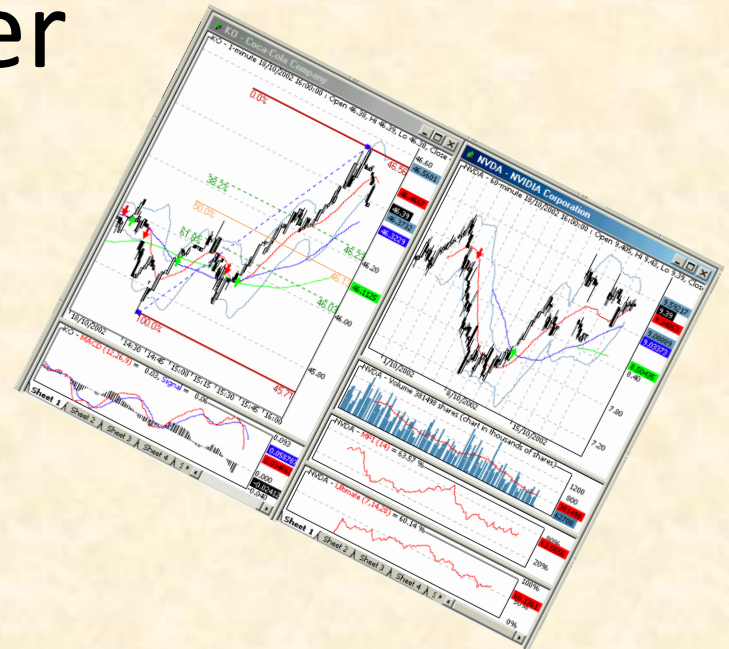


An Introduction to AmiBroker

What it Can Do?
Is it for You?

Bob Krishfield &
Bob Brand



Agenda

- Overview
 - Description
 - Functions & Features
 - Costs for One Year
 - What People Like/Dislike about AmiBroker
- Example Charts and Reports
- Demonstrations & Comments

AmiBroker Description

Another Technical Analysis Program ... And MORE!

Contains all the Indicators of Most Software Programs

Range of Features allows Beginners to Use Basic Capabilities

It Takes a While to Grow Into Advanced Capabilities of

- Chart Customization
- Trading System Development, Backtesting & Validation
- Screening/Scanning/Ranking

Tools are Open, Well Documented & Supported

No Black-Box Proprietary Methods

All Features of AB Are Available from Code Level

Uses AFL ('C- like code), Smart Code Editor, Wizard & Help Functions



AmiBroker Functions

Automatic Analysis

Explore

Filter, Spreadsheet,
Sort/Rank Listings

Scan

Alerts, Buy/Sells
Update Stored Sigs

BackTest

Portfolio Level Profit,
Win/Loss, Drawdown

Optimize

Multiple params
Walk-Fwd. Validation

Charting

Layouts, templates, Windows
Drag&Drop Indicators,
Line-Bar-Candles-P&F, Equity,
MultiPlots

EOD DataBase

Markets, , Groups,
Sectors, Watchlists

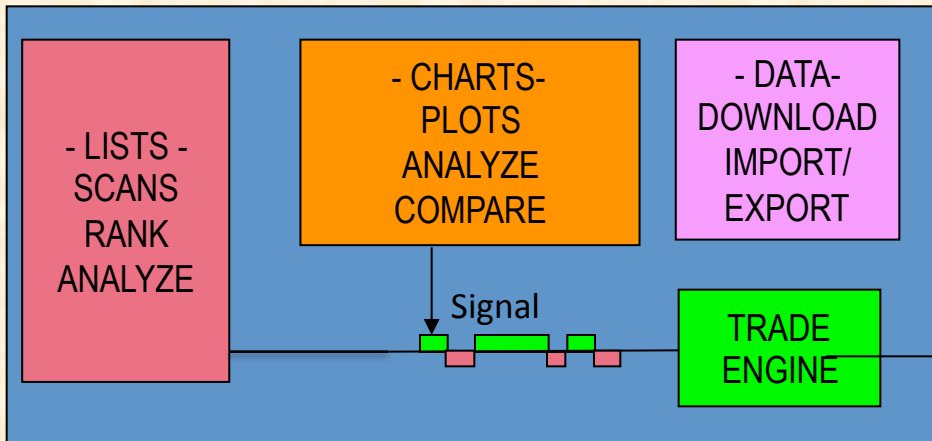
RT DataBase

Markets, , Groups,
Sectors, Watchlists

FastTrack
MetaStock
TC2000
Nortel Premium
FREE Yahoo, Google

AmiQuote

FREE Yahoo, Google
Reuters Quotelink
TC2000
myTrack
eSignal



CSV files
HTML Reports

% Profits
Win/Loss
DrawDown

AFL
Editor

AFL, Vbasic, jScript

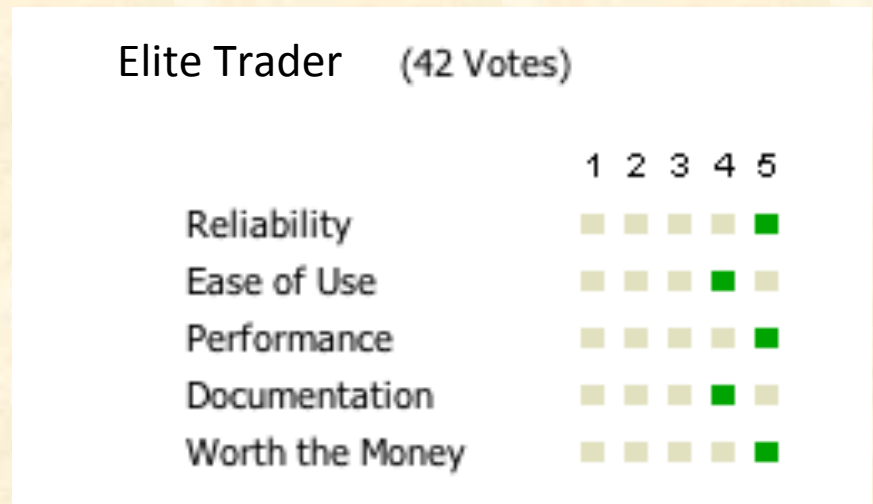
Features Detail

- See List of Features at Amibroker.com

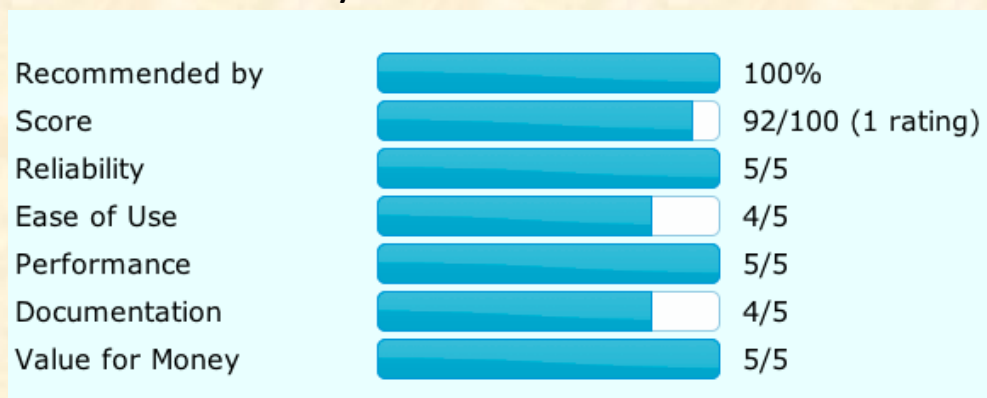
How Users Rate AmiBroker

5 Star Ratings by Users

- ***** Portfolio Testing
- ***** Processing Speed
- **** Trades all Instruments & Timeframes
- *** Charting
- *** Documentation/ Support
- * Ease of Programming



MyPivots.com



Software and One Year Data Costs

AmiBroker	EOD	IntraDay / R T
AmiBroker Program	199	279
+ AmiQuote	+65	+65
+ AFL Code Wizard	+65	+65
<u>Data Providers</u>		
Yahoo Data	Free	132
Norgate Premium*	297	n/a
TC2000*	300	720
Reuters* DataLink/ Quotelink	240	1300
myTrack Data	360	1380
CSI	375	n/a

* Adjusted for Div. & Splits

MetaStock Software	499	960
---------------------------	------------	------------

AmiBroker Free Support

Free Technical Support for Paid Users Provided via e-mail Only

Free Support Package Includes:

- unlimited support for installation issues
- unlimited support issues for basic usage charting, help on AFL functions, setting up data plug-in
- limited support for advanced usage issues including basic AFL/VBScript/JScript

On-Line User Manual and Help Files:

- Startup instructions, tutorials, How-to directions, Detailed References

What's Not for free?

- debugging customer's code/writing DLLs
- help on 3rd party tools
- custom programming
- consultation on C/C++, JScript, VBScript

Getting Started – A Little Work

Learn Basics - Charting / Analysis

1. Read “Getting Started” Instructions
2. Do AB Tutorials and / or Buy H. Bandy’s Book
3. Follow Discussions on Yahoo Groups

Advanced Capabilities - Learn AFL

1. Read User Manual
2. Try Examples in Manual, AB Library & Other Libraries
3. Try AFL Examples on Yahoo, Swap AFL code

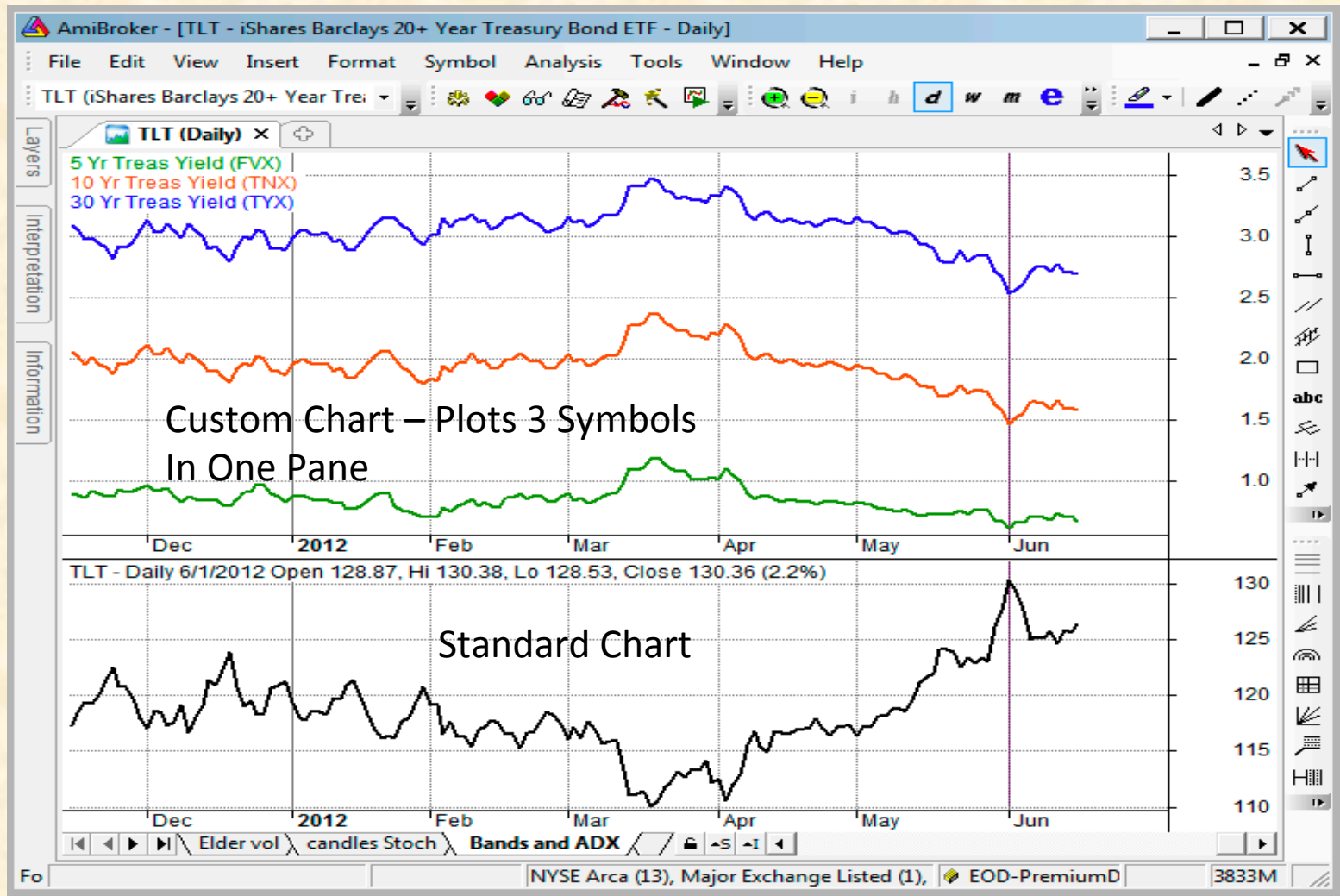
Key Sources of information

- **Starters Guide:** www.amibroker.com/starter/
- **Yahoo Groups:** finance.groups.yahoo.com/group/amibroker
- H. Bandy, “Introduction to Amibroker”, Blue Owl Press

Default Chart (Out-of-Box)



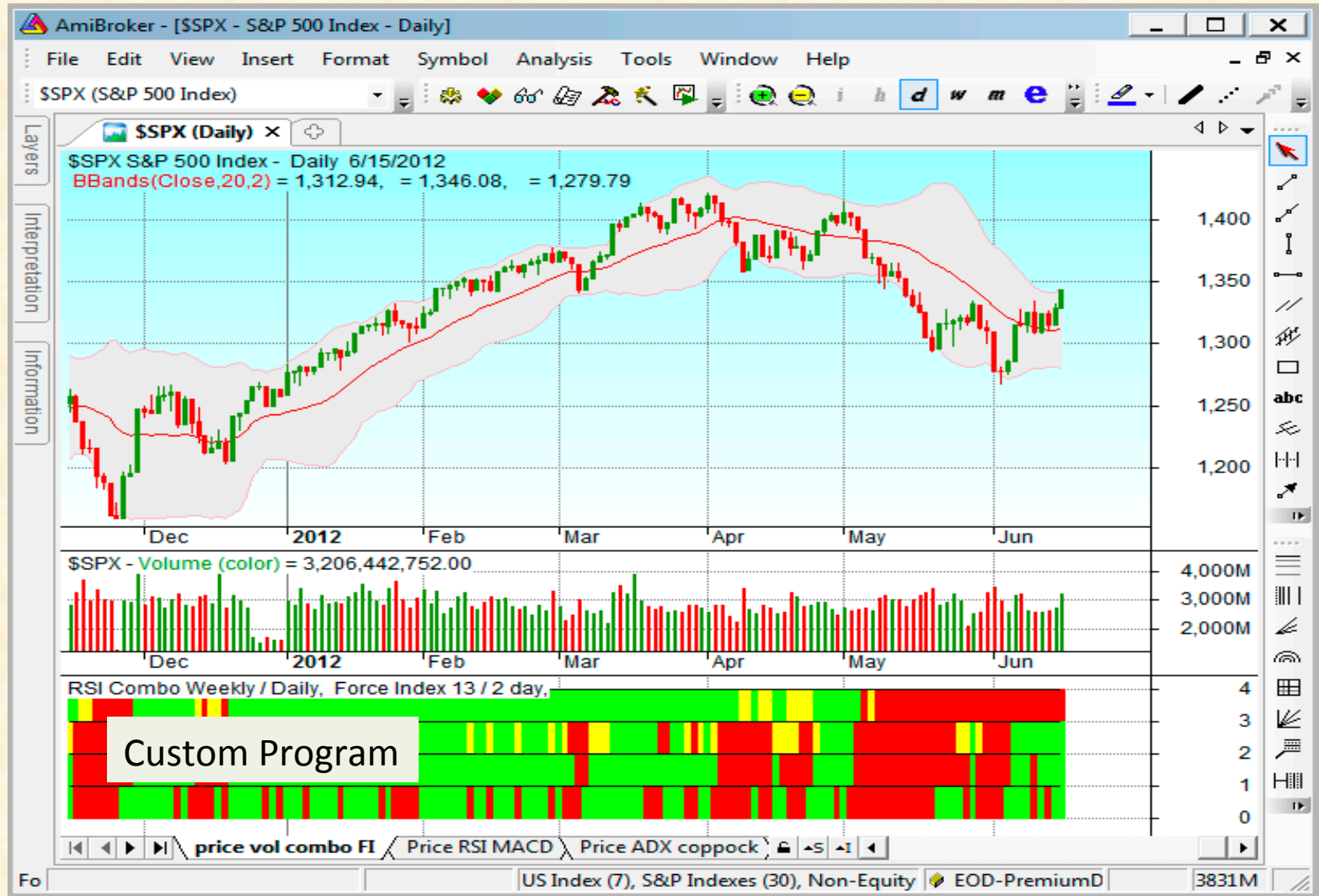
Line Charts



Multiple Window Layout



3 Tabs in One Layout



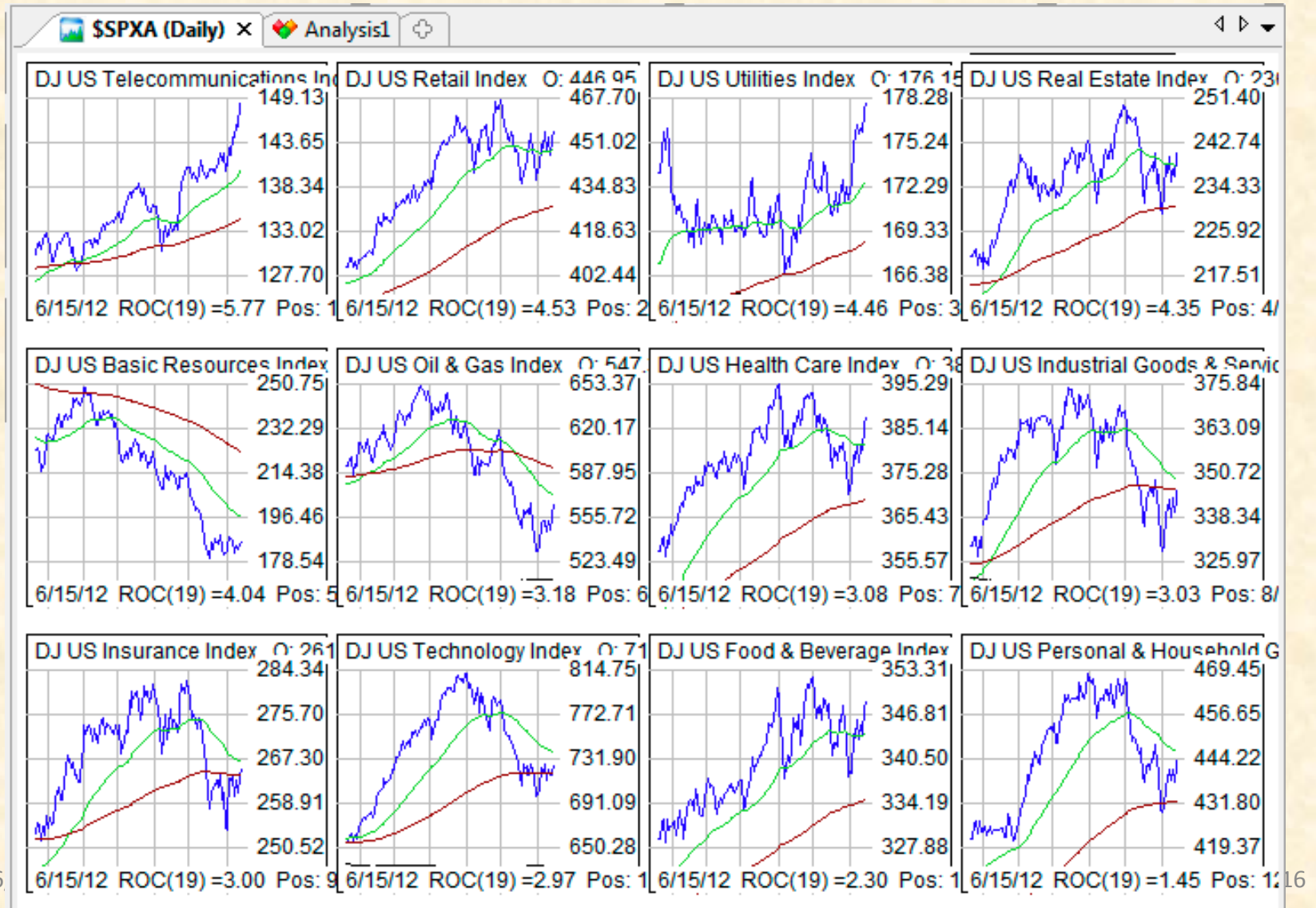
Tab 2 – RSI and MACD



Tab3 – ADX and Coppock



Chart Matrix



Analysis – Correlation Matrix

~My Picks (Daily) Analysis7 x

Scan Explore Backtest Optimize Formula Formulas\AA Explorations_Correlation mat

Apply to *Filter Range From-To dates 1/ 3/2012 6/30/2012

Tic...	Name	ACC	BIP	BKT	CHT	CNP	D	ED	NZT	STR	UL
ACC	American Campus C		0.567	0.238	-0.452	0.509	0.348	0.152	0.808	0.089	0.388
BIP	Brookfield Infrastructur...	0.567		0.378	-0.733	0.779	0.721	0.536	0.646	0.608	0.103
BKT	BlackRock Income Trust ...	0.238	0.378		-0.520	0.252	0.142	0.011	0.518	0.019	0.204
CHT	Chunghwa Telcomm Com...	-0.452	-0.7...	-0.520		-0.408	-0.327	-0.102	-0.697	-0.192	0.018
CNP	CenterPoint Energ	0.509	0.779	0.252	-0.408		0.881	0.671	0.427	0.626	0.178
D	Dominion Resource	0.348	0.721	0.142	-0.327	0.881		0.807	0.227	0.744	0.104
ED	Consolidated Edis	0.152	0.536	0.011	-0.102	0.671	0.807		-0.071	0.782	-0.116
NZT	Telecom Of New Zealan...	0.808	0.646	0.518	-0.697	0.427	0.227	-0.071		0.005	0.425
STR	Questar Corporati	0.089	0.608	0.019	-0.192	0.626	0.744	0.782	0.005		-0.109
UL	Unilever Ltd America Sh...	0.388	0.103	0.204	0.018	0.178	0.104	-0.116	0.425	-0.109	

Momentum (Cheese Chart)

Apply to *Filter		Range		From-To dates		1/ 1/2010	6/ 1/2012					
Ticker	Name	3/30	4/5	4/13	4/20	4/27	5/4	5/11	5/18	5/25	..	
T	AT&T Inc.	73	72	69	70	76	77	80	81	81	82	
DIS	Walt Disney Compa	80	78	75	75	77	76	80	75	76	75	
VZ	Verizon Communica	61	58	55	58	64	66	70	72	74	72	
HD	Home Depot, Inc.	91	91	92	92	93	93	85	72	75	69	
WMT	Wal-Mart Stores,	69	67	63	69	59	54	52	60	66	68	
KO	Coca-Cola Company	74	74	70	75	78	80	81	72	73	68	
TRV	The Travelers Com	63	62	60	68	71	73	75	69	69	63	
AXP	American Express	79	80	79	79	82	83	82	72	70	63	
PFE	Pfizer, Inc. Comm	79	77	73	77	79	73	74	72	68	62	
KFT	Kraft Foods Inc.	72	72	67	72	76	75	74	69	68	59	
IBM	Intl Bus	81	79	76	73	76	75	71	67	64	58	
INTC	Intel Corporation	81	81	82	79	81	79	76	67	61	54	
GE	General Electric	77	74	70	71	73	70	66	63	61	54	
MSFT	Microsoft Corpora	81	78	74	78	77	72	72	64	59	53	
DD	E.I. du Pont de N	74	74	72	74	76	74	70	61	58	51	
MMM	3M Company Common	74	71	68	70	73	72	68	60	58	51	
MRK	Merck & Company,	71	73	69	72	70	72	65	60	54	49	
BAC	Bank of America C	74	73	69	67	65	61	58	53	51	47	
BA	Boeing Company (T	71	69	68	66	71	69	61	52	49	43	
XOM	Exxon Mobil Corpo	72	70	66	68	68	65	58	52	49	42	
JPM	JP Morgan Chase &	81	78	75	74	74	70	60	51	47	41	
PG	Procter & Gamble	72	73	69	73	63	59	55	51	45	40	

Performance Report

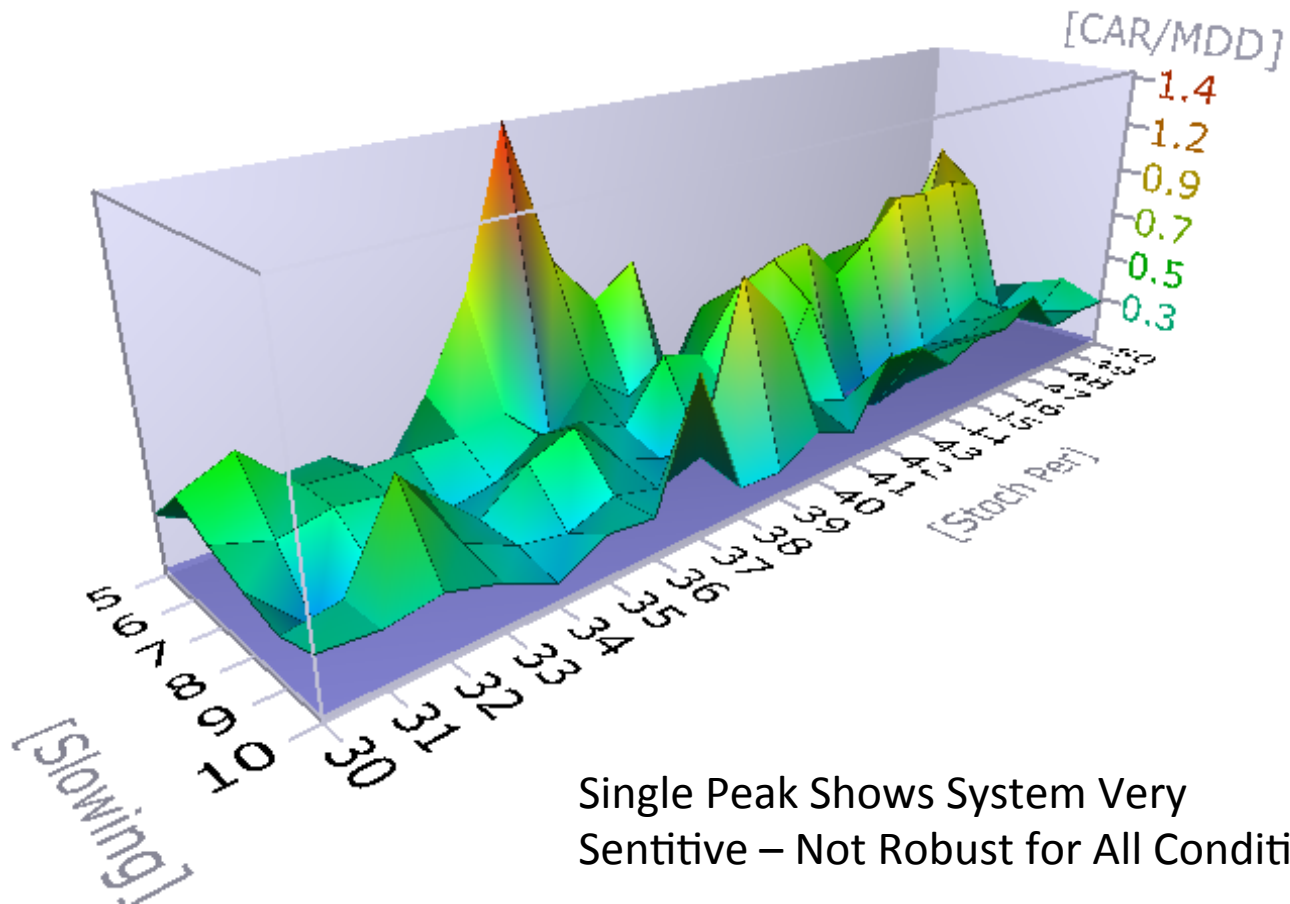
Apply to *Filter		Range		From-To dates		1/ 1/2011	6/ 1/2012				
Symbol	Name	Gain Win	Slope Win	CAR	MDD%	SD	Sharpe	MAM	..	AVolxK	
TLH	iShare...	24.9	38.0	114.9	5.2	6.70	4.95	14.0	18.42	321	
TLT	iShares...	41.2	51.5	235.0	8.9	11.00	6.17	23.3	16.60	50,655	
QQQ	PowerS...	8.1	12.1	22.2	16.1	14.16	0.45	4.5	7.62	304,240	
GLD	SPDR G...	17.9	33.7	80.7	17.1	12.60	1.85	2.9	5.53	76,145	
TUZ	Pimco ...	0.5	0.3	1.7	0.7	0.59	0.83	0.1	3.50	80	
SDY	SPDR S...	3.4	3.6	7.5	13.6	10.14	0.21	0.4	3.34	5,610	
SPY	SPDR S...	0.8	6.3	-3.0	17.4	12.60	-0.07	-0.2	2.64	1,033,...	
Average		-4.97	2.13	2.54	23.06	13.60	0.46	-4.63	2.63	106,90...	
UUP	PowerSh..	-1.9	1.1	2.3	10.3	5.56	0.12	4.0	-0.32	21,326	
GDX	Market...	-17.9	-17.4	-43.2	36.7	21.67	-0.58	-16.8	-0.41	67,850	
OIH	Merril...	-25.7	-24.3	-70.0	37.3	23.69	-0.85	-22.9	-1.19	51,311	
GLL	ProSha...	-41.9	-17.1	-85.3	53.0	25.38	-0.97	-20.4	-1.90	5,725	
USO	United ...	-16.6	-4.4	-52.2	32.5	18.81	-0.80	-16.8	-1.99	51,655	
SH	ProSha...	-10.0	-8.2	-26.2	23.9	12.58	-0.60	-5.6	-2.28	24,843	
RWM	ProSha...	-9.6	-6.1	-23.1	27.9	17.14	-0.39	-5.1	-2.28	9,185	
TBF	ProSha...	-37.0	-24.5	-80.0	39.0	10.88	-2.13	-25.5	-2.33	2,981	
PSQ	ProSha...	-15.8	-10.5	-40.7	29.4	14.04	-0.84	-10.0	-2.82	4,822	

Quarterly Performance

Apply to *Filter		Range		From-To dates		1/ 1/2010	6/ 1/2012				
Symb...	Name	3QB...	2QB...	LastQ	CurrQ	YR C%	CAR	MDD	UI	Industry	
CHSI	Catalyst Health S	-8.7	-3.2	19.2	38.8	46.2	46.0	30.7	20...	Unclassified	
SXCI	SXC Health Soluti	-7.5	7.6	21.9	23.5	49.8	49.6	34.8	14...	Software (Ind 88)	
AEO	American Eagle Ou	-13.6	25.7	5.6	26.3	44.9	44.7	47.4	39...	Apparel Retailers (In..	
IBI	Interline Brands,	-18.5	8.8	28.1	24.0	40.8	40.7	46.5	31...	Industrial Suppliers (.	
*Aver...		-17.9	-1.9	15.9	31.5	22.6	22.5	53.6	43...		
PFCB	P.F.Chang's China	-22.8	0.6	25.6	33.6	30.2	30.1	49.8	37...	Restaurants & Bars (.)	
AOL	AOL Inc. AOL Inc.	-25.2	-8.0	23.2	53.4	30.2	30.1	65.0	49...	Unclassified	
LL	Lumber Liquidator	-40.7	11.9	28.9	26.3	7.9	7.9	56.6	46...	Home Improvement	
SKX	Skechers U.S.A.,	0.4	-16.6	-6.9	29.7	1.1	1.1	73.9	82...	Footwear (Ind 80)	
RLOC	ReachLocal, Inc.	-24.8	-44.3	-2.6	28.3	-47.7	-47.5	77.9	65...	Unclassified	

3D Chart of Optimization

Varying 2 Parameters – Stoch Period and Slowing (Smoothing)



Demos

- Explain chart workspace
 - Symbols, layouts, charts, tabs, Drag& drop, Parameters
 - Data groups -mkts, groups, Sectors, Industries, wl
 - Time intervals, Mult windows
- Explain Analysis Window
 - Load program, set filter, dates, run, save to watchlist
 - float window and view charts
 - Run backtest, plot equity, optimize, 3D chart
- In 5 Min, Run live update
 - Show 5m, 30m 60m features, Market status report?

References

- User Guide - www.amibroker.com/guide/
- AB Tutorials: www.amibroker.com/support.html
- AB Guide to 3rd party sites: www.amibroker.com/links.html
- Discussions, Code, How to: finance.groups.yahoo.com/group/amibroker
- Howard Bandy's Site: www.blueowlpress.com
- Training, trading, utilities (Bruce Robinson): www.amibrokeru.com
- AB Users Knowledge Base: www.amibroker.org/userkb/
- AFL Coding Blog: codefortraders.com
- AFL Coding Blog: www.marketcalls.in/tag/afl-code
- Quantitative methods using AB engineering-returns.com
- “.Net” Programming Package: www.dotnetforab.com

Software for Sale

- Tools for AB: www.patternexplorer.com
- Plug-ins for AB: www.wisetradertoolbox.com
- Trading program: www.9trading.com