Empirics of Financial Markets 2020/2021
Dr hab. Robert Ślepaczuk

Topics and articles

1. **Factor models of rates of return and construction of optimal investment portfolios**
   a. Theoretical basis: C. Alexander, Market Risk Analysis, t. II, chapter 1
   b. Sample articles:

2. **Principal component analysis and its application in finance**
   a. Theoretical basis: C. Alexander, Market Risk Analysis, t. II, chapter 2
   b. Sample articles:

3. **Modeling of volatility - GARCH models**
   a. Theoretical basis: C. Alexander, Market Risk Analysis, t. II, chapter 3-4
   b. Sample articles:


4. Stationary time series and market efficiency
   a. Theoretical basis: C. Alexander, Market Risk Analysis, t. II, chapter 5
   b. Sample articles:
      vi. Khrapko, Vladimir, Testing the weak-form efficiency hypothesis in the Ukrainian stock market versus those of the USA, Russia, and Poland, *Ekonomika*, 2013, 92 (1), 108-121
      viii. Simoes, Mario Domingues et al., Assessment of Market Efficiency in Argentina, Brazil, and Chile: an Event Study of Mergers and Acquisitions, *Brazilian Administration Review*, 9, 2, 229-245, 2012

5. Cointegration of time series and its applications in finance
   a. Theoretical basis: C. Alexander, Market Risk Analysis, t. II, chapter 5
   b. Sample articles:


6. Algorithmic investment systems, derivatives pricing, new asset classes and risk modelling

DOI: 10.3726/978-3-653-04787-5

b. Sample articles:


