

CREDO CAPITAL

RORO and other four letter words...





RORO and other four letter words...

or:

Does "Risk On / Risk Off" really make a difference?



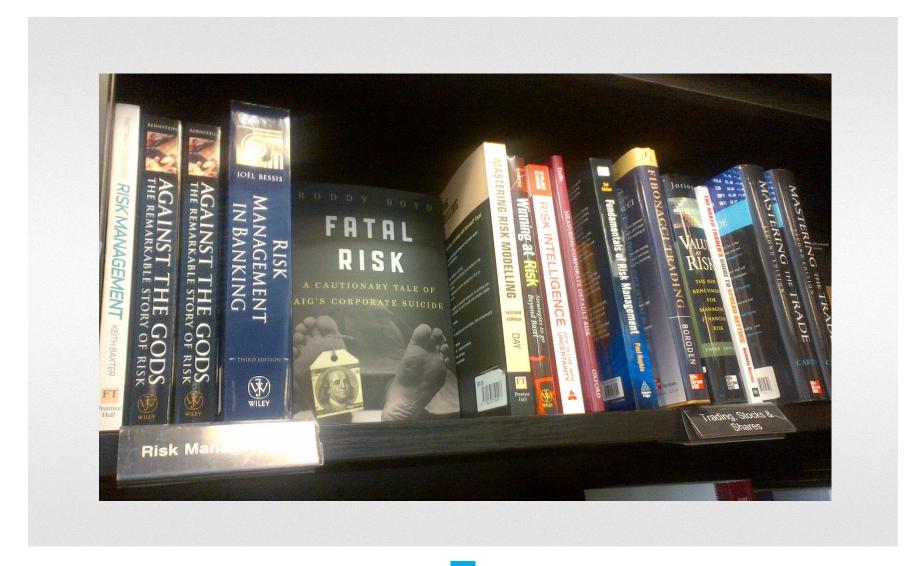
Presented by:

Deon Gouws Chief Investment Officer Credo Group (UK) Ltd

October 2012

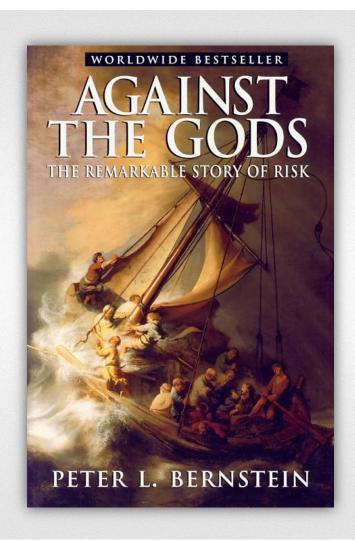
Increasingly a cottage industry in its own right





The seminal work





"Cardano the Renaissance gambler,
followed by Pascal the geometer & Fermat the lawyer,
the monks of Port-Royal & the ministers of Newington,
the notions man & the man with the sprained brain,
Daniel Bernoulli & his uncle Jacob,
secretive Gauss & voluble Quetelet,
von Neumann the playful & Morgenstern the ponderous,
the religious de Moivre & the agnostic Knight, pithy Black
& loquacious Scholes,
Kenneth Arrow & Harry Markowitz...

DEFINITION OF INVESTMENT RISK

From: www.investopedia.com



"The chance that an investment's actual return will be different than expected:

- Risk includes the **possibility of losing some or all** of the original investment.
- Different versions of risk are usually measured by calculating the standard deviation of the historical returns or average returns of a specific investment. A high standard deviation indicates a high degree of risk."

Some terms

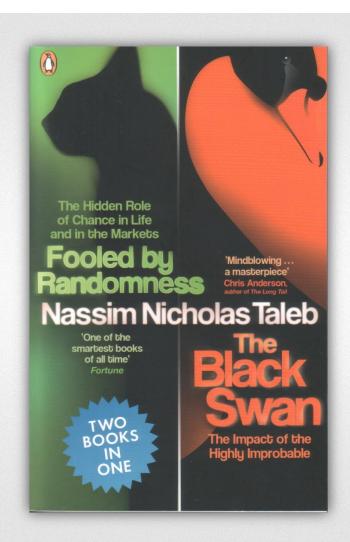


bla bla bla

- Standard deviation $\sigma = \sqrt{E[(X \mu)^2]}$
- Tracking error $TE = \omega = \sqrt{\mathbb{E}[(r_p r_b)^2]}$
- Volatility $\sigma_T = \sigma \sqrt{T}$
- Information ratio $IR = \frac{E[R_p R_b]}{\sigma} = \frac{\alpha}{\omega} = \frac{E[R_p R_b]}{\sqrt{\text{var}[R_p R_b]}}$
- Sharpe ratio $S = \frac{E[R_a R_b]}{\sigma} = \frac{E[R_a R_b]}{\sqrt{\text{var}[R_a R_b]}}$
- Sortino ratio $S = \frac{R-T}{DR}$. $DR = \left(\int_{-\infty}^{T} (T-x)^2 f(x) dx\right)^{1/2}$
- Jensen's Alpha ratio $\alpha_J = R_i [R_f + \beta_{iM} \cdot (R_M R_f)]$
- $\textbf{Semi-deviation of returns} \\ & SD(X) = \left(\mathbb{E}[(X \mathbb{E}[X])^2 \mathbf{1}_{\{X \leq \mathbb{E}[X]\}}]\right)^{\frac{1}{2}} \\ & \text{where } \mathbf{1}_{\{X \leq \mathbb{E}[X]\}} \text{ is an indicator function, i.e. } \mathbf{1}_{\{X \leq \mathbb{E}[X]\}} = \begin{cases} 1 & \text{if } X \leq \mathbb{E}[X] \\ 0 & \text{else} \end{cases}$
- M-squared $M^2 \equiv \overline{R_C} \overline{R_M} = (\overline{R_P} \overline{R_f}) \frac{\sigma_M}{\sigma_P} (\overline{R_M} \overline{R_f})$
- Value at risk $VaR_{\alpha}(L) = \inf\{l \in \mathbb{R} : P(L > l) \le 1 \alpha\} = \inf\{l \in \mathbb{R} : F_L(l) \ge \alpha\}$

A more modern approach...





The 4 largest losses incurred / narrowly avoided by The Mirage Hotel & Casino, Las Vegas fell completely outside sophisticated gambling models:

- 1. Roy Horn's injury (\$100m)
- 2. Disgruntled contractor attempting to dynamite casino
- 3. Employee hiding IRS returns
- 4. Owner's daughter kidnapped (used casino funds for ransom, violating gambling laws)



A neuro-scientific approach...



THE HOUR BETWEEN DOG AND WOLF



RISK TAKING, GUT
FEELINGS, AND THE BIOLOGY
OF BOOM AND BUST

JOHN COATES

Testosterone (increases risk appetite)

versus

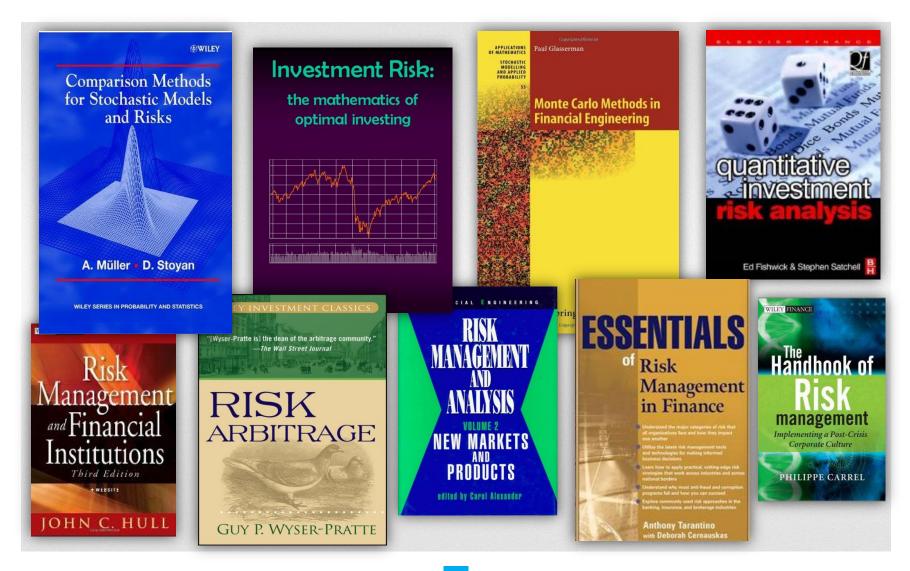
cortisol (which makes us shy away from it)





...but the mathematicians continue to dominate

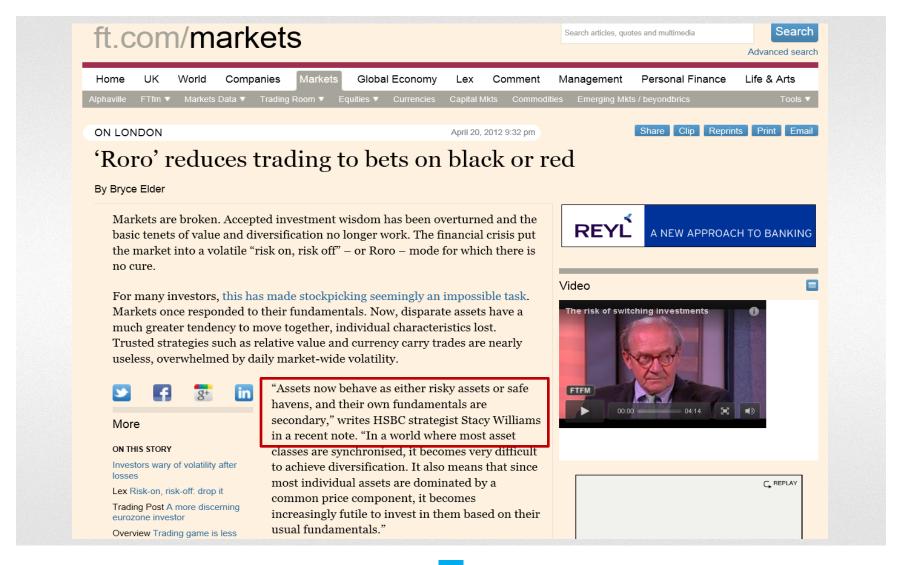




WHICH BRINGS US TO RORO

- an important new concept in the world of investment risk?

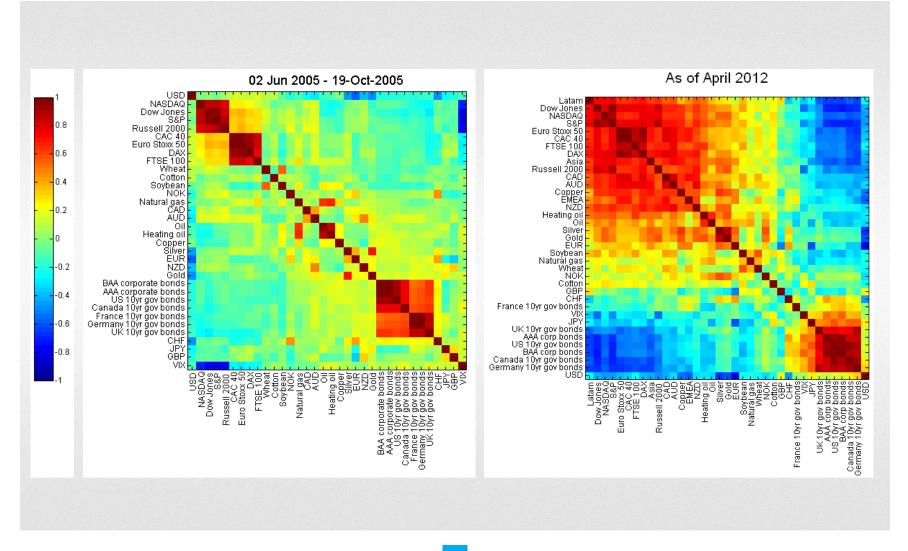




RISK ON – RISK OFF: FIXING A BROKEN INVESTMENT PROCESS

- published by HSBC Global Research, April 2012

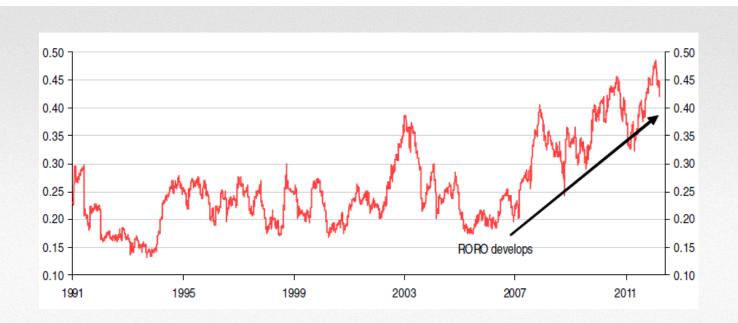




HSBC RORO INDEX

- published by HSBC Global Research, April 2012





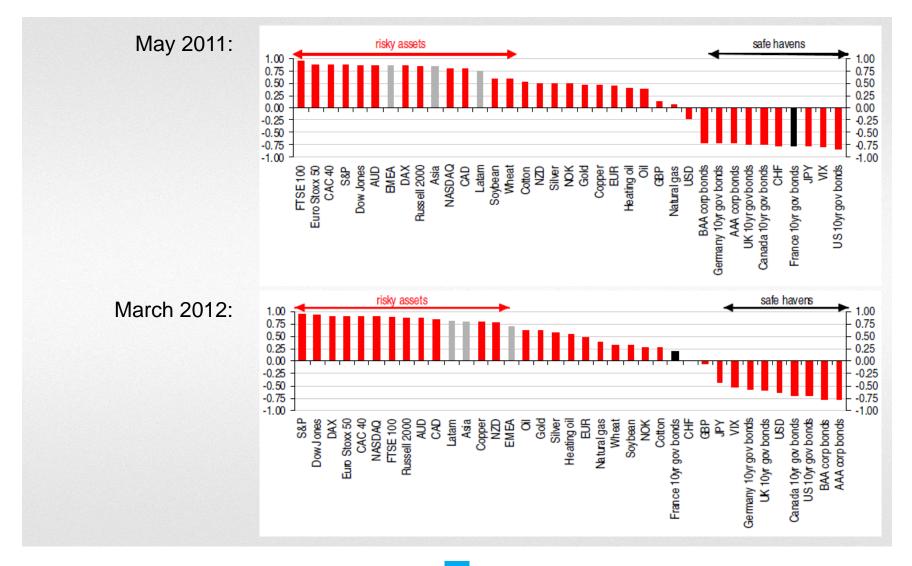
It is worth reiterating that the index measures the *strength* of RORO. A rising index does not indicate that the market is "risk on" – it indicates that the paradigm is gaining strength and correlations are rising. Markets could be moving in any direction, but they are highly synchronised.

Pre-Lehman the index was low and stable. The collapse of Lehman caused a dramatic rise in the index, and although choppy, the index has risen significantly in the subsequent years. All-time highs for the index were seen in December 2011 and, while it has fallen since then, it is still at very high levels. Risk on – Risk off continues to dominate today and the index has a long way to fall to hit pre-Lehman levels.

HSBC RORO PROFILES

- published by HSBC Global Research, April 2012





RORO

- entering the financial lexicon





RORC

- entering the financial lexicon



S&P CAPITAL IQ

Financial Insights 2012: Alpha Series

Navigating the Current Risk On/ Risk Off Environment

Event - Thursday October 4th, 2012 - London

Click here to register

EVENT DETAILS

DATE:

Thursday, 4 October 2012

LOCATION:

The In & Out (Navy & Military Club) No. 4 St. James' Square London SW1Y 4JU

TIME:

08:30 - 10:30

Breakfast provided

For more information, <u>e-mail</u> or call +44 (0)20 7176 1261

S&P Capital IQ combines two of our strongest brands – S&P, with its long history and experience in the financial markets and Capital IQ, which is known globally for its accurate financial information and powerful analytical tools.

I would like to extend an invitation to a complimentary seminar that continues our theme of idea generation; this time exploring macroeconomic and regime analysis.

8:00 a.m. Welcome Breakfast and Registration

8:30 a.m. 2013 Outlook for European Equity Markets: Robert Quinn CFA, Chief European Equity Strategist, S&P Capital IQ

- Global equities have been reliant on central bank policies throughout the past few years and this will continue we believe
- The growth outlook should sequentially improve as we inch past the worst periods of austerity
- · We outline our preferred sectors and single name strategies under this scenario

9:15 a.m. The Impact of Economic Regimes on Investment Strategy: David Pope CFA, Managing Director of Quantitative Research, S&P Capital iQ

- Demonstrate how regime selection impacts strategy performance
 - Good and bad regime definition
 - Illustrate some standard ways of looking at strategy performance within regimes
- Offer insights as to when to emphasise value and momentum.
- · Survey several classes of regime modelling techniques

10:00 a.m. Refreshments and Networking

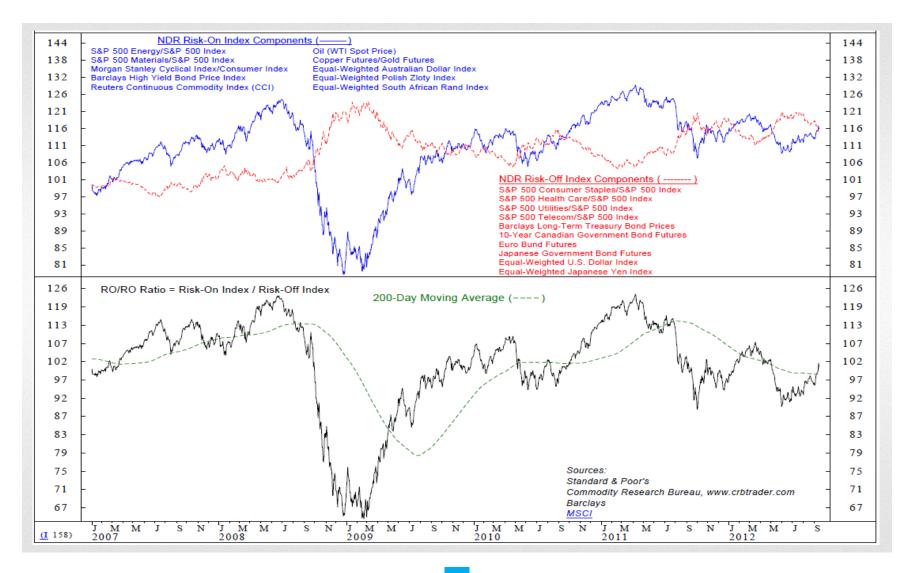
10:30 a.m. Close

Please click here to register, and we look forward to seeing you on October 4th.

NED DAVIS RESEARCH:

Risk Indices & RORO Ratio

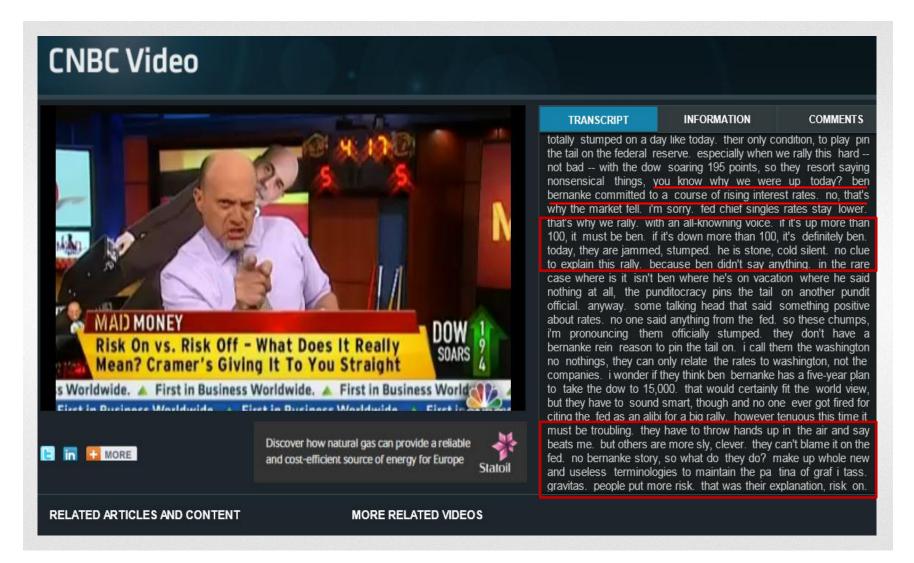




RORO:

The contrarian view





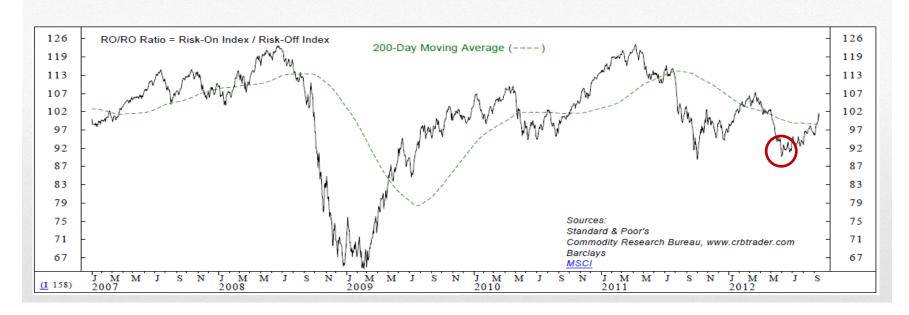
RORO RATIO

- and the most recent market rally



Between the June 4 low to and the recent high on 14 September, Spain, Greece, and Italy were up 31%, 62%, and 27.8%, respectively.

Pity the risk-off brigade who missed the boat...



THE PERILS OF "RISK-OFF"

- likely to keep you out of the market at the most profitable times



Between the June 4 low to and the recent high on 14 September, Spain, Greece, and Italy were up 31%, 62%, and 27.8%, respectively.

Pity the risk-off brigade who missed the boat...

EUROPEAN COUNTRY PERFORMANCE AFTER A BOTTOM 12 CASES SINCE 1990 (BASED ON MSCI COUNTRY INDICES)							
Country	Average Gain in 16 Weeks Following Bottom	Average Gain in Following 52 Weeks					
Austria	-0.1%	11.3%					
U.K.	6.2%	4.5%					
France	6.0%	4.0%					
Germany	7.6%	2.4%					
Greece	2.2%	10.7%					
Italy	5.9%	1.4%					
Netherlands	6.5%	5.1%					
Portugal	0.9%	-3.9%					
Spain	6.6%	5.0%					
Sweden	8.2%	7.1%					
Emerging Europe	10.5%	27.2%					
Average Case	5.5%	6.8%					
Current Case	16.3%	??					
Ned Davis Research Group	T_EUR_C201209261.1						

- ECB announces bond-buying plan (6 September 2012)





RISK-ON!

- Credo Best Ideas Portfolio (price movements, 7 September 2012)



Name	1.Time	Last	Net.Chng	→Pct.Chng	P/E Excl Extra, Basic	Yield
ANGLO AMERICAN/d		1970	+129.50	7.04 %	7.25	2.63 %
BAMSUNG ELECTR/d		1250000	+54000	4.52 %	11.88	0.46 %
XSTRATA/d		1022	+43.00	4.39 %		2.68 %
CATERPILLAR IN/d	1	88.2600	+3.4700	4.0925 %	11.86	2.453119 %
BAMSUNG EL GDR/d		557	+19.000	3.541 %		0.45 %
ABB LTD N/d	₩	17.68	+0.56	3.27 %	13.66	3.797 %
HSBC HOLDINGS/d		562.2	+7.10	1.28 %	8.32	4.67 %
VOLKSWAGEN VZ/d	₽	141.9500	+1.4500	1.03 %	3.49	2.178 %
APPLE INC/d	₽	676.27	+6.04	0.9012 %	14.42	1.567421 %
PRUDENTIAL/d		819.5	+6.00	0.74 %	11.43	3.15 %
JNITED PARCEL /d		72.2400	+0.3000	0.417 %	18.87	3.169307 %
BP/d		431.65	+0.200	0.046 %	5.26	4.492 %
ROCHE HOLDING /d	10 m	177.4	-0.2	-0.11 %	14.47	3.829 %
VODAFONE GROUP/d		177.55	-1.450	■ -0.81 %	12.54	5.318 %
MICROSOFT CP/d	10 m	30.94	-0.42	□ -1.3393 %	15.13	2.55102 %
GLAXOSMITHKLIN/d		1407.5	-30.00	-2.09 %	14.06	5.01 %
DIAGEO/d		1707.5	-57.00	-3.23 %	20.98	2.47 %
IMPERIAL TOBAC/d		2263	-81.00	-3.46 %	12.26	4.21 %

MORF RISK-ON!

- Bernanke annpunces QE3 (13 September 2012)





MORE RISK-ON!

- Credo Best Ideas Portfolio (price movements, 14 September 2012)

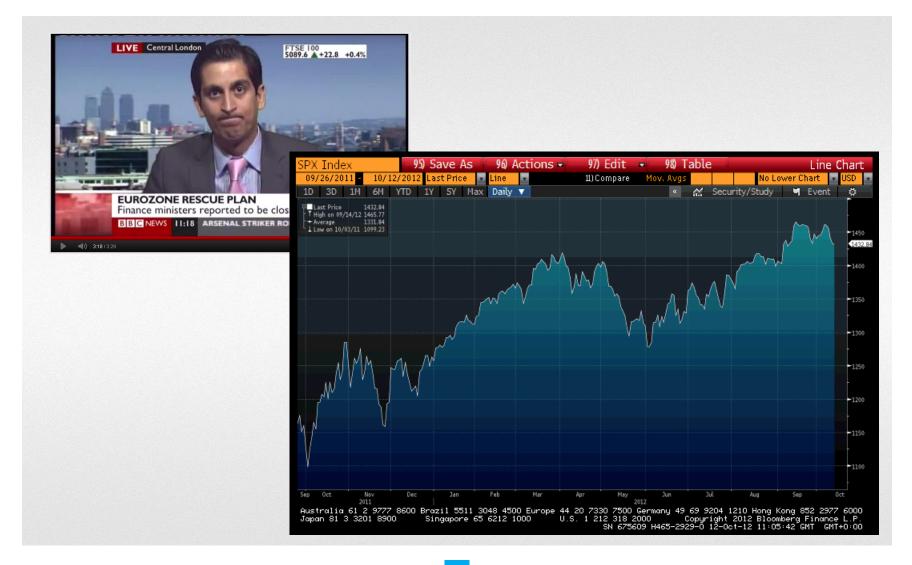


Name	J.Time	Last	Net.Chng	+Pct.Chng	P/E Excl Extra, Basic	Yield
ANGLO AMERICAN/d		2084	+175.00	9.17 %	7.25	2.54 %
XSTRATA/d		1063.5833	+67.50	6.8 %		2.64 %
SAMSUNG EL GDR/d		609.5	+31.500	5.45 %		0.418 %
VOLKSWAGEN VZ/d	₩ +	152.5000	+7.1500	4.92 %	3.49	2.105 %
CATERPILLAR IN/d		93.6400	+2.9600	3.2642 % 💳	11.86	2.29378 %
HSBC HOLDINGS/d		584.4	+16.30	2.87 % 🚾	8.32	4.56 %
ABB LTD N/d	## +	18.61	+0.49	2.7 % 🚾	13.66	3.587 %
SAMSUNG ELECTR/d		1336000	+35000	2.69 % 🚾	11.88	0.42 %
PRUDENTIAL/d		854	+20.00	2.4 % 🚾	11.43	3.07 %
APPLE INC/d	1	695.265	+12.285	1.7987 % 🗖	14.42	1.552022 %
BP/d		450.2	+5.350	1.203 %	5.26	4.357 %
MICROSOFT CP/d	1	31.115	+0.145	0.4682 %	15.13	2.583144 %
ROCHE HOLDING /d	1	176.0	+0.3	0.17 %	14.47	3.87 %
IMPERIAL TOBAC/d		2300	-1.00	-0.04 %	12.26	4.29 %
UNITED PARCEL /d		74.5400	-0.1900	 -0.2542 %	18.87	3.050983 %
DIAGEO/d		1683	-6.50	 -0.38 %	20.98	2.57 %
VODAFONE GROUP/d		175.85	-1.500	∎-0.846 %	12.54	5.368 %
GLAXOSMITHKLIN/d		1417.5	-22.00	■ -1.53 %	14.06	5.0 %

AND WHAT ABOUT MR RASTANI?

...perhaps he was just a little early





AND WHAT ABOUT MR RASTANI?

- then again, he might not really care...





"They approached me, I'm an attention seeker. That is the main reason I speak. That is the reason I agreed to go on the BBC. Trading is a like a hobby. It is not a business. I am a talker. I talk a lot. I love the whole idea of public speaking."

Alessio Rastani, quoted in The Telegraph, 27 Sept. 2011

AND WHAT ABOUT MR RASTANI?

...at least he got a lot of free publicity

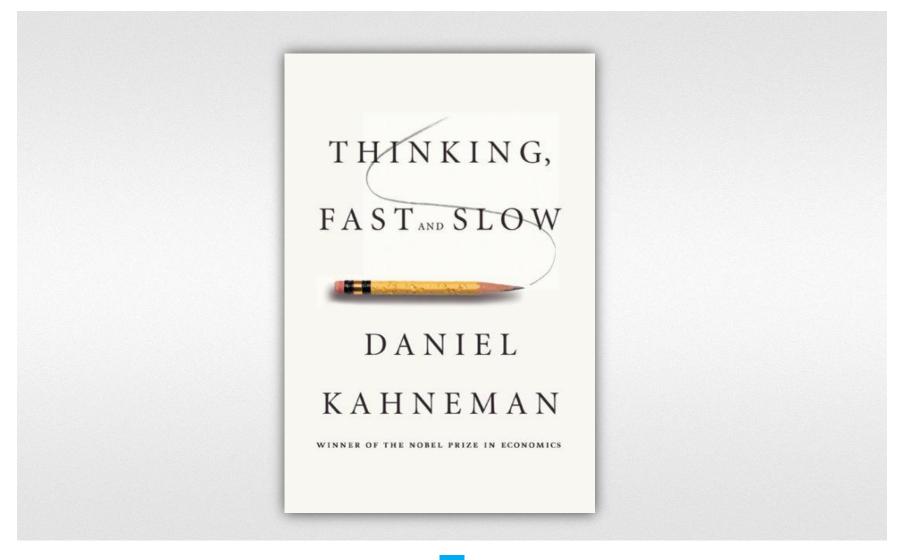




A QUICK LESSON ON RISK

- from: Thinking, Fast and Slow, by Daniel Kahnemann, 2011





SAMUELSON'S PROBLEM

- from: Thinking, Fast and Slow, by Daniel Kahnemann, 2011



Would you accept a gamble on the toss of a coin in which you could either lose \$100 or win \$200?

(EV = \$50)

Would you accept 100 consecutive gambles on the toss of a coin, each of which could either lose you \$100 or win you \$200?

(EV = \$5,000)



SAMUELSON'S PROBLEM

- from: Thinking, Fast and Slow, by Daniel Kahnemann, 2011



"I have a sermon ready for Sam if he rejects the offer of a single highly favorable gamble played once:

I sympathize with your aversion to losing any gamble, but it is costing you a lot of money.

Are you on your deathbed? ...of course, you are unlikely to be offered exactly this gamble again, but you will have many opportunities to consider attractive gambles with stakes that are very small relative to your wealth.

You will do yourself a large financial favor if you are able to see each of these gambles as part of a bundle of small gambles...

...the main purpose of the mantra is to control your emotional response when you do lose.

Remember these qualifications when using the mantra:

- 1. It works when the gambles are **independent**;
- 2. It works only when the possible loss does not cause you to worry; and
- 3. It should not be applied to long shots."

AN IMPORTANT POSTSCRIPT

- from: Thinking, Fast and Slow, by Daniel Kahnemann, 2011



The combination of loss aversion and narrow framing is a costly curse.

Individual investors can avoid that curse, achieving the emotional benefits of broad framing while also saving time and agony, by reducing the frequency with which they check how well their investments are doing.

AN IMPORTANT POSTSCRIPT

- from: Thinking, Fast and Slow, by Daniel Kahnemann, 2011



The combination of loss aversion and narrow framing is a costly curse.

Closely following daily fluctuations is a losing proposition, because the pain of the frequent small losses exceeds the pleasure of the equally frequent small gains. Once a quarter is enough...

The typical short-term reaction to bad news is increased loss aversion.

Investors who get aggregated feedback receive such news much less often and are likely to be less risk averse and to end up richer.



A summer of stock market jitters led to a slowdown in new business at Hargreaves Lansdown....

Peter Hargreaves, the founder and executive director of the Bristol-based group, said that investors were "paralysed" from July to the end of September. "That three-month period was one of the worst I've ever experienced — even worse than the aftermath of 2007," he said. "There were all sorts of shenanigans going on in America and Europe. We even had the possibility that the Israelis might bomb Iran.

"In these conditions, nobody knew what to do with their money.

If you asked a professional fund manager, he'd say he didn't know. He didn't want to put it in cash, didn't want to put it in fixed interest, in Europe or America."

The Times, 13 October 2012



"As investors, we always have to be aware of our innate and very human tendency to be fighting the last war.

We forget that Mr. Market is an ingenious sadist, and that he delights in torturing us in different ways."

From: "It's Never Easy" (April 2012)



"The history of the world is one of progress, and as a congenital optimist, I believe in equities.

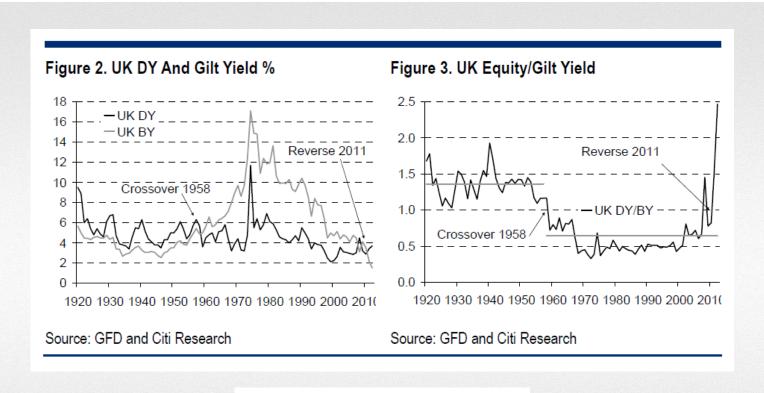
Fundamentally, in the long run, you want to be an owner, not a lender.

From: "It's Never Easy" (April 2012)

SELECTIVE EXPOSURE TO RISK ASSETS

- Investors always need to take on some risk ...





Good News: At 3.6% UK equities now consistently yield more than gilts (1.6%) for the first time since 1958. Equities have never been so cheap against gilts on this measure, even in the 1930s

CREDO BEST IDEAS PORTFOLIO

Value investing: long only, long term, unconstrained, yield-focus



- High conviction global equities (17 stocks)
- Predominantly buy & hold
- Large cap bias
- Average PE 12.8 versus MSCI World 15.6 (forward 11.5 versus 13.1)
- Average DY 3.4% versus MSCI World 2.8%
- Performance: +11.8% v. MSCI World 3.6% (14/04/2011 to 15/10/2012) (including dividends, after AM charges)































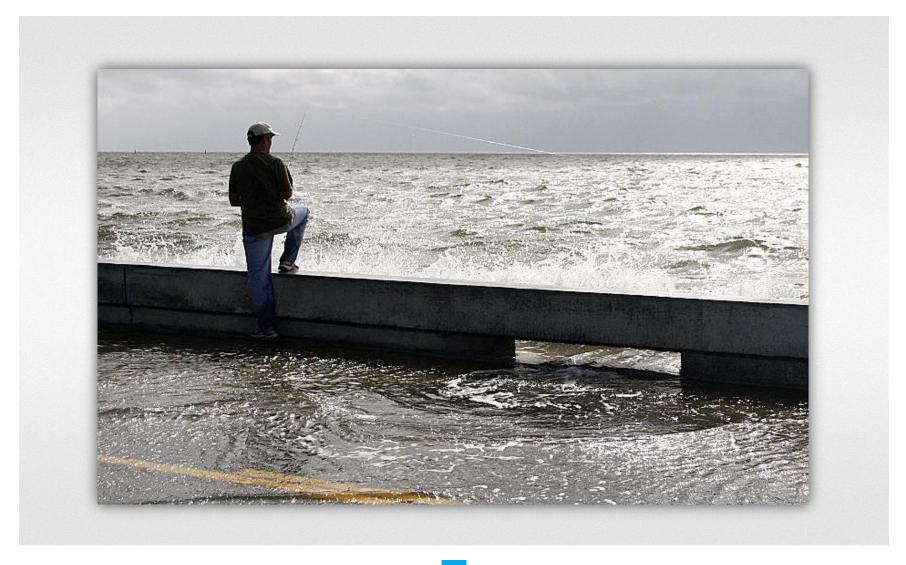




RISK CREATES OPPORTUNITY

Do you focus on the floods, or the opportunity to fish?

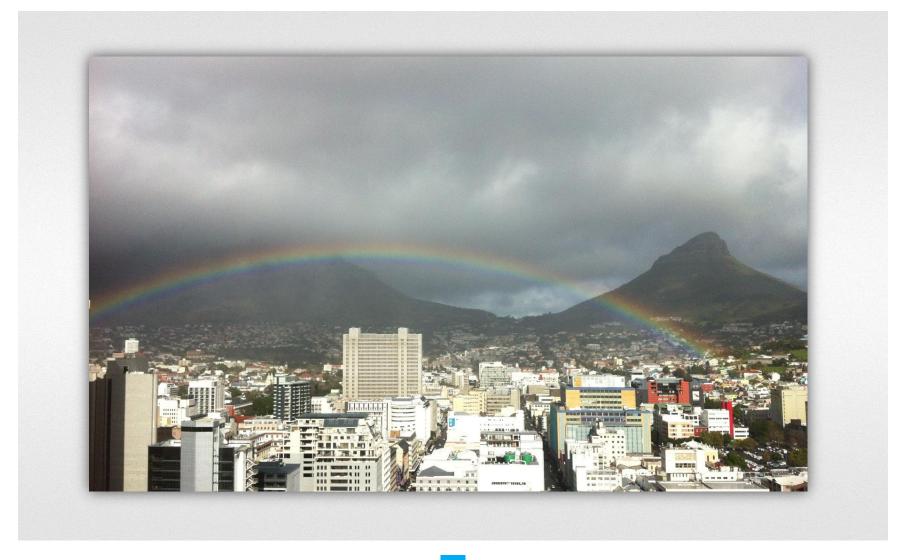




RISK CREATES OPPORTUNITY

Do you see the storm clouds, or the rainbow?





IN CLOSING

...completing the Bernstein quote



"Cardano the Renaissance gambler, followed by Pascal the geometer & Fermat the lawyer, the monks of Port-Royal & the ministers of Newington, the notions man & the man with the sprained brain, Daniel Bernoulli & his uncle Jacob, secretive Gauss & voluble Quetelet, von Neumann the playful & Morgenstern the ponderous, the religious de Moivre & the agnostic Knight, pithy Black & loquacious Scholes, Kenneth Arrow & Harry Markowitz...

...all of them have transformed the perception of risk from chance of loss into opportunity for gain, from fate & original design to sophisticated, probability-based forecasts of the future, and from helplessness to choice."

(From: Against the Gods, by Peter L. Bernstein, 1998)

IN CLOSING



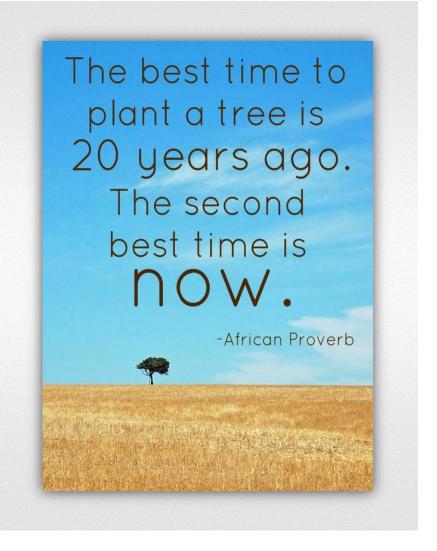
"The policy of being too cautious is the greatest risk of all."

Jawaharlal Nehru

IN CLOSING

There are always opportunities to invest







PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS PRESENTATION

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