

## **MAKING PREDICTIONS OF THE CONSUMER PRICE INDEX AND ITS SUBDIVISIONS WITH APPLICATIONS TO GREEK DATA**

**Polyxeni Liva and Evdokia Xekalaki**

The compilation of a price index that truly reflects the present consumption patterns of the economy, is necessary for a number of reasons, the most important being the need to record changes linked to the value of money. Associated to the achievement of price stability by member states of the European Union, the Consumer Price Index is a statistical measure, which reflects the effects of price variations for a given quantitative and qualitative composition of the goods and services purchased by households during the period covered by the Household Budget Survey. The importance of the use of the CPI in the formulation of social and economic policies makes it obvious that predicting its value and as well as the values of its subdivisions is an interesting problem.

In this paper, the problem of forecasting future values of the basic groups of the Consumer Price Index is examined. For this purpose, 12 time series have been considered, that correspond to the indexes of the 12 basic subdivisions of the Consumer Price Index, for the period from January 1988 to September 1998. The forecast of the General consumer price index is obtained as a weighted average of the forecasts of the indexes of the basic groups. The source of the data is the National Statistical Service of Greece. The Box and Jenkins method is applied for the creation of appropriate forecasting models of the 12 basic groups of the Consumer Price Index, using SPSS for the analysis of the time series, the estimation of the parameters of the models and for the diagnostic checking.

POLYXENI LIVA  
Department of Statistics, AUEB  
Athens, Greece