In this thesis, a new trading strategy is proposed. By the help of quantile regression, the conditional distribution functions of stock market returns are estimated. Based on the knowledge of the distribution the strategy produced buying and selling signals which together with a weight function derived from exponential moving averages determines how much and when to buy or sell. The strategy performs better than the market in terms of absolute return and the Sharpe ratio in-sample, but it does not provide satisfactory results out-of-sample.