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Abstract

The forecasting ability of the macroeconomic factors upon South African commercial property return is investigated in this research. Such research is still very novel in South Africa and only Brooks and Tsolacos (2003) has recently investigated this relationship with several European markets. In this research, both direct property returns (IPD) and indirect property returns (J255 and J256) are investigated. The macroeconomic factors that are identified to have some influence on commercial property return are term structure, gilt-equity ratio, employment index, building plan passed and changing inflation rate (CPIX index). Four different types of models were investigated, namely the univariant ARMA model, the univariant GARCH model, the VAR model and the MLP neural network model. The optimal model for each type is identified using AICc and BIC information criterion techniques. The optimal models are then used in long-term forecasting and short-term forecasting. The ARMA model and the neural network were identified to best predict indirect and direct property returns, respectively.