In this paper, Granger causality test is implemented within the context of Autoregressive distributed lag (ARDL) framework to determine the directions of causality between a pair of price level, real money supply, government fiscal deficit, interest rate and real output in Nigeria over the period 1970 to 2010. Result of the study shows that in the short run, there is a unidirectional causality running from real money supply to inflation, government deficit to price level, real output to inflation, and interest rate to inflation. The long run results indicate that bidirectional causality runs between the real money supply and price level, and also between price level and interest rate. The results suggest that pro-cyclical has been the practice in Nigerian fiscal policy which has accounted for the country’s public deficit. Therefore, there is a need for fiscal policy rule that will guide all the tiers of government to a particular level of fiscal conduct and budgetary management to the extent of making it credible over time. This result is important in that it provides the likely implications of fiscal deficits on some macroeconomic variables such as output, price level, money supply and balance of payment. Knowing these implications is likely to provide an insight into the formulation and design of appropriate fiscal policy by the Nigerian policy makers because far from the efficient provision of public goods, fiscal policy performs stabilizing role.