




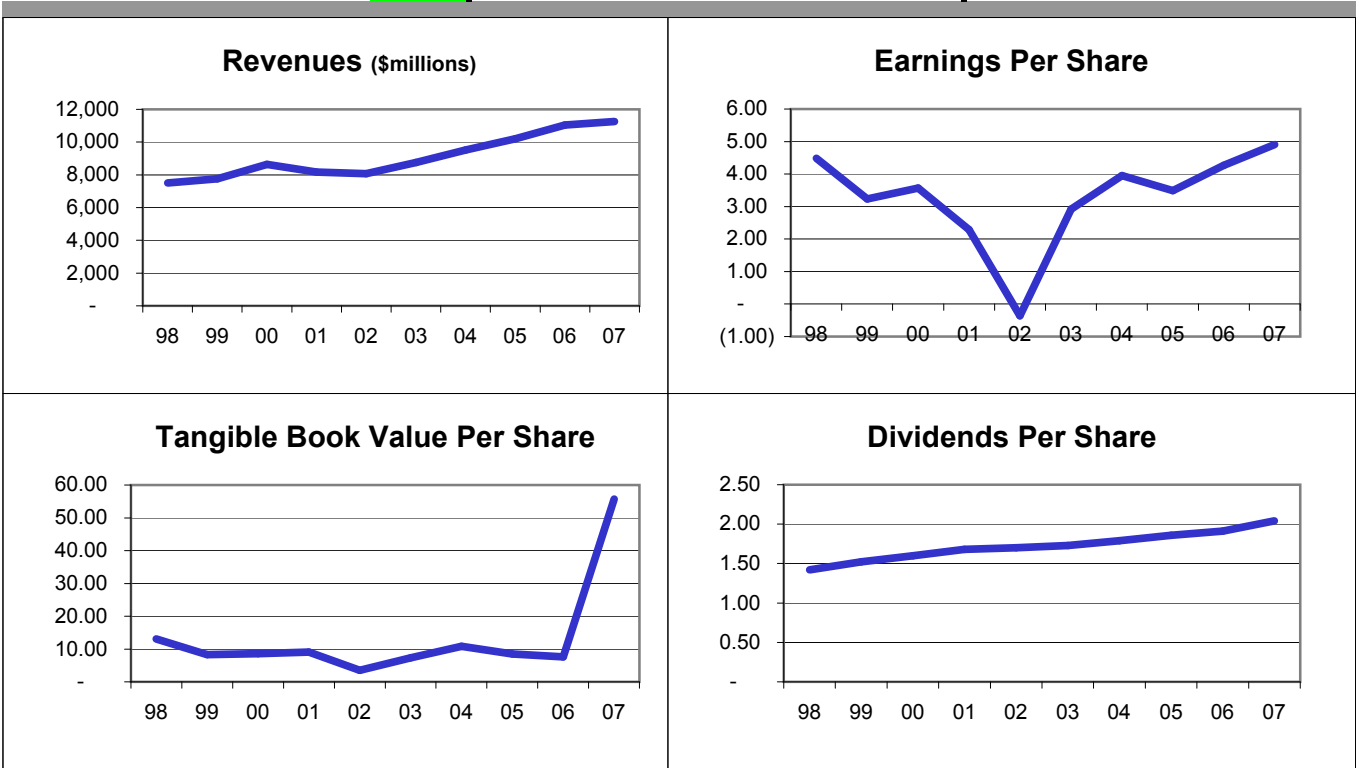


<b>Recommendation:</b>  <b>Very Weak</b>	<b>Description:</b> PPG is a leading manufacturer of coatings and resins, flat and fiber glass, and industrial and specialty chemicals. -8.7% Disc.
	<b>Sector:</b> i-Industrial <b>S&amp;P 500   Aristocrat   Achiever</b> <b>P/E:</b> 13.3 <b>Yield:</b> 3.41%

Fair Value data as of: Jul. 18, 2008	Dividend Analytical Data	Dividend Income vs. MMA
<b>Closing Price:</b> 60.78 	<b>Rolling 4-yr Div. &gt; 15%:</b> FALSE	<b>MMA Rate:</b> 4.61%
<b>Avg. High Yield Price:</b> 60.34	<b>Dividend Growth Rate:</b> 2.0%	<b>NPV MMA Diff.:</b> -1,424
<b>20-Year DCF Price:</b> 19.46	<b>Years of Div. Growth:</b> 36 	<b>Years to &gt;MMA:</b> Never
<b>Avg. P/E Price:</b> 73.62 	<b>1-Yr. &gt; 5-Yr Growth:</b> No	<b>Est. Annual Div:</b> \$2.08
<b>Graham Number:</b> 72.76 	<b>Payout 15% of avg.:</b> Ok	<b>Dividends Paid:</b> Mar. Jun. Sep. Dec.



<b>Stars Reconciliation</b>	<b>Mid-2 Fair Value:</b> 19.46 to <b>66.55</b>	<b>Current price:</b> 60.78 -8.7% Discount
<b>Fair Value:</b> 1	The current share price is below the average fair value calculations or is less than Graham number.	
<b>Rolling 4-yr Div. &gt; 15%:</b> -	For every consecutive 4 year period, within the 10 years, average dividend grow exceeded 15%.	
<b>Dividend Growth Rate:</b> -	The minimum of the 1, 3, 5, 7, 10 year dividend growth rate or 15%, if "Rolling 4-yr Div." > 15%.	
<b>Years of Div. Growth:</b> 1	If the number of years of dividend growth is 10 or more years and penalty if less than 5 years.	
<b>1-Yr. &gt; 5-Yr Growth:</b> -	If 1-year dividend growth exceeds 5 year dividend growth.	
<b>Payout 15% of avg.:</b> OK	Current dividend payout does not exceed 10-year average plus 15%.	
<b>NPV MMA Diff.:</b> (1)	If the NPV of 20 year dividend earnings in excess of MMA earnings is greater than \$2500 per 1000.	
<b>Years to &gt;MMA:</b> -	If the dividend yield exceed the MMA yield in 5 or less years.	
<b>Total Stars</b> <span style="border: 1px solid black; padding: 2px;">1</span>	<1 = Avoid   1 = Very Weak   2 = Weak   3 = Hold   4 = Buy   5+ = Strong Buy	

Historical Data	Average	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Revenues (\$millions):		11,254	11,037	10,201	9,513	8,756	8,067	8,169	8,629	7,757	7,510
Tangible Book Value/Share:		55.71	7.59	8.46	10.81	7.36	3.49	9.10	8.57	8.30	13.09
Cash Flow/Share:		7.20	6.61	5.66	6.19	5.23	1.99	4.93	6.20	12.99	6.69
Earnings Per Share:		4.91	4.27	3.49	3.95	2.92	(0.36)	2.29	3.57	3.23	4.48
Dividends:		2.04	1.91	1.86	1.79	1.73	1.70	1.68	1.60	1.52	1.42
Dividend Increase %:	4.4%	6.8%	2.7%	3.9%	3.5%	1.8%	1.2%	5.0%	5.3%	7.0%	6.77%
Payout Ratio:	49%	42%	45%	53%	45%	59%	NM	73%	45%	47%	32%
Prices:High:		82.42	69.80	74.73	68.79	64.42	62.86	59.75	65.06	70.75	76.63
Prices:Low:		64.01	56.53	55.64	54.81	42.61	41.39	38.99	36.00	47.94	49.13
High Yield:	3.33%	3.19%	3.38%	3.34%	3.27%	4.06%	4.11%	4.31%	4.44%	3.17%	0.00%
Low Yield:	2.31%	2.48%	2.74%	2.49%	2.60%	2.69%	2.70%	2.81%	2.46%	2.15%	0.00%

**Fair Value Section**

**Closing Price:** Recent closing price. A **Star** is added if the closing price is less than the average of "Avg. High Yield Price", "20-Year DCF Price" and "Avg. P/E Price"; or less than the "Graham Number". A **Star** is deducted if the closing price is 5% greater than the "Mid-2 Fair Value" high price.

**Avg. High Yield Price:** Price calculated by dividing current dividend per share by the *average* high dividend yield for each of the last 5-years (dividend per share divided by the year's low share price).

**20-Year DCF Price:** Price calculated by taking the Net Present Value (NPV) of the next 20 years of dividends and the estimated value of the stock at the end of 20 years. Below are the assumptions used for this company:

**Discount rate:** 15.0% **EPS growth rate:** 0.0% **Div. growth rate:** 2.0% **Calculated NPV:** \$19.46

**Avg. P/E Price:** Price calculated by multiplying the EPS (trailing twelve months) times the minimum of: 1.) 5-year average of high and low P/Es or 2.) Last years high P/E.

**Graham Number:** Price calculated by taking the square root of 22.5 times the tangible book value per share times EPS (lower of trailing twelve months or average last 3 years). Benjamin Graham, Warren Buffett's mentor and the father of value investing, developed rules for the defensively screening stocks. This formula uses his principles to calculate the "maximum" price one should pay for the stock. He believed, as a rule of thumb, the product of P/E ratio and price-to-book should not be more than 22.5 (P/E ratio of 15 x price-to-book value of 1.5). The 15 P/E was a result of Graham wanting his portfolio to have a yield equal yield to that of a AA bond (back then around 7.5%). The inverse of this yield is 1 divided by 7.5%. That works out to 13.3; he rounded up to 15.

**Mid-2 Fair Value:** Range of fair values with the low-end equal to minimum of the four fair value calculations above, and the high-end is equal to the average excluding the highest and lowest fair value calculations. The discount or premium is calculated using the high-end of the range.

**Dividend Analytical Data**

**Rolling 4-yr Div. > 15%:** Dividends will double every 5 years if they grow by 15%. This test is TRUE, and a **Star** is added, if dividends grew on average in excess of 15% for each consecutive 4 year periods, within the last 10 years of history.

**Dividend Growth Rate:** The minimum dividend growth rate of the 1, 3, 5, 7, 10 year dividend growth rate or 15%, if "Rolling 4-yr Div. > 15%". A **Star** is awarded if the dividend growth is 15% or greater.

**Years of Div. Growth:** The number of consecutive years of dividend growth. A **Star** is awarded for consecutive growth in 10 or more years. A **Star** is deducted if the number of years is less than 5 years.

**1-Yr. > 5-Yr Growth:** This test identifies if dividend growth is accelerating. A **Star** is awarded if the 1-year dividend rate growth exceeds 5-year dividend growth rate.

**Payout 15% of avg.:** This test identifies companies who have significantly increased dividends paid as a % of earnings. A **Star** is deducted if the current dividend payout exceeds the 10-year average by 15 points (+15%).

**Dividend Income vs. MMA**

**MMA Rate:** Representative high-yield money market rate (MMA) at a financial institution that is insured by the FDIC up to the legal limit (\$100,000). The value is an estimate of what the rate will average over the long-term.

**NPV MMA Diff.:** The basis of this calculation is a hypothetical \$1,000 investment in this stock and a MMA earning the MMA Rate above. The value calculated is the net present value (NPV) of the difference between the dividend earnings of this investment and the interest income from the MMA over 20 years. Other assumptions include: 1.) dividends grow at the Dividend Growth Rate above, 2.) dividends are reinvested, 3.) share price appreciation is not considered, 4.) interest income is reinvested in the MMA. A **Star** is added for amounts over 10,000 (less \$2,500 if an Achiever, less \$5,000 if an Aristocrat) and a **Star** is deducted if the amount is negative.

**Years to >MMA:** The number of years until dividend earnings exceed the earnings from a hypothetical money market account earning the MMA rate above, considering the other assumptions listed in "NPV MMA Diff." above. A **Star** is added if the number of years is less than 5.

**S&P 500 | Aristocrat | Achiever:**

**S&P 500:** Widely regarded as the best single gauge of the U.S. equities market, this world-renowned index includes 500 leading companies in leading industries of the U.S. economy. S&P 500 is a core component of the U.S. indices that could be used as building blocks for portfolio construction.

**Aristocrat:** S&P 500 Dividend Aristocrats is designed to measure the performance of S&P 500 index constituents that have followed a policy of consistently increasing dividends every year for at least **25** consecutive years.

**Achiever:** The Broad Dividend Achievers™ Index. Eligible companies must be incorporated in the U.S. or its territories, trade on the NYSE, NASDAQ or AMEX, and have increased its annual regular dividend payments for the last **10** or more consecutive years.

**Disclaimer**

The above quantitative stock analysis, including the Star rating, is mechanically calculated and is based on historical information. The analysis assumes the stock will perform in the future as it has in the past. This is generally never true. Material presented here is for informational purposes only. Before buying or selling a security, you should do your own research and reach your own conclusion.