

To estimate the future common stock risk premium, how might individual investors extrapolate from the past?

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Summary: The past is the only source of guidance on how securities markets might perform in the future. Investors face critical choices about which method to use when extrapolating from the past. A study by Professors Fama and French provides individual investors with important guidance on which scientific methods to use. With these methods, a real or non-inflationary equity premium of between 3.8% and 4.8% could be a rationally derived estimate of the real forward equity premium. For guidance about the future, investors have little choice but to look to the past. While they cannot know what will happen, they can use the past to calibrate what might be reasonable to expect in the future. The question becomes, "which extrapolation method should I use?" In general, investors should use methods that have demonstrated higher predictive ability across the longest period of historical data available. A related article in *The Skilled Investor* summarizes "The Equity Premium" study by Professors Eugene F. Fama of the U. of Chicago and Kenneth R. French of Dartmouth.¹ This study addresses the question of which extrapolation methods to use. The conclusions reached by Professors Fama and French have significant implications for individual investors. (See: [What explains the recent common stock equity risk premium?](#)) Professors Fama and French found that in the eight decades prior to 1950, both the dividend and earnings growth models did a reasonably good job of predicting the equity risk premium. These models are tied to the economic growth of the underlying business enterprises. After 1950, however, these models substantially underestimated common stock price growth, and an alternate explanation was needed. Professors Fama and French concluded that the extraordinary equity price appreciation experienced during the 1951 to 2000 period, and particularly from 1980 to 2000, was due to a decline in the average discount rate that investors required for holding equities. Previously, investors had generally demanded higher returns from equities. Especially during the 1980 to 2000 period, equity investors became increasingly willing to accept a lower return for each dollar invested in the equity markets. Unusually high price-to-earnings ratios during the period reflect this changed expectation. In essence, the average investor became increasingly willing to pay more, stock prices escalated, and the average P/E ratio increased. As such, this extraordinary price appreciation was just that — "extraordinary." As such, the extraordinary price appreciation of the recent past is probably less likely to be repeated in the future. The collapse of the market bubble corrected much of this extraordinary growth, and PE ratios were modestly above their long-term average by mid-2005. As long as the memory of the bubble collapse persists with investors, there is probably less pricing "headroom" for a similar run-up in PE ratios in the medium term future. Professors Fama and French concluded that the fundamental dividend and earnings growth models are likely to be better predictors than actual market returns over the last few decades of the 20th century. Thus, the dividend and earnings growth models might be better predictors of the future expected equity premium. After some reasonable adjustments, Professors Fama and French estimated that the dividend and earnings growth models had "predicted" a real or non-inflationary equity

premium of between 3.8% and 4.8% for the 1951-2000 period. Therefore, this study implies that a similar range could be a rationally derived estimate of the real forward equity premium. Incidentally, Professors Fama and French used six-month commercial paper rolled over at mid-year to derive an annual risk free rate of return. They commented that, if the benchmark for the risk free rate were the very short-term one-month T-bill rate instead of six-month commercial paper, then this would add about 1% to the equity risk premium. (See: [How are asset class risk premiums and the risk free rate of return related?](#)) Note, also, that these estimates assume that there is no change in the average investors' discount rate and that price-to-earning ratios remain the same going forward. Regarding changes in the average investors' discount rate and the price-to-earning ratio, see: [What happens to the expected equity premium, when the common stock P/E ratio reverts toward historical norms?](#)

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