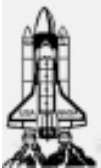


## Tips, Tricks, & Techniques

# Price Variant Quotient (PVQ)

## Price Variant Quotient (PVQ)

Gayle Olson's  
methodology for the selection of an  
alternative Low Stock Price  
in the Stock Study Process



The Price Variant Quotient (aka: PVQ) technique is not for the faint of heart or beginners. The name alone should scare most off; however, in my opinion, the selection of the Potential Low Price is the most critical judgment item in the Stock Study Process; thus, making any and all discussions on the topic relevant.

After listening to all my talk of numbers, please remember that Toolkit makes the calculation very easy with a simple click of your mouse.

### 3 PRICE, PRICE/EARNINGS RATIO and DIVIDEND ANALYSIS

		CURRENT PRICE	28.490	52-WEEK HIGH	33.740	52-WEEK LOW	18.810		
Fiscal Year		High Price	Low Price	EPS	High P/E	Low P/E	Dividend	% Payout	% High Yield
1	2004	16.5	8.6	0.44	37.4	19.5	0.000	0.0	0.0
2	2005	18.0	10.3	0.55	32.5	18.6	0.000	0.0	0.0
3	2006	16.9	10.8	0.63	26.7	17.1	0.000	0.0	0.0
4	2007	36.4	15.0	0.86	42.4	17.5	0.000	0.0	0.0
5	2008	45.1	23.7	1.25	36.1	18.9	0.000	0.0	0.0
6	AVERAGE	26.6	13.7					0.0	
AVERAGE P/E RATIO		26.6	PROJECTED P/E RATIO		17.8	TTM EPS		1.42	
CURRENT P/E RATIO		20.0	PEG RATIO		1.4	FTM EPS		1.60	
RELATIVE VALUE		75.2%	PROJ. RELATIVE VALUE		67.0%				

### 4 EVALUATING REWARD and RISK over the next 5 years

$$PVQ = (13.7 / 26.6) * 33.74 = 17.4$$

#### A FUTURE HIGH PRICE ANALYSIS - NEXT 5 YEARS

Selected High P/E 35.0 25.0 X Estimated High Earnings/Share 2.25 = Forecast High Price \$ 56.3

#### B FUTURE LOW PRICE ANALYSIS - NEXT 5 YEARS

(a) Avg. Low P/E 18.3 17.0 X Estimated Low Earnings/Share 1.25 1.42 = \$ 24.2

(b) Average 5-Year Low Price = 13.7

(c) Recent Severe Low Price = 15.0

(d) Price Dividend/Yield Support = Present Div. + High Yield = 0.000 + 0.000 = 0.0

Selected Estimated Low Price = \$ 17.4

Gayle Olson's PVQ methodology simply stated for the Selected Low Price is the ratio of the 5 year Low to High stock price times the 52-week high.

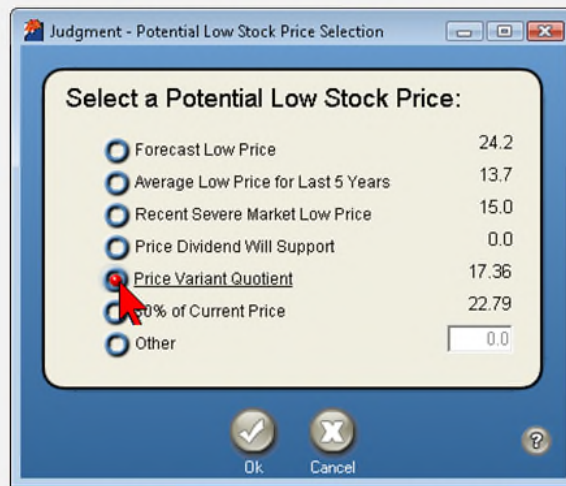
I am going to walk you through the numbers but you need not listen for all you really must know is to click on Price Variant Quotient in the Low Price Selection window

Close your ears and look away 'cause here come the numbers... .

1. Sum the last 5 years of High Prices, then divide by 5 for the Average High Price in the last 5 years.
2. Divide the Average Low Price by the Average High Price.
3. Multiply by the 52-Week High Price.

or

In the Judgment - Potential Low Stock Price Selection window, click on Price Variant Quotient



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3

This sums up your choices.

# Potential Low Stock Price

- 4B(a) -> Most often used selection for Growth Companies without significant dividend
- 4B(b) -> Used for cyclical companies, e.g., auto manufacturers
- 4B(c) -> Used for turnaround or otherwise volatile and unpredictable companies; usually not well suited to this Stock Study methodology
- 4B(d) -> Large companies with significant dividend (>35%)
- 4B -> Price Variant Quotient
- 4B -> 80% of Current Price
- 4B -> Other



This is a quick summary of all the selections for the potential low price.

The Other choice is a valuable addition for your judgment. This provides an out when the present price of the stock is less than any of the other computer generated numbers and your judgment dictate a higher choice than the arbitrary 80% of the current price.

# A Conservative PVQ

Year	High	Low	Ratio
1999	2.96	1.41	0.47
2000	2.33	0.45	0.19
2001	5.90	0.38	0.06
2002	7.33	3.53	0.48
2003	8.74	5.21	0.60
2004	16.48	8.59	0.52
2005	18.05	10.27	0.57
2006	16.92	10.82	0.64
2007	36.35	15.02	0.41
2008	45.10	23.69	0.53
Sum(Last5) ->	132.89	68.38	0.51
52WkHigh ->	33.74		0.41
PVQ ->	17.36		
Conservative PVQ ->	13.94		

The Conservative PVQ uses the lowest Ratio of Low to High within the last 5 years times the 52 weeks high price

← Lowest

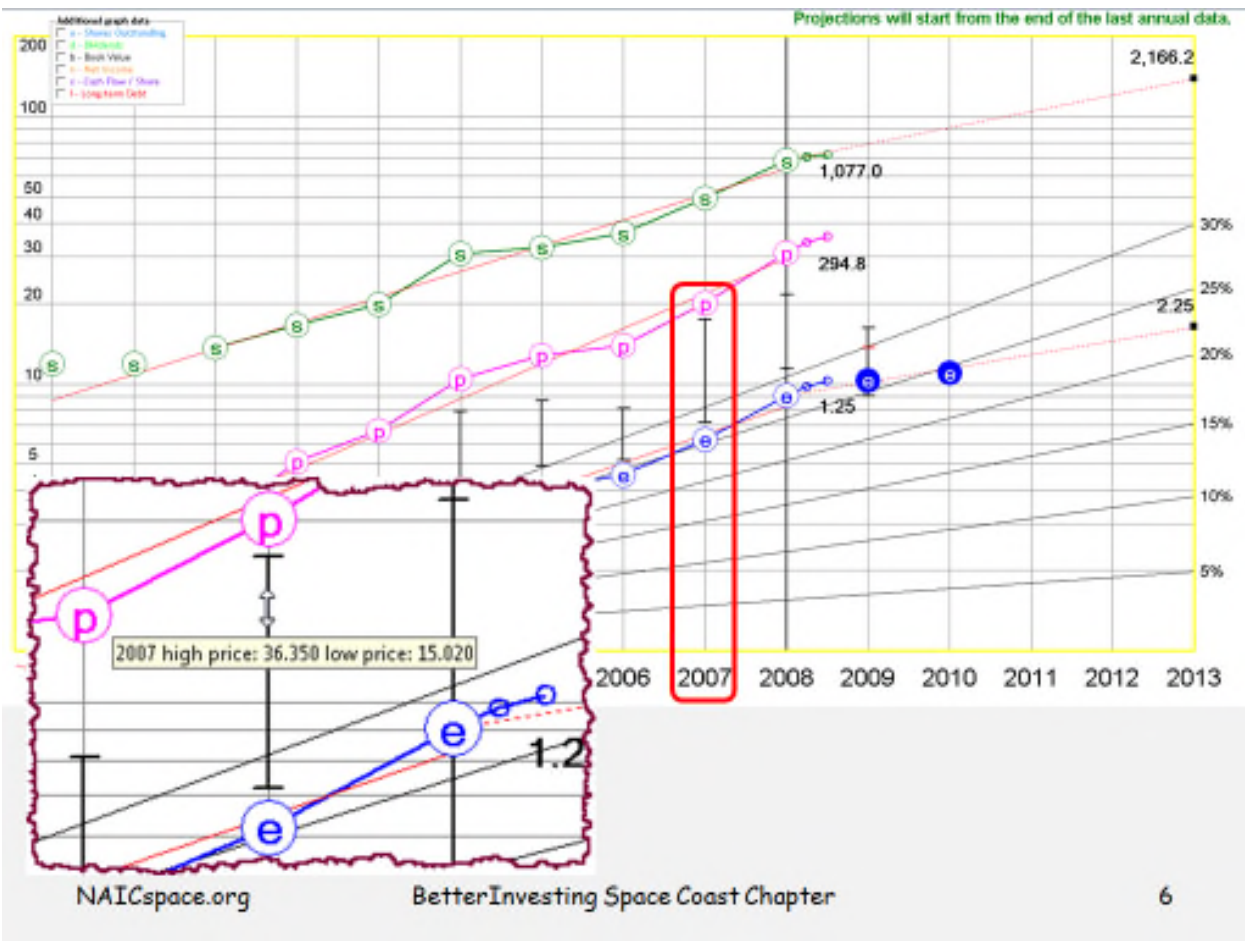
$$(15.02/36.35) * 33.74 = 13.94$$

For the full time geeks, nerds, and other with too much time on their hands there is the conservative PVQ.

For this Stock Study this is the selection that I would use. I would enter the number in the Low Price Selection window using Other.

The Conservative PVQ was first introduced by Bob Adams.





For the really lazy, like me, you may also pick the longest price bar in the last 5 years by inspection. This will return the lowest ratio of Low to High Price. Note the year 2007 is the same as we saw for the lowest ratio on the previous page. Now hover your cursor on that price bar to see the low price of 15.02 and divide it by the high price of 36.35 to finally multiply by the 52 week high of 33.74. Finally if you are not able to easily distinguish which price bar is the longest then it just does not matter. The value calculated by Toolkit 6 will work just fine.

# References and Studies

- [Using NAIC's Stock Study Tools on Donaldson \(01 August 1998\)](#)  
price variance quotient or PVQ... PVQ...Using NAIC's Stock Study Tools on Donaldson ToolsinAction The Donaldson Company... is a manufacturer of filtration devices... used in an assortment of applications...
- [Home Depot Stock Study and Comparison with Lowe's \(01 March 2006\)](#)  
Variance Quotient (PVQ... Quotient (PVQ...Home Depot Stock Study and Comparison with Lowe's Gayle Olson details his research... and stock analysis for Home Depot and uses... the BetterInvesting Stock Comparison...

## Notes:

1. Sadly I have lost the original piece in the BI BITS magazine by Gayle Olson on Price Variant Quotient. However, there are two stock studies in the BetterInvesting achieves by Gayle that you may search out or access from the NAICspace website.
2. 20150111 revision corrected an error on page 3 found and reported by Marty Eckerle.

Created: 091016  
Revised: 100114, 150111  
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