

ABSTRACT

Abstract of thesis entitled Asymmetric Price Responses in Japanese Residential Energy Demand, submitted by Tang Sio Lai (M-A6-6803-4) for the degree of Master of Social Sciences in Economics at the University of Macau in July 2008.

Energy prices have been soaring in recent years, and the world energy demand is expected to continue its increasing trend in the near future. Being the third largest oil consumer in the world and one of the industrialized economies, Japan is facing competitions and challenges in energy supply all over the world. The two oil crises in 1970s gave rise to a series of research on energy economics. Results from the economic literatures show that demand responses to price changes are not symmetric. In particular, consumers tend to be more responsive to price increase rather than price decrease.

The purpose of this thesis is to investigate the hypothesis of price asymmetry in Japanese residential energy demand. We apply demand system analysis, which is referred to the microeconomic analysis of consumer behaviour, in exploring the hypothesis of price asymmetry and investigating the various elasticities. Empirical results decisively indicate that price asymmetry exists in the Japanese residential energy demand. In addition, we find that households are more responsive to own-price increase than decrease, which is consistent to the findings of previous studies.