TITLE: GENERAL EQUILIBRIUM EVALUATION OF RECENT ELECTRICITY MARKET REFORMS IN TURKEY

AUTHORS: AKKEMIK, K ALI;

EMAIL: akkemik@baskent.edu.tr

COUNTRY: TURKEY

KEYWORDS: TURKEY; ELECTRICITY MARKET; CGE MODEL

PAPER CONFERENCE CODE: 165

FULL PAPER IN CD?: YES

ABSTRACT:

The recent attempt to deregulate and liberalize the electricity sector is an important political and economic issue in Turkey. The electricity market in Turkey has been regulated under an autonomous regulator since 2001. Some steps have also been taken to deregulate the electricity market which was previously dominated by public companies. Deregulation in the Turkish electricity sector is still under way and the sector is currently regulated by the regulatory agency to enable smooth implementation of deregulation. Since 2001, competition has been introduced in the electricity generation sector to a significant extent whereas the distribution and transmission stages are highly regulated and controlled almost entirely by public entities. According to the regulation authority, the aim of the recent reform attempts is ensuring the continuity of electricity supply and enhancing efficiency in electricity supply process through increased competition. This paper quantitatively analyzes the impact of these attempts using an applied computable general equilibrium model and a counterfactual full liberalization scenario. The simulation implies that the welfare cost of current regulation is about 1.1 percent of GDP. Full liberalization is found to enhance efficiency in the electricity market, reduce in energy prices for households, and improve consumers' welfare. Empirical findings confirm the policymakers' expectation from the liberalization, i.e., potential efficiency and welfare gains from full liberalization.