Economic Regulation in the Milk Powder Market of Sri Lanka

Nadeeka Premachandra and Anuruddha Kankanamge

Department of Economics and Statistics, University of Peradeniya

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Introduction

Milk powder is an essential good in the commodity basket of an average Sri Lankan household. The Sri Lankan government regulates milk powder market by imposing a maximum retail price and also by taxing the milk powder importers. The objective of these regulations in general is to ensure economic benefits of the milk powder consumers as well as to local milk powder manufacturers. The government tax imposed on the milk powder importers may protect domestic producers while earning some revenue to the government and the maximum retail price is cited as a policy to protect consumers. In this study, we examine these two policies i.e whether the tax on importers gives any protection to the local milk powder producers and whether the consumers are benefited by the imposed maximum retail price. Specifically, we attempted to examine that whether the government should impose the maximum retail price policy as well as tax on imported milk powder. Some recent studies by Bogahawatta and Herath (2006), Karunagoda et al. (2007), Weerahewa and Rajmohan (2008) have investigated different aspects of the milk powder market in Sri Lanka. However, requirement of regulating milk powder market using tax and maximum retail price has not been investigated in the literature and this study focuses on that issue.

Methodology

We have collected data for a period of eleven years on cost insurance freight (c.i.f). price (US\$ values per metric tone was converted to Rupees per 400 grams considering exchange rates published by Central Bank of Sri Lanka) of milk powder, the value of imported milk after tax by adding tax to c.i.f. value (c.i.f + tax value) and domestic average retail price of milk powder (R.P). We have identified the short time period of data as a limitation of this study. We performed several mean comparison tests (differences in means tests) between c.i.f. price of milk powder versus the value after adding tax to c.i.f. price of milk powder and the same with the retail price.

Results and Discussion

Initial test of this study compares the mean c.i.f. value and the mean value after adding tax to c.i.f. value. We find that government tax significantly raises the price of milk powder. This is evident when we examine the past tax rates. In 2001, government has taxed 10% of the c.i.f. value which has gone up to 26% by 2011.

Null Hypothesis (Ho)	t	$\mathbf{P} > \mathbf{t} $	Conclusion
c.i.f. value = c.i.f. value $+tax$	4.6375	0.0009	Rejects Ho
c.i.f. value + tax = $R.P.$	4.2380	0.0017	Rejects Ho
c.i.f. value = Domestic manufacturer's R.P.	3.6759	0.0043	Rejects Ho
c.i.f. value + tax = Domestic manufacturer's RP	1.0294	0.3276	Can't reject Ho

The second test compares the c.i.f. value-plus tax (after tax value) versus the domestic retail price of milk powder to examine whether other cost components (such as storing, packaging and transporting costs) significantly raise the retail price of imported milk powder. Test results indicate that retail prices are significantly higher than the value after adding tax (c.i.f. value-plus tax). It indicates that other cost components significantly raises milk powder price.

The third test examines whether the government tax on imported milk powder protects domestic manufacturers by testing the differences between c.i.f. value and domestic manufactures' R.P. The study found that domestic manufacturers' R.P. is significantly higher than the c.i.f. value of imported milk powder, but it has no difference when tested against the value after adding tax to c.i.f. value (c.i.f. value + tax). This reflects that domestic manufacturer's R.P. is not competitive with imported milk powder without the tax. The study remarks that government's tax gives some protection to domestic manufacturers by raising the value of the imported milk powder. The second test confirms at price competition among importers exists by lowering other cost components to maintain a lower retail price. Hence, tax policy can protect domestic manufacturers while allowing importers to compete in price.

Conclusion

The study reveals that the tax on imported milk powder significantly raises milk powder prices while protecting domestic milk powder manufacturers. Competition among milk powder importers occurs in order to enhance their effort to lower other cost components such as storing, packaging and transporting. This study does not find supporting evidence to regulate this market using maximum retail price. While it seems as an attractive policy to the government to keep the consumers happy, it might lead to implicit collusion among sellers (importers) in prices, closer to maximum retail price. The study also concludes that retail prices of the domestic manufacturer's are significantly less than the market retail price. However, this conclusion needs further investigation to make a firm decision.

References

- Bogahawatte, C and Herath, J., (2006). "Factors Affecting Import Shares of Powdered Milk and other Milk Products and their Implication in Sri Lanka". The Journal of the Sri Lanka Economic Association . Vol. 8, p. 21-29
- Gnanaseelan, J., Morais, N., Thampoe, M., (2010). "Dairy Market Trends In Vavuniya: Identifying Potentials and Challenges in a Post-Conflict Setting". University of Kelaniya, Sri Lanka. p.1-6.
- Karunagoda, N. S. P., Shama, R. and Weerahewa, J., (2007), "Sri Lanka Agricultural Trade Policy Issues". Vol. 14, p. 252-253
- Weerahewa, Jeevika and Rajmohan, K. (2008), Global Milk Market: Impacts on Sri Lanka, Economic Review, Vol. August/September, People's Bank.