finance-Property REIT	5,210	20,896	0.017	7	27	54	C
CNO	C N O Financial Group	Financial	Insurance-Acc & Health	2,331	15,798	0.028	6	32	22	C-
LNC	Lincoln National Corp	Financial	Insurance-Life	11,199	82,204	0.021	5	86	26	C
PUK	Prudential Plc Adr	Financial	Insurance-Life	45,788	13,261	0.000	6	24	20	C-
MET	Metlife Inc	Financial	Insurance-Life	42,402	309,831	0.016	7	62	40	E
AEL	Amer Equity Invstmt Life	Financial	Insurance-Life	2,062	10,759	0.015	5	87	15	D+
BHF	Brighthouse Financial	Financial	Insurance-Life	4,006	38,190	0.052	4	46	35	C
RDFN	Redfin Corporation	Financial	Real Estate Dvlpmt/Ops	1,455	14,971	0.213	3	5	27	D
PINC	Premier Inc Cl A	Health Care	Comm'l Svcs-Healthcare	1,867	24,186	0.140	8	79	15	D-
HALO	Halozyne Therapeutics	Health Care	Medical-Biomed/Biotech	2,269	12,500	0.070	4	57	35	D
REGN	Regeneron Pharmaceutical	Health Care	Medical-Biomed/Biotech	31,837	198,550	0.031	6	83	22	B
ESPR	Esperion Therapeutics	Health Care	Medical-Biomed/Biotech	976	14,967	0.234	5	32	18	C+
SUPN	Supernus Pharmaceuticals	Health Care	Medical-Biomed/Biotech	1,344	15,163	0.114	6	79	12	B
BLUE	Bluebird Bio Inc	Health Care	Medical-Biomed/Biotech	4,931	61,766	0.178	5	12	11	D-
CRSP	Crispr Therapeutics AG	Health Care	Medical-Biomed/Biotech	1,989	17,425	0.165	5	10	27	E

Symbol	Name	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Short Interest, % of Float	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
ANAB	Anaptysbio Inc	Health Care	Medical-Biomed/Biotech	931	12,316	0.175	5	9	4	D-
HRTX	Heron Therapeutics Inc	Health Care	Medical-Biomed/Biotech	1,577	19,574	0.243	5	18	19	C-
BIIB	Biogen Inc	Health Care	Medical-Biomed/Biotech	41,198	318,290	0.019	5	96	22	D-
IMMU	Immunomedics Inc	Health Care	Medical-Biomed/Biotech	2,665	33,124	0.180	4	19	22	C
IRWD	Ironwood Pharma Cl A	Health Care	Medical-Biomed/Biotech	1,336	18,796	0.183	6	70	14	B-
ZGNX	Zogenix Inc	Health Care	Medical-Biomed/Biotech	1,706	20,737	0.212	4	21	33	C-
AMRN	Amarin Corp Plc Adr	Health Care	Medical-Biomed/Biotech	5,143	101,190	0.149	5	61	14	D-
SRPT	Sarepta Therapeutics Inc	Health Care	Medical-Biomed/Biotech	6,114	159,484	0.210	7	1	8	D+
QURE	Uniqure N.V.	Health Care	Medical-Biomed/Biotech	1,768	24,096	0.110	7	10	46	E
GWPH	G W Pharmaceuticals Adr	Health Care	Medical-Biomed/Biotech	3,494	72,206	0.151	7	62	14	B-
ALLO	Allogene Therapeutics	Health Care	Medical-Biomed/Biotech	3,055	10,459	0.182	6	2	40	D+
INVA	Innoviva Inc	Health Care	Medical-Biomed/Biotech	1,068	5,924	0.176	5	64	11	E
EXEL	Exelixis Inc	Health Care	Medical-Biomed/Biotech	5,021	44,659	0.057	7	19	17	D
EXAS	Exact Sciences Corp	Health Care	Medical-Biomed/Biotech	11,836	155,905	0.102	5	16	58	D-
FOLD	Amicus Therapeutics Inc	Health Care	Medical-Biomed/Biotech	1,961	31,354	0.127	6	8	7	D-
GBT	Global Blood Therapeutic	Health Care	Medical-Biomed/Biotech	2,761	38,606	0.131	6	16	58	C
AGIO	Agios Pharmaceuticals	Health Care	Medical-Biomed/Biotech	1,871	19,070	0.272	4	14	7	B-
BOLD	Audentes Therapeutics	Health Care	Medical-Biomed/Biotech	1,236	12,168	0.052	6	10	22	D+
BPMC	Blueprint Medicines Corp	Health Care	Medical-Biomed/Biotech	3,522	32,255	0.086	6	3	33	E
ARGX	Argenx SE Ads	Health Care	Medical-Biomed/Biotech	4,152	16,766	0.031	6	23	62	D-
ARNA	Arena Pharmaceuticals	Health Care	Medical-Biomed/Biotech	2,291	21,352	0.066	5	23	32	E
IONS	Ionis Pharmaceuticals	Health Care	Medical-Biomed/Biotech	8,701	60,523	0.084	5	78	54	C-
VRTX	Vertex Pharmaceuticals	Health Care	Medical-Biomed/Biotech	43,429	199,540	0.017	4	99	35	D+
INSM	Insmad Inc	Health Care	Medical-Biomed/Biotech	1,458	20,835	0.203	6	24	15	D+
RETA	Reata Pharma Inc Cl A	Health Care	Medical-Biomed/Biotech	2,012	19,692	0.198	6	11	50	C-
INCY	Incyte Corporation	Health Care	Medical-Biomed/Biotech	16,142	87,958	0.028	6	97	46	D-
PCRX	Pacira Biosciences Inc	Health Care	Medical-Biomed/Biotech	1,539	31,373	0.090	6	76	29	C+
ALXN	Alexion Pharmaceuticals	Health Care	Medical-Biomed/Biotech	21,633	232,055	0.015	5	93	15	D-
ASND	Ascendis Pharma A/S Ads	Health Care	Medical-Biomed/Biotech	4,372	19,744	0.177	4	7	70	D-
FGEN	Fibrogen Inc	Health Care	Medical-Biomed/Biotech	3,199	22,003	0.061	5	45	15	E
BGNE	Beigene Ltd Ads	Health Care	Medical-Biomed/Biotech	7,059	38,944	0.066	5	26	26	E
FATE	Fate Therapeutics Inc	Health Care	Medical-Biomed/Biotech	1,014	11,035	0.142	6	20	17	D-
RGNX	Regenxbio Inc	Health Care	Medical-Biomed/Biotech	1,424	22,549	0.169	7	5	15	C+
RARX	Ra Pharmaceuticals Inc	Health Care	Medical-Biomed/Biotech	2,142	9,990	0.102	4	23	50	D-
UTHR	United Therapeutics Corp	Health Care	Medical-Biomed/Biotech	3,491	39,759	0.059	4	56	20	C+
BMRN	Biomarin Pharmaceutical	Health Care	Medical-Biomed/Biotech	11,882	85,020	0.047	6	33	13	E
PTCT	P T C Therapeutics Inc	Health Care	Medical-Biomed/Biotech	2,114	22,168	0.088	5	1	22	E

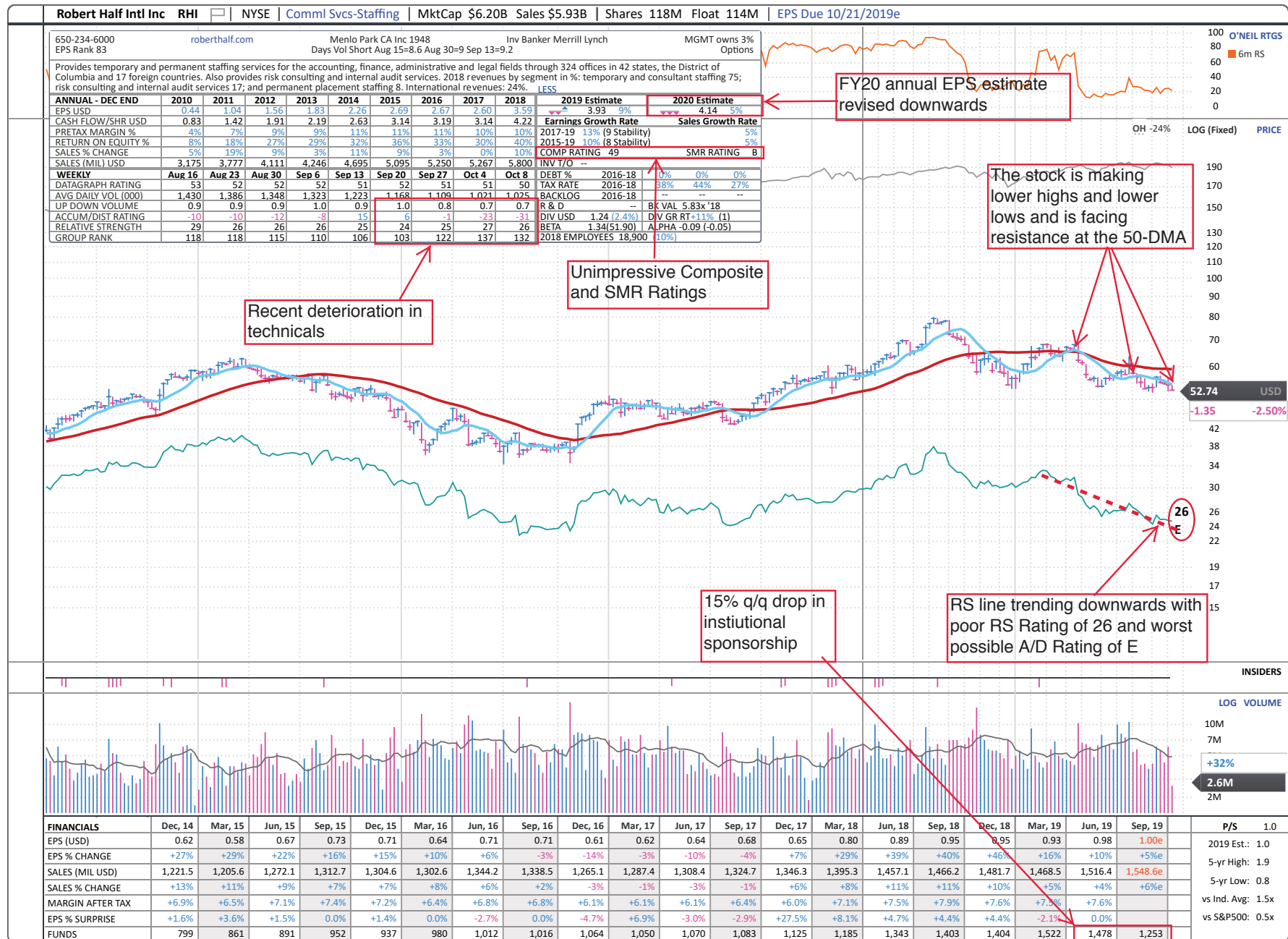
Symbol	Name	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Short Interest, % of Float	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
MRTX	Mirati Therapeutics Inc	Health Care	Medical-Biomed/Biotech	2,922	43,102	0.143	4	5	87	D+
ENTA	Enanta Pharmaceuticals	Health Care	Medical-Biomed/Biotech	1,147	12,766	0.150	5	8	11	C+
SAGE	Sage Therapeutics Inc	Health Care	Medical-Biomed/Biotech	7,111	52,256	0.121	6	1	32	E
RARE	Ultragenyx Pharma	Health Care	Medical-Biomed/Biotech	2,422	25,163	0.107	7	6	12	E
XLRN	Accelaron Pharma Inc	Health Care	Medical-Biomed/Biotech	2,048	10,901	0.092	5	27	26	B-
LLY	Eli Lilly & Co	Health Care	Medical-Diversified	103,258	368,726	0.013	4	71	33	C
JNJ	Johnson & Johnson	Health Care	Medical-Diversified	341,769	942,867	0.006	4	81	37	D+
BHC	Bausch Health Companies	Health Care	Medical-Ethical Drugs	6,794	63,295	0.028	4	59	17	C-
PFE	Pfizer Inc	Health Care	Medical-Ethical Drugs	198,509	858,366	0.009	7	74	20	D-
GRFS	Grifols Sa CI B Ads	Health Care	Medical-Ethical Drugs	5,229	27,045	0.011	6	51	54	C-
MYL	Mylan N V	Health Care	Medical-Generic Drugs	9,600	111,457	0.046	6	49	15	D+
HCA	H C A Healthcare Inc	Health Care	Medical-Hospitals	40,383	184,072	0.011	4	93	27	C-
ENSG	Ensign Group Inc	Health Care	Medical-Long-term Care	2,079	13,208	0.016	5	92	25	D-
CI	Cigna Corp	Health Care	Medical-Managed Care	56,902	318,701	0.014	6	79	23	D-
CNC	Centene Corp	Health Care	Medical-Managed Care	18,016	209,652	0.086	4	99	16	D-
ANTM	Anthem Inc	Health Care	Medical-Managed Care	60,616	349,870	0.022	7	85	25	E
UNH	Unitedhealth Group Inc	Health Care	Medical-Managed Care	211,001	886,010	0.009	6	95	29	E
WCG	Wellcare Health Plans	Health Care	Medical-Managed Care	13,186	130,017	0.063	5	97	40	C+
MGLN	Magellan Health Inc	Health Care	Medical-Managed Care	1,428	11,715	0.028	4	24	25	C-
MOH	Molina Healthcare Inc	Health Care	Medical-Managed Care	7,045	67,585	0.018	8	86	20	D-
HUM	Humana Inc	Health Care	Medical-Managed Care	35,085	267,581	0.017	5	98	32	E
FMS	Fresenius Medical Ads	Health Care	Medical-Outpt/Hm Care	19,842	5,779	0.001	5	48	20	C-
LHCG	L H C Group Inc	Health Care	Medical-Outpt/Hm Care	3,465	23,895	0.063	2	98	58	D-
LIVN	Livanova Plc	Health Care	Medical-Products	1,797	27,928	0.072	5	61	25	E
COO	Cooper Companies Inc	Health Care	Medical-Products	14,327	96,490	0.018	3	80	58	D+
WMGI	Wright Medical Group Nv	Health Care	Medical-Products	2,455	56,551	0.141	5	77	12	B-
GKOS	Glaukos Corporation	Health Care	Medical-Products	2,196	34,493	0.199	7	24	29	D
QGEN	Qiagen Nv	Health Care	Medical-Products	6,183	33,327	0.016	6	61	11	D+
TNDM	Tandem Diabetes Care Inc	Health Care	Medical-Products	3,217	78,918	0.093	1	60	85	C-
CDNA	Caredx Inc	Health Care	Medical-Products	1,145	23,633	0.077	6	66	26	B-
BSX	Boston Scientific Corp	Health Care	Medical-Products	52,794	220,753	0.010	2	77	54	D-
ATRI	Atrion Corporation	Health Care	Medical-Products	1,442	15,588	0.083	6	79	54	C+
ALC	Alcon Inc	Health Care	Medical-Products	27,467	60,013	0.022	5	20	40	C-
MMSI	Merit Medical Systems	Health Care	Medical-Products	1,538	25,310	0.072	5	87	4	C
ALGN	Align Technology Inc	Health Care	Medical-Products	15,210	241,072	0.054	4	77	12	C
ICUI	I C U Medical Inc	Health Care	Medical-Products	3,154	42,579	0.040	5	81	8	D+
PEN	Penumbra Inc	Health Care	Medical-Products	4,945	91,066	0.203	5	77	50	B-

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INSP	Inspire Medical Systems	Health Care	Medical-Products	1,296	14,938	0.085	2	16	70	E
PRAH	P R A Health Sciences	Health Care	Medical-Research Eqp/Svc	6,333	57,064	0.029	2	98	50	C+
PKI	Perkinelmer Inc	Health Care	Medical-Research Eqp/Svc	8,987	56,492	0.047	7	81	27	C
MYGN	Myriad Genetics	Health Care	Medical-Research Eqp/Svc	2,113	45,388	0.171	4	52	32	D
GH	Guardant Health Inc	Health Care	Medical-Services	5,660	84,200	0.053	4	20	88	D-
BEAT	BioTelemetry Inc	Health Care	Medical-Services	1,268	12,471	0.071	5	92	11	C
NVTA	Invitae Corporation	Health Care	Medical-Services	1,770	43,659	0.175	3	21	62	D
NEO	NeoGenomics Inc	Health Care	Medical-Services	2,036	17,617	0.062	4	98	78	E
IRTC	Irhythm Technologies Inc	Health Care	Medical-Services	1,672	21,427	0.217	5	37	20	D
ELAN	Elanco Animal Health Inc	Health Care	Medical-Supplies	9,974	121,779	0.040	7	71	20	D+
HSIC	Henry Schein Inc	Health Care	Medical-Supplies	9,248	76,072	0.133	6	86	40	D-
WAT	Waters Corp	Health Care	Medical-Systems/Equip	13,953	114,405	0.086	3	79	58	C
OMCL	Omniceil Inc	Health Care	Medical-Systems/Equip	3,052	18,757	0.064	4	95	46	C
CMD	Cantel Medical Corp	Health Care	Medical-Systems/Equip	2,848	20,267	0.112	5	73	27	E
VAR	Varian Medical Systems	Health Care	Medical-Systems/Equip	9,929	81,495	0.021	7	63	26	D
AEO	American Eagle Outfitters	Retail	Retail-Apparel/Shoes/Acc	2,465	69,294	0.114	6	86	15	D+
BBY	Best Buy Co Inc	Retail	Retail-Consumer Elec	17,572	186,969	0.026	6	96	40	E
OLLI	Ollie's Bargain Outlet	Retail	Retail-Discount&Variety	3,721	90,513	0.143	6	87	11	C
WBA	Walgreens Boots Alliance	Retail	Retail-Drug Stores	47,957	252,496	0.035	4	71	23	D+
GRPN	Groupon Inc	Retail	Retail-Internet	1,555	16,425	0.083	6	34	16	D+
W	Wayfair Inc Cl A	Retail	Retail-Internet	6,813	228,879	0.247	7	5	20	D-
CAKE	Cheesecake Factory Inc	Retail	Retail-Restaurants	1,741	32,715	0.197	4	79	22	D-
CBRL	Cracker Barrel Old Cnt St	Retail	Retail-Restaurants	3,842	61,049	0.140	3	73	50	B-
TXRH	Texas Roadhouse Inc	Retail	Retail-Restaurants	3,446	41,835	0.072	6	72	22	E
WING	Wingstop Inc	Retail	Retail-Restaurants	2,602	40,606	0.123	3	66	88	D-
ULTA	Ulta Beauty Inc	Retail	Retail-Specialty	14,066	462,417	0.060	7	96	15	C
SFM	Sprouts Farmers Market	Retail	Retail-Super/Mini Mkts	2,130	27,793	0.099	4	65	22	D+
GPC	Genuine Parts Co	Retail	Retail/Whlsle-Auto Parts	13,782	68,282	0.027	4	55	32	D-
PAG	Penske Automotive Grp	Retail	Retail/Whlsle-Automobile	3,546	13,854	0.132	6	68	37	D
TIF	Tiffany & Co	Retail	Retail/Whlsle-Jewelry	10,757	186,544	0.135	5	48	32	D+
YEXT	Yext Inc	Technology	Comp Sftwr-Spec Enterprs	1,730	13,005	0.080	4	22	20	D
WK	Workiva Inc Cl A	Technology	Computer Sftwr-Database	1,629	23,361	0.064	8	77	46	D
MDB	Mongodb Inc Cl A	Technology	Computer Sftwr-Database	6,280	207,092	0.170	5	44	94	D-
VRNS	Varonis Systems Inc	Technology	Computer Sftwr-Database	1,862	17,954	0.086	6	4	70	E
ADSK	Autodesk Inc	Technology	Computer Sftwr-Design	32,525	365,465	0.029	5	78	43	D-
PTC	P T C Inc	Technology	Computer Sftwr-Design	7,256	68,801	0.047	5	19	12	D-
SPOT	Spotify Technology S A	Technology	Computer Sftwr-Edu/Media	20,589	157,526	0.062	6	49	19	E

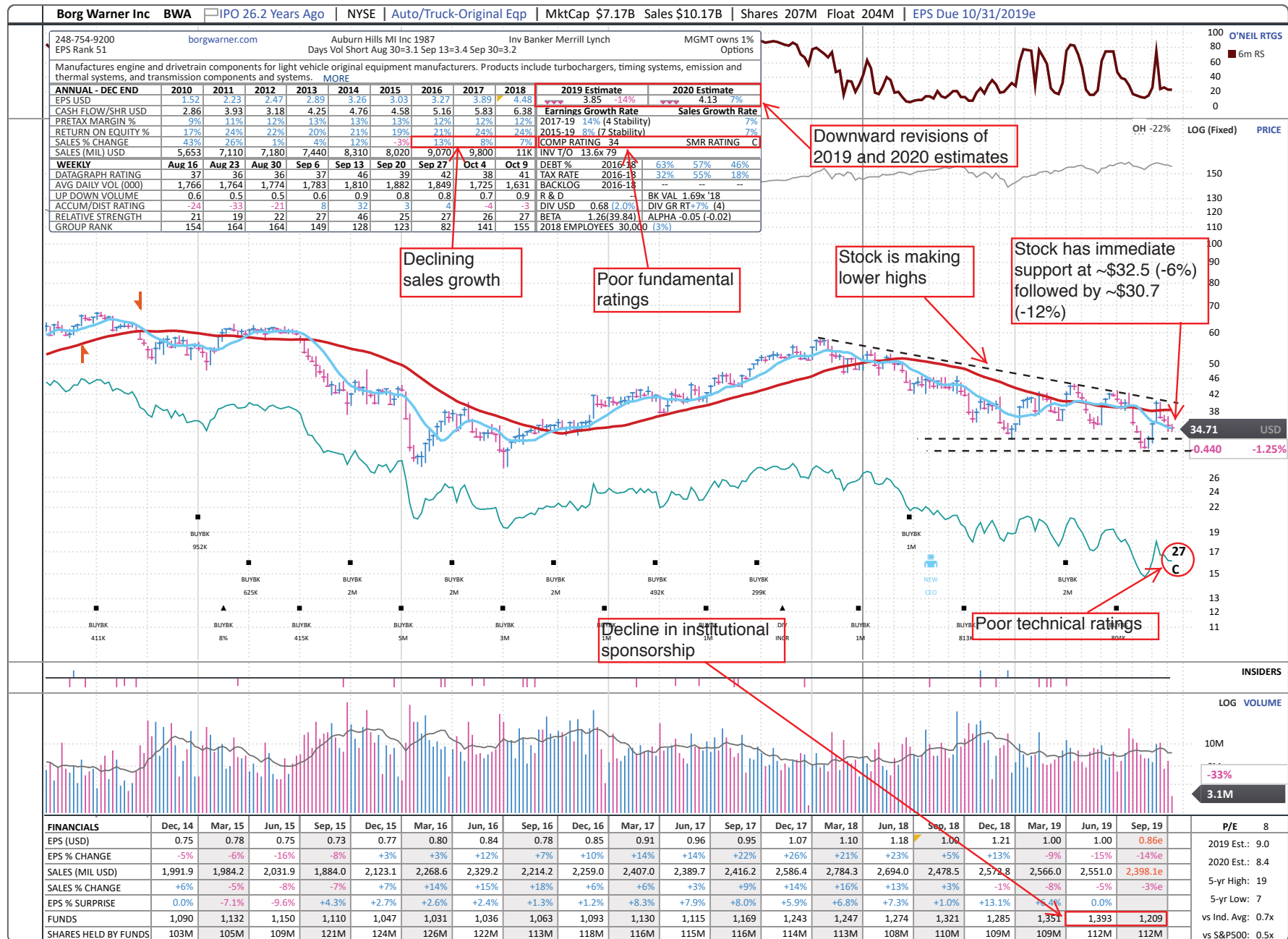
Symbol	Name	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Short Interest, % of Float	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
SMAR	Smartsheet Inc Cl A	Technology	Computer Sftwr-Enterprse	3,676	99,397	0.084	5	21	90	D-
EGHT	8X8 Inc	Technology	Computer Sftwr-Enterprse	1,937	25,115	0.189	5	2	35	E
TWLO	Twilio Inc Cl A	Technology	Computer Sftwr-Enterprse	13,568	452,603	0.151	5	43	74	C-
GDDY	Godaddy Inc Cl A	Technology	Computer Sftwr-Enterprse	10,867	111,306	0.034	5	27	27	D
BAND	Bandwidth Inc Cl A	Technology	Computer Sftwr-Enterprse	1,135	16,596	0.069	4	5	80	D-
BCOR	Blucora Inc	Technology	Computer Sftwr-Financial	1,037	10,711	0.018	5	80	11	D+
ZS	Zscaler Inc	Technology	Computer Sftwr-Security	6,003	170,274	0.192	8	77	26	D+
SAIL	Sailpoint Tech Holdings	Technology	Computer Sftwr-Security	1,676	27,157	0.092	7	5	20	D
VRNT	Verint Systems Inc	Technology	Computer Sftwr-Security	2,899	26,028	0.052	8	70	23	D-
VRSN	Verisign Inc	Technology	Computer Sftwr-Security	21,621	110,657	0.014	5	94	70	E
HPQ	H P Inc	Technology	Computer-Hardware/Perip	23,881	203,590	0.013	6	54	16	E
XRX	Xerox Holdings Corp	Technology	Computer-Hardware/Perip	6,433	58,777	0.041	7	81	50	E
CSCO	Cisco Systems Inc	Technology	Computer-Networking	195,559	984,151	0.009	8	88	33	E
JNPR	Juniper Networks Inc	Technology	Computer-Networking	8,146	70,512	0.040	6	42	25	C
HPE	Hewlett Packard Ent Co	Technology	Computer-Tech Services	18,559	144,140	0.036	4	68	37	D-
CTSH	Cognizant Tech Sol Cl A	Technology	Computer-Tech Services	33,121	196,562	0.020	5	65	27	D-
RAMP	Liveramp Holdings Inc	Technology	Computer-Tech Services	2,691	24,537	0.065	6	2	22	E
FLEX	Flex Ltd	Technology	Elec-Contract Mfg	5,044	41,226	0.016	4	66	43	D-
TRMB	Trimble Inc	Technology	Elec-Misc Products	9,447	42,415	0.015	8	55	40	C
GLW	Corning Inc	Technology	Elec-Misc Products	22,138	165,064	0.034	6	88	25	D-
IPGP	I P G Photonics Corp	Technology	Elec-Scientific/Msrng	6,955	54,657	0.092	5	48	32	C-
CREE	Cree Inc	Technology	Elec-Semiconductor Mfg	5,113	85,380	0.088	6	33	37	D+
AVT	Avnet Inc	Technology	Electronic-Parts	4,091	33,737	0.037	6	43	35	D
TEL	Te Connectivity Ltd	Technology	Electronic-Parts	29,834	124,529	0.012	3	75	66	E
APH	Amphenol Corp Cl A	Technology	Electronic-Parts	28,469	127,945	0.010	7	78	70	B-
WCC	Wesco International Inc	Technology	Electronic-Parts	1,917	20,341	0.023	6	60	25	E
IIVI	Ii-Vi Incorporated	Technology	Electronic-Parts	2,055	43,973	0.180	6	99	26	E
ZG	Zillow Group Inc Cl A	Technology	Internet-Content	1,694	27,204	0.077	5	5	13	D-
TME	Tencent Music EntGrp ADS	Technology	Internet-Content	2,020	60,117	2.191	5	30	23	C-
Z	Zillow Group Inc Cl C	Technology	Internet-Content	4,038	93,231	0.196	6	5	13	D-
YELP	Yelp Inc	Technology	Internet-Content	2,324	49,567	0.140	4	95	29	C-
BILI	Bilibili Inc Cl Z Ads	Technology	Internet-Content	4,546	41,156	0.053	5	2	29	C-
WUBA	58.com Inc Cl A Ads	Technology	Internet-Content	6,173	42,654	0.029	5	72	19	D
UPWK	Upwork Inc	Technology	Internet-Content	1,517	13,976	0.078	5	77	15	D+
RCI	Rogers Communicatns Cl B	Technology	Telecom Svcs- Foreign	19,200	20,649	0.017	5	64	30	D-
CHL	China Mobile Ltd Adr	Technology	Telecom Svcs- Foreign	171,175	33,663	0.001	3	38	26	D+
DISH	Dish Network Corp Cl A	Technology	Telecom Svcs-Cable/Satll	7,636	82,085	0.127	6	50	37	D-

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IRDM	Iridium Communications	Technology	Telecom Svcs-Wireless	2,947	19,094	0.078	7	5	43	D-
S	Sprint Corp	Technology	Telecom Svcs-Wireless	25,417	75,775	0.180	5	5	37	C
TDS	Telephone & Data Sys Inc	Technology	Telecom Svcs-Wireless	2,619	19,076	0.022	8	67	15	D
USM	U S Cellular Corp	Technology	Telecom Svcs-Wireless	1,877	11,329	0.071	9	34	13	C-
VG	Vonage Holdings Corp	Technology	Telecom Svcs-Wireless	2,581	26,592	0.067	6	49	37	E
BDC	Belden Inc	Technology	Telecom-Cable/Satl Eqp	2,286	18,521	0.052	6	53	30	C-
CIEN	Ciena Corporation	Technology	Telecom-Fiber Optics	5,749	104,723	0.059	3	96	62	E
NOK	Nokia Corp Ads	Technology	Telecom-Infrastructure	27,757	87,110	0.008	5	46	30	D-
ERIC	Ericsson L M Tel Adr	Technology	Telecom-Infrastructure	27,489	48,773	0.002	5	77	29	C-
DY	Dycom Inds Inc	Technology	Telecom-Infrastructure	1,457	18,678	0.082	5	57	20	D-
FDX	Fedex Corp	Transportation	Transport-Air Freight	36,800	371,603	0.029	7	65	17	D+
JBLU	Jetblue Airways Corp	Transportation	Transportation-Airline	4,992	77,009	0.078	2	77	40	D-
AAL	American Airlines Group	Transportation	Transportation-Airline	12,010	203,716	0.061	4	39	20	C
SAVE	Spirit Airlines Inc	Transportation	Transportation-Airline	2,321	33,535	0.059	3	88	9	D-
EXPD	Expeditors Intl Wash Inc	Transportation	Transportation-Logistics	12,190	65,933	0.030	7	82	54	D+
CHRW	C H Robinson Worldwide	Transportation	Transportation-Logistics	11,362	107,702	0.161	4	89	46	D+
NSC	Norfolk Southern Corp	Transportation	Transportation-Rail	45,011	276,630	0.013	7	83	35	D+
UNP	Union Pacific Corp	Transportation	Transportation-Rail	108,998	504,035	0.007	6	80	40	E
CSX	CSX Corp	Transportation	Transportation-Rail	53,270	329,830	0.013	6	88	33	D+
NFG	National Fuel Gas Co	Utility	Utility-Gas Distribution	3,725	31,087	0.073	5	46	17	D

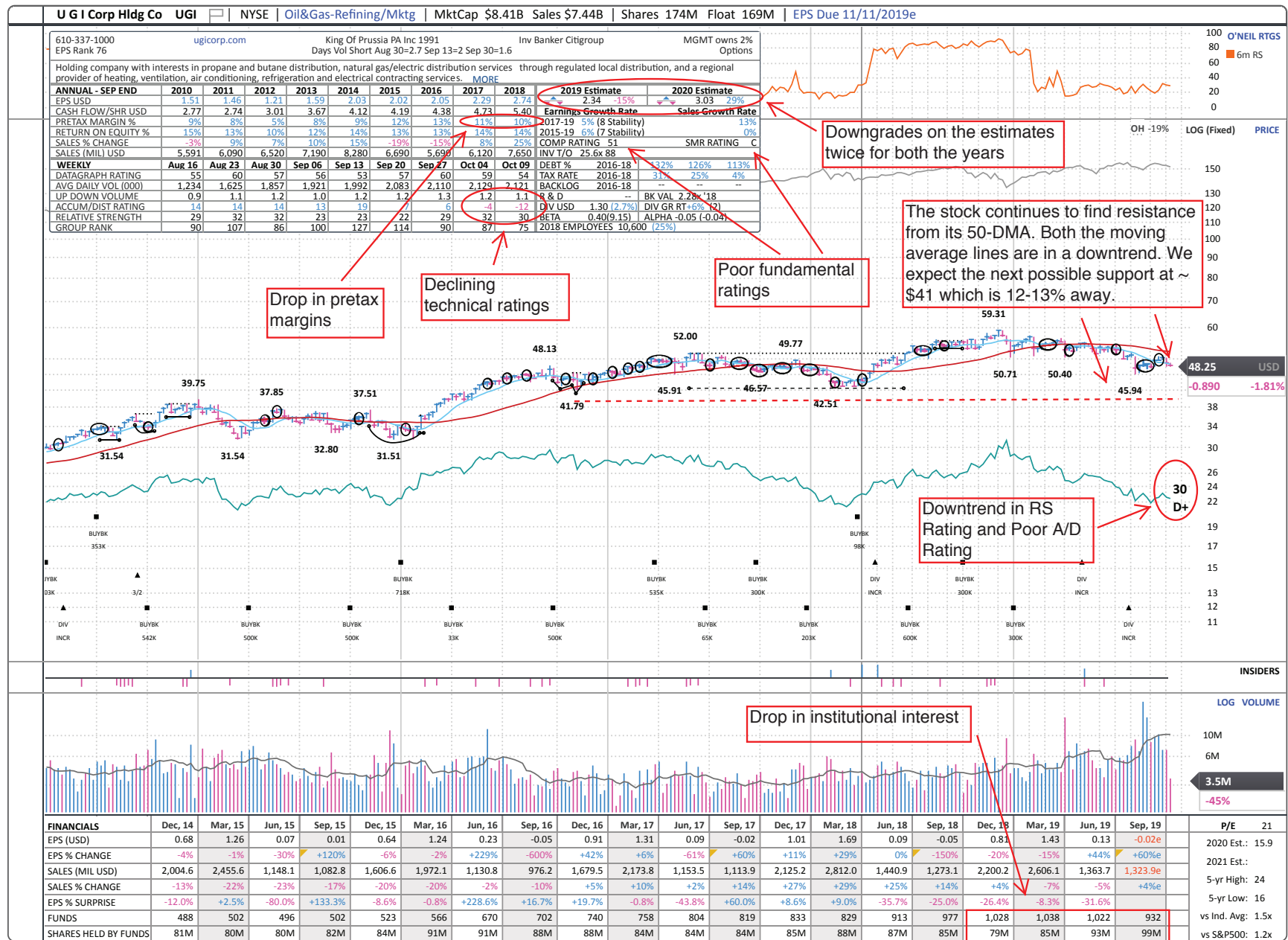
U.S. — Capital Equipment — Highlighted Laggard



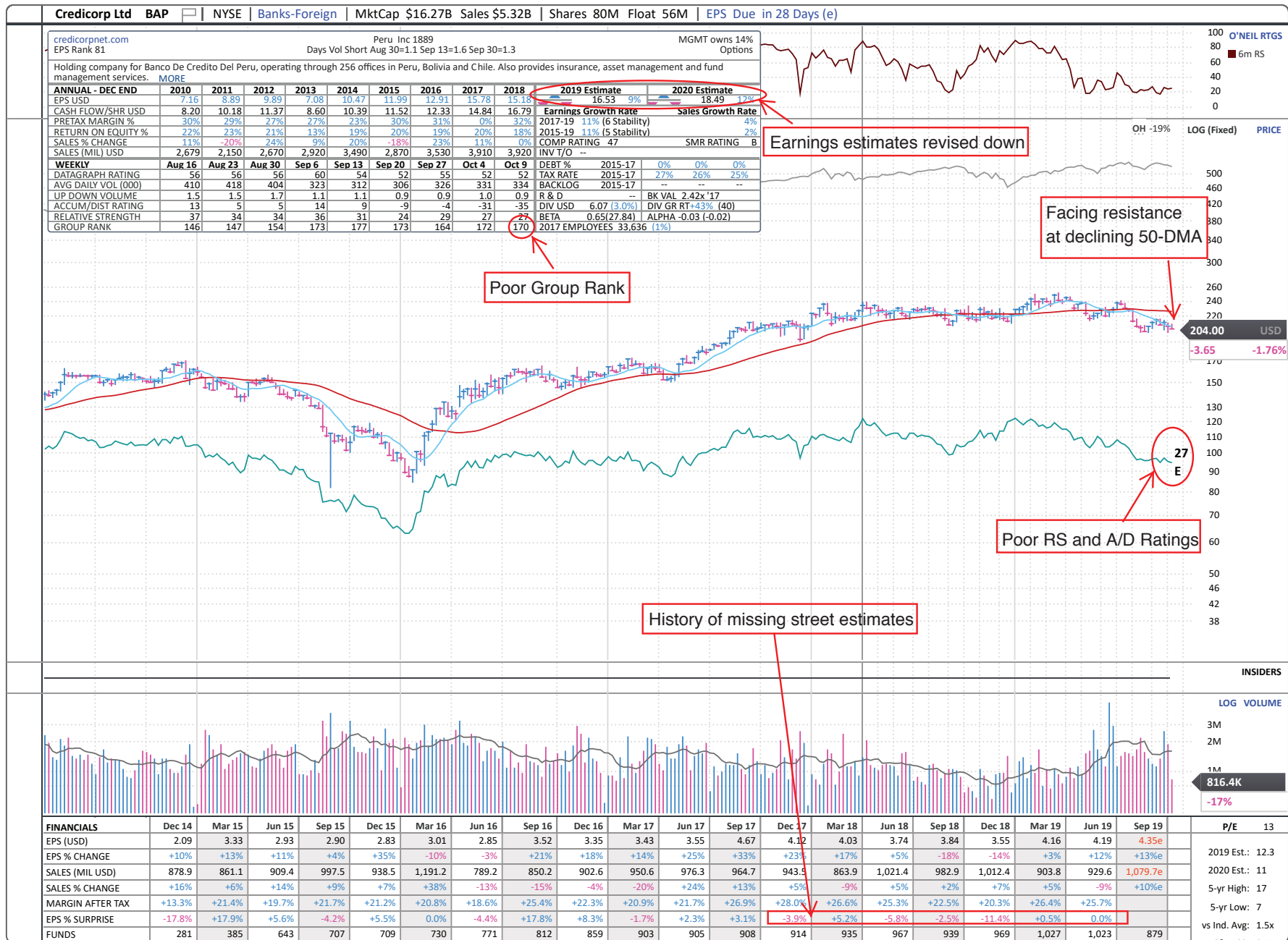
U.S. — Consumer Cyclical — Highlighted Laggard



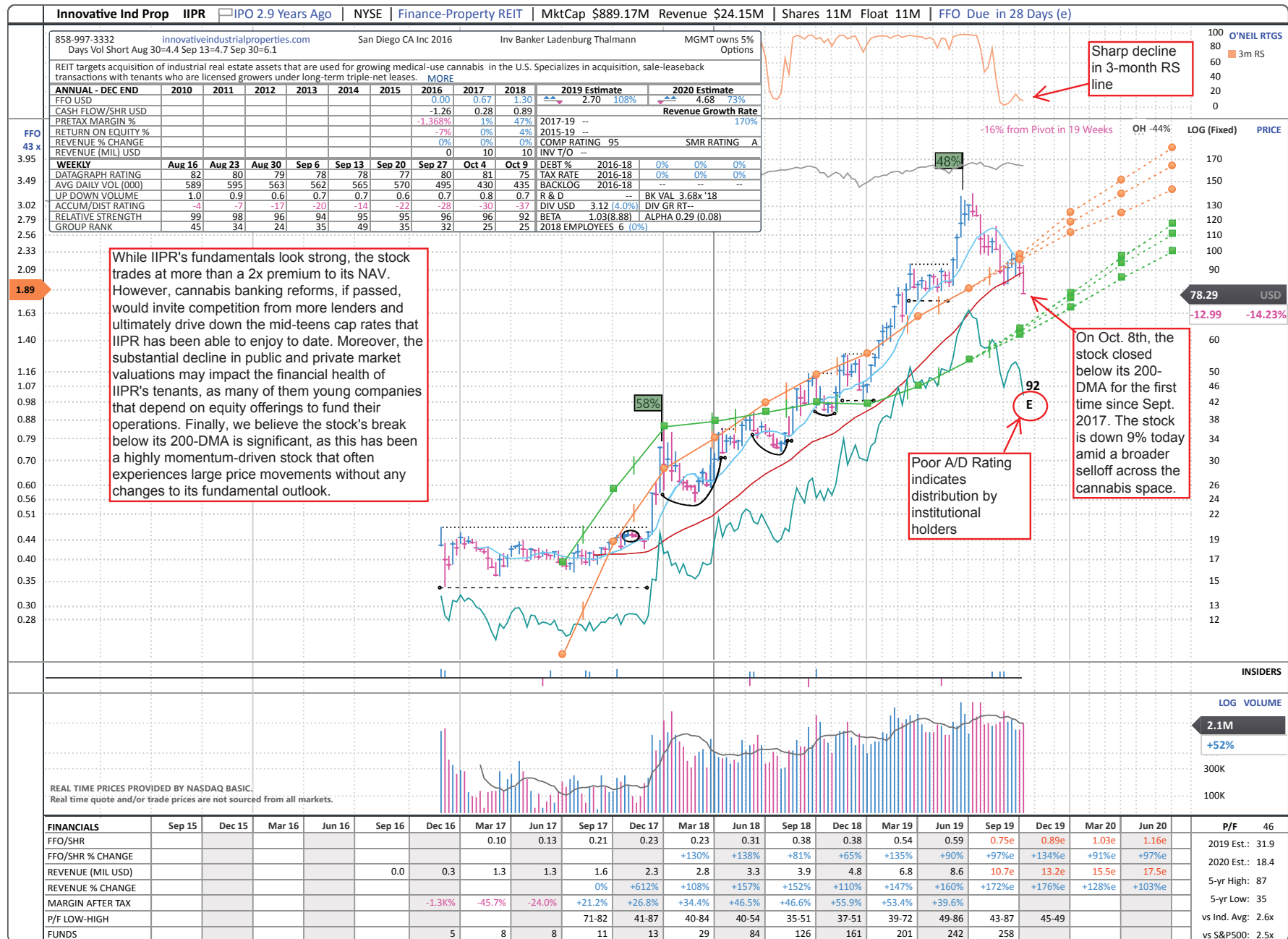
U.S. — Energy — Highlighted Laggard



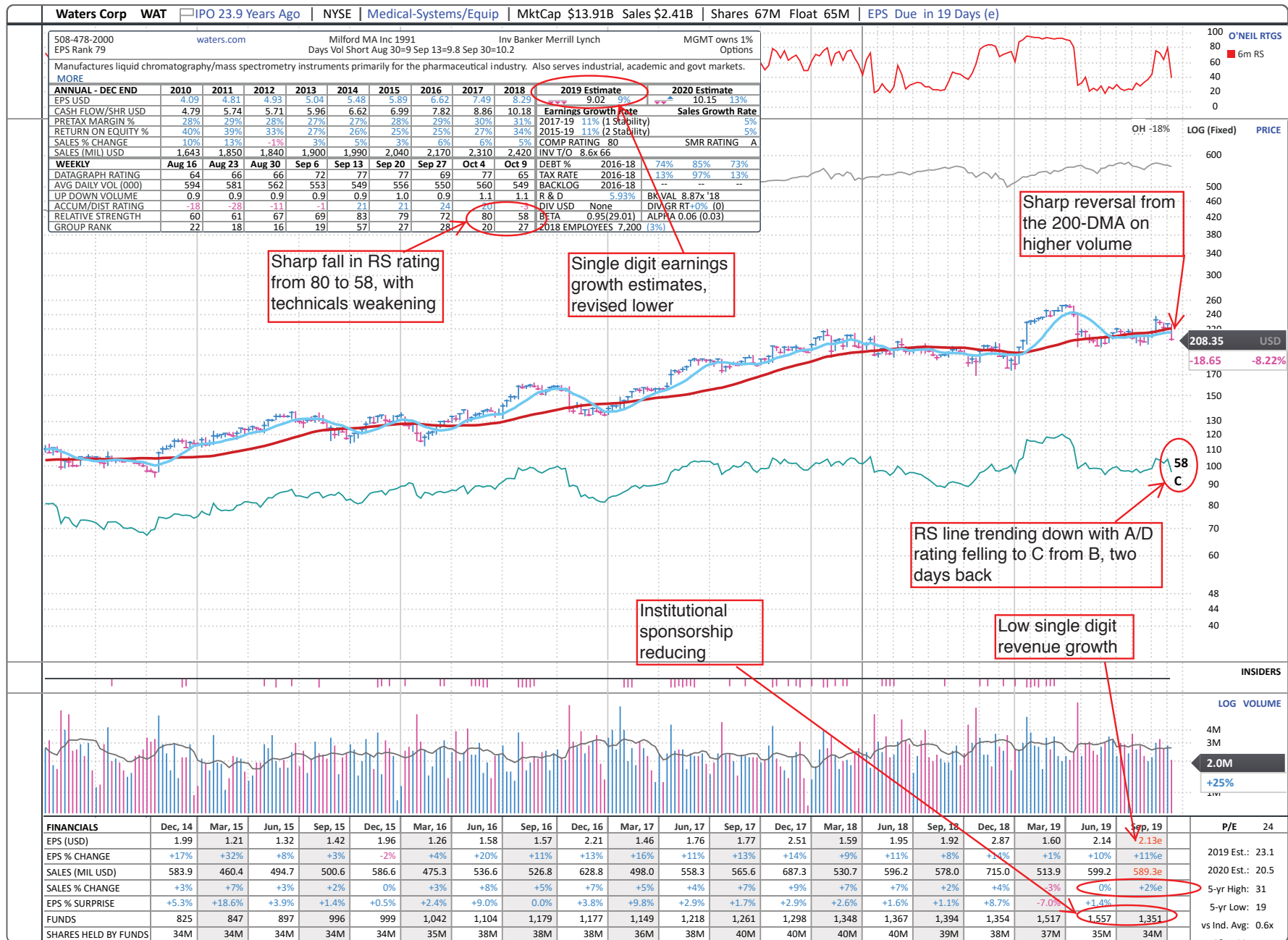
U.S.—Financial—Highlighted Laggard



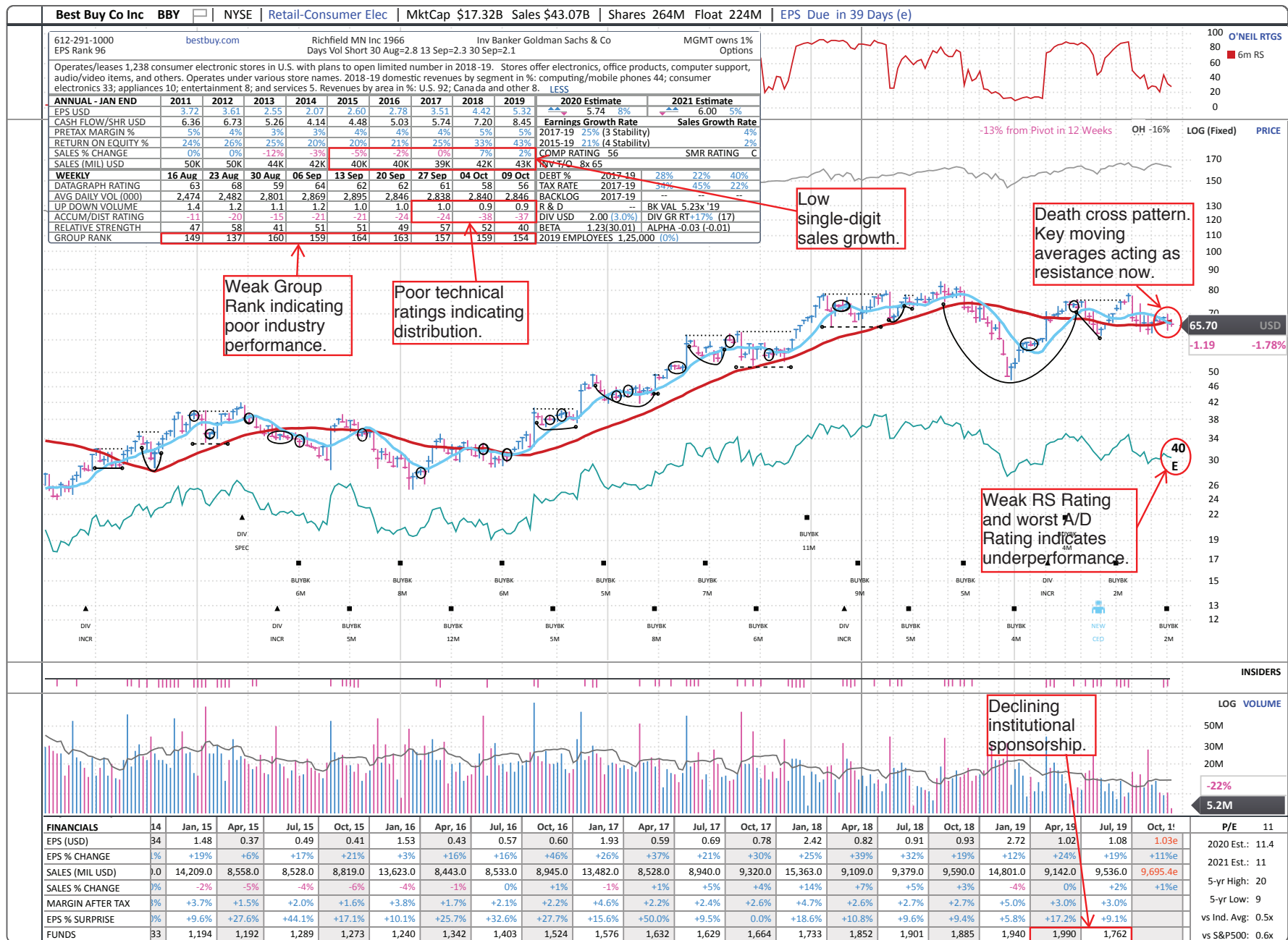
U.S.—Financial—Highlighted Laggard



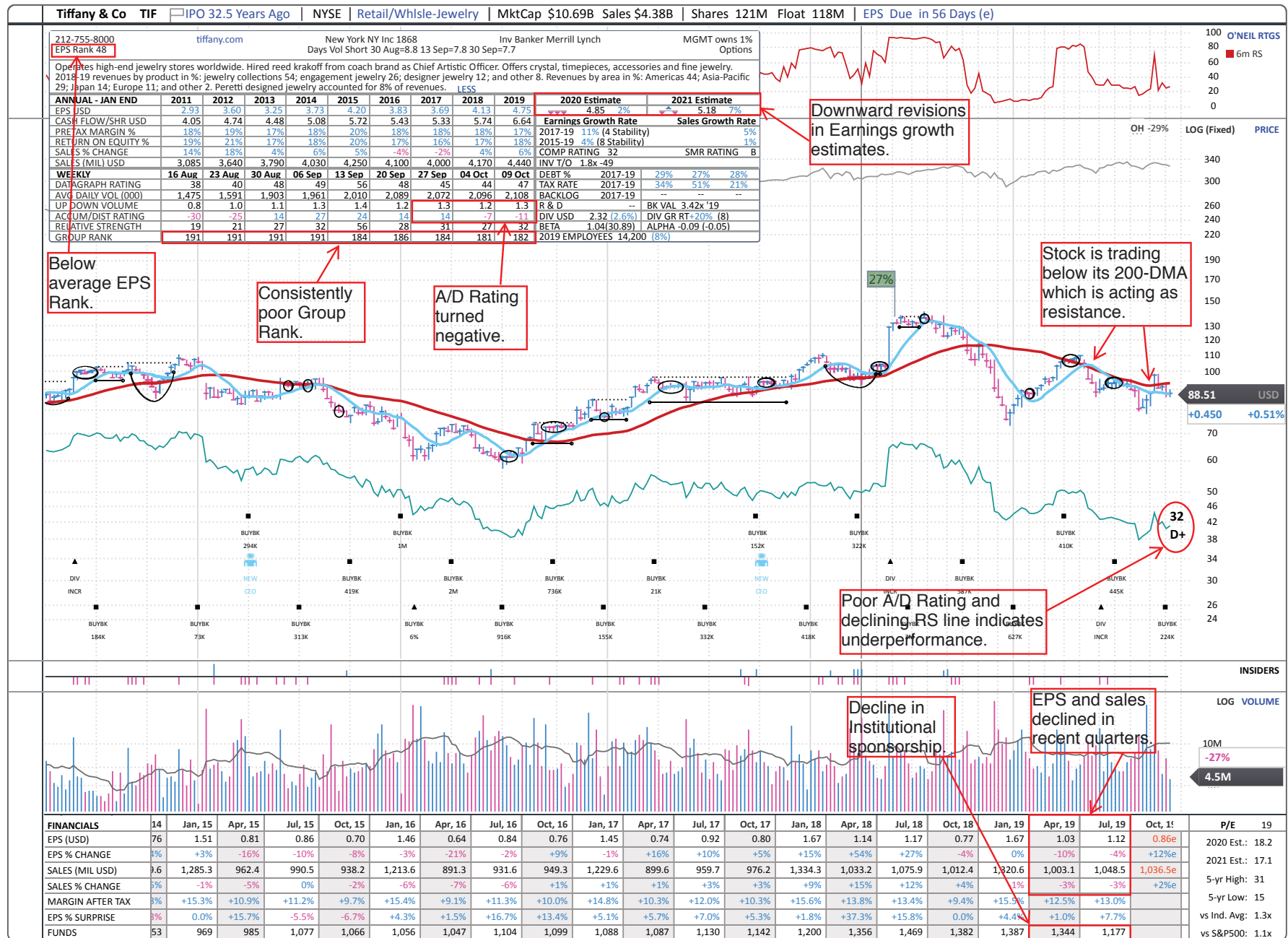
U.S.—Health Care—Highlighted Laggard



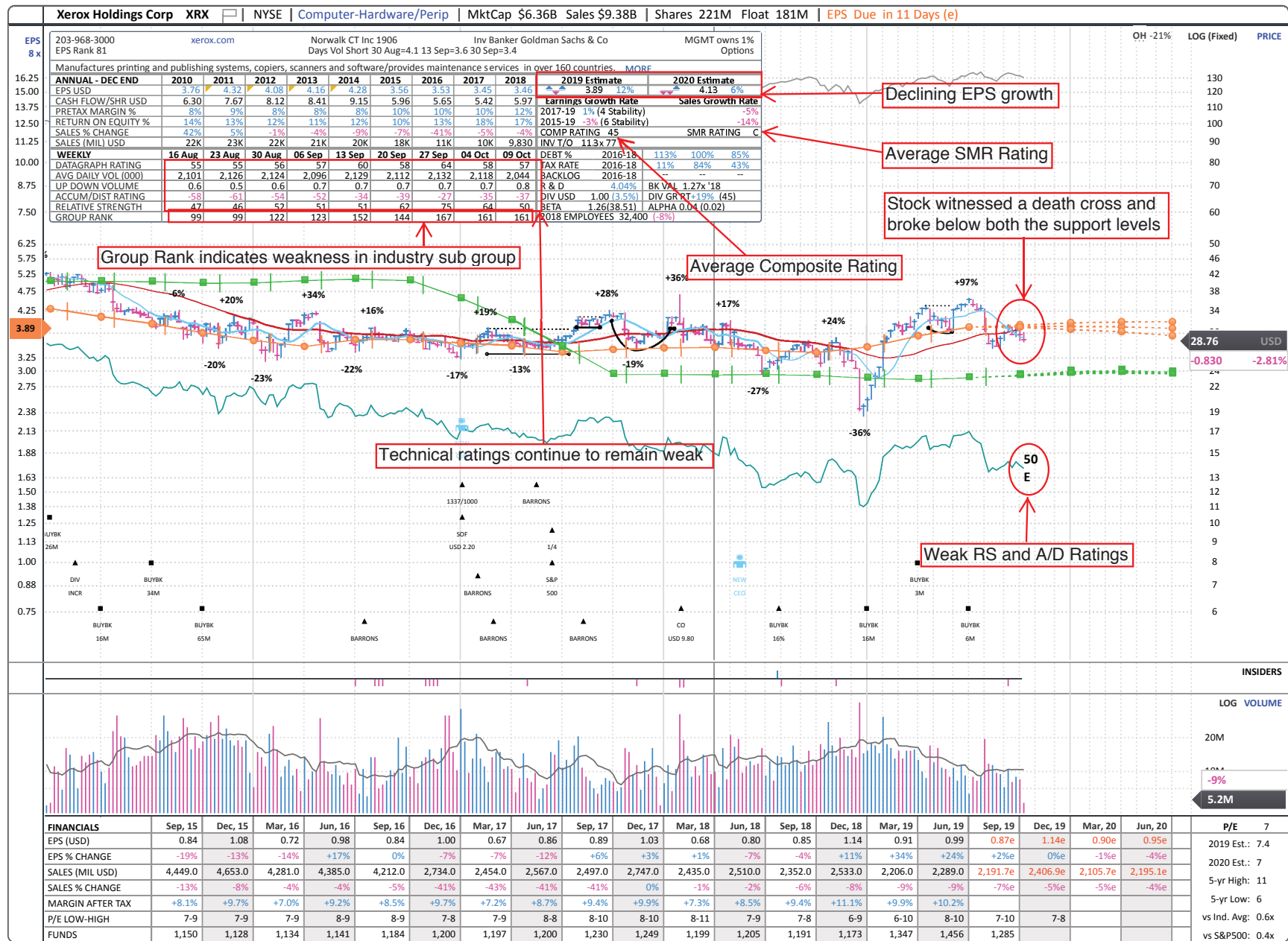
U.S. — Retail — Highlighted Laggard



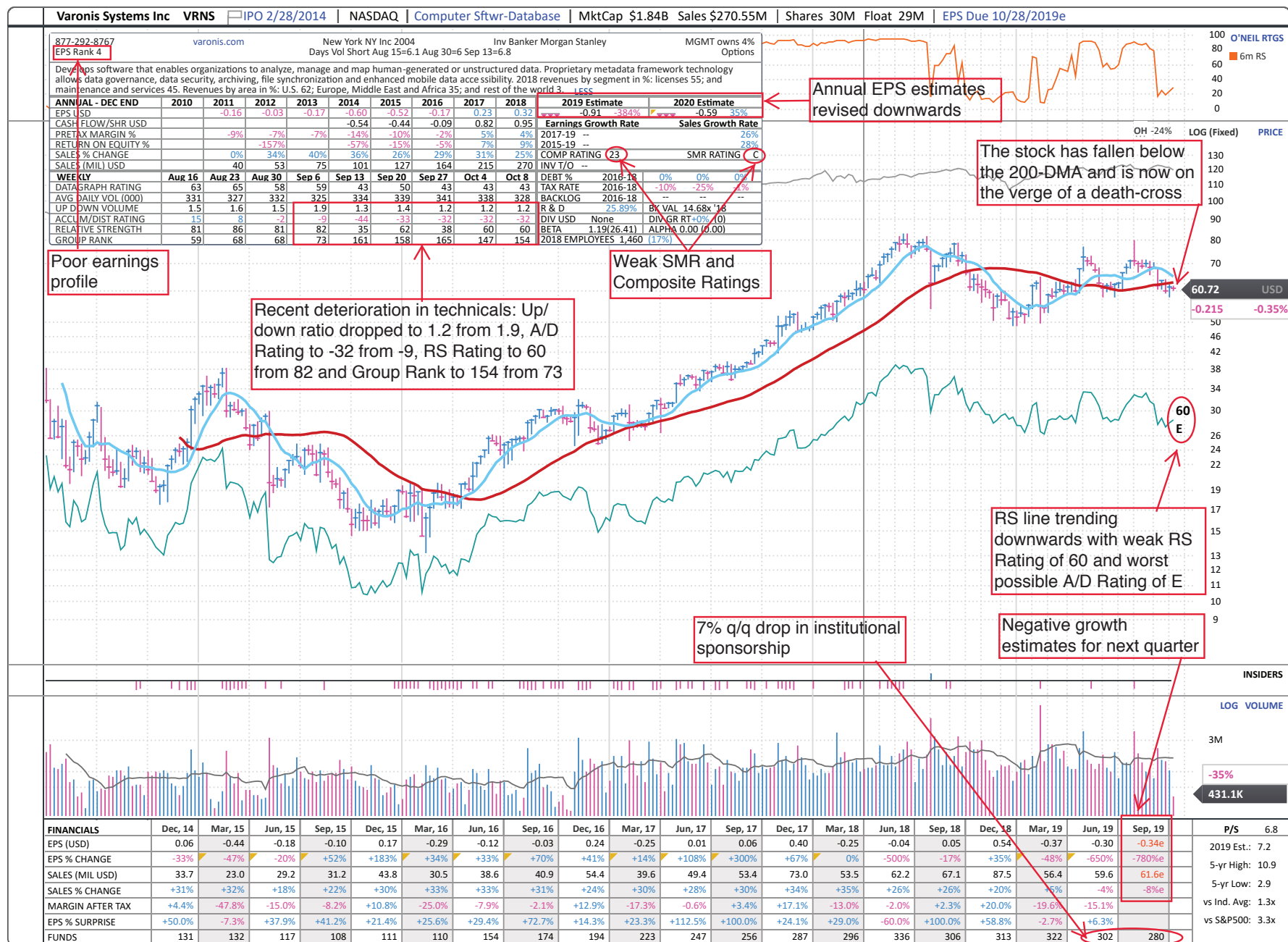
U.S. — Retail — Highlighted Laggard



U.S. — Technology — Highlighted Laggard



U.S. — Technology — Highlighted Laggard



Developed Markets

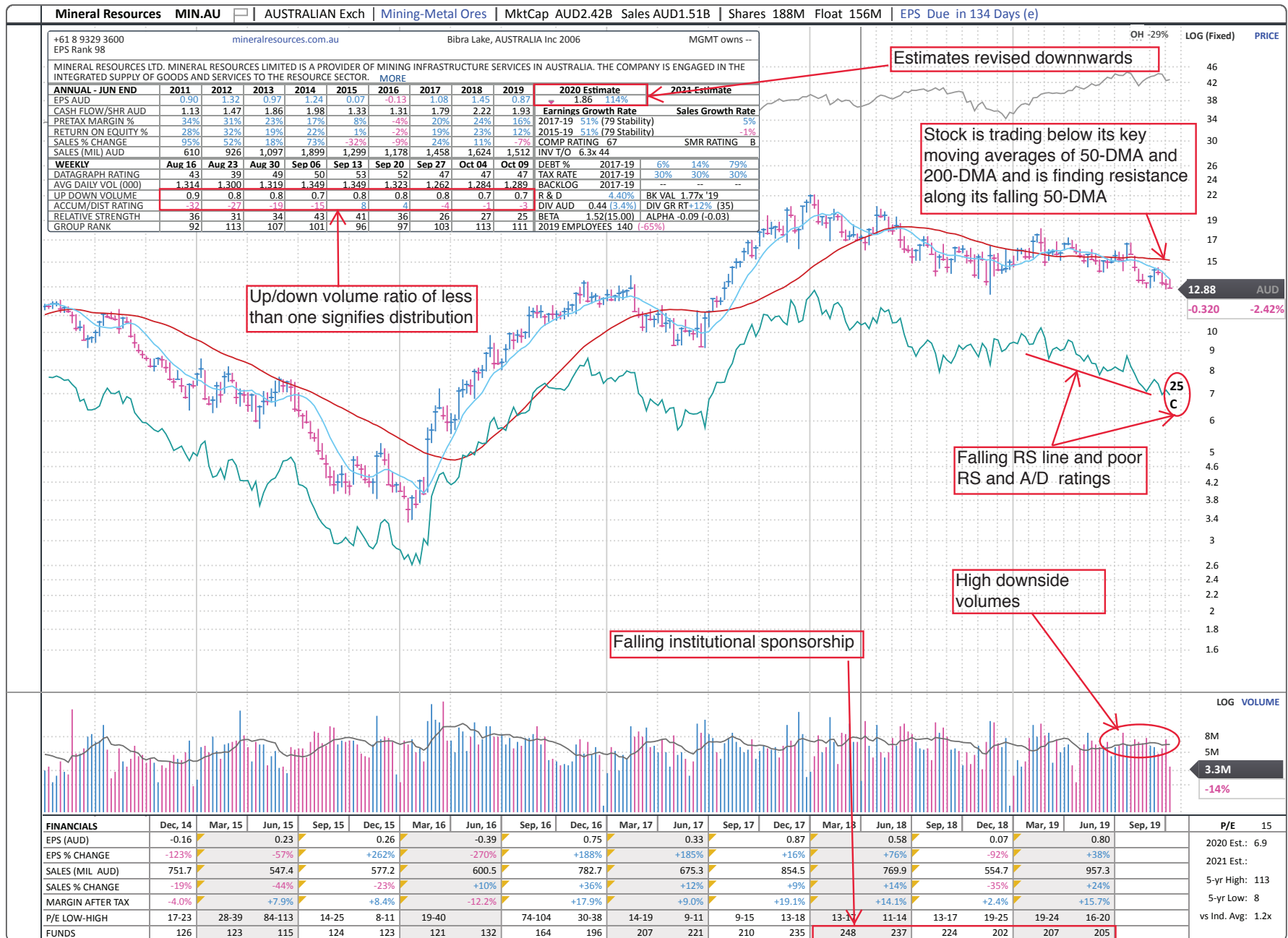
Symbol	Name	Trading Country	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
MIN.AU	Mineral Resources	Australia	Basic Material	Mining-Metal Ores	1,587	11,185	5	98	23	D+
BHP.AU	Bhp Group	Australia	Basic Material	Mining-Metal Ores	69,514	160,161	6	89	40	C-
BSL.AU	Bluescope Steel	Australia	Basic Material	Steel-Producers	3,957	26,654	4	68	32	D+
BXB.AU	Brambles	Australia	Capital Equipment	Containers/Packaging	12,007	39,845	5	94	53	B-
AMC.AU	Amcor Cdi	Australia	Capital Equipment	Containers/Packaging	9,889	35,406	4	43	40	C-
CWY.AU	Cleanaway Waste Management	Australia	Capital Equipment	Pollution Control	2,816	16,948	6	94	46	D+
A2M.AU	The A2 Milk Company(Asx)	Australia	Consumer Staple	Food-Dairy Products	6,002	40,871	6	99	53	E
OSH.AU	Oil Search	Australia	Energy	Oil&Gas-Intl Expl&Prod	7,089	27,861	4	88	35	C
WPL.AU	Woodside Petroleum	Australia	Energy	Oil&Gas-Intl Expl&Prod	19,585	61,719	4	78	30	C
DXS.AU	Dexus Stapled Units	Australia	Financial	Finance-Property REIT	8,731	27,047	4	75	46	C-
CPU.AU	Computershare	Australia	Technology	Computer-Tech Services	5,670	20,118	4	97	32	D-
AGL.AU	Agl Energy	Australia	Utility	Utility-Diversified	8,402	26,234	6	32	39	E
ERS.AT	Erste Group Bank	Austria	Financial	Banks-Money Center	13,332	23,169	4	62	16	C-
ARGX.BE	Argenx	Belgium	Health Care	Medical-Biomed/Biotech	4,147	11,583	5	15	62	D-
UCB.BE	Ucb	Belgium	Health Care	Medical-Diversified	13,498	20,621	4	46	18	C-
LUN.CA	Lundin Mining	Canada	Basic Material	Mining-Metal Ores	3,399	9,942	4	17	49	C+
CCL/B.CA	Ccl Inds.'B'	Canada	Capital Equipment	Containers/Packaging	6,642	14,384	5	94	43	D-
GIL.CA	Gildan Activewear	Canada	Consumer Cyclical	Apparel-Clothing Mfg	7,076	15,808	4	73	68	C-
SAP.CA	Saputo	Canada	Consumer Staple	Food-Misc Preparation	11,882	15,596	5	80	50	E
IMO.CA	Imperial Oil	Canada	Energy	Oil&Gas-Refining/Mktg	17,980	20,326	5	69	35	D-
FFH.CA	Fairfax Finl.Hdg.	Canada	Financial	Insurance-Prop/Cas/Titl	11,479	16,510	4	93	39	E
RCI/B.CA	Rogers Comms.'B'	Canada	Technology	Telecom Svcs-Wireless	19,173	48,628	4	87	44	C
CNR.CA	Canadian National Ry.	Canada	Transportation	Transportation-Logistics	60,959	93,941	3	96	52	D
NZY.DK	Novozymes B	Denmark	Basic Material	Chemicals-Specialty	9,912	21,586	5	69	34	E
CHR.DK	Christian Hansen Holding	Denmark	Consumer Staple	Food-Misc Preparation	11,227	20,638	4	81	47	C-
VEW.DK	Vestas Windsystems	Denmark	Energy	Energy-Alternative/Other	15,310	51,413	6	29	65	C
LUN.DK	H Lundbeck	Denmark	Health Care	Medical-Diversified	6,540	13,145	4	63	13	D
WDH.DK	Demant	Denmark	Health Care	Medical-Systems/Equip	5,946	16,994	5	52	17	E
GSN.DK	Gn Store Nord	Denmark	Health Care	Medical-Systems/Equip	5,651	19,020	6	92	34	E
NOK1.FI	Nokia	Finland	Technology	Computer-Networking	27,775	67,894	3	21	40	D-
PUB.FR	Publicis Groupe	France	Capital Equipment	Comml Svcs-Advertising	11,144	30,463	3	53	21	D+
RXL.FR	Rexel	France	Capital Equipment	Electrical-Power/Equipmt	3,194	11,128	5	80	26	D-
TAL.FR	Total	France	Energy	Oil&Gas-Integrated	131,418	293,601	5	66	24	D
SCO.FR	Scor Se	France	Financial	Insurance-Brokers	7,448	16,001	5	36	29	D-
IPN.FR	Ipsen	France	Health Care	Medical-Ethical Drugs	7,920	11,633	4	94	10	D-

Symbol	Name	Trading Country	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
CRFR.FR	Carrefour	France	Retail	Retail-Super/Mini Mkts	13,243	37,250	7	48	26	D-
ATO.FR	Atos	France	Technology	Computer-Tech Services	7,647	28,602	5	86	34	E
EVXX.DE	Evonik Industries (Xet)	Germany	Basic Material	Chemicals-Specialty	11,063	17,817	6	38	24	E
SIEX.DE	Siemens (Xet)	Germany	Capital Equipment	Diversified Operations	89,545	238,757	5	45	40	D
KGXX.DE	Kion Group (Xet)	Germany	Capital Equipment	Machinery-Mtl Hdlg/Autmn	6,033	14,974	5	98	34	D-
BMW.DE	Bmw (Xet)	Germany	Consumer Cyclical	Auto Manufacturers	41,215	104,914	6	39	29	D+
CONX.DE	Continental (Xet)	Germany	Consumer Cyclical	Auto/Truck-Original Eqp	24,523	77,367	5	48	25	C
EVTX.DE	Evotec (Xet)	Germany	Health Care	Medical-Biomed/Biotech	3,306	30,471	6	85	29	D+
FMEX.DE	Fresenius Med.Care (Xet)	Germany	Health Care	Medical-Hospitals	19,925	50,184	4	62	24	D
FREX.DE	Fresenius (Xet)	Germany	Health Care	Medical-Hospitals	20,488	74,738	5	71	22	E
B4BX.DE	Metro Ag (Xet)	Germany	Retail	Wholesale-Food	5,623	12,906	7	32	44	C
IFXX.DE	Infineon Techs. (Xet)	Germany	Technology	Elec-Semiconductor Mfg	21,852	112,586	3	61	32	D+
CCON.HK	China Comms.Con.'H'	Hong Kong	Capital Equipment	Bldg-Heavy Construction	3,409	10,731	4	75	38	C
PIPE.HK	Galaxy Entertainment Gp.	Hong Kong	Consumer Cyclical	Leisure-Gaming/Equip	26,647	63,669	4	62	59	D+
SNDC.HK	Sands China	Hong Kong	Consumer Cyclical	Leisure-Gaming/Equip	35,974	43,935	4	62	59	C
HENG.HK	Hengan Intl.Gp.	Hong Kong	Consumer Staple	Cosmetics/Personal Care	7,726	19,847	4	67	43	C-
BOC.HK	Boc Hong Kong (Hdg.)	Hong Kong	Financial	Banks-Money Center	33,825	46,459	5	70	34	D
HSBA.HK	Hang Seng Bank	Hong Kong	Financial	Banks-Money Center	38,502	47,254	6	69	38	E
LREI.HK	Link RL.Est.Inv.Tst.	Hong Kong	Financial	Finance-Property REIT	21,514	78,607	4	58	59	E
FOSN.HK	Fosun International	Hong Kong	Financial	Insurance-Brokers	10,670	16,930	4	91	49	C+
AGP.HK	Aia Group	Hong Kong	Financial	Insurance-Life	110,477	263,299	4	95	65	D-
CHPX.HK	China Pac.In.(Group) 'H'	Hong Kong	Financial	Insurance-Life	10,223	58,349	3	96	78	E
CKPH.HK	CK Assets Hldgs	Hong Kong	Financial	Real Estate Dvlpmt/Ops	23,938	45,021	6	63	39	C-
SCHL.HK	Sunac China Holdings	Hong Kong	Financial	Real Estate Dvlpmt/Ops	18,401	69,206	3	98	86	D-
SHKP.HK	Sun Hung Kai Properties	Hong Kong	Financial	Real Estate Dvlpmt/Ops	39,964	92,742	8	95	43	D
LEGE.HK	Lenovo Group	Hong Kong	Technology	Computer-Hardware/Perip	7,994	23,405	4	83	57	D+
TCNT.HK	Tencent Holdings	Hong Kong	Technology	Internet-Content	388,192	654,737	5	98	59	C-
CTC.HK	China Telecom 'H'	Hong Kong	Technology	Telecom Svcs-Wireless	6,368	20,448	5	69	53	D+
MTRC.HK	Mtr	Hong Kong	Transportation	Transportation-Rail	33,505	36,084	5	47	55	C-
CKIH.HK	CK Infrastructure Hldgs Ltd	Hong Kong	Utility	Utility-Diversified	17,788	12,485	7	42	43	C+
CLIG.HK	Clp Holdings	Hong Kong	Utility	Utility-Electric Power	25,633	38,807	4	29	51	C
HKCG.HK	Hong Kong And China Gas	Hong Kong	Utility	Utility-Gas Distribution	32,273	39,712	6	60	59	D-
SFER.IT	Salvatore Ferragamo	Italy	Consumer Cyclical	Apparel-Clothing Mfg	2,982	10,544	6	48	13	E
FCA.IT	Fiat Chrysler Autos.	Italy	Consumer Cyclical	Auto Manufacturers	19,225	104,794	4	83	17	C-
SPM.IT	Saipem	Italy	Energy	Oil&Gas-Field Services	4,494	31,787	4	45	29	D
FCBK.IT	Finecobank Spa	Italy	Financial	Banks-Money Center	6,226	36,095	5	86	29	D+
UBEI.JP	Ube Industries	Japan	Basic Material	Chemicals-Specialty	2,164	11,072	5	81	35	D+

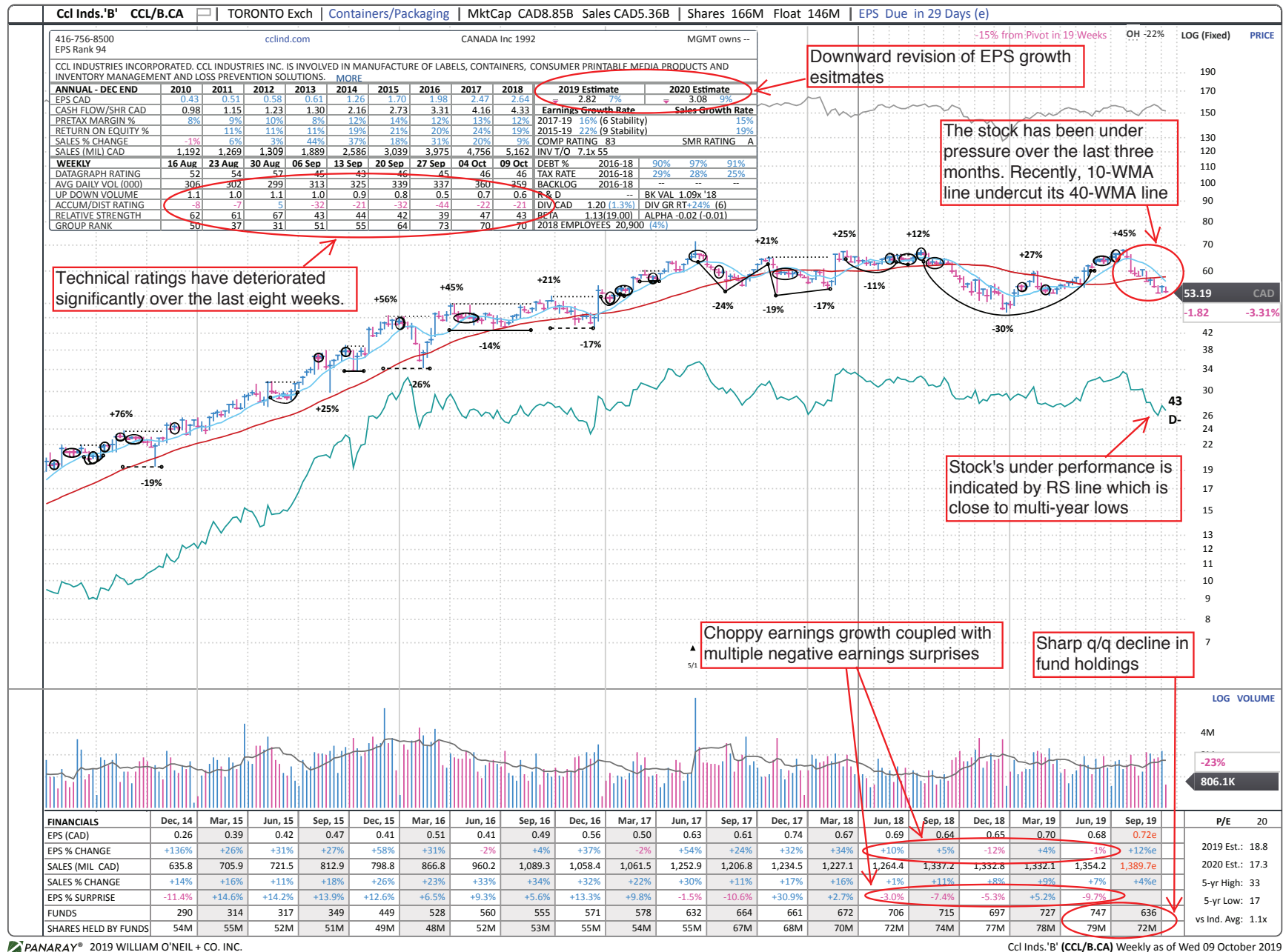
Symbol	Name	Trading Country	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
EC@N.JP	Denka	Japan	Basic Material	Chemicals-Specialty	2,424	11,504	4	77	25	D+
KYEX.JP	Kyowa Exeo	Japan	Capital Equipment	Bldg-Heavy Construction	2,802	13,450	5	74	27	D
TMHD.JP	Persol Holdings	Japan	Capital Equipment	Comm'l Svcs-Staffing	4,398	22,947	5	52	30	D-
ZJ@N.JP	Mitsubishi	Japan	Capital Equipment	Diversified Operations	39,047	144,808	5	21	18	D+
MH@N.JP	Mitsubishi Heavy Inds.	Japan	Capital Equipment	Diversified Operations	13,214	48,237	7	45	35	C-
NIIW.JP	Sojitz	Japan	Capital Equipment	Diversified Operations	3,823	15,261	4	82	20	C
KU@N.JP	Kubota	Japan	Capital Equipment	Machinery-Constr/Mining	17,754	45,677	5	71	32	D-
XE@N.JP	Yokogawa Electric	Japan	Capital Equipment	Machinery-Gen Industrial	4,498	16,926	3	38	13	D-
OE@N.JP	Jtekt	Japan	Capital Equipment	Machinery-Gen Industrial	3,906	10,692	5	13	22	C
OZ@N.JP	Sumitomo Heavy Inds.	Japan	Capital Equipment	Machinery-Gen Industrial	3,571	14,910	4	67	18	D-
MISM.JP	Misumi Group	Japan	Capital Equipment	Machinery-Mtl Hdlg/Autmn	6,369	18,599	5	75	42	D-
KITK.JP	Coca-Cola Bottlers Jap.	Japan	Consumer Staple	Beverages-Non-Alcoholic	4,710	15,116	7	2	18	D-
KA@N.JP	Kao	Japan	Consumer Staple	Cosmetics/Personal Care	37,690	112,229	4	77	70	B
FANC.JP	Fancl	Japan	Consumer Staple	Cosmetics/Personal Care	3,467	26,223	4	84	85	B
NS@N.JP	Nippon Suisan Kaisha	Japan	Consumer Staple	Food-Meat Products	1,792	10,949	4	41	20	C-
BO@N.JP	Nisshin Seifun	Japan	Consumer Staple	Food-Misc Preparation	5,652	14,264	4	69	11	C
DS@N.JP	Daiwa Securities Group	Japan	Financial	Finance-Invest Bnk/Bkrs	7,704	29,725	4	26	30	C-
JHRC.JP	Japan Hotel Reit Inv.	Japan	Financial	Finance-Property REIT	3,494	15,368	5	71	57	C-
OSEX.JP	Japan Exchange Group	Japan	Financial	Financial Svcs-Specialty	8,646	20,979	3	67	46	C-
DITC.JP	Daito Tst.Construction	Japan	Financial	Real Estate Dvlpmnt/Ops	9,497	40,240	4	82	32	D
TA@N.JP	Takeda Pharmaceutical	Japan	Health Care	Medical-Diversified	54,123	178,878	4	11	25	B-
DPPH.JP	Sumitomo Dainippon Pha.	Japan	Health Care	Medical-Diversified	6,536	15,495	4	78	3	D
SQ@N.JP	Shionogi	Japan	Health Care	Medical-Diversified	17,373	59,076	5	89	27	C
PS@N.JP	Ono Pharm.	Japan	Health Care	Medical-Generic Drugs	9,520	26,207	4	87	14	D-
ALCH.JP	Alfresa Holdings	Japan	Health Care	Medical-Systems/Equip	5,185	10,453	5	60	10	D
MIXI.JP	Mixi	Japan	Technology	Computer Sftwr-Gaming	1,544	10,515	4	30	25	C-
SEEP.JP	Seiko Epson	Japan	Technology	Computer-Hardware/Perip	5,352	24,165	6	16	13	D+
CN@N.JP	Canon	Japan	Technology	Computer-Hardware/Perip	35,125	85,113	6	23	22	D-
RH@N.JP	Ricoh	Japan	Technology	Computer-Hardware/Perip	6,514	25,615	5	56	16	C-
SGHS.JP	Sg Holdings Co	Japan	Transportation	Transport-Air Freight	7,943	17,063	7	70	22	E
JAPL.JP	Japan Airlines	Japan	Transportation	Transportation-Airline	10,622	48,158	6	53	25	D-
ANAW.JP	Ana Holdings	Japan	Transportation	Transportation-Airline	11,897	35,272	4	87	50	D
NX@N.JP	Nippon Express	Japan	Transportation	Transportation-Logistics	5,056	14,923	4	36	27	C-
UY@N.JP	Kyushu Elec.Power	Japan	Utility	Utility-Electric Power	4,667	11,611	5	35	20	D
SBMO.NL	Sbm Offshore	Netherlands	Energy	Oil&Gas-Field Services	3,292	14,181	6	21	26	C-
ADYE.NL	Adyen	Netherlands	Financial	Financial Svcs-Specialty	19,609	55,808	5	99	40	D-
ASRN.NL	Asr Nederland	Netherlands	Financial	Insurance-Brokers	5,052	19,459	4	93	26	D

Symbol	Name	Trading Country	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
SUBC.NO	Subsea 7	Norway	Energy	Oil&Gas-Field Services	2,923	11,269	5	42	31	D-
STEN.SG	Singapore Techs.Engr.	Singapore	Capital Equipment	Aerospace/Defense	9,066	12,227	2	92	78	B-
KEPP.SG	Keppel	Singapore	Capital Equipment	Diversified Operations	7,768	16,369	5	26	37	D+
JMTS.SG	Jardine Matheson Hdg.	Singapore	Capital Equipment	Diversified Operations	38,317	13,336	6	99	22	C-
GINT.SG	Genting Singapore Ltd	Singapore	Consumer Cyclical	Leisure-Gaming/Equip	7,881	12,623	4	75	47	C+
CODE.SG	Comfortdelgro	Singapore	Consumer Cyclical	Leisure-Services	3,796	11,787	4	77	61	D+
DBSS.SG	Dbs Group Holdings	Singapore	Financial	Banks-Money Center	45,873	76,578	6	94	57	D+
OCBC.SG	Oversea-Chinese Bkg.	Singapore	Financial	Banks-Money Center	33,996	38,366	5	77	47	D+
HKLH.SG	Hong Kong Land Hdg.	Singapore	Financial	Real Estate Dvlpmnt/Ops	12,603	20,032	5	50	21	D-
TELC.SG	Singapore Telecom	Singapore	Technology	Telecom Svcs-Integrated	37,243	48,447	3	54	54	C+
GAM.ES	Siemens Gamesa Renewable Energy	Spain	Energy	Energy-Alternative/Other	8,616	20,909	7	67	34	E
BBVA.ES	Bbv.Argentaria	Spain	Financial	Banks-Money Center	32,992	93,823	4	67	34	B-
AMS.ES	Amadeus It Group	Spain	Technology	Computer-Tech Services	30,668	56,348	4	82	46	C+
HUSB.SE	Husqvarna B	Sweden	Consumer Cyclical	Hsehold-Appliances/Wares	3,415	12,965	5	81	42	D-
SWED.SE	Swedbank A	Sweden	Financial	Banks-Money Center	15,230	47,091	5	64	24	C-
SOBI.SE	Swedish Orphan Biovitrum	Sweden	Health Care	Medical-Biomed/Biotech	4,726	11,595	5	89	18	D
TT@G.SE	Trelleborg B	Sweden	Technology	Electronic-Parts	3,254	14,589	5	50	38	D
LHN.CH	Lafargeholcim	Switzerland	Basic Material	Bldg-Cement/Concrt/Ag	28,234	115,609	5	70	42	D-
SGSN.CH	Sgs 'N'	Switzerland	Capital Equipment	Comml Svcs-Outsourcing	18,033	45,412	3	86	47	D-
FIN.CH	Georg Fischer	Switzerland	Capital Equipment	Machinery-Gen Industrial	3,464	17,587	4	42	35	D-
CFR.CH	Richemont N	Switzerland	Consumer Cyclical	Apparel-Clothing Mfg	36,496	132,127	5	76	37	E
JMAT.GB	Johnson Matthey	United Kingdom	Basic Material	Mining-Gold/Silver/Gems	6,713	18,116	5	88	18	D+
RR.GB	Rolls-Royce Holdings	United Kingdom	Capital Equipment	Aerospace/Defense	17,260	37,081	5	39	14	E
MNDI.GB	Mondi	United Kingdom	Capital Equipment	Containers/Packaging	9,171	39,798	5	93	17	D-
ABF.GB	Associated Brit.Foods	United Kingdom	Capital Equipment	Diversified Operations	20,496	22,214	4	62	19	C-
WEIR.GB	Weir Group	United Kingdom	Capital Equipment	Machinery-Gen Industrial	4,226	18,122	5	32	14	E
CINE.GB	Cineworld Group	United Kingdom	Consumer Cyclical	Leisure-Services	3,605	16,093	4	65	8	D
STJ.GB	St.James's Place	United Kingdom	Financial	Finance-Investment Mgmt	6,054	23,006	5	38	14	E

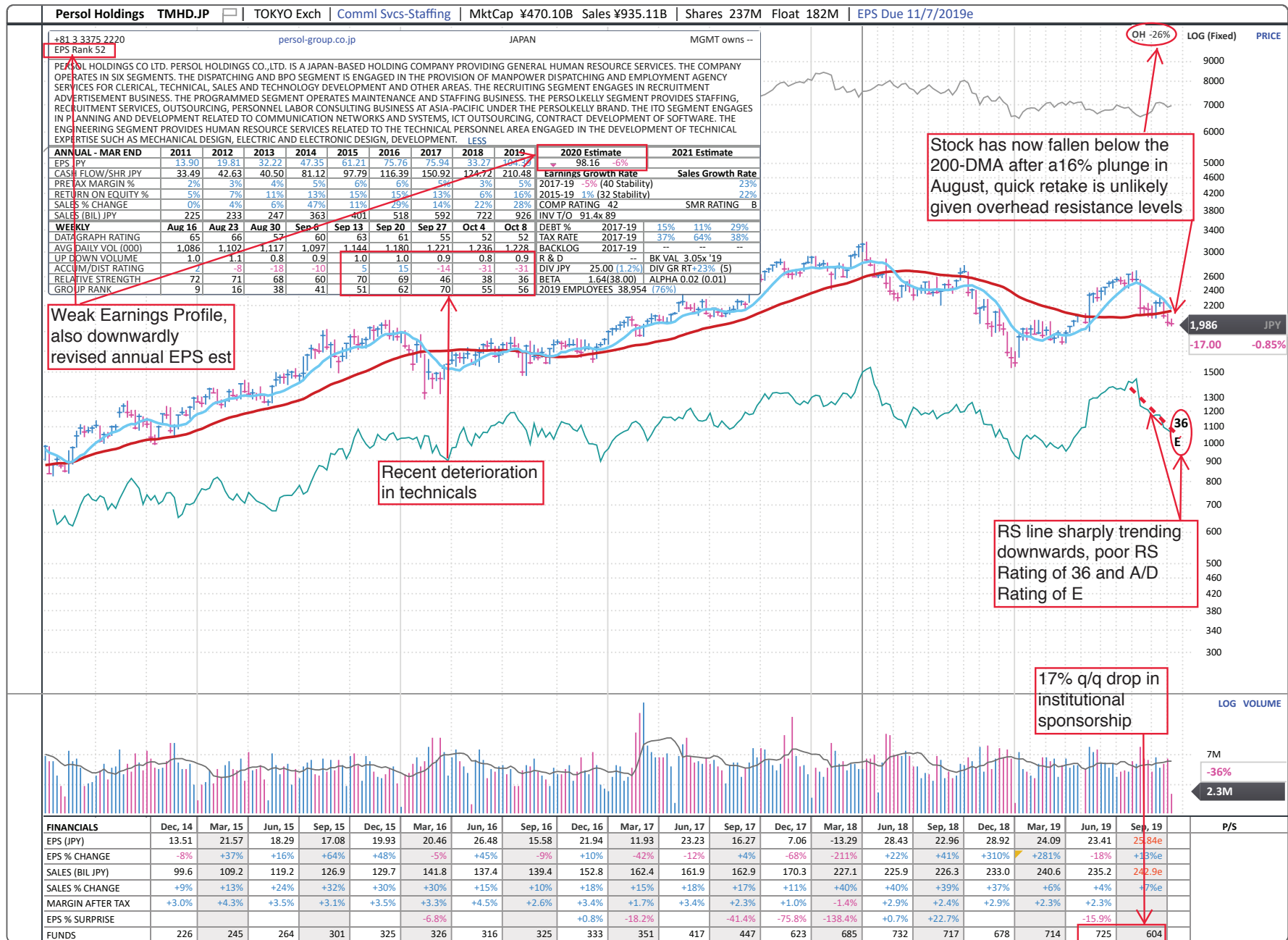
Developed — Basic Material — Highlighted Laggard



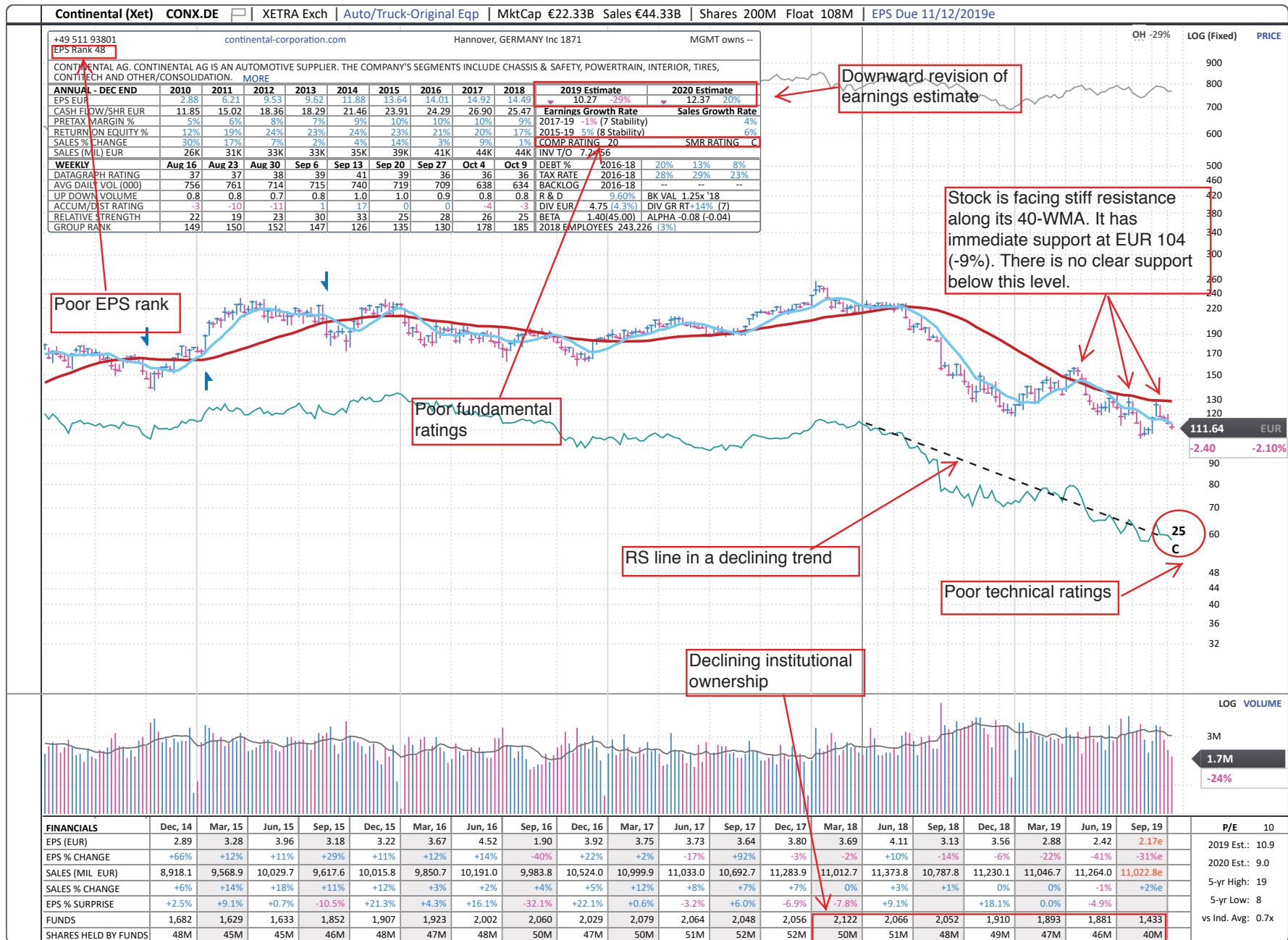
Developed — Capital Equipment — Highlighted Laggard



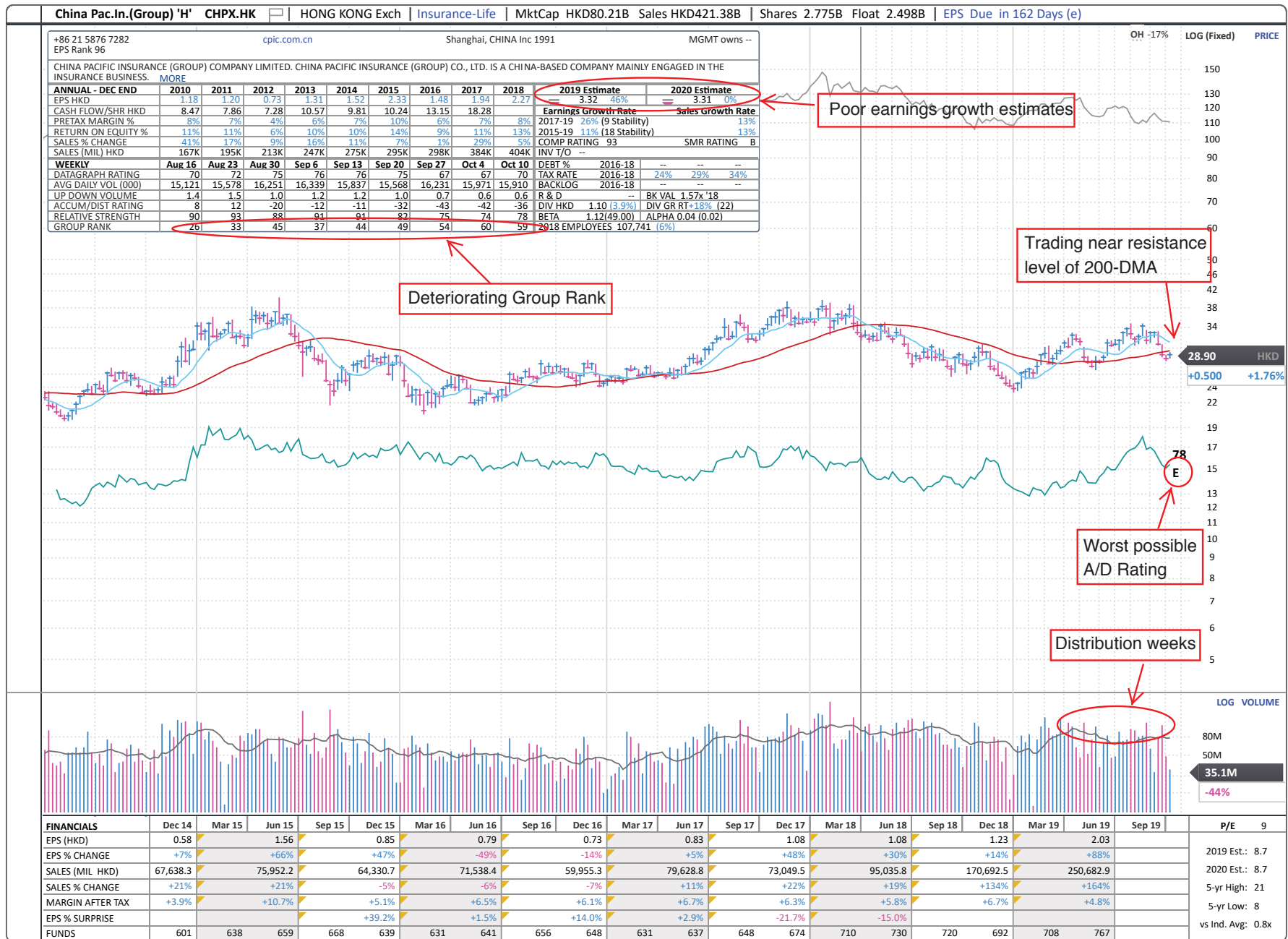
Developed — Consumer Cyclical — Highlighted Laggard



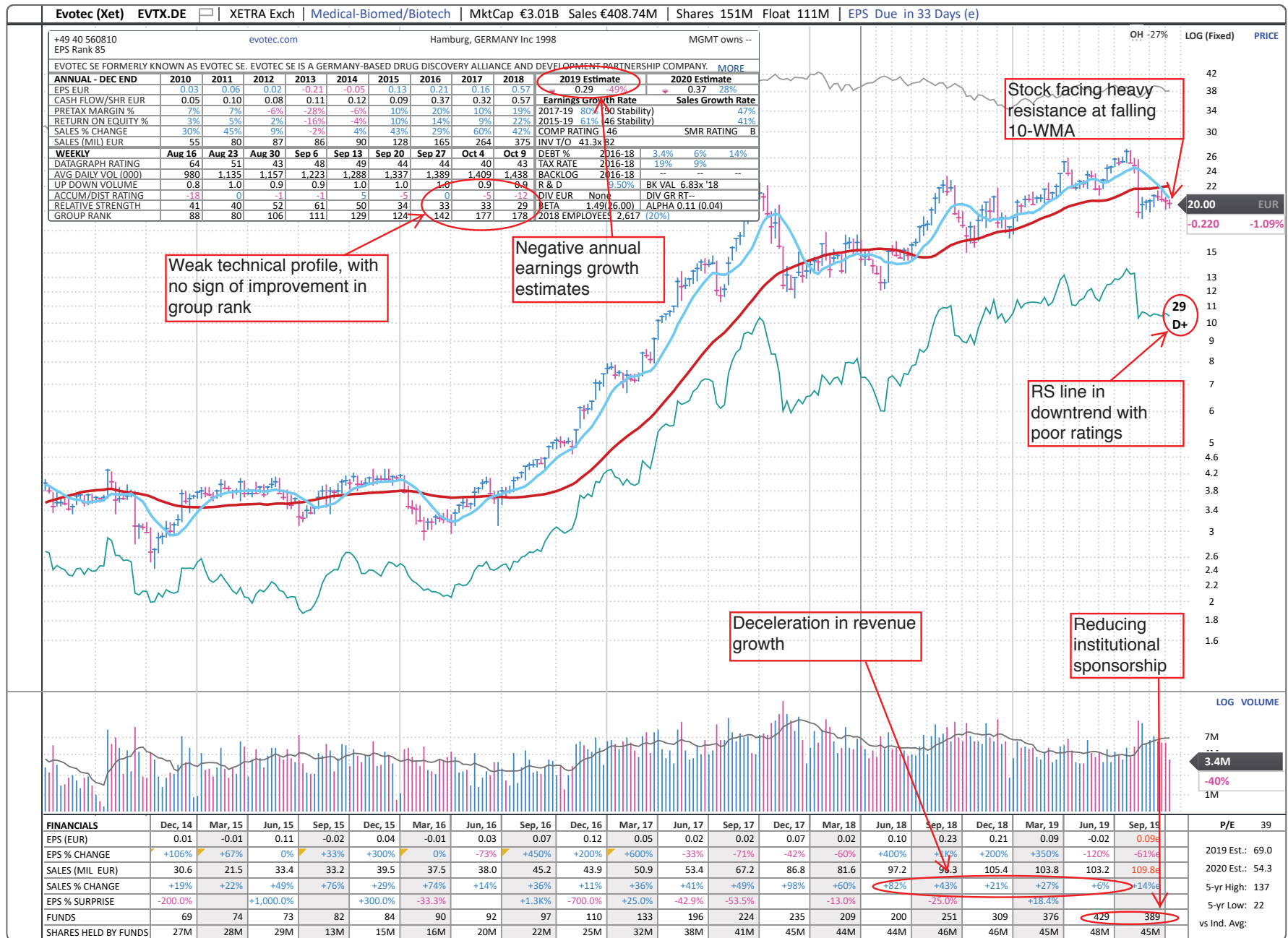
Developed — Consumer Cyclical — Highlighted Laggard



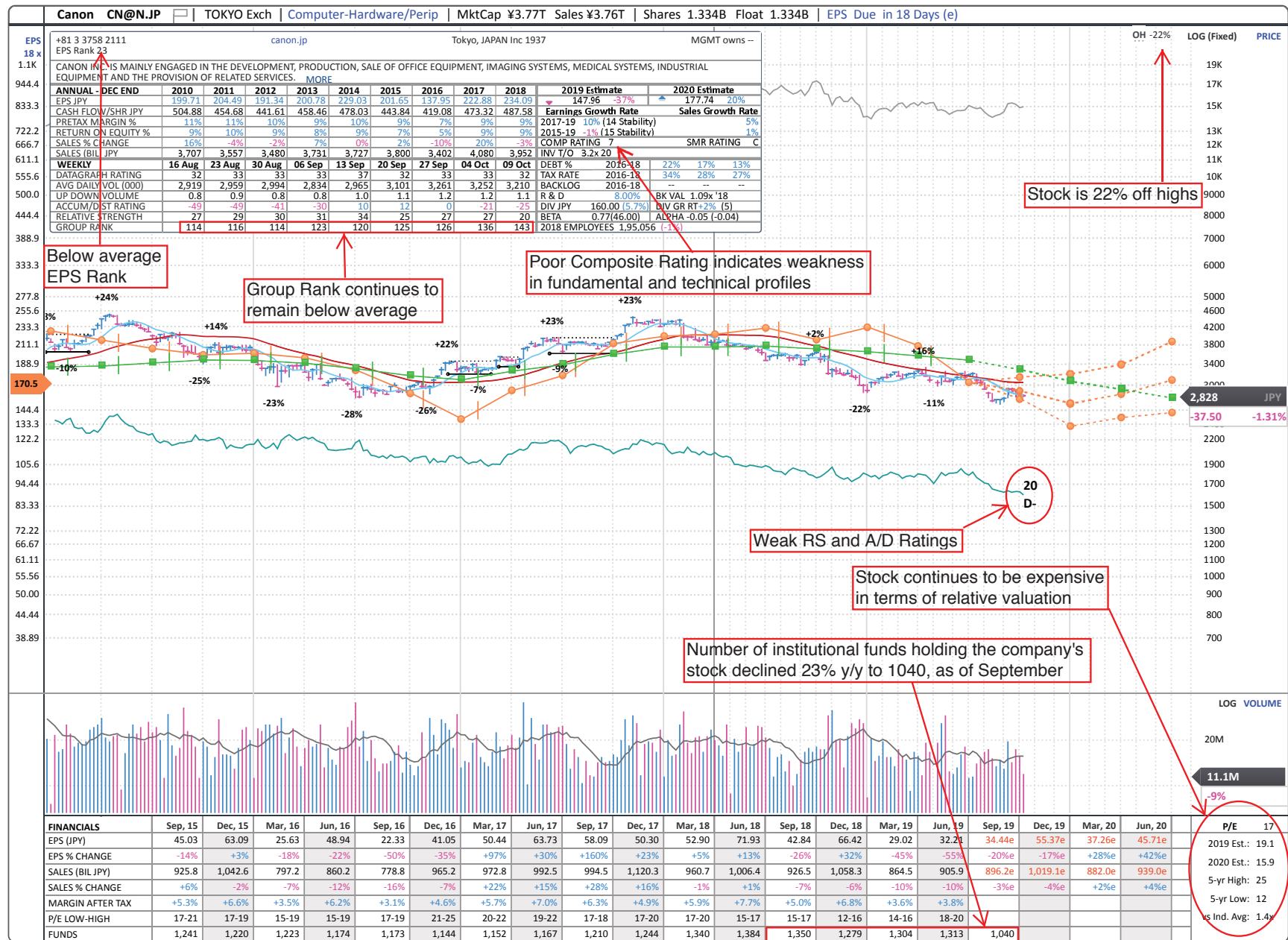
Developed — Financial — Highlighted Laggard



Developed — Health Care — Highlighted Laggard



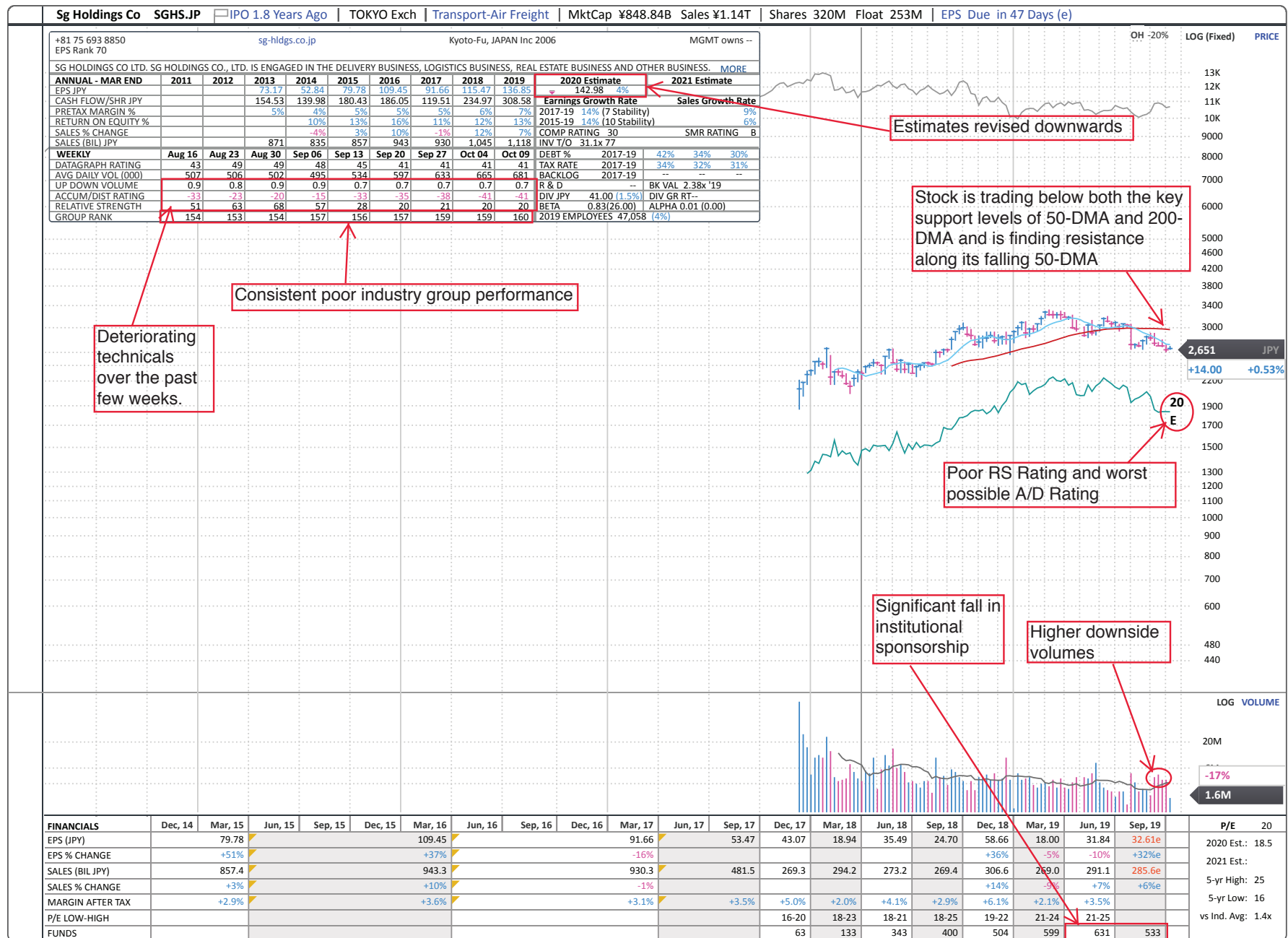
Developed — Technology — Highlighted Laggard



PANARAY® 2019 WILLIAM O'NEIL + CO. INC.

Canon (CN@N.JP) Weekly as of THU 10 October 2019

Developed — Transportation — Highlighted Laggard

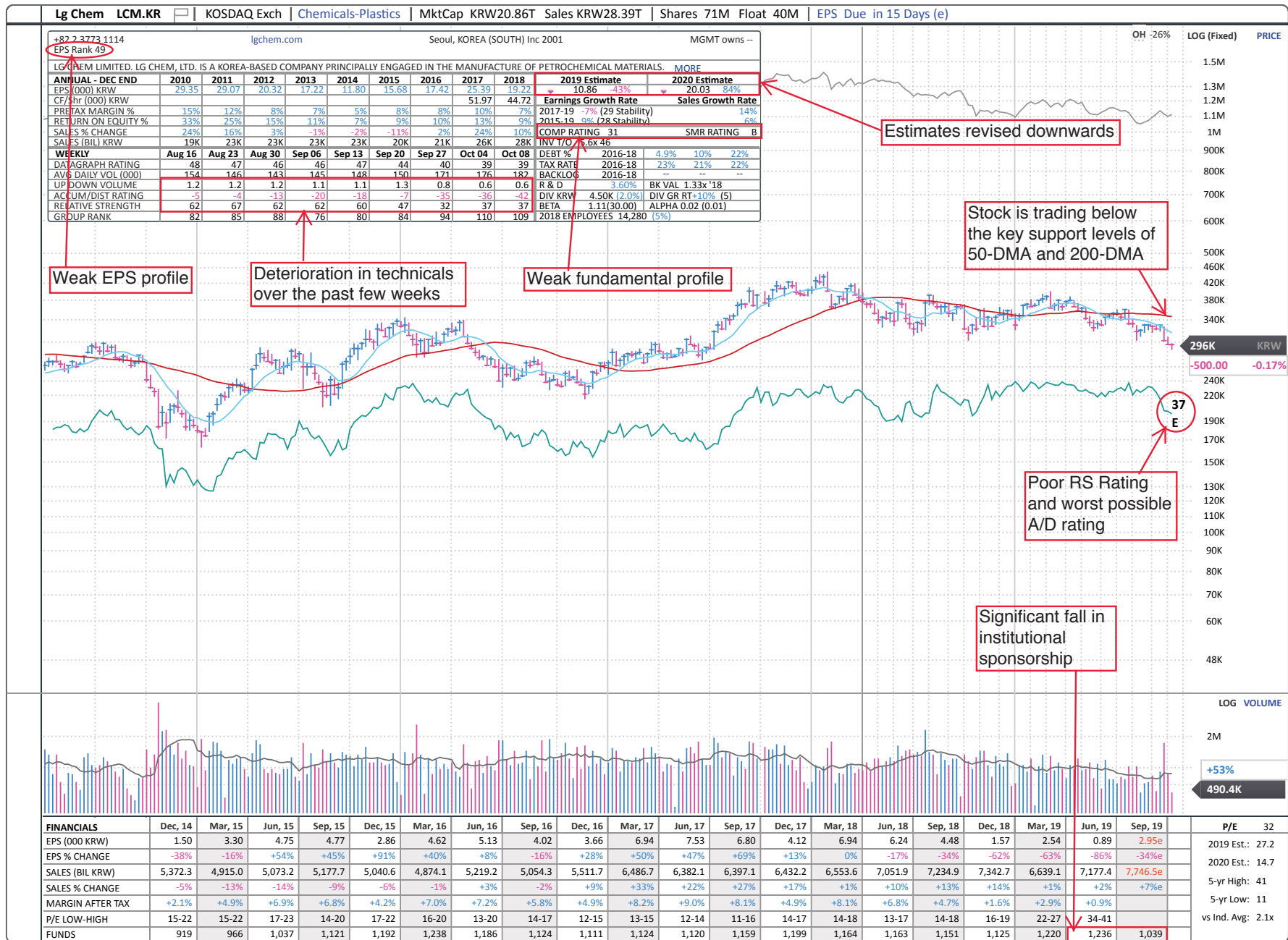


Emerging Markets

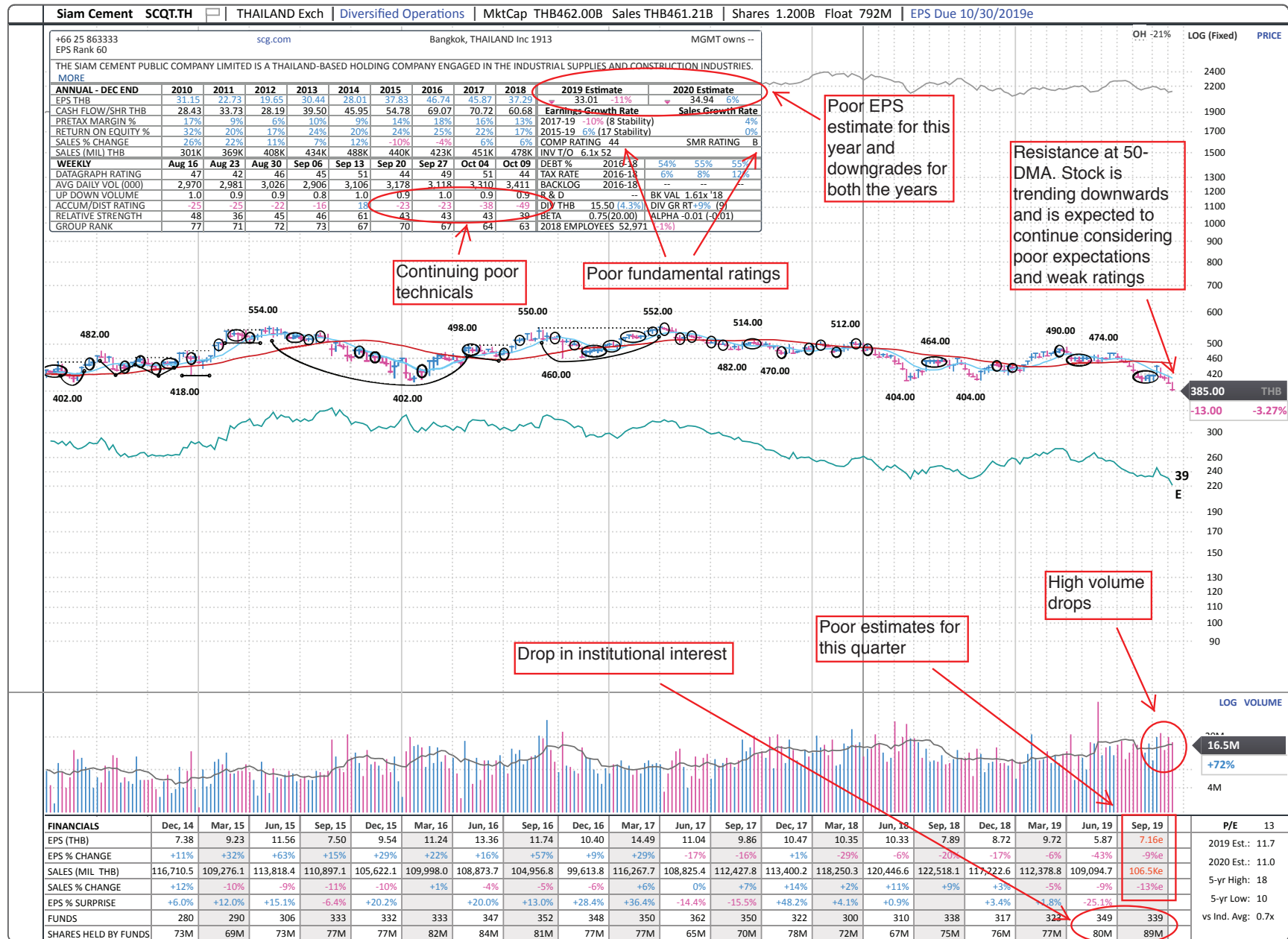
Symbol	Name	Trading Country	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
EA3.BR	Embraer On	Brazil	Capital Equipment	Aerospace/Defense	3,065	11,033	3	74	13	D+
IO3.BR	Banco Do Brasil On	Brazil	Financial	Banks-Money Center	30,857	105,274	4	82	18	D-
DC3.BR	Banco Bradesco On	Brazil	Financial	Banks-Money Center	30,227	22,148	5	91	23	D+
CU4.BR	Cmpbra.De Distb. Pn	Brazil	Retail	Retail-Major Disc Chains	3,243	30,472	3	24	15	C
CRF.BR	Atacadao Distribuicao	Brazil	Retail	Retail-Super/Mini Mkts	9,286	12,322	3	76	25	C-
LH3.BR	Light On	Brazil	Utility	Utility-Electric Power	1,394	11,642	4	34	32	C-
HDI.IN	Hindalco Industries	India	Capital Equipment	Metal Proc & Fabrication	5,760	18,863	4	75	61	C-
IT.IN	Itc	India	Consumer Staple	Tobacco	42,044	50,065	4	74	56	C-
UTI.IN	Axis Bank	India	Financial	Banks-Money Center	26,694	127,598	6	66	71	D
IBK.IN	Indusind Bank	India	Financial	Banks-Money Center	11,979	96,179	5	85	48	D-
FED.IN	Federal Bank	India	Financial	Banks-Money Center	2,361	14,526	6	80	61	D
PRH.IN	Piramal Enterprises	India	Health Care	Medical-Diversified	3,809	27,537	4	67	19	D
TIC.IN	Sun Pharm.Industries	India	Health Care	Medical-Generic Drugs	13,067	40,269	4	46	52	B-
CPL.IN	Cipla	India	Health Care	Medical-Generic Drugs	4,788	13,937	5	68	37	D-
LUP.IN	Lupin	India	Health Care	Medical-Generic Drugs	4,400	13,162	2	65	52	C+
TSE.IN	Tata Consultancy Svs.	India	Technology	Computer-Tech Services	105,832	74,352	2	83	72	C-
WIP.IN	Wipro	India	Technology	Computer-Tech Services	19,143	14,958	5	78	62	D+
BRI.ID	Bank Rakyat Indonesia	Indonesia	Financial	Banks-Money Center	33,523	28,789	4	82	62	D-
BKM.ID	Bank Mandiri	Indonesia	Financial	Banks-Money Center	21,274	16,841	6	72	33	C
PCHE.MY	Petronas Chemicals Gp.	Malaysia	Basic Material	Chemicals-Specialty	13,686	9,957	4	82	21	C
PBOM.MY	Public Bank	Malaysia	Financial	Banks-Money Center	17,741	21,161	5	1	19	D-
IXB.MX	Banco Santander B	Mexico	Financial	Banks-Money Center	4,360	13,676	5	58	32	D-
PKB.PL	Pko Bank	Poland	Financial	Banks-Money Center	11,838	25,647	3	89	45	C-
MGN.RU	Magnit	Russia	Retail	Wholesale-Food	5,211	11,814	3	26	21	D
REMJ.ZA	Remgro	South Africa	Financial	Finance-Investment Mgmt	5,615	14,173	6	11	35	E
APNJ.ZA	Aspen Phmc.Hdg.	South Africa	Health Care	Medical-Generic Drugs	2,853	14,292	5	90	31	D
MTNJ.ZA	Mtn Group	South Africa	Technology	Telecom Svcs-Wireless	11,709	33,091	1	34	67	C
LCM.KR	Lg Chem	South Korea	Basic Material	Chemicals-Plastics	17,571	45,205	5	49	40	E
DLI.KR	Daelim Industrial	South Korea	Capital Equipment	Bldg-Heavy Construction	2,721	10,331	5	90	64	C
CLZ.KR	Samsung C&T	South Korea	Capital Equipment	Bldg-Heavy Construction	14,069	21,152	4	20	37	D-
LCY.KR	Lg	South Korea	Capital Equipment	Comml Svcs-Outsourcing	9,733	10,973	5	93	59	D
JHD.KR	Lg Electronics	South Korea	Consumer Cyclical	Hsehold-Appliances/Wares	9,367	31,970	4	16	69	C
LHH.KR	Lg Hhld.& Hlth.Care	South Korea	Consumer Staple	Cosmetics/Personal Care	16,859	32,262	5	95	81	B
SHB.KR	Shinhan Finl.Group	South Korea	Financial	Banks-Money Center	16,254	31,989	6	90	61	D-
MEY.KR	Medy-Tox	South Korea	Health Care	Medical-Biomed/Biotech	1,787	12,877	5	69	14	C-

Symbol	Name	Trading Country	Sector Name	Industry Group Name	Market Value, USD (Mil)	Avg Daily Dollar Vol (000), USD	Negative Alert Score, 10 Wks	EPS Rank	RS Rating	A/D Rating
SZS.KR	Samsung Sds	South Korea	Technology	Computer-Tech Services	12,483	11,670	4	90	49	D+
SKT.KR	Sk Telecom	South Korea	Technology	Telecom Svcs-Wireless	15,768	31,606	4	59	49	E
CST.TW	China Steel	Taiwan	Basic Material	Steel-Producers	11,714	9,900	5	46	27	D+
DEL.TW	Delta Electronics	Taiwan	Capital Equipment	Electrical-Power/Equipmt	10,698	23,732	6	92	20	E
MIK.TW	Makalot Industrial	Taiwan	Consumer Cyclical	Apparel-Clothing Mfg	1,176	10,917	6	81	27	E
PRE.TW	Uni-President Ents.	Taiwan	Consumer Staple	Food-Grain & Related	13,267	17,654	3	91	35	D
QUM.TW	Quanta Computer	Taiwan	Technology	Computer-Hardware/Perip	6,814	10,969	4	72	41	D+
CBO.TW	Chipbond Tech.	Taiwan	Technology	Elec-Semiconductor Mfg	1,209	10,738	5	96	27	E
PHE.TW	Phison Electronics	Taiwan	Technology	Elec-Semiconductor Mfg	1,745	14,435	5	64	57	C-
HON.TW	Hon Hai Precn.Ind.	Taiwan	Technology	Electronic-Parts	32,774	65,306	4	69	29	D+
CPFT.TH	Charoen Pokphand Foods	Thailand	Basic Material	Agricultural Operations	7,452	25,610	3	84	70	D+
SCQT.TH	Siam Cement	Thailand	Capital Equipment	Diversified Operations	15,231	42,938	7	60	39	E
ENAP.TH	Energy Absolute	Thailand	Energy	Energy-Alternative/Other	5,872	21,762	4	95	62	C
PTTE.TH	Ptt Exploration & Prdn.	Thailand	Energy	Oil&Gas-Intl Expl&Prod	15,313	51,019	3	98	42	D-
SBBT.TH	Siam Commercial Bank	Thailand	Financial	Banks-Money Center	12,930	45,006	4	62	34	D+
KTBT.TH	Krung Thai Bank	Thailand	Financial	Banks-Money Center	7,787	17,270	5	70	39	E
CPN.TH	Central Pattana	Thailand	Financial	Real Estate Dvlpmnt/Ops	9,395	18,237	4	86	34	C-
TSIA.TH	True Corporation	Thailand	Technology	Telecom Svcs-Integrated	5,665	29,252	5	26	55	E
PET.TR	Petkim Petrokimya Hldg.	Turkey	Basic Material	Chemicals-Specialty	1,219	42,603	4	87	6	C

Emerging — Basic Material — Highlighted Laggard



Emerging — Capital Equipment — Highlighted Laggard



Phison Electronics PHE.TW | [TAIWAN OTC Exch](#) | [Elec Semiconductor Mfg](#) | [MktCap TWD53.80B](#) | [Sales USD40.29B](#) | [Shares 197M](#) | [Float 166M](#) | [EPS Due in 36 Days \(e\)](#) | [-9% from Pivot in 15 Weeks](#) | [OH -20%](#) | [LOG \(Fixed\)](#) | [PRICE](#)

EPS 12 x +886 3 758 6896
EPS Rank 64

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ANNUAL - DEC END	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 Estimate	2020 Estimate
EPS TWD	8.57	14.68	14.99	17.57	17.48	20.41	24.67	29.23	21.91	21.94	0%
CASH FLOW/SHR TWD	9.92	16.30	16.67	19.92	17.24	21.84	26.37	34.14	23.10	24.23	10%
PRETAX MARGIN %	6%	9%	9%	12%	11%	12%	13%	16%	12%	2017-19 -3% (14 Stability)	-2%
RETURN ON EQUITY %	18%	27%	23%	24%	21%	22%	23%	24%	16%	2018-19 -8% (15 Stability)	5%
SALES % CHANGE	30%	2%	2%	-3%	3%	13%	17%	-4%	-3%	COMP RATING 66	SMR RATING B
SALES (MIL) TWD	32K	32K	33K	32K	33K	37K	44K	42K	41K	INV T/O 4.3x 46	

WEEKLY	16 Aug	23 Aug	30 Aug	06 Sep	13 Sep	20 Sep	27 Sep	04 Oct	09 Oct	2016-18	2016-18	2016-18
DATAGRAPH RATING	60	57	57	60	60	59	55	53	53	DEBT %	2016-18	0%
AVG DAILY VOL (000)	2,103	2,106	2,155	2,156	2,153	1,983	1,781	1,722	1,640	TAX RATE	2016-18	12%
UP/DOWN VOLUME	1.3	1.3	1.3	1.5	1.3	1.0	0.8	0.7	0.7	BACKLOG	2016-18	14%
ACCUM/DIST RATING	-16	-17	-12	6	1	-3	-7	-8	-7	R & D	8.10%	BK VAL 2.00x '18
RELATIVE STRENGTH	80	75	70	83	78	73	63	60	57	DIV TWD	13.00 (4.8%)	DIV GR RT +11% (8)
GROUP RANK	24	28	22	13	13	17	14	11	13	BETA	1.18(24.00)	ALPHA 0.09 (0.04)

Downward revision of EPS estimates indicate weakening prospects

Average Composite Rating

Stock witnessed a failed breakout and is currently trading below key support levels

Despite belonging to a strong industry sub group, the stock's technical ratings are weak

Weak RS and A/D Ratings

Institutional sponsorship declined y/y by 8%, as of September

Distribution of stock increased in the past few weeks

57 C-

273.00 TWD
-1.50 -0.55%

LOG VOLUME
20M
8M
3.9M
-17%

FINANCIALS	Sep, 15	Dec, 15	Mar, 16	Jun, 16	Sep, 16	Dec, 16	Mar, 17	Jun, 17	Sep, 17	Dec, 17	Mar, 18	Jun, 18	Sep, 18	Dec, 18	Mar, 19	Jun, 19	Sep, 19	Dec, 19	Mar, 20	Jun, 20	P/E
EPS (TWD)	6.00	5.25	4.71	4.87	7.61	7.49	6.50	8.07	8.12	6.54	4.48	6.27	7.12	4.04	4.47	3.95	6.75e	5.74e	4.75e	6.06e	14
EPS % CHANGE	+24%	+27%	+4%	+5%	+27%	+43%	+38%	+66%	+7%	-13%	-31%	-22%	-12%	-38%	0%	-37%	-5%	+42%	+6%	+53%	2019 Est.: 12.4
SALES (MIL TWD)	10,189.2	10,360.7	9,906.4	10,456.9	12,337.4	11,081.8	9,555.9	10,492.5	11,173.6	10,642.8	9,299.6	10,329.1	11,036.8	10,122.6	9,348.0	9,783.1	11,065.5e	10,613.5e	9,480.0e	11,089.0e	2020 Est.: 11.3
SALES % CHANGE	+20%	+18%	+19%	+24%	+21%	+7%	-4%	0%	-9%	-4%	-3%	-2%	-1%	-5%	0%	-5%	0%	+5%	+1%	+13%	5-yr High: 17
MARGIN AFTER TAX	+11.6%	+10.0%	+9.4%	+9.2%	+12.2%	+13.3%	+13.4%	+15.2%	+14.3%	+12.1%	+9.5%	+12.0%	+12.7%	+7.9%	+9.4%	+8.0%					5-yr Low: 9
P/E LOW-HIGH	10-14	10-14	10-13	11-14	9-13	9-11	9-10	9-13	11-15	10-13	10-12	9-12	9-11	9-12	10-14	13-16					vs Ind. Avg: 0.7x
FUNDS	258	242	251	281	281	229	231	283	311	306	297	293	299	288	314	337	275				

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