

**Cyprus University of Technology**

***Department of Commerce, Finance and Shipping***

***Seminar Talk***

Wednesday 7th of October 2015, 16:30-17:20

(Conference Room, 2nd floor, Continental Building)

**“Joint Confidence Bands for Forecast Paths and Impulse Responses”**

**by**

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Abstract

In impulse response analysis estimation and path forecasting evaluation uncertainty is typically displayed by constructing bands around estimated impulse response functions or forecasting paths. If these bands are based on the joint asymptotic distribution possibly constructed with bootstrap methods in a frequentist framework often individual confidence intervals are simply connected to obtain the bands. Such bands are known to be too narrow and have a joint coverage probability lower than the desired one. If instead the Wald statistic is used and the joint bootstrap distribution of the impulse response coefficients is taken into account and mapped into the band, it is shown that such a band is typically rather conservative. It is argued that, by using the Bonferroni method, a band can often be obtained which is smaller than the Wald band. Some alternative procedures are also discussed.

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