



A fundamentally different approach to ETFs

ALTAR Score™

An Explanation

ALTAR Score™

Our rating of an ETF's overall investment merit:

- AltaVista Long Term Annual Return
- Foundation in financial theory
 - Forward-looking Buffet-style ownership approach
 - Gauges intrinsic value
 - Allows pan-cyclical comparisons across asset classes
 - Dynamically allocates assets
- Simple and transparent

ALTAR Score TM

$$ROE_{avg} \div \frac{P}{BV}_{FY1} - fees$$

Illustration

Firm A: 10% ROE, P/BV = 2.0x

if BV = \$1,000

Profits = $$100 (10\% \times $1,000)$

My investment = \$2,000 (2.0x BV)

My return = 5% (\$100 ÷ \$2,000)



Academic Foundations

Relation between P/BV and ROE well established in Financial literature:

- DDM is rearranged algebraically to relate ROE & P/BV (equations)
- Direct relationship demonstrated by Wilcox (Financial Analysts Journal, Jan/Feb 1984)
- Advantages: simple, versatile, intrinsic
- ❖ Disadvantage: Small errors in estimates → large changes in outcome

Dividend Discount Model (DDM)

$$P = \frac{D}{k - g}$$

Substituting...

$$ROE = EPS \div BV$$

 $g = ROE(1 - payout)$

Rearranged algebraically

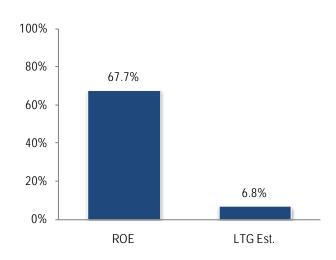
$$\frac{P}{BV} = \frac{ROE - g}{k - g}$$



AltaVista Modifications

- Use average ROE for better estimate of sustainable profits & facilitate comparisons
- Use forward P/BV multiple
- Indifferent to dividend payout; assumes owners reinvest dividends
- Accepts linear relationship* as good estimate of CAGR in owner's equity
 - Forecast error is small for reasonable time horizons and realistic ROEs
 - Compensates for likelihood high ROEs will fall over long periods
 - Observed as strong indicator (chart)

Correlation of ROE and LTG to P/BV, S&P500 stocks



Note: Growth & Value report, AltaVista Research, Jan. 2005



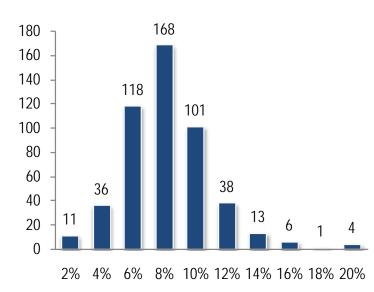
^{*}Mathematical relationship between PBV and ROE is geometric (i.e., over time, 20% ROE is worth more than twice what 10% ROE is worth)

ALTAR Score™ in Practice

Applied to a universe of 500+ equity ETFs:

- ❖ Average ALTAR Score™ = 7.2% in line with historical stock returns
- Normal distribution (chart) with a standard deviation of 2.8%
- ❖ High ALTAR Scores™ are BUY candidates
- Low scores are SELL candidates

Distribution of ALTAR Scores™



Note: as of Dec. 10, 2009, current coverage universe



ALTAR Score™ in Practice

Used as primary selection tool in four model portfolios:

- US Model, US equities, +4.7% vs. S&P500
- Int'l Model, non-US equity, +11.2% vs. MSCI EAFE Index
- Global Fundamentals, Global equity, NYSE-listed fundamental ETFs, +8.0% vs. FTSE All-World
- Australian World Traveler, Global equity, ASX ETFs, +8.4% vs. FTSE All-World

Note: Inception date for US, Int'l & GF models is 7/15/07; inception data for Australian World Traveler is 7/15/09. Cumulative over/underperformance since inception versus benchmark (chart).

Performance vs. benchmark

