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AAII SV CI-MI Agenda

- (6:30-6:40) Administrative Items
- (6:40-6:45) Since the Last Meeting...
- (6:45 7:30) Random Fido Select Folios (John N)
- (7:30 8:00) "Retail Stock" Screen Applied to S&P Sectors (Al Z)
- (8:00 8:45) "Other Side of Value" Screen (Al Z)
- 8:45 Must clear the library!!

Reference section:

- Asset Class/Allocator/Timing Review
 - Time permitting will review. Otherwise read the charts off-line
- Performance Metrics

Administrative Items

CI-MI Meeting Schedule

Computerized Investing Seminar Saturday October 19th 8:30-11:30 AM

@ San Jose Garden Hotel

(Jackie Ann Patterson, Al Z)

November 4th 6:30 – 8:30 PM

@ Campbell Library

December 9th 6:30 – 8:30 PM

@ Saratoga Library

Saratoga Library has limited hours and room availability. We will do what we can...

Upcoming Events

- AAII SV Chapter: Next meeting: <u>10/19/13, ETF Rotation, Value Stock</u> <u>Screening, Jackie Ann Patterson, Al Z</u>
 - San Jose Airport Garden Hotel, 1740 N 1st St, San Jose, CA 95112
 - Register on-line at http://www.eventbrite.com/org/399694412
 - Discussion group: (October 22nd), Coco's Restaurant,1206 Oakmead Parkway Sunnyvale
- CTAG Meetings Next Meeting: October 2nd (this Wednesday)
 - 1st & 3rd Wednesdays, Holder's Country Inn, 998 South De Anza Boulevard, San Jose
- SectorSurfer User Group: Next meeting: TBD
 - Contact: Joe Gruender (<u>SectorSurferJoe@gmail.com</u>)
 - Group site: https://groups.google.com/forum/?fromgroups#!forum/sectorsurfer
- SV Options Group: Next Meeting: 10/10/13 6-9 PM. Subject: TBD
 - Further information at http://www.svog.org/
 - Held at Elks Lodge Sunnyvale: 375 North Pastoria Avenue, Sunnyvale
- VectorVest: http://www.vectorvest.com/events/
 - Webinars: Develop A Winning Trading Plan Oct 2, 20134:30 PM ET
 - How to Manage Your Portfolio Better Than Any Money Manager and In Only 10 Minutes a Week!! Oct 3, 20134:30 PM ET
 - contact steveg1943@gmail.com for next meeting

User Presentations???

- We are always looking for volunteers for presentation
 - Can be as informal or formal as you like
- Any Volunteers for the next few months?
- Possibilities to consider or add your own:
 - Review Dark Liquidity site strategies
 - Tool reviews: Investors FastTrack, SectorSurfer, VectorVest (various), ETFReplay
 - Bring Michael Cugino, the PRPFX manager, down (if he's willing)
 - Timers: \$NAHL, Vreba
 - AAII First Cut: New Era w/Strong Fundamentals; AAII CI Portfolio Optimization Program
 - AAII: "Smart Beta" funds (DIY version), CI articles on web-based stock screening, FINVIZ, MeanVar optimization spreadsheet
 - Pring-Turner Business Cycle Approach (from AAII-SV 2/9/13 meeting)
 - AAII: CI: The Ulcer Index and Stock Screens
 - Biotech investing (core & explore, funds, screens, trading algs, etc.)
 - Review of algorithmic trading platform sites
 - Review and application of Gerstein screening papers
 - Review of Motif Investing

Presentations, Data Files and Such

- We don't do paper bring your own if you need to take notes, etc.
 - (If you need the contact info I have a limited number of 1 page fliers I can hand out)
- Presentations, spreadsheets, etc. are stored at
 Dropbox usually by the weekend after the meeting
 - See Links > <u>CI-MI Group Presentations & Files</u> in Yahoo Group
 - The Files section of the group page is NOT kept current and is NOT the place to find our presentations!

Yahoo! Group

- Yahoo Group is the point of contact, information
 - Name: AAII-SV-CI-MI-Group
 - Link: http://finance.groups.yahoo.com/group/AAII-SV-CI-MI-Group/
 - Alternative: Go to Yahoo! Groups home page and search for "aaii sv"
 - Also listed in monthly AAII mailers (tinyurl provided)
- Admin points
 - Email sign-ups: Go to the Yahoo! Group and sign-up you'll get read only access to everything
 - Feel free to post emails to the group (currently unmoderated), hold conversations outside meetings
 - If you want to post a file, provide a link, etc., email Al or the group
 - Al_zmyslowski@yahoo.com
 - Files will be posted at Dropbox (again, read-only mode) use link in Link section
 - To save space on larger files they may be zipped with 7zip (open source tool). Links to 7zip are also in the links section at the Yahoo! Group
- Questions??

Since the Last Meeting...

Since the Last Meeting...

- Biotech investing core & explore, ETF listing
- Algorithmic trading platform sites (articles, references)
- Marc Gerstein screening papers
- Motif investing overview
- Tracking folio updates
 - New Retail stock folio started with:
 HD, PCLN COST TJX WFM KR GPS DG BBBY M ROST AZO ORLY DLTR JWN KM
 X TRIP TSCO FDO PETM GRPN ULTA DKS AN and SIG.
- Other Side of Value papers, initial screen (more later tonight)

Random Fido Select Folios

(John N)

"Retail Stock" Screen: Application to S&P Sectors

(Al Z)

Retail Stock Screen: Review

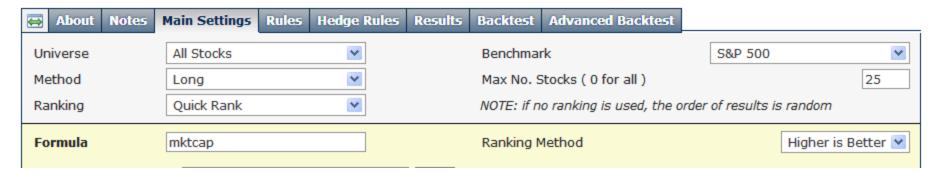
- Last month we looked at a stock screen aimed at the large cap Retail industry.
- We walked through multiple screen variations using EPS Growth Rate TTM, Sales GRT TTM and PEG ratio singly and in variations
- We took the Top 25 Retail stocks from these screens sorted in descending order by Market Cap
- We compared the results to 3 benchmarks:
 - a) the SP500,
 - b) An equal weight portfolio of ALL retail stocks re-balanced annually, and
 - c) the distribution resulting from randomly selecting 25 Retail stocks annually over 14 years 30+ times
- Summarized the results and chose the "best" Retail screen
 - This screen now has a tracking folio at FFN

Retail Screen – EPS, Sales Growth & PEG, Backtest Parms



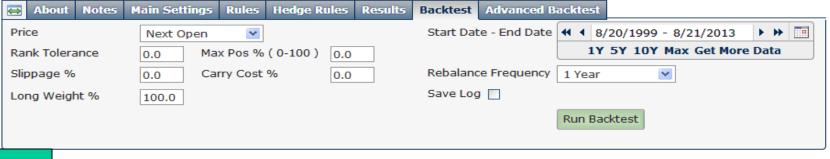




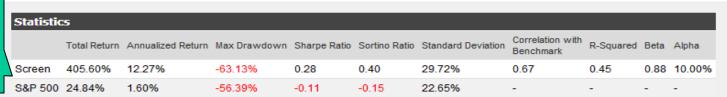




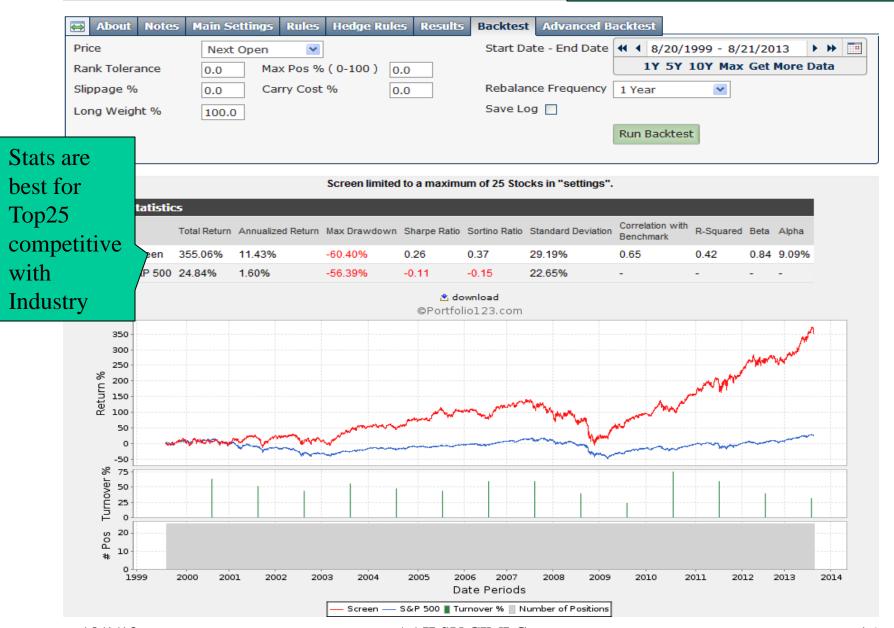
EPS & Sales Growth & PEG Yearly All



Best stats overall for industry







Retail Stocks: Summary Chart

					min	max	_	Avg Turn	CAGR vs	CAGR vs	SD vs	SD vs					
o Alg	CAGR	MDD	Sharpe	SD	stocks	stocks	over %	over#	base	industry	base	Industry	Correl	RSQ	Beta	Alpha	Comment
1 Yrly MC All	8.9%	64.7%	0.17	28.8%	143	196	12%	24	NA	NA	NA	NA	0.68	0.47	0.87	6.7%	base case
2 Yrly Sales Growth All	11.1%	61.5%	0.24	29.2%	80	116	27%	31	2.2%	NA	0.4%	NA	0.68	0.46	0.88	8.9%	
3 Yrly EPS Growth All	10.9%	64.7%	0.24	29.1%	76	102	45%	46	2.1%	NA	0.3%	NA	0.68	0.46	0.87	8.7%	
4 Yrly PEG All	9.9%	61.4%	0.21	28.5%	128	180	16%	29	1.0%	NA	-0.3%	NA	0.69	0.47	0.86	7.7%	
5 Yrly Sales & EPS Growth All	12.0%	63.7%	0.27	29.6%	43	68	45%	31	3.1%	NA	0.9%	NA	0.68	0.46	0.88	9.7%	
6 Yrly Sales Growth & PEG All	11.4%	61.6%	0.25	29.2%	80	110	28%	31	2.6%	NA	0.4%	NA	0.68	0.46	0.88	9.2%	
7 Yrly EPS Growth & PEG All	12.0%	61.7%	0.28	28.9%	72	100	47%	47	3.1%	NA	0.2%	NA	0.68	0.46	0.87	9.7%	
8 Yrly EPS Sales Growth & PEG All	12.3%	63.1%	0.28	29.7%	43	79	46%	36	3.4%	NA	1.0%	NA	0.67	0.45	0.88	10.0%	
9 SP500	1.6%	56.4%	-0.11	22.7%	500	500	NA	NA	-7.3%	NA	-6.1%	NA	1.00	1.00	1.00	0.0%	Benchmark
10 Yrly MC Top 25	6.5%	52.3%	0.09	26.9%	25	25			NA	-2.3%	NA	-1.8%	0.65	0.43	0.78		base case
11 Yrly Sales Growth Top 25	8.1%	-58.2%	0.14	28.6%	25	25			1.6%	-3.0%	1.7%	-0.6%	0.65	0.42	0.82	5.9%	
12 Yrly EPS Growth Top 25	7.9%	61.3%	0.14	28.3%	25	25			1.4%	-3.0%	1.4%	-0.8%	0.66	0.43	0.82	5.7%	
13 Yrly PEG Top 25	7.1%	50.4%	0.12	26.8%	25	25			0.6%	-2.8%	-0.1%	-1.7%	0.65	0.43	0.78	4.8%	
14 Yrly Sales & EPS Growth Top 25	10.5%	59.5%	0.22	29.1%	25	25			4.0%	-1.5%	2.2%	-0.5%	0.65	0.42	0.84	8.2%	
15 Yrly Sales Growth & PEG Top 25	9.1%	57.7%	0.18	28.7%	25	25	29%	7	2.6%	-2.3%	1.8%	-0.5%	0.65	0.42	0.82	6.8%	
16 Yrly EPS Growth & PEG Top 25	7.9%	60.8%	0.14	28.3%	25	25	47%	12	1.4%	-4.1%	1.3%	-0.7%	0.66	0.43	0.82	5.7%	
17 Yrly EPS Sales Growth & PEG Top 25	11.4%	60.4%	0.26	29.2%	25	25	47%	12	4.9%	-0.8%	2.3%	-0.5%	0.65	0.42	0.84	9.1%	
18 SP500	1.6%	56.4%	-0.11	22.7%	500	500	NA	NA	-5.0%	NA	-4.3%	NA	1.00	1.00	1.00		Benchmark
19 Yrly Random Top 25 (avg)	9.0%	65.4%	0.17	30.5%	25	25			2,5%	NA	3.6%	NA	0.64	0.41	0.87		Alternative Bench Random 25
Yrly Random Top 25 (SD)	2.1%	4.7%	0.07	0.8%	23	23			2,570	IVA	3.070	NA	0.04	0.01	0.02	2.0%	National 25
Yrly EPS Sales Growth & PEG Top 25	11.4%	60.4%	0.26	29.2%	25	25	47%	12	4.9%	-0.8%	2.3%	-0.5%	0.65	0.42	0.84	9.1%	
%distribution	87%	14%	92%	5%									80%	70%	12%	87%	

"Retail" Screen Factors Applied to Other S&P Sectors

- I ran the entire sector (i.e., all stocks in the sector that meet liquidity & market cap constraints), re-balanced annually, as a reference/benchmark
- I ran a randomly picked 25 stock screen, re-balanced annually, 30+ times to gather distribution stats
- I then applied these screen <u>factors</u> to the 10 S&P sectors. In each case the following was done (again re-balancing annually):
 - Performed a "Top25 Stock" sort study using the PEG rate, EPS TTM GR, Sales GR TTM, and Mkt Cap as single sort factors. I then selected the "best sort" based on CAGR.
 - With the selected sort, I then ran the following screens:
 - Single factor screens with PEG rate, EPS GR TTM and Sales GR TTM
 - Multi-factor screen with ALL 3 factors (PEG rate, EPS TTM GR and Sales GR TTM)
 - I then chose the "best screen" based on CAGR
- Compared the "best screen" to the distribution, the SP500 and the entire sector to get an idea of how well the screen performed
- The following table summarizes the results of this work

Example: Healthcare Screen

₩	Abou	ut No	tes Main Settings Rules Hedge Rules Results Backtest Advanced Backtest	
Ø	Show	v 🎉	Add Wizard Rule Add Free Form Clear As Of 8/20/1999 Run Totals &	9370
ф _в	×		Daily \$ Amount, 20 Day Average - Greater Than\$ 1000K	2667 ₪
÷ 4	×	and	GICS Sector - Energy	2667 ₪
÷ 4	×	and	GICS Sector - Health Care	258 ₪
÷ 4	×	and	GICS Sector - Materials	258 ₺
÷ 4	×	and	GICS Sector - Telecommunication Services	258 ₪
÷ 4	×	and	GICS Sector - Utilities	258 ₺
÷ 4	×	and	GICS Industry - Computers & Peripherals	258 ₪
d	×	or	GICS Industry - Electronic Equipment, Instruments & Components	258 ₺
d	×	or	GICS Industry - Electrical Equipment	258 ₺
d	×	or	GICS Industry - IT Services	258 ₺
d	×	or	GICS Industry - Office Electronics	258 ₺
d	×	or	GICS Industry - Semiconductors & Semiconductor Equipment	258 ₪
d	×	or	GICS Industry - Software	258 ₺
d	×	or	GICS Industry - Wireless Telecommunication Services	258 ₪
÷ 4	×	and	GICS Industry - Distributors	258 ₪
d	×	or	GICS Industry - Food & Staples Retailing	258 ₪
d	×	or	GICS Industry - Internet & Catalog Retail	258 ₺
d	×	or	GICS Industry - Multiline Retail	258 ₪
d	×	or	GICS Industry - Specialty Retail	258 ₪
÷ 4	×	and	Sales Growth Last 12 months - Better than Industry Median	258 ₪
÷ 4	×	and	PEG Ratio - Best in the Industry, lowest 50%	258 ₪
÷ 4	×	and	Earnings Growth Last 12 months - Better than Industry Median	258 ₪
\$	≯ ×	and	frank("Mktcap", #industry)>50	255 ₪

"Retail" Screen Applied to Other S&P Sectors

				Distribution			Sharpe						
Sector/Industry	Stocks	Best Sort	Best Screen	% CAGR	CAGR	MDD	Ratio	Std Dev	Correl	R-Sqrd	Beta	Alpha	Comment
Retail (Ind)	All	NA	NA	NA	12.3%	-63.1%	0.28	29.7%	0.67	0.45	0.88	10.0%	Base Screen
	Top25	MktCap	All 3	87%	11.4%	-60.4%	0.26	29.2%	0.65	0.42	0.84	9.1%	Base Screen, good screen
Tech (Ind)	All	NA	NA	NA	5.5%	-78.7%	0.05	31.7%	0.50	0.25	0.44	2.5%	Worst Sector
	Top25	PEG	PEG	65%	6.5%	-67.2%	0.07	34.1%	0.64	0.41	0.96	4.6%	Poor Screen
Energy	All	NA	NA	NA	14.1%	-65.7%	0.31	32.8%	0.54	0.29	0.78	11.6%	Best Sector
	Top25	PEG	EPS GR TTM	96%	17.1%	-77.4%	0.33	40.2%	0.53	0.28	0.93	14.8%	Great Screen, High SD
Utilities	All	NA	NA	NA	8.2%	-44.3%	0.21	20.4%	0.61	0.37	0.55	5.4%	
	Top25	EPS GR TTM	EPS GR TTM	76%	9.1%	-50.1%	0.24	21.8%	0.59	0.35	0.57	6.3%	Fair Screen
Healthcare	All	NA	NA	NA	9.5%	-47.6%	0.21	25.6%	0.67	0.44	0.75	7.0%	
	Top25	PEG	PEG	98%	14.7%	-51.5%	0.44	24.3%	0.62	0.39	0.67	11.8%	Great Screen, Low SD
Materials	All	NA	NA	NA	10.7%	-63.6%	0.22	30.4%	0.49	0.24	0.41	7.4%	
	Top25	PEG	PEG	34%	9.5%	-80.5%	0.15	36.7%	0.49	0.24	0.49	6.5%	Horrible screen
Industrials	All	NA	NA	NA	8.4%	-62.5%	0.16	28.1%	0.54	0.30	0.42	5.3%	
	Top25	Mkt Cap	EPS GR TTM	72%	10.0%	-64.9%	0.23	26.7%	0.53	0.28	0.39	6.7%	Fair screen
Cnsmr Discretionary	All	NA	NA	NA	7.6%	-71.1%	0.13	28.7%	0.54	0.29	0.43	4.5%	
	Top25	EPS GR TTM	EPS GR TTM	96%	10.6%	-71.3%	0.21	31.5%	0.50	0.25	0.44	7.4%	Great Screen
Cnsmr Staples	All	NA	NA	NA	10.1%	-43.9%	0.34	18.3%	0.50	0.25	0.25	6.5%	
	Top25	PEG	Sales GRT TTM	77%	11.4%	-51.9%	0.33	22.4%	0.47	0.22	0.29	7.8%	Fair screen, Low SD
Financials	All	NA	NA	NA	7.5%	-69.3%	0.12	29.6%	0.52	0.28	0.43	4.4%	
	Top25	EPS GR TTM	Sales GRT TTM	88%	9.8%	-61.8%	0.19	30.0%	0.51	0.26	0.43	6.5%	Good screen
IT	All	NA	NA	NA	2.6%	-87.4%	-0.04	34.7%	0.48	0.23	0.46	-0.2%	
	Top25	EPS GR TTM	Sales GRT TTM	72%	4.6%	-74.8%	0.02	37.3%	0.47	0.22	0.49	1.7%	Fair screen, High SD
Telecomm	All	NA	NA	NA	2.8%	-86.5%	-0.04	27.1%	0.49	0.24	0.37	-0.3%	
	Top27	EPS GR TTM	Sales GRT TTM	97%	7.1%	-72.8%	0.12	27.0%	0.48	0.23	0.36	3.9%	Great screen
S&P500	All	NA	NA	NA	1.6%	-56.4%	-0.11	22.7%	NA	NA	1.00	0.0%	Benchmark

"Retail" Screen vs. the Pros (Fido Selects)

- Another apt comparison is how the screen did vs. a corresponding sector actively managed mutual fund
- Problem: Which sector mutual fund to pick?? I used Fidelity since they have the longest history.
 - If I had infinite time I would compare to sector indices, a range of mutual funds, etc.
- Problem: Fido sector funds and 10 S&P sectors how do we map?? I took my best guess based on name, knowledge of fund. *Far from perfect*. Other comparisons may (probably are) better.
 - Again, with more time I would look into the mapping here in more detail
- What to compare on?? I used CAGR. SD, Sharpe would be my next choice. That pesky "lack of time" thing keeps coming up...

Bottom line: A reasonable initial comparison is given on the next page. In short, the screen did pretty well.

(Note: This is an unfair comparison: back-test vs. real-time performance).

"Retail" Screen Applied to Other S&P Sectors

				Distribution	
Sector/Industry	Alg	Best Sort	Best Screen	% CAGR	CAGR
Energy	All	NA	NA	NA	14.1%
	Top25	PEG	EPS GR TTM	96%	17.1%
	fsenx				9.3%
	fsesx				9.5%
	average				9.4%
Utilities	All	NA	NA	NA	8.2%
	Top25	EPS GR TTM	EPS GR TTM	76%	9.1%
	fiuix				3.0%
	fsutx				2.9%
	average				2.9%
Healthcare	All	NA	NA	NA	9.5%
	Top25	PEG	PEG	98%	14.7%
	fsphx				8.0%
Materials	All	NA	NA	NA	10.7%
	Top25	PEG	PEG	34%	9.5%
	fsdpx				11.1%
	fsngx				8.6%
	fnarx				9.9%
	average				9.9%
Industrials	All	NA	NA	NA	8.4%
	Top25	Mkt Cap	EPS GR TTM	72%	10.0%
	fsgcx				6.1%
	fcyix				9.3%
	average				7.7%
Cnsmr Staples	All	NA	NA	NA	10.1%
	Top25	PEG	Sales GRT TTM	77%	11.4%
	fdfax				9.1%
S&P500	All	NA	NA	NA	1.6%

				Distribution	
Sector/Industry	Alg	Best Sort	Best Screen	% CAGR	CAGR
Cnsmr Discretionary	All	NA	NA	NA	7.6%
	Top25	EPS GR TTM	EPS GR TTM	96%	10.6%
	fscpx				5.0%
	fsrpx				7.9%
	average				6.5%
Financials	All	NA	NA	NA	7.5%
	Top25	EPS GR TTM	Sales GRT TTM	88%	9.8%
	fsrbx				2.5%
	fslbx				7.6%
	fsvlx				-0.4%
	fidsx				1.7%
	fspcx				6.8%
	average				3.6%
IT	All	NA	NA	NA	2.6%
	Top25	EPS GR TTM	Sales GRT TTM	72%	4.6%
	fdcpx				2.7%
	fselx				1.3%
	fbsox				9.6%
	fscsx				10.0%
	fsptx				3.0%
	average				5.3%
Telecomm	All	NA	NA	NA	2.8%
	Top27	EPS GR TTM	Sales GRT TTM	97%	7.1%
	fsdcx				1.0%
	fstcx				0.7%
	average				0.9%
S&P500	All	NA	NA	NA	1.6%

"Retail" Screen & S&P Sectors: Summary

- Sorts dominated determining the performance
- For 8/10 sectors screen variations were in the 70th+ percentile. 2/10 were excellent. 1/10 (Materials) was horrible
- All screens beat the SP500 easily (so did all sectors)
- WRT screens vs. their "all stocks" sector benchmarks:
 - With 1 exception (Materials) screen CAGR beat the "all stocks" benchmark
 - 7/10 screens had a Std Dev larger than the "all stocks" benchmark—though Retail,
 Healthcare and Industrials were slightly lower
 - 7/10 sectors saw the screen having better Sharpe ratios
- Takeaways: Simple single factor sorts and screens work well in majority of the cases i.e., the "Retail" screen is a good general screen (at least for initial study)

"The Other Side of Value (OSV)" Screen

(Al Z)

The OSV Screen: Background

- David K alerted me to the article and the approach
- I've spent a bit of time to review and absorb the article and the 76 page paper(!!) it is based on -- and I have a bit more to go
- The following links provide background. (I'll place the papers at Dropbox)
 - http://rnm.simon.rochester.edu/research/OSoV.pdf
 - http://seekingalpha.com/article/207990-a-different-way-to-find-value
 - http://www.cxoadvisory.com/6040/fundamental-valuation/gross-profitability-as-a-stock-return-predictor/

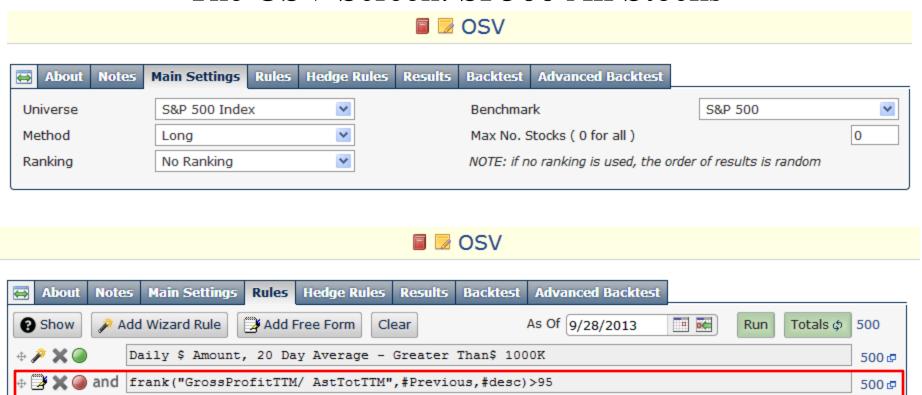
• General comments

- A simple screen: Gross Profit TTM / Total Assets TTM (yep, that's it)
- Claim is that it works well (better) on large cap than small
- Claim is that it works well (better) with faster re-balance periods
- There is a more complex screen version involving Book/Market will cover next month
- Financial institutions should be removed (I didn't remove them − oops!)
- (My comment): Seems to work better with a large number of stocks (100s not 10s)
- Not only is there <u>no momentum</u> in this screen <u>there's no pricing info at all!!</u>

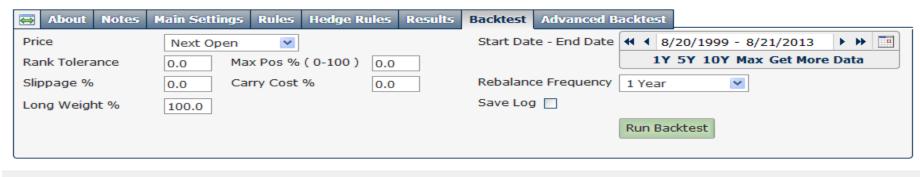
The OSV Screen: What I Did...

- Ran screen across a number of indices and sectors
 - Indices: SP500, SP400, SP600, ADRS, QQQ, NYSE, NASDAQ
 - Sectors: Energy, Materials, Industrials, Discretionary, Staples, Healthcare,
 Financials, IT, Telecom, Utilities
- Took larger cap part of index if/when appropriate
 - SP500=500; SP400=200; SP600=300, etc. by market cap
- Ran simple sort (GP TTM/ TtlAsst TTM) and took top 25 stocks
- Re-balanced annually, then tried quarterly and every 4 weeks to see if performance improved
- Also ran "All Stocks" of the index or sector, re-balanced annually, as a benchmark (along with SP500)
- In a few cases I ran a randomly picked 25 stock screen, re-balanced annually, 30+ times to gather distribution stats

The OSV Screen: SP500 All Stocks

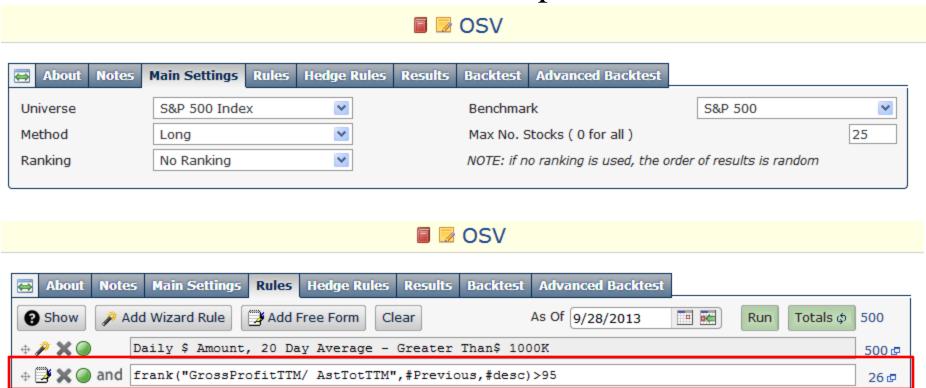


The OSV Screen: SP500 All Stocks

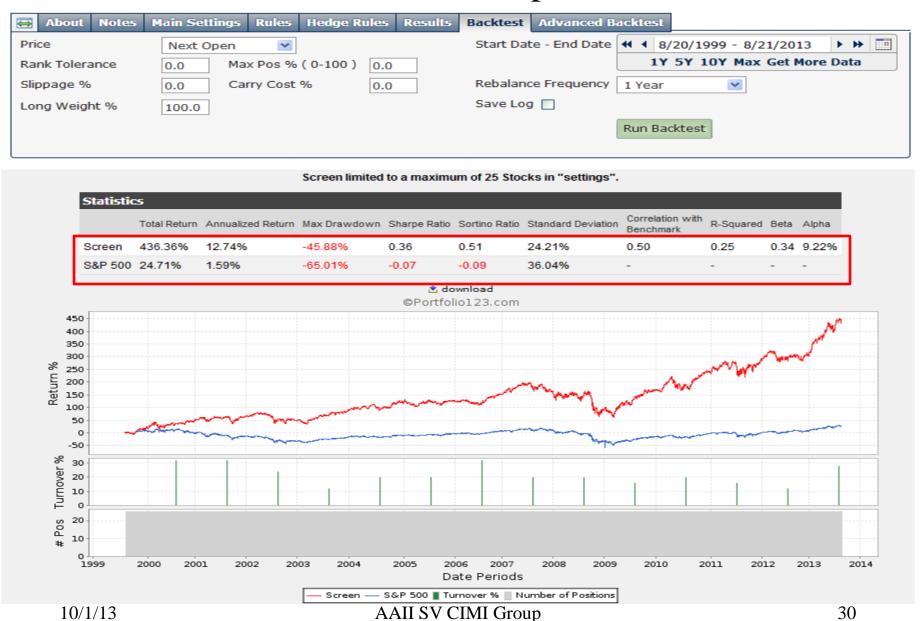




The OSV Screen: SP500 Top 25 OSV Stocks



The OSV Screen: SP500 Top 25 OSV Stocks



The OSV Screen: SP500 Top 25 OSV Stocks



The OSV Screen: Index Summary Table

			Distribution			Sharpe						
Index	#Stks	Rebalance	% CAGR	CAGR	MDD	Ratio	Std Dev	Correl	R-Sqrd	Beta	Alpha	Comment
S&P500	AII-500	None	NA	1.6%	-56.4%	-0.11	22.7%	NA	NA	1.00	0.0%	MktCap Benchmark
SP500	AII-500	Annual	NA	8.06%	-57.78%	0.17	24.37%	0.58	0.33	0.39	4.83%	
	Top 25	Annual	99%	12.74%	-45.88%	0.36	24.21%	0.5	0.25	0.34	9.22%	OSV paper area
												small universe 143 stocks
ADRs	AII-100	Annual	NA	5.03%	-58.84%	0.04	26.27%	0.47	0.22	0.34	1.81%	took top 100 by Mktcap
	Top 25	Annual	TBD	2.53%	-70.70%	-0.06	25.69%	0.45	0.2	0.32	-0.64%	
	Top 25	Quarterly	TBD	6.35%	-64.69%	0.09	26.54%	0.46	0.21	0.34	3.07%	
QQQQ	All-100	Annual	NA	9.24%	-56.39%	0.21	27.51%	0.5	0.25	0.32	5.55%	Started 2005
	Top 25	Annual	TBD	12.64%	-49.65%	0.34	27.64%	0.48	0.23	0.3	8.84%	
												~1400 pass liquidity test
NYSE	AII-500	Annual	NA	7.04%	-57.39%	0.13	23.51%	0.56	0.31	0.36	3.80%	took top 500 by MktCap
	Top 25	Annual	TBD	8.52%	-42.52%	0.22	20.82%	0.5	0.25	0.29	5.04%	
NASDAQ	AII-500	Annual	NA	4.98%	-74.54%	0.03	30.25%	0.52	0.27	0.44	1.97%	took top 500 by MktCap
	Top 25	Annual	TBD	11.75%	-64.52%	0.24	32.92%	0.45	0.2	0.41	8.44%	
	Top 25	Quarterly	100%	13.91%	-55.72%	0.31	32.08%	0.47	0.22	0.42	10.53%	quarterly random picks
												370 pass liquidity test
MidCap400	AII-200	Annual	NA	10.09%	-51.72%	0.25	24.40%	0.55	0.31	0.37	6.75%	took top 200 by MktCap
	Top 25	Annual	TBD	13.27%	-48.20%	0.35	26.89%	0.48	0.23	0.36	9.77%	
												370 pass liquidity test
Small Cap 600	AII-300	Annual	NA	10.58%	-53.85%	0.25	26.87%	0.54	0.29	0.4	7.28%	took top 300 by MktCap
	Top 25	Annual	TBD	9.29%	-57.03%	0.18	29.15%	0.47	0.22	0.38	5.99%	
	Top 25	Quarterly	TBD	12.20%	-57.45%	0.27	30.12%	0.48	0.23	0.4	8.84%	

The OSV Screen: S&P Sectors

Having just done the S&P sectors for the "Retail" screen I decided to give the OSV screen a whirl on the same sectors

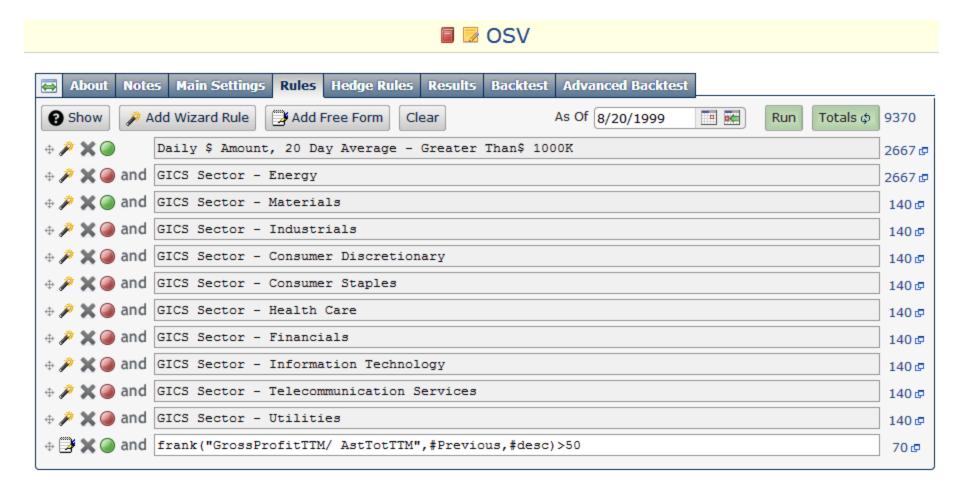
What I did...

- Ran simple sort (GP TTM/ TtlAsst TTM) and took top 25 stocks
- Compared to results from "Retail" screen in summary chart

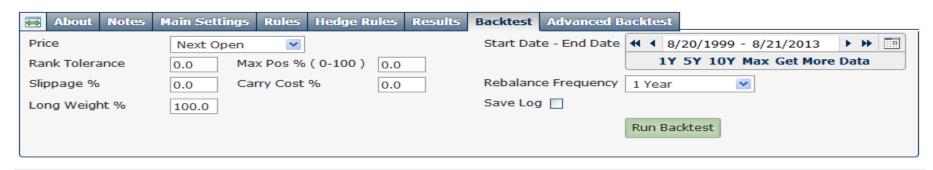
Next slides show...

- Example Screen
- Summary table for all sectors

The OSV Screen: Materials Sectors



The OSV Screen: Materials Sectors





The OSV Screen: Sector Summary Chart 1

				Distribution			Sharpe						
Sector/Industry	Stocks	Best Sort	Best Screen	% CAGR	CAGR	MDD	Ratio	Std Dev	Correl	R-Sqrd	Beta	Alpha	Comment
Energy	All	NA	NA	NA	14.1%	-65.7%	0.31	32.8%	0.54	0.29	0.78	11.6%	Best Sector
	Top25	PEG	EPS GR TTM	96%	17.1%	-77.4%	0.33	40.2%	0.53	0.28	0.93	14.8%	Great Screen, High SD
	Top25	OSV	NA	TBD	11.2%	-66.4%	0.22	33.2%	0.41	0.16	0.37	7.9%	
			Differenc	e: OSV - Retail	-5.9%	10.9%	-0.11	-7.0%	-0.12	-0.12	-0.56	-6.9%	OSV does poorly
Utilities	All	NA	NA	NA	8.2%	-44.3%	0.21	20.4%	0.61	0.37	0.55	5.4%	
	Top25	EPS GR TTM	EPS GR TTM	76%	9.1%	-50.1%	0.24	21.8%	0.59	0.35	0.57	6.3%	Fair Screen
	Top25	OSV	NA	TBD	11.0%	-47.2%	0.32	21.9%	0.45	0.20	0.27	7.4%	
			Differenc	e: OSV - Retail	1.9%	2.9%	0.08	0.1%	-0.14	-0.15	-0.30	1.1%	OSV easily wins
Healthcare	All	NA	NA	NA	9.5%	-47.6%	0.21	25.6%	0.67	0.44	0.75	7.0%	
	Top25	PEG	PEG	98%	14.7%	-51.5%	0.44	24.3%	0.62	0.39	0.67	11.8%	Great Screen, Low SD
	Top25	OSV	NA	TBD	14.1%	-40.0%	0.39	25.8%	0.44	0.20	0.32	10.4%	
			Differenc	e: OSV - Retail	-0.6%	11.4%	-0.05	1.5%	-0.18	-0.19	-0.35	-1.4%	OSV close
Materials	All	NA	NA	NA	10.7%	-63.6%	0.22	30.4%	0.49	0.24	0.41	7.4%	
	Top25	PEG	PEG	34%	9.5%	-80.5%	0.15	36.7%	0.49	0.24	0.49	6.5%	Horrible screen
	Top25	OSV	NA	TBD	15.1%	-61.4%	0.37	30.0%	0.50	0.25	0.41	11.7%	
			Differenc	e: OSV - Retail	5.6%	19.1%	0.22	-6.6%	0.01	0.01	-0.08	5.2%	OSV easily wins
Industrials	All	NA	NA	NA	8.4%	-62.5%	0.16	28.1%	0.54	0.30	0.42	5.3%	
	Top25	Mkt Cap	EPS GR TTM	72%	10.0%	-64.9%	0.23	26.7%	0.53	0.28	0.39	6.7%	Fair screen
	Top25	OSV	NA	TBD	10.6%	-62.1%	0.22	29.6%	0.50	0.25	0.41	7.3%	
			Differenc	e: OSV - Retail	0.5%	2.9%	-0.01	2.9%	-0.03	-0.03	0.02	0.5%	OSV slightly better

The OSV Screen: Sector Summary Chart 2

				Distribution			Sharpe						
Sector/Industry	Stocks	Best Sort	Best Screen	% CAGR	CAGR	MDD	Ratio	Std Dev	Correl	R-Sqrd	Beta	Alpha	Comment
Cnsmr Discretionary	All	NA	NA	NA	7.6%	-71.1%	0.13	28.7%	0.54	0.29	0.43	4.5%	
	Top25	EPS GR TTM	EPS GR TTM	96%	10.6%	-71.3%	0.21	31.5%	0.50	0.25	0.44	7.4%	Great Screen
	Top25	OSV	NA	TBD	7.9%	-65.5%	0.13	31.1%	0.46	0.22	0.40	4.7%	
			Differenc	e: OSV - Retail	-2.6%	5.8%	-0.08	-0.4%	-0.04	-0.03	-0.04	-2.6%	OSV does poorly
Cnsmr Staples	All	NA	NA	NA	10.1%	-43.9%	0.34	18.3%	0.50	0.25	0.25	6.5%	
	Top25	PEG	Sales GRT TTM	77%	11.4%	-51.9%	0.33	22.4%	0.47	0.22	0.29	7.8%	Fair screen, Low SD
	Top25	OSV	NA	TBD	10.9%	-47.2%	0.32	21.5%	0.44	0.19	0.26	7.3%	
			Differenc	e: OSV - Retail	-0.5%	4.6%	-0.01	-0.9%	-0.03	-0.03	-0.03	-0.5%	OSV close
Financials	All	NA	NA	NA	7.5%	-69.3%	0.12	29.6%	0.52	0.28	0.43	4.4%	
	Top25	EPS GR TTM	Sales GRT TTM	88%	9.8%	-61.8%	0.19	30.0%	0.51	0.26	0.43	6.5%	Good screen
	Top25	OSV	NA	TBD	12.3%	-63.8%	0.27	31.4%	0.53	0.28	0.46	9.1%	
			Differenc	e: OSV - Retail	2.6%	-2.0%	0.08	1.4%	0.02	0.02	0.03	2.6%	OSV easily wins
IT	All	NA	NA	NA	2.6%	-87.4%	-0.04	34.7%	0.48	0.23	0.46	-0.2%	
	Top25	EPS GR TTM	Sales GRT TTM	72%	4.6%	-74.8%	0.02	37.3%	0.47	0.22	0.49	1.7%	Fair screen, High SD
	Top25	OSV	NA	TBD	6.5%	-87.4%	0.07	37.5%	0.43	0.18	0.45	3.5%	
			Differenc	e: OSV - Retail	1.9%	-12.7%	0.05	0.2%	-0.04	-0.04	-0.04	1.8%	OSV easily wins
Telecomm	All	NA	NA	NA	2.8%	-86.5%	-0.04	27.1%	0.49	0.24	0.37	-0.3%	
	Top27	EPS GR TTM	Sales GRT TTM	97%	7.1%	-72.8%	0.12	27.0%	0.48	0.23	0.36	3.9%	Great screen
					0.2%	-83.0%	-0.13	29.7%	0.47	0.22	0.39	-2.7%	
					-6.9%	-10.3%	-0.25	2.7%	-0.01	-0.01	0.03	-6.6%	
S&P500	All	NA	NA	NA	1.6%	-56.4%	-0.11	22.7%	NA	NA	1.00	0.0%	Benchmark

The OSV Screen: Summary

- Screen lives up to its rep: One of the better/best single factor sort screens I've seen -- even when (purposely) mis-applied
- On Indices...
 - Works great on SP500, QQQ, Mid-Cap (annually) NASDAQ (annually, quarterly)
 - Works OK on NYSE (annual) & ADRs, Small Cap (quarterly);
 - Why stress?? Go with the SP500 version and get 12.7% CAGR
- On S&P Sectors…
 - Beat the "Retail" screen (tuned for best performance!) in 5/10 sectors, came close in 2 more
 - Beat "All Stocks" in 8/10 sectors
 - Why not pick between Retail & OSV for each sector?? Will have a winner in every sector! (screens tend to be complimentary)

• Future work

- Fill in the rest of the table info (random distribution data, OSV quarterly, monthly rebalance returns)
- Implement 2nd part of OSV screen (Book/Market dual sort)

Reference Material

- Asset Class Timing Review
- Performance Metrics

Asset Class/Allocator/Timing Review

- Charts for the 10 Faber/QTAA ETFs/Assets
- Charts for static and dynamic asset allocators
- \$NAHL timing system
 - Useful for small caps (IWM) which has slightly different timing needs

Asset Class/Allocator/Timing Review

The rules for deciding Bullish vs. Bearish in these charts are given below:

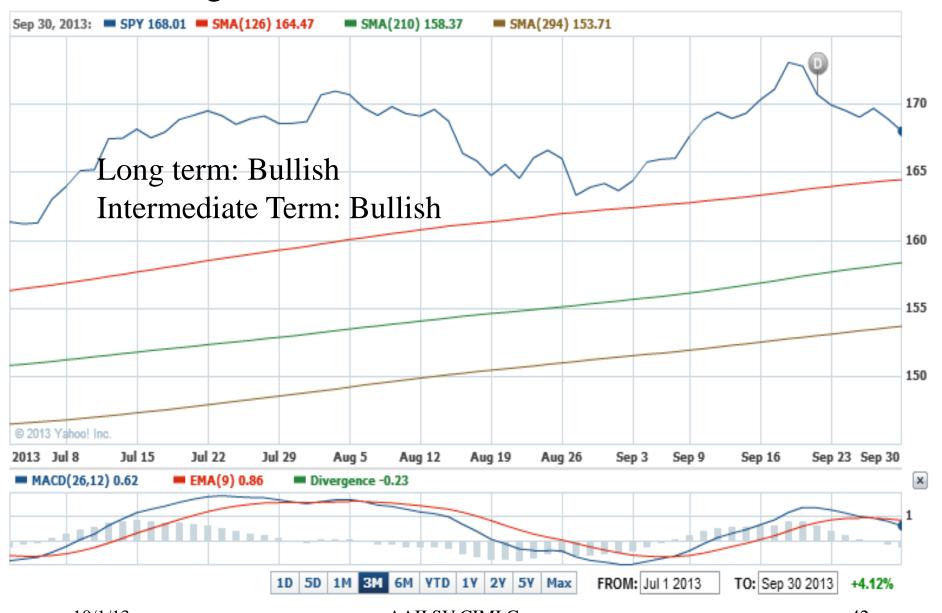
The 6, 10 and 14 month SMAs are used since Meb Faber suggests these in his work and book as an appropriate range

Long term: If above 210 day SMA (10 month SMA) then bullish, below bearish.

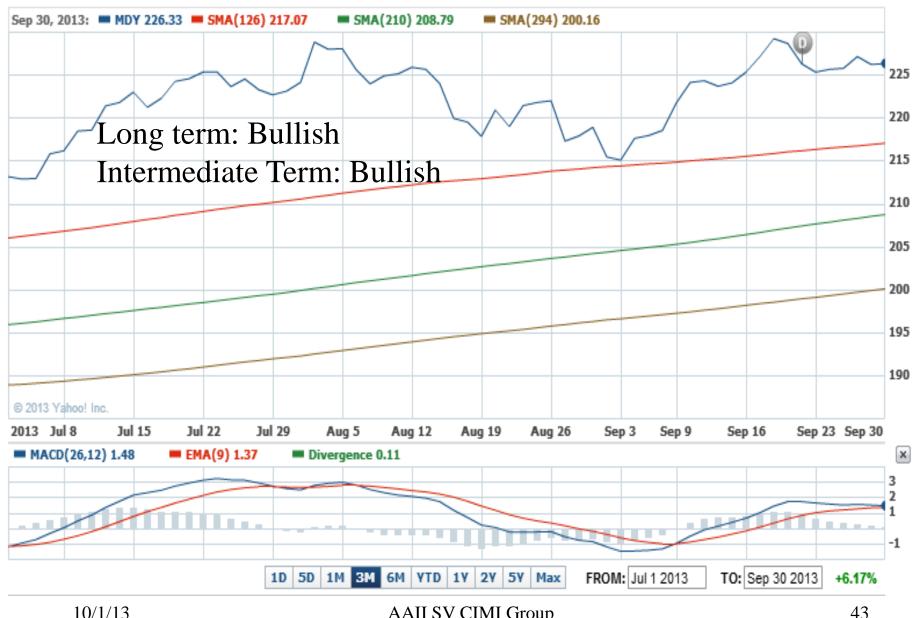
Intermediate term: If the MACD (26,12) line (blue line) is below zero, bearish; above bullish.

In both cases I occasionally add some question marks (??) when the situation is dicey/a close call.

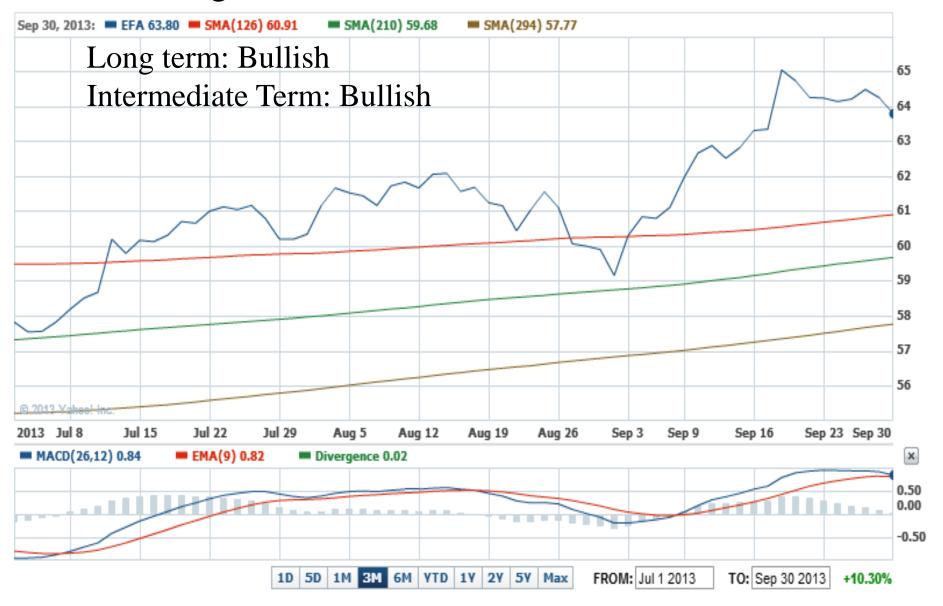
SPY Timing



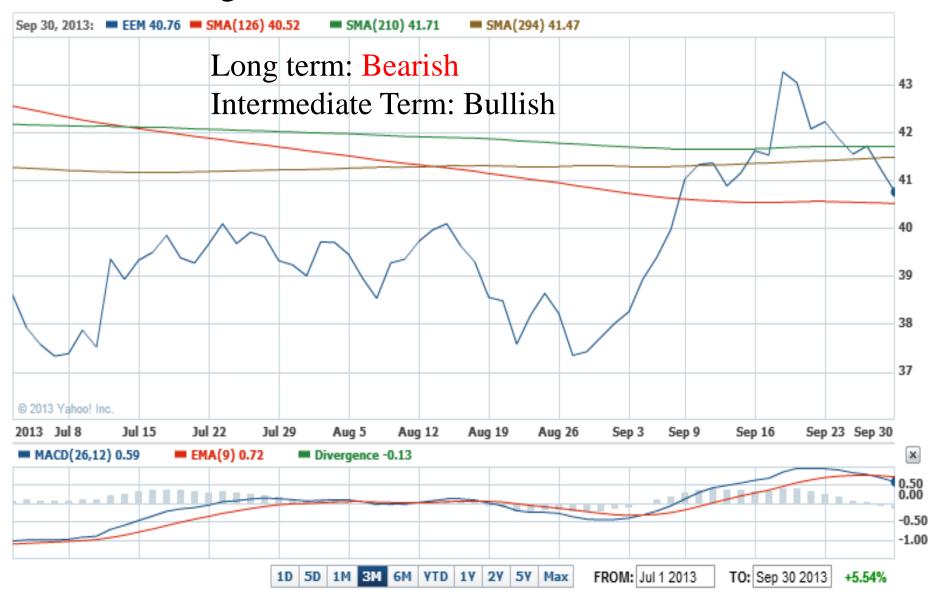
MDY Timing



EFA Timing



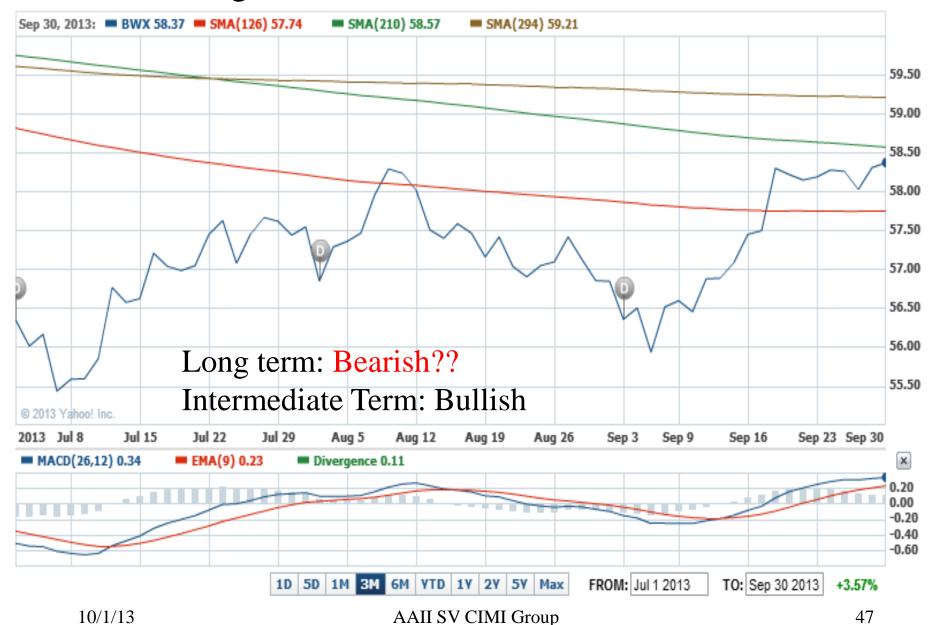
EEM Timing



AGG Timing – No Dividends!!



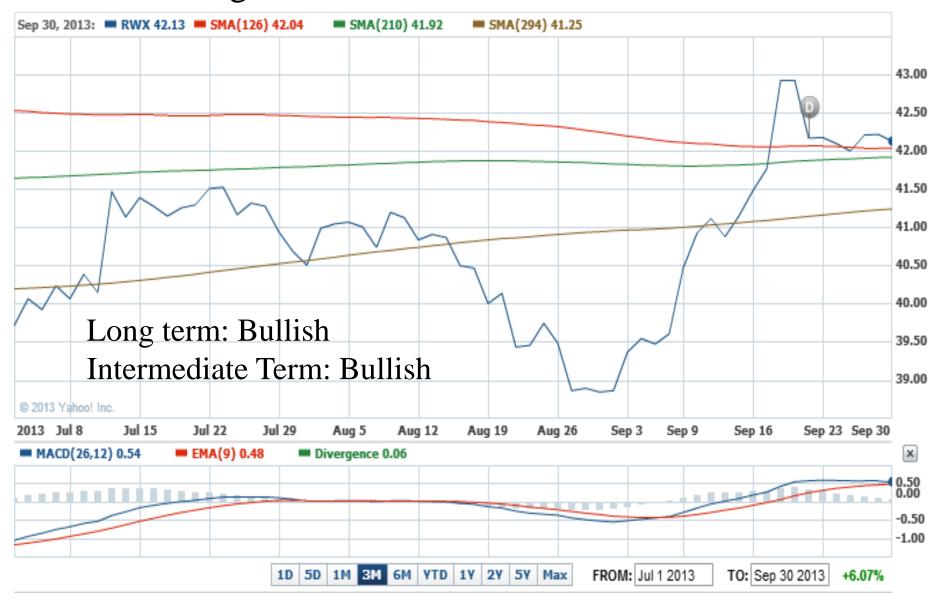
BWX Timing – No Dividends!!



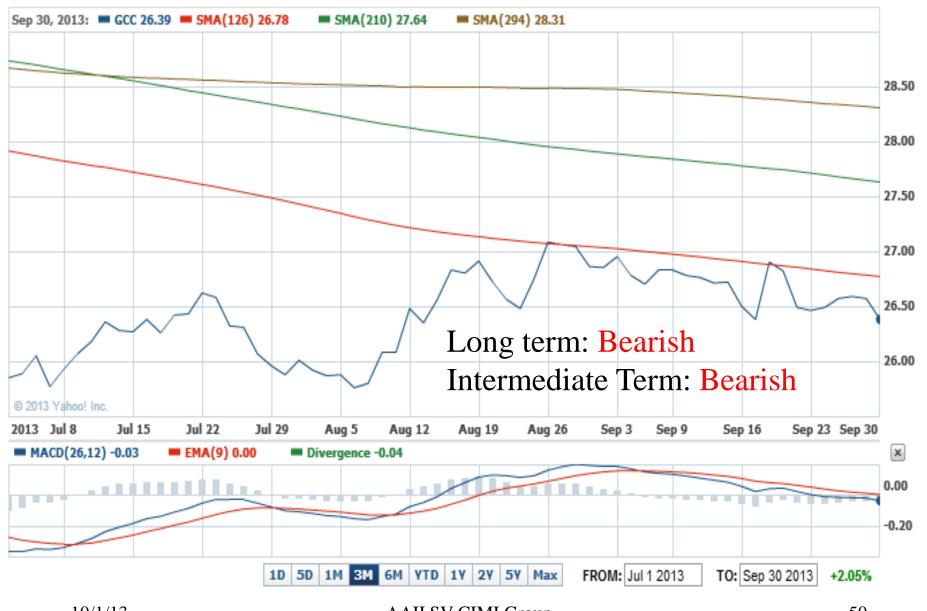
IYR Timing – No Dividends!!



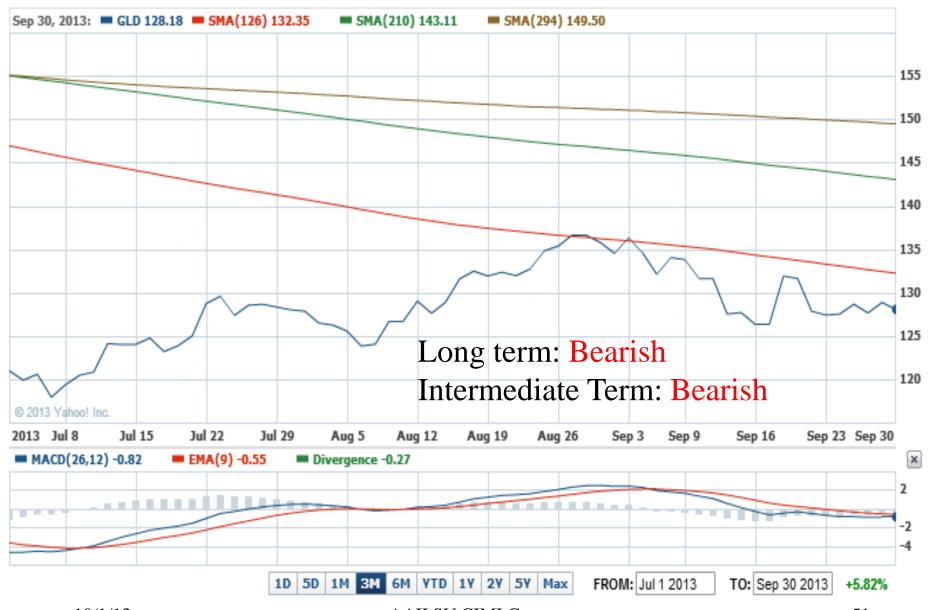
RWX Timing – No Dividends!!



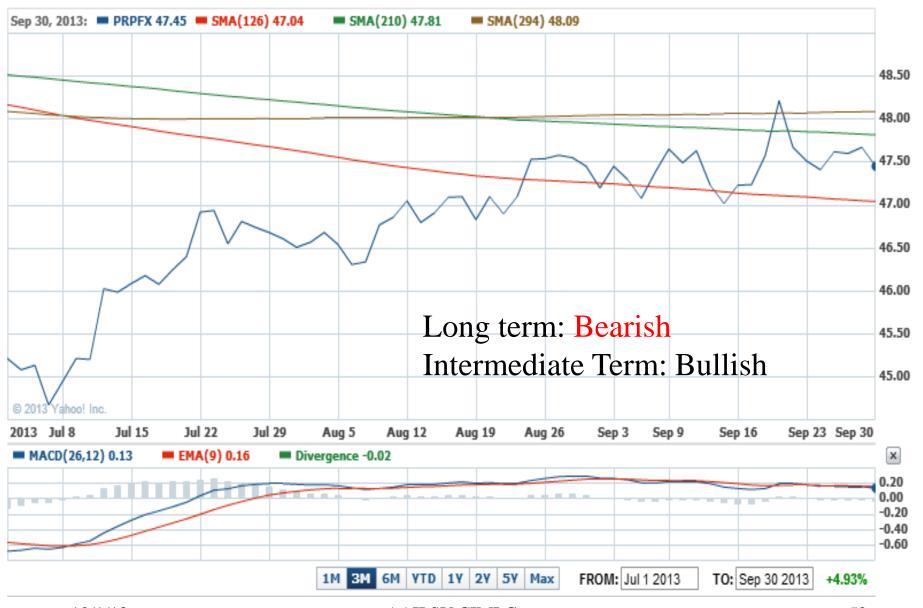
GCC Timing



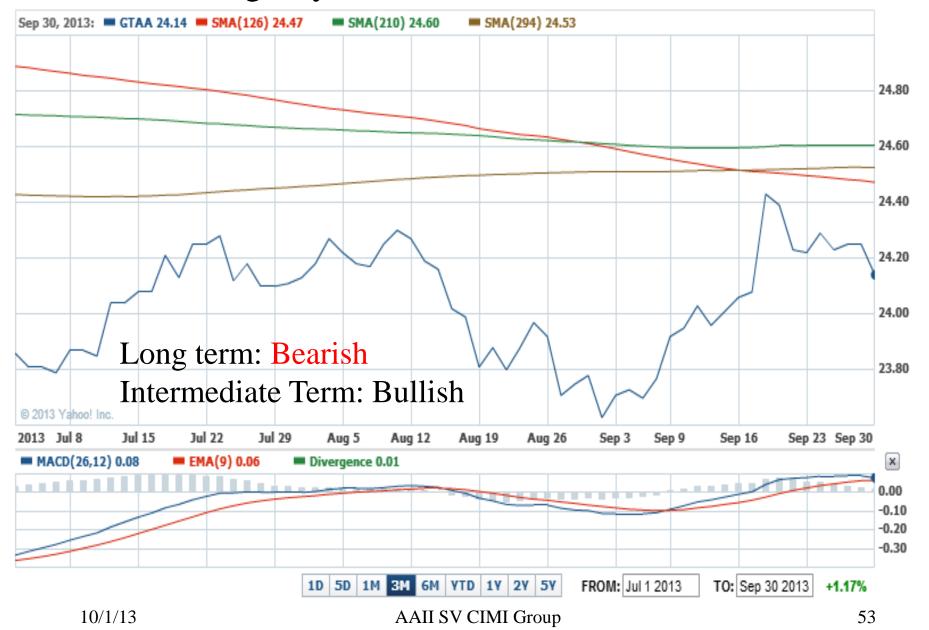
GLD Timing



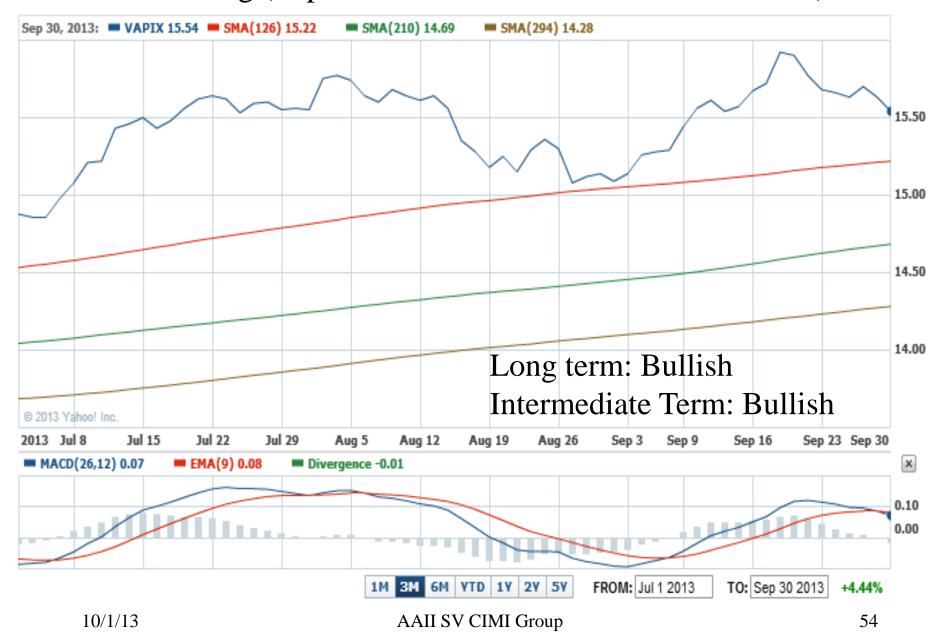
PRPFX Timing (Static Asset Allocator)



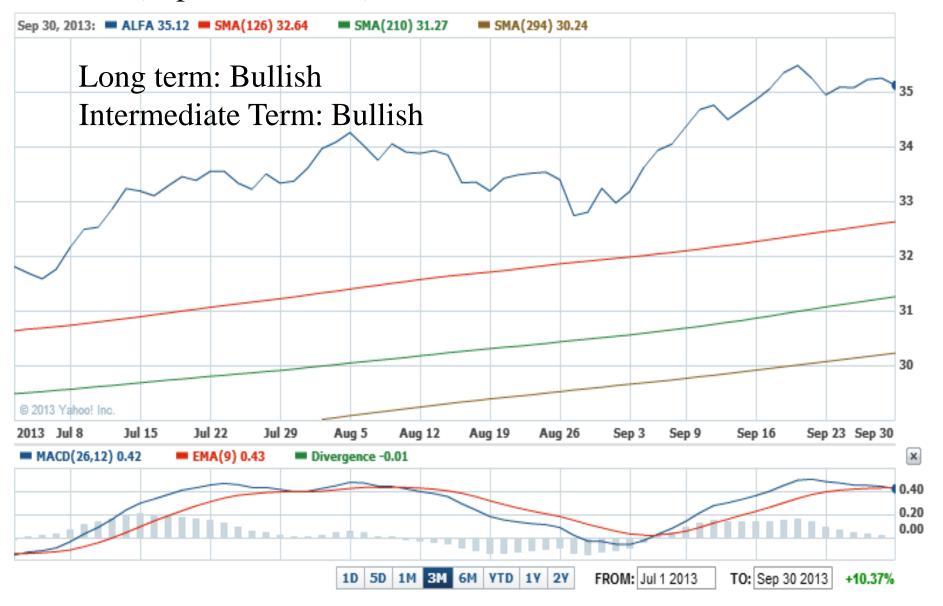
GTAA Timing (Dynamic Asset Allocator)



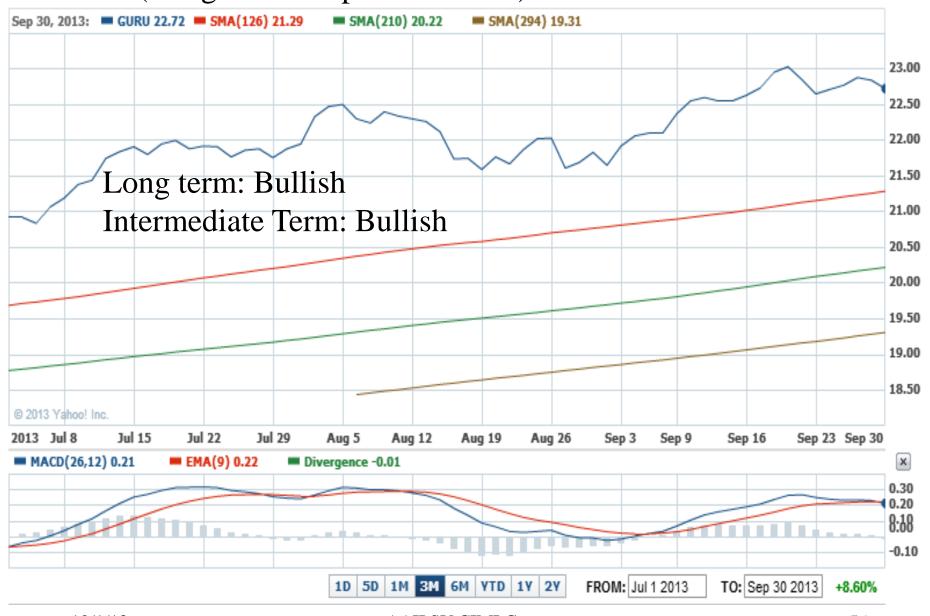
VAPCX Timing (Sophisticated US Stock Sector/Bond Fund)



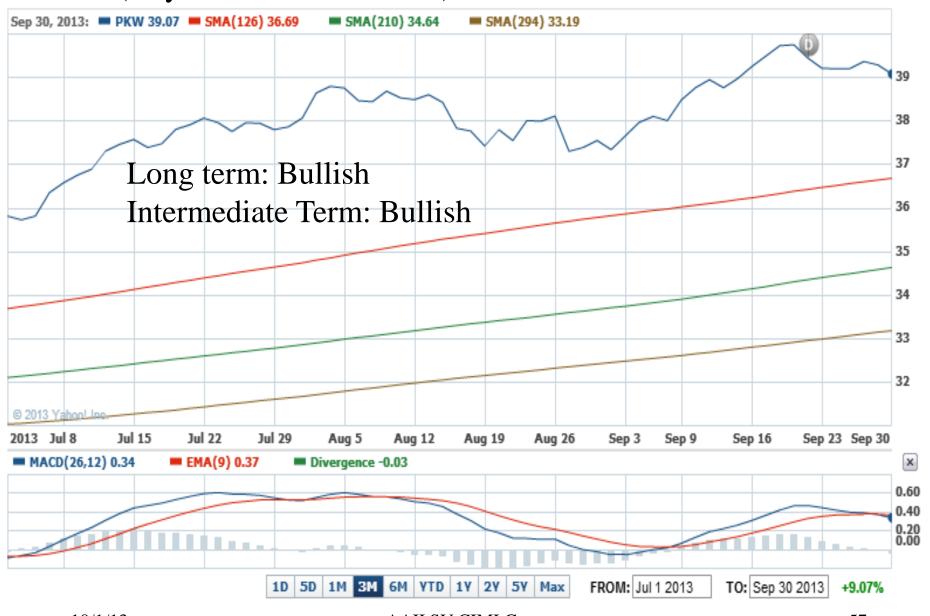
ALFA (AlphaClone ETF)



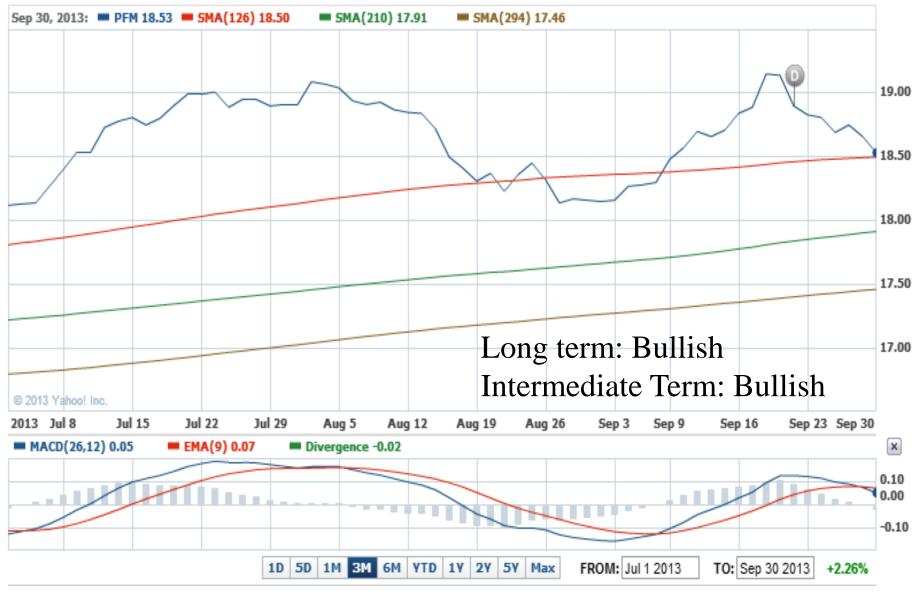
GURU (Hedge fund Replication ETF)



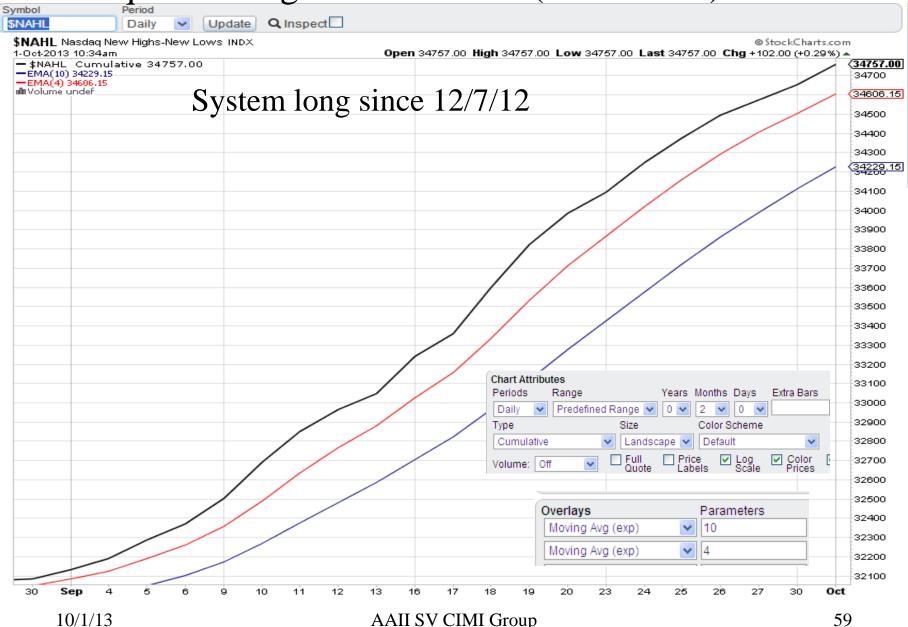
PKW (Buyback Achievers ETF)



PFM (Dividend Achievers ETF)



Nasdaq #New High – #New Low (cumulative)



Performance Metrics

EC	Equity Curve	Portfolio Value plotted against time					
CRR	Compound Rate of Return	Reward Measurement Annualized compound, or geometric, rate of return					
DD	Drawdown	Percentage difference in portfolio value on a given date from the maximum portfolio value on all prior dates					
MDD	Maximum Drawdown	Risk Measurement - Maximum observed DD over all portfolio valuation dates					
UI	Ulcer Index	Risk Measurement - Root Mean Square of the DD measurements for all portfolio evaluation dates. For each date, measure DD and square it. Then take the square root of the average of all the DD^2 measurements. The result is the Ulcer Index where a high number means the portfolio has large drawdowns that take a long time to recover to a new portfolio high value.					
UPI	Ulcer Performance Index	Reward to Risk Measure CRR / UI					
CR	Calmar Ratio	Reward to Risk Measure CRR / MDD This measure is inferior to the UPI because a single large DD will result in a low Calmar Ratio forever					

with permission, Michael Begley, informal notes

Performance Metrics: Examples

