

**FEDERAL FISCAL TRANSFERS  
AN INTEGRATED APPROACH FOR INDIA**

**By**

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# FEDERAL FISCAL TRANSFERS

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### ***Abstract***

Devising optimal criteria for federal fiscal transfers to reduce fiscal imbalances across the States has always been a demanding job in India. In particular, two aspects that have become perennial sources of controversy are; (i) the disintegrated approach, and (ii) the near-subjective assignment of weights to factors determining the shares of States. With regard to the first aspect, the recommendation of the Tenth Finance Commission (TFC) in favour of integrating the system of tax devolution and enlarging the divisible pool to include all Union taxes should be welcomed. However, with regard to the second and perhaps, more important aspect of objective determination of weights for revenue shares, not much attention has been paid. This study explores an objective approach for the purpose.

Given the reduction of horizontal fiscal inequity as an important objective of the federal transfers, the study suggests that the identification of factors as well as derivation of weights for deciding the revenue shares, could be accomplished from their observed degree of association with the fiscal balance of States. The approach is illustrated by estimating a fiscal behavioural model using panel data, in the Indian context. The resultant State-wise shares are compared with those recommended by the past Finance Commissions.

# FEDERAL FISCAL TRANSFERS

## AN INTEGRATED APPROACH FOR INDIA

### *1. Introduction.*

Inter-governmental sharing of financial powers and the resultant fiscal transfers in a federal system have always been controversial. To some extent, the issue is unavoidable. Because the transfers are needed not only to correct the inherent fiscal mismatch between the revenue sources and expenditure needs of the federating units, but also to reduce the possible inequalities with respect to their revenue-capacities and unit costs of providing public goods and services.

Several transfer methods are in vogue in countries that have explicitly adopted the federal form of the government. Yet, the issue of devising an appropriate transfer mechanism aimed at reducing the fiscal imbalances, - vertically between the central government and provincial governments, and horizontally among different provincial jurisdictions, - remains controversial. In several cases the transfers are subject to a great deal of experimentation and frequent modification. Often, the lack of agreement on the criteria has led to dominance of political considerations rather than economic rationale.

In India, the distortions caused by the Constitutional arrangements for sharing of fiscal powers between the Centre and the States call for inter-governmental transfers. The determination of the fiscal transfers is a quinquennial ritual undertaken by successive Finance Commissions constituted for the purpose. Even after ten such Commissions, the debate and the heat generated shows that an objective transfer criteria have eluded policy makers so far. Devising optimal criteria for federal fiscal transfers to reduce fiscal imbalances across the States has always been a demanding job in India. In particular, two aspects that have become perennial sources of controversy are; (i) the disintegrated approach that specifies item-wise criteria to be adopted for revenue-sharing, and (ii) the near-subjective identification of, and assignment of weights to, factors determining the shares of States. The recommendation of the Tenth Finance Commission (TFC) in favour of integrating the system of tax devolution and enlarging the divisible pool to include all Union taxes should be welcomed.

This study explores for an objective approach for the purpose. Given the reduction of horizontal fiscal inequity as an important objective of the federal transfers, the study suggests that the identification of factors as well as derivation of weights for deciding the revenue shares, could be accomplished from their observed degree of association with the fiscal balance of States. However, care must be taken to see that the association is not distorted by either the random factors or non-justifiable State-specific factors. The approach is illustrated by estimating a fiscal behavioural model using panel data, in the Indian context. The resultant State-wise shares are compared with those recommended by the past Finance Commissions.

After briefly examining the criteria recommended by the Finance Commission in the past in Section 2, the relevant theoretical considerations of fiscal transfers are looked into to construct an empirical model for designing integrated transfer criteria for India in section 3. Section 4 is devoted to illustrating the modified criteria.

## **2. Federal Fiscal Transfers - An Appraisal of Past Criteria.**

The designing of inter-governmental transfers is fairly complicated In India in view of the wider inter-State differences in economic endowments and levels of income than found elsewhere in the federal world. It is further compounded by the assignment of an active role to the government in the economic development through centralised planning. Inter-governmental transfers in India comprise transfers recommended by the Finance Commission, the Planning Commission and other discretionary grants and loans. The focus in this study, however, is on the transfers recommended by the Finance Commissions. Further, these recommendations pertain to three types of transfers: (i) the assigned taxes, (ii) the shareable taxes between the Centre and the States, and among States *inter se*, and (iii) grants-in-aid to those States that are left with gaps in the revenue account after adjusting their estimated shares of assigned and shared taxes.

Recommendations on transfers relating to the assigned taxes are guided by the tax-arrangements between the Centre and the States. The main controversy has been in respect of the unconditional transfers comprising the shareable taxes and general purpose grants-in-aid. The shareable taxes consist of non-corporate income tax and union excise duty. However, while the net proceeds from non-corporate income tax (that is, excluding tax on Union emoluments, and surcharges), are shareable *compulsorily* between the Centre and States, revenue from the Union excise duties *may be* shared. The general purpose grants-in-

aid are recommended with a view to fill the possible post-devolution gaps in the revenue budgets of the States.

Two aspects of the federal transfer criteria that have become sources of perpetual controversy are; (i) the disintegrated approach that specifies item-wise criteria to be adopted for revenue-sharing, and (ii) the near-subjective identification of, and assignment of weights to, factors determining the shares of States.

Although the Constitution specifies that the income tax proceeds are *compulsorily* shareable while the excise duty proceeds *may be* shared, all the finance commissions have recommended for sharing of the excise duty proceeds. Yet, none of the commissions have specified any specific reason for the differential criteria adopted for the two tax yields. Similarly, the criteria adopted for distribution of general purpose grants has been different from that of tax sharing and the grants are meant apparently to help the States to overcome their projected budgetary difficulties.

There is no case for adopting different criteria for different instruments of transfers. It only complicates the process and will not serve any useful purpose. For example, let the total funds available for transfers be 100 of which 30 per cent are from the income tax and 70 per cent are from the excise. Let 80 per cent of the income tax proceeds and 60 per cent of the excise proceeds are specified to be distributed on the basis of population. Clearly, it is much simpler to specify a combined weight of 66 per cent to population and distribute the total yield accordingly. As Gulati and George (1984) observe that "item-wise sharing will perpetuate the present hide and seek game played by the Centre and the States....What seems to be called for is a more radical approach whereby in the Centre-State sharing, one takes note of the resource flows accruing to the Centre in their totality and sharing is done on objective and equitable basis both between the Centre and States and between States." (p24). "There is no reason in equity or in economics which demands that different principles should be adopted depending upon the constitutional obligation to share a given tax. We urge that the same principles of devolution and distribution should be adopted (as far as possible) in respect of both (income tax and union excise) the taxes." (Chelliah *et al*, 1981).

As regards the criteria, the use of the 'contribution' factor does not conform to the fiscal equity principle. Allocation of resources on the basis of contribution is similar to the tax-rental arrangements as in the case of the assigned taxes. The amount so allocated should be regarded as not available for transfers meant to reduce fiscal inequity among States.

As regards the 'backwardness' factor, there is considerable subjectivity involved in the measurement of backwardness. The Fourth Commission has used seven component factors for measuring the backwardness. However, the weights assigned to each of the components were subjective. The later Commissions' measurement of backwardness using the 'distance' and 'inverse' formulae and the determination of weights, is even more awkward.

Similarly restricting the grants-in-aid to only those States with post-devolution budgetary gaps is also not in conformity with the equity principle. "A revenue account deficit, however calculated is no indication of the need of a State and that to underwrite a deficit in a scheme of devolution of funds encourages imprudent budgeting to the utter disregard to considerations of efficiency. Furthermore, financing of deficit offends the canon of equity." (Gulati, 1987).

Consequently, the record of transfers has been observed to be not very satisfactory (Gulati and George, 1988). For example, between 1956 and 1981 "the low-income States as a group (that is, UP Rajasthan, MP and Bihar) have received relatively lower than average per capita transfers of all States. The three agencies, the Finance Commissions, the Planning Commission and the Union Ministries, do not seem to have had equity uppermost in their minds in affecting the inter-State distribution of the transfers within their respective ambit." (Gulati and George, 1988, p24). They suggest that the agency entrusted with the task must have the freedom to fix a reasonable proportion on the basis of an objective assessment of the needs of the Centre and the States. Equity ought to be made the over-riding criterion for the totality of resource transfers and not just a segment thereof.

### ***3. Towards an Integrated Fiscal Transfer Criteria for India.***

The vast literature and the extensive review, Rao and Chelliah (1991), suggest that the transfer criteria cannot overlook the basic economic motivations of the federating units for coming together, namely, the fiscal efficiency, scale economy and equity reasons. Fiscal efficiency not only requires reduction of the inherent fiscal mismatch caused by the centralised revenue collection with decentralised expenditure functions between the Centre and the States, but also calls for offsetting the inequalities among the federating units with respect to their revenue raising capacities and unit costs of public goods and services.

Reduction of horizontal inequities among the federating units is considered conducive for achieving Pareto-optimal welfare. The rationale stems from the fact that the

wedge created by the non-*quid pro quo* nature of taxes between the marginal utility of public goods and the marginal utility of private consumption sacrificed, differs among individuals depending upon their capacity, and one way to correct the imbalance is to introduce transfers from individuals with lower tax wedge to those with higher tax wedge (Breton, 1965, Gramlich, 1977, Rao and Chelliah, 1991).

These arguments, when extended to federal systems call for horizontal transfers of resources among federating units. The marginal tax wedge in the case of federating units is akin to the difference between the marginal fiscal benefit and marginal fiscal costs of federation. The fiscal costs are in terms of tax powers and the revenue forgone, while the fiscal benefits are the gains in terms of increases in the government revenues (owing to possible rise in the tax base due to lower trade barriers across the States and so on), and increased supply and/or lower unit costs of providing the public goods. It follows that the desirable federal fiscal arrangement would be the one in which the *net marginal benefit due to federating* (NMBF) is equal for all the federating units. In the absence of such an arrangement, federal fiscal transfers should aim to reduce the differences in the NMBF resulting from the constitutional arrangements.

Operationalization of the criteria requires measurement and comparison of the NMBF of each State which, in a way, is likely to be reflected in its revenue-expenditure gap. However, as budgetary gap is also caused by many other forces, before making the inter-State comparison those elements that do not reflect the NMBF need to be separated out.

The first step, therefore would be to inquire and identify the factors causing the inter-State variations in the fiscal gap. These factors can be classified into three groups: (a) factors that are common for all the States and have a fairly uniform influence on the fiscal capacity and expenditure needs, (b) factors that are specific to each State (State-specific factors) and (c) random factors whose influence on the fiscal gaps is temporary. The common factors may be listed as the level of income (SDP), industrialisation, literacy, urbanization, poverty, population and so on.

State-specific factors are those that are unique to each State and contribute to the size of its fiscal gap (such as geographical characteristics, social characters, climatic conditions, political forces and so on). For example, often, the unit cost of providing public services differs from State to State owing to a host of factors not always quantifiable but identifiable in terms of their concerted systematic contribution to the fiscal gap. Among these State-

specific factors, a distinction can be made between justifiable and non-justifiable factors. Justifiable factors are those that are beyond the control of the State government, and non-justifiable factors are those that are within the control of the government. Efforts to augment revenues or restrain expenditure come under this category. Clearly, the criteria of fiscal transfers should aim at offsetting only that portion of the actual fiscal gap which can be regarded as the justifiable fiscal disadvantage of the State, and the rest could be due to the State government not making enough effort to increase the revenue or not making enough effort to cut down unnecessary expenditure. If instead, the entire gap is considered for fiscal devolutions, it would only encourage the States to strive hard to widen the fiscal gap either by not tapping the existing revenue sources or by extravagance in spending. The remaining variation can be only due to random and temporary factors.

Let the fiscal gap  $D_{it}$  of  $i$ 'th State in  $t$ 'th year represent the shortfall of own revenue ( $R_{it}$ ) to meet its expenditure needs ( $E_{it}$ ). The gap  $D_{it}=E_{it}-R_{it}$  can be partly due to the low revenue raising capacity as reflected in factors such as low income, low industrialisation, low literacy and so on, partly due to insufficient efforts to raise revenue from the existing potential, and partly due to the high unit cost of providing public services not always for justifiable reasons. Let the revenue of  $i$ 'th state at time  $t$  be

$$R_{it}=f\{K_{it}, S_i, t, \text{ and } u_{it}\} \quad --(1)$$

where  $K$ =capacity factors,  $S$ =State-specific factors,  $t$ =time factor, and  $u$ =random factors. Similarly, let the expenditure of the state be

$$E_{it}=f\{N_{it}, C_{it}, F_i, t, \text{ and } v_{it}\} \quad --(2)$$

where  $N$ =need factors,  $C$ =cost factors,  $F$ =State-specific factors, and  $v$ =random factors. The combined fiscal gap equation is

$$D_{it}=f\{K_{it}, N_{it}, C_{it}, Z_i, t, \text{ and } e_{it}\} \quad --(3)$$

where  $Z_i$ =combined effect of the state-specific factors on the revenue and expenditure growth of a State,  $e_{it}$ =combined effect of the random factors.

To extract the magnitude of the NMBF from the actual budgetary gap, the first step is to purge it from the influence of temporary random factors. The remaining budgetary gap

is comparable between the States but for the scale effects of the common factors and the influence of state-specific factors.

The estimated fiscal gap function renders considerable flexibility in selecting the common factors responsible for the variation in the fiscal gaps of the States. Given the selected set of factors, the function automatically determines the weight of each factor in relation to its degree of relevance to offset the fiscal gap. For example, if population is considered as a factor responsible for the growing revenue gaps of States, the function will assign the weight needed to population factor.

After specifying the common factors, the need for the inclusion of the non-quantifiable State-specific factors can be tested statistically by comparing the explainable variation before and after including the state-specific factors. If it turns out that there is no need to include any other state-specific factors, it would mean that the actual fiscal gaps of the States, but for the random factors, can be taken to be comparable across the States. In such a case, the estimated response coefficients of the explanatory factors can be taken as the weights for fiscal transfers.

The relative shares for each State can be worked out as follows. Let the fiscal gap equation is estimated as a fixed-effects panel model. Let the estimated equation shows that the h'th State has the lowest Z value. The estimated fiscal gap of that State,  $D_{ht}$  will also be the lowest among the States. Using the hth State as a bench-mark State, the justifiable fiscal gap for i'th State can be worked out by plugging the value  $Z_h$  instead of  $Z_i$ , as

$$D''_{it}=f\{K_{it}, N_{it}, C_{it}, Z_h, t, \text{ and } e_{it}\} \quad --(4)$$

$D''_{it}$  indicates a hypothetical fiscal gap that would have resulted had the i'th State put in the same effort as the h'th State in the year t in revenue-raising and expenditure-curbing. Thus, fiscal devolution aimed at horizontal equity should off-set  $D''_{it}$  rather than the actual fiscal gap,  $D_{it}$ . The transfer for the ith State should accordingly be related to the gap  $D''_{it}-D_{ht}$  and not  $D_{it}-D_{ht}$ .

Although measurement of justifiable fiscal gap is straight forward with the above combined equation, there is some advantage to estimate the revenue and expenditure equations separately. The bench-mark state will be imaginary and could be better than the best among the existing States. For, the State that may emerge as best-effort State from the estimated revenue equation may not be the most prudent State according to the expenditure

equation. However, to simplify the specifications for the purpose of the present illustration the combined equation version is adopted.

#### 4. An Empirical Illustration.

An attempt is made to illustrate the approach described above. The main factors reflecting the revenue-raising capacity of a State are assumed initially, to be state domestic product, degree of urbanisation and literacy ratio, and factors representing the fiscal needs are taken to be population and poverty ratio. Time trend as well as the state-specific factors are included and the equations are estimated on the panel data for the 14 major States spanning the 15-year period from 1975-76 through 1989-90. The exact specifications of the equations are as follows:

$$R = a_0 + a_1.Y + a_2.X_1 + a_3.X_2 + \dots + a_k.X_k + z_r.t + \alpha_i \quad --(5)$$

$$E = b_0 + b_1.P + b_2.X_{k+1} + b_3.X_{k+2} + \dots + b_l.X_{k+l} + z_x.t + \beta_i \quad --(6)$$

where R=own revenue, E=expenditure,  $X_1, X_2, \dots, X_{k+l}$  = relevant factors,  $\alpha_i$  and  $\beta_i$  = State-specific fixed effects relevant for revenue and expenditure, respectively, and  $z_r$  and  $z_x$  = residual trend growth factors for revenue and expenditure, respectively. [All variables are in logarithms]. The combined equation is,

$$E - R = (b_0 - a_0) - a_1.Y + b_1.P - [a_2.X_1 + a_3.X_2 + \dots + a_k.X_k] + b_{k+1}.X_{k+1} + b_{k+2}.X_{k+2} + \dots + b_l.X_{k+l} + z_x.t - z_r.t + \alpha_i - \beta_i \quad --(7)$$

which is in the form,

$$R - E = A + A_1.Y + A_2.P + A_3.X_1 + \dots + A_{m+3}.X_m + z.t + w_i \quad --(8)$$

The log-linear regression results are as shown in Table 1. As the dependent variable is a ratio of revenue expenditure to own revenue, the expenditure needs factors such as population are expected to have positive signs and revenue capacity variables such as SDP are expected to have negative sign. However, it may be construed that SDP might also reflect the fiscal need or the unit cost of providing public services and therefore can be a determinant of the government expenditure. Urbanisation, on the other hand, influences the revenue side only. In fact, most state level taxes has an urban bias. Literacy reflects the expenditure needs. The residual trend is negative.

Almost all the State effects are significant, thereby indicating that fiscal gap, in addition to the four common factors, is also influenced by a host of unidentified factors. These would include the revenue effort factors and factors that influence the cost of public services. Unlike the random factors, these factors have a systematic influence on the fiscal balance of a State.

The estimated gap function facilitates identification of three components of the actual revenue gap: (1) the basic gap as a result of the interplay of identifiable major factors that have a bearing on either the revenue capacity or expenditure needs of the State; (2) the effect of those factors which are unidentifiable and exert non-systematic influence, and (3) the effect of those factors which also cannot be easily identified but exert systematic influence on the fiscal gap, for example, the revenue-raising behavioral efforts, the efforts of economy in government spending. The basic gap represents the real fiscal disadvantage of each State as caused by the revenue raising capacity and the expenditure needs factors. Added to this gap is the second component reflecting the effect of factors such as natural calamities which a State has no control. The fiscal disadvantage as reflected in the two components needs to be offset by the devolutions. The third component includes the impact of certain behavioral factors such as revenue-raising efficiency, economy efforts etc. and may be partially offset. For this purpose, the State which has the lowest such effect is taken to be a bench-mark. The value of the this component for the bench-mark State is considered to be reasonable and the values over and above this value is considered to be not justifiable. Thus a tolerable fiscal gap for a State is obtained as the sum of the first two components and the value of the third component of the bench-mark State. The shares of devolution are worked out on the basis of the tolerable fiscal gap (averaged for the five-year period 1985-89). The resultant shares are as shown in table 2.

The shares are compared with those resulting from the VII, VIII and IX Finance Commissions' awards (table 3). As can be seen from the table the estimated shares are not quite the same as those arising out of the Finance Commissions' awards.

In a way, the regression estimates also facilitate derivation of the weights to be assigned to the relevant factors in an objective manner. First of all the criteria of the transfers are based on the factors that need to be taken into account, and second, the weights to be assigned can be derived from the regression coefficients of these factors. Thus as can be seen the most relevant factors for the State's revenue deficit appear to be SDP, POP, URB, and LIT. Apart from these, the trend factor is also important. In a way the significance of the

trend factor implies that the present revenue gap is also conditioned by the revenue deficits of the past years.

The relative weights of the five common factors including time trend derived from the regression estimates are as shown in table 4.

## **5. Conclusion.**

The approach of the Indian Finance Commissions has, so far, been to concentrate only on the common factors such as population, poverty, backwardness etc, and somehow relate the fiscal devolutions to these factors. The State-specific factors are altogether ignored. Also, the weights assigned to the common factors are prone to subjective determination. Further, the devolution criteria differ for different portions of the devolution funds. Finally, the gap filling grants-in-aid determination fails to make any distinction between the capacity factors on the one hand, and the State-specific behavioural and the temporary random factors on the other.

The present model, in contrast, has the following advantages over the conventional devolution models adopted by the Indian Finance Commissions. It prescribes an integrated approach for all the unconditional transfers and does not make source-wise distinction. It does not restrict revenue capacity factors to per capita SDP and takes into account other factors as well. The model if specified in log-linear form allows for non-unit response coefficients such as the revenue elasticity (buoyancy). The model takes into account the State-specific factors that may be interpreted as indicative of the degree of efficiency effort. And what is more important, the relative revenue capacity can be estimated after discarding the effect of temporary factors influencing the revenue raising.

**Table 1. Regression results (OLS with variables transformed into Logarithms) of the equation**

$$FISGAP = A + A_1 \cdot \text{Log}(SDP) + A_2 \cdot \text{Log}(POP) + A_3 \cdot \text{Log}(URB) + A_4 \cdot \text{Log}(LIT) + Z \cdot t + (\alpha - \beta)_1$$

[FISGAP computed as  $\text{Log}(\text{Revenue Expenditure}) - \text{Log}(\text{Own Revenue})$ ]

DEPENDENT VARIABLE		41	FISGAP			
FROM	1: 1974-75	UNTIL	14: 1989-90			
TOTAL OBSERVATIONS	224	SKIPPED/MISSING	16			
USABLE OBSERVATIONS	208	DEGREES OF FREEDOM	189			
R**2	.94107831	RBAR**2	.93546672			
SSR	16.732800	SEE	.29754552			
DURBIN-WATSON	1.38527437					
Q( 42) =	72.5034	SIGNIFICANCE LEVEL	.239306E-02			
NO.	LABEL	VAR	LAG	COEFFICIENT	STAND. ERROR	T-STATISTIC
***	*****	***	***	*****	*****	*****
1	SDP	40	0	-.1404881E-06	.9131736E-07	-1.538460
2	POP	38	0	7.169890	1.780491	4.026916
3	URB	36	0	-1.711446	1.242753	-1.377141
4	LIT	35	0	-1.129848	.9038717	-1.250010
5	TREND	42	0	.1291602	.3615390E-01	3.572510
6	AP	1	0	-26.16005	10.14501	-2.578611
7	BIH	2	0	-29.10613	10.42708	-2.791399
8	GUJ	3	0	-22.56013	9.514643	-2.371096
9	HAR	4	0	-18.26998	7.934665	-2.302553
10	KAR	5	0	-23.45420	9.606826	-2.441410
11	KER	6	0	-20.68993	8.822842	-2.345041
12	MP	7	0	-26.47267	10.06473	-2.630240
13	MAH	8	0	-26.22725	10.49154	-2.499847
14	ORI	9	0	-22.55698	8.758944	-2.575308
15	PUN	10	0	-18.64025	8.417533	-2.214455
16	RAJ	11	0	-23.55411	9.445349	-2.493726
17	TN	12	0	-24.22630	10.06075	-2.408002
18	UP	13	0	-31.11312	11.24853	-2.765972
19	WB	14	0	-25.27607	10.20815	-2.476069

Notes: SDP=State domestic product,

POP=population

URB=percent of urban population in total.

LIT=percent of literate population in total.

**Table 2. State-wise Shares of Federal Transfers Derived from the Log-linear Regressions based on Panel data.**

State	Actual gap	Without Random effects	Without State-spec effects	Without both the effects
	1	2	3	4
AP	8.15	8.37	9.22	9.24
BIH	8.94	9.10	12.18	12.12
GUJ	6.15	5.78	5.39	5.32
HAR	3.22	2.72	1.05	.99
KAR	6.13	6.07	6.23	6.21
KER	5.78	5.85	3.54	3.62
MP	7.96	7.52	9.48	9.33
MAH	8.46	8.15	9.35	9.25
ORI	6.52	7.39	5.46	5.70
PUN	3.22	2.72	1.05	.99
RAJ	7.43	8.30	6.60	6.84
TN	7.74	7.41	7.30	7.24
UP	11.68	11.10	14.67	14.44
WB	8.62	9.54	8.49	8.71

**Table 3. State-wise Shares of Federal Transfers Derived under the Present Integrated Approach as Compared to the Past Finance Commissions' Estimates.**

(%)

State	Past Finance Commissions			Estimated under the Present integrated approach (Col 3 Table 2)
	VII	VIII	IX	
AP	8.09	8.54	8.07	9.22
Bih	11.76	12.45	12.47	12.18
Guj	5.12	4.39	4.14	5.39
Har	1.64	1.30	1.33	1.05
Kar	5.34	5.10	4.53	6.23
Ker	4.09	3.80	3.85	3.54
MP	8.49	8.72	8.75	9.48
Mah	9.11	7.77	6.92	9.35
Ori	5.23	5.63	6.16	5.46
Pun	2.23	1.91	1.87	1.05
Raj	4.80	4.94	7.28	6.60
TN	7.99	7.27	6.91	7.30
UP	17.62	18.01	19.46	14.67
WB	8.49	10.17	8.26	8.49
Total	100.00	100.00	100.00	100.01

**Table 4. Weights of the Transfer Criteria derived from the Regression Estimates.**

Criteria	Log transfor- mations
1 SDP	negl.
2 POP	76.60
3 URB	17.86
4 LIT	2.03
5 TREND	3.50

negl. indicates that the weight is negligible.

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