Are US stock index returns predictable? Evidence from automatic autocorrelation-based tests

Abstract

This article re-examines the evidence of return predictability for three major US stock indices using two recently developed data-driven tests, namely the automatic portmanteau Box-Pierce test and the wild bootstrapped automatic variance ratio test. In tracking the time variation of return predictability via rolling estimation window, we find that those periods with significant return autocorrelations can largely be associated with major exogenous events. Theoretically, the documented time varying nature of predictable patterns is consistent with the adaptive markets hypothesis.