ABSTRACT

Endogenous growth model of Romer (1986, 1990) argue that better institutional quality with stringent property rights and patent protection laws encourage the researchers and entrepreneurs towards innovation. The theory predicts that technological innovation, endogenously determined by better institutional quality promotes economic growth. However, we have observed a missing link between the endogenous growth model of Romer and its empirical application used to analyse the role of institutions in promoting economic growth. This missing link, arising for not incorporating the endogenous decision of undertaking innovation as suggested by Romer (1990), could lead to the misspecification of the econometric model and consequently yield inconsistent estimate due to the omitted variable bias. We have used the Endogenous Switching Regression Model of Maddala and Nelson (1975) in this thesis to address this omitted variable bias. We find that better institutions with stringent intellectual property rights and patent protection laws promote economic growth for the innovation driven rich countries, who belong closer to the global technological frontier.

Note, the endogenous growth model of Romer (1990) also predicts better institutions with stringent intellectual property rights and patent protection laws attracts more people to research and development. However, data shows declining population growth rate due to falling Total Fertility Rate (TFR) for the OECD and non-OECD countries, and innovation driven rich countries and non-innovation driven poor that might have serious implications to their economic growth (see; Jones, 2020). Given this backdrop, following Jones and Vollrath (2013); we have developed a simple quantity/quality trade-off model that can explain the trend in TFR and government educational spending of various OECD and non-OECD countries, and innovation driven rich countries and non-innovation driven poor countries as observed in the data.