ABSTRACT

This study investigated the relationship between education and economic growth of Pakistan. In this research time series data has been used on education and gross domestic product (GDP in current US $) from 1970 to 2011. Data has been collected from different sources i.e. Pakistan Economic Survey, World Bank World Development Indicators (WDI) and MIC.GDP is used as dependent variable, while education is used as independent variable. The proxy variables for education are education expenditure, enrollment of university students and enrollment of students in professional colleges.

In this research Augmented Dickey Fuller Test, Johansen cointegration test, VECM and Granger causality test are applied for examining stationarity, long run relationship, short run and long run causality and direction of causality respectively. To examine the model efficiency Breusch-Godfrey Serial Correlation LM Test, Histogram Normality test, ARCH Test and Correlogram Test are used. Impulse Response Function (IRF) has also been applied to explain the response to shock amongst the variables.

The ADF test specifies that all the variables are stationary at 1st difference. The result of Johansen cointegration test indicates that there exists long run relationship between GDP, ENROL, ENROLPC and EDUEXP. The VEC model reveals that there exist long run relationship between dependent variable GDP and independent variables i.e. ENROL, ENROLPC and EDUEXP. According to VECM all the independent variables i.e. enrollment of university students, enrollment in professional colleges and education expenditure has positive and significant impact on GDP of Pakistan in the long run. According to the cointegrating equation 1% increase in enrollment of university students will increase GDP by 0.256% and 1% increase in enrollment of professional colleges will increase GDP by 0.051%. While 1% increases in education expenditure will increase GDP by 0.56%. The Wald test indicates that there exist short run relationship from independent variables ENROL, ENROLPC and EDUEXP to dependent variable GDP.

The Granger causality test showed there exist unidirectional causality from LENROL to LGDP, from LENROL to LEDUEXP and from LEDUEXP to LENROLPC while, there exist bidirectional causality between LGDP and LEDUEXP.