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股票市场历史信息的长记忆性特征研究

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Improved VaR Model by Embedding Strategic Factor

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摘要 回顾历史是为了预测未来,历史能够蕴含事物发展的脉络和内在规律。那么投资者能否通过对股市历史的分析来制定投资决策以及预测未来走势?文章选择中国沪深两市指数、亚洲有代表性的日经225指数以及在世界金融市场有重要影响的标准普尔500指数为研究对象,运用动态估计方法,对股市长记忆性的时变特征进行分析,探讨股票市场历史信息的可鉴性;除采用修正R/S方法、LW估计外,又加入较为新颖的ELW和FLW两种方法作为对比。实证结果表明,虽然几种方法得出的时变长记忆参数并非完全相同,但是有关股市长记忆性的结论基本一致;股市收益序列在整个样本区间并未表现出显著的长记忆性,但在极端事件发生时,收益序列会表现出显著的相关性,体现了股市长记忆性的时变特征,此时可以通过对历史数据信息的分析,达到规避极端风险的目的。

关键词 : [反持久性](#) [长记忆性](#) [LW估计](#) [极端事件](#)

Abstract : Reviewing the history is aimed to predict the future. History contains the thread and the inherent law of the development of a thing. Can investors make investment decisions and predict the future trend through the analysis of stock market history? In this paper, taking Shanghai Composite Index, Shenzhen Compositional Index, Nikkei 225 and S&P 500 index as the samples, the dynamic estimation method is used to analysis the time-varying characteristics of long memory in the stock market, and the value of historical information is explored;and using the modified R/S method and LW estimates, two more novelty correction LW estimation method are employed for comparison, and the research of stock market long memory characteristics is expected to promoted. The empirical results show that, although the specific values are not exactly the same from different methods, but the same conclusions about the stock market long memory can be obtained;the stock return series did not have significantly long memory in the whole sample interval, but with extreme events, such as the 1990's real estate crisis in the Japanese, the Asian financial crisis in 1997, the U.S. financial crisis in 2008 and so on, return series exhibit a significant correlation, which inflect the time-varying characteristics of stock market long memory, and the extreme risk can be avoided by analysis historical information. Without regarding to the differences of cultural, economic and social background, this paper researches the China, Asia and globally representative stock index, and discusses the long memory characteristics of return series. An empirical evidence is provided for comprehensive understanding of the effective market hypothesis theory, and a support for risk management use the market's history information is also provided.

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