Objective of the study

The objective of this study is to identify the nexus between economic growth with aging population and gross domestic savings.

Methodology

This study is based on the time-series data from 1980 to 2010 which was extracted from World Bank Database. To check the stationary of the series the researcher applied Augmented Dickey Fuller (ADF) unit root test. The study used multiple linear regression model in order to identify the nexus between economic growth with aging population and domestic savings. The model can be represented as follows;

$$EG_t = \beta_0 + \beta_1 \Delta GAP_t + \beta_2 \Delta GDS_t + \varepsilon_t$$

Where, EG = economic growth

β_0 = Constant value

β_1 and β_2 = coefficients of each independent variable

ΔGAP = change in growth of aging population

ΔGDS = change in gross domestic savings

ε = error term

Normality Test, Breusch-Godfrey Serial Correlation LM Test, Heteroskedasticity Test and Variance Inflation Factors were applied to assure the model diagnostic.

Results and Discussion

Table 1: Results of Augmented Dickey-Fuller unit root test

Variable	T-statistics		Prob	
	Constant	Constant with trend	constant	Constant with trend
ΔGAP	-4.673552	-3.980508	0.0008	0.0232
ΔGDS	-6.172973	-6.060958	0.0000	0.0001
EG	-4.380778	-4.595756	0.0017	0.0049

According to the ADF unit root test (Table 1), economic growth was stationary at level while change in growth of aging population and change in gross domestic savings were stationary at first difference implying that variables are stationary at combination of I (0) and I (1).