
Understanding the dynamism of electricity consumption in India: an empirical investigation

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Abstract: The study intends to examine the impact of per capita GDP, financial sector development, capital formation, and urbanisation on electricity utilisation in India for the period of 1975 to 2015. The ARDL bounds test results reveal that the improved delivery of financial services, capital formation, per capita GDP, and urbanisation has a direct impact on electricity consumption in the long run. Further, the outcomes of the ARDL bounds and impulse response function confirm that after achieving a level of income, the electricity demand starts decreasing, as the adoption of electricity-efficient technology may reduce the marginal usage of electricity. Contrarily, even after achieving a threshold level of urbanisation the marginal impact of urbanisation on electricity usage has remained positive and significant. The association between urbanisation-electricity purposes that urban Indian populace takes a long time to inculcate the electricity-saving lifestyle. The study has also considered the possibility of the unknown series discontinuity.

Keywords: electricity; India; ARDL; impulse response function; urbanisation.