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The Case for a Risk-First Approach to Stock Selection

June 2015

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Time for a Change in Approach?

- Active management is losing its appeal to investors
  - Past performance hasn't justified higher fees
- Traditional stock selection research still focuses on earnings
  - Earnings expectation game is entrenched and played by all parties - companies, analysts, portfolio managers
- Quantitative factor models, once an alternative approach, have also become commonplace
  - Stock mispricing 'anomalies' are well known
- Investors and their agents are more short-term and risk averse

➢ Key Takeaway: How might an active equity manager evolve in response to these trends, and maybe even take advantage of them?

Purpose of this Presentation

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- Revelation Investment Research believes that active equity managers must evolve to thrive

- In this presentation, we provide 9 reasons why adding a risk-first, 'what could go wrong?' research perspective can:
  - Enhance equity performance
  - Enhance client satisfaction
  - Enhance business results

➢ ***"The essence of portfolio management is the management of risks, not the management of returns. Well-managed portfolios start with this precept."*** Benjamin Graham

Let's Frame the Stock Valuation Challenge

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- Consider the textbook Fair Value equation:

$$Price = \sum_{t=1}^{\infty}[CF_t \,/\, (1+r)^t]$$

  - Most researchers focus on the numerator: estimating future cash flow or earnings levels, growth rates, and 'surprises'
  - Few researchers pay much attention to the denominator: estimating a discount rate that reflects the uncertainty of future cash flows

  ➢ Yet changes in risk perception move stock prices just as directly as changes in growth expectations

➢ Key Takeaway: Could a *risk-first* approach to stock selection be beneficial?

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Risk-First Stock Selection: Why?

1. Most stocks underperform – "Creative destruction" at work

- According to a JP Morgan study ("Eye on the Market", Sept 2014) of Russell 3000 members 1980 – 2014
  - 64% of individual stocks underperformed the index
  - 40% of all stocks had negative absolute returns
  - 40% of all stocks experienced "catastrophic losses" (defined as a 70% drop from peak price with no recovery above 60% blow peak price)

- According to recent studies of S&P 500 Index members
  - From 2000-2014, an average of 180 stocks each year had negative absolute returns (source: S&P Dow Jones Indices)
  - Since 1980, 320 S&P 500 members were removed from the index for business distress reasons (source: JP Morgan)

➢ Key Takeaway: Avoiding big losers can improve an active manager's performance

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Risk-First Stock Selection: Why?

2. Return volatility hurts wealth compounding

- 'Volatility drag' can be estimated using: G = $A - (S^2/200)$
  - Where G = Annual Geometric (compounded) Return, A= Annual Arithmetic Return, S = Standard Deviation of Annual Return

Impact of Volatility on Return Compounding				
Investment Strategy	Avg Return	Stdev of Returns	Geometric Return	20 Year Growth of $1000
1 (high volatility)	10%	22%	7.58%	$4310
2	10%	18%	8.38%	$5000
3	10%	14%	9.02%	$5630
4 (low volatility)	10%	10%	9.50%	$6140

- For strategies with the same *average* return, lower volatility produces higher *compounded* return

➢ Key Takeaway: Reducing return variability alone can improve long-term portfolio returns

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Risk-First Stock Selection: Why?

3. Even professional investors are 'loss averse', not just risk averse as finance theory dictates

   - Loss aversion can trigger two related and damaging behavioral tendencies

     - *Anchoring* – tendency to add cost basis (something unknown to the market and irrelevant to a stock's prospects) as an input to hold vs sell decisions

     - *Disposition effect* – tendency to sell winners too soon (so they don't become losers) and hold losers too long (in hope they recover and become winners)

➢ Key Takeaway: Investing in lower risk stocks can reduce losses on individual positions and at the portfolio level

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Risk-First Stock Selection: Why?

4. Loss aversion can lead employers and clients to make ill-timed business decisions that are damaging to you and/or your firm

   - Riskier strategies (by chance alone) are more likely to produce larger short-term losses or longer runs of underperformance

   - Riskier strategies tend to perform worst in down markets, when investor/decision-maker loss aversion is highest

➢Key Takeaway: Reducing investment strategy risk, especially in down markets, can reduce business risk and career risk

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Risk-First Stock Selection: Why?

5. Research focus on stocks' growth potential can lead to excessive optimism and overconfidence, which can trigger more damaging behavioral tendencies:

    - *Lottery effect* – extreme payoffs tend to influence decisions more than their low probability of occurrence
    - *Representativeness bias* – tendency to see unwarranted familiarities (this stock is the next __________)
    - *Confirmation bias* – tendency to accept information that supports the original decision to buy and to discount conflicting information
    - *Endowment effect* – tendency for investors to place a higher value on what they own than non-owners do

➢ Key Takeaway: Greater focus on 'what could go wrong?' can add new perspective and help prevent overvaluing upside potential

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Risk-First Stock Selection: Why?

6. Forecasting earnings levels and growth rates is difficult and largely ineffective

- Analyst EPS forecasts are highly inaccurate and biased
  - 45% of reported quarterly EPS deviate by more than 5% from consensus forecasts from 2001-2015
  - Consensus 5Y EPS Growth Rate forecasts typically average 12-15% annually, while stocks' actual EPS growth has averaged 6-8% annually
- Analyst EPS growth forecasts have little stock selection usefulness
  - The 20% of stocks with the highest forecasted 1Yr EPS Growth have lagged by 2.0% annually from 2001 - 2015
  - The 20% of stocks with the highest forecasted 5Yr EPS Growth have lagged by 2.8% annually from 2001 – 2015

➢ Key Takeaway: Focusing on the numerator of the Fair Value equation is a challenging approach to finding mispriced stocks

Risk-First Stock Selection: Why?

7. Investing based on earnings-related ‘factors’ – another approach linked to the Fair Value equation numerator – produces mixed results

Earnings Screen Historical Performance (Top 2300 Mktcap Universe, 2001-2015)		
Best 20% of Stocks Based on Screening Variable Below	Avg 12M Return vs Universe	Avg 12M Volatility vs Universe
FY1 EPS / Price	2.1%	0.1%
PE / Estd 5Y EPS Growth	1.1%	1.5%
Earnings / Sales	0.5%	-1.6%
Earnings Quality (ie, accruals)	-2.0%	4.4%
Last 3M EPS Estimate Revisions	1.4%	0.5%
Last Qtr EPS Surprise	-0.1%	2.1%
Last 4Q EPS Growth	-0.7%	3.2%
Average	0.3%	1.5%

- Key Takeaway: earnings-related metrics are insufficient for consistently finding mispriced stocks

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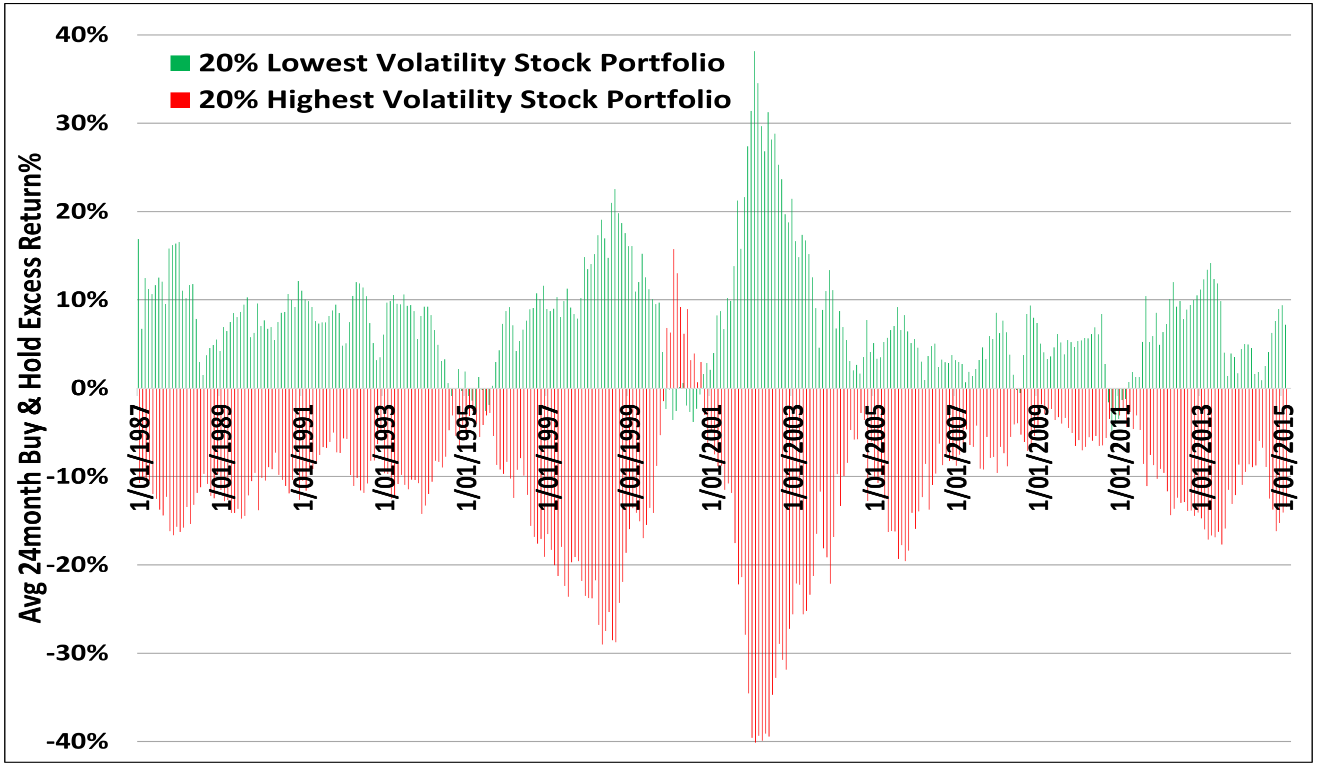
Risk-First Stock Selection: Why?

8. By contrast, even some simplistic risk-related factors have been highly effective stock selection tools
   - For example, low volatility stocks have consistently *outperformed*, while high volatility stocks have *underperformed*



➢ Key Takeaway: Focusing on the denominator of the Fair Value equation may be a more productive path to excess returns

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Risk-First Stock Selection: Why?

9. If many equity managers have a similar research focus, e.g.,
   - Looking for reasons to buy a stock, not for reasons to avoid a stock
   - Forecasting EPS growth, not EPS uncertainty
   - Actively participate in the quarterly EPS reporting game
   - Managing portfolio risk, not stock-specific risk
   - Constructing portfolios to match the benchmark risk level

- Are opportunities being created for users of a different approach?
  - Could earnings-related stock selection metrics be increasingly overused?
  - Could stocks held in benchmark-tracking portfolios be a ‘crowded trade’?
  - Could stocks’ absolute risk level be mispriced?
  - Could a research focus on downside risk prediction reveal new alpha factors?

➢ Key Takeaway: A risk-first research focus may enhance returns and increase your strategy’s differentiation in the marketplace

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Risk-First Stock Selection: Next Step

- If you agree that a greater emphasis on stock specific risk in your equity research approach may make sense, how do you proceed?
    - Option 1: do it yourself
        - It's definitely possible…
        - But the effort would consume time and dollars that might best be allocated elsewhere in your business
    - Option 2: work with Revelation Investment Research!
        - We specialize in 'downside risk avoidance' research
        - Our Downside Risk Alert tool is highly effective and easy to use
        - We will work with you to integrate Downside Risk Alert into your unique investment process – with minimal disruption and cost

- For further information on how Revelation Investment Research can help you, please contact us at info@RevelationIR.com or call us at 219-213-2531