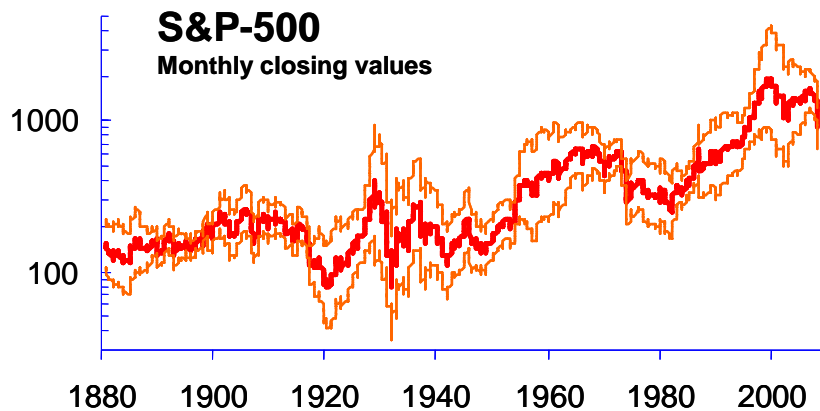
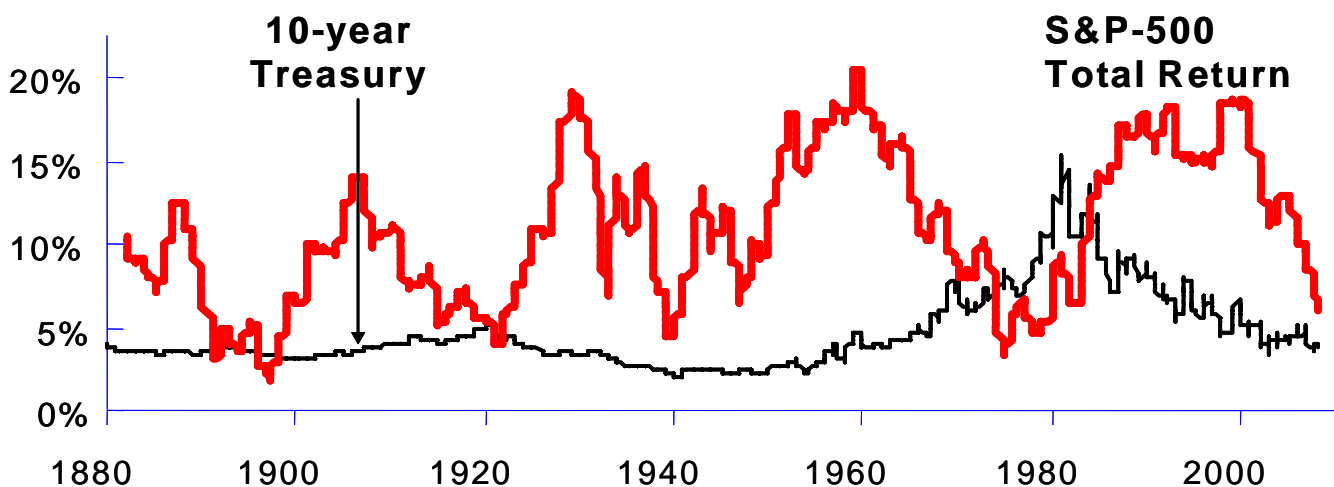


# Market's Current Valuation

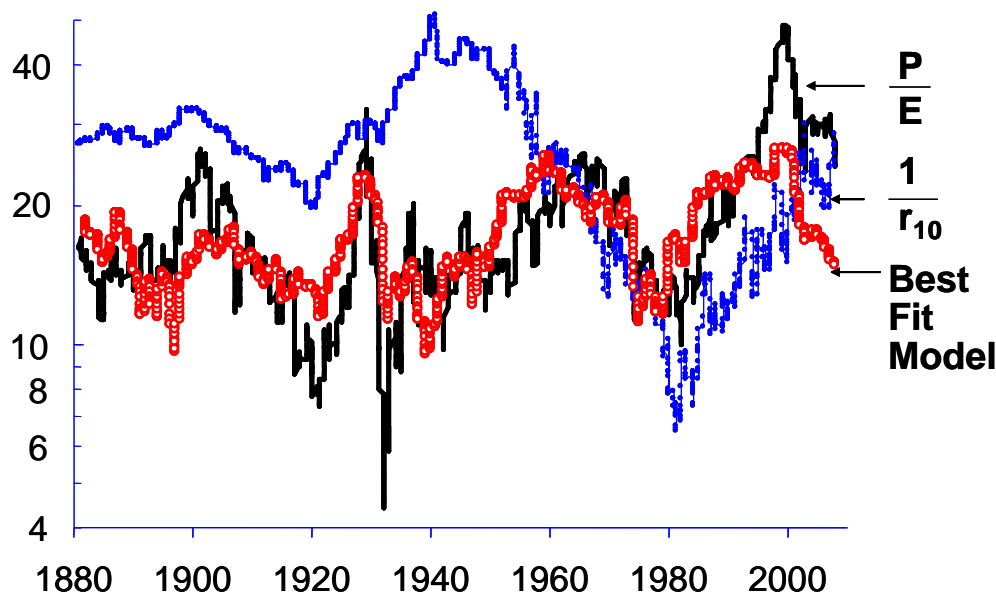
by Poorna Pal



Given that the market always fluctuates, and may well be flirting with newer lows, the pattern is not as reminiscent of the 1930's scenario as one might fear. The graph on the left shows the monthly S&P-500 real closing values, and the corresponding Bollinger band. It is not that history does not repeat itself. Note in the following chart of S&P-500 total annual returns how the returns have persistently peaked once every 20-30 years. We may well be in a 5-7 years long window of buying opportunities now, therefore. Note that these data are 10- year averages and nominal. True, these returns now are paltry, and comparable to the Treasuries.



But interest rates are unlikely to rise significantly any time soon, so where else do we go if we shun the market? Curiously though, it is not clear if the market is indeed as undervalued as the current prices suggest. The currently popular, albeit grossly over-simplistic, view is that a fairly valued market's P/E ratio should be close to the reciprocal of the 10-year Treasury rate. But then, as the Treasuries are likely to remain low, this makes even a moderately priced market seem overvalued. Besides, this model only works for the post-1960s data, as can be seen in the graph below. I have been trying to solve this problem by regressing P/E with the following Cobb-Douglas type function:



$$P/E = \alpha_1 (\sigma_{r10}/r_{10ave})^{\alpha_2} \times (r_{SP}/\sigma_{SP})^{\alpha_3} \times [(E-D)/E]^{\alpha_4}$$

where  $\alpha_1$ ,  $\alpha_2$ ,  $\alpha_3$  and  $\alpha_4$  are constants estimated from regression. This assumes that the market moves with the Treasury rate, firms' retention rate and the market's price momentum. The result, still a work in progress, seems quite promising, as can be seen in this graph alongside.