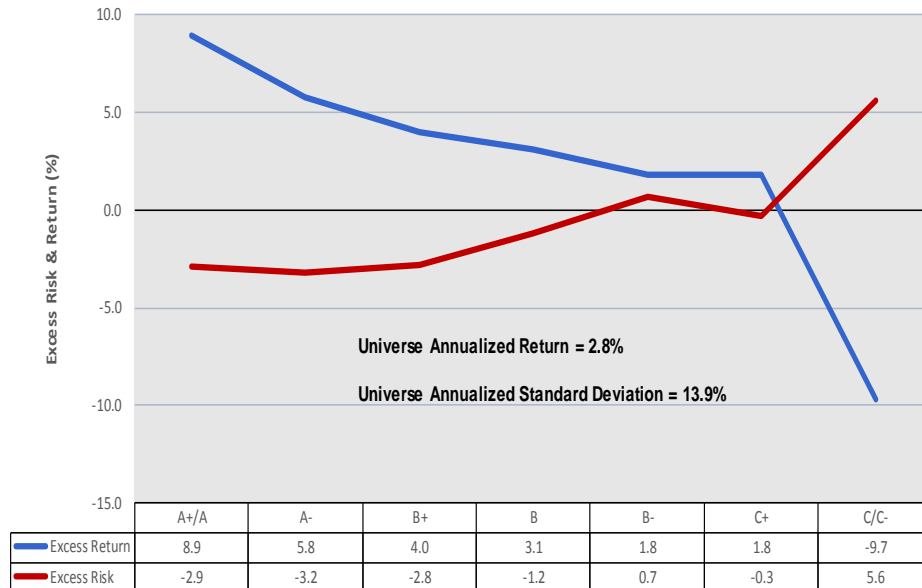


## Quality Rating (QTY)

Introduced in 1970, Ford's Quality Rating is based upon a number of factors that indicate a company's overall financial strength and earnings predictability. Each company in the Ford database is assigned a quality rating ranging from A+ to C- (1 to 9) based on size, debt level, earnings history and industry stability. As shown in the table below, high quality stocks have higher average market capitalizations and annual sales, as well as lower average levels of debt as a percent of equity and historical dispersion of earnings, as measured by Ford' Earnings Variability. Also note that the ratings are not evenly distributed. Most companies fall in the B- to C+ quality rating range.

High quality stocks also tend to have lower standard deviations of annual returns. Accordingly, a firm's quality rating may be used to gauge the risk associated with a particular stock. Ford considers companies with B- or higher quality rating as investment grade while those rated C+ and lower tend to be smaller and more speculative.

### Ford Quality Rating Model (QTY) Group Excess Returns & Std. Dev. (%) vs. Ford Universe 12/13 to 12/18



### Quality Rating Averages, as of 12/31/2018

	Earnings Variability	Growth Persistence	LT Debt/Equity	Total Revenue (mil)	Market Cap (mil)	Price/Value	Earnings Trend
A+/A	15	B	0.54	158871	360184	0.69	-2
A-	17	B	0.71	47618	111064	0.72	9
B+	25	B	0.85	23003	42642	0.81	2
B	82	C	0.96	8760	12180	1.01	14
B-	186	C	0.86	1277	2886	1.28	29
C+	630	D	0.64	244	884	1.80	82
C/C-	2660	D	0.38	272	411	1.78	-229

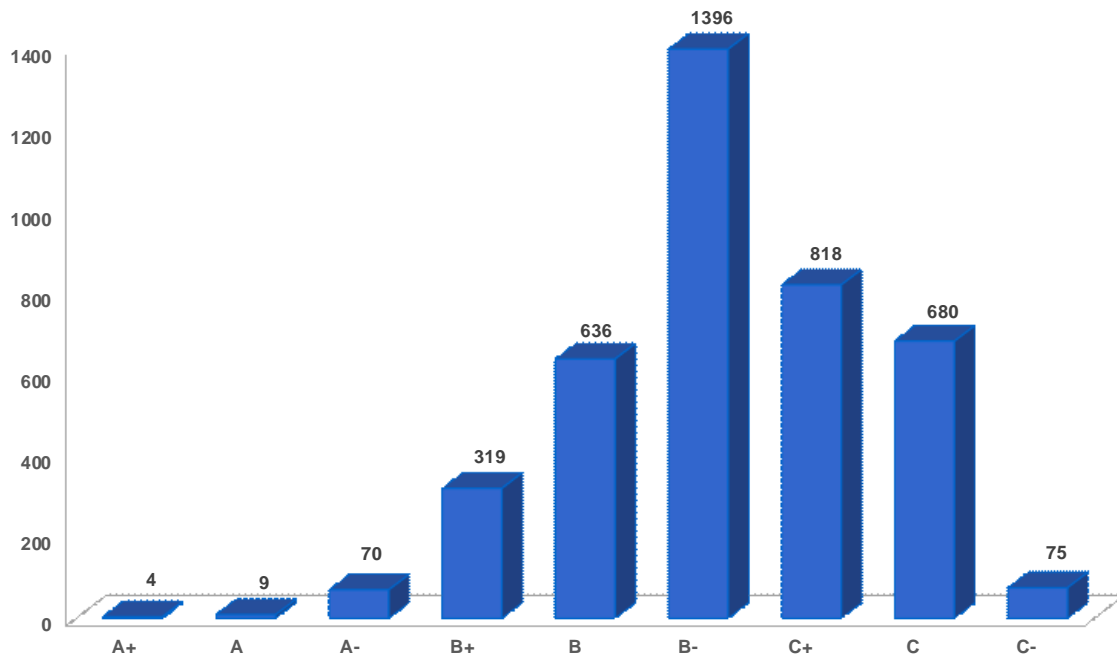
Performance is based on ranking the Ford Universe from best to worst by the Ford Quality Rating and dividing the rankings into 7 groups each month. Due to the small number of A+ and C- companies they have been combined with A and C ranked companies, respectively. The group returns represent equal-dollar investments in each stock each month, with monthly total returns linked to create annual and annualized results. Total returns, which sum month-end price changes and 1/12 of companies' indicated annual dividend rates, exclude transaction costs and management fees. The Ford Universe had 4023 companies at the end of 2018.

Quantitative model results are affected by market environment and are based on historical financial data. Certain material information for a company may not be reflected in models presented. The performance shown is based on large portfolios and may not be effective on every security. There is no assurance that future results will duplicate past results.

### Annual Quality Rating Performance (%) 12/13 to 12/18

	A+/A	A-	B+	B	B-	C+	C/C-	Ford Un.
12/13-12/14	15.1	12.6	11.2	9.6	5.0	3.7	-6.3	3.7
12/14-12/15	-0.1	3.6	0.9	-4.9	-6.5	-6.0	-13.7	-6.9
12/15-12/16	15.6	9.8	14.4	22.2	27.5	23.7	4.0	19.8
12/16-12/17	25.7	23.0	19.7	17.6	13.9	15.4	12.8	15.3
12/17-12/18	4.2	-4.0	-9.8	-11.0	-12.0	-10.1	-26.4	-13.9
<b>Annual</b>	11.7	8.6	6.8	5.9	4.6	4.6	-6.9	2.8
<b>Annual STD</b>	11.0	10.7	11.1	12.7	14.6	13.6	19.5	13.9

### Companies Per Quality Rating (12/18)



### Correlation Coefficients 12/13 - 12/18 Ford Proprietary Models

	PVA	OEY	EMO	PRM	VMO	SHB	QTY	SMO	SED	SDR	EDV
Price/Value (PVA)	1.000	0.902	0.871	0.870	0.809	0.805	0.481	0.781	0.882	0.891	0.680
Operating Earnings Yield (OEY)	0.902	1.000	0.921	0.837	0.937	0.927	0.643	0.871	0.842	0.918	0.831
Earnings Momentum (EMO)	0.871	0.921	1.000	0.931	0.944	0.928	0.634	0.947	0.927	0.971	0.883
Price Momentum (PRM)	0.870	0.837	0.931	1.000	0.866	0.817	0.566	0.886	0.949	0.932	0.769
Value/Momentum (VMO)	0.809	0.937	0.944	0.866	1.000	0.944	0.710	0.939	0.842	0.923	0.921
Share Buyback (SHB)	0.805	0.927	0.928	0.817	0.944	1.000	0.730	0.887	0.802	0.894	0.928
Quality Rating (QTY)	0.481	0.643	0.634	0.566	0.710	0.730	1.000	0.643	0.482	0.615	0.795
Sales Momentum (SMO)	0.781	0.871	0.947	0.886	0.939	0.887	0.643	1.000	0.870	0.924	0.895
Earnings Trend (SED)	0.882	0.842	0.927	0.949	0.842	0.802	0.482	0.870	1.000	0.948	0.718
Relative Earnings Trend (SDR)	0.891	0.918	0.971	0.932	0.923	0.894	0.615	0.924	0.948	1.000	0.835
Earnings Variability (EDV)	0.680	0.831	0.883	0.769	0.921	0.928	0.795	0.895	0.718	0.835	1.000