Demand for Cheese in Norway

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The percapta consumption in Norway has increased from 1972 to 1995 for different types of cheese and different types of cheese are introduced into the Norwegian market over the years. Now, mainly 15 different types of cheese are consumed in Norway. All these cheeses can be classified into three different groups such as standard cheese, speciality cheese and brown cheese. Many studies have used AIDS, or linear approximation LAIDS, to obtain price and income elasticities for food commodities. This analysis is performed on a more aggregate level of goods. In this study, dynamic elements have been incorporated.

Producers are facing difficulties in planning their production level because the actual value of price elasticities and income elasticity are not available for their products. Main objective of this study is to estimate the price elasticities and income

elasticity for different types of cheese in Norway.

Time series data in quarter year basis from 1977 to 1993 for 15 different types of cheese from Norwegian market were used for this analysis. The data were aggregated into three groups. It is assumed that types of cheese in each group are near substitutes and the result for the group as whole can be used to describe one individual type. The groups are Standard cheese, Speciality cheese and Brown cheese. The data set contains 73 observations of prices and quantities. The weighted average of prices was used for the each group. The AIDS model was developed to analyze the demand for cheese in Norway by non linear seemingly unrelated regression procedure. The nonlinear seemingly unrelated regression procedure of Shazam was used for this estimation. This method is iterative and converges to a maximum likelihood estimator. Each model is tested for homogeneity and symmetry and is imposed. First and second order Breusch Godfrey(BG) test was used to test autocorrelation. Misspecification of functional form is tested by RESET test and normal distribution of residuals is tested by Jarque Bera(JB) test.

All own price elasticities are negative and significant. Own price elasticities for standard cheese, speciality cheese and brown cheese are -1.0094, -0.82866 and -1.1144 respectively. Cross price elasticities of all the cheese are positive. This shows that they are substitutes for each other. Many of the cross price elasticities are significant except cross price elasticities between standard cheese and brown cheese. The expenditure elasticities are positive as expected and significant. Expenditure elasticities for standard cheese, speciality cheese and brown cheese are 1.121, 0.97546, 0.67039 respectively. These expenditure elasticities show that brown cheese is not more luxuries good than standard cheese and speciality cheese.