

Household demand for disaggregated milk products in Sri Lanka: a censored QUAIDS model approach

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Abstract

Purpose – Liquid milk has a higher nutritional value than powdered milk; however, Sri Lankans consume more powdered milk than fresh liquid milk. To increase domestic liquid milk consumption in Sri Lanka, it is vital to understand the demand for different milk products and the existing relationship between them. Therefore, this study estimates the households' demand for different milk products.

Design/methodology/approach – We used the most recent Household Income and Expenditure Survey – 2019 data to study the demand for disaggregated milk products in Sri Lanka. A censored QUAIDS model was applied to estimate the price and expenditure elasticities.

Findings – The results showed that households are price-sensitive to all milk products, whereas households are more responsive to price changes in fresh liquid milk than in milk powder and flavoured liquid milk. The findings revealed that all milk products considered are substitutes for each other, and a strong substitution relationship exists between milk powder and fresh liquid milk.

Research limitations/implications – This study focuses on three milk products to estimate their demand and analyse the relationships between them. The findings will help policymakers and marketers to understand how households react to changes in economic parameters, thereby allowing them to formulate effective policies and marketing strategies to increase fresh liquid milk consumption in Sri Lanka.

Originality/value – Disaggregated demand studies on milk products are limited globally, and this study is the first to analyse the demand for various milk products in Sri Lanka.

Keywords Elasticities, Fresh liquid milk, Flavoured liquid milk, Milk powder, QUAIDS model

Paper type Research article

1. Introduction

Sri Lanka is one of the very few countries in the world that still consumes a large proportion of its milk in the form of powdered milk (Mendis and Edirisinghe, 2014). Even though fresh



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