Loyalty and Consumption: a CES Representation

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Abstract

This paper offers a new interpretation of the elasticity of substitution in the CES utility function under the discrete choice and separability. We model an economy with one discrete choice goods group and one composite good under diverse consumers. The results from our theoretical analysis illustrate the relation between the diversity of loyalty of each good and goods demands. Moreover, the origin of the elasticity of substitution of the CES utility function is described based on our assumptions. According to our results, the power index of the CES utility function does not change even if the diversity of loyalty differs by each good. On the other hand, coefficients of X_i^σ varies according to each good's attractiveness. We also consider the production under this economy, and obtain the result as the increase in productivity leads the decrease in price. This effect is the same as the standard Melitz model (monopolistic competition).