3564 6169 PhD Mathematics - Econometrics, Statistics, Transport Sector Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. lt develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.  
  
At the "Friedrich List" Faculty of Transport and Traffic Sciences, Institute of Transport and Economics, the Chair of Econometrics and Statistics, esp. in the Transport Sector offers a position as  
  
Research Associate (m/f/x)  
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)  
  
starting as soon as possible. The position comprises 75% of the fulltime weekly hours and is limited to 3 years. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). The position offers the chance to obtain further academic qualification (e.g. PhD). Research work to fulfill below-listed objectives. Own research activities as well as publications in international journals are explicitly desired and expected. The following goals are to be advanced within the framework of a DFG project:  
  
 Develop estimators of the higher realized moments of daily returns based on the high-frequency data.  
 Estimate the conditional distribution of the daily returns and forecast it. Based on moment estimation, to derive an ex-post approximation of the conditional distribution of returns based on intra-day information.  
 Develop a model to predict future ex-post density approximations. Using the modified CAViaR model in which the quantile regression takes realized skewness and kurtosis into account, we aim at a simultaneous estimation of ES and VaR.  
 university degree in statistics, econometrics or mathematics; profound knowledge of modern programming and a suitable language, e.g., Python or R; knowledge of data analysis, ability to work independently in a goal- and project-oriented manner. Knowledge in stochastic processes and financial econometrics is advantageous. mathematician None 2023-03-07 15:57:51.673000