

The MCV Portfolio: Agenda

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 - The Purchasing Process
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 - Stop loss improvements
 - Risk analysis improvements
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 - Stolen from a SF Money Show presentation by Reuters
- References: Books, URLs, etc.

The MCV Portfolio: History/Background

- The MCV portfolio is one of multiple portfolios in an investment club (The BYA Investment Club)
- The MCV portfolio was a result of an effort to create multiple “passive” portfolios attempted in the late 90s
 - “Passive” portfolios are ones which are mechanically implemented with minimal judgement, discretionary input allowed
 - The MCV (MicroCap Value) portfolio was based on AAI’s “Beginner’s Portfolio”
 - The MCV portfolio began in February 1999 and was managed along the lines of the “Beginner’s Portfolio” until early 2002
 - Examples: Portfolio reviewed quarterly, sell rules were fundamental/screening based in nature, etc.
 - From March ‘02 on MCV has been managed as presented here
 - There continues to be changes, refinements added as time passes

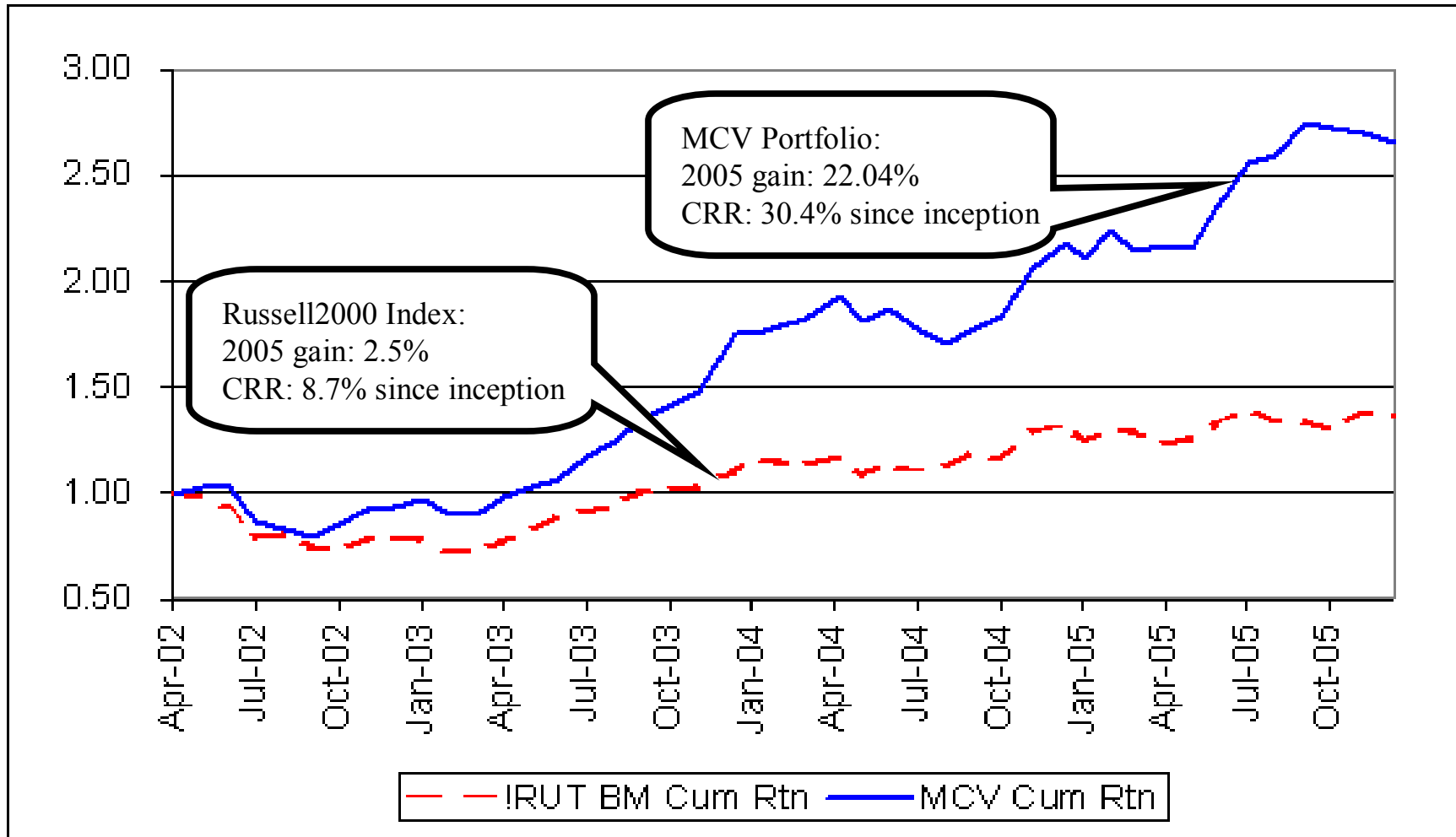
The MCV Portfolio: Portfolio Management (Overview)

- The MCV portfolio attempts to be 100% invested in the market at all times (long positions only)
 - Cash is held after stopping out of a stock and before re-purchases
 - Cash is also held if inadequate funds exist to buy a position
 - A position takes a minimum of 3% of the portfolio's value
- Currently the portfolio holds 18 stocks; < 3% cash is held
- Stocks are sold primarily when they hit their trailing stop loss value
 - Stop losses are set based on the volatility of each stock
 - Stops are checked each weekend - market orders are used to sell and occur on Monday morning's open
 - Historic portfolio turnover has been 75%/year - about 1.1 stocks/month
- Replacement stocks are purchased on the last Friday of each month. Stocks are purchased based on a combination of:
 - Stock screening results
 - A stock ranking system from another tool (VectorVest)
 - Taking into consideration their impact on total portfolio volatility (RiskGrades)

The MCV Portfolio: Portfolio Performance (1)

AAll Micro Cap Value Stock Portfolio

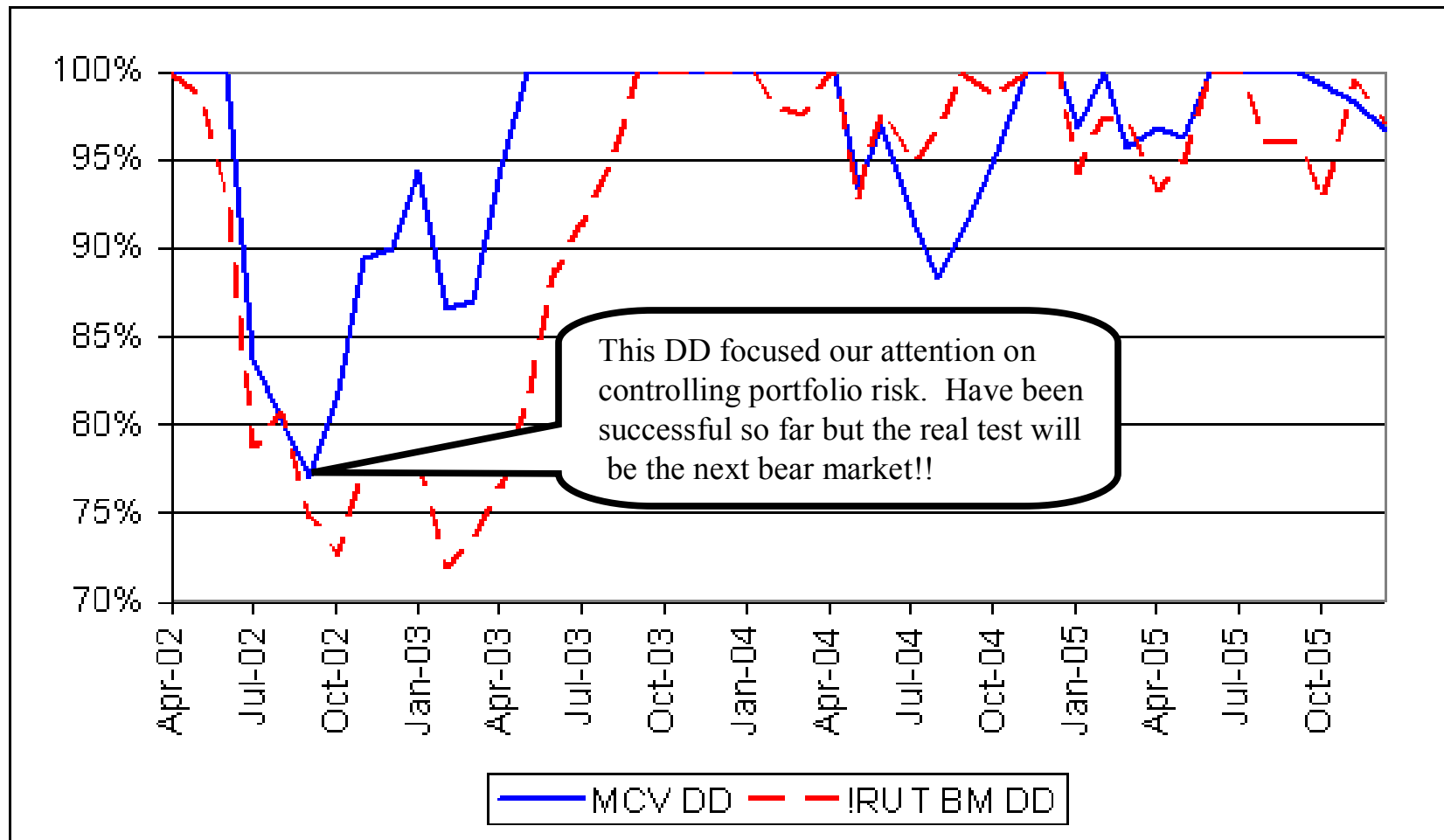
12/31/05



The MCV Portfolio: Portfolio Performance (2)

AAll Micro Cap Value Stock Portfolio

12/31/05



The MCV Portfolio: The MCV Screen (1)

- Based on “Beginner’s Portfolio” Screen
- Implemented using AAI Stock Investor Pro (SIPro) Screening Tool
- Screen Overview
 - Insider Ownership $>10\%$ and $< 70\%$
 - Assures insiders have significant stake in the company
 - Institutional Ownership $> 10\%$ and $< 70\%$
 - Assures some - but not excessive - institutional interest in the stock
 - Price/Book $<$ Industry Price/Book
 - Value criterion
 - Modification from Beginner’s Portfolio screen of Price/Book < 1.0 . Found this to be too restrictive
 - Market Cap $> \$50\text{M}$ and $< \$400\text{M}$
 - Forces stocks to be part of Micro-Cap universe
 - I modify this item periodically to adjust for market growth/shrinkage
 - Price $> \$5$
 - Avoid “penny” stocks

The MCV Portfolio: The MCV Screen (2)

- Screen Overview (continued)
 - 10 day average Volume > 40,000
 - Liquidity check - at least \$200K volume/day
 - Continuing EPS > 0 for last year and 2 quarters
 - Check for past profitability in operational part of business
 - EPS EST Q0 and Q1 > 0
 - Check for expected future profitability
 - Also assures at least 1 analyst following stock
 - Industry <> Consumer finances, Money Center or Regional Banks, S&Ls
 - Exclude banks from screen results
 - Price/Sales < 1.0
 - Another Value Screen
- Eyeball screen: No limited partnerships allowed
 - Tax paperwork just not worth the bother
- Screen, screen results from 12/30/05 shown on next slides...

The MCV Portfolio: The MCV Screen (3)

Screen Editor - Stock Notebook #1 - Untitled

Name: McvBuy Portfolio none: 8598 companies active

Description:

Conn	(Field	Operator	Factor	Compare To (field, value, industry))	Count On
		Insider Ownership %	>		10		5410
And		Insider Ownership %	<		70		7959
And		Institutional Ownership %	>		10		4665
And		Institutional Ownership %	<		70		5734
And		Price/Book	<		Industry Price/Book		3415
And		Market Cap Q1	>		50		5424
And		Market Cap Q1	<		400		5497
And		Price	>		5.000		5145
And		Volume--Average Daily 10d	>		.04		7908
And		EPS--Continuing 12m	>		0		4719
And		EPS--Continuing Q1	>		0		4775
And		EPS--Continuing Q2	>		0		4793
And		EPS Est Q0	>		0		3201
And		EPS Est Q1	>		0		3057
And		Industry	Not Equal		Consumer Financial Services		8515
And		Industry	Not Equal		Money Center Banks		8574
And		Industry	Not Equal		Regional Banks		8071
And		Industry	Not Equal		S&Ls/Savings Banks		8374
And		Price/Sales	<		1.0		2585

How Many: 39

Buttons: Insert, Move Up, Delete, Delete All, Print, How Many, Duplicate, Move Down, Save, Save As, Close, Apply

The MCV Portfolio: The MCV Screen (4)

SI Stock Notebook #1 - Untitled													
View	Overview	Multiples	Growth	Ratios	Valuations	Estimates	Fin - Qtr	Fin - Ann'l	Custom				
Company name	Ticker	Insider Owners	Institutional Owr	Price/Book	Market Cap Q1	Price	EPS-Continuing 12m	EPS-Continuing Q1	EPS-Continuing Q2	EPS Est Q0	EPS Est Q1	Price/Sales	
TransMontaigne, Inc.	TMG	24.4	65.1	0.82	328.2	6.600	1.43	0.41	1.10	.06	.17	0.03	
PC Connection, Inc.	PCCC	67.1	23.1	0.79	135.7	5.360	0.26	0.08	0.06	.08	.06	0.10	
TESSCO Technologies, Inc.	TESS	24.1	42.3	1.10	69.8	16.540	1.41	0.40	0.29	.19	.15	0.12	
ePlus Inc.	PLUS	46.3	44.1	0.87	112.8	13.760	2.77	0.23	0.15	.13	.20	0.18	
Flexsteel Industries, Inc.	FLXS	17.7	32.5	0.88	92.3	14.070	0.89	0.15	0.24	.16	.19	0.22	
U.S. Xpress Enterprises	XPRSA	66.8	45.0	1.22	267.0	17.370	0.56	0.25	0.03	.46	.07	0.24	
Olympic Steel, Inc.	ZEUS	19.2	59.0	1.31	252.3	24.850	2.68	0.21	0.30	.47	.76	0.26	
Capital Title Group, Inc.	CTGI	23.2	21.2	1.66	125.3	5.530	0.89	0.32	0.33	.13	.09	0.34	
United Retail Group, Inc.	URGI	18.1	39.0	2.14	173.4	13.150	0.59	0.14	0.32	.09	.09	0.40	
Dynamics Research Corporation	DRCO	11.0	39.4	1.90	140.5	15.450	1.30	0.35	0.37	.32	.27	0.45	
Insteel Industries, Inc.	IIN	23.7	36.0	1.61	156.3	16.570	2.60	0.68	0.90	.62	.81	0.45	
Shoe Carnival, Inc.	SCVL	38.8	49.0	1.64	290.1	21.920	1.30	0.54	0.21	.15	.49	0.46	
Franklin Credit Management Cor	FCMC	67.0	10.2	1.13	59.9	7.900	1.98	0.26	0.68	.36	.37	0.48	
Alamo Group, Inc.	ALG	37.4	30.3	1.21	133.0	20.500	1.36	0.45	0.43	.25	.32	0.54	
Steinway Musical Instrum.	LYB	18.6	63.9	1.39	206.8	25.510	1.96	0.46	0.30	.88	.47	0.54	
P.A.M. Transportation Services	PTSI	42.3	46.9	1.14	191.1	17.790	0.95	0.20	0.33	.24	.24	0.55	
Meadowbrook Insurance Group, I	MIG	20.2	69.6	0.97	167.5	5.840	0.54	0.16	0.16	.15	.14	0.57	
Waste Industries USA, Inc.	VWVN	56.3	26.6	1.39	176.6	12.880	0.79	0.22	0.16	.18	.21	0.58	
Hooker Furniture Corporation	HOFT	36.2	55.7	1.40	247.4	17.150	1.18	0.06	0.41	.38	.32	0.59	
Affirmative Insurance Holdings	AFFM	34.9	56.5	1.11	217.4	14.590	1.58	0.40	0.37	.39	.48	0.61	
EMC Insurance Group Inc.	EMCI	56.7	32.0	1.10	271.5	19.940	1.73	0.61	0.38	.46	.68	0.62	
Rubio's Restaurants, Inc.	RUBO	28.9	35.2	2.05	88.1	9.350	0.27	0.09	0.10	.02	.06	0.63	
MGP Ingredients, Inc.	MGPI	40.8	31.1	1.55	189.4	11.800	0.46	0.23	0.05	.16	.16	0.67	
Bassett Furniture Ind.	BSET	11.9	61.8	1.00	218.5	18.500	0.69	0.16	0.09	.24	.24	0.68	
D&E Communications, Inc.	DECC	15.6	23.6	0.67	119.4	8.330	0.29	0.17	0.10	.18	.14	0.68	
USA Truck, Inc.	USAK	43.8	61.9	2.06	331.8	29.130	1.50	0.41	0.47	.40	.40	0.72	
EZCORP, Inc.	EZPW	23.1	68.7	1.57	196.6	15.280	1.19	0.27	0.17	.44	.35	0.75	
Allied Healthcare Internationa	AHCI	28.2	42.3	1.36	275.4	6.140	0.42	0.09	0.10	.11	.12	0.78	
GP Strategies Corporation	GPX	24.0	37.7	1.66	149.2	8.160	1.43	0.08	0.13	.11	.11	0.78	
Key Technology, Inc.	KTEC	15.5	55.4	1.89	66.7	12.840	0.53	0.11	0.53	.02	.12	0.82	
Clark Inc.	CLK	12.4	65.9	0.91	232.8	13.250	0.80	0.01	0.16	.42	.16	0.83	
Docucorp International, Inc.	DOCC	16.2	35.7	2.43	72.3	6.270	0.15	0.05	0.01	.07	.08	0.86	
Wireless Facilities, Inc.	WFII	19.2	46.6	1.55	366.0	5.100	0.36	0.08	0.06	.04	.05	0.87	
NATCO Group Inc.	NTG	44.9	54.4	2.86	345.6	20.460	0.39	0.12	0.14	.29	.31	0.88	
Marten Transport, Ltd.	MRTN	30.4	43.1	1.40	392.9	18.220	1.08	0.44	0.47	.29	.24	0.89	
America's Car-Mart, Inc.	CRMT	21.6	62.8	1.77	135.9	16.520	1.38	0.24	0.41	.35	.44	0.90	
Lifetime Brands Inc.	LCUT	32.6	26.6	2.32	270.0	20.670	1.10	0.41	0.12	.60	.09	0.91	
Luby's, Inc.	LUB	15.8	44.4	2.09	345.8	13.300	0.38	0.01	0.37	.03	.15	0.94	
Intersections Inc.	INTX	63.8	31.7	1.74	157.3	9.340	0.64	0.21	0.19	.22	.17	0.99	

The MCV Portfolio: VV Ranking/Filtering (1)

- Even after SIPro screening a large number of stocks typically remain
 - Typically 20-60 stocks survive screening
- Use another independent ranking system to further screen/reduce the number of stocks needing further analysis
 - Could “tighten up” one or more screening attributes to achieve this
 - Alternative screen/tool considered superior since this forces looking at these stocks in an alternative manner
 - Two independent rankings are better than one!!
- VectorVest (a stock screening, ranking tool) is used to further filter SIPro screen results
 - VV has a daily DB of 8,000+ stocks, ranking each one with the VV overall “goodness” metric of VST
 - Alternatives: ValueLine, S&P, Schwab rankings....
- The SIPro stocks are exported into VV and then ranked by VST.
 - Typically only the highest VST stocks are chosen for further analysis

The MCV Portfolio: VV Ranking/Filtering (2)

Stock WatchList																						
Find • Graph • History • Details • Print • Layout • Quick Test • Import • Analysis • News • Help																						
Date: 12/30/2005		Return: 1000		<input checked="" type="checkbox"/> Return All		Refresh																
Sorted by: VST DESC, Symbol ASC																		Buys: 12 (40.0%) Sells: 6 (20.0%) Holds: 12 (40.0%) Total: 30				
Company	Symbol	Value	Price	Stop	RV	RS	RT	VST	REC	CI	Sales	GRT	GRT	P/S	P/E	GPE	EY	DY	SPS	EPS	DIV	Mkt Cap(\$M)
Shoe Carnival	SCVL	32.72	21.92	19.37	1.49	1.29	1.43	1.40	B	0.94	12	21	0.46	14.81	1.42	6.74	0.00	48.07	1.48	0.00	290.00	
U T D Retail	URGI	8.51	13.15	10.98	0.70	1.15	1.85	1.38	B	1.05	5	-4	0.41	21.21	-0.18	4.71	0.00	32.39	0.62	0.00	173.45	
U S Xpress	XPRSA	12.49	17.37	14.74	0.75	0.88	1.78	1.28	B	0.89	3	-2	0.23	16.23	-0.12	6.14	0.00	75.28	1.07	0.00	267.32	
Luby's Inc	LUB	14.68	13.30	12.15	1.36	1.13	1.32	1.27	B	1.03	7	23	1.07	21.45	1.08	4.66	0.00	12.42	0.62	0.00	345.00	
Olympic Steel	ZEUS	16.12	24.85	21.32	0.67	0.88	1.78	1.27	B	1.31	-15	-6	0.26	10.85	-0.55	9.23	0.00	96.02	2.29	0.00	252.23	
M G P Ingrdnts	MGPI	20.27	11.80	10.89	1.57	1.09	1.13	1.26	B	0.94	11	28	0.67	13.88	2.01	7.17	1.27	17.65	0.85	0.15	189.39	
Tesco Tech	TESS	21.91	16.54	14.92	1.26	0.97	1.43	1.24	B	1.15	19	14	0.12	13.02	1.08	7.69	0.00	135.71	1.27	0.00	69.80	
Ezcorp A	EZPW	25.46	15.28	14.24	1.49	1.11	1.02	1.20	H	0.82		21	0.77	8.40	2.51	11.94	0.00	19.76	1.82	0.00	196.50	
Bassett Furn.	BSET	26.43	18.50	17.52	1.45	1.04	1.02	1.16	H	0.93	5		0.57	15.55	1.16	6.42	4.32	27.66	1.19	0.80	218.49	
NATCO Grp Inc	NTG	40.89	20.46	21.05	1.58	1.06	0.84	1.16	S	1.49	21									0.00	345.16	
Allied Hlthcare	AHCI	9.31	6.14	5.84	1.42	0.94	1.04	1.13	H	0.55											0.00	275.44
Lifetime Hoan	LCUT	36.67	20.67	20.54	1.52	1.14	0.71	1.13	H	0.88												230.68
Transmontaigne	TMG	9.84	6.60	6.11	1.35	0.93	1.09	1.12	B	0.65												328.35
Affirmative Ins	AFFM	20.10	14.59	13.62	1.22	0.93	1.17	1.11	B	1.11												217.39
America's CarMt	CRMT	23.20	16.52	15.64	1.22	0.96	1.15	1.11	H	0.84												195.93
P A M Transport	PTSI	18.58	17.79	16.46	0.98	0.98	1.26	1.10	B	0.85												191.06
D & E Comm Inc	DECC	14.04	8.33	8.06	1.53	0.83	0.86	1.08	H	0.72												119.37
Hooker Furnitr	HOFT	15.07	17.15	15.40	0.86	0.92	1.31	1.07	B	0.81												203.06
Alamo Group	ALG	28.85	20.50	19.72	1.24	1.00	0.95	1.05	H	1.23												199.88
ePlus Inc	PLUS	18.24	13.76	13.12	1.23	0.91	1.02	1.05	H	1.18												115.86
Rubios Rest Inc	RUBD	5.07	9.35	8.39	0.76	0.96	1.27	1.04	B	0.75												88.08
Steinway	LYB	36.42	25.51	24.40	1.25	0.90	0.96	1.03	H	0.83												206.89
Dynamics Resch	DRCD	21.30	15.45	14.69	1.18	0.89	1.01	1.02	H	0.99												139.98
Key Tech	KTEC	9.68	12.84	12.37	1.03	1.05	0.84	0.97	H	0.67												65.36
Franklin Credit	FCMC	12.52	7.90	8.23	1.27	0.74	0.75	0.92	S	0.74												59.88
P C Connection	PCCC	5.73	5.38	5.40	0.84	0.97	0.82	0.88	S	0.65	5	-3	0.10	12.81	-0.30	7.79	0.00	34.93	0.42	0.00	135.68	
Docucorp Int'l	DOCC	3.24	6.37	5.98	0.57	0.87	0.98	0.85	H	0.53	5	-6	0.90	17.69	-0.33	5.62	0.00	7.08	0.36	0.00	72.24	
Intersections	INTX	9.74	9.34	9.37	0.81	0.92	0.62	0.79	S	0.48	10	-6	1.00	13.54	-0.44	7.39	0.00	9.38	0.69	0.00	157.19	
Clark Inc	CLK	12.92	13.25	13.45	0.81	0.81	0.74	0.78	S	0.93	-9	-6	0.80	15.77	-0.37	6.33	1.81	16.50	0.84	0.24	232.80	
Wireless Fclts	WFII	2.68	5.10	5.24	0.61	0.94	0.65	0.75	S	0.29	13	-4	0.87	20.40	-0.19	4.92	0.00	5.89	0.25	0.00	365.72	

In the case of 12/30/05 stock screen results, 6 stocks are ranked as very good or better (VST >=1.25) and are retained for further analysis

The MCV Portfolio: VV Ranking/Filtering (3)

company	ticker	VST	shinsd	shinst	pbvps	mktcap	price	epscon_12m	epscon_q1	epscon_q2	eps_eq0	eps_eq1	psps	rs_04w	rs_13w	rs_26w	rs_52w	rpr_prh_52	
Shoe Carnival, Inc.	SCVL	1.4	38.8	49	1.64	290.1	21.92	1.3	0.54	0.21	0.15	0.49	0.46	3	36	-1	64	60	
United Retail Group, Inc.	URGI	1.38	18.1	39	2.14	173.4	13.15	0.59	0.14	0.32	0.09	0.09	0.4	19	68	57	195	93	
U.S. Xpress Enterprises	XPRSA	1.28	66.8	45	1.22	267	17.37	0.56	0.25	0.03	0.46	0.07	0.24	12	47	40	-42	19	
Luby's, Inc.	LUB	1.27	15.8	44.4	2.09	345.8	13.3	0.38	0.01	0.37	0.03	0.15	0.94	5	0	7	72	67	
Olympic Steel, Inc.	ZEUS	1.27	19.2	59	1.31	252.3	24.85	2.68	0.21	0.3	0.47	0.76	0.26	7	40	78	-9	70	
MGP Ingredients, Inc.	MGPI	1.26	40.8	31.1	1.55	189.4	11.8	0.46	0.23	0.05	0.16	0.16	0.67	1	4	38	33	63	
TESSCO Technologies, Inc.	TESS	1.24	24.1	42.3	1.1	69.8	16.54	0.77	0.4	0.29	0.19	0.15	0.12	8	24	19	15	82	
EZCORP, Inc.	EZPW	1.2	23.1	68.7	1.57	196.6	15.28	1.19	0.2	0.2	0.44	0.35	0.75	2	-6	33	-4	34	
Bassett Furniture Ind.	BSET	1.16	11.9	61.8	1	218.5	18.5	0.69	0.2	0.2	0.2	0.2	0.2	2	2	2	-7	-8	60
NATCO Group Inc.	NTG	1.16	44.9	54.4	2.88	345.6	20.46	0.3	0.2	0.2	0.2	0.2	0.2	2	2	2	9	126	41
Allied Healthcare Internationa	AHCI	1.13	28.2	42.3	1.36	275.4	6.14	0.4	0.2	0.2	0.2	0.2	0.2	2	2	2	7	8	51
Lifetime Brands Inc.	LCUT	1.13	32.6	26.6	2.32	270	20.67	0.7	0.2	0.2	0.2	0.2	0.2	2	2	2	1	26	42
TransMontaigne, Inc.	TMG	1.12	24.4	65.1	0.82	328.2	6.6	1.4	0.2	0.2	0.2	0.2	0.2	2	2	2	2	5	19
Affirmative Insurance Holdings	AFFM	1.11	34.9	56.5	1.11	217.4	14.59	1.5	0.2	0.2	0.2	0.2	0.2	2	2	2	0	-16	52
America's Car-Mart, Inc.	CRMT	1.11	21.6	62.8	1.77	195.9	16.52	1.3	0.2	0.2	0.2	0.2	0.2	2	2	2	9	-37	30
P.A.M. Transportation Services	PTSI	1.1	42.3	46.9	1.14	191.1	17.79	0.9	0.2	0.2	0.2	0.2	0.2	2	2	2	3	-7	70
D&E Communications, Inc.	DECC	1.08	15.6	23.6	0.67	119.4	8.33	0.2	0.2	0.2	0.2	0.2	0.2	2	2	2	9	-33	32
Hooker Furniture Corporation	HOFT	1.07	36.2	55.7	1.4	247.4	17.15	1.1	0.2	0.2	0.2	0.2	0.2	2	2	2	4	-27	29
Alamo Group, Inc.	ALG	1.05	37.4	58.9	1.21	199.8	20.5	1.3	0.2	0.2	0.2	0.2	0.2	2	2	2	5	-27	35
ePlus Inc.	PLUS	1.05	46.3	44.1	0.87	112.8	13.76	2.7	0.2	0.2	0.2	0.2	0.2	2	2	2	5	13	47
Rubio's Restaurants, Inc.	RUBD	1.04	28.9	35.2	2.05	88.1	9.35	0.27	0.2	0.2	0.2	0.2	0.2	2	2	2	-10	-25	41
Steinway Musical Instrum.	LVB	1.03	18.6	63.9	1.39	206.8	25.51	1.96	0.2	0.2	0.2	0.2	0.2	2	2	2	-16	-14	51
Dynamics Research Corporation	DRCO	1.02	11	39.4	1.9	140.5	15.45	1.3	0.35	0.37	0.32	0.27	0.45	2	-5	4	-16	-16	52
Key Technology, Inc.	KTEC	0.97	15.5	55.4	1.69	68.7	12.84	0.53	0.11	0.53	0.02	0.12	0.82	0	-11	15	29	56	
Franklin Credit Management Cor	FCMC	0.92	67	10.2	1.13	59.9	7.9	1.98	0.26	0.68	0.36	0.37	0.48	-8	-23	-24	-17	24	
PC Connection, Inc.	PCCC	0.88	67.1	23.1	0.79	135.7	5.38	0.26	0.08	0.06	0.08	0.06	0.1	-16	-3	-18	-45	22	
DocuCorp International, Inc.	DOCC	0.85	16.2	35.7	2.43	72.3	6.37	0.15	0.05	0.01	0.07	0.08	0.86	5	-8	-17	-35	25	
Intersections Inc.	INTX	0.79	63.8	31.7	1.74	157.3	9.34	0.64	0.21	0.19	0.22	0.17	0.99	5	-23	-23	-47	23	
Clark Inc.	CLK	0.78	12.4	65.9	0.91	232.8	13.25	0.8	0.01	0.16	0.42	0.16	0.83	-7	-23	-13	-17	37	
Wireless Facilities, Inc.	WFIL	0.75	19.2	46.6	1.55	366	5.1	0.36	0.08	0.06	0.04	0.05	0.87	-6	-13	-21	-48	21	

In the case of 12/30/05 stock screen results, 6 stocks are ranked as very good or better (VST >=1.25) and are retained for further analysis

- Above spreadsheet (exported from SIPro) contains VST rankings and shows top 6 stocks retained for further analysis

The MCV Portfolio: RiskGrades (1)

- The MCV portfolio uses RiskGrades (RG) as the measure of stock and portfolio volatility
 - The goal is to have the MCV portfolio RG be below the RG of the IWM and as near as possible to the SPY
- Candidate stocks use RiskGrades in 2 ways :
 - To determine the trailing stop and position size (\$\$ invested) if the stock were to be added to the portfolio
 - To minimize portfolio RG when adding stocks
 - This means only adding stocks that reduce portfolio RG
- Alternative measures of risk:
 - Standard deviation, semi-standard deviation, ATRs, etc.
 - RG used since convenient, RG site provides many metrics, charts useful for review and analysis

The MCV Portfolio: RiskGrades (2)

What is a RiskGrade™ Measure?

The Benchmark for Measuring Financial Risk

A RiskGrade™ Measure is an open and transparent benchmark to measure the risk of the world's financial assets.

A RiskGrade™ Measure:

allows for a **comparison of investment risk** across all asset classes, regions, and currencies.

varies over time to reflect asset specific information (e.g., the price of a stock reacting to an earnings release) and general market conditions.

operates differently from traditional risk measures, such as beta, standard deviation, and average shortfall

How Do We Calculate a Riskgrade™ Measure?

Calculating the RiskGrade™ Measure is a two-step process.

First, we **calculate how much variation there is in the asset's price**, making the most recent history more important than outdated observations.

Second, we **compare the asset's volatility to the volatility of a basket of global equities**. The ratio of these volatilities results is a RiskGrade™ Measure.

The RiskGrade™ Measure can vary from 0, for cash, to values well in excess of 1000 for highly speculative investments.

Above explanations taken from RiskGrades site

The MCV Portfolio: RiskGrades (3)

mcv Set as default

RISKMETER
EDIT

Portfolio Views

- This portfolio's RiskGrade™ of 68 suggests [Growth Plan investment strategy](#).
- Diversification benefits have lowered this portfolio's risk by 59%.
- This portfolio is 1.42 times as volatile as the S&P - S&P 500 Index.

Symbol	Risk Grade™	Risk Impact	XLoss	XLoss %	% of Holding	Market Value	Risk Chart™
	189	2%	\$73	3.22%	4.25%		
	169	2%	\$82	4.14%	3.70%		
	210	11%	\$191	5.31%	6.73%		
	98	1%	\$101	2.16%	8.78%		
	160	1%	\$119	6.86%	3.25%		
	110	4%	\$102	2.83%	6.78%		
	177	8%	\$147	4.57%	6.02%		
	118	0%	\$145	3.37%	8.04%		
	172	1%	\$120	5.05%	4.46%		
	208	20%	\$623	7.35%	15.88%		
	212	4%	\$119	6.07%	3.68%		
	163	2%	\$106	5.15%	3.84%		
	147	1%	\$75	3.24%	4.35%		
	159	5%	\$85	3.60%	4.41%		
	147	3%	\$70	3.69%	3.56%		
	237	4%	\$128	6.71%	3.59%		
	187	7%	\$136	4.66%	5.46%		
	188	3%	\$71	4.12%	3.22%		
Equities	68	100%	\$978	1.83%	100.00%		
Portfolio	68		\$978	1.83%			
Diversification Benefit	100		\$1,515	60.76%			

The MCV Portfolio: Position Sizing (1)

- Position Sizing: Determining how many \$\$ to trade
 - Also known as trade sizing, bet sizing, betting strategy
- The MCV portfolio uses a Fixed Fractional strategy
 - Each trade risks a certain amount of account equity - e.g., 1%
 - Also known as Fixed Risk strategy
- Fixed Fractional is an anti-Martingale betting strategy
 - Bet size increases/decreases as account equity increases/decreases
- With a fixed bet size, the trailing stop loss and initial purchase amount vary with the volatility of the stock
 - Volatile stocks have a larger trailing stops, smaller positions (\$\$)
 - Stable stocks have smaller trailing stops, larger positions (\$\$)

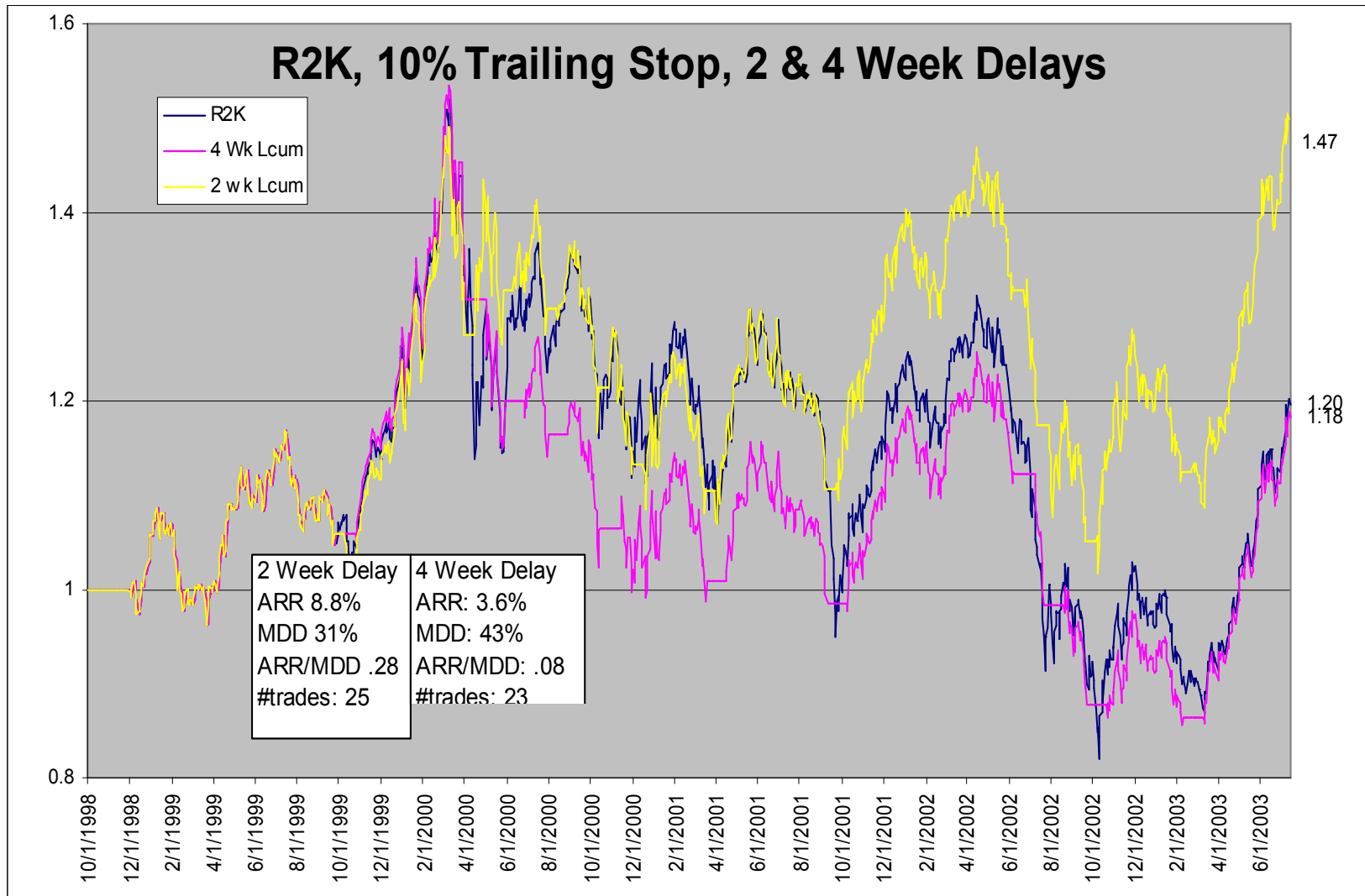
The MCV Portfolio: Position Sizing (2)

- Example: Given the following parameters..
 - Total portfolio size: \$36K
 - Stock A: Price \$10/share; RG=100, stop loss = 10%
 - Stock B: Price \$20/share; RG=200, stop loss = 20% (2x Stock A)
 - Bet size = 1% ($\$36K \times .01 = \360 loss)
- To determine the amount of stock purchased...
 - \$\$ purchased = (Bet size \$) / (stop loss %)
 - Stock A: \$\$ purchased = $\$360 / 10\% = \3600 (= 360 shares)
 - Stock B: \$\$ purchased = $\$360 / 20\% = \1800 (= 90 shares)
- Obviously, choosing Stock B results in extra \$\$ available for further purchases

The MCV Portfolio: Stops (1)

- A trailing stop - based on stock volatility (RG) - is the basic stop mechanism employed in the MCV portfolio
- What is the basis for determining the trailing stop?
 - Russell 2000 index (IWM ETF) volatility (RG) is the standard
 - Example: IWM RG = 100, trailing stop of 10%
 - A stock's trailing stop is based on its RG Vs. that of the IWM
 - Example: StockA RG = 200 (2X IWM RG) =>
StockA stop = 2X IWM stop = 2X 10% = 20%
 - The trailing stop is capped at 30%
 - Discretionary amount based on maximum tolerable loss
- So, how do you determine the IWM trailing stop?
 - Performed study on various trailing stop losses and how they compared to a Buy & Hold strategy on the index
 - Result of study on next slide...

The MCV Portfolio: Stops (2)



Stopped out of IWM at 10% loss (weekly), waiting 2 or 4 weeks for re-entry

The MCV Portfolio: The Purchasing Process (1)

- Will “walk” through the Purchasing SS over the next several slides...
 - Modification of real SS used for stock purchases at end of December 2005
 - Modifications made to protect BYA confidentiality
 - Modified amount of \$\$ involved
 - Individual equities involved hidden (Stock 1, Stock 2, etc.)
- As part of the “walk through” will also discuss several other aspects of the RiskGrade (RG) site
 - What If analysis - for assessing impact to portfolio of each candidate stock
 - Various RG charts - to help assess portfolio risk, compare to indices
 - Event Risk measures - to assess impact of catastrophic events (Sept. 11th)

The MCV Portfolio: The Purchasing Process (2)

stock	rg	port rg		
stock 1	200			
stock 2	178			
stock 3	219			
stock 4	92			
stock 5	157			
stock 6	111			
stock 7	166			
stock 8	103			
stock 9	176			
stock 10	217			
stock 11	149			
stock 12	146			
stock 13	151			
stock 14	246			
stock 15	175			
avg	166	72		
iwv	45		tvl port	\$168,681
iwr	53		bet size	1.00%
iwn	65		bet size \$	1687

RG of existing stocks in portfolio

Average RG of portfolio (166) and portfolio RG from RG site (72)

Portfolio stats: total size, bet size in percent risked and dollars risked

RGs of various indices:
 IVV = SP500, IWR = MidCap800, IWN = SmallCapValue

The MCV Portfolio: The Purchasing Process (3)

stock	rg	port rg
stock 1	200	
stock 2	178	
stock 3	219	
stock 4	92	
stock 5	157	
stock 6	111	
stock 7	166	
stock 8	103	
stock 9	176	
stock 10	217	
stock 11	149	
stock 12	146	
stock 13	151	
stock 14	246	
stock 15	175	
avg	166	72

iw	45	ttl port	\$168,681
iwr	53	bet size	1.00%
iwn	65	bet size \$	1687

stock	price	rg	stop loss
MGPI	11.8	174	27%
LUB	13.3	214	30%
ZEUS	24.85	196	30%
URGI	13.15	195	30%
XPRSA	17.37	226	30%
SCVL	21.92	237	30%

Stock and stock price added from screen output. Color indicate VV rating.

RG of each stock added (from RG site)

Stop loss column computes stop loss based on stock Vs. IWN RG. Note pink shaded cells reflect 30% overrides

The MCV Portfolio: The Purchasing Process (4)

stock	rg	port rg
stock 1	200	
stock 2	178	
stock 3	219	
stock 4	92	
stock 5	157	
stock 6	111	
stock 7	166	
stock 8	103	
stock 9	176	
stock 10	217	
stock 11	149	
stock 12	146	
stock 13	151	
stock 14	246	
stock 15	175	
avg	166	72

Based on stop loss calculations, SS then determines the amount to invest (\$amt column) and the number of shares to purchase (#shares column)

Based on these values, RG site employed (in “What if” mode) to determine new Portfolio RG

Note that any stock increasing Port RG is excluded from further analysis (in this case SCVL)

iw	45	tvl port	\$168,681
iwr	53	bet size	1.00%
iwn	65	bet size \$	1687

stock	price	rg	stop loss	#shares	\$amt	port rg
MGPI	11.8	174	27%	534	6301	71
LUB	13.3	214	30%	422	5613	72
ZEUS	24.85	196	30%	225	5591	72
URGI	13.15	195	30%	427	5615	71
XPRSA	17.37	226	30%	323	5611	72
SCVL	21.92	237	30%	256	5612	73

The MCV Portfolio: The Purchasing Process (5)

What If

Get a feel for how your portfolio's risk would change if you were to make changes to your portfolio. Increase or decrease the size of your positions. Buy or sell assets. Then click on **Run Analysis** to watch the changes unfold.

What If Results

Observe changes to your portfolio's RiskGrade, Diversification Benefit, XLoss and Market Value as a result of the scenario. You may repeat the process by clicking on **Run Another Scenario** or save your proposed portfolio by clicking on **Save**.

The screenshot displays a 'What If' analysis interface. At the top, a dropdown menu shows 'mcv' and a 'RUN ANALYSIS' button. Below this, the 'EQUITY' table lists assets with columns for Ticker, Shares, Exchange, and Sell?. The 'CASH' table has columns for Amount, Currency, and Sell?. A 'Save "What If" Portfolio:' section includes a 'SAVE' button and a 'RUN ANOTHER SCENARIO' button. A table below compares the original portfolio with a 'New mcv' scenario. Three bar charts show the impact on RiskGrade, Diversification Benefit, and XLoss.

PORTFOLIO	Risk Grade™	Diversification Benefit	XLoss™	Market Value
mcv	66	61%	\$972	\$54,263
New mcv	65	62%	\$986	\$56,446

As an example, added 170 shares of MGPI to see impact on total portfolio

Results show decrease in portfolio RG

The MCV Portfolio: The Purchasing Process (6)

stock	rg	port rg
stock 1	200	
stock 2	178	
stock 3	219	
stock 4	92	
stock 5	157	
stock 6	111	
stock 7	166	
stock 8	103	
stock 9	176	
stock 10	217	
stock 11	149	
stock 12	146	
stock 13	151	
stock 14	246	
stock 15	175	
avg	166	72

To pick between the remaining 5 stocks use VV metrics to further rank:

- Value: VV “target” price for stock
- CI: Comfort Index - technical indicator for resistance to downturns
- Val/Price*CI column ranks based on a) most appreciation potential and b) lowest downside risk

Picked top 3 stocks based on this ranking, amount of funds available for investment

iw	45	tvl port	\$168,681						
iwr	53	bet size	1.00%						
iwn	65	bet size \$	1687						
stock	price	rg	stop loss	#shares	\$amt	port rg	val	ci	val/price*ci
MGPI	11.8	174	27%	534	6301	71	20.27	0.94	1.61
LUB	13.3	214	30%	422	5613	72	14.68	1.03	1.14
ZEUS	24.85	196	30%	225	5591	72	16.12	1.31	0.85
URGI	13.15	195	30%	427	5615	71	8.51	1.05	0.68
XPRSA	17.37	226	30%	323	5611	72	12.49	0.89	0.64
SCVL	21.92	237	30%	256	5612	73	21.3	1.58	1.54

The MCV Portfolio: The Purchasing Process (7)

stock	rg	port rg			stock	rg	port rg		
stock 1	200				stock1	200			
stock 2	178				stock2	178			
stock 3	219				stock3	219			
stock 4	92				stock4	92			
stock 5	157				stock5	157			
stock 6	111				stock6	111			
stock 7	166				stock7	166			
stock 8	103				stock8	103			
stock 9	176				stock9	176			
stock 10	217				stock10	217			
stock 11	149				stock11	149			
stock 12	146				stock12	146			
stock 13	151				stock13	151			
stock 14	246				stock14	246			
stock 15	175				stock15	175			
					lub	214			
					mgpi	174			
					zeus	196			
avg	166	72			avg	171	70		
iw	45		ttl port	\$168,681	cash port		22244		
iwr	53		bet size	1.00%					
iwn	65		bet size \$	1687					
stock	price	rg	stop loss	#shares	\$amt	port rg	val	ci	val/price*ci
MGPI	11.8	174	27%	534	6301	71	20.27	0.94	1.61
LUB	13.3	214	30%	422	5613	72	14.68	1.03	1.14
ZEUS	24.85	196	30%	225	5591	72	16.12	1.31	0.85
URGI	13.15	195	30%	427	5615	71	8.51	1.05	0.68
XPRSA	17.37	226	30%	323	5611	72	12.49	0.89	0.64
SCVL	21.92	237	30%	256	5612	73	21.3	1.58	1.54

Updated SS with RGs of all stocks (old and new) in portfolio

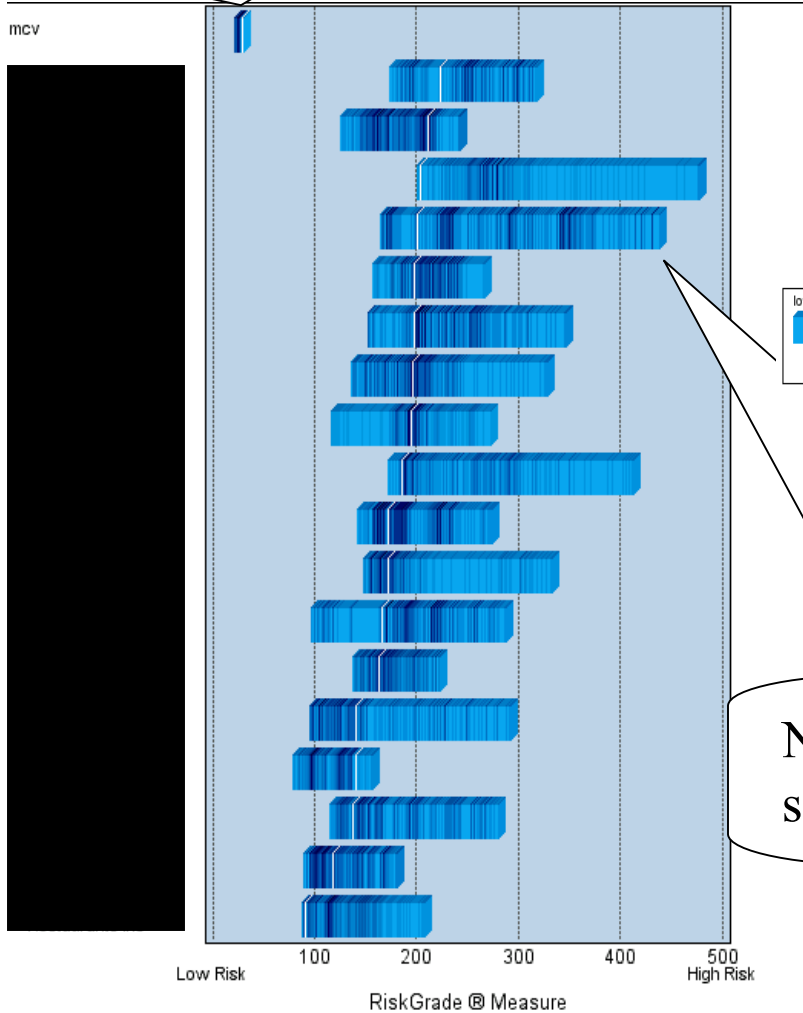
Note lower RG for new portfolio

The MCV Portfolio: The Purchasing Process (8)

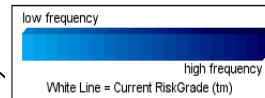
Note tight RG range of MCV Portfolio!!

Portfolio RangeChart

Select the portfolio whose RiskGrade™ Measures you wish to chart from the pull-down list. Each stock, as well as the entire portfolio, will be charted.



Risk	Price	Risk/Price	Streak	Range
Markets Portfolio				
Select Portfolio:				
mcv		BARCHART		
Period: Start Date: End Date:				
One Year		Jan 15 2005	Jan 15 2006	

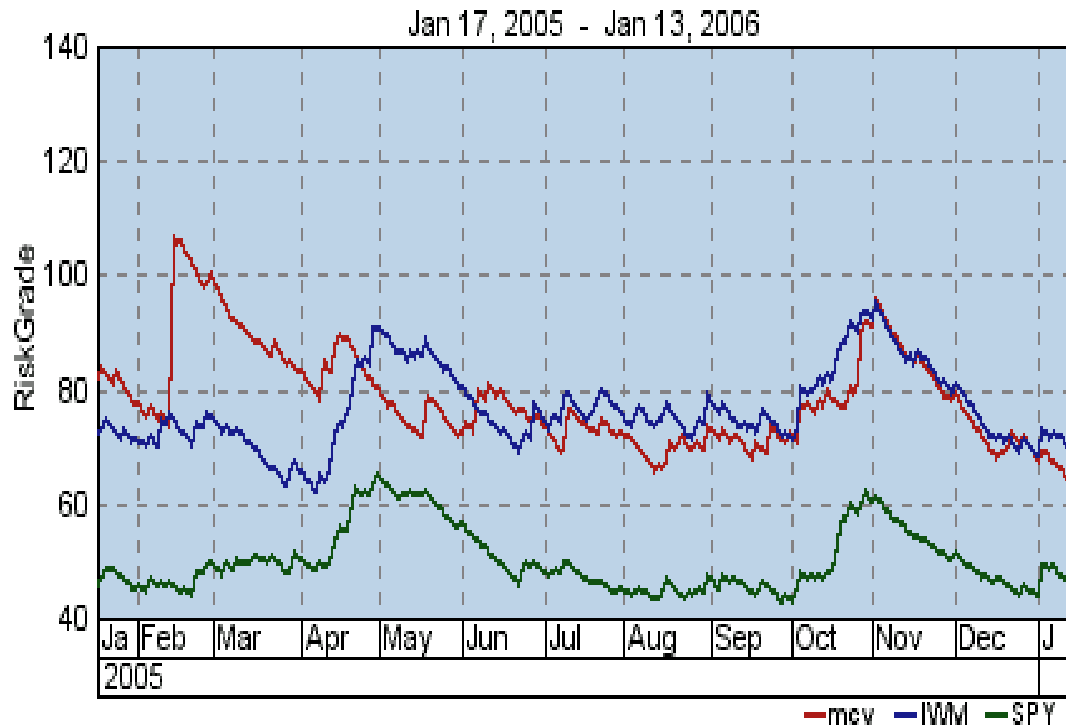


Jan 15, 2005 to Jan 15, 2006

RG Range Chart set to show RG range over TTM

Note high RG ratings of individual stocks some approaching a RG of 500!

The MCV Portfolio: The Purchasing Process (9)



Portfolio Historical RiskChart

Select the portfolio whose RiskGrade™ you wish to chart from the pull down list.

Check "Include asset classes?" to chart the asset classes' RiskGrades™ along with the portfolio's RiskGrade™.

Risk	Price	Risk/Price	Streak	Range
Markets Portfolio				
Select Portfolio				
mcv	<input checked="" type="checkbox"/>	Include asset classes? <input type="checkbox"/>		
Period:	Start Date:	End Date:		
One Year	Jan 15 2005	Jan 15 2006		

Portfolio name: mcv

Portfolio Min: 65 Max: 107 Avg: 79

(SPY) Standard&Poors Depository Receipts

Min: 44 Max: 65 Avg: 51

(IWM) Ishares Russell 2000

Min: 63 Max: 95 Avg: 77

RiskGrade: 66

(01/17/2005-01/13/2006)

RiskGrade: 47

(01/17/2005-01/13/2006)

RiskGrade: 69

(01/17/2005-01/13/2006)

Statistics on RGs of indices, MCV for TTM

Add benchmarks to chart:

<input type="text"/>	US Equity	<input type="button" value="ADD"/>
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MCV has done reasonable job of having RG similar to IWM over TTM

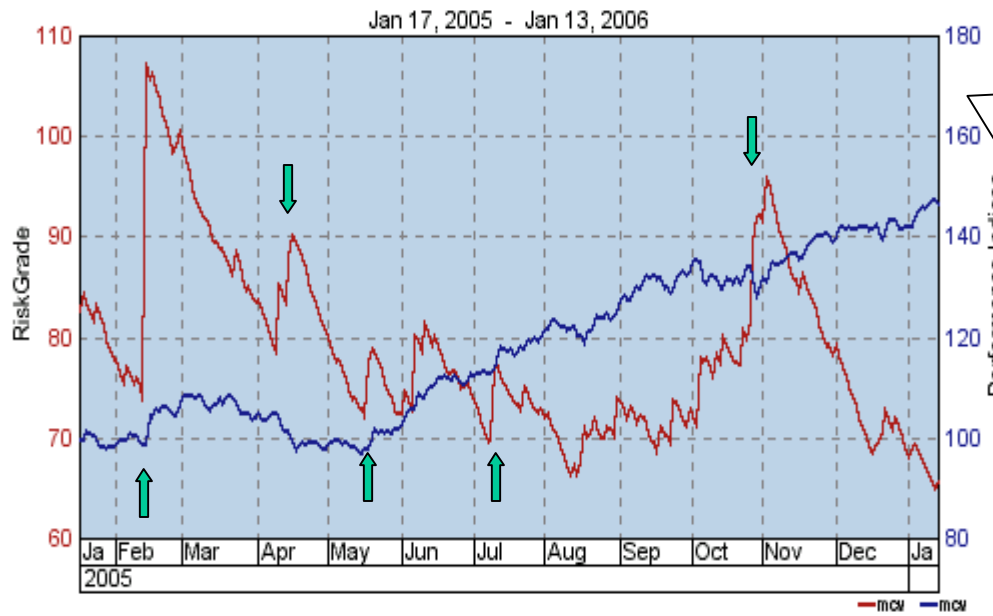
The MCV Portfolio: The Purchasing Process (10)

Select Portfolio
 mcv

Period: One Year
Start Date: Jan 15 2005
End Date: Jan 15 2006

Risk/Price chart shows how RG varies with price action

Portfolio name: mcv **RiskGrade:** 66
 Performance Indices **Min:** 97 **Max:** 148 **Avg:** 119 (01/17/2005-01/13/2006)
 Riskgrades **Min:** 65 **Max:** 107 **Avg:** 79 (01/17/2005-01/13/2006)



Note that RG spikes on ****either**** high or low price spikes as shown by arrows in the chart:

- ↑ RG spike due to upward price spike
- ↓ RG spike due to downward price spike

The MCV Portfolio: The Purchasing Process (11)

stock	rg	port rg
stock 1	200	
stock 2	178	
stock 3	219	
stock 4	92	
stock 5	157	
stock 6	111	
stock 7	166	
stock 8	103	
stock 9	176	
stock 10	217	
stock 11	149	
stock 12	146	
stock 13	151	
stock 14	246	
stock 15	175	
avg	166	72

stock	rg	port rg
stock1	200	
stock2	178	
stock3	219	
stock4	92	
stock5	157	
stock6	111	
stock7	166	
stock8	103	
stock9	176	
stock10	217	
stock11	149	
stock12	146	
stock13	151	
stock14	246	
stock15	175	
lub	214	
mgpi	174	
zeus	196	
avg	171	70

event risk analysis			
event	S&P	Nasdaq	mcv
Black Monday	-20.50%	-13.40%	-10%
Gulf War	-10.40%	-13.10%	-13%
Tech Wreck	-11.20%	-33.10%	-30%
Sept. 11th	-11.70%	-16.10%	-16%

The final element to consider is the portfolio exposure to catastrophic risks. The RG site allows you to simulate various catastrophes (captured above)

As shown, the portfolio has event risk similar to indices.

Note that no effort has been expended to minimize this type of risk

iwv	45	tvl port	\$168,681	cash port	22244		
iwr	53	bet size	1.00%				
iwn	65	bet size \$	1687				
stock	price	rg	stop loss	#shares	\$amt	port rg	val
MGPI	11.8	174	27%	534	6301	71	20.27
LUB	13.3	214	30%	422	5613	72	14.68
ZEUS	24.85	196	30%	225	5591	72	16.12
URGI	13.15	195	30%	427	5615	71	8.51
XPRSA	17.37	226	30%	323	5611	72	12.49
SCVL	21.92	237	30%	256	5612	73	21.3

The MCV Portfolio: The Purchasing Process (12)

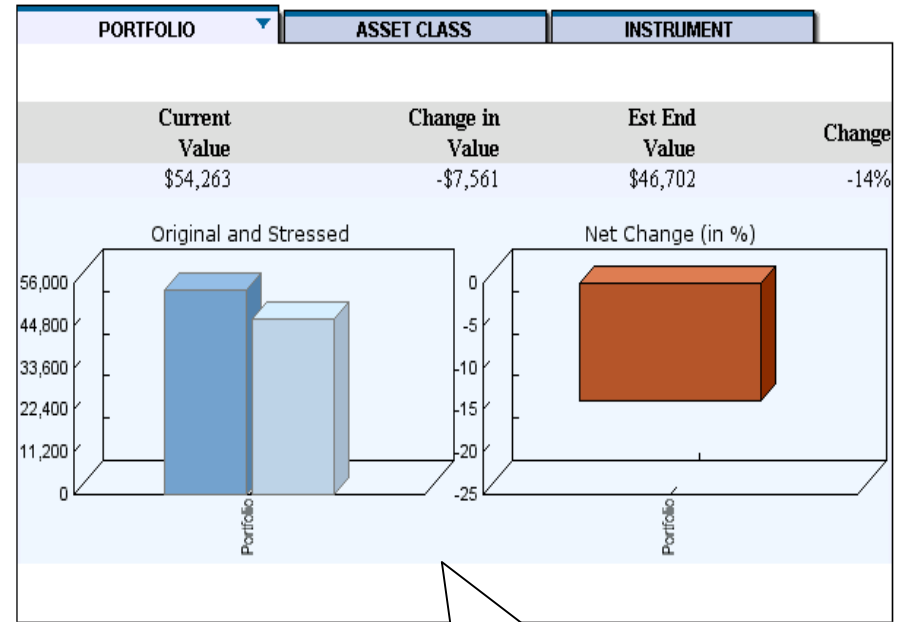
Event Risk Analysis

Results:

- The "mcv" Portfolio decreased by \$7,561 (-14%)

mcv

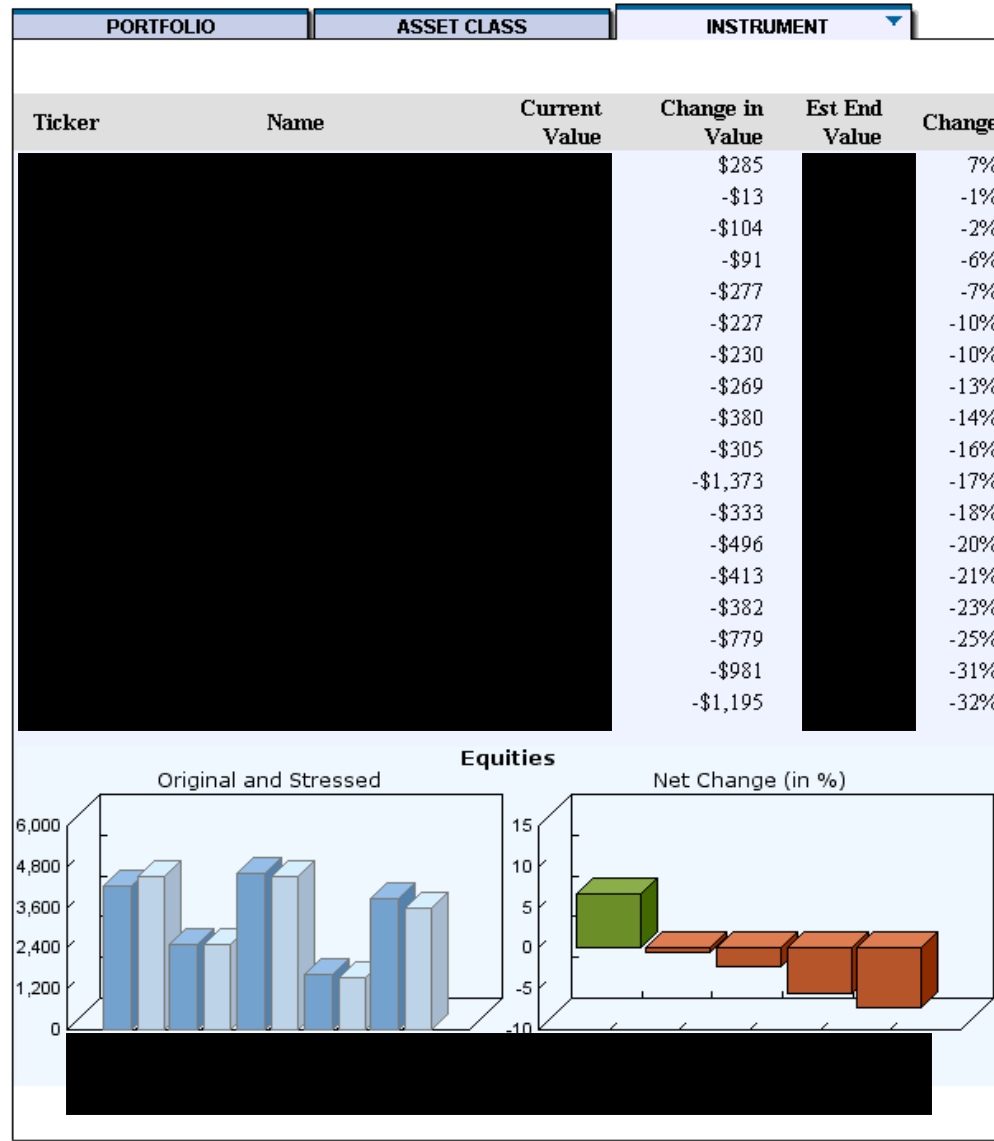
HISTORICAL EVENTS		USER-DEFINED EVENTS					
Shock Names	Selection	S+P	NASDAQ	FTSE	NIKKEI	JPY	GBP
Black Monday	<input type="radio"/>	-20.5%	-13.4%	-10.8%	-2.4%	0.0%	-0.5%
Gulf War	<input type="radio"/>	-10.4%	-13.1%	-7.9%	-16.8%	-2.1%	-3.4%
Euro Crisis	<input type="radio"/>	-2%	-0.6%	7.8%	-3.2%	-4.5%	8.1%
Mexican Peso Crisis	<input type="radio"/>	1.9%	4.3%	-3.4%	-8.4%	-0.4%	-2.2%
Asian Crisis	<input type="radio"/>	-6.9%	-7.2%	-2.6%	-1.9%	-0.2%	-1.8%
Russian Crisis	<input type="radio"/>	-12.9%	-23.5%	-16.8%	-13.5%	-17.6%	-5.5%
Tech-Wreck	<input type="radio"/>	-11.2%	-33.1%	-8.3%	2.4%	-2.2%	0.3%
September 11th	<input checked="" type="radio"/>	-11.7%	-16.1%	-11.9%	-6.3%	3.7%	-1%



Variety of catastrophes to choose from

Portfolio level impact due to chosen catastrophe

The MCV Portfolio: The Purchasing Process (13)



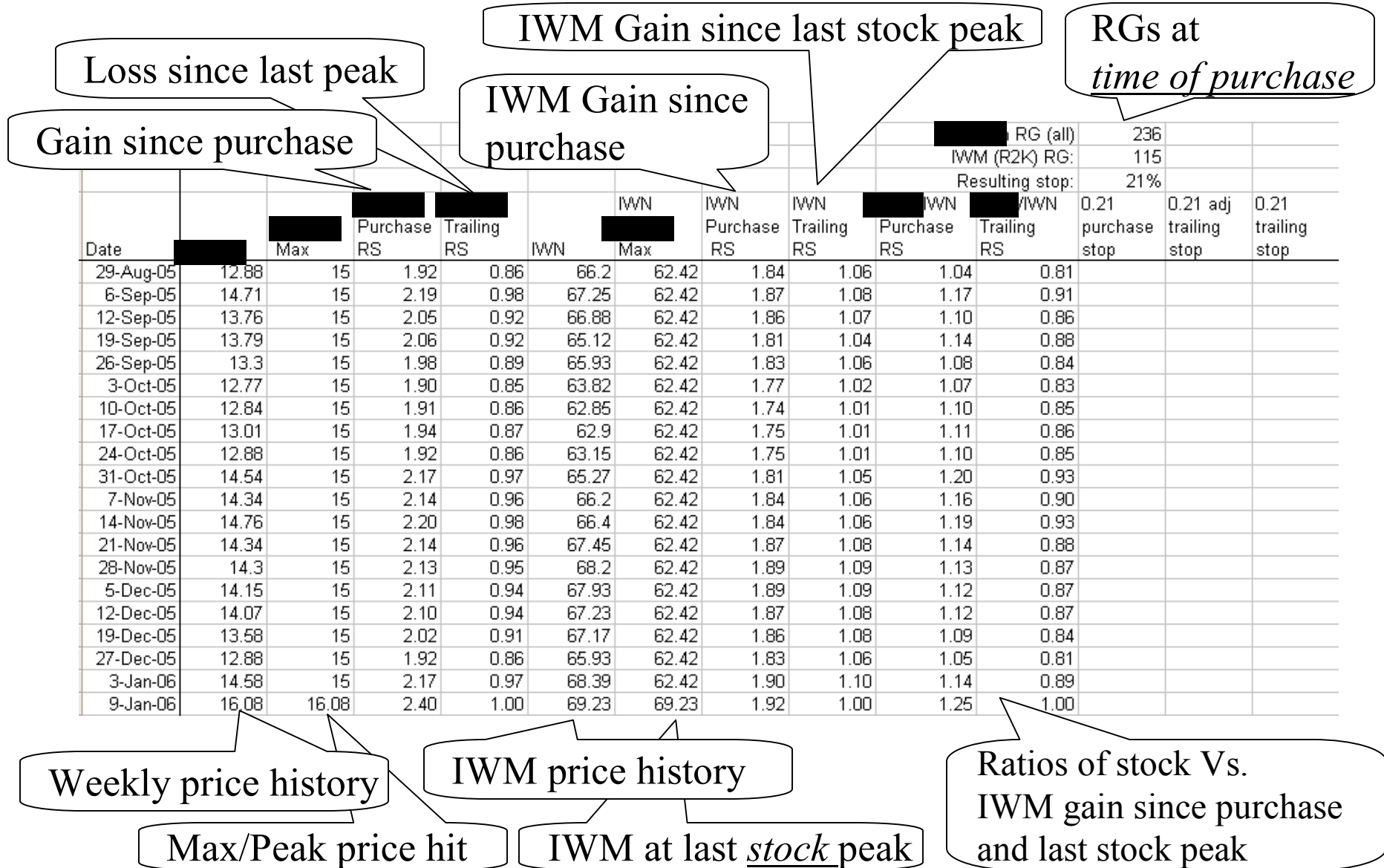
RG site also provides info on which stocks suffered most from the catastrophe

Information provided could be used to minimize exposure for these events - this has not been attempted

The MCV Portfolio: Stop Loss Spreadsheet (1)

- The Stop Loss SS takes advantage of the RG calculations made during the buying process
- Stops are checked each weekend - market orders are used to sell and occur on Monday morning's open
- Several trailing stop losses are implemented:
 - A Trailing Stop (Selling Rule)
 - An Adjusted Trailing Stop (Guideline/Advisory)
 - Adjust trailing stop for losses relative to IWM *since last stock peak*
 - Attempt to guard against under-performing the index *since last stock peak*
 - A Purchase Stop (Guideline/Advisory)
 - Adjust trailing stop for losses relative to IWM *since stock purchase*
 - Attempt to guard against under-performing the index *since stock purchase*
- Guideline/Advisory serves as flag to consider selling
 - Example: Low volatility stocks easily set off the adjusted, purchase stops - IWM can easily outperform a low volatility (<10%) stock

The MCV Portfolio: Stop Loss Spreadsheet (2)



The MCV Portfolio: Stop Loss Spreadsheet (3)

												adpi RG (all)	271	
												IWM (R2K) RG:	115	
												Resulting stop:	24%	
Date	adpi	adpi Max	adpi Purchase RS	adpi Trailing RS	IWN	IWN adpi Max	IWN Purchase RS	IWN Trailing RS	adpi/IWN Purchase RS	adpi/IWN Trailing RS	0.24 purchase stop	0.24 adj trailing stop	0.24 trailing stop	
6-Sep-05		32.87	32.87	1.89	1.00	67.25	67.25	1.17	1.00	1.61	1.00			
12-Sep-05		34.68	34.68	1.99	1.00	66.88	66.88	1.17	1.00	1.71	1.00			
19-Sep-05		34.36	34.68	1.97	0.99	65.12	66.88	1.14	0.97	1.74	1.02			
26-Sep-05		33.92	34.68	1.95	0.98	65.93	66.88	1.15	0.99	1.70	0.99			
3-Oct-05		32.54	34.68	1.87	0.94	63.82	66.88	1.11	0.95	1.68	0.98			
10-Oct-05		33.61	34.68	1.93	0.97	62.85	66.88	1.10	0.94	1.76	1.03			
17-Oct-05	splt	21.95	23.12	1.89	0.95	62.9	66.88	1.10	0.94	1.73	1.01			
24-Oct-05	splt	19.25	23.12	1.66	0.83	63.15	66.88	1.10	0.94	1.51	0.88			
31-Oct-05	splt	21.51	23.12	1.85	0.93	65.27	66.88	1.14	0.98	1.63	0.95			
7-Nov-05	splt	20.71	23.12	1.79	0.90	66.2	66.88	1.15	0.99	1.55	0.90			
14-Nov-05	splt	17.86	23.12	1.54	0.77	66.4	66.88	1.16	0.99	1.33	0.78			
21-Nov-05	splt	18.98	23.12	1.64	0.82	67.45	66.88	1.18	1.01	1.39	0.81			
28-Nov-05	splt	18.50	23.12	1.59	0.80	68.2	66.88	1.19	1.02	1.34	0.78			
5-Dec-05	splt	18.49	23.12	1.59	0.80	67.93	66.88	1.18	1.02	1.35	0.79			
12-Dec-05	splt	18.51	23.12	1.60	0.80	67.23	66.88	1.17	1.01	1.36	0.80			
19-Dec-05	splt	17.49	23.12	1.51	0.76	67.17	66.88	1.17	1.00	1.29	0.75		Sell	Sell
27-Dec-05														

Trade ends with 51% gain. Peak gain of 99% on 9/12/05

24% trailing stop loss since

25% trailing stop loss Vs. IWM since last stock peak

2 sell flags go off

The MCV Portfolio: Additional Selling Rules

Besides the stop loss strategy employed, additional selling rules are used to handle special circumstances:

- “Too Big” rule: Sell a stock if it composes $> 20\%$ of the MCV portfolio
 - Too much risk, \$\$ riding on a single stock
 - Rule would sell 50% of stock, re-distribute cash to new purchases
 - Rule never exercised (but have come close!!)
- “2 year laggard” rule: If a stock is not materially out-performing the IWM after 2 years - sell it
 - Additional check to adjusted stop loss guidelines
 - Rule not yet exercised
- Tax loss rule: Sell on the 51st week of ownership if have a significant ($>5\%$) loss
 - Take your losses early and make them short-term for tax purposes
 - Rule not yet exercised (but have come close!!)

MCV Portfolio: Areas for Improvement (1)

- Scaling: How many \$\$ can be invested in an MCV-like portfolio??
 - Investing in MCV stocks presents problems in trading (liquidity risk)
 - By reducing risk amount to 0.5% believe can double number of stocks in portfolio
 - Based on other studies, believe outsize returns can be enjoyed up to 50 stocks or so
 - By purchasing/selling over a week (5 days) can increase investment by a factor of 5
 - Result: Should be able to handle \$500K - \$1M portfolios without too much effort
- Stop Loss Related Items
 - 10% stop on IWM is a rough approximation - should be improved
 - Update study with purchase delays of 1, 2, 3 and 4 weeks, over a longer timeframe
 - Profit target - or tighter trailing stops to protect profits - should be studied
 - Idea #1: Reduce trailing stop to keep fractional risk to portfolio (near) constant
 - Idea #2: Do statistical study of gain (based on amount risked (R) based on stop loss)
 - Use a fractional amount of the trailing stop loss amount (R) to limit
 - Currently 1 stop loss amount (R) used throughout trade
 - Most winning trades go “underwater” by a fraction (25%-50%) of the amount risked (R)
 - Do statistical study to determine this amount, use it to limit absolute amount of \$\$ risked

MCV Portfolio: Areas for Improvement (2)

- Improvements in risk analysis
 - RG changes over time - should update periodically (e.g., yearly)
 - Small number of stocks in portfolio allows unusual exposure to company risk
 - Typical example: poor revenue, EPS announcement can impact a stock by 20%
 - Only way to “protect” against this is to have a larger number of stocks (e.g., 50)
 - A single large position in a stock can overly influence portfolio
 - Single position distorts the rest of the portfolio to guard against risk impact of big position
 - “Too big” sell rule is an attempt to address this
 - Work involved in doing portfolio RG analysis limits number of candidate stocks analyzed
 - Should look at all stocks from screen that reduce portfolio volatility, then filter those
 - Requires program to compute - too much work to do manually
 - Should bias stock selection to improve event risk exposure
 - Idea: After finding stocks that reduce portfolio RG, determine event risk for those stocks, then bias selection toward stocks that minimize event risk
 - Above is a very labor intensive process

MCV Portfolio: Areas for Improvement (3)

- MCV centered on 1 market segment - can't adapt to changing conditions
 - MCV occupies 1 of 6 segments (Large, Medium, Small caps; Growth and Value)
 - Since Small Cap Value has been the leading segment since 2001 MCV has done well
 - MCV would do less well when Large Cap Growth is dominant (e.g., 1999, 2000)
- Use market timing to improve timing of purchases
 - Purchases at end of month is a simple rule - but may not be smart in a bear market
 - Simple example:
 - If market timing signal “Long” buy stocks immediately (I.e., that weekend)
 - If market timing signal “flat” wait until signal goes long to purchase stocks
- Use of VV metrics in process
 - VST ranking used since VST is VV suggested “best overall metric” - sorting on other metrics may be better
 - Final VV ranking - of Value/Price*CI - works well in value driven market, may not work as well in momentum/growth driven market
 - Picked Value/Price * CI since MCV is a value portfolio

Appendix: In Defense of Stock Screening

- Stolen (with apologies) from a SF Money Show presentation by Reuters
- Authored by Marc H. Gerstein, Director of Investment Research
- Marc's Hypothesis - screening is an excellent way to select stocks - and the criticisms against screening ring hollow
- Some of his main points in this regard follow...

Deconstructing screen critiques: past performance

- Assuming we ignore historic data and just look ahead, are we REALLY nearly as good at forecasting as we like to think we are?
 - As of 3/7/05, there were 3,945 estimates of quarterly EPS for the current fiscal quarter
 - Of these, 2,169 (55%) are equal to where they stood 4 weeks ago
 - Only 1,084 (28%) still stand where they stood 8 weeks ago
 - Only 851 (22%) still stand where they stood 13 weeks ago
 - In other words, there's a 78% probability that the life span of a near-term earnings estimate, the group that get the most attention, will have a shelf life of less than three months
- There's a reason why concepts such as earnings surprise and estimate revision have become standard fare in the investment community
- Companies are more like ocean liners than rowboats
 - They can turn in the opposite direction, but this tends to happen gradually rather than in an instant
 - Evolutionary, rather than revolutionary change
 - So rather than pretend the past is irrelevant, we may as well use it as constructively as we can to help us make rational assumptions about the future

Deconstructing screen critiques: qualitative factors

- Are we REALLY as good at evaluating qualitative factors as we like to think we are?
 - Especially true for small investors - investment firms have tremendous advantages
- Can we REALLY evaluate management (or do we find ourselves saying good things about management teams that produce good numbers and vice versa)?
- Can we REALLY get good handles on patents, technologies, competition, etc.
 - What's the difference between an Intel chip and an AMD chip?
 - Which oil company has better exploration prospects: Exxon, Mobile or Chevron?
 - What EXACTLY does Halliburton do?
 - Who are GE's competitors and how is GE better or worse?
 - Tell me about Cisco's patents
- What the heck is an economic moat? REALLY???
 - Did you know that at the time his fame was spreading most rapidly, Warren Buffett, an often-cited proponent of economic moats, had made an investment in McDonalds, which at the time was getting hammered by fast food rivals in a manner consistent with what one might expect from a zero-moat company?

Deconstructing screen critiques: biases

- Thou shalt not covet thy neighbor's stocks!!!!!!!!!!!!!!!!!!!!!!
- If your screen finds enough good stocks for you to enjoy strong investment returns, don't worry that somebody else with a different investment approach finds different winners
 - If you're winning in the market, why feel bad because you aren't winning with, say, biotech?
- There are a lot of great stocks out there, so it's no sin to miss one
- You're more likely to succeed if you define an area of proficiency, stick with that, execute to the best of your ability, and let others do their thing with their stocks

The MCV Portfolio: References

Books

- James P. O'Shaughnessy's **What Works on Wall Street** can form the basis of many passive portfolios
- Bill Matson's **Data Driven Investing** performs studies similar to O'Shaughnessy's
- Ralph Vince's **The Mathematics of Money Management: Risk Analysis Techniques for Traders** is a good general text on money management techniques
- Tom Stridsman's **Trading System that Work** is an excellent trading system development text covering a number of topics touched on in these talks (e.g., exit design, money management)

Web Sites/URLs

- URL on Reuters Ideas and Screening (web based screens, portfolios, articles)
<http://www.investor.reuters.com/ArticleEntry.aspx?target=%2fopinion>
- URL on position sizing articles, tools:
<http://www.adaptrade.com/Articles/index.htm>
- URL for RiskGrades information:
<http://www.aaii.com/riskgrades/>
- URL for VectorVest information:
<http://www.vectorvest.com>
- URL for SIPro information:
<http://www.aaii.com/stockinvestor/>
- URL for article on the "Beginner's Portfolio" (1996)
<http://www.aaii.com/journal/199608/mop.pdf?CFID=542634&CFTOKEN=56011746>
- URL for article on the "Beginner's Portfolio" performance (2003)
http://www.aaii.com/includes/DisplayArticle.cfm?Article_Id=2586