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# *Dependence of States on Central Transfers: State-wise Analysis #*

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## **Abstract**

This paper examines the dependence of states on central fiscal transfers. The pattern of dependence of states on central transfers is studied with respect to five groups of states, namely, high, middle and low income general category states and two groups of special category states categorized into high and low income states. We make a distinction between transfers that are in the form of an entitlement like states' share in central taxes or statutory grants vis-a-vis transfers that are discretionary and depend on centre's decisions. In terms of groups of states, the extent of dependence is relatively quite high for the special category states and the low income states. The extent of dependence was lowest during the period covered under the Tenth Finance Commission period. It has since increased, for all states considered together, by about 3.5 percentage points, from 37.4 percent to 40.9 percent of states' revenue receipts. This increase comes both from entitlement transfers and discretionary transfers to the extent of 2.1 and 1.3 percentage points, respectively.

### **Keywords**

Central Transfers, Tax Devolution.

### **JEL Codes**

H11, H77

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## Introduction

States derive a certain portion of their revenue receipts from central transfers in the form of share in central taxes and grants from the Finance Commission, Planning Commission and other central ministries. The share of total transfers from the Centre in the total revenue receipts of the states or revenue expenditures indicates the extent to which a state depends on the transfers from the Centre. These shares show variations across states and over time. In this paper, we undertake an analysis of the degree of dependence of individual states (or groups of states) on central transfers for the period from 1990-91 to 2010-11. This covers the periods of awards of the Ninth Finance Commission [Main Award] (1990-91 to 1994-95), Tenth Finance Commission (1995-96 to 1999-2000), Eleventh Finance Commission (2000-2001 to 2004-05), and Twelfth Finance Commission (2005-06 to 2009-10). The first year of the Thirteenth Finance Commission award period, 2010-11, is also included in the analysis. States are divided into five groups: for general category states the groups pertain to high, middle and low income states; the special category states are divided into two groups based on per capita income (high income and low income states): Group 1 and Group 2. Group 1 contains the following states: Himachal Pradesh, Jammu and Kashmir, Uttaranchal, Sikkim and Meghalaya. Group 2 contains the following states: Arunachal Pradesh, Manipur, Mizoram, Nagaland, and Tripura.

In this paper, we look at the pattern of changes in states' dependence on the share of central taxes, plan grants and non-plan grants which they get on the basis of the recommendations of the Finance Commissions. State's dependence on the share of central taxes has changed over time. These changes are partly due to the recommendation of the Finance Commission as to the share that should be given to the states from Centre's shareable portion of tax revenues as well as on changes in economic growth and tax-efforts of both the central and state governments. We make a distinction between transfers that are constitutionally provided for like the state's share in central taxes and statutory grants and transfers that are based on centre's discretion such as plan grants and other grants. Although part of plan grants is formula-based, the weight that is attached to this part remains discretionary.

This paper is organized into five sections. In section two, a scheme of decomposition of transfers to state with respect to funds that are qualitatively different is suggested. Section three provides a decomposition of dependence of states on central funds when the states are considered together. In section four we look at the pattern of dependence for individual states as divided into 5 groups. The general category states are divided into three groups, namely high income, middle income and low income states and the special category states are combined into two groups called group1 and group 2. The findings are summarised in the last section.

## 2. Methodology

In this section we develop a methodology to decompose the dependence of the states on total transfers from the Centre. This includes the share in central taxes as well as grants from all sources<sup>1</sup>.

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<sup>1</sup> The total central transfers consist of share in central taxes (corporation tax, income tax, estate duty, other taxes on income and expenditure, taxes on wealth, customs, union excise duties, service tax, and other taxes and duties on commodities and services), grants from the

An index of dependence (D) is defined as:

$$D = TR/RR \quad i$$

Where, TR=Transfers Received by a State on Revenue Account and  
RR= State's Total Revenue Receipts<sup>2</sup>

TR consists of four sources of funds that are qualitatively different.

$$TR = SCTR + STG + PT + OG \quad ii$$

Where, SCTR=Share in central taxes

STG=Statutory Grants

PT=Plan Grants

OG=Other Grants

Correspondingly D can be seen as the sum of four components:

$$D = D1 + D2 + D3 + D4 \quad iii$$

Where  $D1 = D * SCTR/TR$ ;  $D2 = D * STG/TR$ ;  $D3 = D * PT/TR$  and  $D4 = D * OG/TR$

We can see the degree of dependence in two ways:

$$D = D1 + (D2 + D3 + D4) \quad iii (a)$$

The first term indicates dependence on share in central taxes, which is affected by GDP growth and the buoyancy of central taxes. The second term shows dependence on grants that are determined in nominal terms. The two terms are qualitatively different.

Secondly, we can combine these components as follows:

$$D = (D1 + D2) + (D3 + D4) \quad iii (b)$$

The first term in parenthesis indicates the source of funds as entitlement transfers and the second term indicates discretionary transfers.

### 3. Decomposition of Dependence: Aggregate Analysis

In this section, we undertake an aggregate analysis of the pattern of dependence of all states taken together on central transfers from the Centre, based on the methodology developed in the earlier section.

Table 1 indicates the profile of states' share in central taxes as percentage of states' revenue receipts indicating how the dependence of the states has increased over time in the share in central taxes. For the First Finance Commission period, the average share of central taxes in states' revenue receipts was 14.0 percent. It increased over successive Finance Commission (FC) period to reach a level of 22 percent for the Fifth FC period. Thereafter it fell for the period of Sixth FC and increased again to 24.3 in the Seventh FC. During the period covered by the recommendations of the Eighth to Twelfth FCs, this ratio was in the range of 22.1 to 23.5 percent.

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Centre (state plan schemes, central plan schemes, centrally sponsored schemes, the North East Council special plan schemes), non-plan grants consisting of statutory grants (Finance Commission), relief on account of natural calamities and others.

<sup>2</sup> States' revenue receipts include lotteries.

**Table 1:** Share of States' in Central Taxes and Related Aggregate Determinants

<b>Commission Period Averages</b>	<b>States' Share in Central Taxes as % of States' Revenue Receipts</b>	<b>Share of Central Taxes in Gross Central Tax Revenue</b>	<b>Gross Central Tax Revenue as % of GDPmp</b>	<b>States' Revenue Receipts as % of GDPmp</b>
First (1952-56)	14.0	15.7	4.0	4.5
Second (1957-61)	16.4	18.5	5.0	5.6
Third (1962-65)	16.4	15.2	6.8	6.3
Fourth (1966-68)	17.2	17.8	6.5	6.7
Fifth (1969-73)	22.1	23.3	7.2	7.6
Sixth (1974-78)	19.6	19.9	8.6	8.8
Seventh (1979-83)	24.3	27.1	9.1	10.1
Eighth (1984-88)	22.8	25.2	9.9	10.9
Ninth (1989-94)	22.7	26.7	9.5	11.1
Tenth (1995-99)	23.4	27.4	8.7	10.2
Eleventh (2000-04)	22.1	27.0	8.7	10.6
Twelfth (2005-09)	23.5	26.3	10.6	11.9

**Source (Basic Data):** *Indian Public Finance Statistics*, various issues.

**Note:** GDP new series base 2004-05. Year 1952-56 refers to 1952-53 to 1956-57, and so on.

From Table 1, it can be seen that the share of central taxes in gross central tax revenues also show a corresponding pattern. This share was the highest for the Tenth FC period at 27.4 percent. It was relatively stable during the period covered by the Ninth to Twelfth FCs at around 27 percent, however if individual years are considered there are considerable fluctuations. The gross central taxes revenues and the state revenue receipts as proportion of gross domestic product has been increasing from 4.0-10.6 percent and 4.5-11.9 percent, respectively over the Finance Commission periods.

The aggregate states' share of central taxes in total transfers from the Ninth to Twelfth Finance Commission periods has been in the range of 51-63 percent, plan grants 27-41 percent, statutory grants 2-10 percent, and other grants 2-8 percent. The detail of the composition of central transfers for aggregate states is given in Appendix Table A.

Table 2 shows the degree of dependence for all states from Ninth to Thirteenth Finance Commission (first year). As discussed in the earlier section two alternative ways of decomposition are presented. Decomposition 1 refers to equation iii (a) and decomposition 2 refers to equation iii (b).

**Table 2: Dependence of States on Central Transfers**

Commission	Decomposition 1		Decomposition 2		Aggregate Dependence Ratio (D)
	Share in Central Taxes	Total Grants	Entitlement Transfers	Discretionary Transfers	
	(D1)	(D2+D3+D4)	(D1+D2)	(D3+D4)	
	1	2	3	4	5
Ninth	21.4	18.8	23.7	16.5	40.2
Tenth	22.7	14.7	24.3	13.1	37.4
Eleventh	21.4	16.3	24.3	13.4	37.7
Twelfth	22.7	18.3	26.1	14.9	41.0
Thirteenth (First Year)	23.5	17.5	26.4	14.5	40.9

**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

In decomposition 1 the share of central taxes are treated as one component and total grants are treated as the second component, wherein grants include statutory grants (D2), plan grants (D3) and other grants (D4). Column 1 indicates dependence on share in central taxes and column 2 shows dependence on grants that are determined in nominal terms. In the second decomposition the first component includes the share of central transfers (D1) and the statutory grants (D2) to which the states are entitled under the constitutional provisions. The second component refers to the discretionary transfers comprising plan grants (D3) and other grants (D4). The discretionary transfers are based on the discussions of the states with Planning Commission at the time of Plan discussion with the states. In Decomposition 2, column 3 indicates the source of funds as entitlement transfers (D1 + D2) and column 4 shows discretionary transfers (D3 + D4). Column 5 shows the dependence of all states on central transfers.

The dependence of all states on central transfers (D) was 40 percent in the Ninth FC and it fell by 3 percentage points in the Tenth FC, thereafter rose to 41 percent in the Twelfth FC and continued in the first year of Thirteenth FC. This rise may be attributed to the economic slowdown and inability of states to raise more resources to meet their obligation. On the whole the aggregate dependence ratio (column 5) for the all states was increasing since the Tenth FC.

All states are dependent on central taxes to the extent of 53 to 60 over the five commission periods. If the statutory grants are take into account (entitlement transfers) then the extent of dependence increases to 60-64 percent. Decomposition 1 of dependence shows that central taxes over the four commission periods and the first year of the fifth commission have been in the range of 21 to 23 percent while total grants varied between 14-18 percent. In decomposition 2 the entitlement transfers account for 23-26 percent and discretionary transfers 13-16 percent.

## 4. Decomposition and Pattern of Dependence: Individual States

### i. High Income General Category States a. Dependence of States

The high income general category states receive the lowest transfers relative to their revenue receipts. On average, Haryana is shown to be the least dependent state on central transfers, followed by Punjab, Maharashtra, Goa, and Gujarat. As

shown in Table 3, there are interesting patterns over time across states and across Finance Commissions (Ninth to Thirteenth). If Goa's dependence ratio for Ninth FC period is excluded it is observed that variation across Commissions and high income states have been in the range of 11-24 percent.

**Table 3: Dependence of High Income States**

<b>Commission</b>	<b>Goa</b>	<b>Gujarat</b>	<b>Haryana</b>	<b>Maharashtra</b>	<b>Punjab</b>
Ninth	35.84	19.36	15.91	20.66	19.19
Tenth	15.03	19.91	14.73	17.15	15.63
Eleventh	11.09	21.18	12.71	14.42	12.63
Twelfth	15.99	24.58	17.78	21.45	20.51
Thirteenth (First Year)	19.00	21.22	20.94	21.36	19.74

**Source (Basic Data):** Reserve Bank of India, *State Finances A Study of Budgets*, various years.

- a. In the case of Goa, the extent of transfer has come down over time from an average of 36 percent during Ninth FC to just about 11 percent in Eleventh FC, subsequently increased to 16 percent in Twelfth FC and 19 percent in the first year of the Thirteenth FC.
- b. For Haryana the share has ranged between 12.7-17.8 percent.
- c. For Maharashtra it has ranged between 14.4 percent on an average to 21.5 percent. The lowest share was in the Eleventh Finance Commission period.
- d. For Punjab the share has varied between 12.6-20.5 percent. Here also the lowest share was during the Eleventh Finance Commission award period.
- e. For Gujarat it has ranged between 19.4-24.6 percent.
- f. Comparing across Finance Commissions, the high income group states obtained the lowest shares during Eleventh Finance Commission period, followed by Tenth Finance Commission period.

#### **b. Decomposition of Dependence of States**

Table 4 shows the decomposition of dependence for higher income states in two ways.

1. In decomposition 1 the highest income state viz., Goa's share in central taxes has varied from 7.2–18.2 percent while total grants was in the range of 3.8-17.6 percent. In decomposition 2 entitlement transfers varied from 7.3-27.1 percent while discretionary transfer ranged between 3.8-8.8 percent. In both the decomposition the minimum share was in Eleventh FC and the maximum in Ninth FC. If Ninth FC is excluded the variation in central taxes and entitlement transfers was in the range of 7-11 percent over the FC period. The range is similar as there were no statutory transfers (D2) given to Goa during this period.

**Table 4:** Decomposition of Dependence: High Income States

Commission	Decomposition 1		Decomposition 2	
	Share in Central Taxes	Total Grants	Entitlement Transfers	Discretionary Transfers
<b>Goa</b>				
Ninth	18.19	17.65	27.07	8.77
Tenth	8.97	6.06	10.87	4.16
Eleventh	7.27	3.82	7.27	3.82
Twelfth	11.76	4.21	11.76	4.20
Thirteenth*	10.74	8.26	10.74	8.26
<b>Gujarat</b>				
Ninth	11.03	8.33	11.30	8.06
Tenth	12.90	7.01	13.54	6.37
Eleventh	9.73	11.45	10.16	11.02
Twelfth	14.38	10.20	15.74	8.84
Thirteenth*	12.76	8.46	14.45	6.77
<b>Haryana</b>				
Ninth	8.81	7.10	8.92	6.99
Tenth	8.27	6.46	8.41	6.32
Eleventh	6.31	6.40	6.56	6.15
Twelfth	8.39	9.39	9.07	8.71
Thirteenth*	9.00	11.93	11.71	9.23
<b>Maharashtra</b>				
Ninth	12.01	8.65	12.44	8.21
Tenth	10.85	6.30	11.14	6.00
Eleventh	8.71	5.71	8.84	5.58
Twelfth	9.77	11.67	9.90	11.55
Thirteenth*	10.79	10.58	11.03	10.33
<b>Punjab</b>				
Ninth	10.51	8.68	12.45	6.74
Tenth	9.42	6.21	10.76	4.87
Eleventh	6.62	6.01	6.99	5.63
Twelfth	9.31	11.20	9.31	11.20
Thirteenth*	11.05	8.69	11.05	8.69

**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

**Note:** \* First Year of the Thirteenth Finance Commission – 2010-11.

- For Gujarat the share in central taxes varied from 9.7-14.4 percent and total grants 7.0-11.5 percent while entitlement grants 10.2-15.7 and discretionary transfers 6.4-11.0 percent. In the case of central taxes and entitlement transfers the shares were minimal in Eleventh FC consequently the total grants and discretionary transfers are maximum in this period.
- For Haryana the share in central taxes ranged between 6.3-9.0 percent and total grants 6.4-11.9 percent while entitlement grants 6.6-11.7 percent and discretionary transfers 6.2-9.2 percent. The minimum share was in the Eleventh FC and the maximum was in the first year of the Thirteenth FC.
- For Maharashtra the share in central taxes varied from 8.7-12.0 percent and total grants 5.7-11.7 percent while entitlement grants 8.8-12.4 percent and discretionary transfers 5.6-11.6 percent. It is observed that the minimum share was in the Eleventh FC for central taxes (8.7 percent) and entitlement transfer (8.8 percent) while Twelfth FC for total grants and discretionary transfers were maximum (11.6 percent).
- For Punjab the share in central taxes ranges from 6.6-11.1 percent and total grants 6.0-11.2 percent while entitlement grants 6.9-12.5 percent and discretionary transfers 4.9-11.2 percent. Decomposition 1 shows decline in shares of central taxes from the Ninth to Eleventh FC and thereafter



improved to 11.1 percent in first year of Thirteenth FC but total grants fell to 8.7 percent. The same is observed in decomposition 2. Punjab did not receive statutory grants in the Twelfth and first year of Thirteenth FC.

## ii. Middle Income General Category States

### a. Dependence of States

Among the middle income general category states, across states, the lowest dependence on Finance Commission transfers is that of Tamil Nadu and the highest, that of West Bengal. Table 5 shows the dependence of general category middle income states.

**Table 5:** Dependence of Middle Income States

Commission	Andhra Pradesh	Karnataka	Kerala	Tamil Nadu	West Bengal	Chhattisgarh
Ninth	36.03	27.10	33.37	30.30	43.36	
Tenth	36.53	26.04	28.11	25.46	43.40	
Eleventh	31.25	26.35	26.20	23.31	46.95	39.64
Twelfth	32.31	28.30	28.94	26.42	49.71	43.26
Thirteenth (First Year)	31.03	28.13	23.68	25.30	50.26	43.48

**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

- The dependence ratio has remained relatively stable for Karnataka over five Commission periods (26-28 percent).
- For Andhra Pradesh, there is a significant decline from 36 percent in Ninth and Tenth FC to 31-32 percent in Eleventh to Thirteenth FC.
- In the case of Tamil Nadu there has been significant decline from 30 percent in the Ninth to 23 percent in the Eleventh FC. In Twelfth FC the ratio increased to 26 and came down to 25 percent in the first year of Thirteenth FC.
- For Kerala, dependence ratio fell from 33-26 percent in Ninth to Eleventh FC and thereafter rose to 29 percent in Twelfth FC and thereafter fell to 24 percent in the first year of Thirteenth FC.
- Dependence of West Bengal and Chhattisgarh has increased over the Finance Commission periods.

### b. Decomposition of Dependence of States

Table 6 shows the decomposition of dependence for general category middle income states in two ways. It is observed that dependence of middle income states is higher than that of advance states.

**Table 6:** Decomposition of Dependence: Middle Income States

Commission	Decomposition 1		Decomposition 2	
	Share in Central Taxes	Total Grants	Entitlement Transfers	Discretionary Transfers
<b>Andhra Pradesh</b>				
Ninth	21.17	14.86	23.19	12.83
Tenth	23.57	12.96	26.11	10.42
Eleventh	18.62	12.64	19.86	11.39
Twelfth	19.64	12.67	20.57	11.74
Thirteenth *	18.81	12.22	19.96	11.08
<b>Karnataka</b>				
Ninth	16.58	10.52	16.70	10.41
Tenth	17.81	8.23	17.95	8.09
Eleventh	16.39	9.96	16.96	9.39
Twelfth	15.23	13.07	15.28	13.02
Thirteenth *	16.33	11.80	16.33	11.80
<b>Kerala</b>				
Ninth	19.65	13.71	20.31	13.05
Tenth	19.15	8.96	19.36	8.74
Eleventh	17.39	8.81	18.17	8.03
Twelfth	17.52	10.96	20.05	8.44
Thirteenth *	16.59	7.09	17.65	6.03
<b>Tamil Nadu</b>				
Ninth	19.11	11.19	19.30	11.00
Tenth	17.69	7.77	17.89	7.57
Eleventh	14.98	8.33	15.24	8.07
Twelfth	15.70	10.72	16.75	9.67
Thirteenth *	15.55	9.75	16.90	8.40
<b>West Bengal</b>				
Ninth	26.68	16.68	28.14	15.22
Tenth	29.69	13.72	31.45	11.96
Eleventh	30.93	16.02	36.99	9.97
Twelfth	31.77	17.94	36.40	13.30
Thirteenth *	33.76	16.50	35.93	14.33
<b>Chhattisgarh#</b>				
Ninth				
Tenth				
Eleventh	26.22	13.42	26.22	13.42
Twelfth	27.34	15.92	27.34	15.92
Thirteenth *	23.88	19.60	23.88	19.60

**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

**Notes:** \* First Year of the Thirteenth Finance Commission – 2010-11. # Chhattisgarh state was formed on 1<sup>st</sup> November 2000.

1. For Andhra Pradesh decomposition 1 shows that the component of grants has declined from 14.9-12.2 percent over the finance commission periods. It has been below 13 percent from Tenth to Thirteenth FC. The share of central taxes has broadly been the range of 18-23 percent. The maximum was in Tenth FC and the minimum was in Eleventh FC. The discretionary transfer in decomposition 2 varied in the range of 10-12 percent over the FC periods. Entitlement transfers fluctuated over the commission periods in the range of 19-23 percent.
2. Karnataka has a lower dependency ratio as compared to Andhra Pradesh. The share of central taxes and entitlement transfers varied in the broad range of 15-17 percent while grants and discretionary transfers in the range of 8-11 percent.

3. For Kerala the dependence on share in central taxes has come down from 19 percent in the Ninth FC to 16 percent in the first year of Thirteenth FC. Total grants fell which was 13 percent in Ninth FC declined to 9 percent in Tenth and Eleventh FC and subsequently rose to 11 percent and came down by 3 percentage points in the first year of Thirteenth FC.
4. The share of dependence of Tamil Nadu is lower than Karnataka. Decomposition shows that share of central taxes fell from 19-17 percent in the Ninth and Tenth FC periods and thereafter stabilized around 15 percent while there is volatility in total grants. Decomposition 2 shows that entitlement transfers fluctuated between 15-19 percent and discretionary transfers if Ninth FC is excluded varied in the range of 7-9 percent.
5. In the case of West Bengal the dependence is highest among the middle income states and as discussed earlier has been rising over the successive FC periods. The share in central taxes rose from 26-33 percent over the FC periods. Total transfers ranged between 16-17 percent over the years except for Tenth FC where it was 14 percent. Decomposition 2 shows that entitlements grants have gone up over the years from 28-36 percent. Discretionary transfers fell from 15-9 percent in Eleventh FC and then rose to 14 percent in the first year of Thirteenth FC.
6. For Chhattisgarh both the decompositions show that in Eleventh and Twelfth FC the share in central taxes and entitlement taxes is same as no statutory grants was given to the state.

### iii. Low Income General Category States

#### a. Dependence of States

In the low income states of general category, the dependence of transfers in revenue receipts is far more compared to the middle and high income groups. As shown by Table 7, for the Twelfth Finance Commission period, it varies from a minimum of 42 percent for Rajasthan to a maximum of 78 percent for Bihar. The dependence on central transfers among the low income states is highest in Bihar, followed by Orissa, Jharkhand, Uttar Pradesh, Madhya Pradesh and Rajasthan.

**Table 7:** Dependence of Low Income States

Commission	Bihar	Madhya Pradesh	Orissa	Rajasthan	Uttar Pradesh	Jharkhand
Ninth	59.47	41.79	59.80	43.99	52.21	
Tenth	60.72	39.26	56.79	38.42	49.29	
Eleventh	72.19	42.34	55.00	40.98	49.70	52.70
Twelfth	77.57	47.64	54.16	41.77	52.73	54.02
Thirteenth (First Year)	75.62	47.66	52.00	41.10	52.75	54.75

**Source (Basic Data):** Reserve Bank of India, *State Finances A Study of Budgets*, various years.

- a. For Bihar the dependence ratio has increased from 59-78 percent during the Ninth to Twelfth FC, and was about 76 percent in the first year of Thirteenth FC. The rate of increase has been higher from the Tenth to Twelfth FC.
- b. The dependence for Madhya Pradesh has also increased since the Tenth FC from 39-48 percent.
- c. For Orissa the dependence fell from 60-52 percent over the Ninth to first year of Thirteenth Commission period.
- d. For Rajasthan the dependence increased from Tenth FC onwards 38-41 percent.

- e. For Uttar Pradesh the dependence rose from 49 percent in Tenth FC to 52 percent over the years.
- f. For Jharkhand also the dependence increased from 52-54 percent from the Twelfth FC onwards.
- g. On the whole the dependence of low income states has been increasing from the Tenth FC onwards except for Orissa where the dependence on central transfers has been decreasing.

***b. Decomposition of Dependence of States***

Table 8 captures the decomposition of dependence for general category low income states in two ways. It is observed that dependence of low income states is higher than that of middle income states.

1. For Bihar decomposition 1 shows that the share of central taxes increased from 39-58 percent in the Ninth to Eleventh FC thereafter decreased to 54 percent in the first year of Thirteenth FC. On the other hand, total grants in the Ninth, Twelfth and first year of Thirteenth FC was about 21 percent and during Tenth to Eleventh FC about 14 percent. In decomposition 2 the entitlement transfers rose from 44-59 percent in Ninth to Twelfth FC and came down to 57 percent in the first year of Thirteenth FC. Discretionary transfers fluctuated between 13-18 percent over the years.
2. For Madhya Pradesh share in central taxes increased from 24-30 percent over the years, total grants fluctuated between 13-18 percent while entitlement transfers also rose from 24-33 percent over the commission periods and discretionary transfer varied between 12-15 percent for Ninth FC when it was 17 percent.
3. In the case of Orissa the composition of dependence, viz., share in central taxes varied from 32-35 percent over the years and total grants 20-23 percent excluding Ninth FC (26 percent) while entitlement grants ranged from 33-37 percent and discretionary transfers from 18-24 percent.
4. For Rajasthan the composition of share in central taxes increased from 21-28 percent and total grants fluctuated between 13-17 percent excluding Ninth FC (23 percent). The second decomposition shows that entitlement transfers rose from 23-31 percent over the years and discretionary transfers oscillated 10-15 percent excluding Ninth FC (21 percent).
5. For Uttar Pradesh, the decomposition shows that share in central taxes rose from 29-39 percent during the Ninth to Eleventh FC and stabilized at 39 percent in the Twelfth and first year of the Thirteenth FC. Excluding the Ninth FC (23 percent) the total grants varied between 10-14 percent. In decomposition 2 entitlement transfers increased from 30-42 percent from Ninth to Twelfth FC and fell by one percentage point in the first year of Thirteenth FC. Excluding the Ninth FC (22 percent) the discretionary transfers varied between 10-12 percent.
6. For Jharkhand the composition for Twelfth FC was 35 percent for central taxes and 20 percent for total grants. In the second decomposition for Twelfth FC central taxes were 37 percent and discretionary transfers 17 percent. The composition in the first year of Thirteenth FC share in central taxes was 32 percent and total grants was 23 percent while decomposition 2 entitlements was 37 percent and discretionary transfers was 18 percent.
7. The decomposition of dependence of low income states shows that they are extremely dependent on entitlement transfers viz., share in central transfers and statutory transfers, to finance their activities.

**Table 8:** Decomposition of Dependence: Low Income States

Commission	Decomposition 1		Decomposition 2	
	Share in Central Taxes	Total Grants	Entitlement Transfers	Discretionary Transfers
<b>Bihar</b>				
Ninth	38.78	20.69	44.05	15.42
Tenth	46.66	14.06	47.79	12.93
Eleventh	58.00	14.19	58.63	13.56
Twelfth	56.06	21.49	58.72	18.84
Thirteenth *	53.84	21.78	57.09	18.53
<b>Madhya Pradesh</b>				
Ninth	24.05	17.74	24.31	17.48
Tenth	26.35	12.91	26.60	12.66
Eleventh	29.73	12.61	30.74	11.60
Twelfth	30.87	16.77	33.80	13.84
Thirteenth *	30.16	17.50	32.60	15.07
<b>Orissa</b>				
Ninth	33.35	26.46	36.26	23.54
Tenth	34.05	22.74	36.04	20.74
Eleventh	35.47	19.53	37.28	17.72
Twelfth	34.14	20.02	34.96	19.20
Thirteenth *	31.54	20.45	33.29	18.71
<b>Rajasthan</b>				
Ninth	21.11	22.88	23.45	20.54
Tenth	21.91	16.51	23.27	15.15
Eleventh	23.52	17.46	27.03	13.96
Twelfth	26.52	15.25	28.92	12.85
Thirteenth *	27.99	13.11	30.79	10.31
<b>Uttar Pradesh</b>				
Ninth	28.79	23.42	29.87	22.34
Tenth	35.89	13.40	37.78	11.51
Eleventh	39.45	10.25	40.15	9.55
Twelfth	38.76	13.97	42.48	10.26
Thirteenth *	38.87	13.88	41.06	11.70
<b>Jharkhand#</b>				
Ninth				
Tenth				
Eleventh				
Twelfth	34.52	19.50	36.68	17.35
Thirteenth *	31.54	23.21	36.74	18.01

**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

**Notes:** \* First Year of the Thirteenth Finance Commission – 2010-11. # Jharkhand state was formed on November 2000.

#### iv. Special Category States Group 1 a. Dependence of States

Table 9 captures the dependence of special category states group 1. It is observed that dependence of special category states is higher than the general category low income states. The dependence is highest for Jammu and Kashmir, followed by Meghalaya then Himachal Pradesh and Sikkim.

**Table 9:** Dependence of Special Category States: Group 1

Commission	Himachal Pradesh	Jammu and Kashmir	Meghalaya	Sikkim	Uttaranchal
Ninth	71.92	83.53	84.14	70.42	
Tenth	66.97	85.13	82.40	28.03	
Eleventh	67.80	81.46	79.79	43.39	57.21
Twelfth	60.41	77.60	78.23	44.51	56.50
Thirteenth (First Year)	58.01	79.42	79.51	53.51	56.21

**Source (Basic Data):** Reserve Bank of India, *State Finances A Study of Budgets*, various years.

- For Himachal Pradesh the dependence on central transfers fell from about 72-58 percent over the Ninth to first year of Thirteenth FC except for Tenth FC where the ratio was 68 percent.
- In case of Jammu and Kashmir dependence was above 81 percent from Ninth to Eleventh FC while it fell to 78 percent in Twelfth FC and subsequently rose to 79 percent in the first of Thirteenth FC.
- For Meghalaya dependence came down from 84-78 percent in Ninth to Twelfth FC thereafter rose to about 80 percent in first year of the Thirteenth FC.
- In case of Sikkim the dependence ratio was highest in the Ninth FC and thereafter fell sharply to 28 percent in Tenth FC. No statutory grants were provided by the Tenth FC and other grants were also nil. From Eleventh FC dependence rose from 43-54 percent by the first year of Thirteenth FC. This reflects more an increase in states own revenues rather than a fall in the transfers
- For Uttaranchal it varied between 56-57 percent in the Eleventh to first year of Thirteenth FC.

#### ***b. Decomposition of Dependence of States***

Table 10 captures the dependence of special category states group 1. Since special category states are mostly funded by grants it is observed that grants play major role in these economies. The decomposition of dependence shows that total grants across group 1 states ranged between 32-71 percent over the commission periods Ninth to Thirteenth. Since Sikkim did not receive any grants in the Tenth FC the share fell to 21 percent while the dependence ratio was 28 percent. Excluding the Tenth FC period of Sikkim, for group 1 as a whole the dependence ratio is in the range of 43-85 percent. The discretionary transfers seem to play an important role in decomposition 2.

#### **v. Special Category States Group 2**

##### ***a. Dependence of States***

Table 11 captures the dependence of special category states group 2. It is observed that dependence of special category states group 2 is higher than group 1. Among Group 2 the dependence is highest for Nagaland, followed by Manipur, Mizoram, Arunachal Pradesh, Tripura and Assam.

**Table 10:** Decomposition of Dependence of Special Category States: Group 1

Commission	Decomposition 1		Decomposition 2	
	Share in Central Taxes	Total Grants	Entitlement Transfers	Discretionary Transfers
<b>Himachal Pradesh</b>				
Ninth	24.34	47.57	34.04	37.87
Tenth	26.23	40.74	34.85	32.13
Eleventh	10.40	57.40	32.83	34.97
Twelfth	8.31	52.09	33.90	26.51
Thirteenth *	13.50	44.51	31.93	26.07
<b>Jammu &amp; Kashmir</b>				
Ninth	23.86	59.68	41.52	42.01
Tenth	23.54	61.59	30.47	54.66
Eleventh	10.50	70.96	40.77	40.70
Twelfth	11.40	66.20	30.48	47.12
Thirteenth *	13.79	65.63	37.05	42.37
<b>Meghalaya</b>				
Ninth	26.19	57.94	38.35	45.79
Tenth	33.32	49.08	42.53	39.87
Eleventh	15.27	64.53	31.45	48.34
Twelfth	20.60	57.62	28.16	50.05
Thirteenth *	21.04	58.47	30.44	49.07
<b>Sikkim</b>				
Ninth	15.61	54.81	18.71	51.71
Tenth	6.96	21.07	6.96	21.07
Eleventh	6.15	37.23	13.21	30.18
Twelfth	11.66	32.82	14.12	30.36
Thirteenth *	17.25	36.26	17.25	36.26
<b>Uttarakhand#</b>				
Ninth				
Tenth				
Eleventh	12.42	44.79	14.68	42.53
Twelfth	17.09	39.40	32.51	23.98
Thirteenth *	21.19	35.01	28.03	28.17

**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

**Notes:** \* First Year of the Thirteenth Finance Commission – 2010-11. # Uttarakhand state was formed on 9<sup>th</sup> November, 2000.

**Table 11: Dependence of Special Category States: Group 2**

Commission	Arunachal Pradesh	Assam	Manipur	Mizoram	Nagaland	Tripura
Ninth	86.77	65.98	90.69	87.86	90.21	90.92
Tenth	91.06	69.10	91.36	92.95	92.19	89.71
Eleventh	89.22	62.96	91.66	92.75	92.93	84.75
Twelfth	81.32	62.34	90.26	98.49	91.38	87.16
Thirteenth (First Year)	98.84	63.91	90.30	91.33	91.79	85.41

**Source (Basic Data):** Reserve Bank of India, *State Finances A Study of Budgets*, various years.

Assam has the minimum dependence on transfers in the range of 62-69 percent. In comparison, the highest dependence has been Nagaland 90-93 percent followed by Manipur 90-92 percent, Mizoram 88-93 percent, Arunachal Pradesh 81-98 percent and Tripura 85-91 percent. The dependence of northeastern states on remains highly dependent on central transfers.

#### ***b. Decomposition of Dependence of States***

Table 12 captures the decomposition of special category states group 2 in two ways. Since special category states are mostly funded by grants it is observed that grants play major role in these economies. The decomposition of dependence shows that total grants ranged between 55-85 percent over the commission periods Ninth to Thirteenth FC if Assam is excluded. In the case of Assam the range is between 29-41 percent and the share is central taxes are 25-35 percent. In the case of other states the shares are high in the Ninth and Tenth FC periods and fell sharply in the Eleventh FC and were in the range of 8-21 percent. In decomposition 2, discretionary transfers account for higher share as compared to entitlements especially in Arunachal Pradesh, Manipur and Mizoram. In other states it seems fluctuating.



**Table 12:** Decomposition of Dependence of Special Category States: Group 2

Commission	Decomposition 1		Decomposition 2	
	Share in Central Taxes	Total Grants	Entitlement Transfers	Discretionary Transfers
<b>Arunachal Pradesh</b>				
Ninth	22.23	64.54	35.28	51.49
Tenth	26.06	65.00	34.15	56.91
Eleventh	10.37	78.85	27.44	61.78
Twelfth	13.15	68.17	22.92	58.40
Thirteenth *	13.28	85.56	22.10	76.74
<b>Assam</b>				
Ninth	24.62	41.35	30.51	35.47
Tenth	30.30	38.79	35.45	33.65
Eleventh	27.76	35.20	28.09	34.87
Twelfth	28.31	34.02	32.50	29.83
Thirteenth *	34.64	29.27	36.14	27.76
<b>Manipur</b>				
Ninth	29.85	60.83	45.34	45.35
Tenth	32.38	58.98	43.32	48.04
Eleventh	15.04	76.62	42.58	49.08
Twelfth	15.11	75.13	43.20	47.05
Thirteenth *	18.24	72.05	40.72	49.58
<b>Mizoram</b>				
Ninth	28.53	59.33	45.06	42.79
Tenth	30.70	62.25	41.14	51.80
Eleventh	8.95	83.80	32.68	60.07
Twelfth	14.77	83.71	40.05	58.44
Thirteenth *	17.51	73.82	29.38	61.95
<b>Nagaland</b>				
Ninth	30.18	60.03	47.86	42.35
Tenth	37.14	55.05	45.56	46.63
Eleventh	8.14	84.80	50.71	42.22
Twelfth	11.96	79.43	49.11	42.29
Thirteenth *	13.79	78.00	45.77	46.02
<b>Tripura</b>				
Ninth	33.57	57.36	49.32	41.60
Tenth	33.58	56.13	43.43	46.28
Eleventh	13.96	70.79	35.04	49.71
Twelfth	15.17	71.98	49.01	38.14
Thirteenth *	21.71	63.69	43.42	41.99

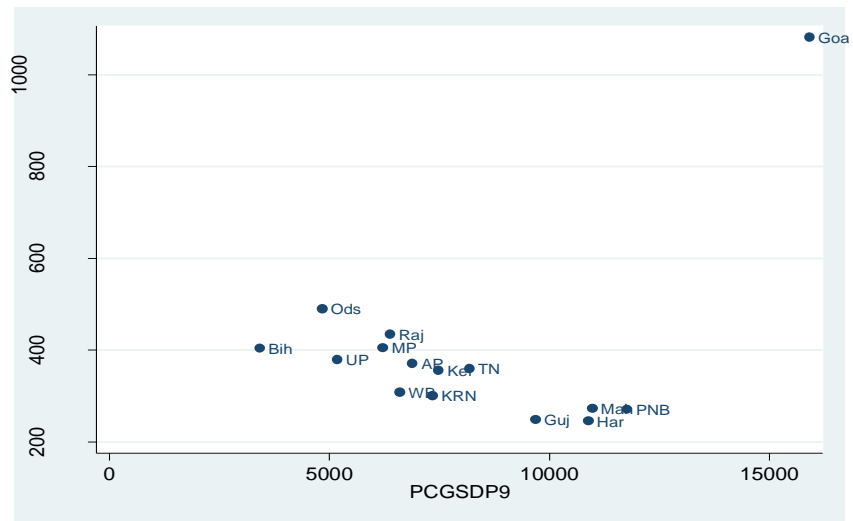
**Source (Basic Data):** Reserve Bank of India, *State Finances: A Study of Budgets*, various years.

**Note:** \* First Year of the Thirteenth Finance Commission – 2010-11.

#### vi. Analysis of Per Capita Transfers and Per Capita Gross Domestic Product

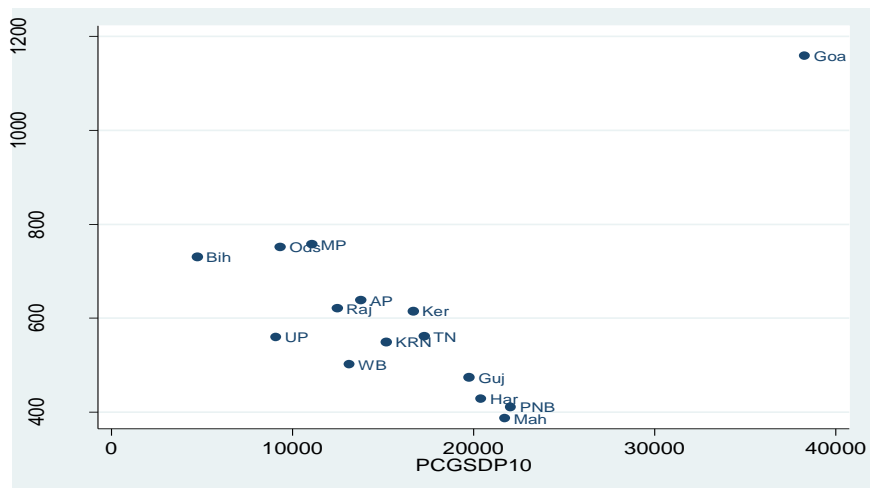
In this section total transfers and gross domestic product are present graphically in per capita terms from the Ninth to Eleventh FC period for the general and special category states separately. In the Ninth FC period (Chart 1) the high income state like Gujarat, Maharashtra, Punjab and Haryana are receiving less per capital transfers from the Centre as compared to the middle income and low income states. The same scenario emerges from the dependence analysis in the earlier sections.

**Chart 1:** Ninth Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of General Category States



Similarly, for the Tenth FC (Chart 2), though the per capita income levels and transfers have risen for the states in general, it is observed that high income states are receiving less transfers as compared to the middle and low income states, while Goa is an outlier in all the Commission periods. This can be observed for the Eleventh FC (Chart 3) and the Twelfth FC (Chart 4). The per capita transfers over the Commission period has increased for the low income and middle income states.

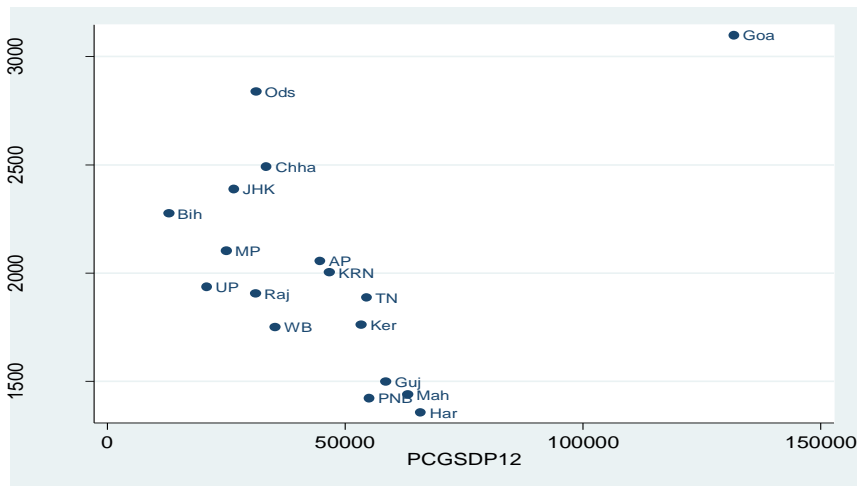
**Chart 2:** Tenth Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of General Category States



**Chart 3:** Eleventh Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of General Category States

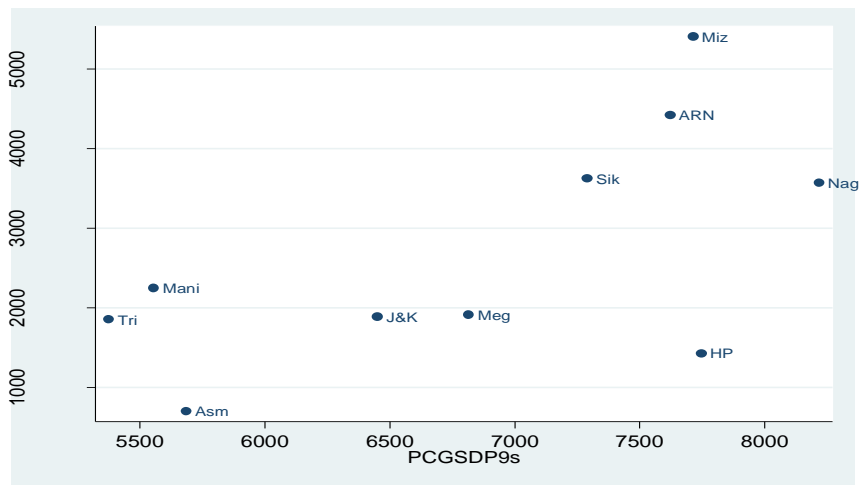


**Chart 4:** Twelfth Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of General Category States



In the case of special category states the scatter between per capita total transfers and per capita gross domestic product shows the low income states like Manipur, Tripura, Assam are receiving less per capita transfers as compared to the better of states (Charts 5-8).

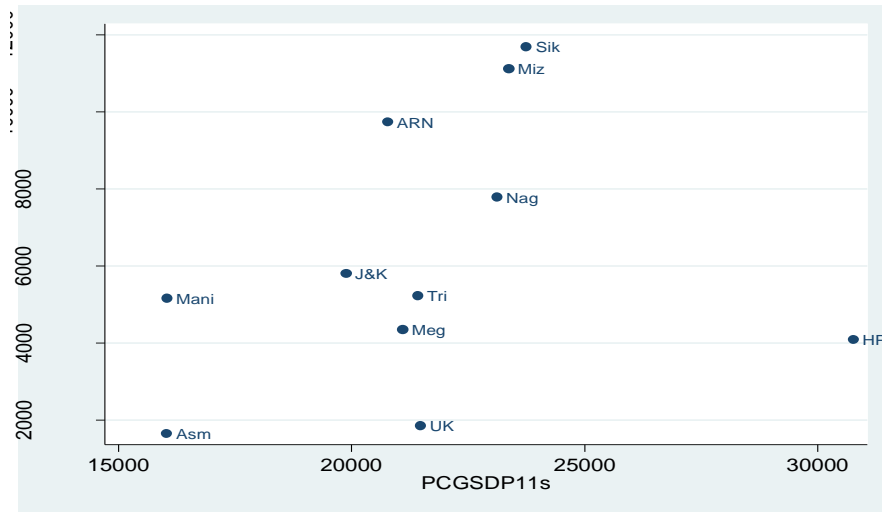
**Chart 5:** Ninth Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of Special Category States



**Chart 6:** Tenth Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of Special Category States



**Chart 7:** Eleventh Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of Special Category States



**Chart 8:** Twelfth Finance Commission: Scatter of Per capita Total Transfers and Per capita GSDP of Special Category States



## 5. Conclusions

In this paper, we have looked at the pattern of dependence of the states on central transfers. This analysis is done with respect to the revenue receipts of the states. We have looked at the pattern of dependence both in terms of the aggregate account of the states (all states) and for individual states. This paper developed a methodology to decompose the dependence of the states on total transfers from the Centre. An index of dependence was formulated and total transfers consisting of four sources of funds that are qualitatively different are decomposed using the index of dependence. The decomposition is presented in two ways. The first decomposition shows the share in central taxes and total grants as two separate categories while in the second entitlement transfers and discretionary transfers are shown as two separate categories.

State's dependence on central taxes has changed over time for the general category states categorized into high, middle and low income states and special category states into group 1 and group 2. The high income general category states receive the lowest transfers relative to their revenue receipts. On average, Haryana is shown to be the least dependent state on central transfers, followed by Punjab, Maharashtra, Goa, and Gujarat. Among the middle income states, across states, the lowest dependence on Finance Commission transfers is that of Tamil Nadu and the highest, that of West Bengal. In the low income states the dependence is far more as compared to the middle and high income groups. The dependence on central transfers among the low income states is highest in Bihar, followed by Orissa, Jharkhand, Uttar Pradesh, Madhya Pradesh and Rajasthan. Among the special category states group 1, dependence is higher than the general category low income states. The dependence is highest for Jammu and Kashmir, followed by Meghalaya, Himachal Pradesh and Sikkim. In the special category states group 2 the dependence is higher than group 1. Among Group 2 the dependence is highest for Nagaland, followed by Manipur, Mizoram, Arunachal Pradesh, Tripura and Assam.

These changes are partly due to the recommendation of the Finance Commission regarding the share that should be given to the states from Centre's shareable portion of tax revenues as well as on changes in macro variables. Important among the macro variables are the ratio of the Centre's gross tax revenue and state's own revenue receipts with respect to GDP.

State-wise decomposition shows how far the states rely on central transfers and grants for their revenues, alternatively the decomposition could be viewed in terms of entitlement and discretionary transfers. In general the decomposition shows that high income states the share of central transfers varied between 6-18 percent, for middle income between 15-34 percent, for low income states 21-58 percent, special category group 1 states 6-33 percent and group 2 states 8-37 percent. On the other hand, total grants for higher income states varied from 4-18 percent, for middle income states from 7-20 percent, low income states from 13-26 percent, special category group 1 states from 33-71 percent and group 2 states from 59-86 percent. Alternative decomposition showed that entitlement transfers of high income states ranged between 7-27 percent, middle income states 15-37 percent, low income states 23-58 percent, group 1 states' 26-51 percent, and group 2 states 28-77 percent. Discretionary transfers fluctuated from 5-11 percent for high income states, 8-14 percent for middle income states, 10-23 percent for low income states, for group 1 states 21-54 percent, and group 2 states 28-77 percent. This shows that discretionary transfers are important for the low income and group 1 and 2 states.

The scatter of per capita transfers and per capita incomes shows that the high income state like Gujarat, Maharashtra, Punjab and Haryana are receiving less per capital transfers from the Centre as compared to the middle income and low income states. However, low income states like Manipur, Tripura, Assam are receiving less per capita transfers as compared to the better of states

In a scheme of transfers that aims to achieve a suitable degree of equalization, it is to be expected that the share of transfers in revenue receipts would in general be larger for the states that have relatively lower fiscal capacities. Any departures from this expected pattern would be due to higher than average tax effort on the part of some states (where the share of transfers in revenue receipts will be less than average) or due to some components of transfers that are not equalizing in nature.

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**Appendix Table A.** Composition of Central Transfers: All States  
(percent)

Item	Share in Central Taxes	Plan Transfers	Statutory Transfers	Others	Total Central Transfers
1990-91	53.0	34.9	8.3	3.9	100.0
1991-92	52.5	37.2	6.6	3.6	100.0
1992-93	53.7	37.5	5.5	3.2	100.0
1993-94	51.4	41.4	4.3	3.0	100.0
1994-95	55.6	38.7	4.1	1.6	100.0
1995-96	58.2	29.8	8.0	4.0	100.0
1996-97	60.4	30.5	6.2	2.9	100.0
1997-98	62.9	28.6	2.6	5.9	100.0
1998-99	62.7	31.8	2.3	3.3	100.0
1999-00	59.4	32.8	2.3	5.5	100.0
2000-01	57.6	27.8	9.1	5.4	100.0
2001-02	55.1	30.7	9.8	4.4	100.0
2002-03	55.6	29.7	8.1	6.6	100.0
2003-04	56.9	31.3	6.4	5.4	100.0
2004-05	58.2	31.0	5.7	5.1	100.0
2005-06	55.1	26.1	10.6	8.2	100.0
2006-07	56.0	28.0	8.3	7.8	100.0
2007-08	58.2	28.6	7.6	5.6	100.0
2008-09	55.3	31.8	7.0	5.8	100.0
2009-10	52.2	32.9	7.9	7.0	100.0
2010-11	57.3	29.9	7.2	5.5	100.0

**Source:** RBI, *State Finances: A Study of Budgets*, various years.