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Do Dividends Matter:

An Empirical Analysis of the Impact of Dividends on Portfolio Stock Selection, Portfolio Weights, and Portfolio Returns for S&P 500 Stocks Over the Period 2005-2011

Name: Greg Castell

Advisors: Dr. Bob Dean & Dr. John Rapp

Purpose: To determine if a portfolio of stocks focused on dividends can create alpha (i.e. excess returns) in both declining and rising stock markets. At the margin, I have assumed critical factors in determining alpha are dividend yield, dividend growth rate, and dividend payout ratio. S&P 500 stocks were screened to compile a list of securities meeting the following criteria:

- [1] Price/Earnings < Market (S&P 500)
- [2] 1 Yr. or 15 Yr. EPS Growth Rate > Market
- [3] Return on Common Equity > Market
- [4] Dividend Yield > 0%

Table 6-A				
Performance of GARP 1 vs. Dividend Portfolios				
(All Percentages = Dividend Portfolio Alpha - GARP Portfolio Alpha)				
	Yield	1/Yield	5 Yr. Growth Rate	Payout Ratio
2005-2011	-11.70%	17.76%	-18.84%	-24.16%
2006-2011	-9.47%	-0.76%	-3.81%	-9.70%
2007-2011	-9.28%	-7.17%	6.80%	-10.47%
2008-2011	3.61%	-2.37%	5.00%	-7.60%
2009-2011	-18.29%	40.27%	-3.12%	-16.95%

Table 6-B				
Performance of GARP 2 vs. Dividend Portfolios				
(All Percentages = Dividend Portfolio Alpha - GARP Portfolio Alpha)				
	Yield	1/Yield	5 Yr. Growth Rate	Payout Ratio
2005-2011	0.96%	15.54%	-6.43%	-17.45%
2006-2011	-6.65%	-5.14%	-0.03%	-6.69%
2007-2011	-7.00%	-6.13%	3.53%	-9.66%
2008-2011	5.04%	-3.72%	6.02%	-10.01%
2009-2011	-16.72%	25.03%	3.76%	-24.38%

Performance vs. Equal-Weighted Benchmarks

- The original stock filter criteria set a very high standard
- When dividend-weighting outperformed is critical
- 1/Yield appears to have the strongest overall appeal, implying the presence of a hidden growth rate in low-yielding stocks
- Dividend Growth Rate appears critical in market downturns

Portfolio Weighting Process

$$Yld_{it} = \frac{D_{it}}{P_{it}}$$

$$Sum(Yld) = \sum_{i=1}^n Yld_i$$

$$Yld_w = \frac{Yld_i}{Sum(Yld)}$$

$$Yld_w * 1,000,000 = DV_{it}$$

$$Shares_{it} = \frac{DV_{it}}{P_{it}}$$

$$PV_{t+1} = Shares_{it} * P_{t+1}$$

Conclusions

- There is no single dividend weighting factor that consistently outperforms over all time periods of analysis
- In the downswing period, dividend weighting appears important, as both Yield and 5-Year Dividend Growth Rate outperformed the equal-weighted benchmarks
- In the upswing period, dividend weighting also appears important, since both 1/Yield and 5-Year Dividend Growth Rate weighting outperformed the equal-weighted benchmarks
- Of all the dividend weighting factors, 1/Yield appears to have the strongest appeal since it strongly outperformed the benchmark portfolio long-term (2005 – 2011)
- All dividend factors outperformed the S&P 500 for all time periods

