

APPLIED STOCHASTIC MODELS IN BUSINESS AND INDUSTRY
Appl. Stochastic Models Bus. Ind., 2005; 21:55–82
Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/asmb.551

Predictability and model selection in the context of ARCH models

Stavros Degiannakis¹ and Evdokia Xekalaki^{1,2,*†}

¹Department of Statistics, Athens University of Economics and Business, Athens, Greece

²Department of Statistics, Trinity College, Dublin, Ireland

SUMMARY

Most of the methods used in the ARCH literature for selecting the appropriate model are based on evaluating the ability of the models to describe the data. An alternative model selection approach is examined based on the evaluation of the predictability of the models in terms of standardized prediction errors. Copyright © 2005 John Wiley & Sons, Ltd.

KEY WORDS: ARCH models; model selection; predictability; correlated gamma ratio distribution; standardized prediction error criterion