The paper analyses demand for different monetary aggregates (M0, M1, M2 and M3) in Kenya for the period 1997:4-2011:2. Dynamic frameworks are used to estimate and uncover parsimonious and empirically stable demand for money functions. Price, real GDP, nominal 91-Day Treasury bill rate, nominal interbank rate, nominal deposit rate and foreign interest rate affected the long-run demand for money functions to different degrees. The demand for money functions is found to be unstable over the period for the parameter values, implying that the current monetary targeting policy framework is inappropriate. However, there are challenges in adopting an alternative monetary policy framework.