Fast Facts on Energy

Household Electricity Expenditures by Income Group

Office of Senator Win Gatchalian

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Version 1

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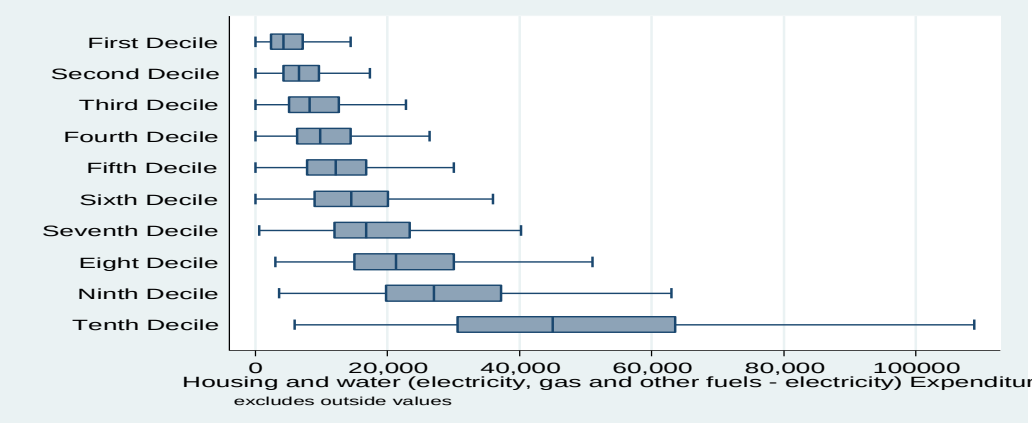
Table 1. Summary Statistics of Annual Electricity Expenditures of Households Residing in the NCR

Household Regional Decile	Mean	Standard Deviation
First	5,131.62	4,185.69
Second	7,595.52	4,369.70
Third	9,493.75	6,850.13
Fourth	11,355.35	7,005.47
Fifth	13,098.68	6,861.79
Sixth	15,962.94	9,388.60
Seventh	18,868.97	10,420.81
Eighth	23,717.64	12,702.55
Ninth	30,051.38	14,929.47
Tenth	51,603.57	33,769.09

Source: FIES 2012

Figure 1. Box Plot of Annual Electricity Expenditures of Households Residing in the NCR



Source: FIES 2012

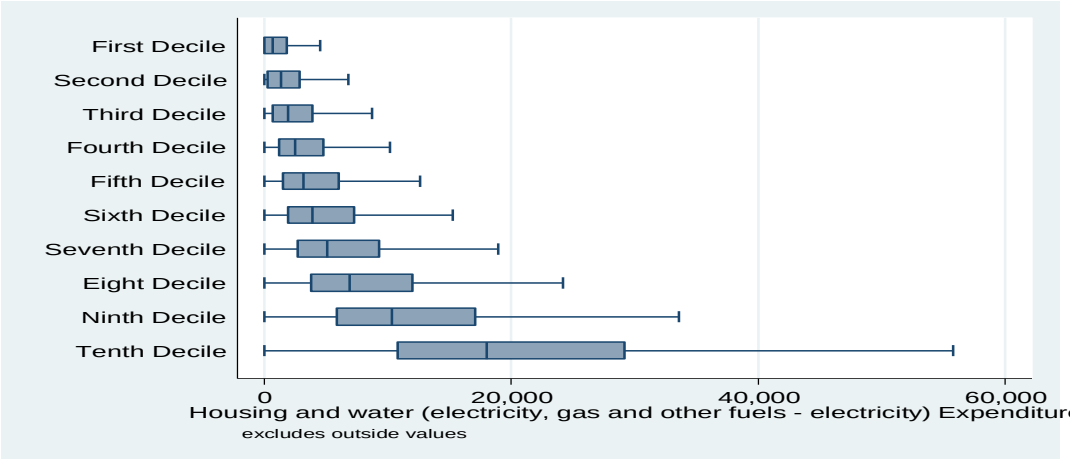
Figure 1 shows the dispersion of values across the regional household income deciles for households in the National Capital Region (NCR). The box-plots indicate that the median value increases as the regional household income decile increases. The box-plots also indicate that the dispersion or the variability across within-decile values increases as the regional household income decile increases. Figure 1 suggests that electricity expenditures increase at an exponential rate as the household income decile increases. The bulk of the observations situated within the ninth decile registered electricity expenditures that are markedly lower than the electricity expenditures of the bulk of the observations situated within the tenth decile. It is also of note that the per-decile distributions are all skewed to the right – implying that the range of values to the right of the median value is wider than the range of values to the left of the median value.

Table 2. Summary Statistics of Annual Electricity Expenditures for Households outside of the NCR

Household Regional Decile	Mean	Standard Deviation
First	1,225.28	1,695.44
Second	2,018.74	2,480.21
Third	2,689.03	2,792.26
Fourth	3,532.10	3,681.21
Fifth	4,404.90	4,248.14
Sixth	5,487.32	5,358.47
Seventh	6,899.60	6,219.20
Eighth	9,093.84	7,684.69
Ninth	12,621.45	9,533.46
Tenth	22,811.47	19,303.01

Source: FIES 2012

Figure 2. Box Plot of Annual Electricity Expenditures of Households Residing outside of the NCR



Source: FIES 2012

Figure 2 shows the dispersion of values across the regional household income deciles for households residing outside the NCR. The box-plots indicate that the median value increases as the regional household income decile increases. The box-plots also indicate that the dispersion or the variability across within-decile values increases as the regional household income decile increases. It is of note that the per-decile expenditures on electricity of households outside the NCR are typically lower than the per-decile expenditures on electricity of households within the NCR.