Global Summit on Changing Bihar

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Raising and Managing Resources for a Stronger Bihar

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1. Introduction: The Bihar Paradox

How is Bihar doing? The answer to that question can be very different, depending on the lens through which we address it. By any standard measure of the *level* of human development, Bihar ranks at the bottom among all Indian states or close to it. It's real per capita income of Rs. 14,6149 (2004-2005 prices) is the lowest among all States, and well below half the national average (Table. 1). Not surprisingly, the incidence of poverty is also the highest in Bihar. Though official poverty estimates based on the 2009-2010 NSS consumer expenditure survey are yet to be released, one recent unofficial estimate suggests that nearly 56 per cent of Bihar's population is below the Tendulkar poverty line[1] as compared to about 31 per cent for the country as a whole (Table 2). Bihar is ranked 20th among 28 listed States in terms of infant mortality (Table 3), and literacy in Bihar is the lowest among all States at less than 64 per cent (Table 4).

Switch that lens to the pace of *change* in these same indicators, and the picture changes dramatically. Bihar emerges as one of the best performers among all Indian states in recent years on many counts. The incidence of poverty has unfortunately not declined, and is indeed a shade higher in 2009- 10 compared to 2004-5 (Table 2). However, Bihar now has one of the highest rates of growth of per capita income in the country at 8.51 per cent for the period since 2004-5, compared to just over 3 per cent prior to 2004-5 (Table 1) . Infant mortality has also been declining rapidly(Table 3), and literacy in the state is increasing at more than double the national rate, nearly three times the national rate in the case of women(Table 4).

In other words, Bihar is one of the top performers among Indian States in terms of the pace of *change* in various development indicators. Yet*,* it remains the poorest and one of the least developed states in India. What accounts for this paradox? The answer is that Bihar's robust performance is a relatively recent phenomenon. It will require many more years of such performance before Bihar can overcome its abysmally poor development legacy of several decades.

What is driving the remarkable positive shift in Bihar's recent development performance? One very important feature is the emphasis the present government has laid on improving Bihar's law and order situation. A secure and peaceful environment, where economic transactions are protected by the rule of law, is a key precondition for robust development. This principal was originally enunciated by Kauilya in the Arthashastra (Rangarajan L.N. translation 1992), and later by Adam Smith. Its applicability across different countries at different stages of development in our own times has been rigorously demonstrated in a recent study by Besley and Persson (Besley T. & T. Persson 2011). Hence, the developmental value of the present Bihar government's emphasis on law and order, security and stability for the citizens of Bihar, should not be under- estimated.

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[1] The poverty line as estimated using the method recommended in the report of the Expert Group to Review the Methodology for Estimation, chaired by the late Professor Suresh Tendulkar

Table 1: State-wise Real GSDP per capita

	(Rs. 1999-2000 Prices)		Growth of 2000-01 to 2004-05	(Rs. 2004-05 Prices)		Growth 2004-05 to 2010-11
	2000-2001	2004-05		2004-2005	2010-11	
Goa	48067.09	53203.13	2.03	88427.70	116292.17 †	5.48
Maharashtra	26256.30	30862.74	3.23	40346.94	69172.55	8.98
Haryana	25207.17	33475.24	5.67	41977.72	65447.26	7.40
Sikkim	17439.79	22755.85	5.32	30720.80	59797.91	11.10
Tamil Nadu	21782.76	26093.57	3.61	33998.65	58176.31	8.95
Gujarat	22394.59	28454.72	4.79	37803.42	57266.68 †	8.31
Himachal Pradesh	23551.32	29632.46	4.59	37002.38	54390.62	6.42
Kerala	21937.75	28720.89	5.39	36277.99	52983.66 †	7.58
Uttarakhand	15248.54	22129.33	7.45	27497.25	52750.12	10.86
Punjab	28155.99	31316.52	2.13	37228.38	51748.32	5.49
Karnataka	19573.47	22668.58	2.94	30062.25	45860.62	7.04
Andhra Pradesh	17075.90	22185.66	5.24	28265.64	44079.22	7.41
Arunachal Pradesh	15064.72	21488.73	7.10	30329.89	43238.85 †	7.09
Meghalaya	15995.70	19727.90	4.19	27023.62	39321.97	6.25
Mizoram	18075.64	21132.21	3.12	27559.79	39208.76 †	7.05
Tripura	15284.07	21384.86	6.72	26585.58	35972.92	5.04
Chhattisgarh	13291.89	16116.37	3.85	21462.56	33951.85	7.64
West Bengal	17165.77	21183.50	4.21	24869.10	33187.03 †	5.77
Jammu & Kashmir	15987.48	17946.72	2.31	25198.52	32495.92	4.24
Orissa	11890.86	15180.21	4.88	19979.93	31107.56	7.38
Rajasthan	15188.12	16854.55	2.08	21055.48	29086.43	5.39
Manipur	14633.58	15983.50	1.76	20786.25	25917.58	3.68
Jharkhand	13113.11	14711.45	2.30	20848.17	24939.64	2.99
Assam	13364.75	15348.12	2.77	18993.35	24687.22	4.37
Madhya Pradesh	13658.45	13623.33	-0.05	17448.66	22537.96 †	5.12
Uttar Pradesh	10889.84	11797.18	1.60	14620.96	19939.15	5.17
Bihar	**6301.29**	**7443.81**	**3.33**	**8772.77**	**14613.79**	**8.51**
Nagaland	15144.76	18435.59	3.93	32605.12	---	---
All India	**17676.00**	**21742.66**	**4.14**	**27055.66**	**40715.77**	**6.81**

Source: State Domestic Product and other aggregates, 1999-2000 series and 2004-05 series, Ministry Of Statistics and Programme Implementation, Government of India; Directorate of Economics & Statistics of respective State Governments, and for All-India -- Central Statistics Office.

Note: † Data refers to 2009-10, since 2010-11 figure is not yet available. Growth rate has been estimated accordingly.

Table 2: State-wise Poverty Incidence by Headcount Ratio

	1993-94			2004-05			2009-10		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Jammu & Kashmir	32.5	6.9	26.3	14.1	10.4	13.2	8.1	11.9	9.1
Himachal Pradesh	36.7	13.6	34.6	25	4.6	22.9	10.3	12.2	10.5
Kerala	33.9	23.9	31.3	20.2	18.4	19.7	11.3	10.7	11.0
Tamil Nadu	51	33.7	44.6	37.5	19.7	28.9	20.4	10.8	15.8
Punjab	20.3	27.2	22.4	22.1	18.7	20.9	15.7	18.1	16.6
Andhra Pradesh	48.1	35.2	44.6	32.3	23.4	29.9	21.7	16.3	19.9
Haryana	40	24.2	35.9	24.8	22.4	24.1	21.3	22.7	21.8
Uttarakhand	36.7	18.7	32	35.1	26.2	32.7	20.6	24.7	21.9
Karnataka	56.6	34.2	49.5	37.5	25.9	33.4	26.1	20.0	23.8
Gujarat	43.1	28	37.8	39.1	20.1	31.8	29.0	18.8	24.7
Maharashtra	59.3	30.3	47.8	47.9	25.6	38.1	31.1	19.2	25.8
Rajasthan	40.8	29.9	38.3	35.8	29.7	34.4	28.4	20.8	26.6
West Bengal	42.5	31.2	39.4	38.2	24.4	34.3	31.1	20.5	27.8
Assam	54.9	27.7	51.8	36.4	21.8	34.4	39.9	24.7	37.8
Orissa	63	34.5	59.1	60.8	37.6	57.2	40.8	25.8	38.3
Uttar Pradesh	50.9	38.3	48.4	42.7	34.1	40.9	42.1	31.5	39.7
Madhya Pradesh	49	31.8	44.6	53.6	35.1	48.6	46.0	23.4	39.8
Chhattisgarh	55.9	28.1	50.9	55.1	28.4	49.4	46.3	24.4	41.3
Jharkhand	65.9	41.8	60.7	51.6	23.8	45.3	45.0	31.0	41.7
Bihar	**62.3**	**44.7**	**60.5**	**55.7**	**43.7**	**54.4**	**57.4**	**44.1**	**55.9**
All India	**50.1**	**31.8**	**45.3**	**41.8**	**25.7**	**37.2**	**35.3**	**20.8**	**30.8**

Source: Unpublished estimates by Himanshu.

Note: Based on estimation procedure proposed in 'Report of the Expert Group to Review the Methodology for Estimation of Poverty' (Tendulkar Committee, November, 2009)

Table 3: State-wise Infant Mortality Rates

	2000			2005			2010			Percentage changes in IMR from 2000 to 2005			Percentage changes in IMR from 2005 to 2010		
	M	**F**	**P**	**M**	**F**	**P**	**M**	**F**	**P**	**M**	**F**	**P**	**M**	**F**	**P**
Goa	27	15	21	14	17	16	6	15	10	-48.3	15.6	-23.8	-57.1	-11.8	-37.5
Kerala	15	13	14	14	15	14	13	14	13	-6.7	15.4	0.0	-7.1	-6.7	-7.1
Manipur	21	24	22	12	13	13	11	16	14	-41.5	-45.8	-41.4	-8.3	23.1	7.7
Nagaland				19	18	18	19	28	23	---	---	---	0.0	55.6	27.8
Tamil Nadu	49	54	51	35	39	37	23	24	24	-28.6	-27.8	-27.5	-34.3	-38.5	-35.1
Tripura	31	39	35	30	31	31	25	29	27	-2.3	-20.3	-10.9	-16.7	-6.5	-12.9
Maharashtra	46	50	48	34	37	36	27	29	28	-26.1	-26.0	-25.0	-20.6	-21.6	-22.2
Sikkim	50	44	47	29	31	30	28	32	30	-41.8	-29.7	-36.2	-3.4	3.2	0.0
Arunachal Pradesh	41	39	40	29	46	37	31	32	31	-29.8	18.6	-7.7	6.9	-30.4	-16.2
West Bengal	54	47	51	38	39	38	29	32	31	-29.6	-17.0	-25.5	-23.7	-17.9	-18.4
Punjab	45	61	52	41	48	44	33	35	34	-8.9	-21.3	-15.4	-19.5	-27.1	-22.7
Mizoram	18	17	18	18	22	20	36	39	37	-1.6	31.0	14.3	100.0	77.3	85.0
Karnataka	65	47	57	48	51	50	37	39	38	-26.2	8.5	-12.3	-22.9	-23.5	-24.0
Uttarakhand				37	48	42	37	39	38	---	---	---	0.0	-18.8	-9.5
Himachal Pradesh	57	45	51	47	51	49	35	47	40	-17.1	14.6	-3.9	-25.5	-7.8	-18.4
Jharkhand				43	58	50	41	44	42	---	---	---	-4.7	-24.1	-16.0
Jammu & Kashmir	59	46	53	47	55	50	41	45	43	-20.6	19.3	-5.8	-12.8	-18.2	-14.0
Gujarat	59	67	62	52	55	54	41	47	44	-11.9	-17.9	-12.9	-21.2	-14.5	-18.5
Andhra Pradesh	66	64	65	56	58	57	44	47	46	-15.2	-9.4	-12.3	-21.4	-19.0	-19.3
Bihar	**62**	**61**	**62**	**60**	**62**	**61**	**46**	**50**	**48**	**-3.2**	**1.6**	**-1.6**	**-23.3**	**-19.4**	**-21.3**
Haryana	63	71	67	51	70	60	46	49	48	-19.0	-1.4	-10.4	-9.8	-30.0	-20.0
Chhattisgarh				63	64	63	48	54	51	---	---	---	-23.8	-15.6	-19.0
Meghalaya	65	67	66	48	51	49	55	56	55	-26.3	-24.1	-26.0	14.6	9.8	12.2
Rajasthan	76	81	79	64	72	68	52	57	55	-15.8	-11.1	-13.9	-18.8	-20.8	-19.1
Assam	66	83	75	66	69	68	56	60	58	0.0	-16.9	-9.3	-15.2	-13.0	-14.7
Orissa	98	92	95	74	77	75	60	61	61	-24.5	-16.3	-21.1	-18.9	-20.8	-18.7
Uttar Pradesh	81	86	83	71	75	73	58	63	61	-12.3	-12.8	-12.0	-18.3	-16.0	-16.4
Madhya Pradesh	81	93	87	72	79	76	62	63	62	-11.1	-15.1	-12.6	-13.9	-20.3	-18.4
All India	**67**	**69**	**68**	**56**	**61**	**58**	**46**	**49**	**47**	**-16.4**	**-11.6**	**-14.7**	**-17.9**	**-19.7**	**-19.0**

Source: Compendium of India’s Fertility and Mortality Indicators 1971-2007, based on The Sample Registration System (SRS), Office of the Registrar General of India, Ministry of Home Affairs, New Delhi.
Note: M=Male, F= Female and P= Person

Table 4: State-wise Literacy Rates

Literacy Rates							Change in Percentage Point			
	1991		2001		2011		From 1991 to 2001		From 2001 to 2011	
	Persons	Females	Persons	Females	Persons	Females	Persons	Females	Persons	Females
Kerala	89.81	86.17	90.92	87.86	93.91	91.98	1.11	1.69	2.99	4.12
Mizoram	82.27	78.6	88.49	86.13	91.58	89.4	6.22	7.53	3.09	3.27
Tripura	60.44	49.65	73.66	65.41	87.75	83.15	13.22	15.76	14.09	17.74
Goa	75.51	67.09	82.32	75.51	87.4	81.84	6.81	8.42	5.08	6.33
Himachal Pradesh	63.94	52.26	77.13	68.08	83.78	76.6	13.19	15.82	6.65	8.52
Maharashtra	64.87	52.32	77.27	67.51	82.91	75.48	12.40	15.19	5.64	7.97
Sikkim	56.94	46.76	69.68	61.46	82.2	76.43	12.74	14.70	12.52	14.97
Tamil Nadu	62.66	51.33	73.47	64.55	80.33	73.86	10.81	13.22	6.86	9.31
Nagaland	61.65	54.75	67.11	61.92	80.11	76.69	5.46	7.17	13.00	14.77
Manipur	59.89	47.6	68.87	59.70	79.85	73.17	8.98	12.10	10.98	13.47
Uttaranchal	---	---	72.28	60.26	79.63	70.7	---	---	7.35	10.44
Gujarat	61.57	48.92	69.97	58.60	79.31	70.73	8.40	9.68	9.34	12.13
West Bengal	57.7	46.56	69.22	60.22	77.08	71.16	11.52	13.66	7.86	10.94
Punjab	58.51	50.41	69.95	63.55	76.68	71.34	11.44	13.14	6.73	7.79
Haryana	55.85	40.47	68.59	56.31	76.64	66.77	12.74	15.84	8.05	10.46
Karnataka	56.04	44.34	67.04	57.45	75.6	68.13	11.00	13.11	8.56	10.68
Meghalaya	49.1	44.85	63.31	60.41	75.48	73.78	14.21	15.56	12.17	13.37
Orissa	49.09	34.68	63.61	50.97	73.45	64.36	14.52	16.29	9.84	13.39
Assam	52.89	43.03	64.28	56.03	73.18	67.27	11.39	13.00	8.90	11.24
Chhattisgarh	---	---	64.66	51.85	71.04	60.59	---	---	6.38	8.74
Madhya Pradesh	44.67	29.35	64.11	50.28	70.63	60.02	19.44	20.93	6.52	9.74
Uttar Pradesh	40.71	24.37	57.36	42.98	69.72	59.26	16.65	18.61	12.36	16.28
Jammu & Kashmir	---	---	54.46	41.82	68.74	58.01	---	---	14.28	16.19
Andhra Pradesh	44.09	32.72	61.11	51.17	67.66	59.74	17.02	18.45	6.55	8.57
Jharkhand	---	---	54.13	39.38	67.63	56.21	---	---	13.50	16.83
Rajasthan	38.55	20.44	61.03	44.34	67.06	52.66	22.48	23.90	6.03	8.32
Arunachal Pradesh	41.59	29.69	54.74	44.24	66.95	59.57	13.15	14.55	12.21	15.33
Bihar	**37.49**	**21.99**	**47.53**	**33.57**	**63.82**	**53.33**	**10.04**	**11.58**	**16.29**	**19.76**
India	**52.21**	**39.29**	**64.84**	**53.67**	**74.04**	**65.46**	**12.63**	**14.38**	**9.20**	**11.79**

Source: Census 1991, 2001 and 2011

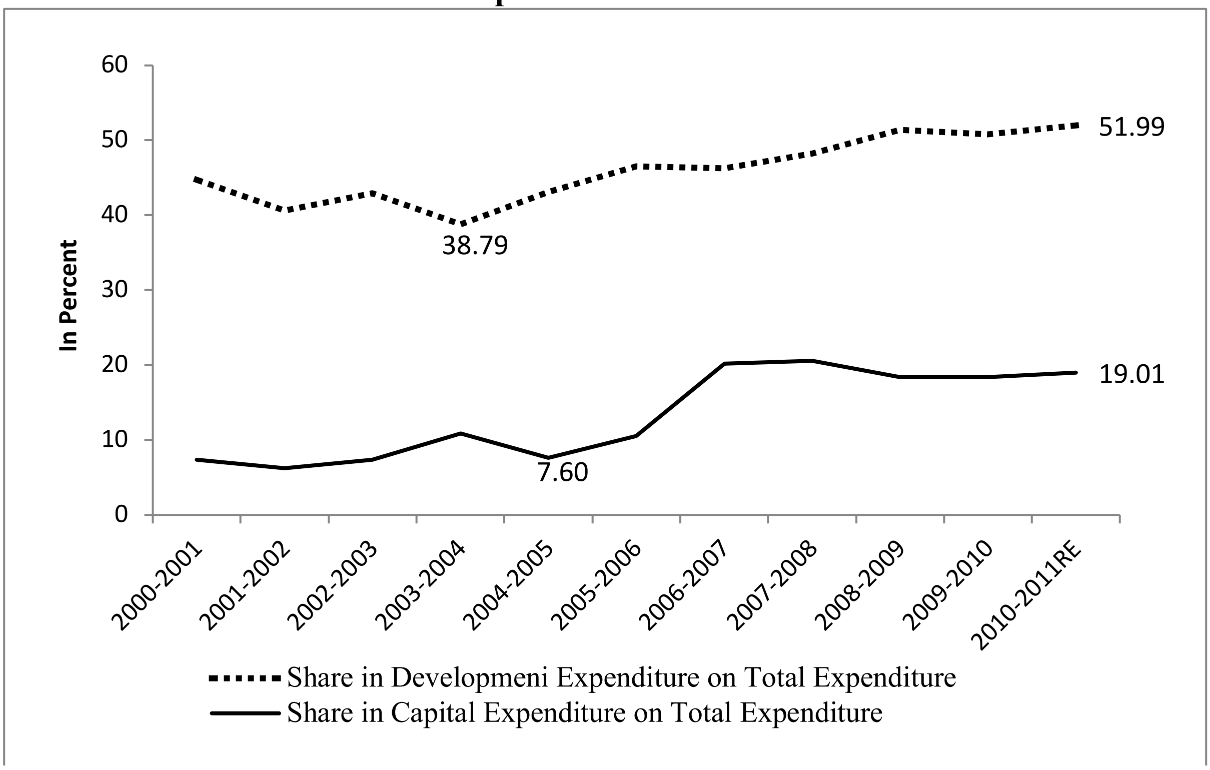
Another factor driving Bihar's strong development performance in recent years is the strengthening of Bihar's fiscal situation, the core concern of this paper. The emergence of a revenue surplus, the rising share of capital spending, and rising development spending are central to an explanation of the remarkable turn around in Bihar's development performance.

2. Fiscal consolidation in Bihar

The developmental impact of government finances is a positive function of the extent to which the government can allocate its resources for capital spending and development spending. Government capital expenditure cannot be equated to capital formation per se, but the two are closely correlated. Capital expenditure is a good measure of how much emphasis is being given to capital formation in the public sector, especially building infrastructure such as roads, telecommunications and power delivery systems. Similarly development expenditure, which is defined to include all expenditure, both revenue and capital, on economic and social services provides a good measure of the extent to which the government is focussing on development.

In Bihar the share of capital expenditure in total government spending bottomed out at less than 8 per cent in 2004-2005, then rose quite sharply to over 20 per cent by 2006-2007, and has stabilized at around that level (Chart 1). Similarly, development spending bottomed out at less than 39 per cent in 2003-2004, and then rose quite steadily to about 52 per cent by 2010-2011. This, together with the relatively harmonious law and order situation, is what accounts for Bihar's strong development performance in recent years. But how has the Bihar government been able to step up its capital spending and development spending?

Chart 1: Share of Development Expenditure and Capital Expenditure in Total Expenditure in Bihar



Source: Finance Accounts of Bihar.

Details relating to the consolidation of Bihar's state finances are summarized in Table 5. On the revenue side, there is a pattern of considerable volatility around a gradual trend improvement. Revenues as a proportion of GSDP rose from a low of 17.4 per cent in 2000-2001, when Jharkand was bifurcated from Bihar, to a peak of over 29 per cent in 2005-2006, then declining to about 22 per cent (revised estimate) in 2010-2011in the wake of the global financial crisis. However, the growth of revenue expenditure, also after peaking at over 29 pecent of GSDP in 2005-2006, was subsequently contained at around 20 per cent, thereby generating a revenue surplus that could be allocated to capital expenditure. Accordingly, the capital expenditure to GSDP ratio has doubled from around 3 per cent of GSDP in the early years of the previous decade (2000-2001 to 2002-03) to around 6 per cent at present, enabling larger investment in public infrastructure. It should be emphasized in this context that increased investment in infrastructure, especially rural roads, district roads etc. not only facilitate the growth of economic activities through better connectivity but also contribute significantly to better education and health outcomes, i.e, human development (Mundle 2011).

Table 5: Bihar State Finances (Percent of GSDP)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (RE)	2011-12 (BE)
Revenues	**17.4**	**20.9**	**20.6**	**23.8**	**27.5**	**29.4**	**22.3**	**23.8**	**21.9**	**20.3**	**21.8**	**26.6**
Own Revenues	7.1	10	5.7	6.1	6.6	6.7	4.4	4.7	4.9	5.6	5.6	7.4
Tax Revenues	6	9.4	5.2	5.5	5.9	5.9	3.9	4.3	4.1	4.6	5.0	6.0
Non Tax Revenues	1.1	0.6	0.5	0.6	0.7	0.9	0.5	0.4	0.8	1.0	0.6	1.4
Central Transfers (i+ii)	10.3	10.9	14.9	17.7	20.9	22.7	17.9	19.0	17.0	14.7	16.2	19.2
(i) Share in Central Taxes	8.6	8.6	12.3	14.6	16	17.2	12.9	14.1	11.7	10.4	10.7	12.8
(ii) Grants	1.7	2.2	2.6	3.1	5	5.5	5.1	4.9	5.3	4.3	5.5	6.5
Expenditures	**23.7**	**26.4**	**26.3**	**32.2**	**29.7**	**35.5**	**26.3**	**26.6**	**24.7**	**24.4**	**27.4**	**30.9**
Revenue Expenditure	21	23.7	23.1	24.3	25.6	29.3	19.9	19.9	18.9	18.6	20.6	23.6
Interest Payment	4.9	5.6	5.7	6.4	6.1	6	3.3	3.1	2.5	2.1	2.1	2.2
Pension	3.1	4.8	3.9	4.3	4.1	4.1	2.4	2.3	2.3	2.5	2.8	3.6
Capital Expenditure	2.7	2.7	3.2	7.9	4.1	6.2	6.3	6.7	5.8	5.8	6.8	7.3
Capital Outlay	1.7	1.6	1.8	3	2.1	3.4	5.2	5.3	4.4	4.5	5.1	5.8
Net Lending	1	1.1	1.4	4.9	1.9	2.8	1.1	1.5	1.4	1.4	1.7	1.5
Revenue Deficit(+)/(-)	**3.6**	**2.8**	**2.4**	**0.5**	**-1.9**	**-0.1**	**-2.4**	**-3.9**	**-3.0**	**-1.7**	**-1.1**	**-3.0**
Fiscal Deficit(+)/(-)	**6.3**	**5.5**	**5.6**	**8.3**	**2.2**	**6.1**	**2.9**	**1.4**	**1.7**	**3.0**	**4.1**	**2.9**
Primary Deficit(+)/(-)	**1.5**	**-0.1**	**-0.1**	**2**	**-3.9**	**0.1**	**-0.4**	**-1.7**	**-0.8**	**0.9**	**2.0**	**0.7**

Source: Finance Accounts and Budget Documents

The growth of revenue expenditure was held in check mainly by containing the growth of non-development expenditure. Pension payments seem to have been stabilized at less than 3 per cent of GSDP compared to an average of 4 per cent a decade ago. More importantly, interest payments have been compressed from an average of nearly 6 per cent of GSDP earlier to just over 2 per cent at present. This has been made possible by cutting down the fiscal deficit to an average of around 3 per cent of GSDP at present from over 6 per cent a decade earlier, the emergence of a primary surplus in some years, and consequent moderation of the debt servicing burden. In other words, a virtuous cycle of fiscal consolidation has been set in motion, though some slippage on the fiscal deficit is again visible in the last couple of years following the global crisis.

It is important to emphasise that the rise in the revenue: GSDP ratio during the past decade ,which set in motion this virtuous cycle of fiscal consolidation , is mainly attributable to a rise in central transfers, not own revenues. The latter accounts for about one-quarter of total revenue and, as a proportion of GSDP, has been lower during in recent years compared to a decade ago. Central transfers , on the other hand, account for about three quarters of the Bihar government's revenues. One part of central transfers, the smaller but stable part, is grants under various central or centrally sponsored schemes. The main component of central transfers is the mandatory transfer of Bihar's share of central taxes, as recommended by successive Finance Commissions. This is the larger but also more volatile part, depending on fluctuation in the collection of taxes by the central government. This pattern of financing is fairly typical of the less developed states, making them heavily dependent on the revenue performance of the central government.

It has to be noted in this context that there is a serious vertical imbalance in the structure of India's fiscal system. The powers of taxation of the States fall far short of their spending responsibilities, i.e., State subjects as determined by the Constitution, in particular law and order, primary education, health, agriculture, etc. which entail large volumes of public spending. This vertical imbalance requires large scale transfer of resources from the centre to that States. But the States themselves are not evenly placed. The richer, more developed, states have a much larger capacity to raise their own revenues than the poorer States. They are therefore less dependent on the centre for financing the delivery of economic and social services to their resident citizens.

Successive Finance Commissions have formulated rules to overcome this imbalance. The principle of equity in a federal fiscal system requires that within a unified national jurisdiction citizens in all States should have access to the same level of publicly provided services for the same tax price. However, as many studies have pointed out, the awards of successive Finance Commissions have only managed to reduce this horizontal inequity at the margin, not eliminate it[2], This is partly because the rules of Finance Commission awards, in which the equalization principle is embedded, only accounts for one part of central transfers. Another large component comes within the purview of the Planning Commission. Only a part of centre transfers sanctioned by the Planning Commission is covered by the Gadgil formula,

[2] Among others, see Rao M.G. & Nirvikar Singh (2005) and Rangarajan C. & D.K. Srivastava (2011)

which also incorporates the principal of equity. For the remainder, mostly various central or centrally sponsored schemes, the allocation between States is ad hoc, not guided by any principle of inter-State equity.

3. The Case for Special Assistance to Bihar

The poorer States are the ones most dependent on central transfers for their development spending. The failure of the federal transfer system to compensate them for their fiscal disadvantage is a major constraint for the development of these States. In the case of Special Category States, the special dispensations provided for them gives them significant relief for their fiscal disadvantage. In the absence of any such special dispensation, it is the poorer General Category States who have been the worst victims of the inadequate federal transfer system, and Bihar is the poorest among the poorer General Category States. As such, it has the strongest claim to be awarded a special assistance package to compensate its fiscal disadvantage.

As pointed out in a recent exercise (Rao M.G. 2011), thanks to inadequate central transfers to compensate Bihar, Bihar's per capita development expenditure is the lowest among all general category States. It amounts to only about half the average per capita development spending of all States, and a third of that in the highest spending State, Haryana (Table 6). On top of having the lowest per capita income, Bihar also has the lowest per capita spending on education, health, social services overall and also economic services. As estimated in this exercise, Bihar would need an *additional* central transfer of Rs 25,295 per capita to bring it at par with the national average of per capita development spending.

As against this, Bihar was given a grant of Rs 8753 crores under the Backward Regions Grant Fund introduced during the 11th Five Year Plan, amounting to about Rs. 1750 crores per annum or roughly Rs. 180 per capita per year. In other words, there is a gap of over Rs. 25,000 per capita in central transfers to Bihar, compared to that which would be warranted by the principal of equalization in the federal transfer system. This is in addition to the shortfall in Bihar's share of central subsidies and in investment by central government enterprises. If pro-rated in line with its population share, Bihar would receive about 8.2 per cent of both. Instead, Bihar receives only 2.67 per cent of central subsidies and 1.9 per cent of central enterprises investment (Table 7).

The case for a special assistance package for Bihar is further reinforced by the fact that the transfer gap exists despite a strong effort at fiscal consolidation by the state government. The Bihar Government enacted its Fiscal Responsibility and Budget Management Act in 2006, committing the state to eliminate its revenue deficit by 2006-07, and to bring down the fiscal deficit to not more than 3 per cent by 2008-09. However, as discussed in section 2 earlier, Bihar had already eliminated its revenue deficit years ahead of target, generating a significant revenue surplus. It had also brought down the fiscal deficit to less than 3 per cent by 2006-07, two years ahead of time (Table 5). There has been some slippage following the severe global financial crisis of 2008. This required the national fiscal consolidation program to be rolled back to make way for a substantial fiscal stimulus.

Table 6: Per Capita Development Expenditures on Selected Items in Major States in 2009-10 (Rs)

States	Per capita GSDP (2009-10) (at 2004-05 current prices)	Per capita Education Expenditure (2009-10)	Per capita Health Expenditure (2009-10)	Per capita Social Service Expenditure (2009-10)	Per capita Economic Service Expenditure (2009-10)	Per capita Development (Economic + Social Service) Expenditure (2009-10)
Maharashtra	51689.91	2126.58	362.43	3487.37	3491.60	6978.98
Haryana	87182.73	2214.02	361.56	4180.91	5330.21	951 1.12
Gujarat	74240.65	1313.68	334.71	3407.70	3738.28	7145.98
Punjab	73308.84	1260.73	327.46	2803.61	2576.00	5379.61
Tamil Nadu	69473.92	1560.12	341.69	3996.08	3190.94	7187.02
Kerala	67363.42	1748.98	587.35	3167.82	1736.32	4904.14
Karnataka	57400.06	1466.25	338.63	3863.60	3567.07	7430.67
Andhra Pradesh	56869.88	1222.47	380.33	3786.84	4441.80	8228.63
Chhattisgarh	46213.23	1412.88	332.55	3713.79	2646.45	6360.24
West Bengal	45387.25	965.32	110.8	2368.06	2387.53	4755.59
Orissa	40372.91	1373.76	405.17	2587.29	2156.66	4743.95
Rajasthan	38586.16	1319.42	232.64	2870.10	1694.60	4564.70
Jharkhand	34503.39	1 133.68	287.38	2707.61	1460.68	4168.29
Assam	30821.58	1551.34	602.74	2998.23	2129.45	5127.67
Madhya Pradesh	30785.78	1795.3	271.31	1885.82	1983.26	3869.07
Uttar Pradesh	26590.97	1774.52	216.75	1984.81	2166.99	4151.80
Bihar	**17616.45**	**809.78**	**157.6**	**1495.07**	**1360.71**	**2855.78**
All State Average	**47856**	**1530**	**294**	**2822.91**	**2676.06**	**5498.97**
Bihar as per cent of all-state average	36.81	52.93	53.61	52.96	50.85	51.93
Bihar as % of the highest spending state	20.21	36.58	26.15	35.76	25.53	30.03
Additional Money required to Reach Average Level		**6892.53**	**1305.36**	**12707.41**	**12587.90**	**25295.31**
Correlation with Per capita GSDP with Developmental Heads		0.49	0.32	0.76	0.74	0.80

Source: Conference presentation by M.G. Rao, Patna, 31 January, 2012
Note: All-state implies the large states included in the table.

Table 7: Inter-State Allocation of Central Subsidies and Investments in Central Government Enterprises

	Population Share in 2003-04	GSDP Share in 2003-04	CPSU Investment Share in 2003-04	Share of Centre's Subsidies in 2007-08
Maharashtra	9.57	15.09	19.38	6.04
Uttar Pradesh	16.42	10.38	7.18	4.37
Andhra Pradesh	7.53	8.66	7.63	6.77
West Bengal	7.91	8.4	5.28	4.35
Tamil Nadu	6.16	7.94	6.92	7.30
Gujarat	5	6.86	7.04	6.04
Karnataka	5.23	6.34	5.32	6.51
Rajasthan	5.58	4.98	2.77	4.50
Madhya Pradesh	5.97	4.67	4.97	4.24
Kerala	3.15	4.09	2.75	4.74
Punjab	2.41	3.97	1.56	9.83
Haryana	2.08	3.24	2.34	9.40
Bihar	8.2	2.99	1.87	2.67
Orissa	3.64	2.42	5.65	4.55
Jharkhand	2.67	1.79	4.11	3.19
Chhattisgarh	2.05	1.71	2.17	5.14
Goa	0.14	0.44	0.07	10.37
Special Category State	6.28	6.04	12.98	

Source: Compiled from conference presentation by M.G. Rao, Patna, 31 January, 2012

This impacted the finances of Bihar as well because of its heavy dependence on central transfers. However, over a three year cycle, the average fiscal deficit is still under 3 per cent. It is this effort of strong fiscal consolidation that has enabled the government to set aside an increasing share of revenue resources for development spending and capital expenditure. The impact of these efforts on stepping up Bihar's growth rate and its education and health outcomes are already evident as was discussed in section 1 above.

Finally, the adverse developmental impact of the huge transfer gap has to seen against the background of some special geographical disadvantages that Bihar has to cope with. In 2006, with the formation of Jharkhand, Bihar lost its entire resource base for mining and mineral based industries in the south western part of the state. This was not only a major geographical platform for employment and income, but also an important revenue base for the government. On the other side, in Northern Bihar, the state frequently suffers from devastating floods on the Kosi and other rivers. While the former is a permanent loss of a strong base for employment, incomes and government revenue, the latter is a permanent threat that the State government alone cannot cope with, given its meagre resources.

To summarise, Bihar suffers a huge deficit in its development spending on social and economic services, which is only about half the average for all States in the country. This shortfall is mainly attributable to a massive deficit in central transfers compared to the scale of transfers required for fiscal equalisation, amounting to about Rs.25,000 per capita per year. This fiscal handicap is compounded by Bihar receiving less than its pro-rata share of central undertakings investments and central subsidies. The State endures additional handicaps in the loss of its employment, income and revenue base with the formation of Jharkand; and the huge losses of life and property, as well as employment, income, and revenue because of frequent devastating floods in North Bihar. As a consequence of the fiscal deprivation and these additional handicaps, Bihar remains the poorest and least developed among all General Category States.

Moreover, Bihar is subjected to this deprivation despite the Bihar government's own efforts, and considerable success, in fiscal consolidation. It eliminated the revenue deficit and reduced the fiscal deficit to target levels two years ahead the schedule. This has enabled Bihar to significantly raise the share of development spending and capital spending in recent years, with a consequent step up in growth and other social indicators. However, the development distance between Bihar and other States is so large that it will not be possible for Bihar to attain even the average standard of living in other States on its own for decades. There is, therefore, a strong case for a special assistance package to compensate Bihar for the large shortfall in central transfers. The case is especially strong in the context of such packages being reportedly considered for some other States that have not demonstrated the kind of effort to consolidate their finances and help themselves that Bihar has shown in recent years.

4. Maximizing Bihar's Own Revenues

The case for a special assistance package for Bihar would be further reinforced if its fiscal consolidation process can be strengthened through additional mobilization of its own revenue resources. This would also help reduce Bihar's heavy dependence on central transfers that are quite volatile, apart from being inadequate as we have seen. It is clear that there is room for such additional resource mobilization because Bihar's own tax revenue as a proportion of GSDP is lower today than it was a decade ago. The fact that several major revenue sources in Bihar have buoyancy greater than 1 suggests that Bihar can indeed regain its earlier tax: GSDP ratio and more.

Taxes provide the bulk of Bihar's own revenue, around 90 per cent at present (Table 5). By far the most important source of tax revenue is the sales tax. Though its share has been declining, it still accounts for over half of the state's total own tax revenue (Table 8). Moreover, it's buoyancy of 1.46 in the last five years is much higher than in the preceding five years (Table 9). This is therefore a very promising source of own tax revenue going forward. The other important taxes are the State excise duty, stamp duty and the motor vehicles tax. Of these, stamp duty and the motor vehicles tax have relatively low buoyancy whereas the State excise duty has shown a very high buoyancy of 2.19 in the last five years, which makes it a second promising source of own tax revenue along with the sales tax.

Table 8: Composition of Bihar's Own Tax Revenue

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11(RE)	2011-12 (BE)
Own Tax Revenues	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sales Tax	63.9	60.7	58.9	56.7	56.5	48.7	51.6	49.8	48.9	47.5	53.5	51.7
State Excise Duties	8.5	10.3	8.7	8.3	8.1	8.9	9.5	10.3	11.0	13.4	13.2	14.2
Stamp Duty Fees	10.6	13.1	12.5	14.5	12.8	14.2	11.3	12.9	11.6	12.3	11.5	12.7
Motor Vehicle Tax	7.9	6.1	6.4	7.3	6.4	8.5	4.5	5.4	4.8	4.3	4.3	4.3
Other Taxes	9.2	9.9	13.6	13.3	16.2	19.7	23.1	21.6	23.7	22.6	17.5	17.1

Source: Finance Accounts and Budget Documents

Table 9: Growth of Bihar's Own Tax Revenue (3 Years Moving Average)

	Own Tax Revenues	Sales Tax	State Excise Duties	Stamp Duty Fees	Motor Vehicle Tax	Other Taxes
2001-02	0.77	-5.90	-4.30	2.67	4.83	146.90
2002-03	-6.10	-2.13	-0.33	11.73	2.23	3.20
2003-04	-5.73	10.50	4.67	12.37	15.03	-10.93
2004-05	8.97	2.20	9.87	13.47	20.47	27.23
2005-06	11.83	9.10	16.77	3.53	1.23	34.40
2006-07	15.28	11.19	24.79	17.19	17.58	26.74
2007-08	20.27	20.29	28.91	14.45	6.54	28.05
2008-09	26.19	22.69	42.03	30.86	25.18	25.29
2009-10	27.74	31.26	39.32	23.52	18.43	19.83
Buoyancy 2000-01 to 2004-05	0.48	0.11	0.34	1.18	-0.14	2.96
Buoyancy 2005-06 to 2010-11	1.27	1.46	2.19	0.91	0.31	1.06

Source: Finance Accounts and Budget Documents

Note: 1. 2008-09 moving average includes 2009-10 Revised Estimates.
2. 2009-10 moving average includes 2009-10 Revised Estimates and 2010-11 Budget Estimates.

It has to be noted of course that both these taxes may be replaced by a state level goods and services tax once ongoing negotiations to introduce the latter are completed. If these two taxes, or their successor state GST, can be imposed with a wide base, allowing few exemptions, moderate rates that do not encourage evasion, and better IT enabled tax administration, it is conceivable that we could see a substantial increase in the State's own tax revenues.

The State's own non-tax revenues sources are listed in Table 10. Currently, they constitute only around 10 per cent of the States own revenue, which in turn is only about a quarter of the State's total revenue. In other words own non-tax revenue is barely 2.5 per cent of the State's total revenue, or merely a token source of revenue. However, this situation could change quite significantly. The State should get serious about imposing user charges and recovering its costs for the delivery of economic and social services, subject to equity considerations. It is mandated to do so under the Bihar FRBM act of 2006 (Government of Bihar 2008). If such a policy were to be implemented, non-tax revenues could very significantly augment the State own revenues, possibly even exceeding tax revenues in due course.

Table 10: Growth of Bihar's Own Non-Tax Revenue (3 Years Moving Average)

	Own Non Tax Revenue	Interest Receipts	Royalties	Forestry and Wild life	Irrigation (Major, Medium & Minor)	Other General Services	Other Social Services	Other Economic Services
2001-02	-15.20	77.64	-4.82	-10.03	6.53	29.48	5.28	-10.20
2002-03	14.93	173.16	28.39	-21.57	16.10	56.96	-21.84	9.12
2003-04	26.08	118.75	18.34	0.21	4.01	39.75	30.07	6.50
2004-05	17.77	131.45	20.56	3.15	-17.33	-6.08	29.66	2.39
2005-06	8.57	55.39	30.82	0.04	-8.62	-27.30	17.89	8.28
2006-07	40.04	19.35	34.53	-10.46	7.71	242.27	-8.77	45.00
2007-08	55.69	30.73	35.89	2.48	12.83	275.54	-15.46	40.91
2008-09	46.56	19.03	16.64	-0.17	31.45	270.57	18.32	44.54
2009-10	52.44	15.79	6.42	9.67	27.89	122.92	2.90	10.66
Buoyancy 2000-01 to 2004-05	-1.15	4.04	-2.24	-1.05	-1.08	2.48	-1.01	-1.23
Buoyancy 2005-06 to 2010-11	1.42	0.42	1.40	-0.15	0.37	7.44	-0.29	1.26

Source: Finance Accounts and Budget Documents
Note: 1. 2008-09 moving average includes 2009-10 Revised Estimates.
2. 2009-10 moving average includes 2009-10 Revised Estimates and 2010-11 Budget Estimates.

Details cannot be discussed in this paper. However, it is possible to imaginatively design safety net cash transfers or subsidy programs for the poor that minimise leakages. This would enable substantial cost recovery from other consumers of those publicly provided economic and social services that are not ‘public goods’ or ‘merit goods’. By way of illustration, children of school going age should be provided quality primary and secondary education below cost under the Right to Education Act. However, university and other forms of higher education provided by the government should be charged at full cost, with targeted delivery of low interest student loans or grants where this is warranted on merit-cum-means criteria.

5. Leveraging Public Expenditure to Mobilize Private Investment

Standard marginal efficiency rules suggest that if central transfers were to fully compensate for all vertical and horizontal imbalances, States would allocate their spending to offset inter-State disparities in the per capita accumulation of physical and human capital. In other words, public spending on physical infrastructure, education, health, etc. would be directed more towards the less developed states, where the returns to such investment would be the highest (Mundle S. & M.G. Rao 1997). However, even in the absence of such equalizing central transfers, Bihar needs to prioritize spending on physical infrastructure and education and health to enhance its competitiveness. The rationale for this proposition is explained below.

However much resources are mobilized in the public sector, whether through enhanced central transfers or the State’s own revenues, high growth in Bihar will in the main depend on private investment, as is the case at the national level. Hence, the best way of leveraging Bihar’s budgetary resources is to allocate them in a manner most appropriate to attract private investment to the State. Essentially that means prioritising public resource allocation to further strengthen Bihar’s comparative advantages vis-à-vis other States and to attenuate its comparative disadvantages.

Paradoxically, Bihar’s low per capita income is also potentially its greatest strength. If properly educated and given the required skills, the availability of Bihar’s huge workforce at relatively low cost compared to other States gives it an almost unbeatable comparative advantage. Hence investment in Bihar’s human resource development, an important goal in itself, should be one of the main priorities of public resource management in Bihar. Similarly, one of Bihar’s major comparative disadvantages vis-à-vis other States is its poor infrastructure , and poor connectivity with the rest of India and the global economy. Despite improvement in recent years this is a significant roadblock to attracting private investment in Bihar. Hence, this has to be the other priority for public resource management in the state, including public-private partnerships in the infrastructure sector itself.

Could such a strategy actually work in making Bihar an attractive destination for private investment compared to the more advanced States? In answering this question, it is instructive to draw a lesson from the experience of globalization. As the process of globalization gathered momentum in the late 20th century, fears were expressed in the developing world that greater integration of the backward periphery of the world economy with the advanced core would lead to greater exploitation and impoverishment in developing countries. Resources, it was said, would flow not from the developed core to the periphery but in reverse, from the periphery to the core. Dependency theorists in Latin America and

Africa became the major exponents of this doctrine (Amin S. 1976, Frank A.G. 1971, Furtado C. 1970). However, the dynamics of globalization has played out quite differently (Mundle 2011). The old Ricardian principle of comparative cost advantage has asserted itself, admittedly in a dynamic context. The winners of the globalization turned out to be not the high cost advanced countries at the centre of world capitalism, but low cost developing countries in the periphery. The larger developing countries like China, India, and Brazil which have huge work forces available at relatively low wages, have turned out to be particularly successful. Today, the G7 have been overtaken by the G20, and the emerging market economies are experiencing robust growth while the advanced countries unfortunately continue to be in the doldrums.

Obviously, the experience of global competition among countries, driven by comparative cost advantage, cannot be transferred mechanically to competition among States within national boundaries. In particular, we need to consider how the outcomes might change when there is free mobility of both labour and capital across States that can change factor endowments. Whether or not the growth structures of Indian States are being driven by comparative cost advantages is a question that requires detailed empirical enquiry. However, as a preliminary hypothesis, it is arguable that the structure of growth in Bihar is indeed following the State's comparative advantage.

The share of agriculture and allied activities in GSDP has declined from around 34 per cent in 1999- 2000 to about 22 per cent at present, in line with the declining share of agriculture in the rest of the country (Table 11). But it is still the second largest sector in the economy. In the non-agricultural sector, it is interesting to note that the share of manufacturing, which was small to begin with in Bihar, has actually declined to only about 5 per cent of GSDP. So has the share of transport, storage, and communications. On the other hand the sector 'trade, hotels and restaurants' has doubled its share in GSDP to 30 per cent over the past decade, and is now the largest sector. It is followed by construction and utilities, which has tripled its share of GSDP to 10 per cent over the past decade and is now the second largest sector. Agriculture (plus allied activities) and these two sectors together account for about 60 per cent of the Bihar economy. Arguably, these are the most labour intensive sectors, and reflect the comparative advantage of Bihar's low wage, labour surplus economy vis-à-vis other States.

This structure of labour intensive growth is indeed the most desirable, since a large share of added value accrues to labour. It is an inclusive pattern of growth that will enable Bihar to rapidly reduce the prevailing high incidence of poverty in the State. Going forward, the question arises whether Bihar can sustain this pattern of high inclusive growth when there is free mobility of both labour and capital across states. The greater mobility of capital within a country should, if anything, enable the forces of comparative cost advantage to work even more powerfully within national boundaries than across countries. Also, labour can certainly migrate from Bihar to, say, the industries of Maharashtra or the farms of Punjab, as indeed they have done for decades. However, such migration is not costless, nor are the barriers of ethnicity and cultural differences unimportant. Hence, the reservation wages for migrant workers will also be higher in destination States than at home. Other things being the same, potential employers would find it cheaper to employ Bihar's workers in Bihar than in other States.

Table 11: Structure of Bihar State Income (Per cent)

Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Primary	**33.69**	**37.86**	**34.60**	**36.13**	**32.52**	**31.59**	**29.79**	**30.64**	**26.71**	**28.07**	**23.54**	**22.48**
Agriculture	30.30	34.47	30.64	32.55	28.77	26.58	24.93	26.29	22.81	24.29	20.18	19.57
Forestry & logging	1.81	1.76	1.88	1.77	1.88	3.50	3.34	3.01	2.62	2.13	1.90	1.63
Fishing	1.39	1.44	1.79	1.73	1.80	1.46	1.39	1.27	1.21	1.56	1.39	1.22
Mining & quarrying	0.19	0.19	0.29	0.08	0.07	0.05	0.12	0.07	0.07	0.09	0.07	0.06
Secondary	**12.43**	**11.17**	**10.70**	**10.90**	**11.07**	**13.71**	**14.32**	**14.32**	**16.15**	**15.97**	**16.30**	**17.22**
Manufacturing	7.20	6.06	5.61	5.67	5.56	5.63	4.97	4.51	5.23	5.42	5.55	5.46
Construction	3.79	3.34	3.82	4.09	4.13	6.61	7.96	8.71	9.74	9.58	10.00	10.83
Electricity, gas and Water supply	1.43	1.76	1.26	1.14	1.37	1.47	1.39	1.10	1.17	0.97	0.75	0.93
Tertiary	**53.88**	**50.97**	**54.70**	**52.97**	**56.42**	**54.70**	**55.89**	**55.04**	**57.14**	**55.96**	**60.16**	**60.30**
Transport, storage & communication	7.42	6.82	6.76	6.45	6.00	5.93	6.10	5.76	5.70	5.14	5.33	5.25
Trade, hotels and restaurants	15.03	15.05	16.62	18.37	19.28	20.94	20.63	22.73	25.61	26.44	30.07	31.30
Banking & Insurance	3.63	3.59	4.74	4.19	4.37	3.32	3.27	3.09	2.97	2.62	2.52	2.31
Real estate, ownership of dwellings and business services	4.18	4.12	4.48	4.46	5.14	5.19	5.72	5.59	5.77	5.28	5.33	5.18
Public administration	7.56	7.19	7.88	6.29	7.41	6.66	6.55	5.66	5.37	5.67	6.03	6.09
Other services	16.06	14.20	14.22	13.20	14.22	12.65	13.63	12.22	11.72	10.81	10.89	10.17
State domestic product	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: State Domestic Product (State series), National Accounts, Ministry Of Statistics and Programme Implementation, Government of India.

However, other things are not the same. The supply of skilled workers and infrastructure is much better in the advanced states. Hence, it is imperative for the Bihar government to heavily allocate its public spending to infrastructure, education, skill formation and health. That alone can attenuate its comparative weaknesses, thus enabling the comparative advantage of its low cost labour to dominate the competition for private investment.

6. Conclusion: Resource Management for High, Inclusive Growth

Bihar's recent growth performance and improvement of social indicators is impressive. Nevertheless, the state is still at the bottom of any ranking of general category states in terms of these indicators because of the state's huge legacy of neglected economic and social development. In a 'business as usual scenario' it will take decades for Bihar to overcome this negative legacy and achieve even the average living standards of other states. On the other hand, the State government cannot finance an accelerated development strategy on its own as it is heavily dependent on central transfers. Unfortunately, these transfers have fallen far short of what would be warranted by the principle of equalization in fiscal federalism.

Given this background, this paper has proposed a strategy for accelerated inclusive growth that rests on three main pillars. First, a special assistance package for Bihar to compensate the state for the shortfall in warranted central transfers and other disadvantages that Bihar faces. This would also be I recognition of the State's own efforts in fiscal consolidation, and allocation of larger spending shares for capital formation and development expenditure. Second, a concerted effort by the State government to mobilize more of its own tax and no-tax revenues through strengthening of its tax base, better IT enabled tax administration, and better cost recovery from the delivery of public economic and social services. Third, a larger deployment of government expenditure for infrastructure development, education, skill formation and healthcare to make the state more competitive and attractive for private investment.

Effective implementation of this strategy would enable Bihar to accelerate its pattern of inclusive growth, based on the State's comparative advantage.

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