



EFFECT OF ELECTION EXPENDITURE ON INDIAN ECONOMY

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Abstract: Indian politics is a unique playground for understanding the various factors attached to it. The money spent by political parties and the budget utilized by the government in power has a co-relationship with the inflation rate, government debt, unemployment rate, and GDP Growth Rate. This Paper analyses the effects of election expenditure on economic variations in the pre-election & election period. The authors of this paper tried to gather data on different macroeconomic variables.

For testing the Hypotheses, the authors have used different variables which impact the Economy, ranging from the Domestic to exogenous factors, including the Budgetary components, rainfall patterns in India and the world GDP, covering almost 3 decades of Indian Economy, starting from the year 1990. They have also given due consideration to the factors which distinguish an election year from the non-election year and have encompassed the market sentiments in the findings.

The authors' analysis walks through the reader, the different perspectives even while rejecting or accepting the hypotheses. The authors have used the Multiple Regression Model to substantiate their results and have provided the reader the explanation of any unintelligible data points, spikes in resultant graphs and results.

IndexTerms - Election Expenditure, Government Policies, Political Budget Cycle, Fiscal Policy.

I. INTRODUCTION

Election expenditure plays a crucial role in elections in India. Election expenditure refers to the money spent by political parties, candidates, and others in the lead-up to and during an election. This can include expenses related to campaign activities such as advertising, rallies, and other events and spending on campaign materials such as posters, brochures, and other promotional items. Election expenditure can also include expenses related to the administration of the election, such as the cost of printing and distributing ballots and the cost of setting up polling stations. Election expenditure can be a significant cost for political parties and candidates, and can impact the outcome of an election. In some countries, election expenditure is regulated and capped to ensure a level playing field and prevent corruption. The regulation of election expenditure can also help to reduce the impact of money on politics and ensure that the election process is fair and transparent.

In India, there are limits on the amount of money that a political party and its candidates can spend during a Lok Sabha election. According to the Election Commission of India (ECI), the maximum amount of money a candidate can spend during a Lok Sabha election is approximately INR 95 lakhs per constituency. The limit is subject to periodic revision and is adjusted for inflation.

For political parties, there is no specific limit on election expenditure, but they must submit an audited account of their expenses to the Election Commission of India after the election. The Election Commission of India can take action against a political party if it is found to have violated the provisions of the Representation of the People Act, which governs election financing in India.

It is important to note that these limits apply to official election expenses and do not include other forms of spending, such as gifts and incentives to voters, which are not allowed under Indian election laws. The Election Commission of India works to monitor and enforce the limits on election spending to ensure a level playing field and prevent corruption in the election process.

Political parties' expenditure before the election year significantly contributes towards the parties' output as a leader. The government in power (party in power) leaves no scope to retain its power. According to political budget cycles ideas, macroeconomic indicators like output, unemployment, and inflation exhibit a specific pattern during election years.^[1] Political parties frequently shift their positions in India as well to entice people for their advantages. Investors' apprehension over the potential of a coalition administration leading to policy stagnation may be the cause of this trend.

Research by Deepa S. Vaidya and K. Kangasabapathy^[2] showed that the actual spending surpasses the planned predictions, which accounts for a large portion of the deficit increase before elections. For a long time, theories of the political business cycle have recognized that governments in democracies may be prone to increasing spending before elections. According to India's recent history, political parties have good reasons to consider such approaches.

For example, the United Progressive Alliance (UPA) in 2009, a year where the government dramatically boosted spending, as an example of an election year in 2014. The administration had already begun budgetary growth before the global financial crisis broke out in September 2008. In accordance with the recommendations of the Sixth Pay Commission, it had eliminated farm loans, increased

social security programs under the National Rural Employment Guarantee Act (NREGA), and implemented new salaries for central government employees. Governments frequently spend comparatively more on transfers and subsidies before elections, in addition to their propensity to increase overall spending.

While there is no clear pattern in the CPI statistics for India from 1958 regarding the growth or fall of inflation before and after elections, pre-election years often have lower inflation. Several ideas contend that inflation will rise before the elections. Prior to elections, the government spends more, which has an impact on inflation in the industrial sector. But, to demonstrate their effectiveness, the government controls the inflation of basic goods, which directly impacts the average person. In India, the government typically invests funds in programs that directly benefit the populace. The government doesn't spend money on capital investments because of illiteracy. But, because the public is growing more informed, the administration must consider the long term before the elections.

In the majority of the years, there is a pattern of deficits in the years before and after elections. Pre-election fiscal deficits increase, and post-election fiscal policy declines. Yet, occasionally, the reverse trend is seen as well. This might occur when the government doesn't spend more money right before the election, instead choosing to direct it towards initiatives that will grab the public's attention. India undoubtedly had a number of initiatives receive additional support right before the election.

With almost 900 million votes, India is also the largest democracy in the world. This indicates that it costs a lot of money to hold this festival of democracy. In addition to the direct expenditures associated with organizing such a large event, there are also several indirect costs. According to historical evidence, economies worldwide typically contract prior to election years.

Here we will discuss different variable responsible for economic growth and how that is related with pre-election and election years spendings:

Government Debt

A considerable rise in the amount of debt that the government is taking on is the first and most evident effect of an election. The implementation of measures that are economic failures but have favorable political outcomes is a hallmark of elections in India and around the world. The implementation of welfare programs that will eventually become unsustainable is a common tactic employed by parties in power to win over people.

Tax reduction strategies

All voters around the world find taxes to be a susceptible topic. A government can become unpopular simply by introducing or raising taxes. On the other hand, eliminating or drastically lowering taxes is sufficient to boost public support for any government. This explains why tax incentives for the general public are frequently included in pre-election budgets. The wealthy and businessmen are frequently forced to foot the bill for these tax benefits. The government frequently grows the national debt, implying that tax reductions are frequently just temporary and will eventually require tax increases.

Credit growth is slowed down

Less projects are being undertaken by business people and manufacturers; therefore, banks do not need to make as many loans. This reduces the rate of credit expansion, which has a negative impact on the economy. In fact, during elections in nations like India, businesspeople take money out of their bank accounts to fund the campaigns of their chosen political parties. The amount of bank deposits declines as money is taken out. It is common knowledge that businesspeople and industrialists defer important decisions during an election year. This is due to the possibility that a change in government could also result in a change in the government's priorities. The viability of a project is frequently completely altered by the policies of a government. Businesspeople wish to prevent the possibility that government policies may make their ideas obsolete. As a result, they favor the wait and watch strategy. The economy will undoubtedly suffer as a result because this delays the economic output and jobs that could have been created.

Inflation rate

Each political party increases its spending throughout the election season. This money is abruptly removed in large amounts from bank accounts and released onto the market. This explains why there is suddenly a lot of money chasing after scarce items. Price inflation is the outcome of this. Food and beverage products frequently experience shortages, which raises the cost of those products.

II. EMPIRICAL EVIDENCE - LITERATURE REVIEW

Author Enkelmann, S., & Leibrecht, M. in their paper^[4] examines whether there is a relationship between government spending and elections in 45 countries over a period of more than two decades. Specifically, the authors look at how public expenditures are allocated across different economic functions (such as education, health, defense, and infrastructure) in the years leading up to an election.

The authors find evidence of political expenditure cycles, where incumbent politicians tend to increase government spending in the run-up to an election to improve their chances of winning. However, they also find that the effect of political expenditure cycles varies depending on the type of economic function that receives the increased spending. In particular, the authors find that spending on education and health tend to have a positive effect on the incumbent's vote share, while spending on defense has a negative effect.

The authors suggest that these results can be explained by voters' perceptions of the effectiveness of government spending in different areas. For example, voters may be more likely to reward politicians who increase spending on education and health, which are seen as providing direct benefits to citizens, while punishing politicians who increase spending on defense, which is seen as providing less direct benefits.

Overall, the paper provides important insights into the relationship between government spending and elections, and highlights the importance of understanding the specific economic functions that receive increased spending during political expenditure cycles.

Authors Nieto-Parra, S., & Santiso, J. in their paper "Revisiting Political Budget Cycles in Latin America"^[5] examines the phenomenon of political budget cycles (PBCs) in Latin American countries. PBCs refer to the tendency of incumbent politicians to manipulate government spending in order to influence the outcome of elections.

The paper begins by reviewing the existing literature on PBCs and identifying some of the key factors that contribute to their occurrence. It then presents an empirical analysis of PBCs in 18 Latin American countries over a period of 30 years (1985-2015), using data on government spending and election outcomes. The analysis finds evidence of PBCs in the majority of the countries studied, with incumbents increasing spending in the year before elections and reducing it afterwards. However, the strength of the PBC effect varies across countries and over time, and is influenced by factors such as the level of democracy, the presence of fiscal rules, and the institutional capacity of the state.

Overall, the paper provides a comprehensive overview of PBCs in Latin America and sheds light on the factors that drive this phenomenon. It also highlights the importance of monitoring government spending during election periods to ensure that it is not being used for political gain at the expense of public welfare.

Rakic, B., Stanojevic, J., & Radjenovic, T in their paper "Political Cycles' Influence on Inflation and Unemployment"^[6] examines the relationship between political cycles and two key macroeconomic indicators, namely inflation and unemployment. The paper analyzes data from 28 OECD countries over a period of four decades (1970-2010) to investigate whether political cycles have an impact on these economic variables.

The paper finds that political cycles do indeed have a significant influence on inflation and unemployment. In particular, it finds that inflation tends to be higher in election years and in the period immediately preceding elections, while unemployment tends to be lower. This suggests that incumbent politicians may manipulate economic policy in order to boost their chances of re-election.

The paper also examines the impact of political ideology on the relationship between political cycles and macroeconomic variables. It finds that left-wing governments tend to have a stronger effect on inflation, while right-wing governments have a stronger effect on unemployment.

Overall, the paper provides important insights into the impact of political cycles on macroeconomic variables. It highlights the need for independent and transparent economic policy-making, and suggests that policy-makers should be aware of the potential impact of political cycles on economic outcomes.

Authors Gavious, A., & Mizrahi, S., "Maximizing Political Efficiency via Electoral Cycles: An Optimal Control Model"^[7] presents an optimal control model that examines the relationship between electoral cycles and political efficiency. The paper argues that politicians may use electoral cycles strategically to maximize their political efficiency and achieve their policy objectives.

The paper develops a mathematical model that considers the trade-offs between the costs and benefits of implementing policies at different stages of an electoral cycle. The model identifies the optimal timing for policy implementation, taking into account factors such as the length of the electoral cycle and the timing of the next election.

The paper applies the model to a hypothetical case study, showing how politicians can use electoral cycles to achieve their policy objectives while minimizing the costs of policy implementation. The paper also discusses the implications of the model for real-world political decision-making.

Overall, the paper provides a theoretical framework for understanding how politicians may use electoral cycles to maximize their political efficiency. It suggests that political decision-makers should consider the optimal timing of policy implementation when designing and implementing policies.

Author Blanchard, O in his paper, "Fiscal Dominance and Inflation Targeting: Lessons from Brazil"^[8] analyses data on Brazilian elections and economic policies over a period of three decades (1986-2016). The analysis shows that Brazilian politicians have frequently used election targeting to influence economic outcomes in the lead-up to elections. The paper also finds that election targeting tends to be more pronounced when fiscal dominance is high. It suggests that policy-makers should be aware of the potential for fiscal dominance and election targeting, and should take steps to ensure that economic policies are not being manipulated for political gain.

Author Daniela Campello in his paper^[9] suggested by discussing the implications of its findings for policy-makers and investors. It suggests that policy-makers should be aware of the potential impact of national elections on investment flows, and should take steps to ensure that their policies are attractive to foreign investors.

Nidhiya Menon and Parikshit Ghosh^[10] analyses data on government expenditure in India over a period of 15 years (1993-2007) to provide empirical evidence of electoral manipulation via expenditure composition. The analysis shows that incumbent politicians in India do indeed allocate more government expenditure to sectors or programs that are likely to be popular with key voter groups, and that this allocation is more pronounced in the lead-up to elections.

Cordes, T., Kinda, T., Muthoora, P., & Weber^[11] finds that there is indeed evidence of a political business cycle in which inflation rates are manipulated by politicians in the lead-up to elections. Specifically, the paper finds that inflation rates tend to be higher in the months leading up to elections, and that this effect is more pronounced in countries with a history of political instability.

Bergh, A., & Nilsson, T.^[12] considers possible explanations for this political business cycle, including the idea that politicians may use inflation to stimulate economic activity and improve their chances of re-election. The paper concludes by discussing the implications of its findings for policy-makers and voters. It suggests that policy-makers should be aware of the potential for inflation manipulation in the lead-up to elections, and should take steps to ensure that economic policies are not being manipulated for political gain. Voters should also be aware of the potential for manipulation and use their voting power to hold politicians accountable.

Benny Geys in his paper "Government Weakness and Electoral Cycles in Local Public Debt: Evidence from Flemish Municipalities"^[13] examines the relationship between government weakness, electoral cycles, and local public debt in Flemish municipalities in Belgium. The authors argue that weak governments may be more likely to engage in electoral cycles, leading to increases in public debt in election years.

The authors use data from Flemish municipalities between 2001 and 2014 to analyze the relationship between government weakness, electoral cycles, and public debt. They find that weak governments, as measured by the share of seats held by the ruling party, are more likely to increase public debt in the year before elections. This effect is particularly strong in municipalities with high levels of political competition.

The paper also examines the role of fiscal rules in mitigating the impact of electoral cycles on public debt. The authors find that municipalities with more stringent fiscal rules are less likely to engage in electoral cycles, suggesting that such rules can be an effective tool for promoting fiscal discipline.

Overall, the paper highlights the importance of government strength and fiscal rules in promoting sound fiscal policy at the local level, and suggests that policymakers should consider these factors when designing fiscal institutions.

The Political and Electoral Cycles have traditionally been viewed as an important determinant on the state of the economy in India and worldwide. It has often been observed that the macroeconomic variables such as the Inflation, GDP, Rate of Employment, Government Debt and Private Investment are affected during and before the elections are announced in the country. The political incentives and voter inducing behaviors often play a major role in announcement of tax benefits and schemes which are said to impact on these macroeconomic variables. In theory

Government Debt tends to rise in the preceding year in which Lok Sabha Elections are to be held. This could happen on the account of increased roll out of welfare schemes, policies, freebies etc., which are voting enticing behavior. These are typically bad for the economy but have higher political payoffs, resulting in increased Government Debt.

Increased Inflation- The increased spending by the political parties in various forms, including the political campaigns, lowering of tax rates, increased money supply results in a lot of money chasing limited amount of goods. This potentially causes the price inflation to rise. On the other hand, products like food, drinks, fuel often face shortage and result in increase in the price of these goods.

Reduced private investment- As the elections approach by, the business sentiment is often affected, which eventually affects the Private investment in the economy. Businesses and Industries when skeptical of the “Government to be” in power and their political/social ideology, risk appetite and policy decisions, tend to avoid taking risk by not investing in projects. The fear of projects being put on hold or the viability of the projects upon the changed government puts the Businessmen at risk which is not related to economic profit. Hence, in principle when there is uncertainty in the country, Private investments are reduced to a great extent.

Slower Economic Growth- Due to above stated reasons, where neither the Citizens, nor the Governments are taking rational economic decisions, and thereby also influencing the Private Capital Formation, the economy is bound to get affected. Macroeconomic variables like the output, inflation rate and GDP rate when distorted will result in slower Economic Growth in the country.

III. FORMULATING HYPOTHESIS

Based on a review of the various literature from numerous research papers, we have discovered how election years influence the macroeconomic factors in different countries. On this basis, the following null hypotheses have been created.

H01 - Inflation increases in the preceding year of the election: This hypothesis is based on the idea that governments may boost spending during election years in an effort to enhance voter turnout. Inflation may rise as a result of this increased spending.

H02 - Government Debt increases during and preceding the election year: According to the theory supporting this claim, governments may raise their borrowing in order to fund their election promises and campaigns, which might result in a rise in the total amount of government debt.

H03 - GDP growth rate rises in the preceding election year: According to the theory supporting it, political parties may adopt measures to spur economic development in the lead-up to an election in an effort to increase their prospects of winning.

H04 - Private investment drops before the election years: This idea underlies the claim that a decline in private investment might occur during an election season due to unpredictability and instability.

H05 - Unemployment declines during and preceding the election year: In order to increase their prospects of winning an election, political parties may adopt measures to increase employment creation in the months leading up to a vote.

To test the hypotheses, data was collected on various macroeconomic variables from the year 1990-2020, covering almost 8 Lok Sabha elections over a period of around 3 decades.

Year	Rainfall - in mm	World GDP (BILLION \$)	Rate of Inflation	GDP Growth Rate %	Rate of Unemployment	GFCF (Crores)	Growth Rate (GFCF)	Capital expenditure (crores)	Growth rate Capital expenditure	Revenue Expenditure (crores)	Growth rate Revenue expenditure	Capital Receipt (crores)	Growth rate Capital Receipt	Revenue Receipt (Crores)	Growth Rate Revenue Receipt	Government Debt (crores)	Growth Rate Government debt	Expenditure by Political Parties (Trillion)	Election held or not	Election held or not (dummy)
1990	907	23100	8.70%	5.53%	1.9	2,93,155		31782		73516		38997		54954		4,43,905		0	N	0
1991	864.1	22400	13.90%	1.06%	2	3,05,058	4%	29122	-8%	82292	12%	38528	-1%	66030	20%	4,79,971	8%	0.02	Y	1
1992	1030.5	23400	9.40%	5.48%	2.1	3,51,763	15%	29916	3%	92702	13%	36178	-6%	74128	12%	5,30,287	10%	0	N	0
1993	978.5	24200	6.70%	4.75%	2.2	4,04,260	15%	33684	13%	108169	17%	55440	53%	75453	2%	5,71,556	8%	0	N	0
1994	1054.7	25500	10.20%	6.66%	2.3	4,60,562	14%	38627	15%	122112	13%	68695	24%	91083	21%	6,01,659	5%	0	N	0
1995	1029.7	27200	10.90%	7.57%	2.4	5,36,621	17%	38414	-1%	139861	15%	58338	-15%	110130	21%	6,37,007	6%	0	N	0
1996	1052.2	28900	8.10%	7.55%	2.6	6,41,137	19%	42074	10%	158933	14%	61544	5%	126279	15%	6,82,615	7%	0.07	Y	1
1997	872.4	31000	5.10%	4.05%	2.8	7,23,705	13%	51718	23%	180335	13%	99077	61%	133886	6%	7,22,433	6%	0	N	0
1998	892.3	32400	13.20%	6.18%	2.9	8,03,790	11%	62879	22%	216461	20%	130064	31%	149485	12%	7,68,106	6%	0.09	Y	1
1999	944.9	33900	3.40%	8.85%	2.9	8,63,820	7%	48975	-22%	249078	15%	115707	-11%	181482	21%	8,10,584	6%	0.1	Y	1
2000	877	36200	3.80%	3.84%	2.7	9,80,214	13%	47753	-2%	277839	12%	134184	16%	192605	6%	8,68,698	7%	0	N	0
2001	901.1	35700	3.80%	4.82%	2.7	10,89,165	11%	60842	27%	301468	9%	162500	21%	201306	5%	9,26,315	7%	0	N	0
2002	794.7	36900	4.80%	3.80%	2.8	12,05,116	11%	74535	23%	338713	12%	180531	11%	230834	15%	9,97,639	8%	0	N	0
2003	911.6	42100	3.80%	7.86%	2.8	13,28,256	10%	109129	46%	362074	7%	211333	17%	263813	14%	1068212	7%	0	N	0
2004	958.7	50300	3.80%	7.92%	2.7	15,14,771	14%	113331	4%	384329	6%	200391	-5%	305991	16%	1161763	9%	0.14	Y	1
2005	914.4	58200	4.20%	7.92%	2.8	17,42,364	15%	66362	-41%	439376	14%	179549	-10%	347077	13%	1272391	10%	0	N	0
2006	874.6	66000	5.40%	8.06%	2.3	21,63,682	24%	68778	4%	514609	17%	144482	-20%	434387	25%	1407785	11%	0	N	0
2007	1079.2	73600	6.40%	7.66%	2.3	28,26,639	31%	118238	72%	594433	16%	197978	37%	541864	25%	1567527	11%	0	N	0
2008	1016.8	75200	9.40%	3.99%	2.3	34,47,035	22%	90158	-24%	793798	34%	299863	51%	540259	0%	1791135	14%	0	N	0
2009	1131.7	67200	10.90%	7.86%	2.5	42,50,320	23%	112678	25%	911809	15%	453063	51%	572811	6%	2078932	16%	0.2	Y	1
2010	994	74900	12.10%	8.50%	2.7	50,28,074	18%	156605	39%	1040723	14%	402428	-11%	788471	38%	2395280	15%	0	N	0
2011	1097.1	80300	8.90%	5.24%	2.7	61,42,242	22%	158580	1%	1145785	10%	568918	41%	751437	-5%	2760326	15%	0	N	0
2012	957.6	83400	10.20%	5.46%	2.2	69,81,238	14%	166858	5%	1243514	9%	582152	2%	879232	17%	3138842	14%	0	N	0
2013	1185.5	86000	9.50%	6.39%	2.3	72,53,324	4%	187675	12%	1371772	10%	563894	-3%	1014724	15%	3612707	15%	0	N	0
2014	1166.9	87900	6.40%	7.41%	2.3	79,95,956	10%	196681	5%	1466992	7%	484448	-14%	1101381	9%	4086383	13%	0.3	Y	1
2015	1065.2	80100	4.90%	8.00%	2.4	84,69,058	6%	253022	29%	1537761	5%	582579	20%	1195025	9%	4422935	8%	0	N	0
2016	973	80700	4.50%	8.26%	2.3	90,42,949	7%	284610	12%	1690584	10%	609886	5%	1374203	15%	4792168	8%	0	N	0
2017	1095.2	84300	3.60%	6.80%	6.1	99,20,005	10%	263140	-8%	1878833	11%	702650	15%	1452333	4%	5323273	11%	0	N	0
2018	1097.6	87300	3.40%	6.45%	5.8	11471388	16%	307714	17%	2007399	7%	763518	9%	1552916	8%	6035973	13%	0	N	0
2019	1097.8	88300	3.70%	3.74%	5.7	13314845	16%	335726	9%	2350604	17%	997301	31%	1684059	8%	6719172	11%	0.55	Y	1
2020	1097.8	84700	6.20%	-6.60%		11196446	-16%	426317	27%	3083519	31%	1883105	89%	1633920	-3%	8032874	20%	0	N	0

Figure 1: Data Set – Various Macroeconomics Variables from 1990 to 2020

The data set incorporates various variables across the year and have been sourced from the RBI publication, (except for Unemployment-2020, sourced from MoSPI), World Bank for World GDP.

The factors to test hypotheses include- rate of inflation, GDP, its growth rate, Government Capital and Revenue Expenditures, Capital and Revenue Receipts, Rainfall pattern, Private investment or the Gross Fixed Capital Formation, expenditure by the political parties on Lok Sabha Elections.

Apart from generating a relationship by generating a Linear trend in the graphs, multiple regression analysis has also been conducted to test the impact of Independent Variables on Dependent Macroeconomic Variables.

IV. FINDINGS AND OBSERVATIONS

Elections have always been surrounded by exaggerated hype that encourages heightened media attention, public relations efforts, and financial outlays in an effort to win over voters. This very notion sparks intense interest in examining the trends of economic indicators and how they alter during the election season.

To start with the same, various plots of economic indicators have been prepared focusing on each decade from 1990 till 2020 covering all Lok Sabha elections, since then.

4.1 Inflation

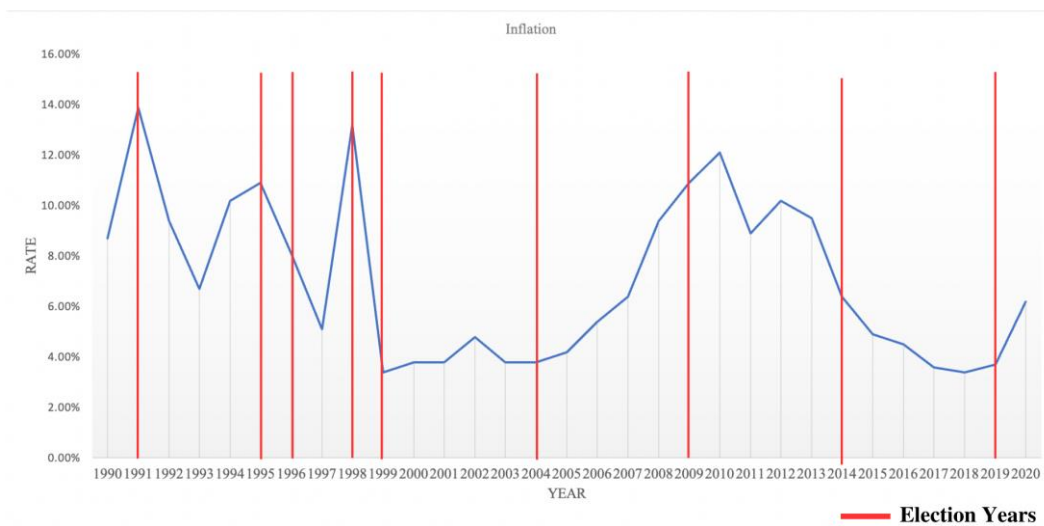


Figure 2: Rate of Inflation In various Years in India

The graph shows no clear relationship between election years and the rate of inflation.

Out of the 8 election cycles, till the year 2020, we can clearly see that the preceding year of election(s)- 1990,1997,2003,2008,2019 saw a spike in inflation. However, a thorough examination of facts puts a different perspective. The years 1990 -91 witnessed Gulf War and low agricultural output- which had caused inflation to rise substantially. Eventually the Government of P V Narasimha Rao had to take stern measures to bring down the rate of inflation. Inflation was high in the year 1997 due to multiple reasons including, increased crude oil prices, poor monsoons, depreciation of Rupee and Increased Government spending. A similar trend is observed for the inflation in the year 2004, where another contributing factor was the increased money supply by the RBI. For the year 2008, both nationally and internationally increased prices (owing to the Sub Prime Crisis) caused heavy inflation in India, though indirectly. We can observe that the inflation rate in India was relatively stable in the years preceding the 2014 Lok Sabha elections. However, after the election of the current government, the inflation rate gradually started to decline and remained relatively low until the 2019 Lok Sabha elections. After the 2019 Lok Sabha elections, there was a slight uptick in inflation, primarily due to supply-side shocks caused by the COVID-19 pandemic.

Table 4.1: Regression Statistics for Inflation

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.595222224	0.354289496	0.119485676	0.030093794	31

Table 4.2: Multiple Regression Analysis, Inflation rate as dependent variable.

	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.008622134	0.071472191	-0.12064	0.905074188
Capital Expenditure (Crores)	-6.873E-07	5.27299E-07	-1.30344	0.205902561
Revenue Expenditure (Crores)	-4.70388E-08	2.92148E-07	-0.16101	0.873554628
Capital Receipts (Crores)	1.26037E-07	2.9399E-07	0.428713	0.672300821
Revenue Receipts (Crores)	1.05491E-07	3.15828E-07	0.334015	0.74153138
Rainfall - in mm	0.000104209	7.40219E-05	1.407808	0.173161709
World GDP (Billion \$)	-1.10409E-07	5.90939E-07	-0.18684	0.853501256
Expenditure by political parties (Trillion)	-0.115008492	0.080244203	-1.43323	0.165851074
Election held or not	0.029859138	0.019584042	1.524667	0.14158994

*5 % level of confidence

4.2 Government Debt

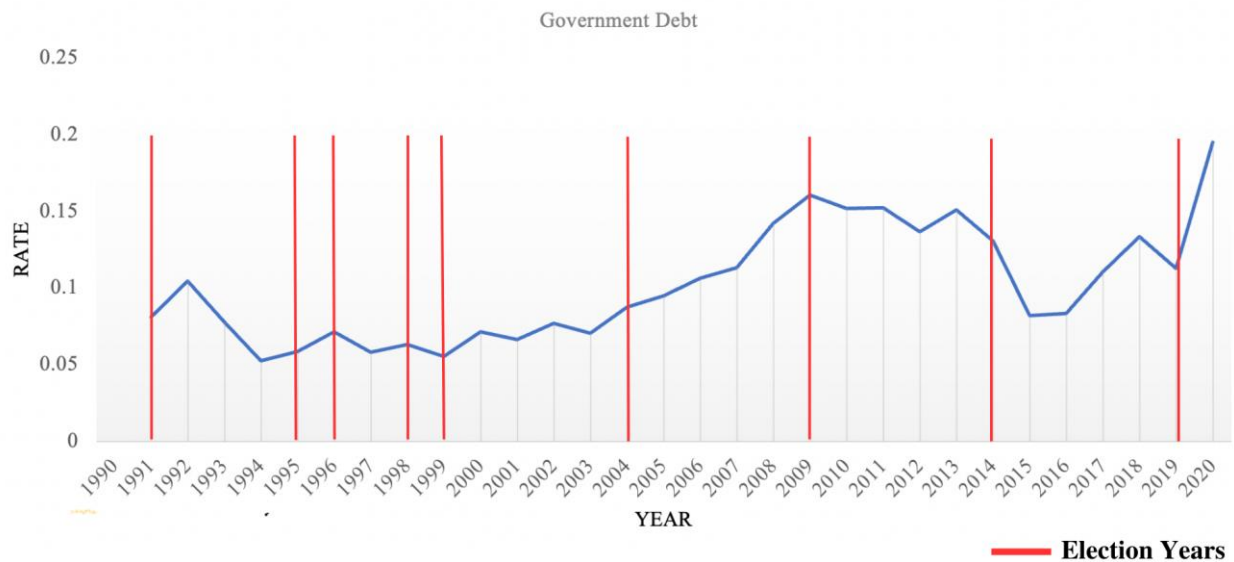


Figure 3: Government Debt In various years in India

First of all, it is clear that India's government debt growth rate has been inconsistent over the years, with some years seeing a notable rise and others a drop or a small rise. With relation to the Lok Sabha Elections, we can see that the pace of government debt growth tends to rise in the year before the elections. For instance, there was a discernible increase in the pace of growth of the public debt in the year prior to the Lok Sabha Elections in 1991, 1998, 2004, 2009, and 2019. This may be because the government debt has increased as a result of the governing party's desire to spend more money in the run-up to the elections in order to win over voters.

In the year of the Lok Sabha Elections, the rate of growth in government debt tends to decline or remain stable. This could be due to various factors such as the government's focus on fiscal consolidation, or the ruling party's efforts to control spending to win the support of the voters who may be concerned about rising debt levels.

This suggests that while Lok Sabha elections may not have very heavy impact on the rate of growth in government debt, but they do contribute to a more expansionary fiscal policy, which could result in higher government borrowing and an increase in the rate of growth in government debt.

The pace of rise of the public debt, however, can also be significantly influenced by other variables, including economic conditions and governmental policy.

Thus, we fail to reject the *Null Hypothesis Ho2*.

4.3 Growth Rate of GDP

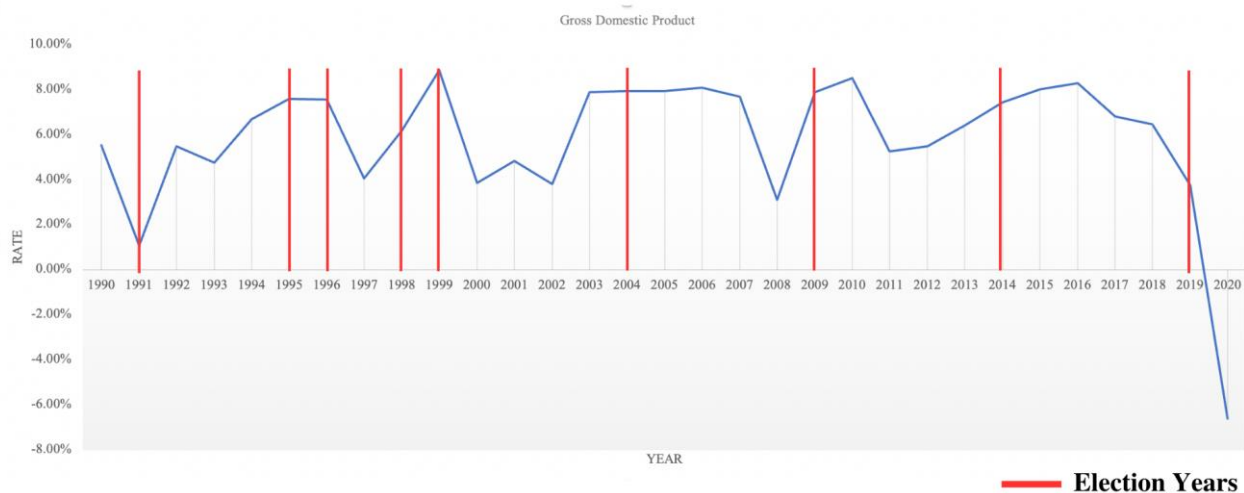


Figure 4: Rate of GDP In various years in India

From the graph we can observe that in most cases of election years the GDP growth rate witnessed a rise. For example, if we look at the 1997,98,99 graph there is upward trajectory in GDP growth rate. Same phenomenon is observed in case of 2009, and 2014 election as well. However, the same is not true for 1991 and 1996 elections. Though there seems to be some strong correlation between the GDP growth rate and Lok Sabha elections, it is important to consider the broader political and economic context in which elections take place.

To establish a stronger relation, when we run a regression analysis for the Growth rate of GDP, where-

Upon analyzing the above graph and data –

We fail to reject the NULL HYPOTHESIS Ho3.

Table 4.3: Regression Statistics for Inflation

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.884439937	0.782234002	0.688905718	0.016619325	31

Table 4.4: Multiple Regression Analysis, Gross Domestic Product as dependent variable

	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.04804642	0.039989639	-1.20147	0.242944
GFCF(crores)	-9.2815E-09	8.81721E-09	-1.05265	0.304462
Capital Expenditure (Crores)	-1.1115E-08	3.29257E-07	-0.03376	0.973389
Revenue Expenditure (Crores)	-3.1604E-07	1.7008E-07	-1.8582	0.077217
Capital Receipts (Crores)	1.62175E-07	1.73902E-07	0.93257	0.361641
Revenue Receipts (Crores)	3.80425E-07	2.21394E-07	1.71832	0.100449
Rainfall - in mm	9.27096E-05	4.20498E-05	2.204756	0.038759
World GDP (Billion \$)	4.69344E-07	3.51886E-07	1.333796	0.196557
Expenditure by political parties (Trillion)	0.031174315	0.049539205	0.629286	0.535949
Election held or not	0.003700261	0.010933637	0.338429	0.7384

*5 % level of confidence

But an interesting outcome is observed. Rainfall distribution can have significant impact on India which is to a large extent dependent on Agricultural Economy.

For crops to grow, there must be enough rainfall. Inconsistent rainfall or drought can reduce crop yields, which can have an impact on agricultural production and the GDP. Rainfall patterns can have an impact on animal output and irrigation, and rural areas, which are highly dependent on agriculture, may see a reduction in income and spending. Unpredictable rainfall patterns may also result in greater food costs, which would increase inflation and lower buying power. In India, the distribution of rainfall is vital for the agricultural industry and the rural economy, and any deviations or anomalies can have a big impact on the GDP.

4.4 Private Investment (Gross Fixed Capital Formation)



Figure 5: Gross Fixed Capital Formation In various years in India

Based on this analysis, it appears that the Private Investment dropped in the preceding election years, especially before the 1997,1998,2004, 2007, and significantly before the 2014 election.

While some election years saw a significant increase in investment, others saw a decline or remained mostly flat, regardless of the preceding year's growth rate. The trend in investment in fixed assets is influenced by various economic and policy factors, and the impact of Lok Sabha elections on GFCF may be a significant factor from our analysis. This trend may be explained by the fact that Businessmen and industrialists are known to steer clear of making important choices during an election year, due to the possibility that changing the administration might likewise change its objectives. The feasibility of a project can frequently be completely altered by a government's policies. Businessmen aim to minimize the chance that government regulations may make their projects obsolete. However, for the election years like the 2019, we see not a decline but rather an increase in the private investment. This is possibly due to the fact that industry had faith in the economy and government decisions backed by the assumption of the BJP returning to power.

If the exception of 2019 is accepted it is clear that the Business environment and investment do see a dip in the preceding year of election.

Thus, we can reach to the conclusion where we *fail to reject the Null Hypothesis Ho4*.

However, the further analysis brings an interesting fact to the table-

Table 4.5: Regression Statistics for Inflation

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.802965329	0.64475332	0.515572708	0.058636212	31

Table 4.6: Multiple Regression Analysis, Gross Fixed Capital Formation as dependent variable.

	Coefficients	Standard Error	t Stat	P-value
Intercept	-0.108900322	0.13926	-0.78199	0.442554005
Capital Expenditure (Crores)	-8.21595E-07	1.03E-06	-0.79967	0.432450744
Revenue Expenditure (Crores)	-7.10612E-07	5.69E-07	-1.24836	0.22502038
Capital Receipts (Crores)	5.26332E-07	5.73E-07	0.918837	0.368145783
Revenue Receipts (Crores)	6.31557E-07	6.15E-07	1.026297	0.315904151
Rainfall - in mm	0.000190231	0.000144	1.318962	0.200746757
World GDP (Billion \$)	3.08045E-06	1.15E-06	2.675357	0.01382105
Expenditure by political parties (Trillion)	0.304816577	0.156352	1.949557	0.06408941
Election held or not	-0.046250942	0.038158	-1.21207	0.238341081
*5 % level of confidence				

As the P-value shows a significant impact of World GDP on Private Investment, backed by a fairly strong R square value, it is interesting to study the impact of World GDP on domestic private investment in India-

As the world GDP increases the demand for goods and services rise worldwide, which is where the space for Private Investment to rise is also created in accelerating the exports and setting up new enterprises.

4.5 Rate of Unemployment-

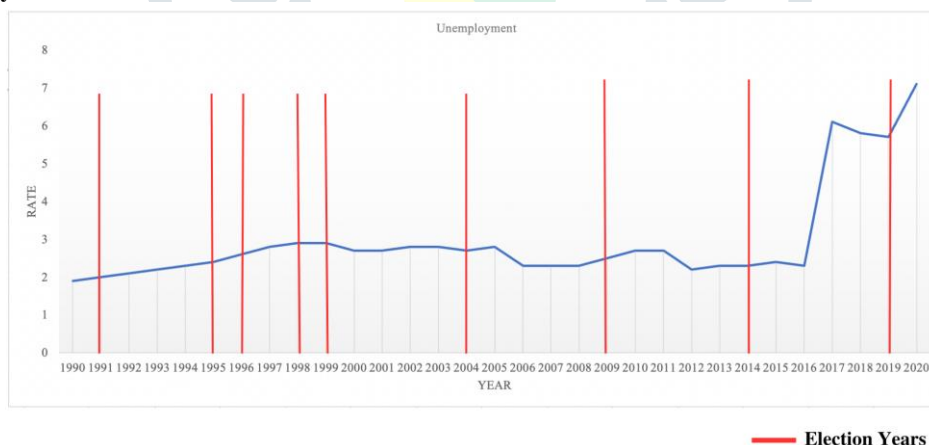


Figure 6: Rate of Unemployment.

We can observe that the rate of unemployment in India has generally been increasing since the 1990s, with some fluctuations. In the early 1990s, India embarked on a process of economic liberalization and globalization, which resulted in significant changes in the economy. While this led to some economic growth and job creation, it also created new challenges and uncertainties in the job market, leading to an increase in the rate of unemployment.

Secondly, we can see that the rate of unemployment tends to increase in the year preceding the Lok Sabha Elections. This could be due to various factors such as political uncertainty, investors adopting a wait-and-see approach, and companies delaying their hiring decisions until after the elections. Additionally, in the year preceding the elections, the ruling party may focus more on campaigning and election-related activities rather than implementing policies and schemes to create job opportunities.

Thirdly, in the year of the Lok Sabha Elections, the rate of unemployment tends to decrease or remain stable. This could be due to the government's efforts to create job opportunities, such as launching new schemes and initiatives, or companies feeling more confident to invest and hire after the elections. Moreover, as elections bring in a new government or the same government with a renewed mandate, it is expected that the government would prioritize job creation in their policies.

However, it is important to note that while there seems to be a pattern in the relation between Lok Sabha Elections and the rate of unemployment, there could be other factors at play as well that impact the unemployment rate in India. For instance, India has a large informal sector, which may not be captured in the official data, and the data itself may not be accurate or reliable.

Thus, observing the above trends, we can conclude that we Fail to reject Null Hypothesis Ho5.

In conclusion, the graph highlights the increasing rate of unemployment in India over the years, with some fluctuations. It also shows a relation between the rate of unemployment and Lok Sabha Elections, where the rate tends to increase in the year preceding the elections and decrease or remain stable in the year of the elections. However, the relationship is not absolute, and there could be other factors at play that impact the unemployment rate in India. To test the same, we run a regression analysis for the same using the same set of data –

Table 4.7: Regression Statistics for Inflation

Regression Statistics				
Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.857654049	0.735570468	0.622243526	0.801182594	31

Table 4.8: Multiple Regression Analysis, Rate of Unemployment as dependent variable

	Coefficients	Standard Error	t Stat	P-value
Intercept	4.091709461	1.927816121	2.12245837	0.045857134
GFCF(crores)	-4.54247E-07	4.25059E-07	-1.068668526	0.29735006
Capital Expenditure (Crores)	-1.77042E-05	1.58728E-05	-1.115383346	0.277287925
Revenue Expenditure (Crores)	-5.85519E-06	8.19918E-06	-0.71411959	0.483015921
Capital Receipts (Crores)	9.0101E-06	8.38343E-06	1.074750832	0.294680425
Revenue Receipts (Crores)	1.3195E-05	1.06729E-05	1.236304139	0.229995383
Rainfall - in mm	-0.000600109	0.002027134	-0.296038087	0.770108675
World GDP (Billion \$)	-4.78213E-05	1.69637E-05	-2.819044854	0.010280702
Expenditure by political parties (Trillion)	1.63052427	2.388180544	0.682747489	0.502229392
Election held or not	-0.046222984	0.527087585	-0.087695072	0.930949911

*5 % level of confidence

The significant P value, calls for a deeper examination of facts. It can be explained in a similar fashion how the world GDP and Private Investment were clubbed.

As the world GDP rises, the private investment increases, impacting the Indian Companies, especially the ones involved in export of goods and services. This creates new opportunities for employment in the Domestic nation, by employing large set of people as per the industry requirement. It can be established through data that major employment opportunities, therefore, are market driven and not so much so dependent on the Government Vacancies or roll out plans.

V. CONCLUSION

Table 5.1 Results

Hypothesis	Result
Inflation increases in the preceding year of election	✗
Government debt increases during and the preceding election year	✓
GDP growth rate rises in the preceding year of election	✓
Private Investment drops in the preceding year of election	✓
Unemployment level declines in the year of election	✓

Though the Hypotheses have been tested on various broad parameters and the result conform to the assumed results, however in the analysis and research we have strongly been able to identify the reasons apart from the election expenditures and the fiscal measures which impact the economy. These factors include not only the domestic influences and political cycles but also the exogenous factors which can significantly impact the economy and coincide with an election year, giving distorted result if not examined carefully. The example of Sub Prime crisis in the year 2008-2009 is a great example of the same. Though the hypothesis stands to be correct but upon the regression analysis of various cycles different we establish the significance of different variables on

each Macroeconomic (dependent) variable. The exogenous reasons often have significant impacts on the economy, which are often underrated. The example of Rainfall distribution, resulting drought , in turn effect on Agricultural economy, its relation with the forward and backward linkages , seasonal employment etc are huge considerations, which require further detailed and independent analysis.

The study also points to the fact that even though election expenditures are huge and in significant amount, it is the sentiment of the elections that affect the economy more than the Monetary value of the expenditure. In terms of how these factors relate to elections, election outcomes can impact government policies, which can, in turn, impact the macroeconomic variables of the Indian economy. For example, if a new government is elected, it may implement new policies that impact taxation, regulation, or spending, which can impact macroeconomic variables.

Additionally, election outcomes can impact investor confidence, which can impact global economic conditions and the macroeconomic variables of the Indian economy .

The Fiscal and Monetary Policy interventions before and after the elections is also an interesting area of research towards understanding the impact of these elections.

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