Selective Memoirs

RBI Has Far More Autonomy Than Scrutiny

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> It is unfortunate how so few Finance Ministers and other policy makers understand, let alone accept, the monetarist paradox. If there is one enduring idea from Friedman that central bankers in emerging economies such as China and India would be well advised to heed, it is that almost every interest rate cut leads, over time, to a higher interest rate. (Moorthy 2007)

The perennial discussions about and clamour for more Reserve Bank of India (RBI) autonomy have become more frequent and heated. Further, they have spread far and wide among the general public due to the controversy about Governor Raghuram Rajan's extension and culminating in the search for his successor. Against this backdrop, former RBI Governor Duvvuri Subbarao's plea for more RBI autonomy in his recent book calls for a careful and detailed scrutiny and assessment.

According to Subbarao, in various realms—not just the setting of interest rates but more so in making and getting high level appointments ratified by the finance ministry—he was thwarted by the then Finance Minister P Chidambaram. This review will argue that while the constraints imposed by the finance ministry's dominance upon the RBI are considerable, Subbarao has overstated them. What needs highlighting is that the RBI has not put whatever autonomy it has had to good use.

With regard to my overall views on RBI autonomy, for the record, I had assessed the term of his predecessor Y V Reddy when it ended in September 2008. Starting by citing a memorable passage from a Vikram Seth poem ("It's true, I so to speak presided/but all, and none of us decided./ That is the doctrine, don't you see?/ Of joint responsibility"), I then went on to state that "the RBI still does not have enough autonomy from the Finance Ministry" (Moorthy 2008).

The review is organised as follows: Section 1 provides a broad discussion of his book for the general reader. Section 2 reproduces the three phases of his term, as classified by Subbarao, and evaluates his performance during the first and third phases when global influences dominated the RBI's decisions. Section 3 then examines the critical middle phase when Subbarao had leeway and provides "real time" evidence that his interest rate decisions were too lax. It also points to a crucial RBI portfolio shuffle, which he fails to mention, that had major adverse economic ramifications. Section 4 makes the case that the RBI under Subbarao, and going back earlier, has not adequately communicated to the finance ministry and the wider financial and business community what the benefits of tight money policy are and the associated need for more autonomy. Section 5 concludes by discussing term length and appointment rules for central bank governors.

REVIEW ARTICLE

Who Moved My Interest Rate? Leading the Reserve Bank of India through Five Turbulent Years by Duvvuri Subbarao, *Gurgaon: Penguin Viking, 2016; pp 323, ₹699.*

1 The Gracious, Globetrotting Governor

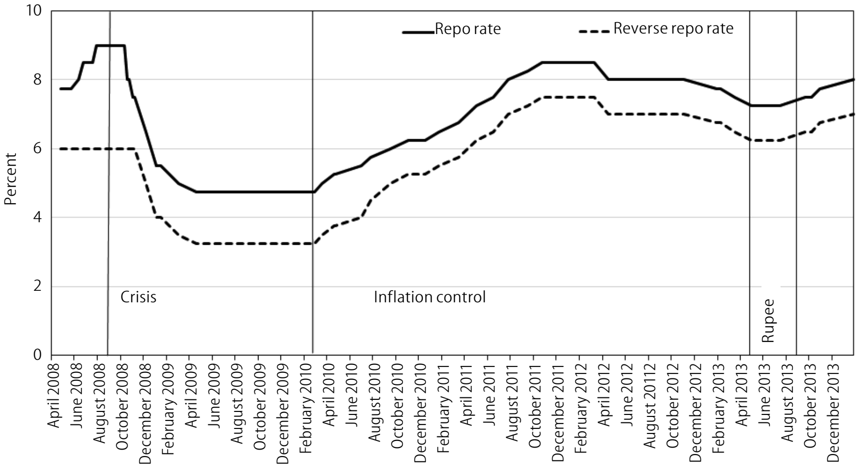
For starters, this book with its engaging title and breezy style is a great read. The endearing personal touch, his self-deprecating sense of humour, the conveying of a wide range of information, sometimes complex, about monetary policy in a simple manner for a layman are all highly commendable. It would be useful for all those keen on understanding how a central bank performs its various functions, and what are the dilemmas and pressures that central bank governors face repeatedly. The flowing narrative approach for many parts of the book is best suited to discuss events, decisions, and controversies as they occurred in real time. The handling of serious topics with a lighter touch is a huge plus.[1]

This first chapter provides a racy account of how Subbarao was suddenly informed that he would be appointed governor in end August, just days before he took over on 5 September 2008. The most likely candidate, then Deputy Governor Rakesh Mohan was not chosen. The global financial crisis erupted a few days later, and he was catapulted into the global arena by having to speak before the G-20. With the then United States (US) President George Bush dropping by and patting him on his shoulder, he went almost overnight from being an "unknown unknown" to a "known unknown" (in former US Secretary of State Dick Cheney's phrase).

Subbarao usefully divides his full five-year term (with an extension of his initial term ending September 2011 for two years to September 2013) into three phases—the first or crisis phase, the second or inflation control phase, and the third or rupee phase. During the first and third phases, external influences dominated, and the RBI was in firefighting mode. Its decisions have to be evaluated keeping this in mind. He also discusses at length the legislative body Financial Sector Legislative Reforms Commission (FSLRC) that recommended sweeping changes to curtail the RBI's powers in most realms and also assesses the regime of inflation targeting introduced by the RBI under Rajan. Both these issues dominated policy well past his term and, although very important, are mostly outside the domain of this review.

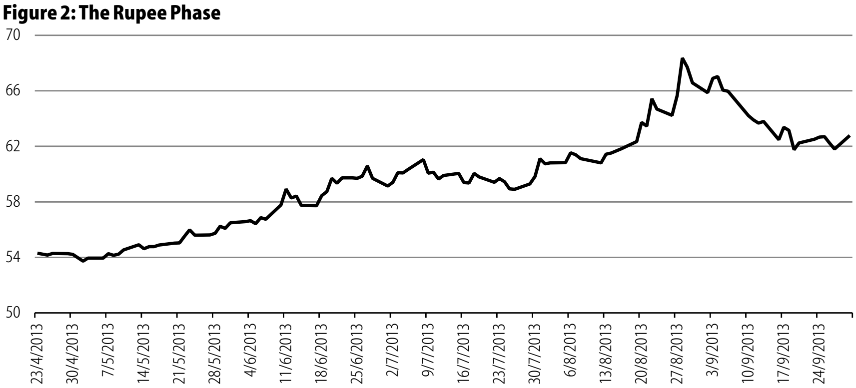
These three phases are shown below (Figure 1, p 34), and they provide the factual template for this review. For analytical convenience, I will discuss the middle phase the last, since it relates to the broader theme of this review—the

Figure 1: The Three Phases of Subbarao's Regime: Monetary Policy Rates



Source: *Handbook of Statistics on Indian Economy*, RBI.

Figure 2: The Rupee Phase



Source: *Handbook of Statistics on Indian Economy*, RBI.

ill-informed decisions of RBI, made without much scrutiny.

2 The Crisis and Rupee Phases

During the first or global financial crisis phase (September 2008–March 2010), Subbarao reacted quite boldly early on, dropping the repo rate sharply from 9% in September 2008 to 4.75% by April 2009, with similar large moves for the reverse repo rate (Figure 1). It is the case that due to financial market pressures at the repo window, he would have had to ease at some point. Nevertheless, as a greenhorn governor, for his quick and pre-emptive handling of the crisis, narrated in the chapter, "Baptism by Fire," he deserves much kudos.

The third or rupee phase was when almost all emerging economy currencies tumbled. This drop was part of the "taper tantrums" of the global financial markets in response to then US Federal Reserve Chairman Ben Bernanke's 22 May 2013 statement that the Federal Reserve would scale back its purchase of long-term bonds. The rupee tumbled to an all-time low of close to ₹69 against the dollar in intra-day trading on 28 August 2013, and then recovered after Rajan took over as the RBI chief. In fact in early August, when the rupee fell sharply past ₹61, the appointment of Rajan, then chief economic advisor to the government, as RBI Governor was announced during trading hours. This indicates the enormous importance by policymakers to the exchange rate.

The rupee's tumble in August 2013, over and above the general May rout, was laid at Subbarao's door, since other emerging market currencies did not fare so badly then. Most of the harsh critiques of his competence have been based on this last phase. This is partly because people typically tend to recall the latest period, partly because the rupee fell so sharply, and mainly because it recovered sharply after Rajan took over as governor. However, the situation is more complex. His performance during this period is a mixed bag, as explained below, and does not warrant harsh criticism.

Some licence raj type measures that he imposed, such as raising the customs duty on gold and then banning categories of gold imports as an emergency measure in August 2013, can be criticised. Banning individuals from buying gold is a restriction on basic economic freedom. Unfortunately, Subbarao does not see it that way—"the need to impose restrictions on gold imports to reduce the current account deficit was obvious" (p 122). Further, in that panicky situation, far from supporting the rupee, these measures may have contributed to the rupee's tumble.

In a later chapter titled "Goldfinger Governor," he narrates how the RBI purchased 200 tonnes of gold from the International Monetary Fund (IMF) in November 2009, a huge transaction that was completed very smoothly, and for which the RBI was complimented by the *Financial Times* of London. He then admits the irony of RBI's gold purchases being followed by the ban on gold imports for what can be called AAA (*aam aadmi aurat* [common man and woman]) entities. He justifies the ban by the need to curb speculative purchases. Granted that there was a speculative bubble in gold demand in 2013 boosting imports, these are typically small in relation to the huge flows in capital account, or financial transactions. Even if gold imports are large, there is a compelling case to let the rupee weaken instead of restricting gold imports, and/or deplete foreign exchange reserves to fund the current-account deficit. Forex reserves are meant precisely for that.

To clarify the views expressed here, I am a proponent of moderate capital controls on inflows in general, both to reduce inflows and to reduce rupee volatility, and also some controls on capital outflows. But it is always hard to tell how the currency will react to imposing capital controls. After reducing the amount that could be taken out under the Liberalised Exchange Rate Management System, "the market reaction was swift and brutal… the rupee fell from ₹61.43 on 13 August to ₹68.36/$ on 28 August" (p 126) (Figure 2).

If by chance the rupee had rallied on these measures, Subbarao would have been lionised. Curbs on capital flows should have been made earlier during

2010 to 2012, when there was no external crisis. After liberalising these limits to attract inflows in 2009 when the rupee tumbled, according to me, Subbarao failed to tighten up on inflows, when the crisis eased by late 2009.

As for the rupee's recovery in September 2013, it was due to the offering of very generous terms on swaps to overseas investors, similar to the Resurgent India Bonds in 1998, at the expense of the Indian taxpayer. While Rajan got fulsome credit after he took over for devising these swaps, it turns out Subbarao devised them (p 239). Further, going by some recent newspaper accounts, he did so at the behest of the then Finance Minister Chidambaram! So maybe Chidambaram should get credit for rescuing the rupee in September 2013. In short, in the chaos of the last few weeks and days of Subbarao's term, as during the "fog of war," it is difficult to trace outcomes to specific individual's decisions and attribute blame or praise accordingly.

In the chapter titled "Rupee Tantrums," Subbarao provides a fine discussion of exchange rate management. Common perceptions to the contrary, monetary theory implies that defending the exchange rate or rescuing the rupee is not an end in itself, but a means to the ends—of low inflation and output stability, not growth or exports. Foreign exchange intervention is meant to reduce volatility, not affect the rupee level itself, as he explains. He suggests that the RBI intervention should be based on "more rules and less discretion" (p 134). On this matter, I find myself in his distinguished company, having suggested a blueprint for foreign exchange intervention based on rules. This was done following a financial market crisis around April 2007, when the rupee jumped from ₹44 to ₹40/$ in a month, and the call money rate fell to zero. The thorny issues of whether and how to conduct forex intervention can surface anytime.

The main conclusion one can draw from the whole rupee crisis is that India has become too vulnerable to global capital inflows and outflows, and the RBI too preoccupied with the exchange rate, at the expense of vital domestic considerations. Subbarao himself admits this preoccupation when he says, that in July 2013, "the rupee problem required my undivided attention" (p 124), preventing him from travelling to all the RBI branch offices. This lopsided situation, which has evolved from policies going back to Chidambaram's dream budget of 1997, is not of his doing.

3 Lax Monetary Policy Was an Inside Job

This article now turns to mainly evaluate his performance based on the decisions made during the middle stretch from January 2011 to April 2013, about half his total term. In the chapter "Baby Step Subbarao," he justifies his decisions during this main middle phase. Following his first repo rate hike to 3.25% in March 2010, he exited from the crisis phase gradually in small 25 basis points hikes through early 2011. In critiquing this policy, in a paper titled "Rising Food Inflation and India's Monetary Policy," co-authored with a former doctoral student, we wrote, "An aggressive, immediate tightening of 300–400 basis points from the current 5.5%–6.5% range (as of end January 2011) for the repo corridor is called for, unlike the recent 'baby steps' that leaves the RBI way behind on the inflation curve" (Moorthy and Kolhar 2011).

As events transpired, the inflation situation did not adequately improve. Subbarao then hiked by 50 basis points in June 2011, followed by two more rate hikes, bringing the repo rate to 8.5% by end-2011, a cumulative rise of 375 basis points from 4.75% in April 2010. Despite this, inflation remained high through 2012 and 2013, clearly indicating that the early baby steps were not adequate and that the RBI was behind the curve in fighting inflation.

Along with high inflation, growth declined in 2012 and 2013, which is the phenomenon of stagflation. This is precisely as predicted by the shifting Phillips curve, when growth falls after a period of overheating. This fall in growth is often mistaken to be due to supply shocks. I have presented detailed and diverse evidence in seminars and in articles during 2012 and 2013, explaining stagflation based on a Phillips curve and labour supply approach. All this evidence was incorporated into an e-book in 2014, which has now been expanded and would be published soon (Moorthy forthcoming).

Subbarao denies there was stagflation, attributing it to bad preliminary data that got revised (p 55). His denial is flimsy. It is well known that these 2015 gross domestic product (GDP) revisions are questionable (Nagaraj 2015). Further, if we compare five-year averages of growth and inflation for the periods April 2003–March 2008 and April 2008–March 2013, the stagflation is very clear. Over the latter five-year period, average growth dropped by almost 2% while consumer price index (CPI) inflation rose by five percentage points to average 10%. Besides, the GDP growth revisions have had a negligible impact on growth over the five-year period. Data on corporate profit and sales, and the sharp drop in capacity utilisation in 2012 and 2013, provide further evidence of the stagflation.

Subbarao attributed the stagflation to "groupthink" (p 55), but without specifying which group. Apart from a few references in the media, there was little academic literature or newspaper articles stressing stagflation. Insofar as there was groupthink, it was more about food supply shocks. Some economists who have written on the subject are Mohanty (2010), Balakrishnan (2011), Bose (2012), Ghosh and Arora (2013), Rakshit (2011), and many others (cited in Patra, Khundrakpam and George 2014). Some members of the RBI's Technical Advisory Committee also expressed similar views on inflation.

It was also argued within the RBI itself that food inflation, and thus overall inflation, is determined by changing patterns of food consumption—in particular, growing demand for protein (Gokarn 2010). For robust evidence on food and non-food inflation rates from China and ASEAN countries, compared to India, that contradicts this view, see Moorthy (2012a). Instead, it can be argued that policy was lax for various reasons. In early 2010, the RBI introduced a new measure of inflation as its benchmark—non-food manufacturing wholesale price index (WPI). While presumably less volatile than prevailing inflation measures, this was not the case, as has been pointed out by Kolhar (2013).

In his Statistics Day speech, Subbarao (2009) defended the RBI's prevailing use of multiple indicators of inflation, and the emphasis on the WPI instead of the CPI, on the grounds that there were multiple CPIs and none of them were representative of the full reality of India. He reiterates this justification here (p 78), stating that controlling inflation based on CPI was only possible later—say after 2013 when a composite all-India CPI, which was started in 2011, providing two years of inflation data. In critiquing this view, we argued that

> The notable divergence is really between the movements in the CPIs and the WPI…Randomly choosing any of the CPIs should lead broadly to the same monetary policy decisions. For simplicity, the CPI (Industrial Workers) that is used for wage and other adjustment could be the focus of policy. Even if various CPIs diverged, policy could be based upon a simple or weighted average of them. (Moorthy and Kolhar 2011)

The RBI has had a long tradition of focusing on what I have called the wrong price index (WPI) instead of the correct price index (CPI)! While inflation targeting itself is a complicated matter and should not be mechanically followed (Moorthy 2009, 2014), the switch to CPI that took place as part of the inflation targeting regime post Subbarao, after much struggle, was long overdue.

Sidelining the prescient deputy governor: As for Subbarao's claim that he was repeatedly pressurised by Chidambaram to cut rates for much of the time between 2010 and 2012, the facts suggest otherwise. Within the RBI, the seasoned Deputy Governor K C Chakrabarty, with valuable commercial banking experience much earlier, had criticised the monetary policy of 28 July 2010 for not raising rates. A few days later he was stripped of most monetary policy functions and put in charge of the departments of Customer Service, Inspection, Information Technology, and last but not the least the Rajbhasha Department (Basu 2016). While this was a violation of protocol on the deputy governor's part and warranted a reprimand, the penalty imposed was excessive.

Based on the evidence presented earlier, Chakrabarty was way ahead with regard to identifying that the RBI was behind the curve in fighting inflation. If Chidambaram or the finance ministry put pressure on Subbarao to sideline Chakrabarty, that should have been mentioned here. Surprisingly, there is no discussion at all of this vital portfolio reshuffle, with its huge policy impact. Further, a savvy governor who wants to raise rates without antagonising the finance minister should do so by encouraging or allowing his deputies to speak, while keeping quiet himself.

The big rate cut in 2012: Further evidence of the RBI's avoidable laxity comes from his decisions in 2012, after he was given an extension in September 2011 for two more years. On 30 March 2012, I had interviewed Subbarao who was the chief guest at the convocation of the Indian Institute of Management (IIM) Bangalore. In that long- and wide-ranging interview, pointing to the recent large open market operations that were pushing long bond yields lower, despite rising gold imports and rising inflation expectations, I stressed that monetary policy was too easy (Moorthy 2012b). The governor seemed to agree. Nevertheless, two weeks later, in mid-April 2012, the RBI aggressively cut the repo rate, then at 8.5%, by 50 basis points! There is no mention of pressure from the finance ministry. This rate cut he justifies by "the indication of a significant drop in inflation" (p 55) and says that the RBI was "wrong footed," since the inflation data was subsequently revised upwards. He should have known fully well that such revisions are common. The justification of a big rate cut on the basis of a preliminary inflation drop was not warranted. In short, just as during 2010 and 2011, Subbarao's policy in 2012 was also too lax, within the domain of interest rate control that he had.

Overall, during his second inflation control phase, there was a major failure to control inflation. Over his entire five-year term, inflation averaged about 10%, and food inflation higher at about 12%. Very recently, Ruchir Sharma has described and discussed what he calls "one of the worst bouts of inflation in India's post-independence history," tracking India's fall in international rankings of inflation. Based on his travels through Rajasthan and Madhya Pradesh in December 2013, he states

> In the multi-hued states of India, it is unusual to find two that share an opinion, but this time we were surprised to hear the same chorus everywhere. From the badlands of Bhind in Madhya Pradesh to the colourful bazaars of Pushkar in central Rajasthan, the neighbourhood barber, the local carpenter, and the small farmer would angrily reel off to the exact rupee the increase in prices for potatoes, ghee, and yes, onions over the last five years… (Sharma 2016: 236–37)

Sharma then attributes the defeat of the Congress party in the 2013 state assembly elections in Rajasthan and Madhya Pradesh and then its sweeping defeat in the national elections in May 2014 to high inflation. Others have too. Insofar as the social fabric of India has fundamentally altered after these elections, both Subbarao and Chidambaram, and all those espousing the food supply shock and protein-centric views of inflation, should reflect on their possible contribution to this outcome.

The economic consequences of the lax policy can and have extended beyond the nasty bout of inflation, which has receded after September 2014, due to a drop in global oil prices and for other reasons. A lingering consequence of the lax policy earlier is that too many bad loans have been made. As a result, when the banking and financial system is saddled with too much debt and too many non-performing assets, then trying to meet an inflation target, as the RBI is doing currently, can come into conflict with maintaining the stability of the banking and financial system.

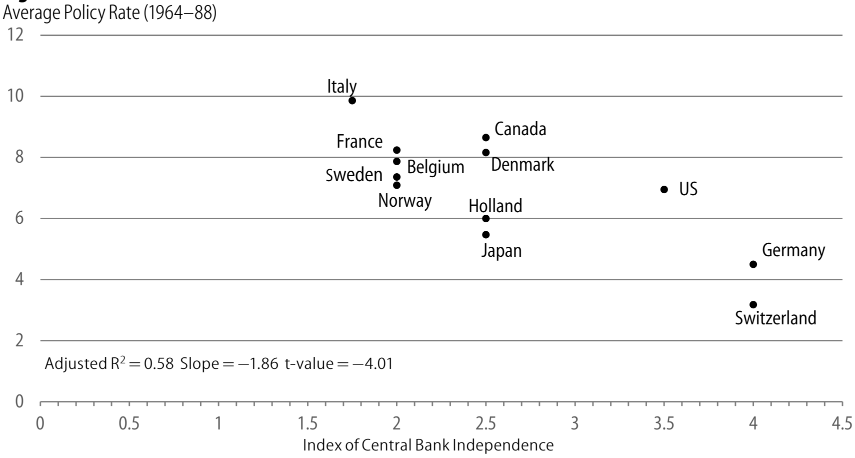
Overall, with regard to this second phase, one is reminded of this critique of the 1930s Federal Reserve, "Men are far readier to plead—to themselves as to others—lack of power rather than lack of judgment as an explanation of failure" (Friedman and Schwartz 1963: 436).

With the analysis of interest rate phases complete, this review now turns to broader themes.

4 The RBI's Failure to Communicate to Finance Ministry

A repeated theme of Subbarao's book is the efforts and initiatives undertaken by the RBI to enhance transparency and communication with the public and also its outreach. His chapter "Demystifying the Reserve Bank" deals with this and outlines at length various measures, certainly laudable, taken by the RBI in this regard. In another chapter, his description of the efforts of senior bankers to practise

Figure 3: The Monetarist Paradox



Source: Index from Alesina and Summers (1993); Policy Rate: Author's Computations from IMF data.

with the hand-held machine used to promote the Banking Correspondent Model in rural areas, to be showcased to the Prime Minister, is quite hilarious.

The more fundamental question is whether the RBI has attempted to clearly communicate to the finance ministry what can be labelled as Milton Friedman's monetarist paradox, that is an easy money policy leads to high interest rates and vice versa (see correspondence with Friedman in Moorthy 2005). This was the central theme of my debate with former RBI Governor Venkitaramanan (1995), who argued that the RBI's hawkish or tight money policy under his successor Governor Rangarajan, which pushed Government of India bond yields to well over 12%, was killing growth. In my rejoinder to him (Moorthy 1995), I made the case for sticking with this policy: interest rates would come down, which they did a few years later, while growth picked up. Venkitaramanan's arguments were similar to those made in May 2016 by the Member of Parliament Subramanian Swamy against "rising and high interest rate" policy under Governor Rajan, although stated in a dovish way.

Figure 3, taken from my class notes for over a decade, provides robust cross-country evidence for a 25-year period supporting the monetarist paradox. Countries that follow tight money policies, namely those with more independent central banks that aggressively raise rates, have lower policy rates. The most independent central banks of Germany and Switzerland have an index of four while the least independent of Italy has an index of 1.75.[2] Germany and Switzerland have the lowest interest rates as shown in the figure, while Italy's is the highest, close to 10%.

Explaining precisely how and why this Figure 3 holds is outside the scope of this already lengthy review. Algebraically, the monetarist paradox result can be derived by combining the long-run Phillips curve with the Fisher equation for the interest rate (Moorthy, Singh and Dhal 2000), and then equating a high numerical value of central bank independence with a tight money policy, and vice versa. Further, a case study of Subbarao's umpteen baby steps during 2010 and 2011, using simulations based on this model, can be used to explain why tightening moves do not necessarily imply that policy has tightened. All these connected results have been incorporated into a textbook in progress, titled "Foundations of Financial Macroeconomics."

This correlation is not presented in prevailing textbooks, nor have I come across it in the general central bank literature, although the negative correlation between the index of central bank independence and inflation that Alesina and Summers (1993) and earlier Grilli, Masciandaro and Tabellini (1991) established, has been reproduced in many places.[3]

In my opinion, Figure 3 is perhaps the most convincing evidence that can be mustered to persuade the business community that tight money does not harm them, since it ensures lower interest rates. Have Subbarao or other RBI governors, for that matter over decades, shown and then tried to explain such a plot to the former Finance Minister Chidambaram or to the financial community? If that were the case, then I stand corrected. But I have my doubts, and hereby request Chidambaram to respond to this query.

Overstating the case for low inflation: In trying to explain the perennial, global conflict between central bankers and governments, Subbarao starts by discussing the classic Phillips (1958) paper (incidentally on p 58) on inflation and unemployment in the United Kingdom (UK). He then uses Friedman's (1968) extension of Phillips' analysis to the long run, to argue that it is bad policy for central banks to promote growth. Unfortunately, "…the government remained unpersuaded or chose to be unpersuaded" (p 58).

According to me, he overstates the rationale for central banks to pursue inflation and ignore growth by promising too much, "in the long run, inflation takes a heavy toll on growth (p 58)," and thereby inviting a sceptical response. At high levels this is true (say above 20% inflation). When Brazil's inflation dropped from triple digits to single digits in the 1990s, there was a sustained rise in growth. But at lower inflation rates, from the range of 10% down to say 2%, there is no long run trade-off between inflation and growth. Between 1979 and 1989, average inflation in 20 Organisation for Economic Co-operation and Development (OECD) countries came down by about five percentage points, from 13.7% to 8.7%, while average GDP growth fell by just 0.2 percentage points to 3.8%. This is robust evidence of no long-run trade-off between them.

More detailed evidence and the rationale for pursuing only low inflation and ignoring growth, and other related considerations are outlined in Moorthy (forthcoming). Without getting into much detail, the RBI's time series econometric exercises over the years, claiming that up to a certain rate inflation promotes growth and then reduces it, are not robust. Earlier their studies claimed, when there was tolerance for higher inflation, that 6% was the growth maximising inflation rate; now 4% is the inflation target. Subbarao's, and more generally the RBI's, justification for a low inflation target is based on this supposedly U-shaped relationship.

Instead, the case for keeping inflation low should be based on a macroeconomic welfare (MEW) function based on inflation and growth. Inflation has various real costs and deleterious effects, some hidden, that may not show up in GDP but will reduce MEW. A 1% rise in growth raises MEW a lot, while a 1% rise in inflation reduces it only a little, especially in developed countries. There are short-run benefits of accepting say 2% more inflation for, say, a 1% rise in growth. But since in the long run growth cannot be affected by the central bank, and only the inflation remains, monetary policy might as well lower inflation and thus raise MEW.

The RBI has vast resources at its disposal to communicate the rationale for its policies. Apart from its many press conferences, publications, website, and communication and research departments, there are various research institutes and centres and academic positions that it funds. What is the concrete contribution, as an input to economic policy, of all this expenditure? Over, say, the last decade, what has it effectively done by way of raising macroeconomic literacy and explaining clearly to the finance ministry and others as to why monetary policy should focus only on inflation? Has it brought out brochures or published answers to FAQs (frequently asked questions) to explain and justify its policies?

5 RBI Autonomy Must Come with Scrutiny

How to protect RBI autonomy while simultaneously ensuring accountability is a wide-ranging and perennial issue. Such dilemmas extend far beyond central banks to many other organisations. While a complete discussion is beyond the scope of this review, some vital facts and conclusions are in order.

With regard to ensuring autonomy in connection with the interest rate decision, in my opinion, it is best to give the governor a single, strictly non-renewable, non-dismissible (barring health and similar rare circumstances) term. This will make it more likely that the governor will resist pressure from the government to cut interest rates, since there is no chance of reappointment. While longer is definitely better, non-renewability is far more important. Suppose the term was say N years but non-renewable. In this case, inflation would tend to be lower than with the same initial term of N years but renewable, leading to an average longer term, as a result of some extensions or reappointments.

The experience of the US during the 1970s when the legendary Arthur Burns was the Federal Reserve chairman is noteworthy. Prior to that he was a Columbia university professor, Milton Friedman's teacher, and pioneer in the National Bureau of Economic Research's dating of business cycles. Burns eased monetary policy to get the then US President Nixon re-elected in November 1972. His initial term was from February 1970 to February 1974, and he was rewarded with a second term up to February 1978. The result was the severe stagflation of the 1970s, mistakenly attributed to the Organization of the Petroleum Exporting Countries (OPEC) supply shocks. Wide-ranging evidence on the 1970s stagflation is provided in Chapter 5 of Moorthy (forthcoming).

Those with some knowledge of the US monetary policy and its history are well aware of Burns' capitulation to Nixon, and documented long ago by Pierce (1979) among others. The strongest evidence about the various pressures Burns was subject to, based on transcripts of tape records of Nixon's conversations, is in Abrams (2006). The decisions of Alan Greenspan who had three reappointments (1987–2006) as Federal Reserve Chairman contributed significantly to the global financial crisis of 2008.

More recently, Brazil's central bank Governor Alexandre Tombini was appointed in January 2011 by the then President Dilma Roussef with a promise of operational autonomy. Nevertheless, he cut the Selic (policy) rate between August 2011 and October 2012 from 12.5% to 7.25% and later had to reverse course when inflation went out of control. While he served five years up to December 2015, in Brazil the governor does not have a fixed term and can be removed by the president at any time.[4]

Even more recently, shortly after Subramanian Swamy's letter to the Prime Minister Narendra Modi in September 2015 attacking the RBI Governor Rajan was publicised, the RBI cut rates by a huge 50 basis points on 29 September 2015, although the market was not even sure of a 25 basis point cut at the time, in light of the inflation target.

In my opinion, a strictly non-renewable term would facilitate lower inflation in India. That is the most important change to the RBI that is called for. The suggestion applies to other central bank heads as well. Too much effort by all concerned (the finance ministry, RBI, and Parliament) has gone into legislating and assessing an inflation targeting regime as a framework for policy and into the formation of various committees. Too much effort by the media and economists has gone into analysing these developments. Too much effort by academic economists has gone into analysing monetary policy rules (money growth rule, nominal gross national product [GNP] rule, Taylor rule, direct inflation rule, etc) instead of evaluating appointment rules and criteria.

As for ensuring accountability, for complex and high level positions it is hard to assess performance, and a central bank governor's job is as high level and complex as it gets. Instead, to begin with, there needs to be far more professional scrutiny of the RBI's decisions and its high level appointments. While the Securities and Exchange Board of India has been under the scanner for long, thanks to some valuable investigative journalism, there has been very little critical or analytical investigation of the RBI by the media, barring a few instances. Better budgetary scrutiny is also called for.

To return to Subbarao's performance, it bears pointing out that his monetary laxity during 2012 came after he was given an extension in September 2011. It could, therefore, be attributed to improper decisions rather than buckling to pressures to get reappointed. He states in his last chapter that he was not interested in a second extension.

To summarise, one cannot help but recall Shobha De's book *Selective Memory*. While reviewing the book, Mallika Sarabhai wrote, "Shobha says it from the heart—but says very little." The same can be said about the book by Subbarao and hence the title of this review article, "Selective Memoirs."

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NOTES

1 A joke of his that all central bankers could use is that he decides upon interest rates with a coin toss: heads, I raise them, tails, I cut them, and if the coin falls on its edge, then the Finance Minister decides!

2 The policy rates for the UK (with an index of 2, just above Italy) for the full 25 years were not available, and so it was left out of the sample. Including it, based on 16 years of data, with average rate about 9.60%, raises the fit of the regression.

3 This figure was sent to accompany my article on the anniversary of Milton Friedman's demise, from which the citation at the start of this review has been taken. But it was not included in the 2007 article.

4 As an aside, some discussion of Tombini's travails was warranted, given many similarities between Brazil and India. But this is missing from this book. By contrast, there are umpteen references to Greenspan and Bernanke and to their memoirs.

REFERENCES

Abrams, Burton A (2006): "How Richard Nixon Pressured Arthur Burns: Evidence from the Nixon Tapes," *The Journal of Economic Perspectives,* Vol 20, No 4, pp 177–88.

Alesina, Alberto and Lawrence H Summers (1993): "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence," *Journal of Money, Credit and Banking,* Vol 25, No 2, pp 151–62.

Balakrishnan, Pulapre (2011): "Monetary Policy Not the Answer to Inflation," *Hindu Business Line*, 2 October.

Basu, Debashis (2016): "Tales from Mint Road," *Business Standard*, 25 July.

Bose, Sukanya (2012): "Inflation: Sources, Challenges and Policy Options," *Economic & Political Weekly*, Vol 47, No 3, pp 27–30.

Friedman, Milton and Anna Jacobson Schwartz (1963): *A Monetary History of the United States: 1857-1960*, Princeton University Press.

Friedman, Milton (1968): "The Role of Monetary Policy," *The American Economic Review,* Vol 58, No 1, pp 1–17.

Ghosh, Soumya Kanti and Sakshi Arora (2013): "Don't Blame MSP Alone," *Financial Express*, 2 April.

Gokarn, Subir (2010): "The Price of Protein," *RBI Bulletin*, 12 November.

Grilli, Vittorio, Donato Masciandaro and Guido Tabellini (1991): "Political and Monetary Institutions and Public Financial Policies in the Industrial Countries," *Economic Policy,* Vol 6, No 13, pp 341–92.

Kolhar, Shrikant (2013): "Inflation Measurement for Policy: Analytical Issues and Application to India," IIM Bangalore FPM Thesis, E37869, DIS.FPM-IIMB.P14-01.

Mohanty, Deepak (2010): "Inflation Dynamics in India: Issues and Concerns," *RBI Speeches*, 4 March.

Moorthy, Vivek (1995): "Why Gentlemen Still Prefer Bonds," *Economic Times*, 4 September.

— (2005): "Letter to Milton Friedman and His Reply," December, http://www.economicsperiscope.com/LetterMFriedman.pdf.

— (2007): "Legacy of Friedman versus Keynes," *Hindu Business Line*, 16 November.

— (2008): "As the Governor's Term Ends," *Mint*, 5 September.

— (2009): "How Inflation Targeting Evolved," *Mint*, 27 October.

— (2012a): "The Rudderless Bank of India," *Financial Express*, 12 March.

— (2012b): "Reorienting India's Financial System: In Conversation with Dr Duvvuri Subbarao", Governor, Reserve Bank of India, *IIMB Management Review*, Vol 24, No 2, pp 85–94.

— (2014): "Issues and Challenges in Monetary Policy: An Assessment of the Urjit Patel Committee Report," presentation at RBI Bengaluru, 20 October, http://www.economicsperiscope.com/InflationTargetting.pdf.

— (Forthcoming): *Applied Macroeconomics: Employment, Growth and Inflation*, New Delhi: IK International Publishing House.

Moorthy, Vivek, Bhupal Singh and Sarat Dhal (2000): "Bond Financing and Debt Stability: Theoretical Issues and Empirical Analysis for India," RBI DRG, Study No 19, June.

Moorthy, Vivek and Shrikant Kolhar (2011): "Rising Food Inflation and India's Monetary Policy," *Indian Growth and Development Review,* Vol 4, No 1, pp 73–94.

Nagaraj, R (2015): "Seeds of Doubt on New GDP Numbers," *Economic & Political Weekly*, Vol 50, No 13.

Patra, Michael Debabrata, Jeevan Kumar Khundrakpam and Asish Thomas George (2014): "Post-Global Crisis Inflation Dynamics in India: What Has Changed?," *India Policy Forum*, Vol 10, No 1.

Phillips, Alban W (1958): "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861–1957," *Economica,* Vol 25, No 100, pp 283–99.

Pierce, James L (1979): "The Political Economy of Arthur Burns," *The Journal of Finance*, Papers and Proceedings, Vol 34, No 2, May, pp 485–96.

Rakshit, Mihir (2011): "Inflation and Relative Prices in India 2006–10: Some Analytics and Policy Issues," *Economic & Political Weekly*, Vol 46, No 16, pp 41–54.

Sharma, Ruchir (2016): "*The Rise and Fall of Nations: Ten Rules of Change in the Post-Crisis,*" Penguin, UK.

Subbarao, Duvvuri (2009): Governor's Inaugural Address at the Third Annual Statistics Day Conference of the Reserve Bank of India, Mumbai, 2 July.

Venkitaramanan, S (1995): "Should We Prefer Bonds or Money?," *Economic Times*, 9 August.