Chapter-III

Theoretical Base for Fiscal Policy Rules and it’s Implication in India

3.1. Introduction
Two stands of literature set out the basic reasons why external constraints on growth of fiscal deficits such as through fiscal policy rules may be required. One line of argument is mainstream approach and the other form of argument is the political economy approach.

3.2. Mainstream Theoretical Perspectives: While the views of economists differ, the circumstances under which debt, and its increment, i.e. fiscal deficit become unsustainable. There are three theoretical perspectives, namely, neo-classical, Ricardian and Keynesian. Depending on the circumstances and the relevant theoretical perspectives, fiscal deficit may be bad, indifferent or good. Neo-classical view consider fiscal deficits detrimental to investment and growth, while in Keynesian paradigm, it constitute a key policy prescription and theorist persuaded by Ricardian equivalence assert that fiscal deficits do not really matter except for smoothening the path of adjustment to expenditure or revenue shocks.

3.2.1. The Neo Classical View: Neo classical literatures highlight the adverse impact of unsustainable debt and deficits. The usability of fiscal policy as a tool of countercyclical intervention is also compromised when fiscal deficit is high and structural in nature. In the neo classical perspective fiscal deficit will have a detrimental effect on growth if the reduction in government saving (or an increase in government dis-Saving) which is equivalent to revenue deficit is not fully offset by rise in private saving. Besides affecting the overall saving rate, when there is a net fall in the saving rate, there will be pressure on interest rate which may crowd out private investment and therefore adversely affect growth. The neo classical economists assume that markets clear so that full employment of resources is attend. In this paradigm, fiscal deficits raise lifetime consumption by
shifting taxes to future generations. If economies resources are fully employed, increased consumption implies decreased saving in a closed economy. In an open economy, real interest rates and investment may remain unaffected, but the fall in national saving is financed by higher external borrowing accompanied by an appreciation of the domestic currency and fall in exports. In both cases, net national saving falls and consumption rises accompanied by some combination of fall in investment and exports. The neo-classical paradigm assumes that the consumption of each individual is determined as the solution to an inter-temporal optimization problem where, both borrowing and lending are permitted at the market rate of interest. It also assumes that individuals have finite life spans where each consumer belongs to a specific generation and life spans of successive generations overlap.

3.2.2. Keynesian View: In the mainstream fiscal literature, the Keynesian views give strong argument for high level of fiscal deficit relative to GDP. Keynesian view argues, particularly when there are unemployed resources, that an increase in autonomous government expenditure, whether investment or consumption, financed by borrowing would cause output to expand through a multiplier process. The traditional Keynesian framework does not distinguish between alternative uses of the fiscal deficit as between government consumption or investment expenditure, nor does it distinguish between alternative sources of financing the fiscal deficit through monetization or external or internal borrowing. Although there is no explicit budget constraint in the analysis by Keynes, subsequent developments that do incorporate the budget constraint show that, as a result, some of the Keynesian conclusion is weakened. Subsequent elaboration of the Keynesian paradigms envisage that the multiplier-based expansion of output leads to a rise in the demand for money, and if money supply is fixed and deficit is bond financed, interest rate would rise partially offsetting the multiplier effect. However, the Keynesians argue that increased aggregate demand enhances the private investment and leads to higher investment at any given rate of interest. The effect of a rise in interest rate may thus be more neutralized by the increased profitability of investment. Keynesian argue that deficits may stimulate saving and investment even if interest rate rises, primarily because of the employment of unutilized resources. However, at full employment, deficit
would leads to crowd out even in the Keynesian paradigm. Unlike loanable funds theory, Keynesian paradigm rules out any direct effect on interest rate of borrowing by the government.

The standard keynesian argument is that a fiscal contraction has a temporary contractionary effect through an aggregate demand channel, in a model with sticky prices and wages. A standard multiplier effect implies that spending cuts are more recessionary than tax increases.

3.2.3. Ricardian Equivalence Perspective: In Ricardian equivalence, fiscal deficits are viewed as neutral in terms of their impact on growth. The financing of budget by deficits amounts only postponement of taxes. The deficit in any current period is exactly equal to the present value of future taxation that is required to be pay off the increment to debt resulting from the deficit. Since government spending must be paid for, whether now or latter, the present value of spending must be equal to present value of tax and non tax revenues. If household spending decisions are based on the present value of their incomes that takes into account the present value of their future tax liabilities, fiscal deficits would not have an impact on aggregate demand.

The relevance and applicability of these alternative analytical frameworks depend on the empirical characteristics of a given economy as also the initial conditions. It depends particularly on the saving behaviour of the household sector. If consumers are myopic or liquidity constrained, aggregate consumption becomes very sensitive to changes in disposable incomes, and the Keynesian prescriptions may be more applicable. If individuals are rational, fully informed and motivated by altruistic behaviour, Ricardian equivalence may have some validity. In general it has been argued that short term demand management, Keynesian prescriptions apply and for long term growth the neo classical view should be considered relevant. The critical difference in these alternative perspectives comes from how the saving of private sector is affected by the existence of fiscal deficit of a given order. If fiscal deficits are meant to largely finance revenue deficits, there would be a fall in government savings. To some extent, this fall may be
offset by an increase in the private savings as their wealth in terms of holding government bonds increases with an increase in fiscal deficits. The latter effect is often much smaller than the former effect, and there is a fall in overall saving rate.

3.3. Political Economy Literature
The main argument for fiscal rule is the bias towards budget deficits and towards excess public spending. The attraction of rules is that by constraining policymakers, they will reduce or eliminate the tendency towards budget deficits.

Alesina and Perotti (1995) classified three types of political economy models of fiscal policy such as, model based on fiscal illusion with optimistic and naïve voters, models of debt as a strategic variable and models of distributional conflict.

3.3.1. Models based on Fiscal Illusion with Opportunistic and Naive Voters
This type of model is in spirit of public choice literature. The key assumptions are that policymakers are opportunistic (that is they are care about electoral prospects and not directly about private agents welfare). There is the electoral motive towards high spending in election years and in this way fiscal deficit increases. In many countries incumbents appear to increase government spending before elections in order to improve their re-election prospects. Fiscal manipulation before elections is especially strong in developing countries. Early theories of fiscal choices based on political considerations highlight the manipulation of government expenditures by policymakers trying to get re-elected (for instance, Buchanan and Wagner, 1977). The basic argument is that voters value public spending but consistently underestimate its costs in terms of the tax burden, especially if those costs are postponed. A classic argument is that individuals favor expenditures, but do not want to pay for them. Wagner (1976) and Buchanan and Wagner (1977) have formalized this point in the notion of a “deficit illusion,” whereby voters do not understand the government’s intertemporal budget. Faced with deficit-financed expenditure, voters overestimate the value of the expenditure side and underestimate the future tax burden. Voters suffer from “fiscal illusion” both in considering the size of government and in analyzing budget deficits. Opportunistic incumbents take advantage of
this misperception, running deficits to win the favor of voters. According to Ricardian equivalence notwithstanding, voters may not grasp fully the mechanics of the intertemporal budget constraint by which today’s deficits are inevitably linked to tomorrow taxes and noninterest spending capacity. This lack of understanding has two effects. First a rational policy maker may find it useful to use fiscal expansions as a way to increase reelection chances. Second, voter’s myopia and an incumbents’ willingness to stay in office may cause undue delays in much needed fiscal adjustments. Voters do not punish politicians for fiscal irresponsible behaviour. Thus voters support policy makers who provide high levels of deficit financed expenditures, and do not favour fiscally conservative politicians. This generates incentives for fiscal irresponsibility. It also generates asymmetric stabilization policies, as policymakers are willing to run deficits to fight a recession but are not willing to run surpluses in good times. Hence, fiscal illusion is not simply an empirical statement about misperceptions about government size, but a hypothesis about how policymakers may succeed in deceiving voters about the true size of government. It is argued that voters measure the size of government by their tax bill and policymakers can disguise taxes so that voters underestimate the true tax bill. One explanation of a persistent deficit is in terms of misperceptions about deficits.

A closely related argument has been made by the literature on political business cycles (Nordhaus, 1975), where the opportunistic manipulation of economic policy is tied to election times. Individuals are assumed to vote on the basis of recent macroeconomic outcomes, and public spending increases and tax cuts are assumed to be expansionary. Policymakers then run deficits before elections to stimulate the economy. Elections are followed by expenditure cuts engineered to “cool down” the economy.

A political process argument concerns bureaucratic behavior. Niskanen (1971) argues that the behavior of bureaucrats may be explained by budget maximization. They try to maximize their budgets since a higher budget translates into both higher salaries and more power. He views bureaucratic behavior as a principal-agent problem under asymmetric information. Fiscal rules are thus meant to try to contain the political pressures that yield such a bias (Drazen, 2002).
Rogoff (1990) and Rogoff and Sibert (1988) argue that not only voters cannot fully understand the government budget, but also that they are repeatedly fooled by the politicians. Voters have only imperfect information about competence level of each politician. They extract information about the incumbent running for reelection from his past fiscal choices. An incumbent who has provided more government programmes is inferred to be more competent, and is thus supported by voters. This creates incentives for politicians to run deficits to finance larger expenditures.

This early literature has been criticized because of the assumption that voters make consistent mistakes (Alesina and Perotti, 1995; Drazen, 2000). The notion of fiscal illusion implies not only that voters cannot fully understand the government budget, but also that they are repeatedly fooled by politicians. The opportunistic political business cycles literature, for instance, exhibits the unsatisfactory feature that voters who have gone through one electoral cycle do not learn from previous experience that pre-election expansions will be followed by contractions. As a result, expansions repeatedly lead voters to support the incumbent, even though there is every reason to expect that they will be followed by a period of poor macroeconomic performance. Alesina and Perroti (1995), Drazen (2000), and others provide empirical evidence to contend that rational and informed voters can not be repeatedly fooled by the opportunistic politician.

One important condition to explain the rational manipulation of fiscal deficits is that voters must be unable to observe all the details of the budgets. If they knew the cost of all projects undertaken by the government, they would clearly infer the incumbent’s competence. Shi and Svensson (2006) show that opportunistic deficits may also arise if voters observe all government programmes, but at least some individual remain uninformed about the fiscal balance. In any case, the accumulation of debt arises from opportunistic behaviour of politicians depends on how transparent the budget is: less transparency leads to larger opportunistic deficits (Alt and Lassen, 2006). The ability of voters to understand the government’s budget depends on factors such as the government’s accounting practices, media development, and the sophistication of voters.
Two empirical implications arise from this literature. First, debt accumulation should be larger in contexts with less budget transparency. Second, electoral periods could be times of high public expenditures and deficits, but only in contexts where fiscal outcomes cannot be transparently observed by voters. There is however a large body of empirical literature that does not support the hypothesis of opportunistic use of deficits during election times. For example, Persson and Tabellini (2003) find no pre-electoral change of government expenditure or surplus in a large sample of both developed and less developed economies. Similar findings are reported by Brender and Drazen (2005a) show that these findings reflect the experience of “new democracies” in the first few years after their transition to democratic regimes. They interpret this finding as an indication that political deficit cycles emerge only in contexts where voters and the media have not yet developed the ability to efficiently monitor fiscal policy. On the other hand, Schuknecht (1994) Shi and and Shi and Svensson (2006) find pre-electoral deteriorations of fiscal balances and increases of public expenditure in developing countries. He tested a similar hypothesis by letting the effect of election years on fiscal outcomes vary with a measure of the share of voters who are well informed. They find the negative effect of election times on the deficit is weaker for higher shares of informed voters.

Alt and Lassen (2006) construct an index of fiscal transparency for 19 OECD countries during the 1990s, using survey responses from those countries’ budget directors. They study whether the transparency index is systematically related to the levels of deficit and debt in those countries. Their findings suggest that more transparency leads to lower deficits and debt levels, even after controlling for a variety of political and economic factors, and treating transparency as potentially endogenous to fiscal outcomes.

Other studies analyze the effect of budget institutions on debt accumulation. Though not restricted to fiscal transparency, measures of the quality of budget institutions do account for the transparency of procedures relating to both the drafting and the implementation of the budget. For the case of Latin America, Alesina et al. (1999) and Stein et al. (1998) use an index of budget institutions that, besides measuring other important characteristics of the budgetary process, captures transparency by considering the ability of the
government to acquire debt through decentralized agencies. They study the relationship between budget institutions and the government’s deficit for 20 Latin American countries during the 1980s and early 1990s, and find that better budget institutions have been related to lower deficits. Similar findings are reported by Von Hagen (1992) for eight European countries. His measure of the quality of institutions includes indicators of budget transparency, based on survey responses by budget officials, as well as on objective measures such as the existence of “special funds” in the budget.

In short, empirical evidence seems to support the main predictions of models based on opportunistic manipulation of fiscal policy. First, debt accumulation is related to the degree of transparency of the budget. Second, while there appear to be electoral increases in fiscal deficits and government expenditures, these are limited to countries where one could argue that voters are less successful in monitoring fiscal outcomes. When the government’s fiscal choices are not transparent to the public, however, opportunistic incentives may lead to high deficits because highly valued spending on development projects may be paid for by acquiring debt that is not observed by voters.

There are certain literatures which are not so favorable toward the traditional assumption that voters prefer high-spending governments. The most traditional view of the political effect of fiscal decisions has been that voters penalize fiscal adjustments, either because they are contractionary or because voters derive utility from high expected levels of government spending. Empirical findings suggest both that fiscal adjustments are not necessarily contraction and that incumbents who have adopted loose fiscal policies do not receive greater voter support than fiscally conservative incumbents. If anything, the opposite seems true. Alesina et al. (1998) examine the behavior of various macroeconomic indicators before, during, and after episodes of fiscal adjustment in 19 OECD countries during the 1960-1995 periods. They find that whether or not tight fiscal policies are contractionary depends in turn on whether the adjustment is successful in achieving a persistent deficit reduction. Successful episodes of fiscal adjustment are not followed by deteriorations of the macroeconomic environment, whereas unsuccessful episodes frequently are. A related finding is reported by Gupta et al. (2003), who study a
group of 39 low-income countries during the 1990s and show that strong fiscal balances are associated with high growth, even in the short run. Interestingly, the success of an episode of fiscal adjustment depends on the composition of the adjustment, as well as on the initial level of debt. These studies find that adjustments based on expenditure contractions mainly reductions of transfers and wage payments are successful; those relying on tax increases are contractionary and fail to achieve persistent deficit reductions. Moreover, fiscal adjustments are more likely to succeed if the initial level of debt is high, a result that is consistent with the models of delayed adjustment we review below. Findings regarding the fiscal preferences of voters are no less surprising. Based on election outcomes and opinion polls for 19 OECD countries, Alesina et al. (1998) find that governments that follow tight policies are no more likely to be replaced than others, nor do they lose popularity. If anything, the opposite holds: after sharp fiscal adjustments based mostly on current spending cuts, the probability that an incumbent remains in power increases. Similarly, various country studies for both developed and developing countries show that the share of votes received by the incumbent’s party decreases with the level of government spending and/or the fiscal deficit observed before the election. Findings in this direction are reported by Eslava (2006) and Drazen and Eslava (2005) for Colombia, Brender (2003) for Israel, and Peltzman (1992) for the United States. Voters’ fiscal conservatism, however, is not independent of the composition of government spending. Using data on the elections of mayors in Israel, Brender (2003) finds that, although voters penalize election-year increases in deficits, they reward high expenditure in development projects. Eslava (2006) and Drazen and Eslava (2005) show that the share of votes received by an incumbent party in Colombian local elections increases with capital expenditures (including development projects) observed before the election, even though it decreases with the fiscal deficit. Indirect evidence along the same lines is provided by several studies on pre-electoral changes in the composition of government spending, which are likely to reflect incumbents’ beliefs about the political effects of their fiscal choices. Schuknecht (1994) finds that, prior to elections, capital expenditures rise as a share of both GDP and overall expenditure in his sample of 35 developing countries. Kneebone and McKenzie (2001) find no pre-electoral increases in aggregate spending for Canadian provinces, but do find that spending in social services, industrial
development, and health actually increase before elections. Very similar findings are reported for Mexico by González (2002), who also finds that other categories of spending, such as current transfers, contract prior to elections. Drazen and Eslava (2005) for Colombia and Khemani (2004) for India, find that, local government expenditures shift from current categories of spending toward investment categories before the elections. In Brender’s (2003) study, the negative effect of deficits on incumbents’ re-election probabilities became evident only in the latter part of his sample period, after the adoption of modern accounting practices and a greater media effort to monitor fiscal policy. Brender and Drazen (2005b), using a large panel of countries, find that deficits over the previous three years reduce an incumbent’s re-election chances, but only in established democracies.

Moreover, review shows the evidence that electoral deficits arise only in the context of relatively young democracies, suggesting that politicians in more developed political environments realize increased deficits will not be rewarded. This evidence suggests that, contrary to conventional wisdom, voters do not prefer high spending governments. They show preferences for high spending on specific items, such as development and infrastructure projects, but seem to be quite aware of the costs of overall high spending. In particular, they support governments that engage in successful and stringent fiscal adjustments when these are necessary, and penalize governments that run large deficits. When the government’s fiscal choices are not transparent to the public, however, opportunistic incentives may lead to high deficits because highly valued spending on development projects may be paid for by acquiring debt that is not observed by voters.

3.3.2. Models of Debt as a Strategic Variable

It emphasizes that stock of debt has an effect on policy choices of future government and can therefore be used to constrain it action (Alesina and Tabelini, 1990). In this context, a deficit bias can arise because different political parties, which face electoral uncertainties, have conflicting spending priorities. These factors imply that the current government does not fully internalize the cost of running budget deficit today, because the future spending that is going to be compressed may reflect the priorities of a different
government. This deficit bias is increasing in the degree of political polarization (reflected in the difference between spending priorities) and in the budget of electoral uncertainty. In this class of model, priorities before an election would agree on abandoned budget rule, but after the election the party in power prefers discretion.

3.3.3. Models of Distributional Conflict

A high level of fiscal deficits is the result of distributional conflicts between policymakers or between groups of voters. Two lines of research are considered. First the strategic use of deficits by policy makers who fear be replaced by someone with different fiscal preferences. Second, budget deficits based on the fight of groups of voters with conflicting interests for a common pool of government revenues. In this discussion the argument that distributive conflicts may explain delays in undertaking necessary fiscal adjustments. It shows that how conflict between groups (represented by parties, interest, groups, and coalition members) can delay the adoption of necessary policy measures, such as for example, spending cuts or tax increase to stem growth in public indebtedness caused by exogenous factors (Alesina and Drazen, 1991), Drazen and Grilli, (1993)). Delays occur because groups can not agree on burden sharing for the necessary fiscal adjustment. These models predict that fragmented or divided government and polarized societies would have more difficulty implementing fiscal adjustment than single party governments and less polarized societies. Evidence presented in Roubini and sachs (1989) and Grilli, Masciiandaro and Tabellini (1991) for OECD countries and by Poterba (1994) and Alt and Lowry (1994) for US states is consistent with these prediction.

In this regard literatures explain fiscal deficits are the result of conflicts of interests: conflicts between politicians with heterogeneous preferences, or conflict between different social groups over the distribution of resources. Three sub-stands of these literatures are:

(a) Policymakers strategically use deficits to tie the hands of successors with different preferences.
(b) The adoption of fiscal adjustment is strategically delayed with distributional consequences
(c) Common pool problems where the competition among different groups over the distribution of government revenues leads to deficits.

**Distributive Conflicts between Policy Makers:** If different politicians have potentially different fiscal preferences for instance, reflecting the heterogeneous preferences of voters in citizen-candidate framework incumbent officials may have incentives to run deficits to tie the hands of their successors. The argument is based on the fact that current budget deficits impose costs in terms of either lower future public spending or higher future tax collections.

The model has three basic implications: 1) officials from different parties, who are assumed to have heterogeneous preferences, spend on different types of public goods, 2) budget deficits increase with the probability that the government will be replaced, and 3) deficits increase with the level of polarization between the different parties, since greater polarization implies larger differences between the preferences of the incumbent and those of his potential replacement. Alesina and Tabellini (1990) present a model where politicians have heterogeneous preferences in terms of the composition of public spending. An incumbent who faces the risk of being replaced by someone of the opposing “party” has incentives to run a deficit and spend the resources on the types of public goods he prefers. If the incumbent is in fact replaced by an opponent, the cost of the deficit (a future spending contraction) will fall disproportionately on the goods the current incumbent values less.

A related argument arises when politicians differ in their preferences regarding the optimal size of the government (Persson and Svensson, 1989). If policy maker is faced with a large probability of being replaced in office, low-spending incumbents may run deficits (mainly by cutting taxes), thereby increasing government indebtedness in order to force their successors into low expenditure levels. High-spending incumbents would do the opposite. The model thus predicts that conservative incumbents will run deficits when
they expect to be replaced, while liberal incumbents will run surpluses in similar circumstances. The differences between the choices of parties with diverging ideologies should be starker in more polarized contexts, where the preferences of opposing parties are further apart.

The last decade has witnessed several attempts to test the empirical relevance of the theoretical arguments outlined above. There are studies that examine large samples of countries and studies that examine U.S. states; neither has found consistent evidence in favor of either model of strategic use of deficits. Lambertini (2003), for instance, studies two large data panels: U.S. states between 1960 and 1995, and a sample of 16 OECD countries for the 1960-1992 periods. She does not find any significant effect of the probability of being re-elected on the budget surplus, nor differences between different parties in terms of either defense spending or budget surpluses. Similar findings are reported for samples of industrial countries by Grilli et al. (1991) and by Franzese (2000), and for U.S. states by Crain and Tollison (1993).

It has been recently argued, however, that the lack of evidence in support of strategic models of the deficit is due to the use of data on countries or states faced with widely different political, legal, and economic environments (Sutter, 2003; Pettersson-Lidbom, 2001). As it is difficult to appropriately control for these sources of variability, attempts to discover strategic patterns in the deficit data may be affected by the presence of opposing effects not accounted for. Pettersson-Lidbom (2001) tries to overcome this difficulty by examining the patterns of debt accumulation by Swedish local governments between 1974 and 1994. The advantage of these data lies in the fact that Swedish localities are all subject to the same institutional and constitutional framework. The study uses a two-stage procedure, where the first stage fits a probit model on the probability of being defeated in the next election, and introduces several controls. The author finds evidence that supports the Persson-Svensson theory of strategic debts: the amount of debt accumulated by right-wing government increases with its probability of electoral defeat, while the opposite is true for left-wing governments. His finding, in turn, contradicts the
Alesina-Tabellini model, which predicts that debt accumulation by any government should increase with the probability of defeat.

An interesting experimental study also presents evidence that the strategic use of deficits may be masked when widely different subjects are studied. Sutter’s (2003) experiment presents pairs of individuals with the decision to allocate a given budget over two time periods, and over two goods in each period. Choices are made by one of the two individuals, and each faces a positive probability in each period of being the one making the choices. The experiment assigns payoffs to each combination of the two goods, defining the preferences of the two agents over the allocation of the budget, as in Alesina and Tabellini (1990). Greater polarization can thus be defined as more heterogeneous preferences between the two individuals. The author presents each pair of individuals with the same experiment in several trials, varying the level of polarization and the probability of “re-electing” the first period decision maker in each trial. He finds that spending in the first period (and thus the “deficit”) rises with a higher degree of polarization and a lower probability of re-election, supporting the Alesina-Tabellini model. However, when the experiment is conducted with different pairs of individuals and with only one trial for each pair, there is no systematic effect on the deficit of letting polarization and the probability of re-election vary across pairs. The author concludes that, while deficits are indeed used strategically, this phenomenon is hard to identify in the data if other sources of heterogeneity are not appropriately controlled for.

**Distributive Conflicts between Groups of Voters:** Heterogeneous interests across groups of voters have been put forward as a reason for potentially pervasive deficits. The basic argument was first presented by Weingast et al. (1981) when explaining the fiscal consequences of having geographically disperse interests influence the budget. The problem arises if legislators making budget decisions represent geographic units interested in different government-funded projects, with government revenues being centralized. The benefits of a given government project are then concentrated geographically, while its costs are shared by all districts. The consequence is that each district internalizes the full benefit of specific projects, but only part of the cost, and this
result in over-provision of government projects. The size of the budget, and thus the deficit, increases with the number of districts represented in the government, termed government “fragmentation.”

Similar common-pool problems have been captured by more recent theoretical developments, and have been used to explain the pro-cyclicality of fiscal policy in less developed economies. Tornell and Lane (1998) and Talvi and Végh (1996, 2005) argue that the additional fiscal resources available during booms generate a more intense fight among the different groups for the common pool of resources (a “voracity effect”). As a result, government deficits grow in good times. Alesina and Tabellini (2005), meanwhile, relate procyclicality to voters’ efforts to avoid having the extra revenues generated by the boom be handed out to interest groups fighting for those resources (or appropriated by the government). A central assumption is that there are two fiscal outcomes voters cannot perfectly monitor: the amount of “rents” captured by the incumbent or the interest groups, and the amount of fiscal resources generated by the boom. When a boom is observed, therefore, voters demand more public spending on productive projects to restrain the incumbent’s ability to appropriate any extra resources. Voters’ demands create a deficit bias during good times.

Why would these models be particularly appropriate for less-developed economies (which are the ones exhibiting pro-cyclical fiscal policy)? Two reasons are put forward. First, the greater volatility of the macroeconomic environment exhibited by those economies implies that booms are associated with particularly large and short-lived extra revenues. These characteristics imply large incentives to fight for those extra resources (Talvi and Végh, 1996). Second, the model in Alesina and Tabellini (2005) suggests that the pro-cyclicality of the deficit is negatively associated with the budget’s transparency, and is positively associated with the level of corruption. In a sample of 87 countries between 1960 and 1999, the authors show that pro-cyclicality and corruption are indeed positively correlated, but only for democracies. These findings are consistent with their theoretical arguments. It remains to be shown that less developed economies have less
transparent budget institutions, or that developing economies only exhibit procyclical fiscal policy when voters face great difficulties understanding the budget.

The bias is stronger the more the decentralized the decision system is because of the existence of common pool problem (every body has pay taxes, but only specific ministries and constituents benefits from the spending). Kontoupoulos and Perotti (1999) present the evidence that countries with a larger number of spending ministers tends to have higher public spending. Fragmentation, it is argued (e.g., Stein et al 1998) is positively related to the number of seats representing each district in legislature, the effective number of parties participating in the government, and the lack of power of the government over the legislature. Coalition governments and proportional representation systems are also related to more fragmentation. Spending decisions within a government coalition, implying that control on spending is more difficult the larger the number of parties in the coalition. Empirical findings seem to confirm that electoral systems that results in more political cohesion and stability generate more fiscal discipline. The results are less supportive of a systematic relationship between left-wing or right-wing parties and greater debt accumulation. Stein et al (1998) examine the relationship between different electoral systems and fiscal performance in a sample of 26 Latin American countries for 1990-95. The degree of fragmentation of electoral systems is measured using district magnitude (the number of seats each district holds in the legislature) and the number of effective parties in the legislature (number of parties weighted by their vote share). The power of government over the legislature is measured by the number of legislative seats held by the government’s party. Results suggest that electoral systems with more proportionality and a larger number of parties, as well as those with less government power over the legislature, produce larger governments, larger deficits, and more pro cyclical fiscal policies.

The literature that explains fiscal deficits based on distributional conflicts has several testable implications. First, the probability of a fiscal adjustment should increase with the initial level of debt. Second, debt accumulation should be positively related with the number of groups or districts that are effectively represented in the process of choosing
the budget. Government fragmentation should thus generate higher deficits. It should also lead to more procyclical fiscal policy, to the extent that distributional conflicts have been suggested as an explanation of procyclical fiscal outcomes. Furthermore, greater fragmentation should also lead to a fiscal adjustment being less likely. On the other hand, models of the strategic use of deficits suggest that more polarization and greater government turnover should generate larger deficits, possibly contingent upon the ideological orientation of the government. An additional implication is that the accumulation of debt may be related to the ideology of the party in power.

Fragmentation has been suggested to be positively related to the number of seats representing each district in the legislature, the effective number of parties participating in the government, and the lack of power of the government over the legislature (Stein et al., 1998). Coalition governments and proportional representation systems are also related to more fragmentation. Polarization, on the other hand, is usually measured in terms of the frequency of change of the party in power, and parliamentary systems are considered more polarized than presidential ones. It is not clear, however, that measures of “fragmentation” are not also capturing “polarization,” and vice versa. Both concepts refer to the process of fiscal policymaking being more subject to distributive conflicts.

To summarize, the findings seem to generally confirm that electoral systems that result in more political cohesion and stability generate more fiscal discipline. The results are less supportive of a systematic relationship between left-wing or right-wing parties and greater debt accumulation. In short, the studies reviewed above seem to support the hypotheses that more fragmented governments and electoral systems lead to more debt accumulation.

3.4. Political Cycles: Some Studies in India

There have been a number of studies in India that have considered the applicability of political determinants of fiscal decisions. Most of these studies have looked at the state level. Some of the studies discussed below are Khemani (2000), Besley and Burgess (2000), and Chaudhuri and Dasgupta (2006).
Khemani studied the effect of state elections in India on two separate policy instruments available to state governments: fiscal policies, namely taxes and spending, and public service delivery, particularly road construction. The inclusion of public services was innovative. The contrast between the effect of elections on taxes and spending on the one hand, and public service delivery on the other, allows her to distinguish between alternate theories explaining the existence of cycles. The Nordhaus-style model of political cycles to woo uninformed and myopic voters predicts populist spending and tax cuts (leading to deficits) just before elections, followed by post-election contraction. The Rogoff model predicts tax cuts, and increases in government consumption spending at the expense of investment spending.

Her findings may be summarized as follows: on the fiscal side, in the year leading to an election, incumbent state governments lower taxes, not on items of mass consumption but instead on a selective base consisting of manufacturers and producers; they increase spending on the capital account, but reduce spending on the current account which consists of various populist subsidies and salaries. She finds that there is no significant effect of elections on the state deficit. Khemani argues that this pattern of evidence is contrary to both the Nordhaus and Rogoff type models. The electoral effects on the composition of taxes and spending are not consistent with a story of populist politics to woo the mass of uninformed voters. The distinction between capital and current spending is directly counter to Rogoff’s prediction.

She finds that state governments significantly increase road construction in the year before elections, without corresponding increases in spending on roads. This election-year increase in the mileage of new roads, even after controlling for spending on roads, indicates that government management of public works improves in election years. The effect on roads is much larger in magnitude than the effect on the fiscal instruments. In her analysis, the cycle is generated by high discounting of the future by politicians in a common agency setting where they are responsive to several different constituencies. She highlights that the big effect of elections is on public service delivery, which requires a
model different from the ones in the received literature that focus on fiscal policy manipulation. There is some evidence for fiscal maneuvering, but it appears to be limited to the extension of political patronage to specific groups, in exchange for support for electioneering.

Besley and Burgess (2000) study the determinants of government responsiveness to its citizens are a key issue in political economy. They develop a model based on the solution of political agency problems. Having a more informed and politically active electorate strengthens incentives for governments to be responsive. This suggests that there is a role both for democratic institutions and the mass media in ensuring that the preferences of citizens are reflected in policy. They show that public food distribution and calamity relief expenditure are greater, controlling for shocks, where governments face greater electoral accountability and where newspaper circulation is highest.

They use data from the sixteen major Indian states for the period 1958 to 1992 to test the implications of the theory. India is home to a large vulnerable population which is regularly buffeted by natural shocks including droughts, floods, earthquakes and cyclones. Over time, measures including public food distribution, calamity relief expenditure and public works projects have been developed to deal with these shocks. In India, popularly elected state governments play a key role in social protection.

They consider two social protection measures: per capita public food distribution and calamity relief expenditure expressed as a share of net state domestic income. Their measures of shocks are food grain production and the real value of crops damaged by floods. They find no impact of state income on public food distribution and the fraction of state income devoted to calamity relief tends to decline with state income. Population density is insignificant in both regressions and urbanization is insignificant in the calamity relief regression. They show that, after controlling for both shock levels and basic economic and political indicators, newspaper circulation is positively and significantly correlated with both food distribution and calamity relief. Thus, those states that have higher levels of media development are also more responsive in terms of public
The level of political competitiveness proxied by the electoral margin between the ruling party and its main competitor might also be expected to affect incentives to respond. The fraction of the population classified as scheduled caste/scheduled tribe is a rough measure of polarization in Indian society. They include an election dummy, equal to one if it is an election or pre-election year in a given state. While, not strictly predicted by the theory, it is possible that governments are more responsive near elections if citizens have better memories about recent events.

The results show that, controlling for shocks; electoral turnout rates in Indian states do not exert a direct effect on either levels of public food distribution or calamity relief expenditures. Where ruling parties are more secure due to there being larger electoral margins and less political competition, higher levels public food distribution are seen. This is not the case for calamity relief. They also observe that state governments are more responsive in terms of public food distribution during election and pre-election years. This effect is not present for calamity relief expenditures. Having a higher fraction of scheduled caste/scheduled tribe in the population does not appear to affect average levels of food distribution or calamity relief. The results suggest that for public food distribution, politics matter. Governments who are threatened either due to there being a close competitor or due to the proximity of an election tend to be more responsive.

Chaudhuri and Dasgupta (2006) investigate, using data from the 14 major states of India, whether state governments' fiscal policy choices are tempered by political considerations. Two main conclusions are as follows. First, they show that certain fiscal policies experience electoral cycles: state governments raise less commodity tax revenue, spend less on the current account, and incur larger capital account developmental expenditures in election years than in all other years. Second, it is observed that coalition state
governments raise less own non-tax revenues and spend less on the current account than state governments that are more cohesive in composition.

Srivastava D.K. (2008), examines impact of election year upsurges in fiscal deficit through econometric investigation covering the period from 1950-51 to 2005-06. It seems that in two years around the election time, that is the election year and the year immediately proceeding the election year, the combined impact leads to a rise in the fiscal deficit relative to GDP, on average, of about 1.8 percentage points. Soon after the election years, the fiscal deficit falls, rising again in the next election cycle.

Rajaraman (2006) focuses on the factors underlying the continued weak fiscal position during the previous one and half decades as well as the prospects of recent fiscal reforms. An econometric exercise investigates whether this event was endogenous to the political economy. The regression equations show an election year response, which has become more marked in the last 30 years.

3.5. Political Determinants of Fiscal Deficit

It may be noted that the opportunistic and partisan models are not mutually exclusive in a multi-party setting. Whereas the ruling party may sometimes exhibit opportunistic behaviour, the growth of many regional parties have political bases in partisan motives that are reflected in support for specific regions, castes, economic and social groups, etc. Secondly, while the government may tend to stimulate the economy just prior to elections, opposition parties try to woo the electorate on the basis of promises, if they are voted to power. If they actually do come to power, they tend to stimulate the economy soon after the elections. Even the ruling party promises to undertake more spending if voted back to power. That is why we may, in general, expect higher deficit based spending in the year preceding the elections and the year in which elections are held.

Research Issues:
Political economy literature explain that there is the electoral motive towards high spending in election years and in this way fiscal deficit increases. Whether election year leads to increase in fiscal deficit can be checked through econometric investigation. It is the impact of overall government fiscal deficit and debt that is important for both growth and macroeconomic cycles. We focus on the role of political factors in this time series macro framework covering for the econometric exercises, the period from 1980-81 to 2008-09.

Data Period of the Study
The data for the study have been from *Handbook of Statistics on the Indian Economy*, which is a publication of Reserve Bank of India. In this study, the focus is on time series data relating to the combined account of the central and state governments. Elections were held in 1980, 1984, 1989, 1991, 1996, 1998, 1999, 2004 and 2009.

The Model
The Impact of election year on the fiscal deficit is checked by taking dummy for the one year proceeding to election year as 1 and by taking other years as 0.

\[
\text{FD/GDP (at mkt price)} = f \{ \text{GDPFCG, PG, (Election is taken as a dummy 1 for one year proceeding to election year and 0 is taken for other years)} \}
\]

Here, GDP = Gross Domestic Product (at market price)
GDPFCG = GDP growth rate at Factor Cost
PG = population growth Rate
Election = Election is taken as a dummy 1 for one year proceeding to election year and 0 is taken for other years

\[
\text{FD_GDP} = \text{Gross Fiscal Deficit (Combined Government)} / \text{GDP (at market price)}.
\]
Table 3.1. Empirical Result of the Impact Election on Gross Fiscal Deficit to GDP Ratio

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.009444</td>
<td>0.016651</td>
<td>0.567150</td>
<td>0.5761</td>
</tr>
<tr>
<td>GDPFCG</td>
<td>-0.001842</td>
<td>0.000641</td>
<td>-2.872069</td>
<td>0.0086</td>
</tr>
<tr>
<td>PG</td>
<td>0.020497</td>
<td>0.006141</td>
<td>3.337935</td>
<td>0.0029</td>
</tr>
<tr>
<td>ELECTION</td>
<td>0.006961</td>
<td>0.003775</td>
<td>1.844260</td>
<td>0.0781</td>
</tr>
<tr>
<td>FD_GDP(-1)</td>
<td>0.665441</td>
<td>0.128343</td>
<td>5.184856</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

R-squared 0.736517  Mean dependent var 0.077248
Adjusted R-squared 0.690694  S.D. dependent var 0.015142
S.E. of regression 0.008421  Akaike info criterion -6.555707
Sum squared resid 96.77990  Schwarz criterion -6.317814
Log likelihood 2.402981  Prob(F-statistic) 0.000002

Note: Election dummy (ELECTION) takes a value 1 in one year preceding election years and 0 in other years.

From the result we can say that in India election does not have a significant impact on the rising fiscal deficit to GDP ratio where as GDP growth (at factor price) has a negative effect on fiscal deficit to GDP.

3.8. Conclusion

A key distortion underlying inadequate fiscal discipline arises from the tendency of government to have shorter horizons than voters. The reason for policy makers’ myopia lies in the electoral uncertainty inherent in the democratic process. As elected official focus primarily on the consequences of their own (discretionary) actions while in office, their interest for future policies is lessened due to the risk of losing the next election. Myopia implies a relative neglect for the future tax hikes and primary expenditure cuts inevitably attached to present deficits. A rational government that balance the perceived marginal cost of deficits with marginal gains will thus opt for deficits above those desired by voters. For similar reasons, fiscal adjustment delayed or back loaded, and revenue windfalls in good times are less likely to be saved, pointing once again to an asymmetric cyclical pattern in deficit.
Models based on fiscal illusion with opportunistic and naive voters assumptions are that policy makers are opportunistic (that is they are care about electoral prospects and not directly about private agents welfare). There is the electoral motive towards high spending in election years and in this way fiscal deficit increases. From the above model result we can say that election does not have a significant impact on the fiscal deficit in India. While there appear to be electoral increases in fiscal deficits and government expenditures, these are limited to countries where one could argue that voters are less successful in monitoring fiscal outcomes. When the government’s fiscal choices are not transparent to the public, however, opportunistic incentives may lead to high deficits because highly valued spending on development projects may be paid for by acquiring debt that is not observed by voters.
BIBLIOGRAPHY


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Theoretical Base for Fiscal Policy Rules and it’s Implication in India


