

Inflation Targeting in the Presence of Fiscal Imbalances: The Case of Pakistan

M. Ali Kemal

Introduction

- High inflation distorts decisions of private agents to make investment, savings, wage contracts, etc., which slows down the process of economic growth
- Kydland and Prescott (1977): Rules Vs Discretion
- Barro and Gordon (1983): Problem of Dynamic consistency in monetary policy
- Rogoff (1985): conservative central banker

What is Inflation Targeting

- Policy of inflation targeting is a commitment to maintain inflation at the announced level.
- The process of inflation targeting starts with an announcement of targeted inflation for the next period by the government and the Central Bank.
- Period could range from one year to two years or even three years depending on the situation and confidence they have in the markets and markets have in them.

How Does it Work

- Independence of central bank is one of the prerequisites of the policy of inflation targeting. After the announcement of inflation for the next period, independent central bank, which has instrumental independence, is responsible for achieving the target.
- Interest rate is the main variable used in controlling inflation in the policy of inflation targeting.
- CRR and SLR can be used to control monetary policy

Problem

- Central bank resists to increase interest rate of the proportion of dollar denominated debt is higher in total public debt.
- In higher dollar denominated debt country problem starts with an increase in interest rate because it pressurizes foreign exchange market which leads to depreciation of currency
- Depreciation leads to further increase in prices due to Pass through Effect
- In high fiscal deficit and public debt countries it will be difficult for central bank to control inflation

Problems in Developing Countries

- Developing countries have higher reliance on seigniorage (Inflation Tax) and low tax base (Total Tax Revenues 10.9 percent of GDP, Direct Taxes 3.4 percent of GDP).
- Fiscal Deficit is financed through increase in money supply, thus Government do not give full operational independence to Central Bank.

Some Evidence from Pakistan

- The empirical analysis in the paper finds no evidence of a significant pass-through of rupee depreciations to consumer prices in the short run. Choudhari and Khan (2002)
- inflation is affected by government's bank borrowing for budgetary support as well as fiscal deficits. Agha and Khan (2006)

Objectives

- Problems in short periods give rise to all the serious problems of the economy [Eichner (1979)]
- Short run association between real interest rate and real exchange rate
- Short run association between real exchange rate and prices.
- If the association is true then inflation targeting is perverse for developing countries

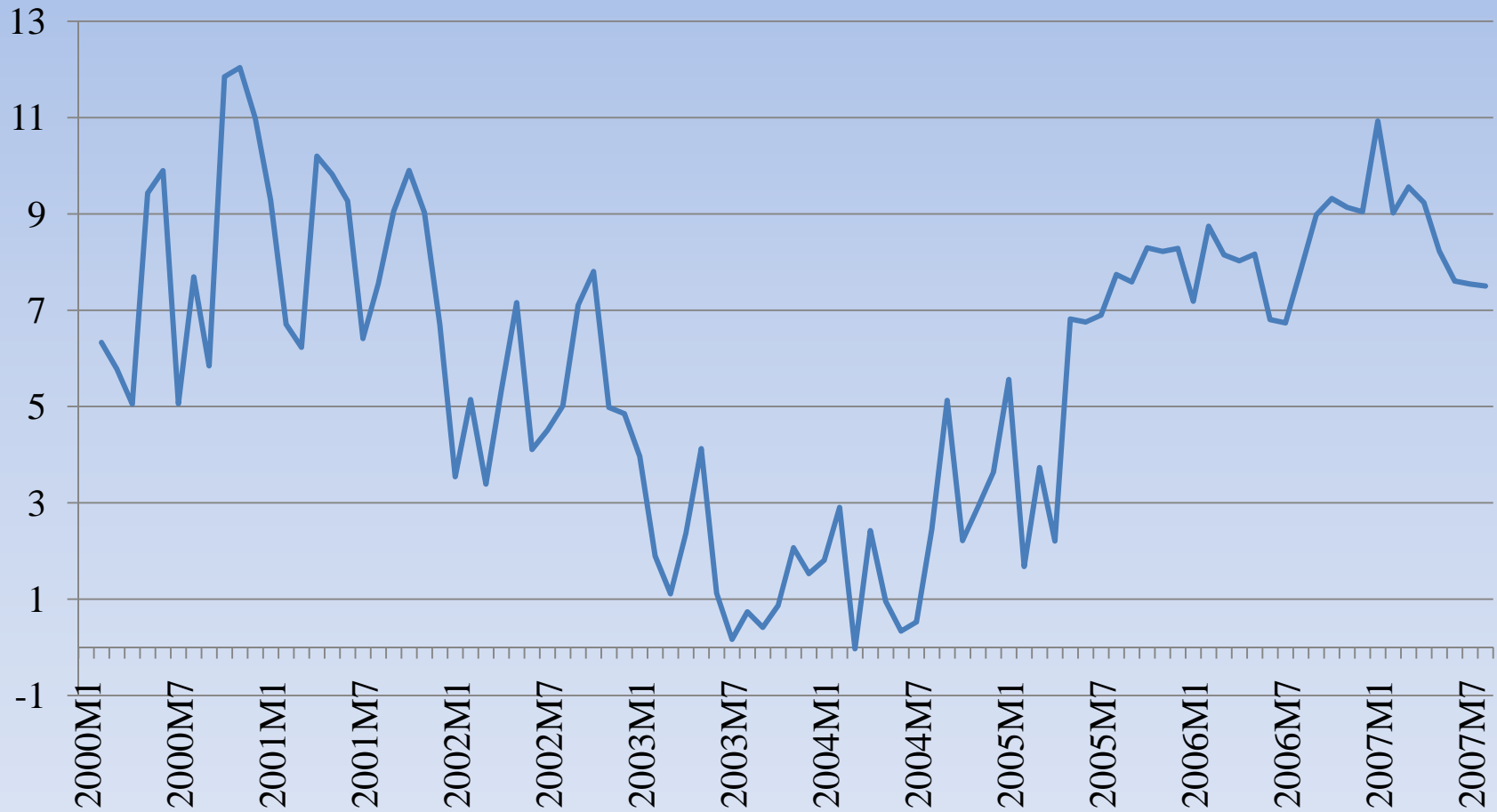
Data

- Annual Data on Debt and Budget Deficit is taken from Economic Survey from 2000 – 2007
- Monthly data for technical analysis on Exchange Rates, CPI, US CPI and Money Market Rate is taken from IFS from Jan 2000 – Aug 2007

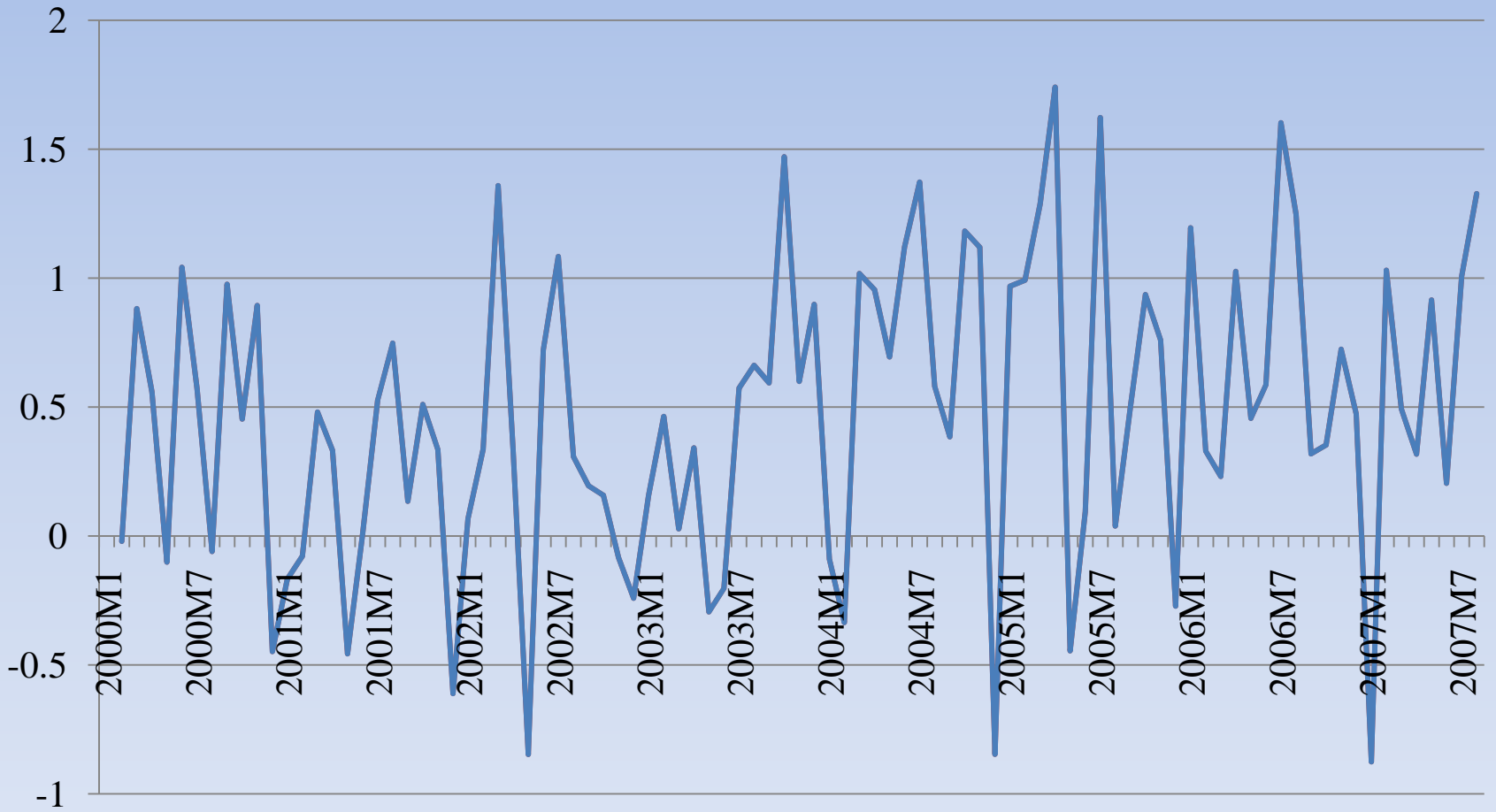
Real Exchange Rate



Real Interest Rate



Inflation



Debt and Deficit

Years	Interest Payment					Budget Deficit
	Debt Outstanding	Debt Servicing	Domestic Debt	Foreign Debt	Repayment to Foreign Debt	
2000	25359	9.7	5.5	1.2	2.5	5.4
2001	25608	8.3	4.5	1.2	2.3	4.3
2002	27215	10	4.3	1.4	3.7	4.3
2003	28301	6.3	3.4	1	1.3	3.7
2004	28900	5.4	2.9	0.7	1.2	2.4
2005	30813	4.7	2.7	0.6	0.9	3.3
2006	32407	4.8	2.7	0.6	1.1	4.3
2007	33966	3.8	2.2	0.6	0.7	4.3

Model

- Own lags and the lags of all the other variables in the model
- All the variables should be $I(0)$ (stationary)
- $$D\log(\text{rer})_t = \text{constant} + \sum_{i=1}^n D\log(\text{rer})_{t-n} + \sum_{i=1}^n D\log(\text{rir})_{t-n} + u_{1t}$$
- $$D\log(\text{rir})_t = \text{constant} + \sum_{i=1}^n D\log(\text{rir})_{t-n} + \sum_{i=1}^n D\log(\text{rer})_{t-n} + u_{2t}$$

VAR Results

- Real Interest Rate to Real Exchange Rate
 - Positive and Significant for Lags 4, 9, and 16
 - Negative and Significant for 18 and 15
- Real Exchange Rate to Prices
 - Positive and significant for Lags 5, 14 and 18

Conclusions

- Interest rate changes are not spontaneously reflected by real exchange rate and
- Real exchange rate pass through effect does not hold for Pakistan for very short run
- Inflation targeting is not a bad policy for Pakistan but **Be Careful**