

Using Computers to Adapt to Changing Markets

By

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Please Note: Individual companies shown or discussed in this presentation have been used as examples only and are not intended as recommendations of any kind by Anava Capital Management LLC or any of its representatives.



GETTING EVERYTHING ON YOUR SIDE



- **The true price of anything is whatever someone is willing to pay for it.**
- **What people are willing to pay for a stock depends on *their perception* of:**
 - **Its value as a share of a business**
 - **The value that it has in the minds of others**
 - **How these will change in the future**
 - **How long they can afford to wait for a profit**
 - **How confident they are in their ability to judge these things**
- **In quantitative terms these can be reduced to two numbers**
 - **Your estimate of returns vs. time.**
 - **Your estimate of the probable error in that estimate.**

THE USE OF COMPUTERS

- **INFORMATION GATHERING**
 - **Price data**
 - **Financial data**
 - **News**
 - **Both current and historical data**
- **QUANTITATIVE TREND ANALYSIS**
 - **Time series back testing**
 - **Correlation testing**
 - **Extrapolation**
- **WHY BOTHER?**
 - **Stay ahead of the experts. Find opportunities before they are public knowledge.**
 - **Optimize your portfolio for your needs – not someone else's.**

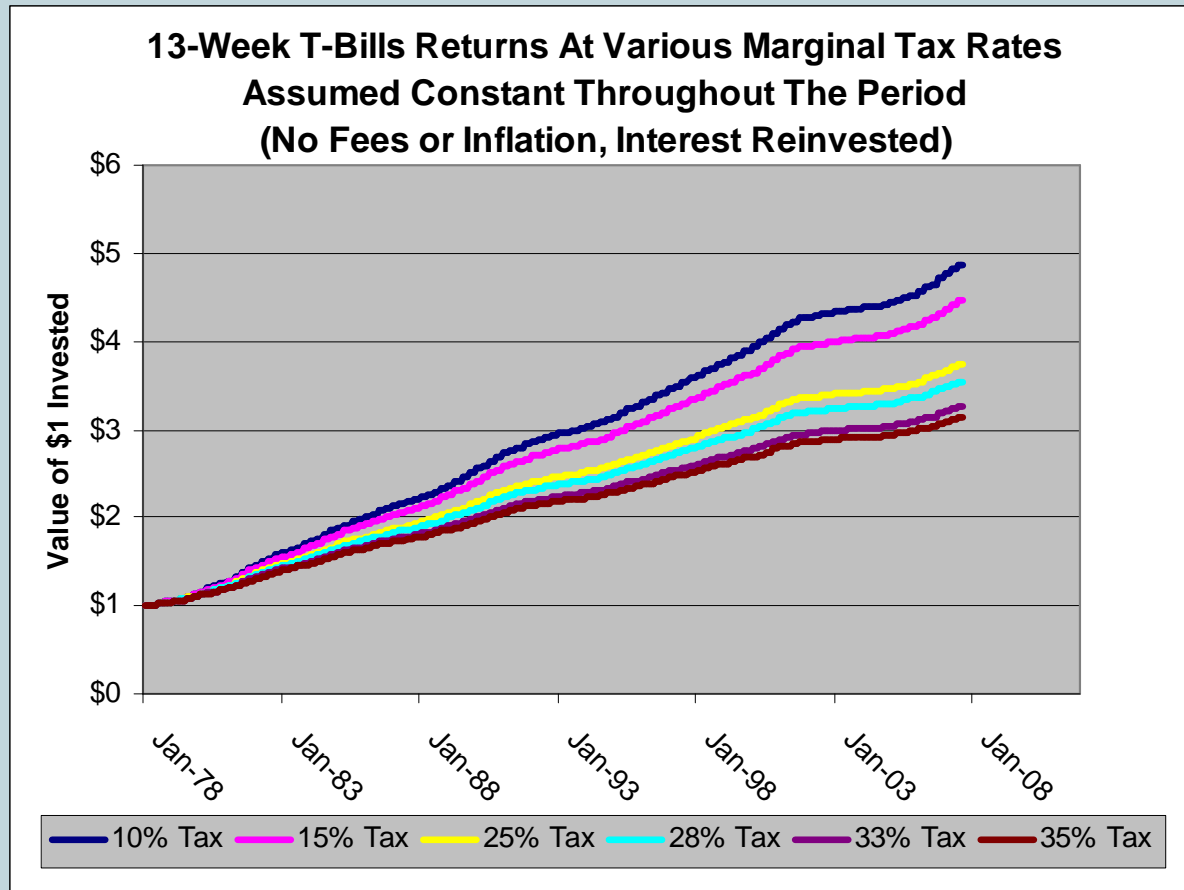


EXAMPLE INFORMATION SOURCES TO BE USED



- **Yahoo Finance: general info – strength is historical data (online – free – <http://finance.yahoo.com/>)**
- **Google Finance: general info – strength is news and price charts (online – free – <http://finance.google.com>)**
- **Risk Grades: risk analysis of securities (online – free)**
- **AAII Stock Investor Pro: fundamental data analysis stand-alone – some data online (\$198/yr to members, \$247/yr to non-members. Membership is \$29/yr.)**
- **VectorVest: combination of fundamental and technical screening plus education (online – \$708/yr)**

REALITY CHECK T-BILLS 1978 – 2008

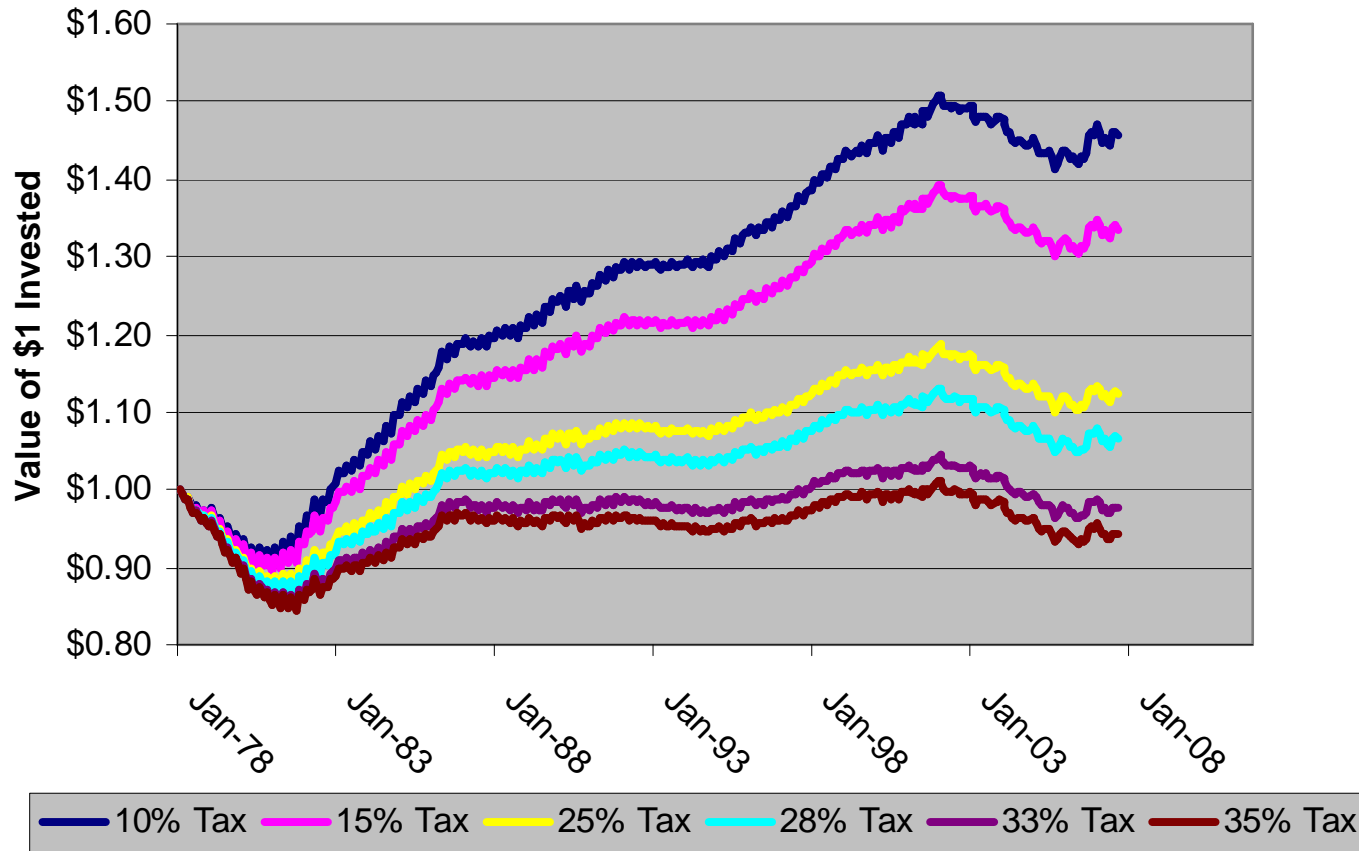


**“RISK-FREE”
TREASURIES
ARE THE
STANDARD TO
WHICH ALL
OTHER
INVESTMENTS
ARE
COMPARED.
ALTHOUGH
INTEREST
RATES VARY,**

**PRINCIPAL IS NEVER LOST. THEY ARE TAXED AT THE
FEDERAL LEVEL ONLY.**

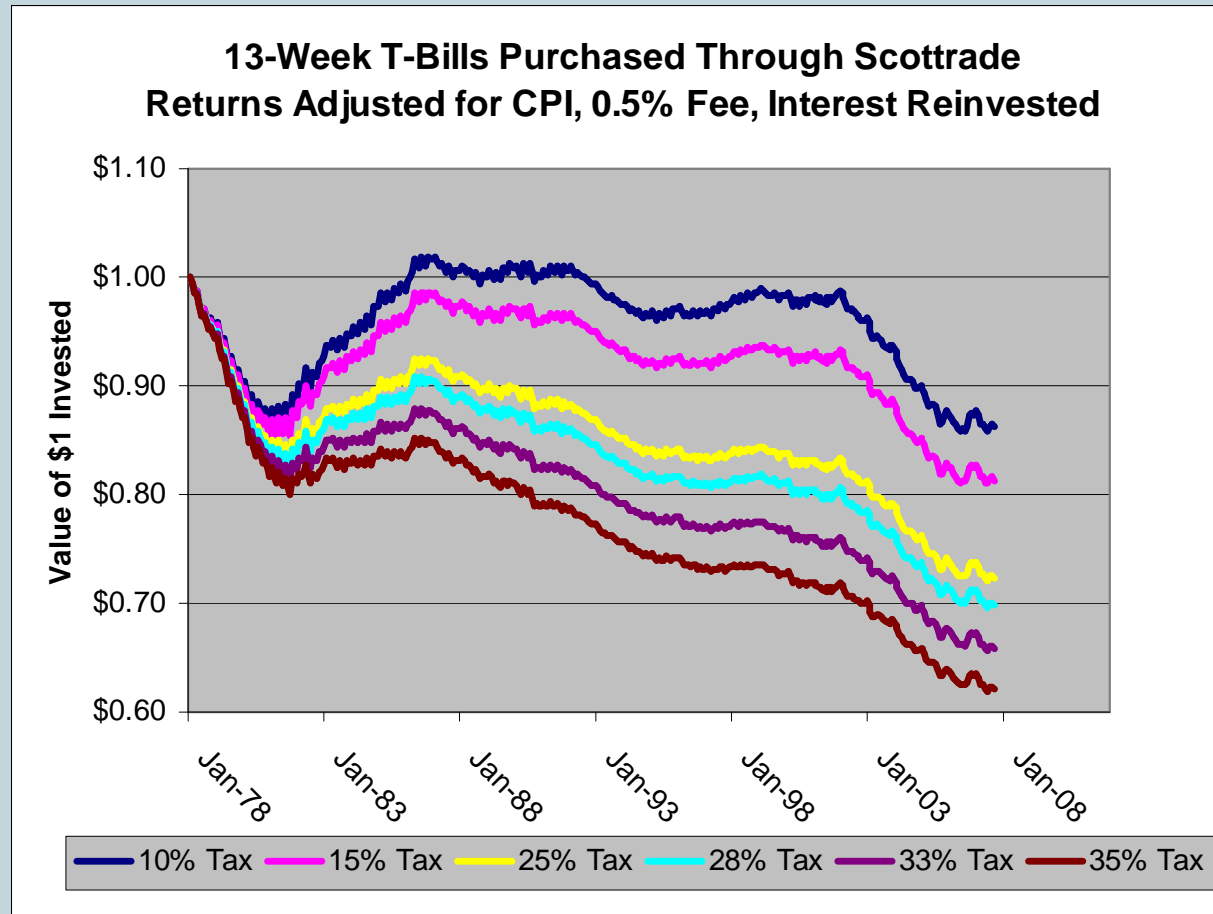
Yahoo Finance Historical Quotes, Symbol ^IRX (<http://finance.yahoo.com/q/hp?s=%5EIRX>)

**13-Week T-Bills Purchased Through Treasury Direct
Returns Adjusted for CPI, No Fees, Interest Reinvested**



CPI Data: Bureau of Labor Statistics, Series Id: CUUR0000AA0 (<http://www.bls.gov/data/home.htm>)

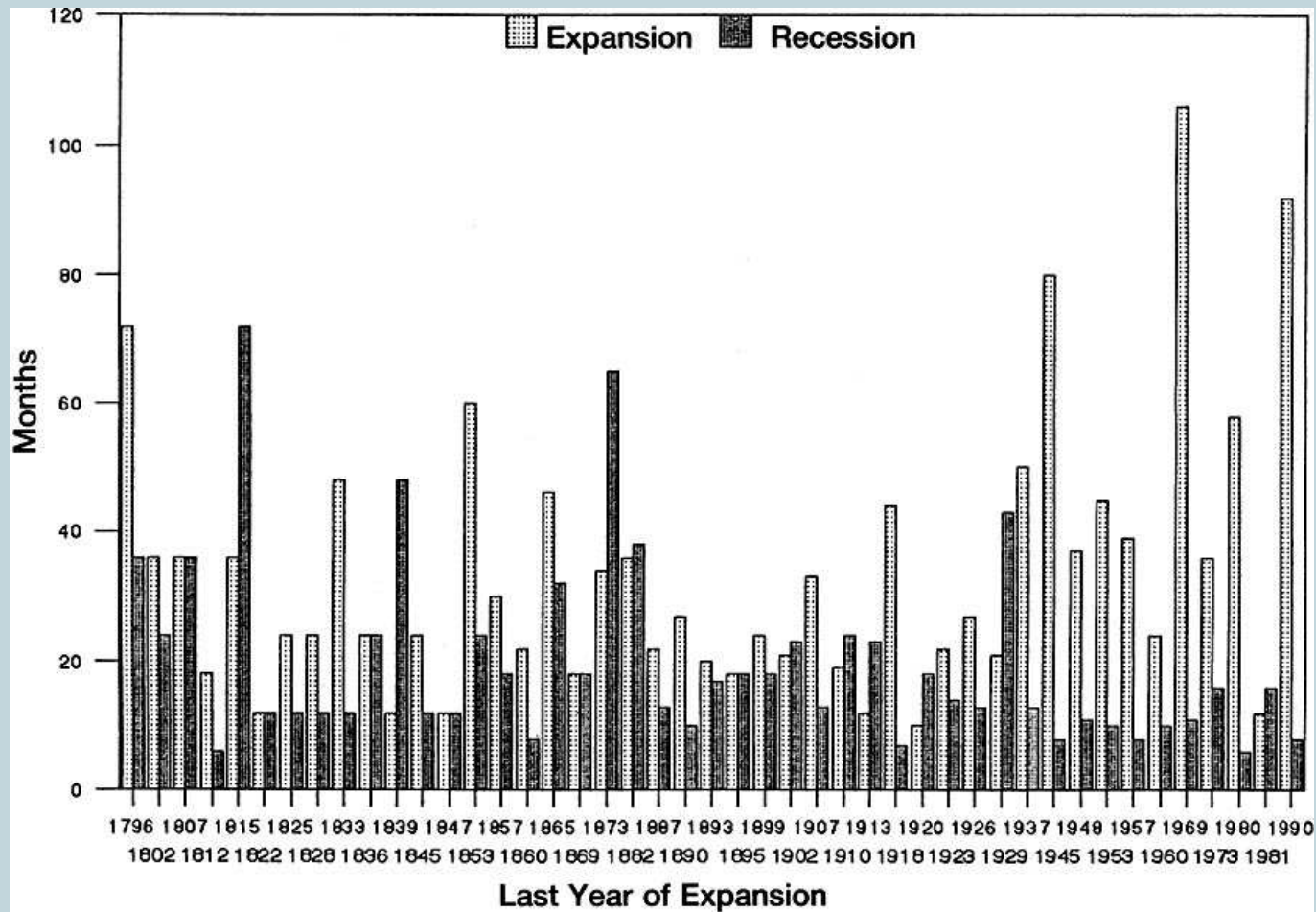
THE EFFECT OF FEES



Taxes, inflation and transaction fees can have a dramatic effect on returns, and should not be neglected.

Fee data from Scottrade website: <http://www.scottrade.com>

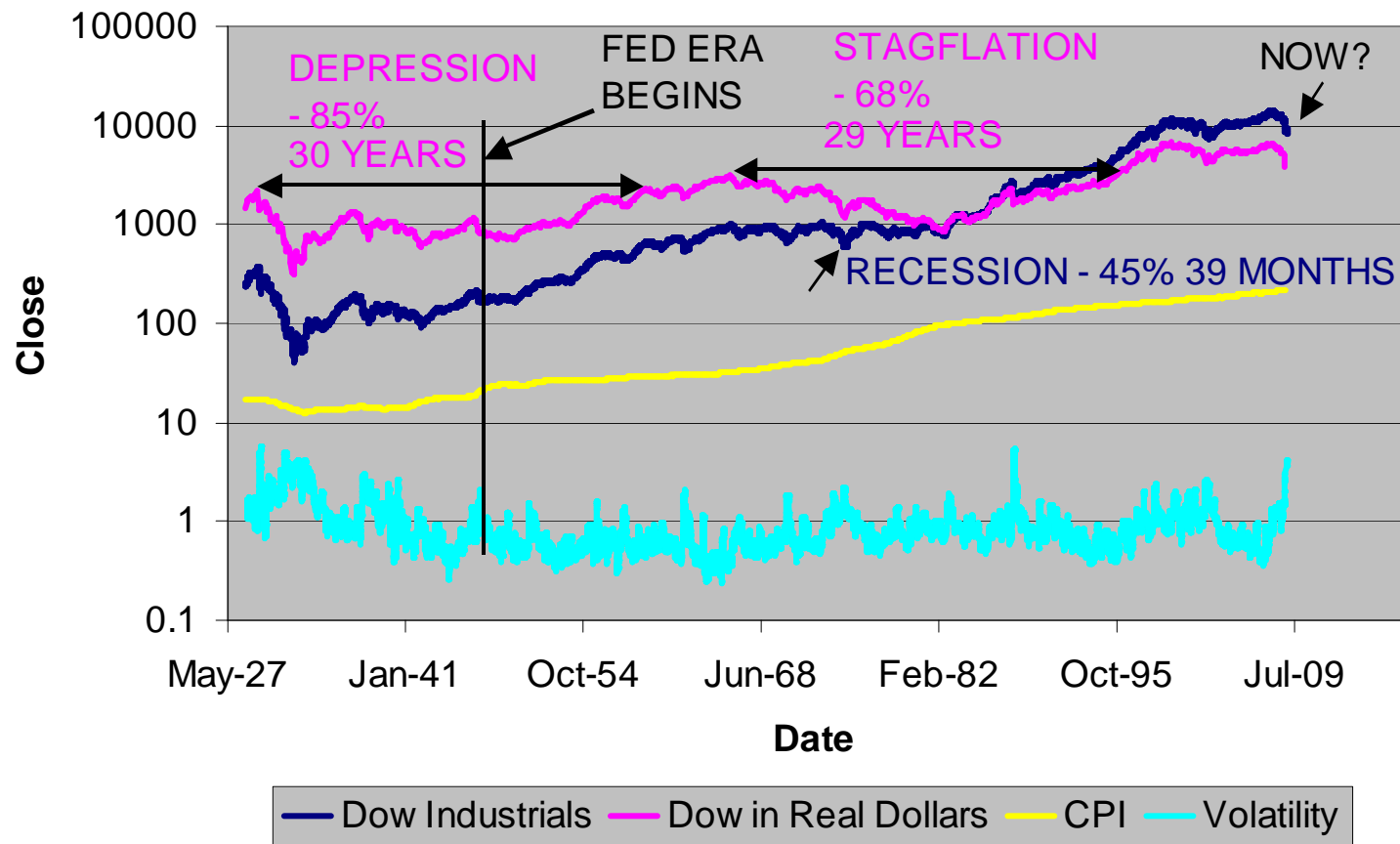
RECESSIONS HISTORICAL COMPARISONS

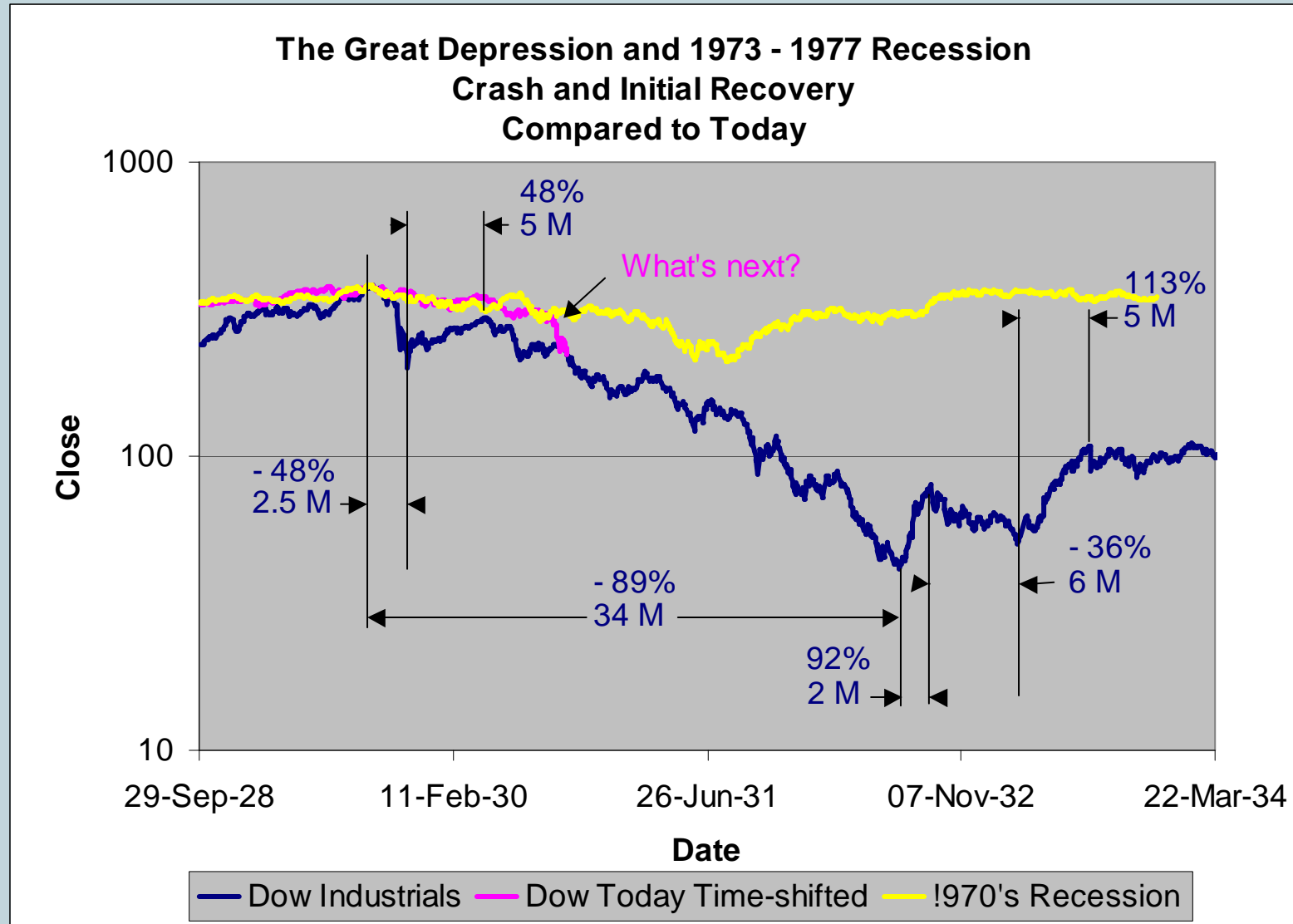


Geoffrey H. Moore, "Recessions." *The Concise Encyclopedia of Economics*. 1993.
Library of Economics and Liberty. 29 October 2008.
<<http://www.econlib.org/library/Enc1/Recessions.html>>.

Dow History

Dow Industrials, Dow Industrials in 1984 Dollars, CPI and Volatility (1-Month Daily Standard Deviation in Percent) Showing Maximum Loss and Time to Recovery







STEP-BY-STEP CONSTRUCTION OF A PORTFOLIO



- 1. Determine what initial screens have been working lately. This produces flexibility in changing markets.**
- 2. Run screens for a set of candidates that have a good chance of paying off**
- 3. Cross-check all candidates against independent opinions and keep those on which there is agreement**
- 4. Check news and charts for surviving candidates and drop those that seem unsuitable**
- 5. Create a diversified and optimized portfolio from the resulting candidates**
- 6. Recheck weekly to see how your portfolios are doing with respect to the market and adjust your next week's criteria accordingly.**



STEP 1 – RAW DATA

Jan 2008	-6.1%	-6.2%	-5.0%	-11.7%	-4.6%	0.3%	-6.0%	-8.4%	-3.5%	-6.2%	-7.2%
Feb 2008	-3.5%	-2.0%	-3.1%	-5.2%	-3.0%	0.2%	-3.2%	-1.3%	-5.2%	-1.9%	-0.4%
Mar 2008	-0.6%	-1.1%	0.2%	2.1%	0.0%	0.1%	-0.4%	-0.4%	-0.5%	-1.0%	-1.5%
Apr 2008	4.8%	7.6%	3.9%	7.6%	4.5%	0.1%	4.9%	5.9%	3.7%	7.7%	7.7%
May 2008	1.1%	5.1%	4.3%	6.0%	-1.4%	0.2%	1.3%	2.4%	0.1%	5.3%	6.0%
Jun 2008	-8.6%	-7.1%	-7.7%	-9.6%	-10.2%	0.2%	-8.4%	-5.9%	-11.2%	-7.0%	-5.1%
Jul 2008	-1.0%	-2.0%	2.0%	0.7%	0.2%	0.2%	-0.8%	-2.7%	1.4%	-1.9%	-3.3%
Aug 2008	1.2%	1.6%	4.1%	1.3%	1.5%	0.2%	2.6%	3.2%	2.5%	2.9%	2.5%
Sep 2008	-9.2%	-10.8%	-6.9%	-14.8%	-6.0%	0.2%	-8.9%	-10.2%	-7.5%	-10.7%	-12.9%
Oct 2008	na	na	na	na	na	na	na	na	na	na	na
Nov 2008	na	na	na	na	na	na	na	na	na	na	na
Dec 2008	na	na	na	na	na	na	na	na	na	na	na
	S&P 500 price chg	S&P MidCap 400 price chg	S&P SmallCap 600 price chg	Nasdaq 100 price chg	Dow Jones 30 price chg	T-Bills price chg	S&P 500 (TR) price chg	S&P 500- Citigroup Growth (TR) price chg	S&P 500- Citigroup Value (TR) price chg	S&P MidCap 400 (TR) price chg	S&P MidCap 400/ Citigroup Growth (TR) price chg

This is a small part of a very large spreadsheet containing monthly returns for 75 screens and indexes running from January, 1998 to the present. It can be downloaded by any AAI member from: <http://www.aai.com/stockscreens/performance.cfm>



STEP 1 – WHAT SI PRO SCREENS ARE WORKING NOW?



Name	Category	Sept. Performance	2008 Performance*
Piotroski	Value	0.0%	32.6%
T-Bills price chg	Index	0.2%	1.4%
P/E Relative	Value	-14.4%	0.3%
O'Shaughnessy--Growth Revised	Growth & Value	na	0.0%
O'Neil's CAN SLIM price chg	Growth	-14.7%	-2.0%
Buffettology--Sustainable Growth price chg	Growth & Value	-10.4%	-2.2%
Shadow Stock Screen	Specialty	-11.7%	-2.5%
Weiss Blue Chip Div Yield	Value	-6.1%	-3.5%
Buffett--Hagstrom price chg	Growth & Value	-8.5%	-3.8%
Inve\$tWare Quality Growth	Growth	-11.6%	-3.8%
S&P SmallCap 600/ Citigroup Value (TR) price chg	Index	-5.3%	-5.7%
Graham--Defensive Investor (Utility)	Value	-6.8%	-6.5%
S&P SmallCap 600 (TR) price chg	Index	-6.8%	-6.9%
Dividend (High Relative Yield)	Value	-1.0%	-7.4%
Neff	Value	-7.7%	-8.5%
S&P SmallCap 600/ Citigroup Growth (TR) price chg	Index	-8.5%	-8.6%
S&P SmallCap 600 price chg	Index	-6.9%	-8.7%
Muhlenkamp	Growth & Value	-1.2%	-9.6%

This data is sorted by YTD performance through September 30. It includes all results with YTD performance better than -10%. Green means September performance better than -5%. Strong companies often beat both bull and bear markets.



STEP 2 – RUN SI-PRO SCREENS AND LIST CANDIDATES PLUS ANY INDEXES



T-Bill Index

Piotroski – No Companies

Dividend (High Relative Yield) – 49 Companies

Muhlenkamp – 27 Companies

Portfolio: Screen: View:

SI Stock Notebook #1 - Untitled

View | Overview | Multiples | Growth | Ratios | Valuations | Estimates | Fin - Qtr | Fin - Ann'l | C

Company name	Company name	Ticker	Market Cap Q1	Sector
1st Source Corporation	1st Source Corporation	SRCE	517.4	Financial
AMCOL International Corporatio	AMCOL International Corporatio	ACO	745.3	Capital Goods
American River Bankshares	American River Bankshares	AMRB	59.0	Financial
Apogee Enterprises, Inc.	Apogee Enterprises, Inc.	APOG	281.1	Capital Goods
AptarGroup, Inc.	AptarGroup, Inc.	ATR	2057.6	Basic Materials
Becton, Dickinson and Co.	Becton, Dickinson and Co.	BDX	16903.7	Health Care
Black Hills Corporation	Black Hills Corporation	BKH	969.7	Utilities
Carlisle Companies, Inc.	Carlisle Companies, Inc.	CSL	1418.6	Basic Materials
CenturyTel, Inc.	CenturyTel, Inc.	CTL	2514.5	Services
Chevron Corporation	Chevron Corporation	CVX	153263.6	Energy
Community Trust Bancorp, Inc.	Community Trust Bancorp, Inc.	CTBI	500.7	Financial
Credicorp Ltd. (USA)	Credicorp Ltd. (USA)	BAP	3706.4	Financial
Cullen/Frost Bankers, Inc.	Cullen/Frost Bankers, Inc.	CFR	3320.3	Financial

49 stocks selected - ranked by Company name, ascending



STEP 3 – THE VECTORVEST PROGRAM



- **VectorVest is a combined technical and fundamental analysis program and database that contains a wide variety of pre-defined screens and unusual proprietary technical and fundamental parameters. (www.vectorvest.com)**
- **It costs a bit over \$700 per year in its most common configuration, although cheaper and much more expensive versions are available.**
- **At its simplest, VectorVest is based on three parameters: relative value, relative safety, and relative timing. The first is a fundamentals-based parameter measuring value, the second is a risk assessment, and the third is a technical parameter that reflects the relative probability of a price increase now. The three are combined in the VST parameter that reflects the overall quality of the investment. There is also a buy/sell/hold recommendation. All parameters vary between 0 (bad) and 2 (good) with anything over 1 considered a reasonable purchase.**
- **Normally a high VST and a “buy” are desirable. However, if you think we are near a bottom (VectorVest does) then you want to look for high relative value stocks that are rated “sell” because these should rebound dramatically in any market rally. We’ll look for $RV > 1.2$**



STEP 3 – CROSS-CHECK AGAINST VECTORVEST HIGH RELATIVE VALUE



Buys: 1 (1.4%) Sells: 52 (70.3%) Holds: 21 (28.4%) Total: 74

Company	Symbol	Price	\$ Change	%PRC	Value	RV	RS	RT	VST	GRT	REC	Stop	▲
Murphy Oil	MUR	49.85	-3.50	-6.56	98.16	1.65	1.41	0.50	1.24	31	S	53.91	
S L Green Rlty	SLG	32.70	-5.89	-15.26	81.23	1.62	1.00	0.14	1.04	27	S	50.69	
Cimarex Energy	XEC	35.19	-3.56	-9.19	70.33	1.58	1.09	0.45	1.08	33	S	39.34	
ResearchInMtn	RIMM	52.97	-2.59	-4.66	89.96	1.56	1.16	0.21	1.07	33	S	69.39	
Fossil Inc	FOSL	16.48	-2.52	-13.26	32.95	1.49	1.14	0.26	1.04	23	S	20.36	
Credicorp Ltd	BAP	42.80	-0.50	-1.15	78.53	1.48	0.97	0.59	1.03	26	S	47.93	
Chevron Corp	CVX	74.88	-3.31	-4.23	114.12	1.48	1.31	1.01	1.26	21	H	72.05	
Millicom Int'l	MICC	43.52	-2.67	-5.78	82.81	1.47	0.89	0.53	0.99	23	S	50.88	
HudsonCity Bcp	HCBK	18.01	-0.86	-4.56	21.21	1.44	1.28	1.13	1.27	25	H	17.09	
M D U Resrces	MDU	18.61	+0.08	+0.43	33.37	1.44	1.12	0.42	1.04	17	S	21.53	
Garmin Ltd	GRMN	21.24	-0.90	-4.07	41.00	1.43	1.03	0.32	0.98	16	S	25.36	
CenturyTel	CTL	26.80	-0.87	-3.14	56.00	1.42	0.63	0.66	0.93	10	S	30.48	
Cognizant Tech	CTSH	20.17	-0.83	-3.95	27.01	1.37	1.28	0.72	1.13	20	S	20.76	
Lincoln Elec	LECO	43.52	-2.75	-5.94	77.32	1.37	1.06	0.35	0.98	14	S	51.72	
Apogee Entrp	APOG	9.94	-0.20	-1.97	19.15	1.36	0.80	0.29	0.87	15	S	12.43	
American Orient	AOB	6.34	-0.16	-2.46	9.82	1.34	0.91	0.94	1.06	22	H	6.20	
Emerson Elec	EMR	34.18	-1.68	-4.68	53.53	1.34	1.09	0.67	1.04	13	S	35.44	
Frst Nat'l Lncn	FNLC	16.56	-0.94	-5.37	24.16	1.31	0.88	0.76	0.99	17	S	17.14	
Pentair Inc	PNR	27.12	-1.51	-5.27	37.67	1.30	1.06	0.62	1.00	16	S	28.98	
AMCOL Int'l	ACO	22.29	-1.72	-7.16	34.12	1.28	1.11	0.46	0.98	10	S	25.02	
j2 Global Comm	JCOM	16.24	-0.87	-5.08	26.90	1.28	1.09	0.48	0.97	12	S	18.24	
Healthspring	HS	17.12	-0.16	-0.93	26.20	1.27	0.80	1.00	1.03	22	S	17.37	
V F Corp	VFC	54.62	-2.50	-4.38	83.45	1.27	1.05	0.62	0.99	9	S	60.09	
Amer PhysSvc	AMPH	20.00	-0.68	-3.29	28.18	1.26	1.07	1.05	1.12	15	H	19.22	
Antar Group	ATR	31.33	-0.77	-2.40	37.80	1.23	1.10	0.85	1.08	15	S	32.07	

Price	\$ Change	%PRC	Value	RV	RS	RT	VST	GRT	Stop	Mkt Cap(\$M)	CI	Indusl
38.215	-1.839	-4.59	42.60	1.08	1.05	0.73	0.97	8	40.03	9477.00	0.49	



STEP 4 – CHECK NEWS AND CHARTS ON GOOGLE FINANCE



We have 23 stocks plus T-bills left. Here's a sample chart.

Garmin Ltd. (Public, NASDAQ:GRMN) - [Add to Portfolio](#) - [Discuss GRMN](#) Find more results for [grmn](#)

21.24	Open: 22.25	Mkt Cap: 4.30B	P/E: 5.21	Dividend: 0.75
-0.90 (-4.07%)	High: 22.34	52Wk High: 112.68	F P/E: 9.73	Yield: 3.53
Nov 5 - Close	Low: 21.16	52Wk Low: 19.90	Beta: 1.65	Shares: 202.53M
Vol: 3.09M	Avg Vol: 2.53M	EPS: 4.08	Inst. Own: 32%	

After Hours: **21.00 -0.24 (-1.13%)** - Nov 5, 7:26PM EST NASDAQ Real-time data - [Disclaimer](#)

Compare [Settings](#) [Historical Prices](#) [Link to chart](#)

Enter ticker here Nasdaq Dow Jones S&P 500 KVHI TRMB

Zoom: [1d](#) [5d](#) [1m](#) [3m](#) [6m](#) [YTD](#) [1y](#) [5y](#) [10y](#) [Max](#) Dec 28, 2007 - Oct 31, 2008 **-78.37 (-77.73%)**

Volume (mil / 1d)

2007 2008

News [Blogs](#) [Feeds](#)

- [Newer news](#) | [Latest news](#)
- A** [Earnings roundup: Hanesbrands, Garmin](#)
Forbes - Oct 29, 2008
- B** [Garmin reports lower 3Q profits](#)
Forbes - Oct 29, 2008 - [Related articles »](#)
- C** [RBC Cuts Garmin Ltd. To Underperform, Shares Fall-Reuters](#)
Reuters Key Development - Oct 6, 2008
- D** [Garmin Ltd. Signs Letter Of Intent To Acquire Sportmanship International AB](#)
Reuters Key Development - Oct 3, 2008
- E** [Garmin Ltd. Invites You to Listen to Its Third Quarter 2008 Earnings Call](#)
MarketWatch - Sep 30, 2008
- F** [Garmin Ltd. Announces Completion of the Acquisition of SatSignal-Equipamentos de Comunicacoes e de Navegacao, S.A. in Portugal](#)
Reuters Key Development - Aug 28, 2008
- G** [Garmin Ltd. Announces Completion Of Acquisition Of Puls Elektronik GmbH](#)
Reuters Key Development - Jul 31, 2008
- H** [Garmin Ltd. Completes Acquisition Of Distributor In Finland](#)
- I** [Older news](#) | [View all news for GRMN »](#) | [Subscribe](#)

Item B reveals that Garmin's quarterly sales are up 19%, profits are down 11% at \$0.82 / share due to a strong dollar. Its price YTD is down about 80%. It's buying back shares. Draw your own conclusions.

STEP 4 – SUBJECTIVE SCORES FOR NEWS AND CHARTS

1	Ticker	Rating	Country	Exchange
2	ACO	F		
3	AMPH	G		
4	AOB	P	China	NYSE
5	APOG	G		
6	ATR	F		
7	BAP	G	Peru	NYSE
8	BDX	P		
9	CTL	F		
10	CTSH	E		
11	CVX	G		
12	EMR	G		
13	FNLC	F		
14	GRMN	E	Caymans	NASDAQ
15	HCBK	G		
16	HS	F		
17	JCOM	P		
18	LECO	E		
19	MDU	F		
20	MICC	G	Luxembourg	NASDAQ
21	NTE	P	Hong Kong	NYSE
22	PNR	F		
23	TEVA	P	Israel	NASDAQ
24	VFC	F		

Overall ratings are excellent, good, fair, and poor. We will drop only the poor rating for the next step. Foreign stocks and the exchanges they are traded on are identified.

STEP 4 – FINAL CANDIDATES

Here are the final candidates, not including treasuries:

Company name	Ticker	Market Cap Q1	Sector	Industry
AptarGroup, Inc.	ATR	2057.6	Basic Materials	Containers & Packaging
AMCOL International Corporatio	ACO	745.3	Capital Goods	Construction - Raw Materials
Apogee Enterprises, Inc.	APOG	281.1	Capital Goods	Construction - Supplies and Fixtures
Lincoln Electric Holdings, Inc	LECO	1847.6	Capital Goods	Misc. Capital Goods
Emerson Electric Co.	EMR	25396.6	Conglomerates	Conglomerates
Pentair, Inc.	PNR	2726.1	Consumer Cyclical	Appliances & Tools
V.F. Corporation	VFC	6000.8	Consumer Cyclical	Apparel/Accessories
Chevron Corporation	CVX	153263.6	Energy	Oil & Gas - Integrated
American Physicians Service Gr	AMPH	139.8	Financial	Insurance (Property & Casualty)
First Bancorp, Inc., The	FNLC	174.4	Financial	Regional Banks
HealthSpring, Inc	HS	966.4	Financial	Insurance (Accident & Health)
Hudson City Bancorp, Inc.	HCBK	9797.4	Financial	S&Ls/Savings Banks
Credicorp Ltd. (USA)	BAP	3706.4	Financial	Regional Banks
CenturyTel, Inc.	CTL	2514.5	Services	Communications Services
Millicom International Cellula	MICC	4331.8	Services	Communications Services
Cognizant Technology Solutions	CTSH	5599.2	Technology	Software & Programming
Garmin Ltd.	GRMN	4546.9	Technology	Scientific & Technical Instruments
MDU Resources Group, Inc.	MDU	3336.4	Utilities	Natural Gas Utilities

STEP 4 – ADDING TREASURIES

- **13-week T-Bill historical data can be downloaded from Yahoo Finance (<http://finance.yahoo.com>) using the symbol \^IRX .**
- **However, in the case of treasuries, the amount in the resulting table is the annualized discount rate in percent, not the market price of the T-Bill. This must be converted to an increase in net value of your holdings assuming each bill is held to maturity and the money re-invested.**
- **The portfolio optimizer now has the ability to handle 13-week T-Bills (\^IRX) as a candidate investment for the portfolio. Simply enter it in the ticker list.**

STEP 5 – OPTIMIZATION

This shows the inputs for a free open-source optimizer available on the chapter website

Ticker	Sector	Bad Tickers
ATR	01 - Basic Materials	
ACO	02 - Capital Goods	
APOG	02 - Capital Goods	
LECO	02 - Capital Goods	
EMR	03 - Conglomerates	
PNR	04 - Consumer Cyclical	
VFC	04 - Consumer Cyclical	
CVX	06 - Energy	
AMPH	07 - Financial	
FNLC	07 - Financial	
HS	07 - Financial	
HCBK	07 - Financial	
BAP	07 - Financial	
CTL	09 - Services	
MICC	09 - Services	
CTSH	10 - Technology	
GRMN	10 - Technology	
MDU	12 - Utilities	
^IRX	99 - T-Bills	

DOWNLOAD
COMPUTE SECTOR VALUES
OPTIMIZE PORTFOLIO

Risk-free Periodic Rate	1.9792E-05
Random Search Iterations	1000
Min Weight by Cash	0
Max Weight by Cash	1
Sample Period (d, w, or m)	d
From Date (m/d/yr)	1/1/2008
To Date (m/d/yr)	11/5/2008

% Annualized Treasury Rate	
	0.5
Minimum % Cash in One Security	
	0
Maximum % Cash in One Security	
	100
Sample Period (d, w, or m)	
	d
From Date (m/d/yr)	
	1/1/2008
To Date (m/d/yr)	
	11/5/2008
Random Search Iterations	
	1000



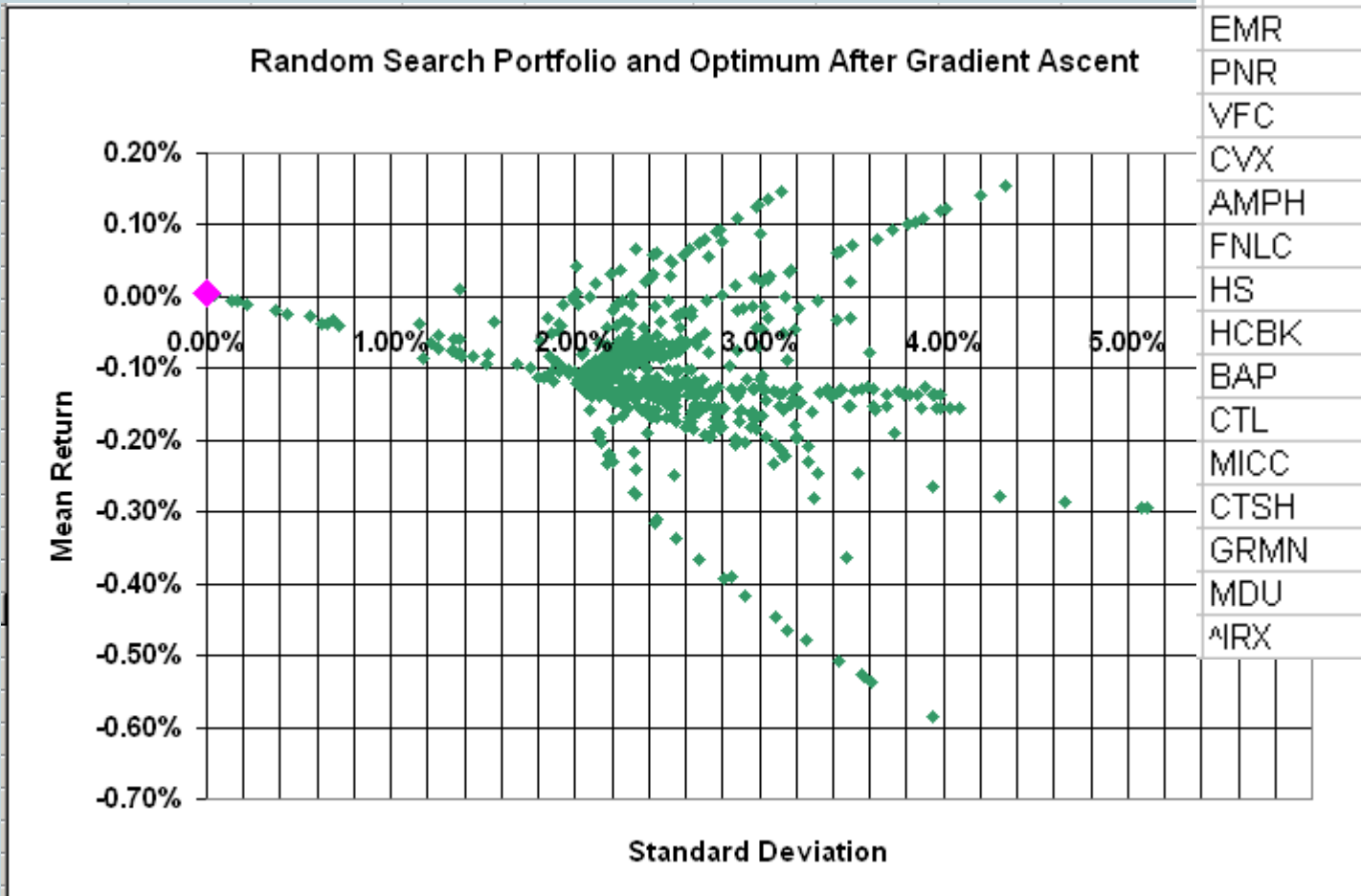
INTERPRETING OPTIMIZATION RESULTS

MINIMIZED STANDARD DEVIATION



	Std Dev	Mean Ret	Sharpe	Dwn Std Dev	Period
Risk Free	0.0000%	0.0020%			
Optimum	0.0029%	0.0043%	0.773345	0.00%	d
End	0.0044%	0.0054%			

Security	Wt. Dollars
ATR	0.0%
ACO	0.0%
APOG	0.0%
LECO	0.0%
EMR	0.0%
PNR	0.0%
VFC	0.0%
CVX	0.0%
AMPH	0.0%
FNLC	0.0%
HS	0.0%
HCBK	0.0%
BAP	0.0%
CTL	0.0%
MICC	0.0%
CTSH	0.0%
GRMN	0.0%
MDU	0.0%
^IRX	99.9%





INTERPRETING OPTIMIZATION RESULTS

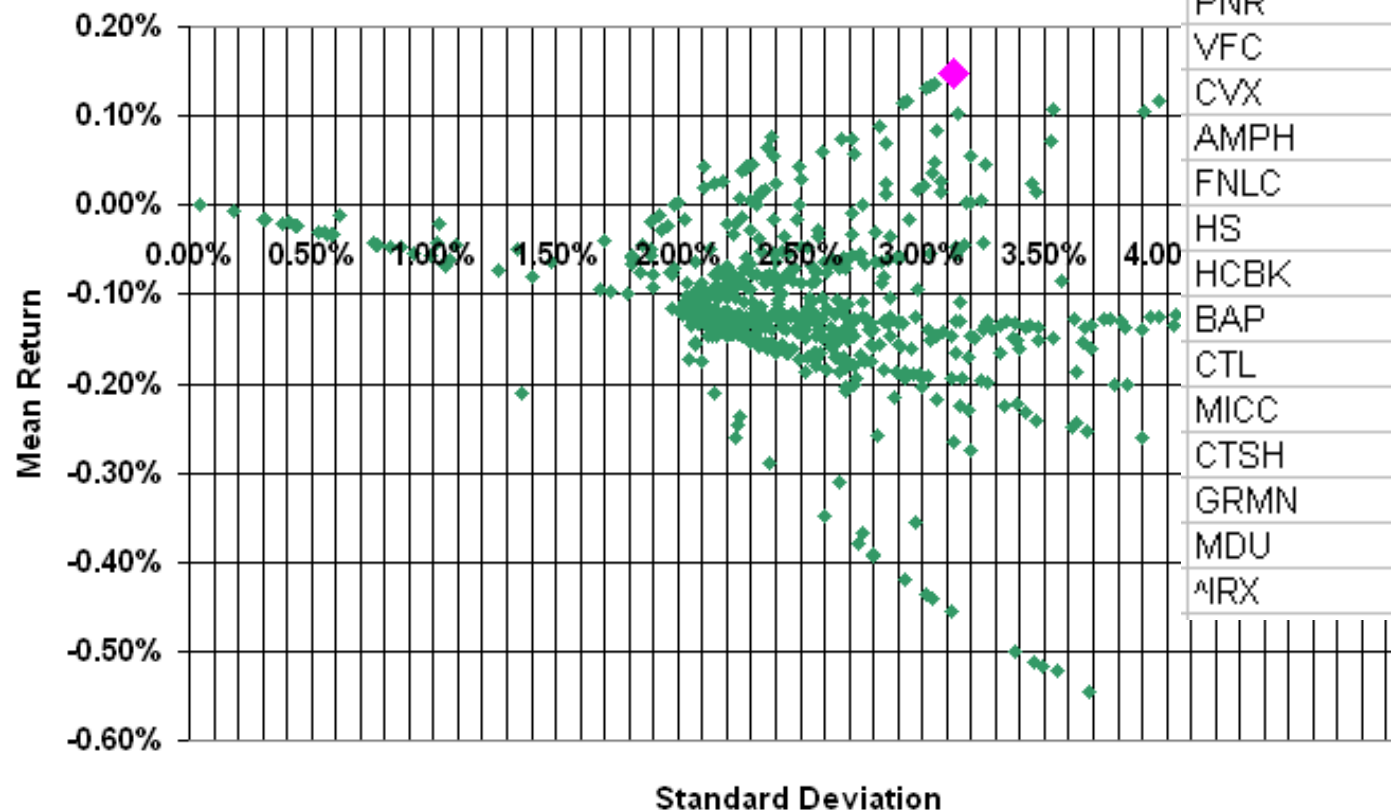
MAXIMIZED SHARPE RATIO



	Std Dev	Mean Ret	Sharpe	Dwn Std Dev	Period
Risk Free	0.0000%	0.0020%			
Optimum	3.1261%	0.1474%	0.046519	2.80% d	
End	4.6891%	0.2201%			

Security	Wt. Dollars
ATR	0.0%
ACO	0.0%
APOG	0.0%
LECO	0.0%
EMR	0.0%
PNR	0.0%
VFC	0.0%
CVX	0.0%
AMPH	0.0%
FNLC	0.3%
HS	0.0%
HCBK	99.6%
BAP	0.0%
CTL	0.0%
MICC	0.0%
CTSH	0.0%
GRMN	0.0%
MDU	0.0%
NRX	0.0%

Random Search Portfolio and Optimum After Gradient Asce



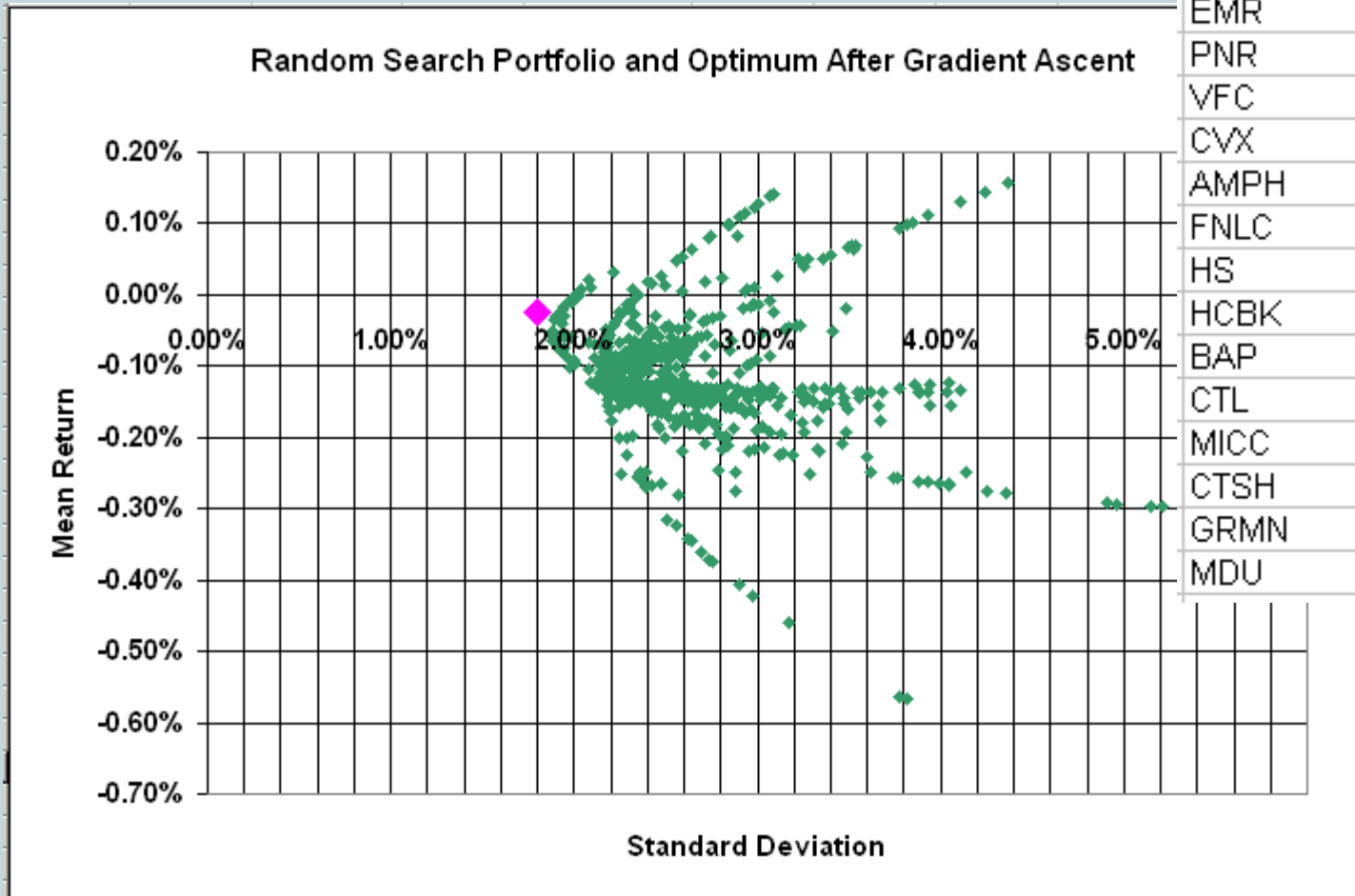


RESULTS WITH NO TREASURIES MINIMIZED STANDARD DEVIATION



	Std Dev	Mean Ret	Sharpe	Dwn Std Dev	Period
Risk Free	0.0000%	0.0020%			
Optimum	1.7976%	-0.0241%	-0.01453	1.91%	d
End	2.6964%	-0.0372%			

Security	Wt. Dollars
ATR	4.9%
ACO	0.0%
APOG	0.0%
LECO	0.0%
EMR	5.0%
PNR	5.0%
VFC	5.0%
CVX	5.0%
AMPH	44.3%
FNLC	5.0%
HS	5.0%
HCBK	5.0%
BAP	5.0%
CTL	5.0%
MICC	0.0%
CTSH	0.0%
GRMN	3.9%
MDU	2.1%



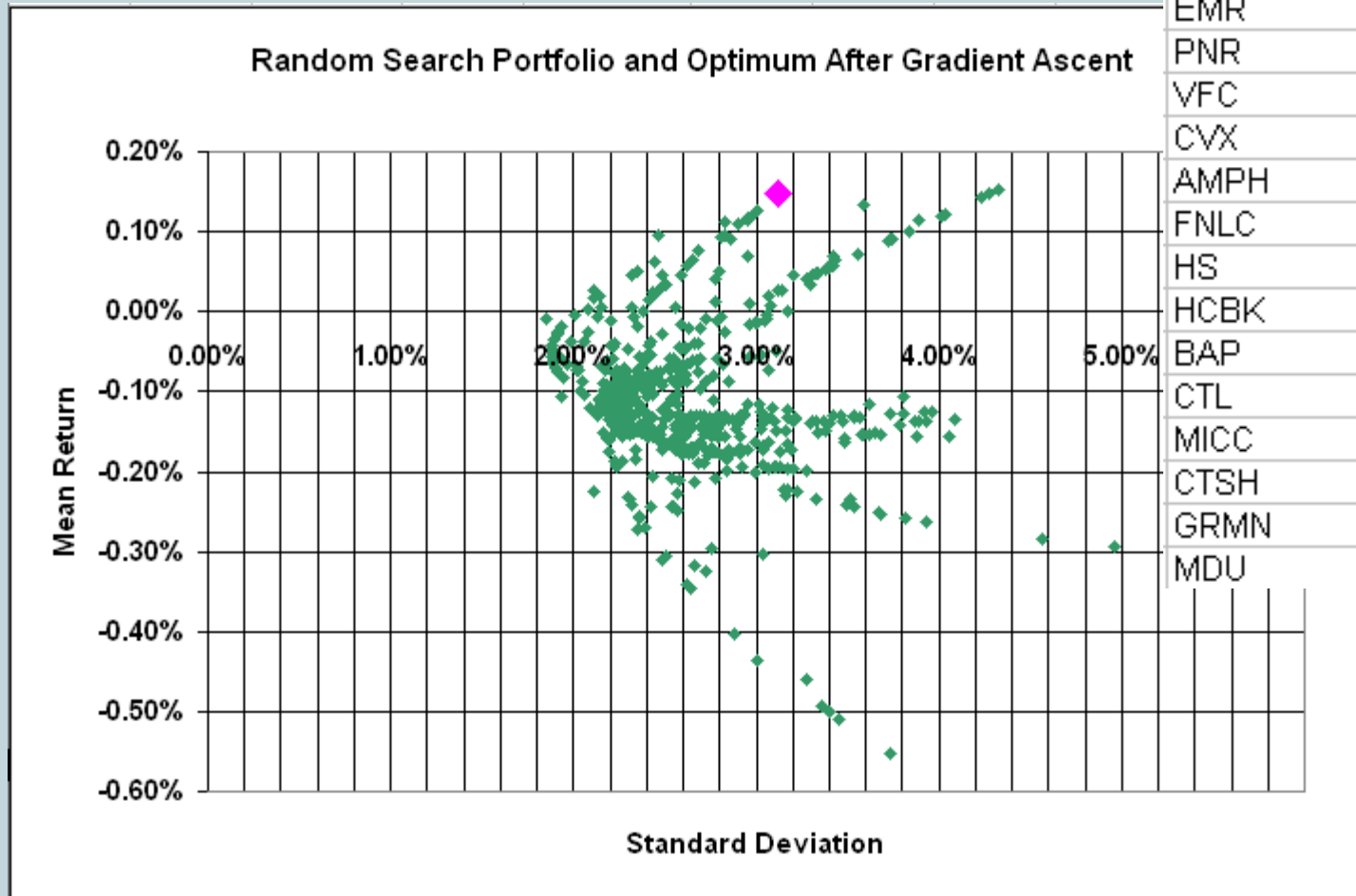


RESULTS WITH NO TREASURIES MAXIMIZED SHARPE RATIO



	Std Dev	Mean Ret	Sharpe	Dwn Std Dev	Period
Risk Free	0.0000%	0.0020%			
Optimum	3.1226%	0.1473%	0.046532	2.81%	d
End	4.6839%	0.2199%			

Security	Wt. Dollars
ATR	0.0%
ACO	0.0%
APOG	0.0%
LECO	0.0%
EMR	0.0%
PNR	0.0%
VFC	0.0%
CVX	0.0%
AMPH	0.0%
FNLC	0.5%
HS	0.0%
HCBK	99.4%
BAP	0.0%
CTL	0.0%
MICC	0.0%
CTSH	0.0%
GRMN	0.0%
MDU	0.0%





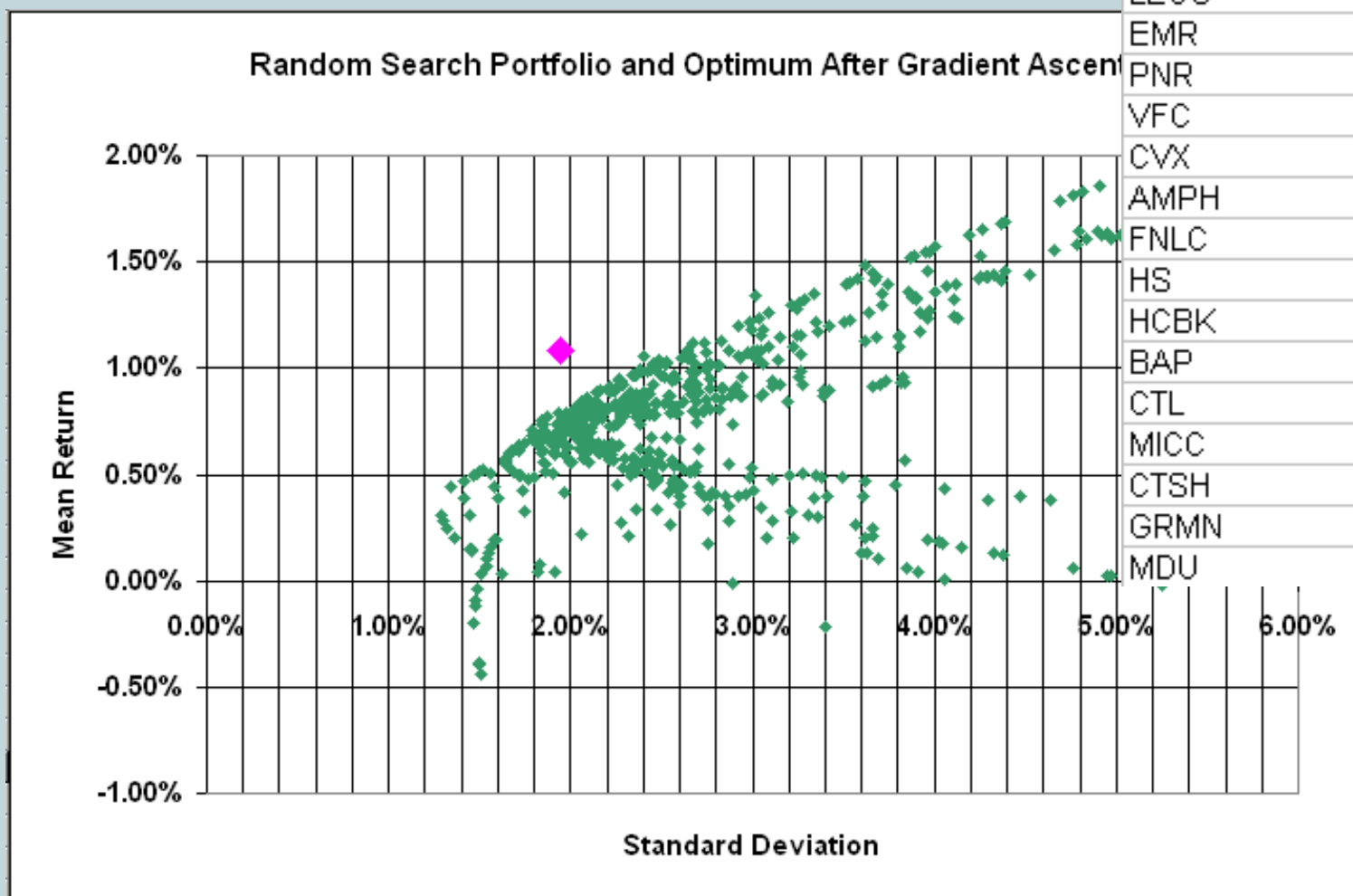
HAPPIER DAYS – SHARPE OPTIMIZED

(January 1 through June 30, 2007 Data)

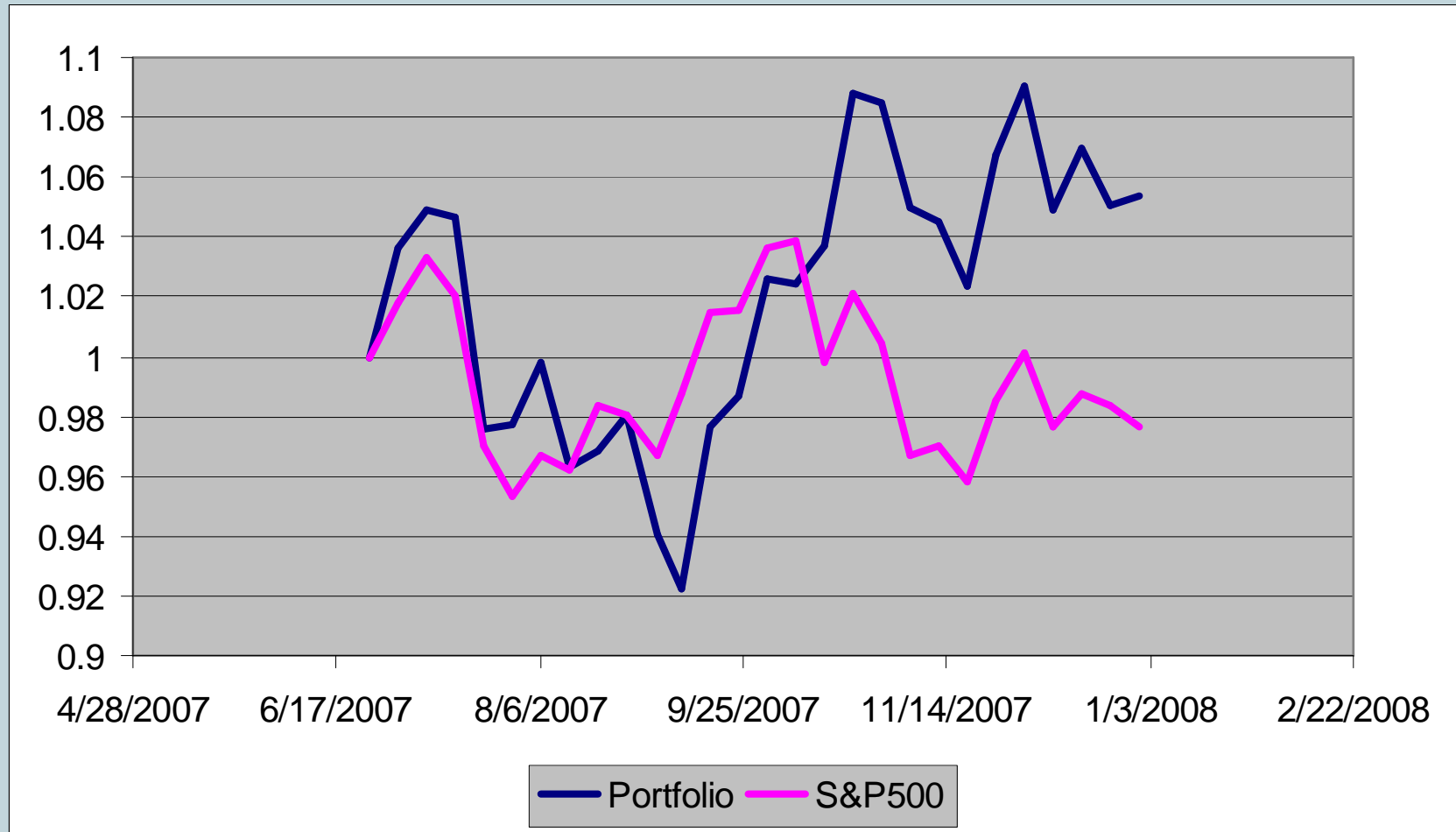


	Std Dev	Mean Ret	Sharpe	Dwn Std Dev	Period
Risk Free	0.0000%	0.0381%			
Optimum	1.9434%	1.0808%	0.536506	2.13%	w
End	2.9152%	1.6021%			

Security	Wt. Dollars
ATR	33.3%
ACO	0.0%
APOG	9.3%
LECO	0.0%
EMR	0.0%
PNR	16.0%
VFC	0.0%
CVX	0.0%
AMPH	29.0%
FNLC	0.0%
HS	0.0%
HCBK	0.0%
BAP	5.3%
CTL	0.0%
MICC	7.1%
CTSH	0.0%
GRMN	0.0%
MDU	0.0%



HOW THE OPTIMIZATION DID THE SECOND HALF OF 2007



This is NOT a true back-test because the portfolio was created with recent data, even though the optimization was done on old data.

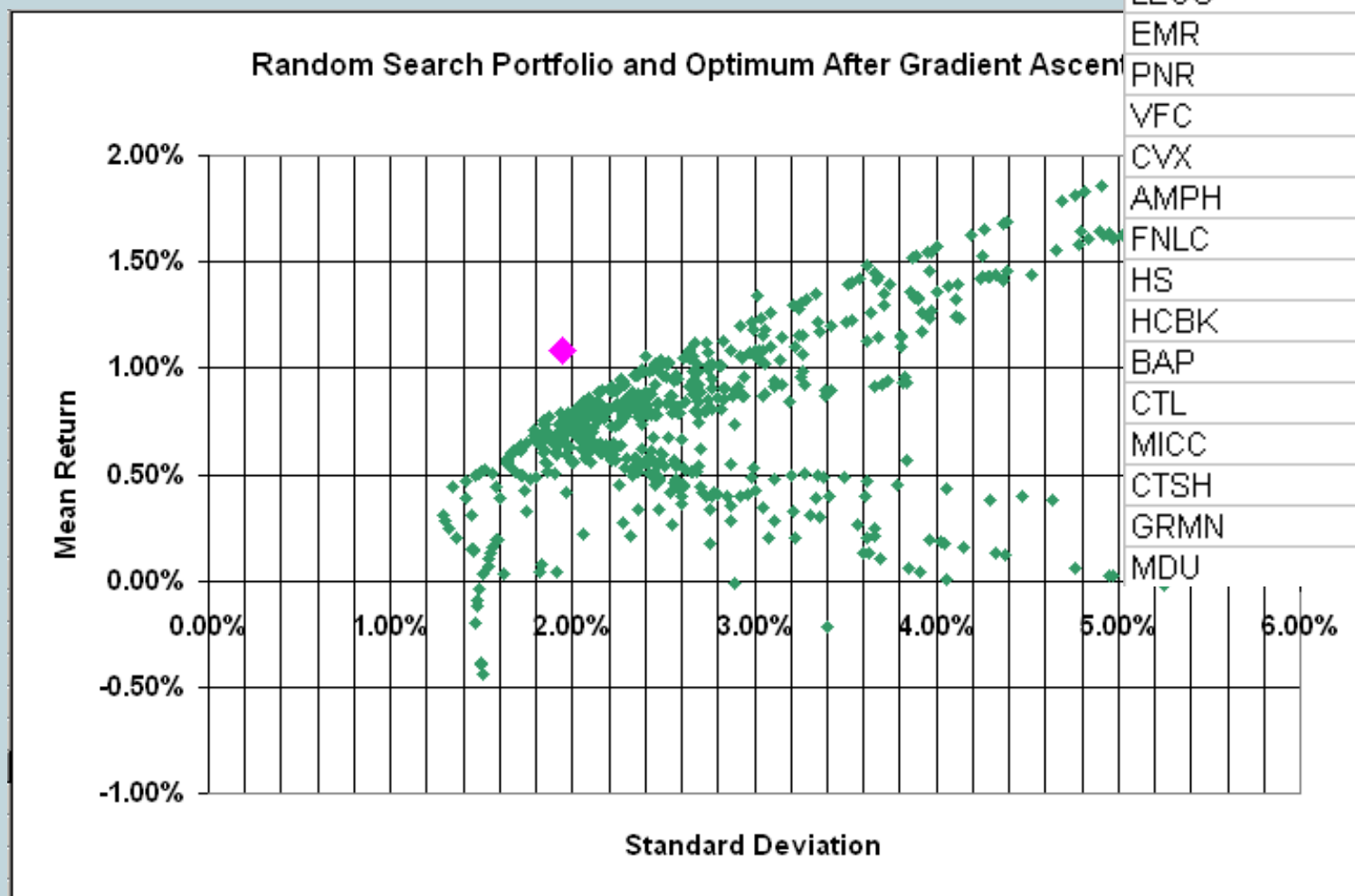


TRUE BACK-TEST FOOLISH SMALL-CAP 8 (January 1 through June 30, 2007 Data)



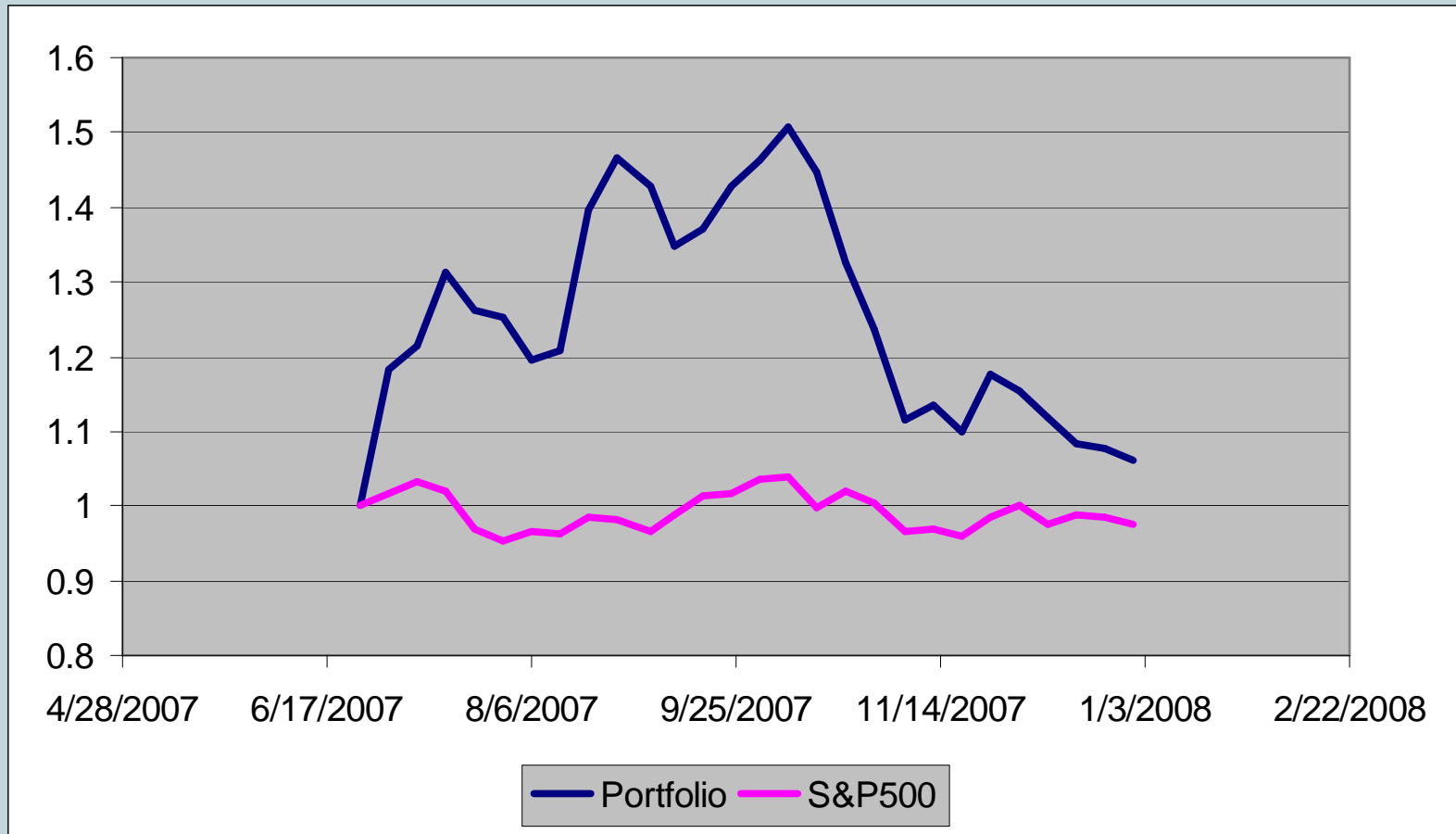
	Std Dev	Mean Ret	Sharpe	Dwn Std Dev	Period
Risk Free	0.0000%	0.0381%			
Optimum	1.9434%	1.0808%	0.536506	2.13%	w
End	2.9152%	1.6021%			

Security	Wt. Dollars
ATR	33.3%
ACO	0.0%
APOG	9.3%
LECO	0.0%
EMR	0.0%
PNR	16.0%
VFC	0.0%
CVX	0.0%
AMPH	29.0%
FNLC	0.0%
HS	0.0%
HCBK	0.0%
BAP	5.3%
CTL	0.0%
MICC	7.1%
CTSH	0.0%
GRMN	0.0%
MDU	0.0%





FOOLISH SMALL-CAP 8 OPTIMIZATION IN THE SECOND HALF OF 2007



This is a true back-test. The portfolio was created with SI Pro using old data and Sharpe optimized. No news or comparison with other ratings was possible or done. Two companies no longer exist, so there is survivorship bias. The performance drop after a few months is common for SI Pro.



FINAL THOUGHTS



Although I have demonstrated objective and systematic methods that have worked well for me over the years, perhaps the most important thing to remember is to watch their behavior as you use them. When they stop giving results that you expect, stop using them until either they start working again, or until you find another objective method that works. In the meantime get out of the market until you know what you're doing. This is not a completely objective decision, but then neither is the market.

Never use a system that you don't understand.