ABSTRACT

This thesis examines the impact of shocks in spot prices on long-term forward contracts in power markets. A unique comparison of efficiency of German and Hungarian power markets is provided. The risk premium on week-ahead forward contract is scrutinized by both data inspection and by unbiased forward rate hypothesis (UFRH) testing. Additionally, the ex-post market's prediction error for this product is explained by main drivers of spot electricity price, which are presented in section devoted to introduction to power markets. Expectedly, Hungarian forwards with longer time-to-delivery are found to react heavily on spot market shocks after controlling for changes in short-run marginal costs of conventional power plants. Such outcome applies both to intra-day and weekly time horizons. However, this evidence was not found for German market. These results point out to immaturity and the presence of inefficiencies in Hungarian power market. However, Hungarian risk premia on week-ahead and day-ahead forward products turn out to be considerably lower than for Germany. This was confirmed by UFRH tests on week-ahead forward contracts, where a significant risk premium was found in Germany as opposed to Hungarian risk premium. This finding is surprising since Hungarian spot prices are more prone to upward spikes. Hence, the risk premium is supposed to be higher in Hungary to compensate for delivery risk.