Companion document for

Quantitative Value Investing

10 Rules For Buying Stocks & Shares

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Narrated by: Becky White

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I really enjoyed putting this audiobook together and hope that you enjoy listening to it. If you have any questions or feedback, you can contact me directly at joe@jbmarwood.com.

I also hope you can join me at the following websites where you will find more content and discussion. I set up both websites to help traders and investors navigate the markets and it's something I really enjoy doing. Make sure to check them out at: http://jbmarwood.com and http://profitsquawk.com.

Video Course

Also, please note that there is a video course to go along with this audiobook (and this book was created in response to a number of requests from students inside the course itself who wanted to see the strategy in book form). If you would like to join the course, watch the walkthrough videos and see the system tested in real time, simply use the link http://jbmarwood.com/valuecourse and claim the special audiobook discount. The video course is free to those who have purchased this audiobook.

CHAPTER 1: GETTING STARTED

Table 1

The 10 Ben Graham Rules:

- 1) An earnings-to-price yield of twice the triple-A bond. If the triple-A bond yield is, say 8%, then the required earnings yield is 16%. In reciprocal form, that's a price/earnings ratio of 6.25.
- 2) A P/E ratio down to four-tenth of the highest average P/E ratio the stock attained in the most recent five years. (Average P/E ratio was defined as average stock price for a given year divided by the earnings for that year.)
- 3) A dividend yield of two-thirds the triple-A bond yield.
- 4) A stock price down to two-thirds of tangible book value per share.
- 5) A stock price down to two-thirds of "net current asset value" or "net quick liquidation value." This figure is defined as current assets less total debt. Fixed assets are not included.
- 6) Total debt less than tangible book value.
- 7) Current ratio (current assets divided by current liabilities) of two or more.
- 8) Total debt equal or less than twice the net quick liquidation value as defined in No.5.
- 9) Earnings growth over the most recent ten years of 7% compounded - that is a doubling of earnings in a ten-year period.
- 10) Stability of growth in earnings, defined as no more then two declines of 5% or greater in year-end earnings (relative to the previous year) in the most recent ten years.

src: investmenttools.com

Table 2

Report 1: Percentage of U.S. Equity Funds Outperformed by Benchmarks						
Fund Category	Comparison Index	One-Year (%)	Three-Year (%)	Five-Year (%)	Ten-Year (%)	
All Domestic Equity Funds	S&P Composite 1500 [®]	87.23	76.77	80.82	76.54	
All Large-Cap Funds	S&P 500	86.44	76.25	88.65	82.07	
All Mid-Cap Funds	S&P MidCap 400	66.23	70.48	85.37	89.71	
All Small-Cap Funds	S&P SmallCap 600	72.92	80.40	86.55	87.75	
All Multi-Cap Funds	S&P Composite 1500	83.74	76.31	84.02	84.03	

src: Standardandpoors.com SPIVA

Table 3

Report 2: Survivorship and Style Consistency of U.S. Equity Funds (cont.)						
Fund Category	No. of Funds at Start	Survivorship (%)	Style Consistency (%)			
Five-Year						
All Domestic Funds	2972	75.98	51.68			
All Large-Cap Funds	1066	73.36	56.10			
All Mid-Cap Funds	458	75.33	43.45			
All Small-Cap Funds	647	79.44	59.04			
All Multi-Cap Funds	801	77.03	44.57			

src: Standardandpoors.com SPIVA

Table 4 Introducing the 10 Rules			
The Buy Rules	The Rules in Portfolio 123		
Rule Zero - Liquidity	PctAvgDailyTot(20) < 10		
Rule 1 - Market cap	MktCap > 50		
Rule 2 - Minimum price	Close(0) > 1		
Rule 3 - Price-earning ratio	PEExclXorTTM < 10		
Rule 4 - Forward price-earnings ratio	ProjPENextFY < 10		
Rule 5 - Price-to-sales	Pr2SalesTTM < 10		
Rule 6 - Price-to-book	Pr2BookQ < 10		
Rule 7 - Price-to-free cash flow	Pr2FrCashFlQ < 10		
Rule 8 - Current ratio	Curratiottm > 1		
Rule 9 - 5-Year EPS growth	EPS5YCGr% > 5		
Rule 10 - Momentum	Close(0) > (1-20/100)*HighVal(252,0,#high)		
And here is the sell rule:			
Sell Rule - Momentum/Cut your losses	Close(0) > (1-30/100)*HighVal(252,0,#high)		

Table 4 Introducing the 10 Rules

Rule Zero - Liquidity

Rule 1 - Market cap

Rule 2 - Minimum price

Rule 3 - Price-earning ratio

Rule 4 - Forward price-earnings ratio

Rule 5 - Price-to-sales

Rule 6 - Price-to-book

Rule 7 - Price-to-free cash flow

Rule 8 - Current ratio

Rule 9 - 5-Year EPS growth

Rule 10 - Momentum

And here is the sell rule:

Sell Rule - Momentum/Cut your losses

CHAPTER 2: PREPARATION

Figure 1 Portfolio 123 General Settings Tab

GENERAL POSITION UNIVERSITY OF SIZING 6 RANKI	TO DIV SELL STOPLOSS				
PREV NEXT REVIEW RE-RUN	SIMULATION				
Simulation Name	Marwood Value Model				
Category	Unclassified ▼				
Starting Capital	100,000				
Benchmark	(S&P 500 🔹				
Commission each Trade	10.0 • Flat Fee O Certs/Share O % Of Total				
Slippage % (of trade amount)	0.5 Fixed Variable				
Transaction Type	● Long ⑤ Short				
Use Margin	● No ② Yes				
Management Fee % (year)	0.0 Management fees are deducted at each rebalance				
Rebalance Frequency	2 Weeks ¢				
Price for Transactions	Next Open ¢				
Allow sold holdings to be re-bought at current rebalance	Yes				
Transaction Save	Yes No Temporary (6 months) Check 'No' to run faster simulations				
Visibility	Private				

CHAPTER 3: THE BUY RULES

Table 5 a PE ratio of 8.5 indicates a company where the market is pricing in zero growth.

PE Ratio	8.5	13.5	18.5	28.5	48.5
Expected Growth Per Year	0	2.50%	5%	10%	20%

Figure 2



CHAPTER 4: ADDITIONAL SETTINGS

No figures

CHAPTER 5: PUTTING THE RULES INTO ACTION

Figure 3.

Copy settings from an exist	ing Ranking System	
Name	Momentum 1	
Ranking Method	Percentile NAs Negative	
Visibility	Private 0	
Category	Unclassified ▼	

Figure 4.

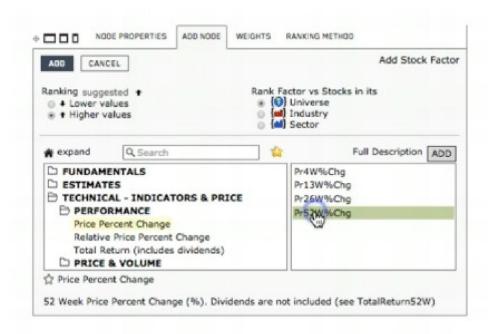


Figure 5. Simulator Settings

GENERAL POSITION UNIVER	RILY SELL STOPLOSS				
PREV NEXT REVIEW RE-RUN	SIMULATION				
Simulation Name	Marwood Value Model				
Category	Unclassified ▼				
Starting Capital	100,000				
Benchmark	S&P 500 🔹				
Commission each Trade	10.0 • Flat Fee O Certs/Share O % Of Total				
Slippage % (of trade amount)	0.5 Fxed Variable				
Transaction Type	● Long ⊝ Short				
Use Margin	® No ⊙ Yes				
Management Fee % (year)	0.0 Management fees are deducted at each rebalance				
Rebalance Frequency	2 Weeks \$				
Price for Transactions	Next Open				
Allow sold holdings to be re-bought at current rebalance	● Yes ○ No				
Transaction Save	○ Yes ○ No ● Temporary (6 months) Check 'No' to run faster simulations				
Visibility	Private \$				

Figure 6. Position Sizing

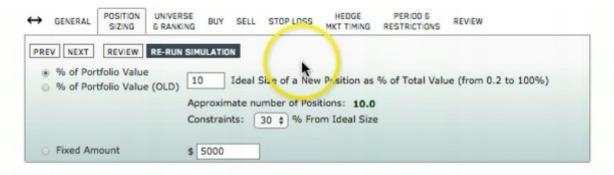


Figure 7. Universe & Ranking Tab

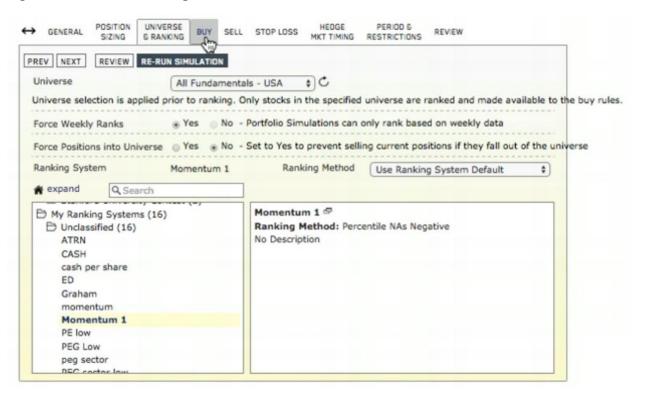


Figure 8. Buy Rules

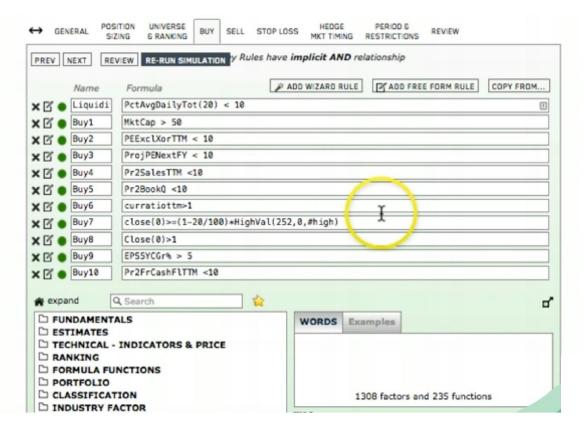


Figure 9. Sell Rules

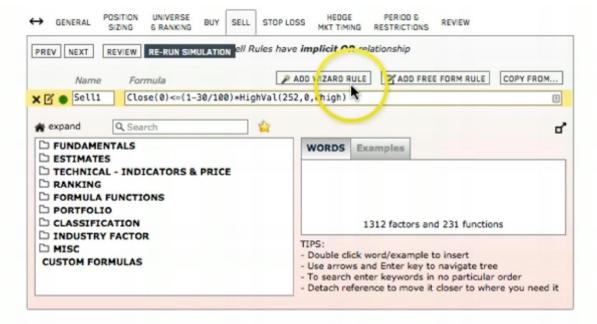


Figure 10. Stop losses and market timing hedges



CHAPTER 6: STRATEGY RESULTS

Figure 11.

GENERAL POSITION UNIVERSE SIZING & RANKING	BUY SELL	STOP LOSS	MKT TIMING	PERIOD 6 RESTRICTIONS	REVIEW
EV NEXT REVIEW RE-RUN SI	MULATION				w
Start Date - End Date	44 4 01/01/	2000 - 12/3	1/2010 > >>	Max R	ank Dat e 1/02/1999 tank Date4/25/2015 trice Date4/24/2015
Exposure List	None	•			
Restrict Buy List					
Enter ticker(s) separated by spa	d				
ADD FROM PREVIOUS RUNS					
Restrict Sell List					
Enter ticker(s) separated by spa	c				4
Load Global Restrictions Click here to see Global Restricti	Yes ON	0			
Allow Mergers	○ Yes ● N				

Figure 12.

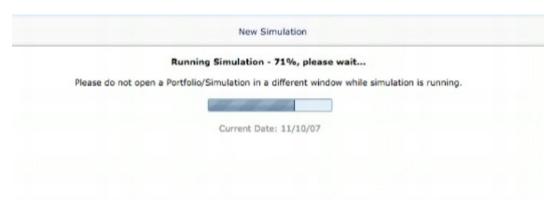


Figure 13. Summary of Key Results

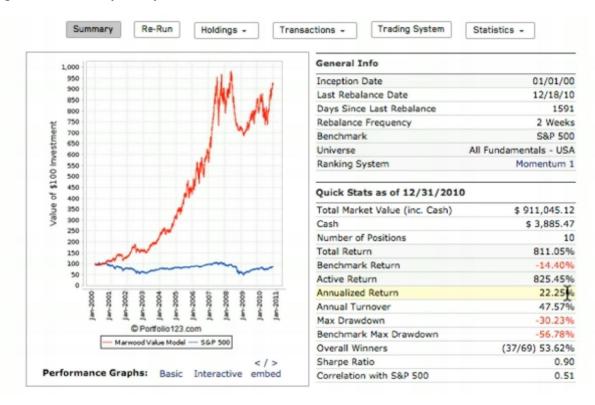


Figure 14.

Running Simulation - 98%, please wait...

Please do not open a Portfolio/Simulation in a different window while simulation is running.

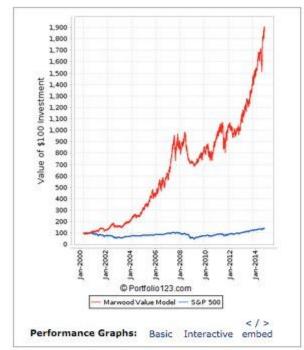


Current Date: 12/13/14

Figure 15.



Figure 16.



General Info	
Inception Date	01/01/00
Last Rebalance Date	12/27/14
Days Since Last Rebalance	121
Rebalance Frequency	2 Weeks
Benchmark	S&P 500
Universe	All Fundamentals - USA
Ranking System	momentum
Quick Stats as of 12/31/201	4
Total Market Value (inc. Cash)	\$ 1,859,330.62
Cash	\$ 33,748.05
Number of Positions	10
Total Return	1,759.33%
Benchmark Return	40.13%
Active Return	1,719.20%
Annualized Return	21.52%
Annual Turnover	37.02%
Max Drawdown	-30.23%
Benchmark Max Drawdown	-56.78%
Overall Winners	(45/84) 53.57%
Sharpe Ratio	0.90
Correlation with S&P 500	0.57

No	Ticker		Weight	Return	Shares	Value
1	CORE	[5D] [1Y]	16.01%	328.19%	4,800.0	\$297,264.00
2	ALK	[5D] [1Y]	13.36%	304.27%	4,152.0	\$248,123.52
3	WDC	[5D] [1Y]	11.32%	75.44%	1,899.0	\$210,219.30
4	INT	[5D] [1Y]	11.28%	195.66%	4,464.0	\$209,495.52
5	SANM	[5D] [1Y]	9.56%	69.22%	7,545.0	\$177,533.86
6	UGI	[5D] [1Y]	9.07%	144.33%	4,432.5	\$168,346.34
7	STX	[5D] [1Y]	7.98%	45.99%	2,228.0	\$148,162.00
8	LLY	[5D] [1Y]	7.67%	95.33%	2,065.0	\$142,464.34
9	GLT	[5D] [1Y]	7.39%	88.22%	5,369.0	\$137,285.33
10	TECD	[5D] [1Y]	4.67%	41.32%	1,371.0	\$86,688.33

Date	Туре	Ticker		Shares	Price
12/31/14	DIV	WDC	[5D] [1Y]	0.0	\$0.00
12/31/14	DIV	GLT	[5D] [1Y]	0.0	\$0.00
12/31/14	DIV	INT	[5D] [1Y]	0.0	\$0.00
12/31/14	DIV	UGI	[5D] [1Y]	0.0	\$0.00
12/22/14	DIV	CORE	[5D] [1Y]	0.0	\$0.00
12/10/14	DIV	LLY	[5D] [1Y]	0.0	\$0.00
12/03/14	DIV	ALK	[5D] [1Y]	0.0	\$0.00
11/25/14	DIV	STX	[5D] [1Y]	0.0	\$0.00
11/03/14	DIV	GLT	[5D] [1Y]	0.0	\$0.00
10/15/14	DIV	WDC	[5D] [1Y]	0.0	\$0.00
			view all		

Figure 17.

Top Hold	ngs	Last 10 Trades
No Ticker	Weight Return Shares Valu	Date Type Ticker Shares Price
1 CORE	[5D] [1Y] 16.01% 328.19% 4,800.0 \$297,264.0	12/31/14 DIV WDC [5D] [1Y] 0.0 \$0.00
2 ALK	[5D] [1Y] 13.36% 304.27% 4,152.0 \$248,123.5	2 12/31/14 DIV GLT [5D] [1Y] 0.0 \$0.00
3 WDC	[5D] [1Y] 11.32% 75.44% 1,899.0 \$210,219.3	12/31/14 DIV INT [5D] [1Y] 0.0 \$0.00
4 INT	[5D] [1Y] 11.28% 195.66% 4,464.0 \$209,495.5	2 12/31/14 DIV UGI [5D] [1Y] 0.0 \$0.00
5 SANM	[5D] [1Y] 9.56% 69.22% 7,545.0 \$177,533.8	12/22/14 DIV CORE [5D] [1Y] 0.0 \$0.00
6 UGI	[5D] [1Y] 9.07% 144.33% 4,432.5 \$168,346.3	\$ 12/10/14 DIV LLY [5D] [1Y] 0.0 \$0.00
7 STX	[5D] [1Y] 7.98% 45.99% 2,228.0 \$148,162.0	12/03/14 DIV ALK [5D] [1Y] 0.0 \$0.00
8 LLY	[5D] [1Y] 7.67% 95.33% 2,065.0 \$142,464.3	4 11/25/14 DIV STX [5D][1Y] 0.0 \$0.00
9 GLT	[5D] [1Y] 7.39% 88.22% 5,369.0 \$137,285.3	3 11/03/14 DIV GLT [5D] [1Y] 0.0 \$0.00
10 TECD	[5D] [1Y] 4.67% 41.32% 1,371.0 \$86,688.3	3 10/15/14 DIV WDC [5D] [1Y] 0.0 \$0.00
	view all	view all

Figure 18.

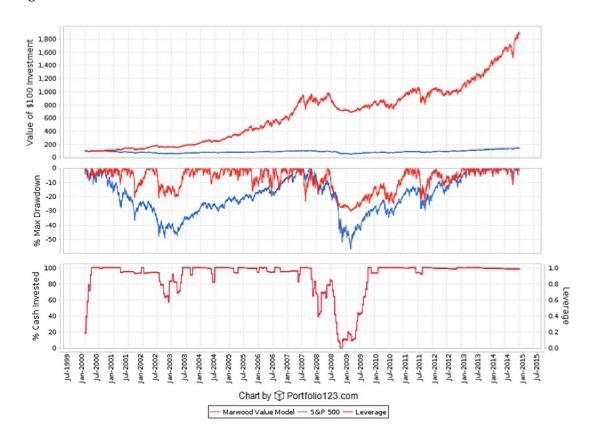


Figure 19. Monthly and yearly performance stats.

Return (%)	1999*	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014**
Model	N/A	13.80	14.49	17.44	47.08	41.96	30.17	44.55	46.43	-18.13	15.08	9.75	11.19	-0.30	38.26	33.59
Benchmark	N/A	-10.14	4 -13.04	-23.37	26.38	8.99	3.00	13.62	3.53	-38.49	23.45	12.78	-0.00	13.41	29.60	11.47
Excess	N/A	23.9	1 27.49	40.81	20.70	32.97	27.16	30.93	42.90	20.35	-8.38	-3.03	11.19	-13.71	8.66	22.12

Figure 20.

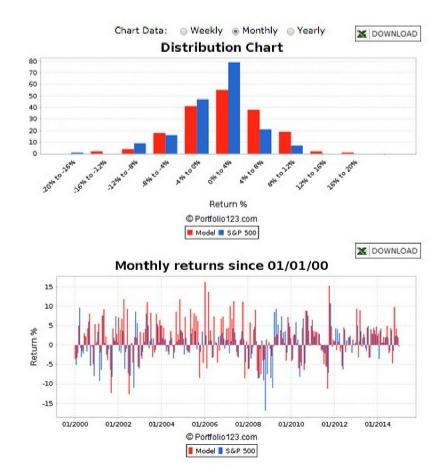


Figure 21.

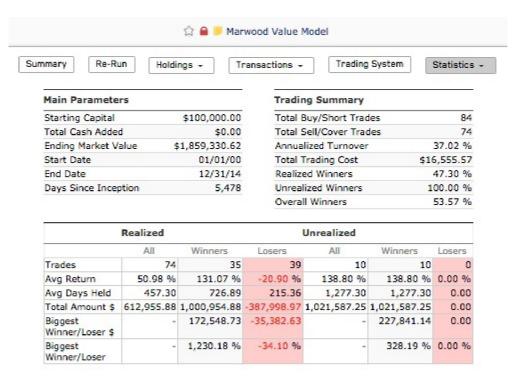


Figure 22. Transactions Page

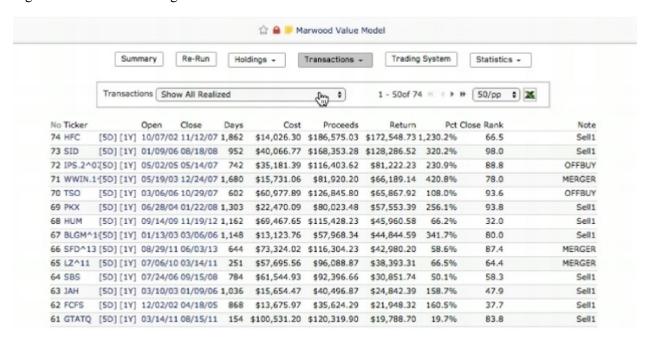
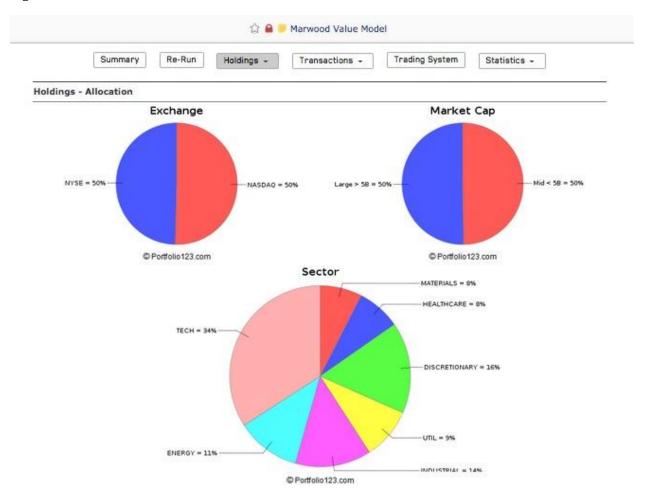


Figure 23. Allocation of Positions



CHAPTER 7: STRESS-TESTING

Figure 24.

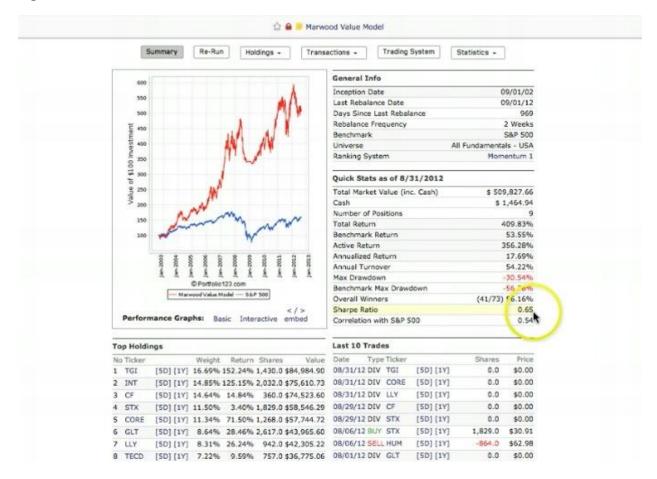


Figure 25.

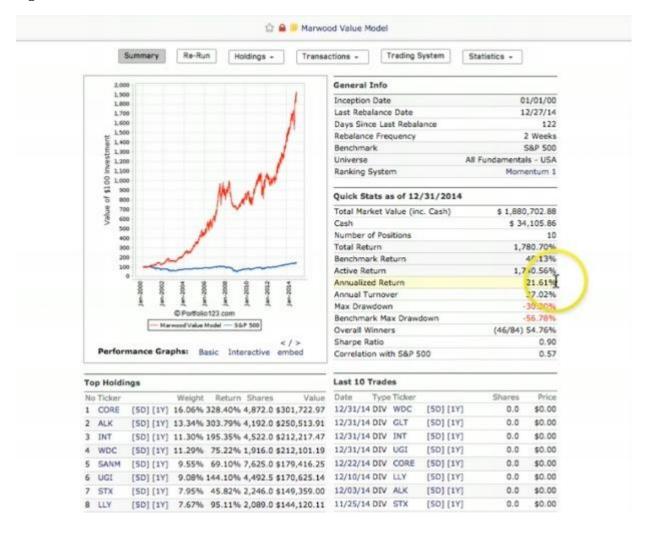


Figure 26.



Figure 27.



Figure 28.

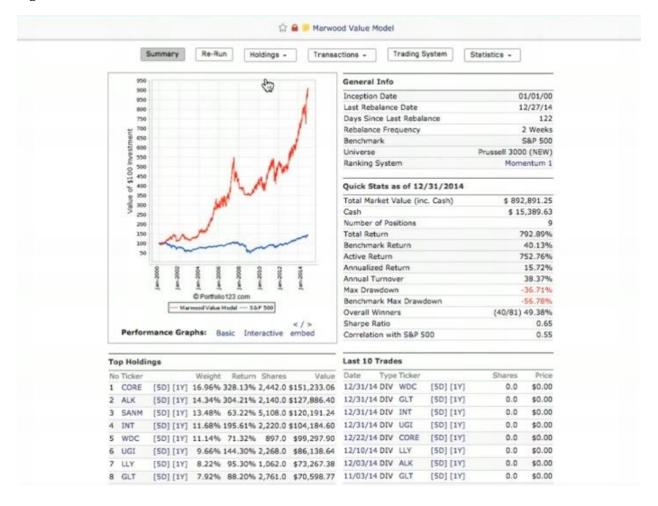


Figure 29.



CHAPTER 8: OBSTACLES AND VARIATIONS

Figure 30. Vanguard 500 exchange traded fund



Figure 31. iShares 7-10 Year Treasury Bond

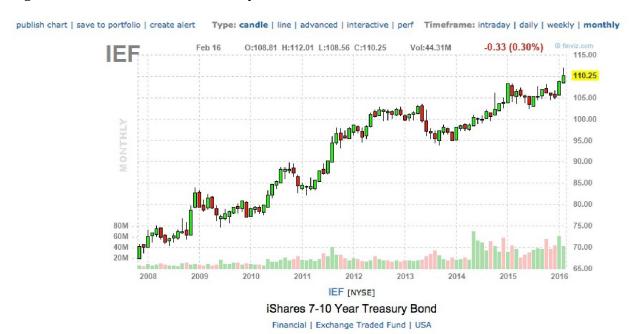


Figure 32.

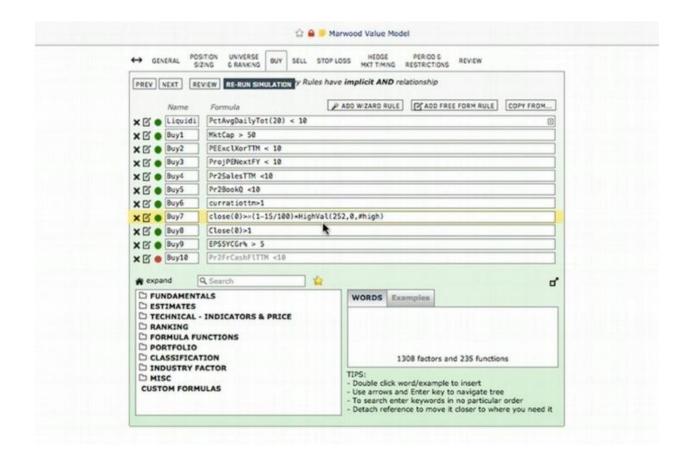
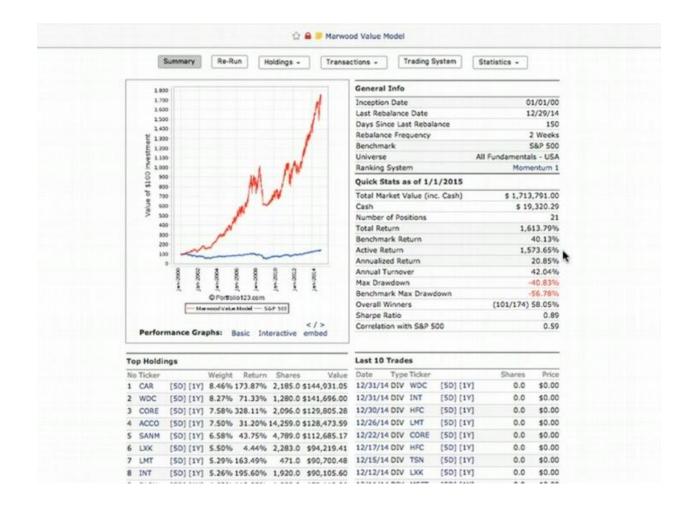


Figure 33.



CHAPTER 9: 10 MORE RULES FOR SUPER-SIZING RETURNS (QUALITATIVE)

Figure 34.

Alimera Sciences, Inc., a pharmaceutical company, engages in the research, development, and commercialization of prescription ophthalmic pharmaceuticals in the United States and internationally. The company focuses on diseases affecting the back of the eye or retina. The company offers ILUVIEN, an intravitreal implant for the treatment of diseater cancular edema (DME), which is a disease of the retina that affects individuals with diseaters could lead to severe vision loss and blindness. Its ILUVIEN is inserted in the back of the patient's eye to believe the state of the development and collection of the patient's eye to the state of the severe vision local dividuals of the severe vision local control of the development and sale of ILUVIEN, and a delivery device to deliver other corticosteroids to the back of the eye for the treatment and prevention of eye diseases in humans (at than uveits) or to treat DME. Alimera Sciences, Inc. was founded in 2003 and is headquartered in Alpharetta, Georgia.

Insider Trading	Relationship	Date	Transaction	Cost	#Shares	Value (\$)	#Shares Total	SEC Form 4
EISWIRTH RICHARD S JR	COO and CFO	Dec 16	Option Exercise	1.33	15,409	20,494	50,383	Dec 17 04:19 PM
Green Kenneth	SVP & Chief Scientific Officer	Dec 16	Option Exercise	1.33	44,118	58,677	92,353	Dec 17 04:18 PM
EISWIRTH RICHARD S JR	COO and CFO	Dec 16	Sale	2.30	15,409	35,399	34,974	Dec 17 04:19 PM
EISWIRTH RICHARD S JR	COO and CFO	Dec 15	Option Exercise	1.33	31,260	41,576	66,234	Dec 17 04:19 PM
EISWIRTH RICHARD S JR	COO and CFO	Dec 15	Sale	2.32	31,260	72,520	34,974	Dec 17 04:19 PM
Flynn James E	Possible Member of 10% Group	Dec 08	Buy	3.04	55,059	167,545	4,760,408	Dec 08 06:35 PM
Flynn James E	Possible Member of 10% Group	Dec 07	Buy	3.00	136,588	409,696	4,732,879	Dec 08 06:35 PM
Flynn James E	Possible Member of 10% Group	Dec 04	Buy	3.01	80,602	242,338	4,664,585	Dec 08 06:35 PM
Flynn James E	Possible Member of 10% Group	Dec 03	Buy	3.00	106,973	321,176	4,624,284	Dec 03 06:14 PM
Flynn James E	Possible Member of 10% Group	Dec 02	Buy	2.98	110,514	329,752	4,570,798	Dec 03 06:14 PM
Flynn James E	Possible Member of 10% Group	Dec 01	Buy	3.05	25,765	78,550	4,515,541	Dec 03 06:14 PM
Flynn James E	Possible Member of 10% Group	Nov 06	Buy	2.98	73,250	218,483	4,502,658	Nov 10 04:12 PM
Flynn James E	Possible Member of 10% Group	Oct 30	Buy	3.00	16,542	49,626	4,466,033	Nov 03 05:22 PM

Figure 35.

Src: Finviz.com



CHAPTER 10: GOING LIVE

Figure 36.

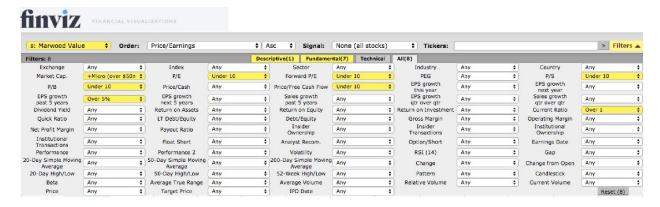
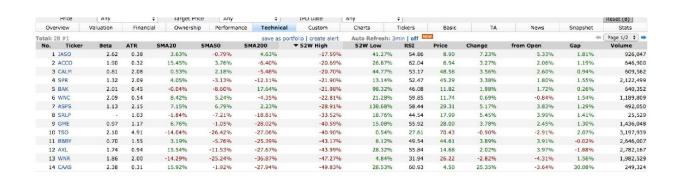


Figure 37.



CHAPTER 11: CONCLUSION

If you have any questions or feedback, feel free to email me directly at <u>joe@jbmarwood.com</u> and visit my blog at http://jbmarwood.com. Thank-you for listening.

BIBLIOGRAPHY & RECOMMENDED READING

Following are a list of the academic papers, articles and books that influenced this book.

PAPERS

Jegadeesh, Narasimhan and Titman, Sheridan, Momentum (October 23, 2001). University Of Illinois Working Paper. Available at SSRN: http://ssrn.com/abstract=299107 or http://dx.doi.org/10.2139/ssrn.299107

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Asness, Clifford S. and Frazzini, Andrea and Israel, Ronen and Moskowitz, Tobias J. and Pedersen, Lasse Heje, Size Matters, If You Control Your Junk (January 22, 2015). Fama-Miller Working Paper. Available at SSRN: http://ssrn.com/abstract=2553889 or http://dx.doi.org/10.2139/ssrn.2553889

Books

What Works on Wall Street, James O' Shaugnessey

Security Analysis, Benjamin Graham

The Intelligent Investor, Benjamin Graham

Buffettology, Mary Anne Buffett

One Up on Wall Street, Peter Lynch

The Little Book That Still Beats The Market, Joel Greenblatt

Quantitative Investing, Fred Piard

4 and 20 Rules For Buying and Selling Shares, Nigel McCArter

A Random Walk Down Wall Street, Burton Malkiel

Screening the Market, Marc Gerstein (creator of Portfolio123)

The Inefficient Stock Market, Robert Haugen

Investment Valuation, Aswath Damodaran

Link to the video course

http://jbmarwood.com/valuecourse

CHAPTER 13: BONUS MATERIAL

Figure 38. VXX Chart



iPath S&P 500 VIX ST Futures ETN Financial | Exchange Traded Fund | USA

Figure 39.



Financial | Exchange Traded Fund | USA

Figure 40.

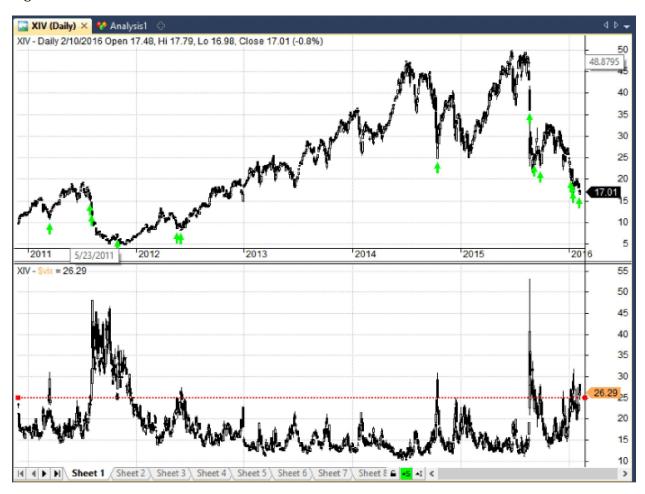
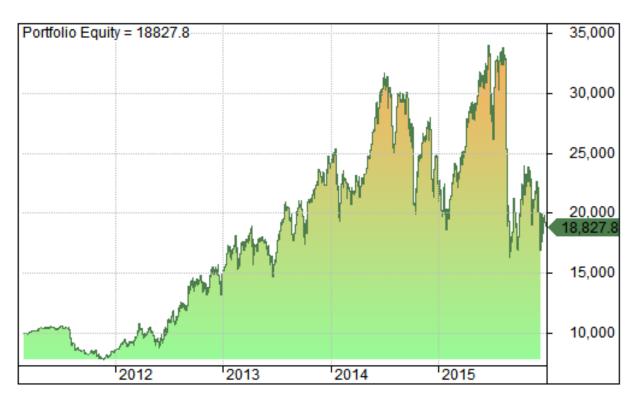


Table 6.

	All trades
Initial capital	10000.00
Ending capital	18827.80
Net Profit	8827.80
Net Profit %	88.28 %
Exposure %	66.84 %
Net Risk Adjusted Return %	132.08 %
Annual Return %	13.97 %
Risk Adjusted Return %	20.90 %
Total transaction costs	0.00

Figure 41.

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About The Author

Joe Marwood is an independent trader and investor specialising in stock trading, stock investing and trading systems. He is a former professional futures trader and now operates through his own private company.

Marwood started his career trading the FTSE 100 future and German Bund for a trading firm in London, UK and he worked right through the financial crisis of 2008/2009. He has a passion for building mechanical trading strategies and uses a blend of fundamental and technical analysis to find low-risk investment opportunities. He was taught how to trade by the former head of trading at a leading German investment bank and is also an established financial writer, author of a number of books on stock trading, and a regular Seeking Alpha contributor. He is also the owner of http://jbmarwood.com and http://profitsquawk.com