ABSTRACT

**TRANSFER FUNCTION MODEL USING CROSS CORRELATION AND
FORECASTING OF VOLUME AND VALUE OF IMPORT IN
LAMPUNG PROVINCE**

By

CHARISSA SUDARISMAN

The purpose of this research is to determine the best transfer function model for forecasting of volume and value of import in Lampung Province. Transfer function model has assumption that the series data are stasionary and does not has feedback on cross correlation. To find the best transfer function model, first we check the stasionary data and white noise on the volume of import. Then the model parameters are estimated by cross correlation. And than we check autocorrelation residuals and cross correlation residuals to find diagnostic model. The best model is transfer function with numerator at lags 1 ($s = 1$) and noise model to follow moving average process orde 3 (MA(3)).

Key Words : time series, forecasting, transfer function model, cross correlation, prewhitening.