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*The 'Success Tax':  
Is our tax system penalising successful states?*

*Submitted by*

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## **EXECUTIVE SUMMARY**

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It is common knowledge that in all federations some degree of vertical fiscal federal imbalance arises. The existence of horizontal and vertical fiscal imbalances increases the need for federal fiscal assistance to the constituent states.

Equity considerations must in effect aim for ensuring the provision of selected services at minimum acceptable standards across the country. At the same time, 'efficiency' in the use of resource should be ensured and promoted. States that perform more efficiently in the delivery of services or raise more revenues relative to their tax bases should not be penalized.

The solution to achieve an equilibrium policy between growth and equity has been envisaged in the form of an **"Equity-Incentive" model**. The objective of entire federal fiscal transfers like revenue sharing, grants-in-aid and plan assistance is to achieve 'equalization' in terms of reducing vertical imbalances and also reducing inter-regional disparities in need. 'Need' is measured by 'development' and fiscal potential. The need factor is coupled with the incentive factor viz., tax-effort which encourages states to perform better in tax collection.

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## **INTRODUCTION**

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Issues pertaining to federal fiscal transfers have been of perennial interest in India. The importance of the subject is increased due to the organization of a new Finance commission every five years leading to a heated debate about the principal criteria and basis of Federal fiscal transfers. There have been a lot of controversies regarding the principles which should form the basis of devolution of taxes and duties, grants-in-aid and grants.

Transfer of resources from Centre to federal units is a common phenomenon in all large countries having a federal constitution. This is so because there is always a mismatch between the responsibilities of the federating units and their ability to raise adequate resources. Certain resources are best raised only at the national level, both on grounds of equity and efficiency. This necessitates transfer of resources from the Centre to the States in order to correct what is very often described as vertical imbalance. Apart from this, the overall resources to be transferred to the States have to be distributed among them and the criteria for horizontal distribution are equally important.

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## **CURRENT SYSTEM**

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The devolution of taxes is mainly done through the sharing of federal revenues and grants. This helps not only in decreasing the vertical imbalances but also the horizontal disparities among the States arising from variations in their revenue base. The design of these transfers should be such as to close the vertical gap and to reduce the horizontal disparities simultaneously so that all States can provide basic public services to their people at reasonably comparable levels.

The transfers in established federations like Canada and Australia have been based on the principle of equalization. Equalization is done mainly by equalizing the revenue capacity of the states. The states having lower than average per capita revenue capacity are given grants to make up for their deficiencies. Grants are provided to factor in cost disabilities in provision of services.

In designing a suitable scheme of fiscal transfers, three considerations seem relevant - needs, cost disability and fiscal efficiency. Needs refer to expenditures required to be made but not met by own resources. Cost disabilities refer to such characteristics of a State that necessitate more than average per capita cost in service provision due to factors that are largely beyond its control like large areas with low density of population, hilly terrains, poor infrastructure, proneness to floods and droughts. Fiscal efficiency encompasses parameters like maintaining revenue account balance, robust revenue effort, economies of expenditure linked to efficient provision of services and the quality of governance. Equity

considerations must in effect aim for ensuring the provision of selected services at minimum acceptable standards across the country. It is seen that on average, the low income States spend only half of the average per person expenditure of high income States in social services. Such equalization of services may demand some form of conditional grants requiring monitoring of the use of funds to achieve the desired objectives.

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**NEED FOR REFORM**

The task of formulating a sound transfer system has to establish a fine balance between equity and efficiency, a system where fiscal disadvantage is taken care of but fiscal imprudence is effectively discouraged. In such a system, States that are fiscally disadvantaged but prudent stand to gain and States that have the resources but do not use them well stand to lose. The task is to devise a formula that redresses disadvantage but penalizes imprudence. Needless to say that fiscal responsibility must be shared by both the Centre and the States. With the two channels of tax devolution and grants, it should be possible for the Finance Commission to achieve the goals of equity and efficiency through a proper mix.

Another factor that hinders the process of equalization is the flow of funds through channels where equalization is not used as a criterion (e.g. with assistance for Centrally Sponsored Schemes and for externally aided projects). If the equalization principle is to be implemented in a full-fledged manner, the transfers for purposes of equalization would have to be determined as a whole and not in the form of tax devolution and grants alone. This is what “the general

revenue recurrent grants” in Australia seek to achieve. These are supplemented by specific purpose grants and some grants through the States to be passed on to the local governments. But the general recurrent revenue grants are given on a normative assessment of revenue capacity and expenditure needs based on the relativities of the States in the matter. It is relevant to note that in Australia the general revenue recurrent grants have come to replace the tax reimbursement grants which were in vogue earlier to compensate the States for the loss of tax powers to the federal government.

At the same time, 'efficiency' in the use of resource should be ensured and promoted. States that perform more efficiently in the delivery of services or raise more revenues relative to their tax bases should not be penalized.

#### Analysis of Current Devolution Scheme

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#### Correlation Matrix

	Population	Criterion
Population	1	
Criterion	0.825214	1

In the calculation of the Distance criterion, population enters as an important factor. Population as such gets a weightage of 10% in the current scheme and this has been reduced as compared to the earlier schemes of the Finance commissions. However a careful examination reveals that in spite of all calculative exercises and formulae, the finance commissions end up by giving, though indirectly, as high a weightage as 70% to population factor. A correlation matrix between population and distance criterion shows a very high correlation of

82.5% and hence the 'distance' criterion is meaningless and only represents the population factor.

#### Inter correlation Matrix

	Population-2001	NSDP(2000-01)	Area
Population-2001	1		
NSDP(2000-01)	-0.346	1	
Area	0.7191	-0.394	

Also area enters as a separate factor with a weightage of 7.5%. But there is a high degree of correlation between area and the population and hence it too acts as a proxy for population.

#### Inter correlation Matrix

	HDI Value	Population
HDI Value	1	
Population	-0.35653	1

The claim that the above criteria are progressive in nature as they help the poorer states is also very weak. Had population been linked to growth, then the states with very low population would have been higher on the Human Development Index and vice versa. This is proved wrong by the low correlation between HDI and the population.

The above analysis clearly shows that population is being used as the major criterion for devolution by the finance commissions and hence they have been unsuccessful in the equalization objective they had set. So a new scheme which incentivises tax effort and is comparatively independent of population is required.

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**PROPOSED "EQUITY-INCENTIVE" MODEL**

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Federal fiscal transfers based on the principle of 'equalization' is endorsed by a large number of economists and accepted by most federations. In India also, various finance commissions have stressed upon the objective of 'equalization'. Though there is considerable diversity with respect to natural resources, climate, rainfall, soil type and disparities in the levels of fiscal potential, levels of development, population size, State domestic product etc. while states are required to provide about the same range of public services, they differ from each other in terms of their capacity to do so owing to diversity and disparity factors. This leads to differential assistance sought from the centre. Usually states with low fiscal potential and low level of development with large population need more resources as compared to the rich and developed states as they can finance their expenditure program to a large extent from their own resources. Thus they are in an advantageous position when compared to less developed and poor states. On this basis, the objective of equalization of general need for resources may be accepted as the general objective of federal fiscal transfers. 'General Need' in turn is represented by three factors viz. population, levels of development and fiscal potential.

But mere equalization is not a sufficient goal of federal fiscal transfers. There should also be sufficient inducement to 'tax-effort' and 'expenditure efficiency' also. Thus incentive and equalization should form the basic objective of federal fiscal transfers in a developing federation. In dynamic fiscal federalism, the perspective ought not only to be one of raising backward states to the normal

level but also one of promoting a continuous process whereby the states at various levels of development keep continually progressing with disparities among them getting progressively narrowed down. Therefore, the objective in a developing federation should be equalization and incentive for higher tax-effort and expenditure efficiency.

The equalization envisaged is that federal fiscal transfers would be in the direction of equalizing relative needs of the states. Thus, term 'need' is used in a comprehensive sense. The most backward state with very low fiscal potential and large population is considered to be the most needy state and vice versa. This need is measured by

- Population
- Relative levels of development
- Relative fiscal potential of the states

If the federal transfers help to reduce regional disparities in development and fiscal potential, the objective of equalization would be considered as achieved. The transfer should be moderately equalizing when the resources are transferred to all the states, but the amount thus transferred, depends upon their relative backwardness, population and fiscal potential level. In India, most of the states are still in the developing stage. Hence, all states require federal assistance, but the requirement of such assistance varies depending upon their fiscal need and fiscal resources.

The devolution should also take into account the incentive factor. The incentive provided by matching element. However, matching grants may not always be

equalizing because a state with larger fiscal potential can always promise to contribute more to a public scheme in order to get larger assistance; but a state with low fiscal potential cannot do so.

Alternatively, incentive factor can be introduced in terms of relative tax efforts i.e., actual tax effort related to their relative fiscal potential. Incentive can be provided to the states to effect economy in expenditure. But this term is difficult to define.

The scheme of incentive should also be moderately incentive oriented. In this case, the assistance will flow in proportion to their relative tax-efforts. All the states are thus taken into consideration rather than only those who are above average in terms of the tax-efforts.

Thus the model developed has the twin objective of 'equalization' and 'incentive'. This can be named as the 'equity-incentive' model and the criterion developed for devolution can be called the 'eligibility criterion'. This method has been based on the 'principle of need'. Need of a state is measured in terms of population size, levels of development and its fiscal potential. The fourth criterion suggested is 'relative tax-effort of the states'. Tax-effort means, the extent to which the states has made use of its tax potential. This criterion provides incentive for resource mobilization and checks 'Free riders'.

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## **CONCLUSION**

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The proposed model is based on the following propositions:

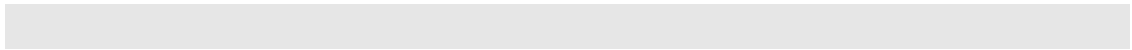
The objective of entire federal fiscal transfers like revenue sharing, grants-in-aid and plan assistance is to achieve 'equalization' in terms of reducing vertical imbalances and also reducing inter-regional disparities in need. 'Need' is measured by 'development' and fiscal potential. The need factor is coupled with the incentive factor viz., tax-effort.

Even if transfers are affected under various heads like shared taxes, shared duties, grants-in-aid or plan grants and so on, the net share accrued to a state would become as it would have accrued if all sources were pooled together and we had one divisible pool which is distributed on the above basis. Once the 'fiscal need' of the state is measured the need for giving 'revenue-gap' grants does not arise. Entire federal fiscal transfer schemes like sharing of Income tax and Union excise duties etc. are also guided by the same principles. Hence states with high need and high efforts get the maximum resources. The question of leaving some states with high revenue surplus or high revenue deficits after the devolution of taxes does not arise. The fiscal potential and expenditure need of the states are normatively assessed. If even after tax-devolution states experience vertical fiscal imbalances, federal government can give revenue gap grants to all the states according to the fiscal gap experienced by each state. Thus, revenue-gap

grant will be an instrument to bring down vertical fiscal imbalances and simultaneously help bringing down inter-state disparities in 'fiscal need'.

The above 'eligibility index' is a simple measure and with the vast data network available in the country at present one can easily measure the levels of development, fiscal potential and tax-efforts of states and derive the eligibility index. Federal fiscal transfers based on this model are highly progressive as more funds flow towards the more needy states, of course, towards those states which are also making serious efforts to mobilize resources. Thus, the model would prove to be effective in realizing the much proclaimed objective of helping the needy states without penalizing the states' efficiency and rather providing incentives to states with higher tax-efforts.

This kind of federal fiscal arrangement would help in India finding the right balance between growth and equity in its fiscal arrangement and move towards a more prosperous country in the future.



**APPENDIX**

## Appendix 1:

**Formula for Distributing State Plan Assistance**

	Criteria Share in central plan assistance (per cent)	Share of grants and loans	Distribution criteria non-special category states
A. Special category States	30	90:10	
B. Non-special category States	70	30:70	
(i) Population (1971)			60
(ii) Per capita income, of which			25
(a) According to the 'deviation' method covering only the States with per capita income below the national average			20
(b) According to the 'distance' method covering all the non-special category states			5
(iii) Fiscal performance, of which			7.5
(a) Tax effort			2.5
(b) Fiscal management			2.5
(c) National objectives			2.5
(iv) Special problems			7.5
			100

## Notes:

1. The formula is as revised in December, 1991;
2. Fiscal management is assessed as the difference between States' own total plan resources estimated at the time of finalizing annual plan and their actual performance, considering latest five years;
3. Under the criterion of the performance in respect of certain programs of national priorities the approved formula covers four objectives, viz. (i) population control, (ii) elimination of illiteracy, (iii) on-time completion of externally aided projects, and (iv) success in land reforms.

Source: Nirvikar Singh, India's System of Intergovernmental Fiscal Relations, August 2004

## Appendix 2:

**Criteria and Relative Weights for Tax Devolution**

Criterion	Weight (Percent)
1. Population (1971 Census)	10
2. Income (Distance Method)*	62.5
3. Area	7.5
4. Index of Infrastructure	7.5
5. Tax Effort**	5
6. Fiscal Discipline***	7.5

## Notes:

\*The distance method is given by:  $(Y_h - Y_i)P_i / \sum (Y_h - Y_i)P_i$  where, where  $Y_i$  and  $Y_h$  represent per capita GDP of the  $i^{\text{th}}$  and the highest income State respectively and  $P_i$  is the population of the  $i^{\text{th}}$  State .

\*\* Tax Effort ( $\eta$ ) is estimated as  $(\eta) = (T_i / Y_i) / (0.5 1/Y_i)$  where,  $T_i$  is the per capita tax revenue collected by the  $i^{\text{th}}$  State and  $Y_i$  is the per capita State domestic product of the  $i^{\text{th}}$  State.

\*\*\* Estimated as the improvement in the ratio of own revenue of a state to its revenue expenditures divided by a similar ratio for all States averaged for the period 1966-99 over 1991-1993.

Source: Nirvikar Singh, India's System of Intergovernmental Fiscal Relations, August 2004

## Appendix 3: Population vs Net State Domestic Product vs Area

State	Population-2001	NSDP(2000-01)	AREA <sup>1</sup>
Andaman & Nicobar Islands	356265	NA	8249
Andhra Pradesh	75727541	9982	275045
Arunachal Pradesh	1091117	9013	83743
Assam	26638407	6157	78438
Bihar	82878796	3345	173877
Chandigarh	900914	29208	114
Dadra & Nagar Haveli	220451		491
Daman & Diu	158059		112
Delhi	13782976	24450	1483
Goa	1343998	NA	3702
Gujarat	50596992	12975	196024
Haryana	21082989	14331	44212
Himachal Pradesh	6077248	10942	55673
Jammu & Kashmir	10069917	NA	222236
Karnataka	52733958	11910	191791
Kerala	31838619	10712	38863
Lakshadweep	60595		32
Madhya Pradesh	60385118	7003	443446
Maharashtra	96752247	15172	307713
Manipur	2388634	8745	22327
Meghalaya	2306069	8460	22429
Mizoram	891058	NA	21081
Nagaland	1988636	NA	16579
Orissa	36706920	5187	155707
Pondicherry	973829	18500	492
Punjab	24289296	15390	50362
Rajasthan	56473122	7937	342239
Sikkim	540493	NA	7096
Tamil Nadu	62110839	12779	130058
Tripura	3191168	6813	10486
Uttar Pradesh	166052859	5770	294411
West Bengal	80221171	9778	88752

<sup>1</sup> Provisional area figures furnished by Surveyor General as on 31.3.91 (Sq.Km.)

## Inter correlation Matrix

	Population-2001	NSDP(2000-01)	Area
Population-2001	1		
NSDP(2000-01)	-0.34636	1	
Area	0.719084	-0.39406	1

## Appendix 4: Human Development Index and Population Correlation

State	HDI Value	Rank	Population
Andhra Pradesh	0.416	10	75727541
Assam	0.386	14	26638407
Bihar	0.367	15	82878796
Gujarat	0.479	6	50596992
Haryana	0.509	5	21082989
Karnataka	0.478	7	52733958
Kerala	0.638	1	31838619
Madhya Pradesh	0.394	12	60385118
Maharashtra	0.523	4	96752247
Orissa	0.404	11	36706920
Punjab	0.537	2	24289296
Rajasthan	0.424	9	56473122
Tamil Nadu	0.531	3	62110839
Uttar Pradesh	0.388	13	166052859
West Bengal	0.472	8	80221171

## Inter correlation Matrix

	HDI Value	Population
HDI Value	1	
Population	-0.35653	1

## Appendix 5: Distance Criterion Analysis

State/UTs	Per Capita Income <sup>1</sup>	Distance	Population	Criterion
Andhra Pradesh	9457	-5625	75727541	7.04%
Arunachal Pradesh	8580	-6502	1091117	0.12%
Assam	5785	-9297	26638407	4.09%
Bihar	3323	-11759	82878796	16.10%
Chhatisgarh	6692	-8390	20795956	2.88%
Goa	27405	12323	1343998	-0.27%
Gujarat	13022	-2060	50596992	1.72%
Haryana	13709	-1373	21082989	0.48%
Himachal Pradesh	10514	-4568	6077248	0.46%
Jammu & Kashmir	7384	-7698	10069917	1.28%
Jharkhand	6651	-8431	26909428	3.75%
Karnataka	11254	-3828	52733958	3.34%
Kerala	10178	-4904	31838619	2.58%
Madhya Pradesh	7947	-7135	60385118	7.12%
Maharashtra	15082	0	96752247	0.00%
Manipur	8147	-6935	2388634	0.27%
Meghalaya	8333	-6749	2306069	0.26%
Nagaland	8726	-6356	1988636	0.21%
Orissa	5265	-9817	36706920	5.95%
Punjab	14980	-102	24289296	0.04%
Rajasthan	8707	-6375	56473122	5.95%
Sikkim	10250	-4832	540493	0.04%
Tamil Nadu	12348	-2734	62110839	2.81%
Tripura	7967	-7115	3191168	0.38%
Uttar Pradesh	5682	-9400	166052859	25.79%
West Bengal	9330	-5752	80221171	7.62%

<sup>1</sup>Per Capita Income (1993-94 Prices) in the year 1999-2000

**Assumption:** The distance has been measured from the state with the 2nd highest per capita income i.e. Maharashtra

The Criterion is given by:  $(Y_h - Y_i)P_i / \sum(Y_h - Y_i)P_i$

where, where  $Y_i$  and  $Y_h$  represent per capita SDP of the  $i_{th}$  and the highest income State respectively and  $P_i$  is the population of the  $i_{th}$  State .

### Correlation Matrix

	Population	Criterion
Population	1	
Criterion	0.825214	1

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