

Shifting Budget Allocation Priorities in India

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ABSTRACT

Budget allocation is an amount designated to a certain aspect of the economy as an expenditure for a particular year. There are various sectors in an economy that are allocated certain shares of the central budget of a country each financial year. The present research paper focuses on studying the allocation of the budget among four pillars of the Indian economy: education, agriculture, healthcare, and defence, by the United Progressive Alliance as well as the National Democratic Alliance over the course of the past few years. The objective of this paper is to determine which government focuses more on which sector in a specific year and to study the various factors which influence it. The data which has been used to analyze the allocations have been picked up from the official Ministry of Finance website and any ambiguity in the data should not be present. Accuracy has been maintained throughout the paper but any ambiguity in the official data is regretted. This paper has been written from the perspective of one individual and does not aim to influence public opinion or harm any emotional or political sentiments.

Introduction

A budget is a financial plan used to estimate revenues and expenditures for a specific period of time. It is a management and planning tool, not just an accounting document. It assists in the allocation of resources. ("What is a Budgetary Allocation",2019). Budget allocation is the amount of funding designated to each sector of the economy. It designates the maximum amount of funding a body is willing to spend on a given agenda, and it is a limit that is not to be exceeded by the government authorized to charge expenses to a particular budget line. ("What is a Budgetary Allocation",2019) The budget is prepared by the finance minister with the assistance of several advisors and bureaucrats. The finance minister seeks the view of the industry captains and economists before preparation. Various accounting and finance-related organizations send in their opinions and suggestions. The budgeting exercise in India remains mainly the domain of bureaucrats to participate and influence the outcomes. Normally, the budget-making process starts in the third quarter of the financial year and is presented and approved by February. (Ryckman,2019)

After the finance minister presents the budget every year, citizens begin to ask familiar questions. How will the budget impact me? What has become expensive? What has become cheaper? Do I save more on tax or do I pay more? The budget varies from year to year but is normally made keeping in mind that it must benefit people from all sections of society. The budget is of great importance because it helps to keep a check on the government's expenditure and prevents misuse of funds.

The budgetary allocation is used by governments as a policy tool. The resources available for the government for expenditure are always limited and it has to balance the priorities of the political class and the needs of its citizens. (Ryckman, 2019) A budget is a tool that allows the government to allocate the available resources to first meet the committed expenditures that it has related to salaries of government employees, pensions for retired employees, and the interest payments on its borrowings. The balance of the resources plus any borrowings of the government is spent on what is called discretionary expenditure of the government. (2019) The committed expenditures for the government have been ballooning owing to the rising stock of debt for which interest payments have to be made and the larger number of pensioners owing to increased life expectancy. The government also has to balance its allocation between consumption expenditures like subsidy and social benefits to the poor and the need for investments in the physical and social infrastructure like roads, bridges, schools, and



hospitals among others. Given the discretionary spend left with the government is just about one-third of the resources at its disposal, the variation in allocations across sectors is not very high over the years and it marginally dips or increases. However, looking at a longer-term, one can spot an increasing or decreasing trend of allocations to a sector that possibly reflects the priorities of the government. It must be noted that there could be some sudden spikes in allocation to a particular sector in a year owing to external factors e.g., health sector allocation going up post-Covid 19. ("What is Fiscal Policy", 2017)

This research study addresses these criteria by comparing differences between the different political regimes during their rules on a quantitative basis and addressing the reasons why these changes occur over the course of the past few years.

Methodology

Aim of the Study

The research report is focused on providing numbers, graphical representations for analysing and understanding the trends and irregularities in the budget allocations in the four sectors covered i.e., Agriculture, Education, Healthcare, and Defence.

Research Design

The data in this study has been collected from the official Indian Government Budget website, indiabudget.gov.in. The data for each year has been collated from the Expenditure Budget document for each sector. The numbers have been adjusted to allow comparison across the years. The data collected has also been analysed by using inferential statistics i.e., 2 t-tests. The test statistic for a two-sample independent t-test is calculated by taking the difference in the two sample means and dividing by either the pooled or unpooled estimated standard error. The mean average of the spending in each sector for both the UPA and NDA governments has been calculated.

Consent or Ethical Issues

While collecting the information for the research paper, an assumption that all the data on the official Ministry of Finance's is accurate was made.

Sectors of the Budget

Agriculture

For the Agriculture Sector, the actual expenditure amounts for the period 2008-2018 is taken. The revised estimate numbers and the budget estimate numbers have been taken for the financial year 2019 and 2020 respectively. For allowing comparison across the years the expenditure on Urea and Nutrient Based subsidy and Food and Public Distribution values from the budget have been excluded as these were not included in the budget prior to financial year 2015-16. The numbers have been carefully studied and graphically represented as a percentage of the GDP as well as the Budget Expenditure. This helps to understand the trends and the differences in the focuses of the UPA and the NDA government.

Defence

For the Defence Sector, the annual expenditure estimates for the period have been taken in the same manner as the Agriculture Sector. Under the Defence Sector, two expenditure values have been considered, from 2008-09 till 2014-15 which are namely, Civil Defence and Capital Outlays. However, from the years 2015-16 onwards,



the figures that have been considered are four different values as these two have been split into four - Civil Defence, Capital Outlays, Pensions, and Revenue. This was done after carefully studying that these were a part of the sectoral expenditure in earlier years. The numbers have been also interpreted graphically and represented in a visually appealing manner so as to allow the reader to understand the report in a better manner.

Healthcare

For the Healthcare Sector, the expenditure amounts for the period have been studied in the same manner as the healthcare and agriculture sectors. However, under this particular Sector, three different heads of expenditure have been considered for all the years to arrive at the total expenditure value. These, namely, Health and Family Welfare, 'Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH)' and Health Research. The numbers fluctuate in the healthcare sector and to simplify the understanding process for this sector, graphs and simple pointers have been used to enable any reader to interpret and understand the topics discussed with ease.

Education

For the Education Sector, The expenditure amounts for the period have been studied in the same manner as other sectors. For the years 2008-09 till 2014-15, it calculated the values of the total expenditure for this sector from two budget heads - School Education and Higher Education. However, from 2015-16, a third budget head namely Skill Development and Entrepreneurship has also been included as a part of this sector's budget. Similar to the other sectors, the information has been represented graphically to ensure easy understanding for the reader.

Results and Discussion

Analysis of Sectoral Spends

Agriculture

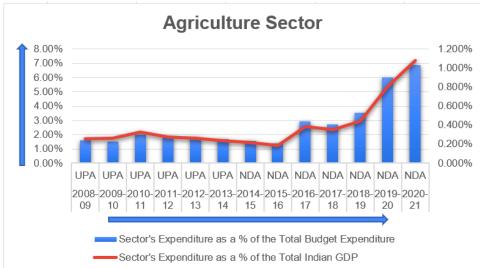


Figure 1. This figure represents the allocations in the Agriculture Sector in which the Bar Graph represents the Sector's Expenditure as a percent of the Total Budget Expenditure and the Line Graph represents the Sector's Expenditure as a percent of the Total Indian GDP. UPA stands for United Progressive Alliance and NDA stands for National Democratic Alliance.

The key observations from the graph depicting the agriculture sector expenditure as a percentage of total expenditure and as a percentage of GDP of India are as follows: (Figure 1)

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It is observed that during financial years 2008-09 to 2013-14, the UPA government maintained the expenditure on agriculture in the range of 1.5% to 2.0 % of the overall budget expenditure. During the NDA years from financial years 2014-15 onwards, there has been an increase in the expenditure for the agriculture sector with the highest growth in expenditure in the financial year 2016-17, having a growth of 131.04% with respect to the previous year.

In the financial year 2016-17, there was a sharp rise in the expenditure budget because the budget that year also included 'Interest subvention' of 15,000 crore INR which was earlier not included in the expenditure budget.

Under the NDA government, many subsidies were added as well which have not been included in the calculations to provide a more comprehensive comparison. The subsidies which have not been included are the Food and Public Distribution subsidies as well as the Urea and Nutrient based subsidies. Many schemes such as the Pradhan Mantri Kisan Maan Dhan Yojana and the Pradhan Mantri Krishi Sinchai Yojana have been launched for the benefit of farmers and in 2019, The PM KISAN project was launched which gave annual support of INR 6,000 to all Indian farmers.

When the t-test method of analysis was used to compare the spending of the UPA with the NDA in the agriculture sector, the mean spending per year of the UPA is approximately INR 21,487.84 lakh crores and the NDA spending is a mean of INR 88651.51 lakh crores. However, since inflation and increased budget are taken into consideration, the spending of the UPA government is also considerably high. NDA spending (M=88651.51 lakhs) reported significantly higher mean spending per year than UPA with the NDA agriculture sector (M=21487.83), t(11)= 2.20, p<.05. The null hypothesis is rejected and the alternate hypothesis is accepted.

Table 1:Summary of Independent T-test Analysis between Agricultural Allocations for the UPA and NDA Governments.

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	21487.83833	88651.50714
Variance	27167758.57	4969450492
Observations	6	7
Pooled Variance	2722958340	
Hypothesized Mean Difference	0	
df	11	
t Stat	-2.313486033	
P(T<=t) one-tail	0.020523004	
t Critical one-tail	1.795884819	
P(T<=t) two-tail	0.041046007	
t Critical two-tail	2.20098516	

Defence

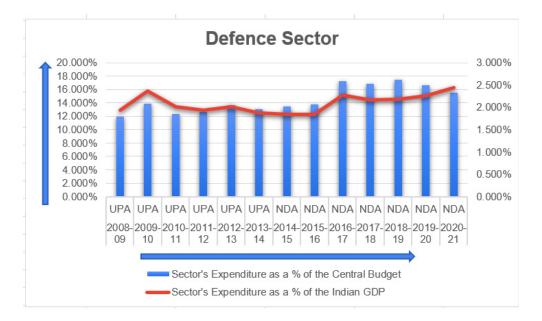


Figure 2. This figure represents the allocations in the Defence Sector in which the Bar Graph represents the Sector's Expenditure as a percent of the Total Budget Expenditure and the Line Graph represents the Sector's Expenditure as a percent of the total Indian GDP. UPA stands for United Progressive Alliance and NDA stands for National Democratic Alliance.

The key observations from the graph depicting the defence sector expenditure as a percentage of total expenditure and as a percentage of GDP of India are as follows:(Figure 2)

The Defence Sector expenditure is one of the highest components of government spending staying over 12% across the years. During the UPA years (2008-09 to 2013-14), the percentage of the budget expenditure spent on defence was in the range of 12% to 14%. Under the NDA years, there has been a step increase in the defence budget allocations with the expenditure going above 16% in 2016-17 and staying above that level up to 2019-20. The financial year 2020-21 witnessed a slight dip possibly owing to the pressures on government resources because of the impact of the Covid-19 pandemic.

The expenditure allocation to defence peaked in financial year 2018-19 to 17.46% of the total expenditure. The growth in the expenditure in this sector from financial year 2016-17 can be attributed to the Make in India focus in the Defence sector. Many military deals including the Rafale Deal in the past few years have boosted spending in the sector. As of 2018, under the NDA government, 182 defence contracts and business deals have been signed in the previous 4 years, including 62 for the navy, 79 for the army, and 41 for the Indian Air Force (IAF).

The details of these are not known to the public for national safety reasons. When the t-test methods of analysis were used to compare the spending of the UPA with the NDA, the mean average spending per year of the UPA is approximately INR 1,59,362.33 lakh crores and the NDA is calculated to be a mean average of INR 3,56,580.71 lakh crores indicating higher spending on defence by the NDA government which can be understood as the graph also shows a growth in its expenditure as a percentage of the GDP as well as the Budget. NDA spending (M=356580.71 lakhs) reported significantly higher mean spending per year than UPA with the NDA defence sector (M=159362.33 lakhs), t(11)= 2.20, p<.05. The null hypothesis is rejected and the alternate hypothesis is accepted.



Table 2: Summary of Independent T-test Analysis between Defence Allocations for the UPA and NDA Governments.

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	159362.3333	356580.7143
Variance	1298760817	8978544332
Observations	6	7
Pooled Variance	5487733643	
Hypothesized Mean Difference	0	
df	11	
t Stat	-4.785241343	
P(T<=t) one-tail	0.00028331	
t Critical one-tail	1.795884819	
P(T<=t) two-tail	0.00056662	
t Critical two-tail	2.20098516	

Education

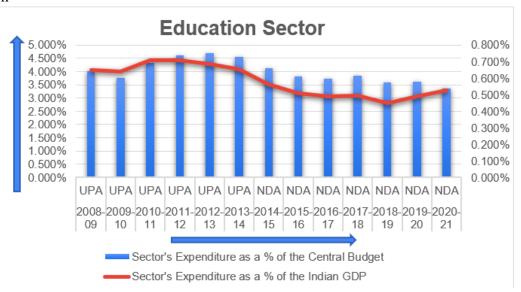


Figure 3. This figure represents the allocations in the Education Sector in which the Bar Graph represents the Sector's Expenditure as a percent of the Total Budget Expenditure and the Line Graph represents the Sector's Expenditure as a percent of the total Indian GDP. UPA stands for United Progressive Alliance and NDA stands for National Democratic Alliance.

The key observations from the graph depicting the education sector expenditure as a percentage of total expenditure and as a percentage of GDP of India are as follows:(Figure 3)

From financial year 2008-09 till financial year 2013-14, when the UPA Government was in power, the education sector expenditure witnessed growth every year, reaching a high of 4.7% of the total Budget expenditure in 2012-13. From the financial year 2014-15 onwards, with the NDA government in power, the education sector expenditure percentage has witnessed a decline from 4.1% in 2014-15 to 3.4% in 2020-21.

The share of the 'Sarva Shiksha Abhiyan' had reduced from 31% in 2016-17 to 29% in 2017-18. However, some of the dips can also be attributed to shifting some of the expenditure responsibilities to the state governments in the sector. The expenditure on the Education Sector as a percent of the Indian GDP has however shown an increase in recent years reaching 0.53% as per the revised estimates for 2020-21.

When the t-test methods of analysis were used to compare the spending of the UPA with the NDA, the mean average spending per year of the UPA comes to approximately INR 53861.90 lakh crores and the NDA spending comes to a mean average of INR 82224.74 lakh crores indicating higher spending on education by the NDA government but it must be kept in mind that various factors have caused the increase including inflation, growth of GDP and Budget which consequently increase the mean spending. NDA spending (M=82224.74 lakhs) reported significantly higher mean spending per year than UPA with the NDA education sector (M=53861.903 lakhs), t(11)= 2.20, p<.05. The null hypothesis is rejected and the alternate hypothesis is accepted. The null hypothesis is accepted which if rejected would state that the data is unrelated to each other.

Table 3: Summary of Independent T-test Analysis between Education Allocations for the UPA and NDA Governments.

t-Test: Two-Sample Assuming Equal Variances		
	UPA	NDA
Mean	53861.90333	82224.74286
Variance	212043636.3	181278167.2
Observations	6	7
Pooled Variance	195262471.3	
Hypothesized Mean Difference	0	
df	11	
t Stat	-3.648323041	
P(T<=t) one-tail	0.001915971	
t Critical one-tail	1.795884819	
P(T<=t) two-tail	0.003831943	
t Critical two-tail	2.20098516	

Healthcare

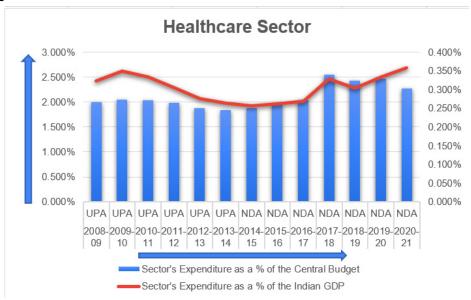


Figure 4. This figure represents the allocations in the Healthcare Sector in which the Bar Graph represents the Sector's Expenditure as a percent of the Total Budget Expenditure and the Line Graph represents the Sector's Expenditure as a percent of the total Indian GDP. UPA stands for United Progressive Alliance and NDA stands for National Democratic Alliance.

The key observations from the graph depicting the healthcare sector expenditure as a percentage of total expenditure and as a percentage of GDP of India are as follows: (Figure 4)

From the financial year, 2008-09 to the financial year 2013-14, the healthcare sector expenditure share as a percentage of the total budget expenditure has remained approximately the same ranging between 2.05% (in

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2009-10) and 1.84% (in 2013-14). From the financial year 2014-15 onwards, the healthcare sector expenditure has shown an increase with the highest growth reaching the peak in the financial year 2017-18. In the financial year 2020-21, the healthcare sector expenditure is estimated at 0.4% of the Indian GDP which is the highest among all studied years. A major reason that caused this increase in the expenditure was the development and increasing severity of the Covid-19 pandemic.

When the t-test method of analysis was used to compare the spending of the UPA with the NDA, the mean average spending per year of the UPA is INR 24,037.12 lakh crores and the NDA spending has a mean average of INR 50,474.68 lakh crores indicating higher spending on healthcare by the NDA government however various factors must be kept in mind which may have caused the increase including inflation, growth of GDP and Budget which have consequently led to an in the mean spending. NDA spending (M=50474.68 lakhs) reported significantly higher mean spending per year than UPA with the NDA healthcare sector (M=24037.16 lakhs), t(11)= 2.20, p<.05. The null hypothesis is rejected and the alternate hypothesis is accepted. The null hypothesis is accepted which if rejected would state that the data is unrelated to each other.

Table 4:Summary of Independent T-test Analysis between Healthcare Allocations for the UPA and NDA Governments.

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t-Test: Two-Sample Assuming Equal Variances		
	UPA	NDA
Mean	24037.16667	50474.68
Variance	16256004.07	227301330.3
Observations	6	7
Pooled Variance	131371636.5	
Hypothesized Mean Difference	0	
df	11	
t Stat	-4.145937662	
P(T<=t) one-tail	0.000813801	
t Critical one-tail	1.795884819	
P(T<=t) two-tail	0.001627601	
t Critical two-tail	2.20098516	

While a budget policy of a government may sound like a very dry and boring topic, it is something that all citizens of a country should care about. In an ideal world, the budget allocation should be a neutral process by which funds are distributed to the different sectors based on an objective evaluation of the needs (Palanjian, 2008). Unfortunately, in reality, this process gets compromised by the biases of the political party that gets elected (Palanjian, 2008). For instance, by taking a look at the NDA government's expenditure on education from 2014 to 2018: its budget had been slashed down from 4.13% to 3.59% ("Story in Numbers: Spending on Education in Four Years of Modi Government", 2018).

Hence, the moving budget allocations impact all classes and sections of society. The four studied sectors, specifically, are sectors that have major impacts on the common people of the country.

Firstly, a reduction in the expenditure in the education sector endangers the future of the country as lesser funds allocated for education will be able to provide free education to fewer underprivileged children. In the agriculture sector, a reduction in the budget allocation leads to fewer schemes being implemented and fewer measures being taken to improve the condition of the farmers as well as the industry. This might serve as a major hit to the economy as the agriculture industry serves as a means of livelihood for approximately 58% of the total Indian population and has a total valuation of 19.48 lakh crore INR. Thirdly, in the defence sector, a reduction might be a major risk factor for the safety of the country as fewer funds spent means lesser protection to preserve the sovereignty of the country and lesser protection from external aggressors. Even though such a deduction has not taken place yet, it might be catastrophically dangerous for the nation if it happens. Lastly, in the healthcare sector, these fluctuations might be positive for the citizens as a larger amount would be used to help the people who cannot afford good healthcare facilities and would be used to carry out medical research. However, a dip



could be bad for the country as lesser amounts could lead to health issues in the country as well as a rise in infections or diseases in the country.

Conclusion

In summary, what can be observed from the sector expenditure across the four sectors under the NDA regime greater emphasis has been on Agriculture and Defence. The level of farm distress and the government's commitment to double farmer incomes has led to the higher allocation for the agriculture sector. The geopolitical tensions and the elevated risks of terrorism have possibly influenced the higher allocations for the defence sector. The health sector expenditure as a percentage of GDP has also exhibited an increasing trend owing to the launch of the 'Ayushman Bharat' (Health for All) health insurance scheme and Covid related expenses in the financial year 2020-21. The expenditure allocation as a percentage of total expenditure for the education sector has witnessed a decline during the NDA regime. However, the education sector expenditure as a percentage of GDP has increased in financial years 2019-20 and 2020-21. The resource constraints of the government and higher allocation to the health, defence, and agriculture sectors may have constrained expenditure allocation to the education sector.

Among the four sectors analyzed, it is clear from the trends that the four sectors had almost balanced trends of allocations without any particular spikes. The only exception was Education where there was a slightly increasing trend observed. It may also be noted that while the allocation to the education sector has somewhat declined in the NDA years, it could be due to the diminished contribution of the central government under the centrally sponsored flagship schemes in the education sector like the Sarva Shiksha Abhiyan (Education for All). The state-level contributions to these schemes were enhanced and there has been a general reduction of central allocations to centrally sponsored schemes with more resources being transferred to the states under the recommendations of the Finance Commissions to share more percentage of the shareable resources with the states. While the percentage allocation to a particular sector or the spending in a particular sector as a percentage of GDP may go up or down, it may be noted that the absolute expenditure in these sectors has grown with a growing budget size for the central government.

Thus, it can be concluded that while there could be sectoral priorities for a particular government that leads to some additional allocations to those sectors, the headroom for maneuver is very limited given the fiscal resources constraints and the limited discretionary budgetary resources at the disposal of governments.

The research paper focuses on collecting and analyzing the data which has been done from the official Ministry of Finance pages with extreme carefulness. Accuracy has been maintained throughout the paper but any ambiguity in data on the official website cannot be guaranteed. This research paper is from an individual perspective and does not aim to hurt any individual or party.

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