

Department of Statistics MASTER'S THESIS PRESENTATION

MUZI LI

Department of Statistics The University of Chicago

Tests of Seasonality and Homogeneity of Variance of Steel Prices of Ma Steel (Hefei) Company, China

TUESDAY, November 6, 2012, at 10:00 AM

110 Eckhart Hall, 5734 S. University Avenue

ABSTRACT

In this paper, I study the behavior of daily steel price patterns. The data consists of threeyear daily prices for 28 types of steels. I focus on finding seasonality and detection of change points in the data, which play significant role in the forecast of steel prices. Using Lomb-Scargle Periodogram and other exploratory analysis, I find that there is little statistical evidence in the data for consistent seasonal behavior. However, tests of homogeneity of variance performed on the data provide statistical evidence against homogeneity. I then explore possible time values of change points in the price data.

For information about building access for persons with disabilities, please contact Matt Johnston at 773.702-0541 or send an email to mhj@galton.uchicago.edu. If you wish to subscribe to our email list, please visit the following web site: https://lists.uchicago.edu/web/arc/statseminars.