



De La Salle University – Dasmariñas

GRADUATE PROGRAM

**DEMAND FOR ELECTRICITY OF RESIDENTIAL CUSTOMERS
IN DASMARIÑAS, CAVITE**

A Thesis
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ABSTRACT

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The purpose of this research study was to determine the socioeconomic profile of the respondents and their households; to determine the housing unit characteristics and its stock of electrical equipment; to determine the electricity consumption of residential consumers and their electricity conservation practices; to identify the factors affecting the consumer demand for electricity; to compare the demand for electricity in terms of identified explanatory variables; and to analyze the price elasticity of demand for electricity in Dasmariñas, Cavite. The explanatory variables considered were household profile, housing unit characteristics, stock of electrical equipment, and practice of electricity conservation.

Most of the respondents were housewives which was about 39 percent of the total respondents. The average household size was 4.56 and the average age of household members was 30.33 years. There was a correlation between gross income and expenses where the average gross income and expenses were about PhP16,007 and PhP9,829, respectively. About 35.6 per cent had business being operated at home. Most of the housing units had a floor area between 36 to 55 sq m with 1 to 2 bedrooms. At least half of the total households owned a refrigerator, washing machine, television, and electric fan. No household owned a water pump.



The average electricity demand in kilowatt-hours was 139.60 with more than half of them consuming between 1-150 KWh. An average number of electricity conservation being practiced by every household was approximately 11.26.

Using multiple and stepwise regression, the factors influencing the demand for electricity in Dasmariñas, Cavite were household size, number of bedrooms, refrigerator, air conditioner, television, microwave oven, and entrepreneurial activity. Furthermore, it was found that there is a significant difference in the mean electricity consumption of the households when grouped in terms of gross income, floor area, number of bedrooms, entrepreneurial activity, electricity conservation, and all stocks of electrical equipment. Price elasticity of demand of electricity was determined using the secondary data from 2001 to 2007. Using natural logarithm of smoothed data, the inelastic demand for electricity was significantly verified.



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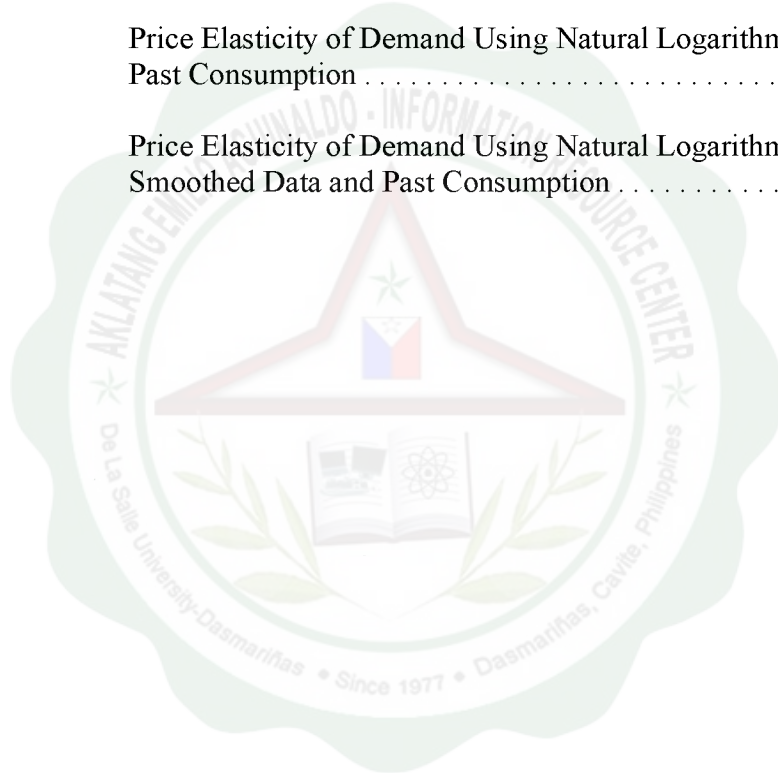
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