

**REPORT OF
SUB-GROUP
ON TAX RESOURCES OF STATES

FOR
11TH PLAN (2007-2012)**

Report of the Sub-group on Tax Resources of the States

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Report of the Sub-group on Tax Resources of the States¹

Introduction:

The main objective of this sub-group was to generate forecasts of the tax revenues for individual states and suggest measures to augment the revenue potential of the states. The following section summarises the results of the exercise undertaken to generate forecasts of the tax revenue of the states. In section 2, a brief discussion of the options for strengthening the tax base of the states is undertaken. This section also takes on board the experiences of some of the states in addressing concerns of low buoyancy in some of the taxes and attempts to identify some useful measures of reforms.

Section 1: Projection of States' Own Tax Revenues

In the first meeting of the sub-group, it was decided that the exercise would forecast the revenues from some of the major taxes individually and club the rest of the taxes into one category – “others”. The following taxes were identified as important contributors to the state exchequer meriting a separate analysis:

1. Sales tax, including Central Sales Tax, entry tax and any other turnover taxes.
2. State Excise
3. Stamp Duty and Registration Fees
4. Taxes on transportation which includes passenger and goods tax and motor vehicles tax.
5. Profession Tax
6. Electricity duty

It was decided that while each tax might have a separate and distinct base, since the group is interested in the overall buoyancy of tax revenue with respect to GSDP, each of the taxes considered, the buoyancy of the tax was to be with respect to GSDP alone. It was further decided that the exercise would clean out the effects of any positive outliers from the series, before examining the trend buoyancies, since such outliers are not predictable. Negative outliers – years where the revenue falls below the trend are however not to be excluded from the analysis since these are risks that the states face and need to be equipped for.

In undertaking this exercise, the ratios of tax to GSDP were computed² and examined for any perceptible trends. This ratio was regressed against time to identify the statistical significant of any observed trends. Further, dummies were used where required, to capture changes in the trend. Using the estimated trend equations, the tax-GSDP ratios for the selected taxes as well as “other taxes” have been forecast. For some of the

¹ The sub-group would like to acknowledge the technical inputs provided by Dr. Indrani Roy Choudhury and Ms. Shweta, in preparing the forecasts of Tax Revenue. They are Economist and Research Associate, respectively at the National Institute of Public Finance and Policy, New Delhi.

² The tax data was obtained from Finance Accounts and the GSDP data was from CSO, with the figures for years prior to 1993-94 being sourced from EPW -----.

taxes, the forecast values are found to decline over time. In such cases, it was decided that the ratio should be stabilized at the level attained in 2004-05, since a decline would not be acceptable to most states and they would make efforts to reverse such trends.³ For Profession Tax however, it was felt that using buoyancies would be inappropriate since the tax by construction is not buoyant. Given that the ceiling for the tax was fixed way back in 1988, most tax payers are already at the ceiling level. Hence expansion in collections can result only from a net expansion in the total number of people entering the workforce. It is therefore assumed that a 3 percent per annum growth rate was more appropriate for this tax, in the absence of radical changes in the structure of the underlying economy. Taking these corrections into account the final forecast values of Tax-GSDP ratio were generated for all the states. Table 1 below provides the forecast numbers for all taxes other than profession tax.

Table 1: Ratio of Tax Revenue to GSDP: Forecast Values

State	Year	Own Tax Revenue net of Profession tax	Electricity Duty	State Excise Duty	Stamps and Registration Fees	Sales Tax	Transportation taxes	Other Taxes
Andhra Pradesh	2005	8.0837	0.0679	0.9681	0.7042	5.6534	0.6006	0.0895
	2006	8.2886	0.0679	0.9681	0.7519	5.8106	0.6006	0.0895
	2007	8.4969	0.0679	0.9681	0.8031	5.9677	0.6006	0.0895
	2008	8.7087	0.0679	0.9681	0.8577	6.1249	0.6006	0.0895
	2009	8.9240	0.0679	0.9681	0.9159	6.2821	0.6006	0.0895
	2010	9.1427	0.0679	0.9681	0.9774	6.4392	0.6006	0.0895
	2011	9.3649	0.0679	0.9681	1.0425	6.5964	0.6006	0.0895
Arunchal Pradesh	2005	1.7744		0.6854	0.0167	0.8615	0.0795	0.1313
	2006	1.8630		0.7136	0.0167	0.9219	0.0795	0.1313
	2007	1.9516		0.7418	0.0167	0.9824	0.0795	0.1313
	2008	2.0402		0.7699	0.0167	1.0428	0.0795	0.1313
	2009	2.1289		0.7981	0.0167	1.1033	0.0795	0.1313
	2010	2.2175		0.8263	0.0167	1.1638	0.0795	0.1313
	2011	2.3061		0.8545	0.0167	1.2242	0.0795	0.1313
Assam	2005	5.9085	0.0183	0.3321	0.1680	4.8210	0.3595	0.2095
	2006	5.9341	0.0183	0.3465	0.1700	4.8210	0.3688	0.2095
	2007	5.9597	0.0183	0.3609	0.1719	4.8210	0.3781	0.2095
	2008	5.9853	0.0183	0.3753	0.1738	4.8210	0.3874	0.2095
	2009	6.0109	0.0183	0.3896	0.1757	4.8210	0.3967	0.2095
	2010	6.0365	0.0183	0.4040	0.1777	4.8210	0.4060	0.2095
	2011	6.0621	0.0183	0.4184	0.1796	4.8210	0.4153	0.2095
Bihar	2005	6.0653	0.0167	0.4768	0.7885	3.4184	1.2599	0.1051
	2006	6.2814	0.0167	0.4768	0.8279	3.5320	1.3229	0.1051
	2007	6.5064	0.0167	0.4768	0.8693	3.6495	1.3890	0.1051
	2008	6.7407	0.0167	0.4768	0.9128	3.7709	1.4584	0.1051

³ 2004-05 is taken as the base year and not 2005-06, since data was available only till 2004-05. Efforts at obtaining more updated figures from CAG were not fruitful.

State	Year	Own Tax Revenue net of Profession tax	Electricity Duty	State Excise Duty	Stamps and Registration Fees	Sales Tax	Transportation taxes	Other Taxes
	2009	6.9847	0.0167	0.4768	0.9584	3.8963	1.5314	0.1051
	2010	7.2388	0.0167	0.4768	1.0064	4.0259	1.6079	0.1051
	2011	7.5034	0.0167	0.4768	1.0567	4.1598	1.6883	0.1051
Chattisgarh	2005	7.9774	0.7366	1.1473	0.6203	4.1905	1.1990	0.0838
	2006	8.3395	0.7366	1.2046	0.6513	4.4000	1.2590	0.0880
	2007	8.7196	0.7366	1.2649	0.6839	4.6200	1.3219	0.0924
	2008	9.1188	0.7366	1.3281	0.7181	4.8510	1.3880	0.0970
	2009	9.5379	0.7366	1.3945	0.7540	5.0936	1.4574	0.1019
	2010	9.9780	0.7366	1.4642	0.7917	5.3483	1.5303	0.1069
	2011	10.4400	0.7366	1.5375	0.8313	5.6157	1.6068	0.1123
Goa	2005	8.3220		0.5471	0.2964	5.5182	1.5807	0.3796
	2006	8.5791		0.5475	0.2964	5.5738	1.7818	0.3796
	2007	8.8362		0.5479	0.2964	5.6294	1.9830	0.3796
	2008	9.0933		0.5482	0.2964	5.6850	2.1841	0.3796
	2009	9.3505		0.5486	0.2964	5.7407	2.3852	0.3796
	2010	9.6076		0.5489	0.2964	5.7963	2.5864	0.3796
	2011	9.8647		0.5493	0.2964	5.8519	2.7875	0.3796
Gujarat	2005	7.1482	1.0187	0.0262	0.5187	4.6276	0.7029	0.2540
	2006	7.1770	1.0187	0.0262	0.5257	4.6276	0.7246	0.2540
	2007	7.2057	1.0187	0.0262	0.5327	4.6276	0.7464	0.2540
	2008	7.2345	1.0187	0.0262	0.5397	4.6276	0.7682	0.2540
	2009	7.2633	1.0187	0.0262	0.5467	4.6276	0.7900	0.2540
	2010	7.2921	1.0187	0.0262	0.5537	4.6276	0.8118	0.2540
	2011	7.3209	1.0187	0.0262	0.5607	4.6276	0.8336	0.2540
Haryana	2005	8.9121	0.0669	1.2206	0.8570	5.7358	0.9847	0.0471
	2006	8.9271	0.0669	1.2206	0.8720	5.7358	0.9847	0.0471
	2007	8.9421	0.0669	1.2206	0.8870	5.7358	0.9847	0.0471
	2008	8.9571	0.0669	1.2206	0.9020	5.7358	0.9847	0.0471
	2009	8.9721	0.0669	1.2206	0.9170	5.7358	0.9847	0.0471
	2010	8.9872	0.0669	1.2206	0.9320	5.7358	0.9847	0.0471
	2011	9.0022	0.0669	1.2206	0.9470	5.7358	0.9847	0.0471
Himachal Pradesh	2005	5.8936	0.1179	1.6275	0.2232	2.6993	0.7273	0.4983
	2006	5.8952	0.1179	1.6275	0.2249	2.6993	0.7273	0.4983
	2007	5.8968	0.1179	1.6275	0.2265	2.6993	0.7273	0.4983
	2008	5.8984	0.1179	1.6275	0.2281	2.6993	0.7273	0.4983
	2009	5.9000	0.1179	1.6275	0.2297	2.6993	0.7273	0.4983
	2010	5.9017	0.1179	1.6275	0.2313	2.6993	0.7273	0.4983
	2011	5.9033	0.1179	1.6275	0.2329	2.6993	0.7273	0.4983

State	Year	Own Tax Revenue net of Profession tax	Electricity Duty	State Excise Duty	Stamps and Registration Fees	Sales Tax	Transportation taxes	Other Taxes
Jammu and Kashmir	2005	6.6216	0.2556	1.1663	0.1875	3.8517	1.1048	0.0558
	2006	6.6513	0.2747	1.1663	0.1980	3.8517	1.1048	0.0558
	2007	6.6810	0.2939	1.1663	0.2085	3.8517	1.1048	0.0558
	2008	6.7107	0.3130	1.1663	0.2191	3.8517	1.1048	0.0558
	2009	6.7404	0.3322	1.1663	0.2296	3.8517	1.1048	0.0558
	2010	6.7701	0.3513	1.1663	0.2402	3.8517	1.1048	0.0558
	2011	6.7998	0.3705	1.1663	0.2507	3.8517	1.1048	0.0558
Jharkhand	2005	5.7519	0.0827	0.3509	0.2003	4.4984	0.5009	0.1185
	2006	5.9803	0.0827	0.3690	0.2025	4.6986	0.5260	0.1015
	2007	6.2223	0.0827	0.3881	0.2047	4.9076	0.5523	0.0869
	2008	6.4780	0.0827	0.4082	0.2069	5.1259	0.5799	0.0744
	2009	6.7476	0.0827	0.4293	0.2092	5.3539	0.6089	0.0637
	2010	7.0316	0.0827	0.4514	0.2114	5.5921	0.6393	0.0545
	2011	7.3301	0.0827	0.4748	0.2137	5.8409	0.6713	0.0467
Karnataka	2005	10.6386	0.2097	1.8178	1.3050	5.8578	1.2640	0.1843
	2006	10.8310	0.2097	1.8178	1.4320	5.8578	1.3294	0.1843
	2007	11.0234	0.2097	1.8178	1.5590	5.8578	1.3949	0.1843
	2008	11.2158	0.2097	1.8178	1.6860	5.8578	1.4603	0.1843
	2009	11.4083	0.2097	1.8178	1.8130	5.8578	1.5257	0.1843
	2010	11.6007	0.2097	1.8178	1.9400	5.8578	1.5911	0.1843
	2011	11.7931	0.2097	1.8178	2.0670	5.8578	1.6566	0.1843
Kerala	2005	9.0995	0.1495	0.7425	0.7263	6.7058	0.6554	0.1201
	2006	9.2269	0.1495	0.7425	0.7648	6.7844	0.6657	0.1201
	2007	9.3544	0.1495	0.7425	0.8033	6.8630	0.6760	0.1201
	2008	9.4819	0.1495	0.7425	0.8418	6.9416	0.6864	0.1201
	2009	9.6093	0.1495	0.7425	0.8803	7.0202	0.6967	0.1201
	2010	9.7368	0.1495	0.7425	0.9188	7.0988	0.7070	0.1201
	2011	9.8642	0.1495	0.7425	0.9573	7.1775	0.7173	0.1201
Madhya Pradesh	2005	7.7290	0.6862	0.1458	1.2148	0.8036	3.9858	0.9748
	2006	8.0779	0.6862	0.1458	1.2756	0.8438	4.1851	1.0235
	2007	9.3555	1.5974	0.1458	1.3394	0.8860	4.3943	1.0747
	2008	9.7402	1.5974	0.1458	1.4063	0.9302	4.6140	1.1284
	2009	9.2673	0.7205	0.1458	1.4766	0.9768	4.8447	1.1848
	2010	9.6914	0.7205	0.1458	1.5505	1.0256	5.0870	1.2441
	2011	10.2107	0.7944	0.1458	1.6280	1.0769	5.3413	1.3063
Maharashtra	2005	7.4659	0.3283	0.5967	1.1125	4.7009	0.4316	0.2960
	2006	7.5075	0.3283	0.5967	1.1540	4.7009	0.4316	0.2960
	2007	7.5490	0.3283	0.5967	1.1956	4.7009	0.4316	0.2960
	2008	7.5906	0.3283	0.5967	1.2371	4.7009	0.4316	0.2960

State	Year	Own Tax Revenue net of Profession tax	Electricity Duty	State Excise Duty	Stamps and Registration Fees	Sales Tax	Transportation taxes	Other Taxes
	2009	7.6321	0.3283	0.5967	1.2787	4.7009	0.4316	0.2960
	2010	7.6737	0.3283	0.5967	1.3202	4.7009	0.4316	0.2960
	2011	7.7152	0.3283	0.5967	1.3618	4.7009	0.4316	0.2960
Manipur	2005	1.6411	0.1228	0.0678	0.0546	1.2688	0.1053	0.0219
	2006	1.6782	0.1228	0.0678	0.0546	1.3059	0.1053	0.0219
	2007	1.7153	0.1228	0.0678	0.0546	1.3430	0.1053	0.0219
	2008	1.7524	0.1228	0.0678	0.0546	1.3801	0.1053	0.0219
	2009	1.7896	0.1228	0.0678	0.0546	1.4172	0.1053	0.0219
	2010	1.8267	0.1228	0.0678	0.0546	1.4544	0.1053	0.0219
	2011	1.8638	0.1228	0.0678	0.0546	1.4915	0.1053	0.0219
Meghalaya	2005	3.8930		1.1914	0.0855	2.3947	0.1600	0.0614
	2006	4.0045		1.1914	0.0874	2.5042	0.1600	0.0614
	2007	4.1161		1.1914	0.0894	2.6138	0.1600	0.0614
	2008	4.2277		1.1914	0.0914	2.7234	0.1600	0.0614
	2009	4.3392		1.1914	0.0934	2.8330	0.1600	0.0614
	2010	4.4508		1.1914	0.0954	2.9425	0.1600	0.0614
	2011	4.5624		1.1914	0.0974	3.0521	0.1600	0.0614
Mizoram	2005	1.2736		0.0500	0.0440	0.9887	0.1545	0.0364
	2006	1.2904		0.0500	0.0398	1.0074	0.1568	0.0364
	2007	1.3071		0.0500	0.0356	1.0260	0.1590	0.0364
	2008	1.3238		0.0500	0.0315	1.0447	0.1612	0.0364
	2009	1.3406		0.0500	0.0273	1.0634	0.1635	0.0364
	2010	1.3573		0.0500	0.0231	1.0821	0.1657	0.0364
	2011	1.3740		0.0500	0.0189	1.1008	0.1679	0.0364
Nagaland	2005	1.3811		0.0435	0.0147	1.1325	0.1769	0.0136
	2006	1.3959		0.0435	0.0147	1.1473	0.1769	0.0136
	2007	1.4107		0.0435	0.0147	1.1620	0.1769	0.0136
	2008	1.4255		0.0435	0.0147	1.1768	0.1769	0.0136
	2009	1.4403		0.0435	0.0147	1.1916	0.1769	0.0136
	2010	1.4551		0.0435	0.0147	1.2064	0.1769	0.0136
	2011	1.4699		0.0435	0.0147	1.2212	0.1769	0.0136
Orissa	2005	6.9639	0.4586	0.6000	0.3178	4.1952	1.1281	0.2642
	2006	7.0692	0.4814	0.6443	0.3264	4.2247	1.1281	0.2642
	2007	7.1738	0.5043	0.6886	0.3351	4.2535	1.1281	0.2642
	2008	7.2784	0.5271	0.7329	0.3438	4.2823	1.1281	0.2642
	2009	7.3829	0.5500	0.7771	0.3524	4.3110	1.1281	0.2642
	2010	7.4875	0.5729	0.8214	0.3611	4.3398	1.1281	0.2642
	2011	7.5921	0.5957	0.8657	0.3698	4.3686	1.1281	0.2642

State	Year	Own Tax Revenue net of Profession tax	Electricity Duty	State Excise Duty	Stamps and Registration Fees	Sales Tax	Transportation taxes	Other Taxes
Punjab	2005	7.8481	0.2567	1.6826	1.0693	4.3196	0.4935	0.0265
	2006	7.9244	0.2479	1.6826	1.1544	4.3196	0.4935	0.0265
	2007	8.0007	0.2391	1.6826	1.2395	4.3196	0.4935	0.0265
	2008	8.0770	0.2303	1.6826	1.3246	4.3196	0.4935	0.0265
	2009	8.1534	0.2215	1.6826	1.4098	4.3196	0.4935	0.0265
	2010	8.2297	0.2127	1.6826	1.4949	4.3196	0.4935	0.0265
	2011	8.3060	0.2039	1.6826	1.5800	4.3196	0.4935	0.0265
Rajasthan	2005	7.8149	0.4009	1.1554	0.7577	4.3438	1.0507	0.1064
	2006	7.9075	0.4009	1.1554	0.7749	4.3438	1.1261	0.1064
	2007	8.0002	0.4009	1.1554	0.7922	4.3438	1.2015	0.1064
	2008	8.0928	0.4009	1.1554	0.8094	4.3438	1.2770	0.1064
	2009	8.1855	0.4009	1.1554	0.8266	4.3438	1.3524	0.1064
	2010	8.2782	0.4009	1.1554	0.8439	4.3438	1.4278	0.1064
	2011	8.3708	0.4009	1.1554	0.8611	4.3438	1.5032	0.1064
Sikkim	2005	5.4889		1.7730	0.0934	3.1888	0.2118	0.2219
	2006	5.5342		1.7730	0.0969	3.2306	0.2118	0.2219
	2007	5.5796		1.7730	0.1005	3.2724	0.2118	0.2219
	2008	5.6250		1.7730	0.1041	3.3142	0.2118	0.2219
	2009	5.6704		1.7730	0.1076	3.3561	0.2118	0.2219
	2010	5.7158		1.7730	0.1112	3.3979	0.2118	0.2219
	2011	5.7611		1.7730	0.1148	3.4397	0.2118	0.2219
Tamil Nadu	2005	10.1228	0.1287	1.3663	0.7654	6.8792	0.8850	0.0984
	2006	10.1480	0.1287	1.3837	0.7732	6.8792	0.8850	0.0984
	2007	10.1733	0.1287	1.4011	0.7809	6.8792	0.8850	0.0984
	2008	10.1985	0.1287	1.4185	0.7887	6.8792	0.8850	0.0984
	2009	10.2237	0.1287	1.4360	0.7965	6.8792	0.8850	0.0984
	2010	10.2489	0.1287	1.4534	0.8043	6.8792	0.8850	0.0984
	2011	10.2741	0.1287	1.4708	0.8121	6.8792	0.8850	0.0984
Tripura	2005	2.8265	0.0002	0.4378	0.1475	1.9905	0.1300	0.1205
	2006	2.8703	0.0002	0.4511	0.1475	2.0210	0.1300	0.1205
	2007	2.9141	0.0002	0.4644	0.1475	2.0515	0.1300	0.1205
	2008	2.9579	0.0002	0.4776	0.1475	2.0820	0.1300	0.1205
	2009	3.0016	0.0002	0.4909	0.1475	2.1125	0.1300	0.1205
	2010	3.0454	0.0002	0.5042	0.1475	2.1430	0.1300	0.1205
	2011	3.0892	0.0002	0.5175	0.1475	2.1735	0.1300	0.1205
Uttaranchal	2005	7.4788	0.1948	1.4452	1.0799	4.0114	0.4895	0.2580
	2006	7.6284	0.2046	1.4452	1.1339	4.0972	0.4895	0.2580
	2007	7.7831	0.2148	1.4452	1.1906	4.1850	0.4895	0.2580
	2008	7.9430	0.2255	1.4452	1.2501	4.2746	0.4895	0.2580

State	Year	Own Tax Revenue net of Profession tax	Electricity Duty	State Excise Duty	Stamps and Registration Fees	Sales Tax	Transportation taxes	Other Taxes
	2009	8.1083	0.2368	1.4452	1.3126	4.3661	0.4895	0.2580
	2010	8.2792	0.2486	1.4452	1.3782	4.4596	0.4895	0.2580
	2011	8.4560	0.2611	1.4452	1.4472	4.5550	0.4895	0.2580
Uttar Pradesh	2005	6.9030	0.1579	1.1687	1.1951	3.9062	0.3802	0.0950
	2006	7.1571	0.1658	1.1983	1.2548	4.0459	0.3973	0.0950
	2007	7.4210	0.1741	1.2287	1.3175	4.1905	0.4152	0.0950
	2008	7.6952	0.1828	1.2599	1.3834	4.3403	0.4338	0.0950
	2009	7.9801	0.1919	1.2918	1.4526	4.4955	0.4534	0.0950
	2010	8.2762	0.2015	1.3246	1.5252	4.6562	0.4737	0.0950
	2011	8.5839	0.2116	1.3582	1.6015	4.8227	0.4950	0.0950
West Bengal	2005	4.6419	0.1749	0.3196	0.5230	2.7477	0.2636	0.6130
	2006	4.7540	0.1833	0.3175	0.5600	2.8082	0.2720	0.6130
	2007	4.8669	0.1917	0.3162	0.5970	2.8687	0.2803	0.6130
	2008	4.9805	0.2001	0.3156	0.6340	2.9292	0.2886	0.6130
	2009	5.0949	0.2084	0.3158	0.6710	2.9897	0.2969	0.6130
	2010	5.2101	0.2168	0.3168	0.7080	3.0503	0.3052	0.6130
	2011	5.3260	0.2252	0.3185	0.7450	3.1108	0.3135	0.6130

Note: The Own Tax Revenue here excludes revenue attributable to profession tax, since that series is projected separately.

To arrive at estimates of tax revenue, forecasts of GSDP are required. The available figures for GSDP and GDP are used to first derive the likely GSDP figures for 2005-06 and 2006-07, the last two years of the Tenth Plan.⁴ The Eleventh Five Year Plan proposes a 9 percent growth target. This study presents numbers for two scenarios 8.5 percent growth and 9 percent growth for the country. Inflation is assumed to be 5 percent in the first case and 4 percent in the second case. This overall growth target is decomposed into state level targets for real GSDP growth based on the methodology adopted for the Tenth Plan.⁵ Salient features to be noted are:

1. Percentage contribution of each state to the growth target of 10th plan is maintained for the 11th plan target. Share of states in all India GDP for year 2002-03 is taken as weight.
2. Calculation is done on the basis of State wise GSDP at 1993-94 prices as available from CSO compiled in February 2006.

⁴ For these two years, ratio of GSDP growth to GDP growth for individual states was maintained at the average level achieved during 2002-04. Given real GDP growth of 8.4 percent and inflation of 4 percent for 2005-06, nominal growth of GSDP for individual states was derived. For 2006-07, GDP growth was approximated by using average of ratio of first quarter growth to full year growth over the last five years.

⁵ These figures were provided by the Perspective Planning Division of the Planning Commission, as a straight forward extension of the methodology used for the Tenth Plan. It is pointed out that these state growth targets are not derived in consultation with the states, may not be consistent with sectoral growth targets and have not been worked out to ensure complete consistency with various numbers generated out of an entire plan document. This sub-group acknowledges the efforts of the PP Division and records the above caveats.

3. The gap that exists between all India GDP and all-States GSDP is assumed to be maintained at 2002-03 level.

Using the above GSDP numbers, Table 2 provide the estimates of total own tax revenue for each of the states for the period 2005-06 to 2011-12, for the two alternative scenarios.

Table 2: Forecasted Values of Own Tax Revenue by State and Year

STATE	OWN TAX REVENUE AT 9%					OWN TAX REVENUE AT 8.5%				
	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
Andhra Pr.	24849	28582	32873	37802	43465	24984	29012	33686	39108	45398
Arunachal Pr.	70	81	95	111	129	70	83	97	115	134
Assam	3674	4097	4569	5096	5685	3695	4159	4682	5272	5937
Bihar	5089	5895	6829	7912	9169	5118	5985	7000	8189	9581
Chattisgarh	6232	7282	8511	9950	11635	6267	7393	8724	10297	12157
Goa	1425	1676	1968	2310	2710	1432	1699	2015	2388	2829
Gujrat	21094	24397	28220	32644	37763	21180	24732	28880	33728	39391
Haryana	10934	12354	13959	15771	17820	10991	12538	14303	16316	18612
Himachal Pradesh	1731	1972	2247	2560	2917	1739	2001	2301	2647	3045
Jammu & Kashmir	1974	2200	2452	2733	3045	1986	2235	2515	2829	3183
Jharkhand	3910	4595	5404	6358	7482	3930	4664	5537	6577	7815
Karnataka	24966	29232	34223	40062	46890	25068	29631	35021	41388	48906
Kerala	14082	16033	18250	20770	23635	14159	16275	18704	21492	24691
Madhya Pradesh	11400	13356	15651	18344	21505	11464	13559	16040	18980	22463
Maharashtra	44197	50699	58171	66761	76634	44392	51400	59533	68972	79926
Manipur	102	115	129	145	163	103	117	132	150	170
Meghalaya	296	337	384	437	497	297	342	393	452	519
Mizoram	72	80	89	100	111	72	81	91	103	116
Nagaland	196	218	243	270	301	197	221	248	279	314
Orissa	6297	7136	8085	9160	10377	6332	7244	8287	9478	10840
Punjab	9471	10739	12176	13805	15649	9523	10902	12480	14284	16349
Rajasthan	11664	13355	15288	17500	20029	11723	13551	15663	18101	20916
Sikkim	131	149	170	193	219	132	152	174	199	229
Tamil Nadu	27501	31252	35515	40360	45864	27638	31710	36382	41742	47891
Tripura	389	441	499	565	640	391	447	511	584	667
Uttaranchal	2458	2795	3180	3619	4120	2472	2839	3261	3746	4306
Uttar Pradesh	24615	28616	33269	38683	44981	24751	29051	34101	40031	46995
West Bengal	14896	17300	20088	23322	27072	14967	17546	20568	24107	28251

Section 2: Options for Augmentation of resource base of the States:

State VAT

The pronouncements of a gradual transition to a Goods and Services Tax by 2010, by the central government indicate that change in the structure of taxation of goods and services in the country is in the offing. What particular form the proposed Goods and Services Tax would take is yet to be resolved. In the interim however, it is clear that for the state VAT to be a comprehensive tax, it has to be transformed into a goods and services tax. Further for the destination principle in taxation to be upheld, the present form of taxation of inter-state transactions should be changed to eliminate tax exportation from one state to the other. A number of states earn considerable amounts of revenue from Central Sales Tax, the levy currently governing the taxation of inter-state trade. Restructuring the taxation of inter-state trade would eliminate this source of revenue and this aspect needs to be taken into account in any such effort of restructuring. Providing the states the power to tax services is one way to compensate for this change in an overall framework which aids the transition to a Goods and Services Tax. This final goal would require the states to be provided a comprehensive power to tax all services as a part of the Value Added Tax regime. The present constitutional dispensation assigns the power to tax services solely to the centre; the centre may choose to retain all powers to levy this tax, but can assign the collection and appropriation of all or some part thereof, to the states. While the final goal should be the concurrent taxation on behalf of the centre and the states, so that the respective levies can be integrated into the corresponding goods taxes, an interim measure could involve assignment of selective services. Invoking such an option, it may be mentioned, would add to the chaos in the taxation regime and introduce more distortions than it would correct. The Empowered Committee of State Finance Ministers is coordinating on behalf of the states to arrive at an appropriate package, on which is contingent, the reform of CST as well. Therefore, this sub-group does not attempt to explore for a preferred path of transition to a CST free regime and finally to a GST regime.

While all these measures are going to change the structure of the tax, it would be fair to assume that the revenues of the states from sales tax would be protected in terms of historical buoyancies. Any additionality is difficult to anticipate, and is likely to be non-uniform in impact. In terms of the projection exercise therefore, it is assumed that the revenues generated continue to be governed by the specific historical performance of the states.

Stamps and Registration: While a large number of instruments are covered by the provisions of this levy, in terms of significant contribution to revenue, transactions relating to transfer of immovable property are the most important. It is commonly recognised that there is widespread evasion and avoidance, especially with respect to these transactions. High rates of levy are often argued to generate/sustain these problems – states are therefore working towards reduction in the rates applicable – most states aim to achieve a peak rate of 5 percent in the next few years. However, this alone may not be adequate to address the underlying problem. Evasion mainly relates to the valuation of the underlying property – while avoidance uses unusual transactions to mask the transfer of property and thereby minimize the incidence of the tax. The states have taken many different initiatives to address these issues some of which are captured below. In a gist, the valuation problem is sought to be addressed by defining benchmarks/guidelines below which transfer of property would not be registered. By involving various stakeholders in the formulation of these guidelines, Karnataka attempts to minimize the resistance to such an approach. Some attempts made to limit the damage done through these options are as follows:

1. Acquisition of land through a cooperative which then constructs flats for its members and allocates the same. West Bengal has brought these transactions into the tax net, by making the transfer of flats from the cooperative to the individual members taxable. In Assam has sought to address this problem by

proposing a separate Assam Apartments (Construction and Transfer of Ownership) Bill, 2006, which pre-empts the masking of sale of apartments as works contracts undertaken on behalf of the Cooperative. In Karnataka such a regulation has been in operation since 2001.

2. Masking of sale as a long term lease: Some states treat the documents governing the lease transactions also as documents requiring registration. Assam has sought to capture lease transactions where the term of the lease is over 30 years. Maharashtra Rent Control Act makes it mandatory to register all lease documents from 2003 onwards. Valuation of the terms of the lease too has been pegged to the benchmark market value of the property.

States have also attempted to expand the coverage of documents/agreements requiring registration. Mortgage documents are now covered in Karnataka, while Maharashtra has brought into its net the following agreements: advertisement on mass media, rights of telecasting, broadcasting or exhibition of an event or film, specific performance by a person or group of persons, creation of any obligation, right or interest having monetary value, assignment of copyright under the Copyright Act, 1975, project under Build, Operate and Transfer System (BOT) whether with or without toll or fee collection rights, and works contracts.

While the revenue implications of these measures is difficult to compute for each individual state, it is expected that such measures, would strengthen the buoyancy of this source of state revenues, in most of the states.

State Excise

A levy on the manufacture of alcohol and narcotics in the state, this levy is usually extended to cover both manufacture as well as import for sale in the state. In most states this is a specific levy and is accompanied by a variety of license fees. This levy suffers from large scale evasion on grounds of valuation/pricing as well as documentation of the quantum.

Efforts to rein in the evasion here has taken two broad forms:

1. Introduction of a state owned Monopolist for the supply of alcohol in the state. Karnataka and Tamil Nadu have experimented with this option with reasonable success.

2. Transform the levy into an ad valorem levy and alongside introduce regulation on the price of the product: In Maharashtra, at the time of approval of a label, the manufacturer has to submit information on the production costs and the MRP, which was to be displayed on the product being marketed. The law provides a ceiling on the ratio of MRP to production costs: for products with production cost below a threshold, the ceiling is 400 percent and for the rest it is 800 percent. Given this benchmarking of the prices, the excise duty is an ad valorem tax on the production or manufacturing cost. So as to protect the revenue concerns, the Act also specifies a floor in specific terms – if the ad valorem duty yields less than this floor value, the floor becomes applicable. West Bengal has adopted the alternative option of specifying the extent of abatement permissible from the MRP and applied an ad valorem tax on the manufacturing cost so derived. This however as applied to only one product and could possibly be extended to other products as well.

These options should render the tax more buoyant. However, they also require a degree of monitoring to ensure that the products are actually sold at the declared MRP. Given the administrative machinery that most state governments have in place for administering this levy, it should not be a difficult task.

Along side these efforts, it is important to monitor the inputs used for production as well to keep a check on the magnitude of production and/or sale. The value added tax provides a mechanism for following a commodity through its production process. It would be desirable to establish a close coordination between the administration of these two taxes to gain from the synergies that may exist.

Taxes on Income: There are two measures for augmenting the state tax base with respect to profession tax – the first relates to expanding the coverage of Profession Tax in states. A number of states do not implement this tax. This list includes Arunachal Pradesh, Bihar, Goa, Haryana, Jammu and Kashmir, Jharkhand, Kerala, Punjab, Sikkim and Uttaranchal. Sikkim collects an income tax from its residents and hence presumably refrains from collecting profession tax. However for the other states, it would be useful to explore the potential from collecting such a levy, especially since a significant part would come through tax deduction at source, thereby imposing very little collection costs. Further, since payments of profession tax are deductible as expenses in the computation of income for Income Tax purposes, for some of the tax payer, it does not mean a complete additionality in expenditure – part of it is set off through a reduction in Income Tax liability. For people with incomes lower than the threshold prescribed by the Income Tax Act, there is no such relief available.

The ceiling for Profession Tax is fixed as per Article 276 of the Constitution of India at Rs 2500 per person per annum. This rate was fixed in 1988 and has not been revised ever since. Given the changes in prices over this period, to maintain the real value of this ceiling at the level proposed by the 60th Amendment to the Constitution of India, the ceiling should have been pegged at Rs 7500. With each passing year, the correction required would be larger. Given the sluggishness in increasing these ceilings, it would be appropriate to consider a ceiling of Rs 10,000, so as to protect the revenue of the states, in the near future.

However, while the enhanced ceiling would not mean a proportionate adjustment in the payments made by all sections of the population, since the slabs applicable would need to be redefined according to some notion of ability to pay, the total Profession Tax collections of the states now collecting the tax should increase by at least Rs 2500 crore. (The revised estimates of profession tax collections for the states, as per the RBI Report on State Finances, is Rs 2348 crore.) The additional revenue to the states not implementing the tax has not been taken into account here.

An alternative mechanism for making the collections of the states more buoyant would be to consider a piggy back levy on income tax. The other element of taxes on income, agricultural income tax, contributes very little to the state exchequer – Rs 49 crore in 2004-05. Given the changing character of the agricultural sector in India, with increasing participation of corporate houses in this sector, it would be useful to take a closer look at the potential from this tax as well. Since the taxation of agricultural income is closely related to the taxation of overall income in the country, it would be worthwhile examining the potential of merging the taxation of agricultural income with that of non-agricultural income with a piggyback tax on all incomes being assigned to the states. This levy could replace both the above taxes.

Closer sharing of information between the income tax department and the state department administering Profession Tax might help enhance the collections in the state.

Forecast of Tax GSDP Ratios for all States

Details of Method Adopted

For the new constituted states of Chattisgarh, Jharkhand and Uttaranchal, history starts in 2000 when the states were constituted. The trends for these states are just beginning to evolve. For projections for these states therefore, the average of the annual change in the ratio over the period 2001-02 to 2004-05 was taken as a basis for forecasting the figures for the latter years. These rates of change are exceptionally high for some variables, implying thereby a substantial increase in the tax-GSDP ratio over the projection period. These appear unreasonable and hence are moderated down to a 5 percent increase in the ratio per annum when ever the average rate of change exceeds 5 percent. While figures are available for the parent states of Bihar, Madhya Pradesh and Uttar Pradesh, these refer to the undivided state and hence cannot be applied to the newly reconstituted states. Therefore forecasts for these states too follow the same principle as outlined above. Table – below provides the averages computed.

Table A1: Average rates of change in the ratio

	Electricity Duty	Profession Tax	State excise duty	Stamps and registration fees	Sales tax	Transport Taxes	Other Taxes
Bihar	0.883		0.981	1.058	1.033	1.243	0.976
Chattisgarh	0.990	0.774	1.013	1.141	1.083	1.033	1.538
Jharkhand	0.809		1.052	1.011	1.044	1.136	0.856
Madhya Pradesh	0.907	1.142	1.124	1.117	1.071	1.597	0.913
Uttaranchal	1.581		0.937	1.151	1.021	0.987	0.881
Uttar Pradesh		1.139	1.025	1.036	1.045	1.478	1.000

Andhra Pradesh:

Electricity duty: Time trend for the ratio of ED to GSDP(over the period 1987-2005) projected for the subsequent period.

State Excise: The two prohibition years of (1995-97) are excluded from the analysis. The period prior exhibits a decline in trend. This is reversed in the subsequent period, with evidence of a stationary trend. The average of the values observed in the second phase are used as the forecast value, given the stationary trend.

Stamps and Registration: The ratio exhibits a non-linear trend: over time, the rate of increase in the ratio is increasing. This captured by taking a non-linear trend and projecting it forward for the period 2005 – 2012.

Sales tax: Change in trend from 1995 is observed. The projections reflect the trends in the later period.

Transport taxes: volatile series. Stable trend of last few years – stationary tax to GSDP ratio is projected forward.

Other taxes: Sharply declining series. Projecting the historical trend forward yields negative estimates of this ratio. To avoid this possibility, the level reached in 2004-05 is assumed to persist.

Arunachal Pradesh:

Electricity duty: Does not exist

State Excise: Apart from a downward spike in 1993-94, the ratio records an upward trend. The estimated equation is used to generate the forecast.

Stamps and Registration: There is no trend behaviour that can form the basis of a forecast. Therefore it is assumed that the level reached in the few years would persist. The average of the ratio for the period 2003-05 is taken as the estimate.

Sales tax: There are no long term trends in this series either. There are periodic changes in the levels – in 1994-95 there is a decline in the level while in 2000-01 there is an increase in the level. As above suggests, the average of the levels recorded in the last phase is adopted as the forecast level.

Transport taxes: This ratio declines till 1991-92 and then increases till 1997-98 before declining again till 2000-01. In the subsequent years, it maintains a stable level for four years. The last fact is used as a basis for generating the forecast – which is an average of the levels in these four years.

Other taxes: In the absence of any systematic trend either over the entire period or in parts thereof, an average of the entire period is taken as the benchmark for the forecast.

Assam:

Electricity duty: No significant pattern discernable in Electricity duty collections. The average of the ratio for the entire period is projected forward.

State Excise: The years from 1997-98 to 2001-02 exhibit a behaviour completely out of sync from the rest of the years and hence are corrected by using a dummy. The series is forecasted from the regression results, and appears satisfactory.

Stamps and Registration: The first two years are excluded from the exercise for obtaining the trends due to volatile behaviour not in line with trends observed subsequently. The regression captures the rate of increase in the ratio for the rest of the period. The last few years are witness to step up. While the regression captures both a level and slope shift, since the pattern is spread over two years, for projection forward, it is felt that a conservative approach should be adopted: applying the earlier rate of increase on to the new base.

Sales tax: There is a change in trend observed from 1999-00 onwards. The prior period shows a no change in the ratio – buoyancy of 1, while the subsequent period shows the ratio to be increasing on an average annual rate of 0.41 percent of GSDP. Projecting this increase on to the base achieved for 2004-05, will send the sales tax to GSDP ratio to 7.44 percent by 2011-12, which seems unattainable. The latter half of the period reflects changes in policy regime which would contribute to some one shot increases in revenue – UFR regime, elimination of new tax exemptions for industrial investment. A conservative approach would be to apply the trends of the earlier period on to the base of 2004-05. The earlier period exhibits on average, a buoyancy of 1, suggesting that the ratio of tax to GSDP remains constant. This forms the basis of forecasting.

Transport taxes: Historical trends applied to forecast the series.

Other taxes: The historical trend is a consistent downward trend with periodic upward adjustment in a ratcheted manner. Projecting the available series outwards would generate negative estimates of the ratio which are impossible. Therefore it is assumed that the ratio remains constant at the level achieved in 2004-05

Goa:

Electricity duty: No collections

State Excise: There are discernable patterns in evidence only after 1990. In this period, there is a declining trend till 1998, after which the ratio fluctuates around a stationary trend. This latter forms the basis for the forecast of this variable.

Stamps and Registration: the four year period 1993-94 to 1996-97 is out of sync with the performance in other years of the states. These years are excluded from the analysis. The estimated trend for the rest of the sample is stationary. Therefore the average of observations used for generating the estimate serves as a benchmark forecast. It may be noted that the observation for the 2004 is higher than the projected value for 2005. However this is retained since there are fluctuations in the series over time and there is no reason to assume that the level correction in 2004 can be sustained.

Sales tax: There are discernable trends in the series, but these trends do not provide a periodisation that aids forecasting this variable. The ratio increased till 1995 and then recorded a decline till 2002, after which there is some turn around. Since none of these can directly be extended forward, the average performance over the entire period is taken as the basis for forecasting.

Transport taxes: While there are periodic upward spikes in the data, the overall trend is upward. The rate of change in the ratio increases after 1998-99. These features are captured in the estimated equation which is used to generate the forecast.

Other taxes: This series increases till 1995 and then decreases till 2002 before resuming an upward trend. Since this history gives very little clue to forecast by, it is assumed that the levels reached in 2004-05 are maintained.

Gujarat:

Electricity duty: The trends in electricity duty collections have been broadly upward till 2000, after which there is evidence of a decline. A dummy is used to separate these trends and the projected series reflects the decline.

State Excise: The ratio is consistently declining till 1998. This is followed by a recovery for 3 years after which the declining trend resumes. The average trend for the entire period is therefore used as a basis for forecasting this series.

Stamps and Registration: This ratio sustains the observed increasing trend.

Sales tax: There is a systematic downward trend across which this ratio fluctuates. This trend is assumed to persist.

Transport taxes: The series does not record major changes but there is a slight decline till 1997 after which there is some modest recovery in the subsequent years. The latter trend is used as a basis for the forecast. The first year of the sample is omitted from the analysis since it reflects a very sharp decline in the ratio, not in line with the performance in subsequent years.

Other taxes: While there is a consistent downward trend through the entire period, the slope decreases after 1994. This estimated equation is used to forecast this series.

Haryana

Electricity duty: This is a rapidly declining series. Using historical trends to forecast the series yields improbable negative ratios. Since there is evidence of some modest stabilization in the series after 1995, an average over the latter period is used as a proxy for the future.

State Excise: Prohibition imposed in the state during 1996-98 makes these two years outliers in this series. Apart from these two years, the ratio exhibits a change in trend

from 1995 onwards. While it was increasing in the first phase, it is declining in the second phase. This latter trend forms the basis for the forecast.

Stamps and Registration: This is a relatively volatile series which exhibits an overall upward trend. This average trend forms the basis for the forecast.

Sales tax: This series is stationary till 1998. In the subsequent years, there has been a sharp increase, with the ratio increasing by almost 2 percentage points to GSDP. Projecting this trend outwards would mean that the ratio increases by another 2 percentage points in the next six years. This however would appear unreasonable since the last few years were also marked by major policy initiatives at the national level which could have contributed significantly to the revenues. It is therefore assumed that this ratio remains stationary at the level attained in 2004.

Transport taxes: This is a volatile series with no stable trends. The average of the ratio over the entire period is used as a forecast.

Other taxes: This trends exhibited by this series till 1997 do not continue in the subsequent period. In the latter period, the series fluctuates around a stationary trend. This is captured by taking the average of the values in the period as the basis for the forecast.

Himachal Pradesh:

Electricity duty: There is no discernable trend. The average of the ratio till 2003 is applied. 2004 is excluded from the average since it is an outlier.

State Excise: The series varies across a stationary trend. The average of the values over the entire period is used as a basis for the forecast.

Stamps and Registration: The series exhibits a systematic upward trend till 2002. In the last three years there is a huge spike followed by a decline. Since this appears out of sync with the rest of the performance, the earlier series is used as a basis for projecting forward. This does mean that the projected value for 2005 is lower than the actual value (planning commission data). Given the down trend, it is anticipated that the series reverts back to its historical trend.

Sales tax: Like in Haryana, this series is stationary till 1998. In the subsequent years, there has been a sharp increase, with the ratio increasing by almost 2 percentage points to GSDP. Projecting this trend outwards would mean that the ratio increases by another 2 percentage points in the next six years. This however would appear unreasonable since the last few years were also marked by major policy initiatives at the national level which could have contributed significantly to the revenues. It is therefore assumed that this ratio remains stationary at the level attained in 2004.

Transport taxes: There is a downward trend. 1996 to 2001 are excluded since they represent out of trend volatile behaviour.

Other taxes: The series provides no basis for forecasting. As a conservative estimate, therefore, it is assumed that the ratio remains stationary at the levels reached in 2004.

Jammu and Kashmir:

Electricity duty: The ratio declines till 1994 and increases thereafter. The rate of increase as obtained from the regression exercise is applied to the base year of 2004, since a forecast using the estimated equation generates figures for 2005 and 2006 which are smaller than the realizations for 2004.

State Excise: There is no trend increase or decline. Further, while the average was pegged around 1.75 till 2000-01, it has dropped down to 1.17 in the latter period. This latter value is adopted as the estimate for the future.

Stamps and Registration: The ratio has a trend decline till 1995 and thereafter there is an increase. This estimated equation is used to forecast the series. The observation for 1990 is excluded from the analysis since it is an outlier.

Sales tax: Like in Haryana and Himachal Pradesh, this series is stationary till 1999. In the subsequent years, there has been a sharp increase, with the ratio increasing by almost 2 percentage points to GSDP. Projecting this trend outwards would mean that the ratio increases by another 2 percentage points in the next six years. This however would appear unreasonable since the last few years were also marked by major policy initiatives at the national level which could have contributed significantly to the revenues. It is therefore assumed that this ratio remains stationary at the level attained in 2004.

Transport taxes: This ratio was stationary at around 0.2 percent of GSDP till 2000. In the subsequent period, there is an increase in the ratio to 1.1 percent of GSDP at which level it has fluctuated ever since. This latter level therefore is adopted as the estimate for transport taxes for the projection period.

Other taxes: Apart from a huge surge in 2000-02, the series exhibits a consistent downward trend. This is projected forward taking the level of 2004 as the base.

Karnataka:

Electricity duty: A volatile series with a negative trend. The average trend for this series is used to forecast the series. The projected series does not start off from the actual observations end. The actual figures for both 2003 and 2004 are out of sync with the rest of the series. Therefore no attempt is made to fine tune the forecasts to suit these levels.

State Excise: This series is also quite volatile. From 1990 to 1998 it exhibits a decline. For three years thereafter there is a sharp increase and from 2001 onwards it fluctuates around a level of 1.8 percent of GSDP. Since the overall history does not give any clues to go by, the average levels in the last three years are assumed to persist.

Stamps and Registration: The ratio increased till 1995 and then declined till 2000 before turning around. The estimated equation takes into account these changes in trend and is used to forecast the series. The forecasted series captures in the trend in the last period.

Sales tax: The series fluctuates around a stationary trend at around 5 percent of GSDP. There is a step up in the level in the 2004 to 5.86 percent. In the absence of a long term historical trend, this level is assumed to persist.

Transport taxes: There is a downward trend till 1998 and then a reversal is observed. The estimated equation takes into account these changes in trend and then is used to forecast the series.

Other taxes: While the series exhibits an overall downward trend, there is one step-up in 1995 which is taken into account. 2004 exhibits another such step-up. It is assumed that subsequent to this step-up, the series would resume its downward trend as before. The estimated equation excludes 2004 and rate of change derived from this equation is used to derive the forecast, using 2004 as the base.

Kerala:

Electricity duty: Extremely volatile series. If the spikes in the series are excluded, the trend would be negative, however using the trend to forecast, results in negative tax GSDP ratios. This series is therefore projected on a completely arbitrary basis, by taking the average of the ratios recorded in the last five years – from 2000 onwards.

State Excise: A generally downward sloping curve, with a step-up in 1993. After

taking this into account the estimated equation is used to forecast the series.

Stamps and Registration: There are distinct phases in the trends in this ratio – till 1995, the ratio increases and then decline till 2001. In the third phase it resumes an upward trend. The estimated equation takes into account these changes and is used to forecast the series. The forecasted numbers reflect a continuation of the upward trend.

Sales tax: Consistent upward trend, which is projected forward.

Transport taxes: With some fluctuations, this series too records an upward trend. This trend is projected forward. The decline in the last two years is considered a fluctuation rather than a change in trend.

Other taxes: The trend is downward and is projected forward.

Maharashtra

Electricity duty: While a downward trend observed till 1996, in subsequent years there is some recovery but with volatile fluctuations. Since these latter observations seem to fluctuate about a stationary trend, the average of these observations is taken as a benchmark for the forecast.

State Excise: The series has an overall negative trend. However in 1997-98, there is an increase in level, after which the negative trend resumes. Since there is no basis to anticipate a similar increase in level, the negative trend is projected forward to generate the forecast.

Stamps and Registration: There is a consistent upward trend which is extended outwards to generate the forecast.

Sales tax: There are two phases in the trends of this ratio – till 1998-99, the ratio is declining and thereafter it fluctuates around a stationary level. This latter trend is forecast forward, by taking the average of the observations of this period.

Transport taxes: This series too is declining and is projected forward using the estimated equation.

Other taxes: This ratio recorded a modest decline till 1996-97 and then there is a reversal for three years before the decline is resumed. The estimated equation establishes the rates of changes in the first two phases and then applies the former on the base of 2004-05 to generate the forecast. This follows from the resumption of downward trend after 2002-03.

Manipur:

Electricity duty: This series records only sporadic observations in the initial years of the period considered and then in the terminal years. Since it is not possible to derive any trend, the level achieved in 2004 is used as the benchmark for the future.

State Excise: After the initial high levels, the ratio settles down to a stationary trend around 0.07 percent of GSDP. This level is assumed to persists

Stamps and Registration: This series records a trend decline. This trend is used to forecast the series.

Sales tax: This ratio follows an upward trend. This trend is extrapolated outwards.

Transport taxes: this ratio follows a declining trend till 1998-99 after which there is some recovery and the ratio stabilizes around a stationary trend. This stationary trend is approximated by the average of the values in the second phase.

Other taxes: While the overall trend is declining, there is not much room left for

further decline. It is therefore assumed that the levels reached in 2004 are sustained.

Meghalaya:

Electricity duty: sporadic data with very low levels makes it difficult to forecast this series. Since there is only positive observation in the last five years, no forecast is proposed for this series.

State Excise: after increasing till 1991-92, the series records a trend decline, with some fluctuations. This trend is used to project the series forward.

Stamps and Registration: After declining till 1992-93, the series records a turnaround with a trend increase with lot of fluctuations. The trend is used to forecast the series.

Sales tax: This series follows the same pattern as above, except that the turnaround comes in 1993-94.

Transport taxes: A declining trend till 1998-99 and then a turnaround. The second phase however is a stationary trend. This is used as a basis for the forecast – average of the values recorded in this phase are the benchmark.

Other taxes: This ratio declines in the initial years with a spurt in 1995-96. After 1997-98, the series settles down to stationary trend around 0.06 percent of GSDP. This latter trend is extended outwards.

Mizoram:

Electricity duty: No electricity duty

State Excise: apart from the initial years which recorded an astoundingly high level for this ratio, in subsequent years, the ratio settled down to a trend decline. There is some change in this trend with a decline in the rate of change after 1994. These features are captured in the equation which is then used to generate the forecast.

Stamps and Registration: This ratio records a positive trend throughout but rate of increase slows down after 1998. The estimated equation excludes 1994-95 which is an outlier and captures the above trends. This equation is used to generate the forecast.

Sales tax: There is modest trend increase in this ratio till 1999-00 after which the pace of increase steps up. As noted in the case of other states, since this period coincides with a number of policy changes across the country, it is over-optimistic to assume that the trend growth achieved in the latter period can be sustained. Conservatively, it is assumed that the earlier trend resumes. This forms the basis for the forecast.

Transport taxes: This series exhibits an initial surge after which there is a positive trend with volatility. The estimated equation captures these trends and is used to forecast the series.

Other taxes: A volatile series with negative trend. Forecasting the ratios from an estimated equation yields estimates which are not in consonance with the observed values in the last few years. Therefore it is assumed that the level reached in 2004-05 is maintained in future.

Nagaland:

Electricity duty: No electricity duty

State Excise: The high level of the first two years is replaced by lower levels, all with a trend line with a negative slope. Projecting these trends outwards generate a disappearing series which is not acceptable. Therefore it is assumed that the levels attained in 2004 are maintained forward.

Stamps and Registration: Except for a spike in the late nineties, the ratio maintains a

low profile with no particular trend. Therefore the average of the levels of the 2001-2004 is taken as the benchmark for the forecast.

Sales tax: A declining trend till 1994 is reverse in the subsequent period. The estimated equation captures this change. The rate of change in the latter period is used on the base of 2004-05 to generate the forecasts. Forecasting from the equation itself generates numbers lower than the actual levels of 2004-05.

Transport taxes: The downtrend through the entire period is captured in the estimated equation, which is used to generate the forecast.

Other taxes: An initial downward is halted after 1995. In the subsequent years, there is fluctuation around a stationary trend. The average of the levels in the second phase are used as the forecast value.

Orissa:

Electricity duty: Declining trend till 1998-99 is reversed in the subsequent years. The second phase reflects a stationary trend. An average of the values recorded in this phase is used as the benchmark for the forecast.

State Excise: The ratio fluctuates around an almost stationary trend till 1998 and then assumes an upward trend. This is reflected in the estimated equation which forms the basis of the forecast.

Stamps and Registration: There is a mild decline till 1995-96 after which there is a reversal in performance. This is captured in the estimated equation.

Sales tax: While there is a consistent upward trend in this ratio, there is an increase in the rate of change of this ratio after 1999-00. While these features are captured in the estimated equation, as in the case of the other states, the estimated rate of change in the first period is used to project the series outwards.

Transport taxes: The ratio fluctuated around the level of 0.40 to 0.50 till 2000-01. Subsequently there is sharp increase to the level of around 1 percent of GSDP. Given the absence of any systematic trend, the average of the values in the second phase is used as the benchmark.

Other taxes: The sharp fluctuations in the initial period are excluded from the analysis. In the rest of the period, there is a declining trend with a step-up in 2001-02. These features are captured in the estimated equation.

Punjab:

Electricity duty: There is a declining trend till 2001-02 after which there is a step up and a moderation in the rate of change. The estimated equation takes these trends into account and is then used to generate the forecast.

State Excise: The ratio increases till 1994-95 with fluctuations, and then records a consistent decline. The estimated equation captures these trends.

Stamps and Registration: This ratio declines modestly till 1996-97 after which there is a turnaround. This is captured in the estimated equation.

Sales tax: The ratio declines till 1998-99 after there is a turnaround. Like in other states, since the turnaround is attributed to a change in the national level policies, it is assumed that the earlier trend would prevail after the change.

Transport taxes: There is a declining trend till 1996 after which the ratio settles down to a stationary trend. So the average of the observations in the latter period is taken as the benchmark.

Other taxes: There is a decline in the ratio till 1993-94 after which the ratio fluctuates around a stationary trend. So the average of the observations in the latter period is taken as the benchmark.

Rajasthan

Electricity duty: There is an overall decline with a few corrections in level. The first correction takes place in 2000-01 and the second in 2004-05. The slope of the estimated equation is applied to the level reached in 2004-05 to derive the forecast values.

State Excise: The ratio exhibits a trend increase till 1994-95 after which this trend is reversed. These trends are captured in the estimated equation.

Stamps and Registration: This ratio has a trend increase. Further in 2004-05 there is a further upward correction. The slope of this curve prior to the change is applied to the new level of 2004-05 to derive the forecast values.

Sales tax: The ratio declines till 1998-99, after which there is a reversal. Like for other states, the rate of change estimated for the first period is used on the levels reached in 2004-05 to derive the forecast values.

Transport taxes: The ratio declines till 1998-99, then increases for a few years before declining again in 2004-05. The estimated equation captures the trends in both these phases and is used to forecast the series.

Other taxes: The ratio decreases throughout but with a slower rate after 1998-99. The estimated equation captures these trends and is used for the forecast.

Sikkim:

Electricity duty: Does not exist

State Excise: There is a trend decline till 1994-95. In the subsequent period, the ratio fluctuates around a stationary trend. The latter is used to forecast the series – an average of the values in the phase is used as the forecast value.

Stamps and Registration: The ratio declines till 1992-93 and then there is a reversal. The estimated equation captures these trends. 2002-03 is an outlier and is excluded from the estimate.

Sales tax: The ratio has a positively sloped trend through out with an increase the rate of change after 1998-99. Like for a number of the other states, the trend rate of change in the first phase is adopted on the base of 2004-05 to derive the forecast values.

Transport taxes: The ratio has a trend decline with some corrections in level. The slope from the equation is adopted on the base of 2004-05 to derive the forecast values. This approach is adopted since the forecast values from the estimated equation do not match the level of the ratio achieved in last fiscal year recorded.

Other taxes: The ratio declines till 1994-95 and then fluctuates around a stationary level. The average of the ratios for the second phase is taken as the forecast value.

Tamil Nadu:

Electricity duty: There is an increase in the level in 1991-92. In the subsequent years the trend is declining. The estimated equation captures this phase and is used for generating the forecast.

State Excise: The ratio records a trend increase with big fluctuations. The estimated equation captures these trends and is used to generate the forecast.

Stamps and Registration: There is an upward trend with some fluctuations. The estimated equation captures these trends and is used to generate the forecast.

Sales tax: There ratio fluctuates around a stationary trend till 1998-99 and then records an upward trend. Given the observations made on the policy change induced impact on sales tax collections, like for all other states, the pre-change trend is expected to resume from the base of 2004-05.

Transport taxes: The series exhibits no persistent trends. There is a reduction in the level in 1998 which is more than compensated for by an increase from 2002-03. Since there is no long term trend to use as a basis, the forecast assumes that the level attained in the last phase is retained. The average of these ratios therefore is adopted as the forecast value.

Other taxes: There is a consistent downward trend in this ratio. However if the estimated equation is used to forecast the series, it generates negative numbers indicating that the present trend cannot persist. In the absence of other information, it is assumed that the level reached in 2004-05 is sustained over the rest of the period.

Tripura

Electricity duty: No data

State Excise: There is a consistent upward trend in the ratio, with some corrections in level. In 1989-90, there is an increase in the level which is reversed in 2000-01. These changes are captured in the estimated equation and the forecast is generated.

Stamps and Registration: this ratio declined from 1992-93 to 2000-01. In the subsequent period the series is more volatile with no trend. The average of the values in this period is used as the basis for forecast.

Sales tax: The series while consistently increasing, records an increase in rate of change after 1999-00. Like in other states, where this change has been attributed to changes in policy parameters, here too it is assumed that the trend prior to this period would prevail, on a base recorded within this period.

Transport taxes: The series is stationary with some fluctuations. The last two years witness an upward spike. Since the sustainability of the positive trend is not predictable, it is assumed that the series would retain the level attained in 2004-05.

Other taxes: While this series exhibits a consistent decline with a few spikes, given the current levels, any further decline appears infeasible. An average of the trend in the past few years therefore is assumed to be the benchmark.

West Bengal:

Electricity duty: The series is very volatile. There is a general upward trend discernable from 1992 onwards. If this overall trend is projected forward, the forecasted figure for 2005 far exceeds the actual figure as provided by the planning commission. Therefore, the rate of change from the estimated equation is applied to the base of 2004.

State Excise: After 1990, this series registers a consistent decline. However the rate of decline is also decreasing. Taking these features into account, the series is projected forward. The forecasted numbers appear stationary about the present level.

Stamps and Registration: The ratio increases till 1994 before declining till 1999. Then it resumes an upward trend. The estimated equation captures these changes and is used to forecast the series.

Sales tax: The ratio increases till 1992-93 after which it declined until 2001-02.

Subsequently there is a turnaround. These trends are captured in the estimated equation which is used to project the series forward. While for other states, such a trend is not projected forward, since it is not considered sustainable, for West Bengal, since the increase over the entire period is less than 0.5 percent of GSDP, it is not considered implausible.

Transport taxes: There is an overall positive trend in this ratio, along with some significant changes in the level. From around 0.50 percent of GSDP the series declines to an average of 0.15 percent and then is corrected to a level of 0.26 percent. The trend rate of change is applied to the level achieved in 2004-05 in order to obtain the forecast values.

Other taxes: Volatile series with many phases. Since no appropriate basis for projection can be identified, the average of the ratio recorded in the last ten years is considered the benchmark.

Tax _GSDP Forecasts: Underlying Regression Results

ANDHRA PRADESH

Dependent Variable: EDAP
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.004242	-2.803509	0.0127
C	0.135764	8.288720	0.0000
R-squared	0.329412		
Adjusted R-squared	0.287500		
Durbin-Watson stat	2.047849		

Dependent Variable: SEAP
Method: Least Squares
Sample: 1987 2004 (1995-96 and 1996-97 excluded)

Variable	Coefficient	t-Statistic	Prob.
TIME	0.036204	1.083092	0.3001
C	0.443127	0.903065	0.3843
DUMSE	2.309590	4.450826	0.0008
DUMSE*TIME	-0.242599	-5.132025	0.0002
R-squared	0.894493		
Adjusted R-squared	0.868117		
Durbin-Watson stat	1.195257		

DUMSE = 1 for 1987-88 to 1994-95

Dependent Variable: SRAP
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.019812	-3.637078	0.0024
TIME^2	0.001732	6.216259	0.0000
C	0.455439	20.26095	0.0000
R-squared	0.904552		
Adjusted R-squared	0.891825		
Durbin-Watson stat	2.030742		

Dependent Variable: STAP
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.157157	5.121282	0.0002
C	2.667454	6.297895	0.0000
DUMST	1.751582	3.679920	0.0025
DUMST*TIME	-0.224252	-4.244452	0.0008
R-squared	0.795597		
Adjusted R-squared	0.751797		
Durbin-Watson stat	1.778691		

DUMST = 1 for 1987-77 to 1994-95

Dependent Variable: OTHRAP
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.015073	-6.771150	0.0000
C	0.376731	15.63472	0.0000
R-squared	0.741303		
Adjusted R-squared	0.725135		
Durbin-Watson stat	1.301748		

ARUNACHAL PRADESH

Dependent Variable: SEARP
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.028173	8.740327	0.0000
C	0.150131	4.302851	0.0005
R-squared	0.826827		
Adjusted R-squared	0.816004		
Durbin-Watson stat	1.190539		

Dependent Variable: SRARP
 Method: Least Squares
 Sample: 1987 2004 (2002-03 excluded)

Variable	Coefficient	t-Statistic	Prob.
TIME	0.000630	1.468773	0.1626
C	0.010726	2.395194	0.0301
R-squared	0.125736		
Adjusted R-squared	0.067452		
Durbin-Watson stat	0.782072		

ASSAM

Dependent Variable: EDASS
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.002002	1.473940	0.1599
C	0.006536	0.444537	0.6626
R-squared	0.119549		
Adjusted R-squared	0.064520		
Durbin-Watson stat	1.389114		

Dependent Variable: SEASS
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.014380	10.45878	0.0000
C	0.058899	4.344306	0.0006
DUMSE	0.156157	9.805016	0.0000
R-squared	0.959256		
Adjusted R-squared	0.953823		
Durbin-Watson stat	0.461443		

DUMSE = 1 for 1997-98 to 2001-02;

Dependent Variable: SRASS
 Method: Least Squares
 Sample: 1989 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.001923	4.970501	0.0003
C	0.092692	24.58020	0.0000
DUMSR	-0.282692	-4.492275	0.0007
DUMSR*TIME	0.018077	4.871179	0.0004
R-squared	0.942645		
Adjusted R-squared	0.928306		
Durbin-Watson stat	2.166516		

DUMSR = 1 for 2002-03 to 2004-05.

Dependent Variable: STASS
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.425714	12.07619	0.0000
C	-3.085238	-5.612396	0.0001
DUMST	5.529632	9.924660	0.0000
DUMST*TIME	-0.438826	-11.74991	0.0000
R-squared	0.965515		
Adjusted R-squared	0.958125		
Durbin-Watson stat	2.744782		

DUMST = 1 for 1987-88 to 1998-99.

Dependent Variable: TTASS
 Method: Least Squares
 Sample: 1987 2005

Variable	Coefficient	t-Statistic	Prob.
TIME	0.009298	6.145512	0.0000
C	0.182807	10.59689	0.0000
R-squared	0.689596		
Adjusted R-squared	0.671337		
Durbin-Watson stat	1.180248		

Dependent Variable: OTHASS
 Method: Least Squares
 Sample(adjusted): 1990 2004

Variable	Coefficient	t-Statistic	Prob.
C	1.944929	9.997302	0.0000
TIME	-0.103357	-7.862157	0.0000
DUMOTH	-0.435714	-3.827123	0.0024
R-squared	0.890286		
Adjusted R-squared	0.872001		
Durbin-Watson stat	2.438200		

DUMOTH = 1 for 1987-88 to 1996-97

GOA

Dependent Variable: SEGOA
 Method: Least Squares
 Sample: 1990 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.000357	0.036598	0.9715
C	0.540357	3.659184	0.0038
DUMSE	0.617500	3.851024	0.0027
DUMSE*TIME	-0.042738	-3.392438	0.0060
R-squared	0.931487		
Adjusted R-squared	0.912802		
Durbin-Watson stat	1.661542		

DUMSE = 1 for 1990-91 to 1997-98

Dependent Variable: SRGOA
 Method: Least Squares
 Sample: 1987 2004 (1993-94 to 1996-97 excluded)

Variable	Coefficient	t-Statistic	Prob.
TIME	0.002423	1.582845	0.1394
C	0.272719	15.64796	0.0000
R-squared	0.172722		
Adjusted R-squared	0.103782		
Durbin-Watson stat	2.093636		

Dependent Variable: STGOA
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.055604	2.220203	0.0412
C	4.461765	16.45862	0.0000
R-squared	0.235522		
Adjusted R-squared	0.187742		
Durbin-Watson stat	0.737011		

Dependent Variable: TTGOA
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.201143	5.553972	0.0001
C	-2.241048	-3.968242	0.0014
DUMTT	2.710139	4.734764	0.0003
DUMTT*TIME	-0.195234	-5.088438	0.0002
R-squared	0.796554		
Adjusted R-squared	0.752958		
Durbin-Watson stat	2.101679		

DUMTT = 1 for 1987-88 to 1998-99.

GUJARAT

Dependent Variable: EDGUJ

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.050593	4.804449	0.0003
C	0.661978	7.382854	0.0000
DUMED	2.153022	1.827479	0.0890
DUMED*TIME	-0.155593	-2.166778	0.0480
R-squared	0.645353		
Adjusted R-squared	0.569357		
Durbin-Watson stat	2.046005		

DUMED = 1 for 2001-02 to 2004-05.

Dependent Variable: SEGUJ

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.000953	-4.421599	0.0004
C	0.043862	18.09515	0.0000
R-squared	0.502575		
Adjusted R-squared	0.471486		
Durbin-Watson stat	0.795254		

Dependent Variable: SRGUJ

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.006997	4.933639	0.0001
C	0.385752	25.12854	0.0000
R-squared	0.603379		
Adjusted R-squared	0.578590		
Durbin-Watson stat	1.962162		

Dependent Variable: STGUJ

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.075738	-5.226988	0.0001
C	5.822288	37.12188	0.0000
R-squared	0.630668		
Adjusted R-squared	0.607584		
Durbin-Watson stat	1.823523		

Dependent Variable: TTGUJ

Method: Least Squares

Sample: 1988 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.021786	2.445931	0.0294
C	0.288929	2.143607	0.0516
DUMTT	0.446829	3.197593	0.0070
DUMTT*TIME	-0.046210	-4.482846	0.0006
R-squared	0.703983		
Adjusted R-squared	0.635672		

Durbin-Watson stat 2.992998

DUMTT = 1 for 1987-88 to 1997-98.

Dependent Variable: OTHGUJ

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.340182	8.991499	0.0000
TIME	-0.007273	-2.653174	0.0189
DUMOTH	0.086961	2.045291	0.0601
DUMOTH*TIME	-0.017370	-3.680540	0.0025
R-squared	0.862355		
Adjusted R-squared	0.832860		
Durbin-Watson stat	1.952314		

DUMOTH = 1 for 1987-88 to 1994-95

HARYANA

Dependent Variable: EDHAR

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.017162	-10.59295	0.0000
C	0.311373	17.75524	0.0000
R-squared	0.875205		
Adjusted R-squared	0.867406		
Durbin-Watson stat	1.370314		

Dependent Variable: SEHAR

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.074370	-13.86377	0.0000
C	2.553377	35.50278	0.0000
DUMSE	-0.758044	-8.222385	0.0000
DUMSE*TIME	0.116656	7.405655	0.0000
DUMSE1	-1.617489	-32.55214	0.0000
R-squared	0.991181		
Adjusted R-squared	0.988467		
Durbin-Watson stat	2.976012		

DUMSE = 1 for 1987-88 to 1992-93

DUMSE1 = 1 for 1996-97 to 1997-98.

Dependent Variable: SRHAR

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.015005	3.659152	0.0021
C	0.571895	12.88411	0.0000

R-squared 0.455586
Adjusted R-squared 0.421560
Durbin-Watson stat 1.066493

Dependent Variable: STHAR
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.294571	6.668984	0.0000
C	0.355810	0.516576	0.6135
DUMST	3.067675	4.394265	0.0006
DUMST*TIME	-0.268697	-5.741996	0.0001

R-squared 0.947861
Adjusted R-squared 0.936689
Durbin-Watson stat 1.546907

DUMST = 1 for 1987-88 to 1998-99

Dependent Variable: TTHAR
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.004138	-0.845294	0.4104
C	1.029869	19.43423	0.0000

R-squared 0.042749
Adjusted R-squared -0.017080
Durbin-Watson stat 0.981352

Dependent Variable: OTHHAR
Method: Least Squares
Sample: 1987 2004 (1996 is excluded as an outlier)

Variable	Coefficient	t-Statistic	Prob.
C	0.072143	2.236713	0.0435
TIME	-0.001786	-0.812742	0.4310
DUMOTH	0.100079	2.954616	0.0112
DUMOTH*TIME	-0.012881	-4.496392	0.0006

R-squared 0.903844
Adjusted R-squared 0.881655
Durbin-Watson stat 1.624269

DUMOTH = 1 for 1987-88 to 1995-96.

HIMACHAL PRADESH

Dependent Variable: EDHP
Method: Least Squares
Sample: 1987 2003

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.000368	-0.082786	0.9351
C	0.120368	2.645094	0.0184

R-squared 0.000457
Adjusted R-squared -0.066180
Durbin-Watson stat 2.182328

Dependent Variable: SEHP
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.002167	-0.459652	0.6520
C	1.657255	32.47287	0.0000

R-squared 0.013033

Adjusted R-squared -0.048653
 Durbin-Watson stat 0.830602

Dependent Variable: SRHP
 Method: Least Squares
 Sample: 1987 2002

Variable	Coefficient	t-Statistic	Prob.
TIME	0.001618	1.790504	0.0950
C	0.192500	22.03517	0.0000
R-squared	0.186326		
Adjusted R-squared	0.128206		
Durbin-Watson stat	1.348483		

Dependent Variable: STHP
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.129714	6.173204	0.0000
C	0.319429	0.974865	0.3462
DUMST	1.587844	4.781217	0.0003
DUMST*TIME	-0.134295	-6.032707	0.0000
R-squared	0.911670		
Adjusted R-squared	0.892742		
Durbin-Watson stat	2.130011		

DUMST = 1 for 1987-88 to 1999-00.

Dependent Variable: TTHP
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.022949	-4.362218	0.0006
C	1.069427	20.57361	0.0000
DUMTT	0.304105	5.252260	0.0001
R-squared	0.690566		
Adjusted R-squared	0.649308		
Durbin-Watson stat	2.354575		

DUMTT = 1 for 1996-97 to 2000-01

JAMMU AND KASHMIR

Dependent Variable: EDJK
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.019152	8.941882	0.0000
C	-0.146545	-4.957362	0.0002
DUMED	0.300474	9.044709	0.0000
DUMED*TIME	-0.033913	-9.196813	0.0000
R-squared	0.888171		
Adjusted R-squared	0.864207		
Durbin-Watson stat	2.077918		

DUMED = 1 for 1987-88 to 1994-95

Dependent Variable: SRJK
 Method: Least Squares
 Sample: 1987 2004 (1990-91 excluded)

Variable	Coefficient	t-Statistic	Prob.
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TIME	0.012000	6.019200	0.0000
C	-0.031333	-1.104010	0.2896
DUMSR	0.215919	7.036151	0.0000
DUMSR*TIME	-0.025822	-9.115108	0.0000
R-squared	0.877036		
Adjusted R-squared	0.848660		
Durbin-Watson stat	1.638982		

DUMSR = 1 for 1987-88 to 1995-96

Dependent Variable: STJK

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.382000	10.25949	0.0000
C	-3.040000	-5.083071	0.0002
D1	4.408846	7.322906	0.0000
D1*TIME	-0.373923	-9.777544	0.0000
R-squared	0.983058		
Adjusted R-squared	0.979428		
Durbin-Watson stat	1.284650		

D1 = 1 for 1987-88 to 1999-00.

Dependent Variable: TTJK

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.009011	-1.323252	0.2056
C	1.223677	9.886552	0.0000
DUMTT	-0.896811	-10.55342	0.0000
R-squared	0.928149		
Adjusted R-squared	0.918569		
Durbin-Watson stat	1.360413		

DUMTT = 1 for 1987-88 to 2000-01

Dependent Variable: OTHJK

Method: Least Squares

Sample: 1989 1999 2002 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.077017	8.846409	0.0000
TIME	-0.002433	-3.064564	0.0098
R-squared	0.439031		
Adjusted R-squared	0.392283		
Durbin-Watson stat	1.985226		

KARNATAKA

Dependent Variable: EDKAR

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.007090	-3.313191	0.0044
C	0.245686	10.60700	0.0000
R-squared	0.406907		
Adjusted R-squared	0.369839		
Durbin-Watson stat	1.834040		

Dependent Variable: SEKAR
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.012632	1.290852	0.2151
C	1.393333	13.15442	0.0000
R-squared	0.094321		
Adjusted R-squared	0.037716		
Durbin-Watson stat	0.507292		

Dependent Variable: SRKAR
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.127000	5.060837	0.0003
C	-1.108000	-2.669806	0.0204
DUMSR	2.610095	5.887282	0.0001
DUMSR*TIME	-0.194429	-6.832923	0.0000
DUMSR1	1.606214	3.848988	0.0023
DUMSR1*TIME	-0.101881	-3.837844	0.0024
R-squared	0.937277		
Adjusted R-squared	0.911142		
Durbin-Watson stat	2.858720		

DUMSR = 1 for 1995-96 to 2000-01
 DUMSR1 = 1 for 1987-88 to 1994-95

Dependent Variable: STKAR
 Method: Least Squares
 Sample: 1987 2002

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.012926	-0.971376	0.3478
C	5.196750	40.38622	0.0000
R-squared	0.063142		
Adjusted R-squared	-0.003776		
Durbin-Watson stat	1.330321		

Dependent Variable: TTKAR
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.065429	3.384846	0.0044
C	0.020857	0.069195	0.9458
DUMTT	1.085355	3.552639	0.0032
DUMTT*TIME	-0.088051	-4.299679	0.0007
R-squared	0.651458		
Adjusted R-squared	0.576771		
Durbin-Watson stat	3.009676		

DUMTT = 1 for 1987-88 to 1998-99

Dependent Variable: OTHKAR
 Method: Least Squares
 Sample: 1987 2003

Variable	Coefficient	t-Statistic	Prob.
C	0.428167	12.09591	0.0000
TIME	-0.015500	-5.803663	0.0001
DUMOTH	0.095048	2.443691	0.0296
DUMOTH*TIME	-0.020214	-4.856836	0.0003
R-squared	0.963324		
Adjusted R-squared	0.954860		
Durbin-Watson stat	1.369886		

DUMOTH = 1 for 1987-88 to 1994-95

KERALA

Dependent Variable: EDKER

Method: Least Squares

Sample: 1987 2001 (1989, 1997 are excluded from analysis)

Included observations: 13

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.018269	-5.492930	0.0002
C	0.268190	8.726729	0.0000
R-squared	0.732830		
Adjusted R-squared	0.708542		
Durbin-Watson stat	2.924676		

Dependent Variable: SEKER

Method: Least Squares

Sample: 1987 2005

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.040515	-11.67323	0.0000
C	1.464414	32.54436	0.0000
DUMSE*TIME	-0.047426	-4.712327	0.0002
R-squared	0.900630		
Adjusted R-squared	0.888209		
Durbin-Watson stat	2.982935		

DUMSE = 1 for 1987-88 to 1992-93.

Dependent Variable: SRKER

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.038511	4.671111	0.0004
C	-0.005426	-0.039050	0.9694
DUMSR	0.612128	5.840193	0.0001
DUMSR1	1.737997	8.287622	0.0000
DUMSR1*TIME	-0.133082	-8.408106	0.0000
R-squared	0.883555		
Adjusted R-squared	0.847726		
Durbin-Watson stat	1.846259		

DUMSR = 1 for 1987-88 to 1994-95

DUMSR1 = 1 for 1995-96 to 2000-01

Dependent Variable: STKER

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.078617	12.65760	0.0000
C	5.212026	77.52444	0.0000
R-squared	0.909202		
Adjusted R-squared	0.903527		
Durbin-Watson stat	1.529242		

Dependent Variable: TTKER

Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.010330	7.363164	0.0000
C	0.459085	30.23049	0.0000
R-squared	0.772132		
Adjusted R-squared	0.757891		
Durbin-Watson stat	1.345819		

Dependent Variable: OTHKER
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.237451	16.20607	0.0000
TIME	-0.007276	-5.374911	0.0001
R-squared	0.643571		
Adjusted R-squared	0.621294		
Durbin-Watson stat	1.832394		

MAHARASHTRA

Dependent Variable: EDMAHA
Method: Least Squares
Sample: 1987 2005

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.004158	-1.097029	0.2879
C	0.373158	8.635067	0.0000
R-squared	0.066112		
Adjusted R-squared	0.011178		
Durbin-Watson stat	1.652889		

Dependent Variable: SEMAHA
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.033214	-5.325472	0.0001
C	1.210357	13.21975	0.0000
DUMSE	-0.351024	-3.670654	0.0025
DUMSE*TIME	0.014426	1.882928	0.0807
R-squared	0.774940		
Adjusted R-squared	0.726713		
Durbin-Watson stat	1.897397		

DUMSE = 1 for 1987-88 to 1996-97

Dependent Variable: SRMAHA
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.041548	12.71665	0.0000
C	0.323072	9.135235	0.0000
R-squared	0.909967		
Adjusted R-squared	0.904340		
Durbin-Watson stat	1.885024		

Dependent Variable: STMAHA
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.066571	1.240975	0.2350
C	3.669810	4.386991	0.0006
DUMST	1.635190	1.928641	0.0743
DUMST*TIME	-0.187341	-3.296384	0.0053
R-squared	0.765009		
Adjusted R-squared	0.714653		
Durbin-Watson stat	2.441261		

DUMST = 1 for 1987-88 to 1998-99

Dependent Variable: TTMAHA
Method: Least Squares
Sample: 1987 2004 (2001 is an outlier and is excluded)

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.015117	-4.907549	0.0002
C	0.638721	19.69672	0.0000
R-squared	0.616212		
Adjusted R-squared	0.590626		
Durbin-Watson stat	1.609673		

Dependent Variable: OTHMAHA

Method: Least Squares
Sample: 1987 2002

Variable	Coefficient	t-Statistic	Prob.
C	-0.007238	-0.093003	0.9274
TIME	0.024857	4.346160	0.0010
DUMOTH	0.484571	6.093390	0.0001
DUMOTH*TIME	-0.048736	-7.739819	0.0000
R-squared	0.895752		
Adjusted R-squared	0.869691		
Durbin-Watson stat	1.519478		

DUMOTH = 1 for 1987-88 to 1996-97.

MANIPUR

Dependent Variable: SRMANI
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.003230	-6.009977	0.0000
C	0.101242	17.40244	0.0000
R-squared	0.693015		
Adjusted R-squared	0.673829		
Durbin-Watson stat	1.571468		

Dependent Variable: STMANI
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.037121	6.234567	0.0000
C	0.563464	8.742866	0.0000
R-squared	0.708401		
Adjusted R-squared	0.690176		
Durbin-Watson stat	1.430122		

Dependent Variable: TTMANI
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.000571	0.088875	0.9304
C	0.097810	0.975542	0.3458
DUMTT	0.184312	1.813750	0.0912
DUMTT*TIME	-0.018718	-2.747979	0.0157
R-squared	0.856236		
Adjusted R-squared	0.825429		
Durbin-Watson stat	2.437938		

DUMTT = 1 for 1987-88 to 1998-99

Dependent Variable: OTHMANI
Method: Least Squares
Sample(adjusted): 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.200196	19.72209	0.0000
TIME	-0.011424	-12.18213	0.0000
R-squared	0.902679		
Adjusted R-squared	0.896596		
Durbin-Watson stat	0.799290		

MEGHALAYA

Dependent Variable: SEMEGH
Method: Least Squares
Sample: 1990 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.024750	-4.048250	0.0014
C	1.493583	20.67165	0.0000
R-squared	0.557647		
Adjusted R-squared	0.523620		
Durbin-Watson stat	1.750758		

Dependent Variable: SRMEGH
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.001993	2.955577	0.0104
C	0.047587	5.441963	0.0001
DUMSR	0.041746	3.622278	0.0028
DUMSR*TIME	-0.007993	-3.914039	0.0016
R-squared	0.581993		
Adjusted R-squared	0.492420		
Durbin-Watson stat	2.139160		

DUMSR = 1 for 1987-77 to 1992-93

Dependent Variable: STMEGH
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.109576	4.346868	0.0007
C	0.312727	0.898836	0.3839
DUMST	1.867630	4.776554	0.0003
DUMST*TIME	-0.210766	-4.856272	0.0003
R-squared	0.662482		
Adjusted R-squared	0.590157		
Durbin-Watson stat	2.432580		

DUMST = 1 for 1987-77 to 1994-95

Dependent Variable: TTMEGH
Method: Least Squares
Sample: 1987 1995 1997 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.001429	0.615305	0.5490
C	0.139286	4.086686	0.0013
DUMTT	0.176825	4.940249	0.0003
DUMTT*TIME	-0.010429	-3.444996	0.0043
R-squared	0.951091		
Adjusted R-squared	0.939804		
Durbin-Watson stat	1.344794		

DUMTT = 1 for 1987-77 to 1996-97

Dependent Variable: OTHMEGH
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.069065	1.515350	0.1536
TIME	-0.000523	-0.168184	0.8690
DUMOTH	0.156649	3.195717	0.0070
DUMOTH*TIME	-0.013048	-2.561736	0.0237
DUMOTH1*TIME	0.013891	5.694466	0.0001

R-squared 0.916844
Adjusted R-squared 0.891257
Durbin-Watson stat 2.767784

DUMOTH = 1 for 1987-88 to 1993-94
DUMOTH1 = 1 for 1994-95 to 1996-97

MIZORAM

Dependent Variable: SEMIZO
Method: Least Squares
Sample: 1989 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.004182	-3.722808	0.0029
C	0.123455	7.962787	0.0000
DUMSE	0.199307	9.526942	0.0000
DUMSE*TIME	-0.027532	-10.25344	0.0000
R-squared	0.972302		
Adjusted R-squared	0.965378		
Durbin-Watson stat	2.652690		

DUMSE = 1 for 1987-88 to 1994-95

Dependent Variable: STMIZO
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.167000	8.597582	0.0000
C	-1.958000	-6.275707	0.0000
DUMST	1.981077	6.307500	0.0000
DUMST*TIME	-0.148319	-7.434312	0.0000
R-squared	0.965438		
Adjusted R-squared	0.958032		
Durbin-Watson stat	2.139621		

DUMST = 1 for 1987-88 to 1999-00

Dependent Variable: TTMIZO
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.002233	2.184711	0.0452
DUMTT	0.075086	5.885793	0.0000
C	0.112097	9.039856	0.0000
R-squared	0.717316		
Adjusted R-squared	0.679625		
Durbin-Watson stat	2.410804		

DUMTT = 1 for 1988-89 to 1991-92

NAGALAND

Dependent Variable: STNAGA
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.014790	1.928345	0.0743
C	0.587622	5.907978	0.0000
DUMST	1.722378	13.13933	0.0000
DUMST*TIME	-0.269076	-11.58422	0.0000
R-squared	0.960180		
Adjusted R-squared	0.951648		
Durbin-Watson stat	3.152380		

DUMST = 1 for 1987-88 to 1992-93.

Dependent Variable: TTNAGA
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.008215	-6.133383	0.0000
C	0.264706	18.25881	0.0000
R-squared	0.701595		
Adjusted R-squared	0.682945		
Durbin-Watson stat	1.201253		

Dependent Variable: OTHNAGA
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-2.42E-18	-1.14E-15	1.0000
C	0.012222	0.404481	0.6920
DUMOTH	0.081667	2.513428	0.0248
DUMOTH*TIME	-0.011000	-3.664513	0.0026
R-squared	0.734321		
Adjusted R-squared	0.677390		
Durbin-Watson stat	1.540106		

ORISSA

Dependent Variable: EDORI
 Method: Least Squares
 Sample: 1990 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.016571	1.321946	0.2130
C	0.116476	0.595853	0.5633
DUMED	0.879079	4.317803	0.0012
DUMED*TIME	-0.074905	-5.257606	0.0003
R-squared	0.907304		
Adjusted R-squared	0.882023		
Durbin-Watson stat	1.275495		

DUMED = 1 for 1987-88 to 1998-99

Dependent Variable: SEORI
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.044286	3.470950	0.0037
C	-0.241429	-1.213448	0.2450
DUMSE	0.602792	2.989235	0.0098

DUMSE*TIME	-0.047572	-3.519415	0.0034
R-squared	0.667219		
Adjusted R-squared	0.595909		
Durbin-Watson stat	1.454421		

DUMSE = 1 for 1987-88 to 1998-99

Dependent Variable: SRORI
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.008667	4.166831	0.0009
C	0.153111	5.170938	0.0001
DUMSR	0.119389	3.749736	0.0022
DUMSR*TIME	-0.012500	-4.249608	0.0008
R-squared	0.670479		
Adjusted R-squared	0.599867		
Durbin-Watson stat	2.949532		

DUMSR = 1 for 1987-88 to 1995-96

Dependent Variable: STORI
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.066307	5.808440	0.0000
C	2.561677	17.54844	0.0000
DUMST*TIME	-0.036798	-2.774579	0.0142
R-squared	0.752044		
Adjusted R-squared	0.718983		
Durbin-Watson stat	2.217365		

DUMST = 1 for 1987-88 to 1999-00

Dependent Variable: TTORI
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.006458	1.230784	0.2374
C	1.056667	11.73628	0.0000
DUMTT	-0.665721	-10.95285	0.0000
R-squared	0.959937		
Adjusted R-squared	0.954595		
Durbin-Watson stat	1.813883		

DUMTT = 1 for 1987-88 to 1999-00

Dependent Variable: OTHORI
Method: Least Squares
Sample: 1991 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.314157	8.347758	0.0000
TIME	-0.004343	-1.979085	0.0734
DUMOTH	-0.099900	-5.101873	0.0003
R-squared	0.769253		
Adjusted R-squared	0.727299		
Durbin-Watson stat	1.790539		

DUMOTH = 1 for 1987-88 to 2000-01

PUNJAB

Dependent Variable: EDPUN
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.008798	-3.677069	0.0022
C	0.423840	15.18588	0.0000
DUMED*TIME	-0.015622	-6.221574	0.0000
R-squared	0.812960		
Adjusted R-squared	0.788021		
Durbin-Watson stat	1.861080		

DUMED = 1 for 1987-88 to 2001-02

Dependent Variable: SEPUN
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.078182	-7.248595	0.0000
C	3.111455	20.90086	0.0000
DUMSE	-0.837526	-5.006200	0.0002
DUMSE*TIME	0.103420	5.569192	0.0001
R-squared	0.883546		
Adjusted R-squared	0.858591		
Durbin-Watson stat	1.615548		

DUMSE = 1 for 1987-88 to 1994-95

Dependent Variable: SRPUN
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.085119	7.062570	0.0000
C	-0.547976	-3.097234	0.0079
DUMSR	1.176643	6.367286	0.0000
DUMSR*TIME	-0.093422	-6.309978	0.0000
R-squared	0.807106		
Adjusted R-squared	0.765771		
Durbin-Watson stat	1.989661		

DUMSR = 1 for 1987-88 to 1996-97

Dependent Variable: STPUN
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.171143	3.696792	0.0024
C	1.282286	1.776229	0.0974
DUMST	2.301048	3.144847	0.0072
DUMST*TIME	-0.234220	-4.775515	0.0003
R-squared	0.866293		
Adjusted R-squared	0.837641		
Durbin-Watson stat	2.192812		

DUMST = 1 for 1987-88 to 1998-99

Dependent Variable: TTPUN
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.003452	0.551937	0.5897
C	0.443690	4.832006	0.0003
DUMTT	0.266976	2.783667	0.0146

DUMTT*TIME	-0.029574	-3.848730	0.0018
R-squared	0.778033		
Adjusted R-squared	0.730468		
Durbin-Watson stat	2.188188		

DUMTT = 1 for 1987-88 to 1996-97

Dependent Variable: OTHPUN
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.032000	4.941549	0.0002
TIME	-0.000364	-0.751289	0.4649
DUMOTH	0.059429	7.650434	0.0000
DUMOTH*TIME	-0.008922	-8.303192	0.0000
R-squared	0.938966		
Adjusted R-squared	0.925887		
Durbin-Watson stat	1.397527		

DUMOTH = 1 for 1987-88 to 1993-94

RAJASTHAN

Dependent Variable: EDRAJ
Method: Least Squares
Sample: 1987 2003

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.005196	-2.729811	0.0163
C	0.357941	11.76219	0.0000
DUMED	-0.150000	-7.329414	0.0000
R-squared	0.849081		
Adjusted R-squared	0.827521		
Durbin-Watson stat	2.215339		

DUMED = 1 for 1987-88 to 1998-99

Dependent Variable: SERAJ
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.029167	-2.308821	0.0367
C	1.705000	9.480620	0.0000
DUMSE	-0.821667	-4.248955	0.0008
DUMSE*TIME	0.097833	5.476151	0.0001
R-squared	0.726453		
Adjusted R-squared	0.667836		
Durbin-Watson stat	3.020505		

DUMSE = 1 for 1987-88 to 1995-96

Dependent Variable: SRAAJ
Method: Least Squares
Sample: 1987 2003

Variable	Coefficient	t-Statistic	Prob.
TIME	0.017230	10.94181	0.0000
C	0.297279	18.42316	0.0000
R-squared	0.888661		
Adjusted R-squared	0.881238		
Durbin-Watson stat	2.582353		

Dependent Variable: STRAJ
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.049685	-3.117820	0.0076
C	3.347121	28.53832	0.0000
1-DUMST	-2.956835	-4.106851	0.0011
(1-DUMST)*TIME	0.264828	5.487426	0.0001
R-squared	0.860176		
Adjusted R-squared	0.830214		
Durbin-Watson stat	2.778679		

DUMST = 1 for 1987-88 to 1998-99

Dependent Variable: TTRAJ
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.075429	4.676559	0.0004
C	-0.382476	-1.520698	0.1506
DUMTT	0.963537	3.779780	0.0020
DUMTT*TIME	-0.082387	-4.821450	0.0003
R-squared	0.848929		
Adjusted R-squared	0.816557		
Durbin-Watson stat	1.885055		

DUMTT = 1 for 1987-88 to 1998-99

Dependent Variable: OTHRAJ
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.322672	19.52473	0.0000
TIME	-0.011534	-9.069533	0.0000
DUMOTH*TIME	-0.005586	-3.524973	0.0031
R-squared	0.848998		
Adjusted R-squared	0.828865		
Durbin-Watson stat	1.179940		

DUMOTH = 1 for 1987-88 to 1998-99

SIKKIM

Dependent Variable: SESIK
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.017091	0.495205	0.6281
C	1.543273	3.239778	0.0059
D1	2.116370	3.953426	0.0014
D1*TIME	-0.263400	-4.432784	0.0006
R-squared	0.792586		
Adjusted R-squared	0.748140		
Durbin-Watson stat	1.572061		

DUMSE = 1 for 1987-88 to 1994-95

Dependent Variable: SRSIK
Method: Least Squares
Sample: 1987 2001 2003 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.003562	2.702847	0.0181
C	0.025694	1.540304	0.1475

DUMSR	0.086972	3.997136	0.0015
DUMSR*TIME	-0.013848	-3.623492	0.0031
R-squared	0.559561		
Adjusted R-squared	0.457921		
Durbin-Watson stat	2.258251		

DUMSR = 1 for 1987-88 to 1992-93

Dependent Variable: STSIK
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.041818	1.752082	0.1016
C	1.093182	6.223225	0.0000
1-DUMST	-2.972706	-2.756765	0.0154
(1-DUMST)*TIME	0.266753	3.690459	0.0024
R-squared	0.908927		
Adjusted R-squared	0.889412		
Durbin-Watson stat	1.576950		

DUMST = 1 for 1987-88 to 1998-99

Dependent Variable: TTSIK
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.004016	-2.539787	0.0227
C	0.255217	11.56706	0.0000
DUMTT	-0.083395	-5.051220	0.0001
R-squared	0.718707		
Adjusted R-squared	0.681201		
Durbin-Watson stat	1.799215		

DUMTT = 1 for 1987-88 to 1994-95

Dependent Variable: OTHSIK
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.267636	3.335088	0.0049
TIME	-0.003455	-0.594156	0.5619
DUMOTH	0.326292	3.618081	0.0028
DUMOTH*TIME	-0.040474	-4.043208	0.0012
R-squared	0.848416		
Adjusted R-squared	0.815933		
Durbin-Watson stat	2.757233		

DUMOTH = 1 for 1987-88 to 1994-95

TAMIL NADU

Dependent Variable: EDTN
Method: Least Squares
Sample: 1991 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.003407	-2.177562	0.0501
C	0.195604	10.26043	0.0000
R-squared	0.283230		
Adjusted R-squared	0.223499		
Durbin-Watson stat	2.241165		

Dependent Variable: SETN
Method: Least Squares
Sample: 1989 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.017426	1.999971	0.0653
C	1.035147	10.35985	0.0000
R-squared	0.222217		
Adjusted R-squared	0.166661		
Durbin-Watson stat	1.522604		

Dependent Variable: SRTN
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.041071	4.076403	0.0011
C	0.096786	0.634791	0.5358
DUMSR	0.551578	3.528563	0.0033
DUMSR*TIME	-0.037162	-3.293041	0.0053
R-squared	0.585101		
Adjusted R-squared	0.496194		
Durbin-Watson stat	2.137579		

DUMSR = 1 for 1987-88 to 1997-98

Dependent Variable: STTN
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.260000	4.342647	0.0007
C	2.103333	2.252876	0.0408
DUMST	3.576364	3.779468	0.0020
DUMST*TIME	-0.262902	-4.144821	0.0010
R-squared	0.702847		
Adjusted R-squared	0.639171		
Durbin-Watson stat	1.319641		

DUMST = 1 for 1987-88 to 1998-99

Dependent Variable: TTTN
Method: Least Squares
Sample: 1987 2001

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.003429	-1.471960	0.1648
C	0.689429	32.55419	0.0000
R-squared	0.142857		
Adjusted R-squared	0.076923		
Durbin-Watson stat	1.316348		

Dependent Variable: OTHTN
Method: Least Squares
Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
C	0.451895	49.41823	0.0000

TIME	-0.019556	-23.14924	0.0000
R-squared	0.971009		
Adjusted R-squared	0.969197		
Durbin-Watson stat	1.804940		

TRIPURA

Dependent Variable: SETRI

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.013289	7.652784	0.0000
DUMSE	0.125674	6.800298	0.0000
C	0.185285	7.531334	0.0000
R-squared	0.837365		
Adjusted R-squared	0.815680		
Durbin-Watson stat	1.981276		

DUMSE = 1 for 1989-90 to 1999-00.

Dependent Variable: SRTRI

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.000381	-0.585064	0.5678
DUMSR	0.062683	3.255676	0.0057
DUMSR*TIME	-0.007786	-4.227528	0.0008
C	0.155651	21.15659	0.0000
R-squared	0.673889		
Adjusted R-squared	0.604008		
Durbin-Watson stat	1.826844		

DUMSR = 1 for 1992-93 to 2000-01.

Dependent Variable: STTRI

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.116000	5.095176	0.0002
DST	0.914077	2.483019	0.0263
DST*TIME	-0.085505	-3.656624	0.0026
C	0.004000	0.010938	0.9914
R-squared	0.968349		
Adjusted R-squared	0.961566		
Durbin-Watson stat	1.665926		

DUMST = 1 for 1987-88 to 1999-00

Dependent Variable: OTHERS

Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.003519	-3.213860	0.0054
C	0.123987	10.46093	0.0000
R-squared	0.392303		

Adjusted R-squared 0.354322
 Durbin-Watson stat 1.677166

WEST BENGAL

Dependent Variable: EDWB
 Method: Least Squares
 Sample: 1991 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.008374	2.957549	0.0120
C	0.015846	0.459282	0.6542
R-squared	0.421606		
Adjusted R-squared	0.373406		
Durbin-Watson stat	2.996339		

Dependent Variable: SEWB
 Method: Least Squares
 Sample: 1990 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	-0.017104	-3.444645	0.0049
C	0.505764	20.32102	0.0000
TIME^2	0.000385	1.729807	0.1093
R-squared	0.897913		
Adjusted R-squared	0.880899		
Durbin-Watson stat	2.249816		

Dependent Variable: SRWB
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.037000	3.757280	0.0027
C	-0.180000	-1.137980	0.2773
DUMSR	0.479286	2.995061	0.0112
DUMSR*TIME	-0.022119	-2.018651	0.0664
DUMSR1	0.798000	4.151569	0.0013
DUMSR1*TIME	-0.061000	-4.380127	0.0009
R-squared	0.767469		
Adjusted R-squared	0.670581		
Durbin-Watson stat	2.067308		

DUMSR = 1 for 1987-88 to 1994-95
 DUMSR1 = 1 for 1995-96 to 1999-00

Dependent Variable: STWB
 Method: Least Squares
 Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.060513	2.842839	0.0138
C	1.597949	4.367058	0.0008
DUMST	1.453590	4.928288	0.0003
DUMST1	2.788885	7.137166	0.0000
DUMST1*TIME	-0.189013	-7.714151	0.0000
R-squared	0.942995		
Adjusted R-squared	0.925455		
Durbin-Watson stat	1.951679		

DUMST = 1 for 1987-88 to 1992-93
 DUMST1 = 1 for 1993-94 to 2001-02

Dependent Variable: TTWB
 Method: Least Squares

Sample: 1987 2004

Variable	Coefficient	t-Statistic	Prob.
TIME	0.008313	2.645882	0.0183
C	0.068771	1.568637	0.1376
DUMTT	0.401319	12.23352	0.0000
R-squared	0.963189		
Adjusted R-squared	0.958281		
Durbin-Watson stat	1.587535		

DUMTT = 1 for 1987-88 to 1994-95.

Minutes of the Meetings

