Allocation to Industry Portfolios

Under

Markov Switching Returns

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Abstract

This paper proposes a Gibbs Sampling approach to modeling returns on industry portfolios. I examine how parameter uncertainty in the returns process with regime shifts affects the optimal portfolio choice in the long run for a static buy-and-hold investor. Ignoring the parameter uncertainty leads the investor overallocate to stocks when returns follow a Markov switching process. I find that after parameter uncertainty is incorporated and possible regime shifts in the returns process is taken into account, the allocation to stocks is smaller in the long run. I find this result to be true for both the NASDAQ portfolio and the individual high tech and manufacturing sector portfolios (less for the manufacturing sector portfolio). I also give the results for the linear case for comparison. Finally, when I include dividend yields and T-bill rate as predictor variables in the model with regime switching returns, I find that the effect of these predictor variables is minimal: the allocation to stocks is still smaller in the long run.