SUMMARY OF THE PhD THESIS ENTITLED

“MACROECONOMIC GOALS AND INFLATION TARGETING IN INDIA”

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SUMMARY OF THE STUDY

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It is not an easy task to find many areas in macroeconomics where almost full agreement has emerged in the last few years. However, there is today a widespread and growing consensus amongst leading policy makers and academic macroeconomists that the single most important goal of monetary policy should be the pursuit of price stability, Blejer and Leone (1999). To chase the price stability central banks have recently developed a new policy tactic called inflation targeting. Inflation targeting central bank targets publically announced numerical target for annual inflation through policy instrument to stabilize inflation itself and real variables of the economy. Price stability remains prime goal of the monetary authority while other goals become subsidiary during the inflation targeting regime. To decide the monetary policy instrument many variables come into picture apart from monetary aggregates and exchange rate. To conduct inflation targeting, a high degree of transparency by publishing objectives, decisions and plans of the central bank for public is indispensable. Inflation targeting central bank has always an obligation and accountability to meet the objectives. New Zealand was the pioneer one to adopt the inflation targeting regime in 1990 and as of now i.e. May, 2013, a total of 27 industrialized and non-industrialized countries have adopted the inflation targeting regime. The inflation targeting regime has been very successful, in terms of first stabilizing the inflation and then real variables of the economy, as hitherto no country has abandoned after taking it up or even articulated any regret.

In my model optimizing private sector (households’ and firms’) behavior is represented by two structural equations, an aggregate supply equation (a forward looking ‘New Keynesian Phillips Curve’, NKPC), an aggregate demand equation (‘Dynamic IS curve’, DISC), and Taguchi (Monetary Policy) Loss Function. The aggregate supply equation, NKPC, is derived from a first order condition for optimal price setting by the representative supplier (firm) following Clarida, Gali, and Gertler (1999) along the lines of Calvo sticky pricing model, Calvo (1983). Even though there are more realistic formulations, Taylor (1979, 1980) and Fischer (1977)), Calvo pricing is more comfortable, simple and gives very similar results in comparison to more complicated models. An aggregate demand equation, DISC, is derived from an Euler consumption equation for the optimal timing of purchases following Woodford
(1999) along the lines of Dixit Stiglitz (1977). In the model, inflation and output are both predetermined for one period, as in Bernanke and Woodford (1997), Rotemberg and Woodford (1997, 1999), and Svensson (2003), except for an unforecastable random error term that cannot be affected by monetary policy. Taguchi Loss Function (Taguchi Method), Taguchi (1986), is used to calculate the loss caused to the society for an off target quality characteristic. Variables of the economy (inflation and output gap) are introduced to write the Taguchi Loss Function. Taguchi Loss Function is minimized, subject to NKPC and DISC to get the optimal reaction (the instrument rate) of the Reserve Bank of India to hit the inflation target.

The structure of emerging market economies is somewhat different than that of advance economies due to existence of large informal sector. The structure of goods, labour and credit markets are pretty dissimilar in formal and informal sectors of the economy as agents have different endowments and constraints. In the advance economies the relative size of informal sector is much smaller to that of formal sector; therefore, it is reasonable to ignore the informal sector in advanced economies as it has negligible impact on the aggregates. But in the emerging market economies where the informal sector is relatively large and plays an important role in the economy then neglecting the informal sector would not be justified; Schneider et al. (2010). Informal sector plays a major role in employment generation, especially for the developing world; Agenor and Montiel (1996); Harris-White and Sinha (2007); Marjit and Kar (2011) and Dutta et al. (2011).

The Indian economy has relatively very large informal sector as the lion’s share of Indian workforce works in this sector to contribute around half of its national product, NSC (2012). In such an informal economic environment this study studies the nature of domestic inflation and thereby studies the real variables of the economy i.e. output and employment. The related issues have been framed in an Open Economy New Keynesian Dynamic Stochastic General Equilibrium Model with micro-foundations to outfit the Indian economy and thereby to explain the nature of Indian domestic inflation, a key instrument for inflation targeting central banks. The Indian economy is an emerging market economy and primarily comprises of two sectors, namely, formal and informal and they are asymmetric in nature to each other. The formal sector shows sluggish prices and rigid wages and imperfections in the markets while informal sector characterizes the complete flexibility in prices and
wages and perfections in markets. Thus, Indian economy comprises of a very typical mixture of Keynesian and Classical markets. The New Keynesian Phillips Curve for Indian economy reveals that the degree of stickiness in prices in formal sector markets has a deep impact on the domestic inflation as informal sector markets are frictionless and have complete price flexibility (zero stickiness). Thus, degree of stickiness in prices in formal sector markets plays a major role to determine the domestic inflation. The study shows that when Reserve Bank of India (RBI) conducts monetary policy, the formal sector observes the fluctuations in real variables while nominal variables vary in the informal sector. In such an economic environment the study reveals that the performance of overall monetary policy is observed very poor in term of output stabilization because of this huge informal sector. Though Indian monetary authority is helpless to stabilize the real variables of the economy in the short run but at the same time it got a shiny side, the informal sector which observes only nominal effects. The study shows that RBI got a pretty good command on price level, ceteris paribus, without affecting (or negligible effect on) the output/employment. Low and stable inflation is good for economic growth and development. How to keep the inflation low and stable? Inflation targeting framework has a solution to this issue. The study shows that RBI can efficiently control the inflation through managing general price level without making any negative impact on output/employment in short run then India should adopt inflation targeting regime to keep the inflation low and stable, which in turn good for economic growth and development. The study recommends in terms of policy that if India adopts the inflation targeting regime then the negative impacts of the inflation targeting are much less than that of the positive outcomes, therefore, India should adopt inflation targeting regime. This conclusion is based on pure theory and may have deviation from reality. This study provides opportunities for further empirical work.

References