

The efficient market hypothesis is one of the most important propositions in finance theory and has been subjected to years of rigorous empirical testing. We examine power of a new tool for evaluating market efficiency, fractal dimension. Characteristics and abilities of fractal dimension measure are explored through extensive Monte Carlo simulations. We prove that it provides an accurate evaluation of market's efficiency and its changes. This approach is highly innovative and creates new possibilities for examination of markets. The uniqueness of fractal dimension is in its ability to assign a numerical ranking to examined series describing the level of (in)efficiency; it is accurate for small samples of observations and quickly reflects changes in market efficiency structure.