p-MRI key concepts

July 6, 2017 12:24 PM

Goal	make a tool that brokers can use to show of original portfolio vs proposed -orig can be an index, a fund, a stock - or a combination
Keys	Lots of securities in available universe Lots of historic performance data for each Lots of 'quality factors' data for each (ie avg sales growth, avg profitability,
Opportunity	If it's easy to use and shows a new way to look at things, then it'll be huge Brokers need an easy way to 'see' impacts of
What it does	
1. Introduces a new visual language of quality fundamentals	Learn how big data can reveal quality (without having to use excel, buy data, do a query or write a line of code
2. Allows visual optimization using sliders etc	See changes in real time
3. Prepare branded ~ 4pg client proposal pdf	Recommend that client Mrs. Johnson buy ____ (hopefully bristol gate, but
Biggest challenges	a. Total return index for each fund/security -does it exist in our feed? -or do we have to construct it?
-	b. Batch processing - so no computationally-intense calculations need to be -many data feeds and market users want VERY CURRENT data, but ours isn't so sensitive to that. In fact, we're mostly going to focus on just 16 'quality factors' and we're going to pull them for each security. Ideally we will also be able to do the same for each year end for last 8 year ends. 16x8=128 static values for each security, index or fund. That's not much
	c. Good ux (so it's simple to understand and easy to use)
	a. Adding more tools and measures. The scribble and walkthrough I did by skype explain one idea whereby we offer 3 colors for each value (top quartile dark, middle 50% med color and bottom quartile light). **but also** the application can offer brand new metrics to the world, like "persistence" (ie the % of the time a given portfolio/security/fund is better than the index on a quality measure at a given point in time). This gives a revolutionary new idea: beating the index not in terms of performance, but in terms of quality. We would merely look at whether portfolio x (the original) is better than alternative y (the proposed) along each measure to https://www.dropbox.com/s/zcdj0pl9ttj7nla/Persistence_v2.mp4?dl=0
Ux main sections	1. Select securities or indices or model portfolios or stocks or funds from a huge list - to build 'original' or before portfolio 2. Select new stocks, funds, indexes etc to add or delete 3. Interact using ie slider to vary weights - with instant visual confirmation of the effect of that change 4. See risk tables, benefits, charts (see my p-MRI mockup v2) 5. (when fiished optimization) print pdf
How simple the quality data actually is	Below are some excel models showing actual numbers and simple coloring. I propose that we merely show colors in the pmri

		Profitability					Financial Strength			Valuation				Growth					
		Return on Equity	Return on Invested Capital	Gross Mrgn x After Tax Op Income	Operating Margin	Net Profit Margin	Assets / Equity	Total Debt to Capital	Debt to EBITDA	Price to Book Value	Enterprise Value to Sales	Enterprise Value to EBITDA	Price to Trailing Earnings	Sales Growth	EBIT Growth	EPS Growth	Dividend Growth /Share	Growth in Cash Flow /Share	Growth in Book Value /Share
		lower is better along these metrics only																	
		3yr avg %	3yr avg %	3yr avg %	3yr avg %	3yr avg %	3yr avg x	3yr avg x	3yr avg x	3yr avg x	3yr avg x	3yr avg x	3yr avg x	1yr %	1yr %	1yr %	1yr %	1yr %	1yr %
2009	*S&P 500*	*15*	*10*	*25*	*14*	*7.3*	*2.6*	*38*	*1.7*	*2.6*	*2.0*	*9.3*	*18*	*4*	*4*	*2*	*8*	*12*	*6*
	Bristol Gate	21	16	29	13	8.7	2.1	28	1.3	3.0	1.5	8.7	16	9	13	16	26	13	10
2010	*S&P 500*	*14*	*9*	*25*	*14*	*7.3*	*2.6*	*38*	*1.7*	*2.4*	*1.9*	*8.7*	*17*	*4*	*8*	*6*	*7*	*10*	*7*
	Bristol Gate	21	17	32	15	9.1	2.4	33	1.3	3.0	1.7	8.2	16	6	12	16	22	14	10
2011	*S&P 500*	*13*	*8*	*24*	*14*	*7.0*	*2.6*	*39*	*1.7*	*2.2*	*1.9*	*8.4*	*16*	*4*	*8*	*8*	*7*	*8*	*6*
	Bristol Gate	21	15	30	15	9.5	2.2	30	1.3	2.9	1.7	8.0	15	5	13	15	18	13	8
2012	*S&P 500*	*13*	*8*	*24*	*14*	*7.0*	*2.6*	*39*	*1.7*	*2.2*	*1.9*	*8.4*	*16*	*4*	*8*	*8*	*7*	*8*	*6*
	Bristol Gate	19	13	26	16	8.8	2.6	36	1.3	2.9	1.9	8.4	15	7	16	20	21	14	14
2013	*S&P 500*	*14*	*10*	*23*	*16*	*9.3*	*2.5*	*37*	*1.7*	*2.5*	*2.1*	*9.5*	*18*	*6*	*13*	*16*	*12*	*10*	*8*
	Bristol Gate	19	13	30	15	9.5	2.3	33	1.3	3.3	2.0	9.0	17	8	18	19	28	15	10
2014	*S&P 500*	*15*	*10*	*22*	*16*	*9.5*	*2.5*	*39*	*1.7*	*2.7*	*2.3*	*10.0*	*19*	*5*	*7*	*11*	*14*	*10*	*6*
	Bristol Gate	23	14	27	13	8.8	2.4	33	1.2	3.5	1.4	9.7	19	9	13	19	31	21	9
2015	*S&P 500*	*14*	*9*	*21*	*16*	*9.0*	*2.7*	*41*	*2.0*	*3.0*	*2.5*	*10.9*	*21*	*3*	*6*	*9*	*14*	*9*	*5*
	Bristol Gate	18	12	34	13	7.8	2.3	32	1.3	4.2	1.6	12.5	20	8	12	17	31	20	9
2016	*S&P 500*	*15*	*9*	*20*	*16*	*9.3*	*2.7*	*43*	*2.1*	*3.1*	*2.7*	*11.5*	*21*	*3*	*6*	*9*	*11*	*9*	*4*
	Bristol Gate	19	12	26	15	10.4	2.2	34	1.5	3.7	2.3	11.8	21	4	11	14	21	15	6
8yr avg Persistence		100%	100%	100%	25%	75%	100%	100%	100%	0%	88%	75%	100%	100%	100%	100%	100%	100%	100%
		rounded values shown to improve legibility in print version																	
		8	8	8	2	6	8	8	8	0	7	6	8	8	8	8	8	8	8

	Profitability					Financial Strength			Valuation			Growth							Persistence		
	Return on Equity	Return on Invested Capital	GM x ATO	Operating Margin	Net Profit Margin	Assets / Equity	Total debt to Capital	Debt to Ebitda	Enterprise Value to Sales	Enterprise Value to Ebitda	Price to Trailing Earnings	Sales Growth (1 year)	EBIT Growth (1 year)	EPS Growth (1 year)	Payout Ratio (dividends / earnings)	Div Per Share Growth (1 year)	Cash Flow Per Share Growth (1 year)	Book value Per Share Growth (1 year)	No periods better	% better BG Top 50	% better BG Actual 22
BG Top 50	18.06	14.79	32.98	10.23	0.06	2.37	26.79	1.07	1.16	8.47	17.14	3.83	6.27	2.68	21.06	21.41	10.03	5.27	13	68%	
BG Actual 22	20.65	16.37	28.79	13.00	0.09	2.13	28.44	1.29	1.53	8.73	16.41	8.54	12.54	16.07	22.82	26.38	12.63	9.54	16		84%
BG Top 50	18.44	13.70	27.91	11.75	0.08	2.51	30.57	1.36	1.26	8.04	15.60	4.56	6.02	7.23	25.04	19.15	11.61	8.27	15	79%	
BG Actual 22	21.05	16.63	31.84	14.91	0.09	2.38	32.57	1.32	1.65	8.17	15.52	5.67	11.90	15.80	23.19	22.32	14.30	10.46	17		89%
BG Top 50	20.24	13.94	31.20	13.19	0.08	2.43	31.77	1.34	1.49	8.41	14.79	4.08	6.18	11.68	28.91	14.39	11.38	8.54	14	74%	
BG Actual 22	20.76	15.47	30.32	14.84	0.10	2.20	30.29	1.30	1.70	8.02	14.86	5.28	12.52	15.26	25.96	18.40	12.74	7.73	17		89%
BG Top 50	20.84	13.75	31.00	13.22	0.09	2.54	34.08	1.33	1.64	8.51	15.57	3.54	5.22	11.53	29.61	14.95	9.86	8.01	11	58%	
BG Actual 22	18.69	12.95	26.20	15.61	0.09	2.65	36.31	1.34	1.90	8.44	15.06	7.13	15.71	19.92	22.71	20.54	13.54	14.07	14		74%
BG Top 50	17.57	12.33	20.39	13.80	0.09	2.57	34.12	1.56	1.82	9.48	16.26	6.66	8.64	15.29	28.33	26.22	10.90	9.65	12	63%	
BG Actual 22	19.13	13.39	30.14	14.54	0.10	2.34	32.64	1.31	1.99	9.05	17.20	8.01	17.51	19.13	22.80	28.29	15.39	9.64	17		89%
BG Top 50	19.42	11.44	27.34	17.88	0.10	2.55	34.21	1.57	2.01	9.53	17.75	6.23	6.76	15.28	28.26	26.82	12.22	6.69	15	79%	
BG Actual 22	22.78	14.46	27.14	12.85	0.09	2.41	33.35	1.24	1.38	9.67	18.75	9.12	13.28	19.23	20.52	31.07	20.81	8.60	16		84%
BG Top 50	18.30	12.02	27.72	15.67	0.10	2.33	35.98	1.46	2.18	10.65	18.83	6.12	6.76	11.21	26.64	23.73	12.03	4.68	13	68%	
BG Actual 22	17.69	12.19	33.76	12.69	0.08	2.30	32.47	1.29	1.63	12.55	20.39	7.93	12.01	16.83	20.65	30.53	19.96	8.69	15		79%
BG Top 50	18.25	11.67	21.24	14.96	0.10	2.29	32.37	1.47	2.42	11.83	21.07	4.25	7.20	9.52	28.35	24.62	12.17	3.28	15	79%	
BG Actual 22	19.14	12.25	25.82	15.14	0.10	2.18	33.84	1.50	2.26	11.83	20.61	4.43	10.77	14.38	26.99	20.80	14.59	5.62	16		84%
																			avg	71%	84%
									Persistence - Across 8 year end periods 2009-2016 and along 19 fundamental measures:										BG Top 50	BG Actual 22