Does Political Business Cycle exist in India?

By

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Extended Abstract

There exists a vast literature inquiring and modelling the nexus between politics and macroeconomic policy making. Mostly the western democracies have been the focus of empirical investigations on this subject, stirred by publication of the paper (Nordhaus1975) by William Nordhaus. This is not surprising as these countries have long history of regular elections based on two party system. Democracies in most of the developing counties are of post second wold war vintage and nominal in nature. In many such countries elections only provide a façade for perpetuating one party rule. India provides a unique case of a large democracy with multiple parties with more or less stable electoral process and peaceful transfer of power from one party to another. This gives an opportunity to examine how important macroeconomic variables are affected by the compulsion of electoral process and partisan ideologies in a developing country afflicted with persistence poverty and a large informal economy.

Most of the empirical studies based on data of OECD countries have found that electoral and partisan motives have a greater short term impact on inflation than on real variables like output growth or rate of unemployment. Recent studies based panel data on OECD countries have reinforced these findings.

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Key words: Political business cycles, Partisan motives, electoral motives, Developing country

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The present study is an empirical attempt to explore the nature of this nexus in case of independent India using 62 years of monthly data on inflation supplemented with data on election and ideological stand of political parties in power. Real variables have been kept out of the purview of this paper because of lack of long term low frequency data (at least quarterly) on output. The coverage of monthly index of industrial production is limited to formal sector and workers in organized sector constitute a small minority of voters.

Studies on inflation in India have pointed out that both structural factors and monetary factors are important determinants of inflation in a country like India where rain fed agriculture is still important and imported oil is a major source of demand for foreign exchange. Thus internal shocks precipitated by weather induced failure in agricultural sector and external shocks arising out of spurt in oil price need to be factored out to identify the impact of electoral motives and partisan ideology on Indian inflation dynamics. Subject to availability of relevant data, the paper has attempted to carry out such analysis for a truncated period.

The present analysis also takes into account the fact that there is an important structural break in Indian electoral politics since 1977. Before that there was a one party rule in the centre, although the break in states had come in 1967. After 1977, India has seen rule by coalition of parties as well as single party rules. When a coalition is led by a national party playing the dominant role, we have taken that coalition as a single party rule. Like USA, the congress party is considered as left leaning party and Bharatyia Janata party (BJP) as a right wing party.

This is because, the Congress party has shown a revealed preference for India's large public sector, while BJP always championed the cause of traders and private sector. The coalition governments were formed by regional parties who championed the cause of socially backward castes and religious minorities. A priori, it is expected that they would follow a left leaning policy. Thus, instead of two party political system, the Indian polity can be termed as consisting of three political formations. Prevalence of large scale absolute poverty and rural population comprising the majority of voters, every political formations have to woo the poor and marginal people to win elections. So, on a priori basis, we should expect little difference in behaviour of political formations with regard to fiscal and monetary policy stances in periods leading to and after elections.

There is another dimension to policies that impact inflation. This is the presence of a central bank which is known to be one the most professionally run central bank of developing counties. One interesting fact about the Reserve bank of India is that many of its governors were career civil servants. These bureaucrats are members of the elite federal government service known as Indian Administrative Service (IAS). After spending the best part of their career in various government departments, they cannot be expected to differ radically from polices they were associated with in their whole career. So their view about factors that cause inflation would resonate better with politicians than the economists who may have better understanding of the monetary dimension of inflation. So in this analysis a binary variable (civil servant / economist) is used to capture the central bank's willingness to accommodate an expansive fiscal policy.

The canvas for this empirical exercise is now laid down. The target variables are two measures of inflation- a wholesale price index (WPI) and a consumer price index (CPI). WPI can be considered as a proxy for producer price index while CPI is based on the consumption basket of industrial workers- not the entire working population. Till recently, our policy makers – both in federal government and in RBI- used WPI as the official measure of inflation. For capturing the structural factors impacting WPI two components of WPI- food price and oil price indices- are considered. For election variable, eight months prior to an election is taken as the period of expansive fiscal policy and eight months after the start of the fiscal year following the election as the period of putting a break on the expansionary policy.. The later part of the election variable has been constructed to reflect the process of policy making in India. In India, the central government budget is the mechanism through which government formulates its fiscal policy. So even if a political party comes to power in the middle of a fiscal year, it generally waits till the start of the next fiscal year to roll out its fiscal policy. Any intermediate intervention is not expected to have any major change in already budgeted incomes and expenditures.

The empirical exercise is based two statistical procedures. These are regression based procedures and Anova based procedures. The regression based procedures takes into account the autoregressive nature of the target variables. Original variable as well as residuals from auto regression are used as dependent variable. It needs to be pointed out that inflation variable is found stationary process in India. As regards Anova based exercises, the GLM procedure is to take into account the unbalanced nature of the implied factorial design of the exercise.

Results

The results are quite interesting. These are:

<u>Results for WPI</u>

1. For the entire period (1954 to 2016), RBI governor dummy is the only explanatory variable that comes out significant along with food inflation (oil inflation data not available for entire period).The lagged dependent variables are included in the regression but not considered as explanatory variable. Election variable is not significant for any combination of explanatory variables. This result remains same whether residual from autoregressive equation or original variable (WPI) is used.

2. For the truncated period (January 1977 to August 2016), even food inflation shows no explanatory power. Only RBI Governor dummy comes out as significant.

3. Indian economic reform was initiated in July 1991. Using data from the next financial year, regressions have been run for WPI inflation using many other variables for which time series data are available. These are central bank’s credit to government and growth in money supply and oil inflation. Using these variables, it should be possible to identify whether after accounting for these variables, one can detect any explanatory power for factors like Election and RBI Governor. The resulting regression shows that Election dummy does not appear to have any explanatory power for inflation.

If the WPI inflation is regressed on other explanatory variables and the residual from that regression is regressed on the variables of our interest, then only Election variable appears to have no significance. Both Party and RBI Governor Dummies are found to be significant at 5% level.

4. The Anova exercise based on appropriate Sum of Squares shows that mean inflation varies significantly with regard to RBI Governor factor and not with regard to Party factor. Result is much stronger when the truncated period from 1977 is used. However, when Party and Election are taken as influencing factor, mean election for the whole period differs significantly with regards to the Party factor and not according to the Election factor. After 1977, however, mean inflation differs significantly across both the factors, namely Election and Party.

Results for CPI

1. As regards CPI data is available from 1969 to 2016. For the whole period the results are similar to the ones reported above with one exception. If food inflation is not included as explanatory variable, Election variable turns out to be significant. But if both food inflation and Election variables are used, only food inflation shows a significant impact on CPI. However, RBI Governor dummy always appears as a significant factor.

2. For the truncated period (January 1977 to August 2016), Election variable comes out significant in different combinations of explanatory variables.

Concluding Observations:

Two important conclusions emerge from the entire exercise.

1. For a developing country like India, where the electoral process is well established, all political parties perforce have to follow policies that appeal to majority of voters. The burden of managing inflation more depends on the views of central bank governors to management of inflation. When civil servants are governors, the possibility of central bank accommodating fiscal profligacy of the

politicians are relatively more as compared to the case when professional economists are in the helm of the central bank.

2. With the end of one party dominance, the electoral motives appear to be slowly emerging although results are weak. As CPI starts becoming the inflation variable to be tracked by policy makers, the present exercise indicates that there is a distinct possibility that electoral motives would come into play in engendering a Political Business Cycles in India also.

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