The effects of weather on crime rates in Malaysia

ABSTRACT

This study estimates the effects of temperature and rainfall on the prevalence of criminal activity in Malaysia. The analysis is based on annual data for the period 1973-2009, on temperature, rainfall and crime rates – total crime, violent and property crime. By using the generalized one-step error-correction model, we examine the short-run and long-run dynamics between crime rates with varying temperatures and rainfall in Malaysia. Our results suggest that there is long-run relationship between total crime and property crimes with weather in Malaysia. The long-run coefficients indicate a positive impact of temperature (hot weather) on criminal activity. Our results imply that the law enforcement would have a better understanding of how the weather affects crime and a chance for the authorities to better prepare their departments during weather conditions that influence certain criminal activities.

Keyword: Crime; Temperature; Rainfall; Generalized error-correction model; Malaysia