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A W O R L D B A N K C O U N T R Y S T U D Y

*Economic
Developments in India*

Achievements and Challenges

The World Bank
Washington, D.C.

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ABSTRACT

Over the last four years since the macroeconomic crisis of 1991, the Indian economy has undergone substantial changes. Almost all areas of the economy have been opened to domestic and foreign private investment. Import licensing restrictions on intermediates and capital goods have been virtually eliminated. Tariffs have been significantly reduced and full convertibility has been established for current account transactions. In the financial sector, prudential regulations that meet international standards have been introduced; banks now have significantly more discretion in their lending decisions; financial markets have been liberalized; and entry restrictions have been eliminated. The external accounts have strengthened considerably and, although still a major obstacle to higher growth, central fiscal imbalances are lower. By 1994-95, GDP growth had risen to 5.3 percent from one percent in 1991-92.

Notwithstanding the improving economic performance, this report, like the Government's recent Economic Survey, highlights a large unfinished agenda. *First*, all reforms, which are part of the program articulated since 1991, need to be followed through to completion. In addition, agriculture, which historically has contributed extensively to poverty reduction, requires a more focused effort. Reforms in this sector have been uneven and partial. Similarly, the pace of public enterprise reform has yet to accelerate.

Second, an urgent and appreciable improvement in public savings (now practically zero)--embracing reduction of the fiscal deficits of the Central and state governments, and improving substantially the efficiency of public enterprises--is absolutely necessary. It is critical for restoring the capacity of the public sector to invest, and accommodate higher levels of private investment. Such levels of total investment, particularly in infrastructure and social services such as primary education, are needed to achieve and sustain rates of growth and poverty reduction comparable to high performing countries in Asia. If the public sector savings performance is not reversed--permitting a sustained reduction in the public sector deficit--excessive monetary tightening will be required to reduce inflation. This would affect real interest rates, investment, and the necessary process of financial sector liberalization, and place India on a lower growth trajectory.

Third, failure to correct fiscal imbalances would complicate and ultimately undermine external sector policies. Over the last two years, the challenge has been to prevent surpluses in the capital account from causing the nominal and real exchange rates to appreciate, and thereby, from reducing export growth. Careful and cautious management of these external accounts needs to continue in the foreseeable future, whether the challenge is large capital inflows or outflows. At the same time, international experience indicates that a strong fiscal position has a central role in managing effectively the capital and current accounts of the balance of payments.

Fourth, in an economy which was driven for four decades by increases in public investment, maintaining dynamic growth requires a dramatic increase in private investment in infrastructure. Recent changes in the policy framework provide ample scope for this needed private sector involvement, and private investors have expressed interest in participating in the sector. But translating their interest into actual capital formation will require the authorities also to address a number of specific legal, regulatory, and administrative issues that are inhibiting such investment. Resolving these issues in some cases will depend on actions by state governments.

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ABBREVIATIONS AND ACRONYMS

AEC	Ahmedabad Electricity Company	HMT	Hindustan Machine Tools
AL	Advance License	ICC	International Chamber of Commerce
ARWSP	Accelerated Water Supply Program	ICD	Inland Container Depot
BHEL	Bharat Heavy Electricals Limited	ICDS	Integrated Child Development Scheme
BIFR	Board of Industrial and Financial Restructuring	ICICI	Industrial Credit and Investment Corporation of India
BOLT	Build-Own-Lease-Transfer	IDBI	Industrial Development Bank of India
BOT	Build-Operate-Transfer	IDF	India Development Forum
BSES	Bombay Suburban Electric Supply	IIP	Index of Industrial Production
CABE	Central Advisory Board on Education	IPC	Investment Promotion Cell
CD	Certificate of Deposit	IPCG	Import Promotion Capital Goods Scheme
CEA	Central Electricity Authority	IPP	Independent Power Projects/ Producers
CESC	Calcutta Electric Supply Corporation	IPRS	International Price Reimbursement Scheme
CII	Confederation of Indian Industry	IRDP	Integrated Rural Development Program
CIL	Coal India Limited	ISO	International Standards Organization
CMIE	Centre for Monitoring the Indian Economy	ITU	International Telecommunications Union
CONCOR	Container Corporation	JNPT	Jawaharlal Nehru Port Trust
CP	Commercial Paper	JRY	Jawahar Rozgar Yojana
CPI	Consumer Price Index	LIC	Life Insurance Company
CRR	Cash Reserve Requirement	LOI	Letter of Invitation
CSO	Central Statistical Organisation	M&A	Mergers and Acquisitions
CSS	Centrally Sponsored Schemes	MDR	Maximum Deposit Rate
DFHI	Discount Finance House of India	MHRD	Ministry of Human Resource Development
DFI	Development Finance Institution	MLL	Minimal Levels of Learning
DGCIS	Directorate General of Commercial Intelligence and Statistics	MLR	Minimum Lending Rate
DIET	District Institute of Education and Training	MNC	Multinational Corporation
DOT	Department of Telecommunications	MOC	Ministry of Communications
DPEP	District Primary Education Program	MODVAT	Modified Value Added Tax
DRS	Debt Reporting System	MOF	Ministry of Finance
EAS	Employment Assurance Scheme	MOP	Ministry of Power
EB	Empirical Bayes	MOST	Ministry of Surface Transport
EFT	Electronic Funds Transfer	MOU	Memorandum of Understanding
EGF	Employment Generation Fund	MOWR	Ministry of Water Resources
EPCG	Export Promotion Capital Goods Scheme	MRTTP	Monopolies and Restrictive Trade Practices Act
FCBOD	Foreign Currency (Banks & Others) Deposits	MTNL	Mahanagar Telephone Nigam Limited
FCCB	Foreign Currency Convertible Bonds	MTO	Multimodal Transport of Goods Act
FCNRA	Foreign Currency (Non-Resident) Accounts	NABARD	National Bank for Rural Development
FCNRB	Foreign Currency (Non-Resident) Accounts Bank Scheme	NCA	Normal Central Assistance
FCON	Foreign Currency (Ordinary) Non-Repatriable Deposit Scheme	NCAER	National Council of Applied Economic Research
FDI	Foreign Direct Investment	NCERT	National Council of Education Research and Training
FERA	Foreign Exchange Regulation Act	NDP	National Drug Policy
FII	Foreign Institutional Investment	NGO	Non-Governmental Organization
FIPB	Foreign Investment Promotion Board	NHA	National Highway Authority
FRN	Foreign Rate Notes	NHPC	National Hydroelectric Power Corporation
FSQ	Free Sale Quota	NIEPA	National Institute of Educational Planning and Administration
FW	Family Welfare	NREP	National Rural Employment Program
GDP	Gross Domestic Product	NRER(A)	Non-Resident External Rupee Account
GDR	Global Depository Receipts	NRF	National Renewal Fund
GER	Gross Enrollment Ratio	NRIs	Non-Resident Indians
GIC	General Insurance Company	NRNRD	Non-Resident (Non-Repatriable) Deposit Scheme
GNP	Gross National Product	NRY	Nehru Rozgar Yojana
GOO	Government of Orissa	NSE	National Stock Exchange
GRIDCO	Grid Corporation of Orissa	NSSO	National Sample Survey Organisation
HLM	Hierarchical Linear Modeling		

NTP	New Telecom Policy	VAS	Value Added Services
NTPC	National Thermal Power Corporation	VAT	Value Added Tax
NWB	National Water Board	VPT	Village Public Telephones
NWP	National Water Policy	VRS	Voluntary Retirement Schemes
O&M	Operations and Maintenance	VSAT	Very Small Aperture Terminal
OBB	Operation Blackboard	VSNL	Videsh Sanchar Nigam Limited
OBC	Other Backward Castes	WPI	Wholesale Price Index
OECD	Organisation for Economic Cooperation and Development	WRCP	Water Resource Consolidation Project
OGL	Open General License	WRMP	Water Resource Management Project
OHPC	Orissa Hydro Power Corporation	WUA	Water Users Association
OSEB	Orissa State Electricity Board		
PDS	Public Distribution System		
PE/ PSE	Public Enterprise		
PFC	Power Finance Corporation		
PLF	Plant Load Factor		
POL	Petroleum, Oil and Lubricants		
POWERGRID	Power Grid Corporation of India		
PPA	Power Purchase Agreement		
PSRA	Public Sector Restructuring Board		
PWD	Public Works Department		
RBI	Reserve Bank of India		
REC	Rural Electrification Corporation		
REER	Real Effective Exchange Rate		
RFC	Resident Foreign Currency Account		
RFP	Request for Proposal		
RLDC	Regional Load Dispatch Center		
RLEGP	Rural Landless Employment Guarantee Program		
RRB	Rural Regional Bank		
SAIL	Steel Authority of India Ltd.		
SC	Scheduled Castes		
SCI	Shipping Corporation of India		
SEB	State Electricity Board		
SEBI	Security and Exchange Board of India		
SES	Socio-Economic Status		
SGC	State Generating Companies		
SGDP	Sectoral Gross Domestic Product		
SGL	Subsidiary General Ledger		
SICA	Sick Industrial Companies Act		
SIDA	Swedish International Development Agency		
SIL	Special Import License		
SLR	Statutory Liquidity Requirements		
ST	Scheduled Tribes		
STCI	Securities Trading Corporation of India		
STD/ISD	Subscribers Truncated Dialing/ International Subscribers Dialing		
TEC	Tata Electric Companies		
TFC	Tenth Finance Commission		
TRAI	Telecom Regulatory Authority of India		
UKODA	United Kingdom Overseas Development Agency		
UNCTAD	United Nations Conference on Trade and Development		
UNDP	United Nations Development Program		
UNICEF	United Nations International Children's Emergency Fund		
UT	Union Territory		
UTI	Unit Trust of India		

CURRENCY

<u>Currency</u>	<u>Rs/ US\$</u>		
	<u>Official</u>	<u>Unified</u>	<u>Market</u> ¹
Prior to June, 1966	4.76		
June 6, 1966 to mid-December 1971	7.50		
Mid-December 1971 to end-June 1972	7.28		
1971-72	7.44		
1972-73	7.71		
1973-74	7.79		
1974-75	7.98		
1975-76	8.65		
1976-77	8.94		
1977-78	8.56		
1978-79	8.21		
1979-80	8.08		
1980-81	7.89		
1981-82	8.93		
1982-83	9.63		
1983-84	10.31		
1984-85	11.89		
1985-86	12.24		
1986-87	12.79		
1987-88	12.97		
1988-89	14.48		
1989-90	16.66		
1990-91	17.95		
1991-92	24.52		
1992-93	26.41		30.65
1993-94		31.36	
1994-95		31.40	
March 1995		31.65	
April 1995		31.41	
May 1995		31.42	

Note: The Indian fiscal year runs from April 1 through March 31.

Source: IMF, International Finance Statistics (IFS), line "rf"; Reserve Bank of India.

¹ A dual exchange rate system was created in March 1992, with a free market for about 60 percent of foreign exchange transactions. The exchange rate was reunified at the beginning of March 1993 at the free market rate.

ECONOMIC DEVELOPMENT DATAGNP Per Capita (US\$, 1993-94): 290 ^a**Gross Domestic Product (1993-94)**

	US\$ Bln	% of GDP	Annual Growth Rate (% p.a., constant prices)					
			70-71-75-76	75-76-80-81	80-81-85-86	85-86-90-91	91-92-92-93	92-93-93-94
GDP at Market Prices	250.6	100.0	2.4	3.0	5.3	6.6	4.6	3.5
Gross Domestic Investment	53.4	21.3	4.4	3.8	4.7	8.3	8.0	-3.9
Gross National Saving	52.7	21.0	4.4	2.6	3.6	8.8	4.2	1.0
Current Account Balance	-0.7	-0.3	--	--	--	--	--	--

Output, Employment and Productivity (1990-91)

	Value Added		Labor Force ^b		V. A. per Worker	
	US\$ Bln.	% of Tot	Mill.	% of Tot.	US\$	% of Avg.
Agriculture	82.5	31.0	186.2	66.8	443	46.4
Industry	78.0	29.3	35.5	12.7	2195	230.0
Services	105.7	39.7	57.2	20.5	1849	193.7
Total/ Average	266.2	100.0	278.9	100.0	954	100.0

Government Finance

	General Government ^c			Central Government		
	Rs. Bln.	% of GDP		Rs. Bln.	% of GDP	
	1993-94	1993-94	88-89-93-94	1993-94	1993-94	88-89-93-94
Revenue Receipts	1477.0	18.8	19.9	754.5	9.6	10.5
Revenue Expenditures	1864.0	23.7	23.6	1081.7	13.8	13.6
Revenue Surplus/ Deficit (-)	-387.0	-4.9	-3.7	-327.2	-4.2	-3.1
Capital Expenditures ^d	367.3	4.7	5.0	275.4	3.5	4.2
External Assistance (net) ^e	50.7	0.6	0.7	50.7	0.6	0.7

Money, Credit, and Prices

	88-89	89-90	90-91	91-92	92-93	93-94	94-95p
	(Rs. billion outstanding, end of period)						
Money and Quasi Money	2002.4	2309.5	2658.3	3170.5	3668.3	4344.1	5264.8
Bank Credit to Government (net)	973.7	1171.5	1401.9	1582.6	1762.4	2039.2	2195.9
Bank Credit to Commercial Sector	1326.6	1517.0	1717.7	1879.9	2201.4	2377.7	2878.9
	(percentage or index numbers)						
Money and Quasi Money as % of GDP	50.6	50.6	49.6	51.5	52.2	55.2	57.6
Wholesale Price Index (1981-82 = 100)	154.3	165.7	182.7	207.8	228.7	247.8	284.6
Annual Percentage Changes in:							
Wholesale Price Index	7.5	7.4	10.3	13.7	10.1	8.4	14.9
Bank Credit to Government (net)	15.4	20.3	19.7	12.9	11.4	15.7	7.7
Bank Credit to Commercial Sector	23.4	14.4	13.2	9.4	17.1	8.0	21.1

a. The per capita GNP estimate is at market prices, using World Bank Atlas methodology. Other conversions to dollars in this table are at the prevailing average exchange rate for the period covered.

b. Total Labor Force from 1991 Census. Excludes data for Assam and Jammu & Kashmir.

c. Transfers between Centre and States have been netted out.

d. All loans and advances to third parties have been netted out.

e. As recorded in the government budget.

Balance of Payments (US\$ Millions)

	1992-93	1993-94e	1994-95p	Merchandise Exports (Average 1989-90-1993-94)	
				US\$ Mill	% of Tot.
Exports of Goods & NFS	23,585	28,925	33,836		
Merchandise, fob	18,869	22,700	26,763		
Imports of Goods & NFS	26,826	29,433	37,946		
Merchandise, cif	23,237	23,985	30,333	Tea	480
of which Crude Petroleum	3,711	3,406	--	Iron Ore	515
of which Petroleum Products	2,289	2,047	--	Chemicals	1,265
Trade Balance	-4,368	-1,285	-3,570	Leather & Leather products	1,245
Non Factor Service (net)	1,127	777	-540	Textiles	1,898
				Garments	2,046
Resource Balance	-3,241	-508	-4,110	Gems and Jewelry	2,992
				Engineering Goods	2,077
Net factor Income ^a	-3,423	-4,002	-4,232	Others	4,514
Net Transfers ^b	2,773	3,825	6,200	Total ^f	17,031
					100.0
Balance on Current Account	-3,891	-685	-2,142	External Debt, March 31, 1994	
					US\$ Mill.
Foreign Investment	587	4,110	4,895	Public & Publicly Guaranteed	80,985
Official Grants and Aid	363	370	390	Private Non-Guaranteed	2,269
Net Medium & Long Term Capital	613	2,954	3,062	Total (Including IMF and Short Term)	91,921
Gross Disbursements	3,552	7,029	7,153		
Principal Repayments	2,939	4,075	4,091		
				Debt Service Ratio for 1993-94	
Other Capital Flows ^c	65	848	-594		% curr receipts
Non-Resident Deposits	2,001	940	847	Public & Publicly Guaranteed	23.1
Net Transactions with IMF	1,289	189	-1,134	Private Non-Guaranteed	1.2
				Total (Including IMF and Short Term)	26.6
Overall Balance	-262	8,538	6,458	IBRD/ IDA Lending, March 31, 1994 (US\$ Mill)	
Change in Net Reserves	262	-8,538	-6,458		
Gross Reserves (end of year) ^d	6,749	15,476	20,800		
Rate of Exchange					
				Outstanding and Disbursed	9,870
				Undisbursed	4,323
End-March 1995 ^e	US\$ 1.00 = Rs. 31.65			Outstanding incl. Undisb.	14,193
					20,088

-- Not available.

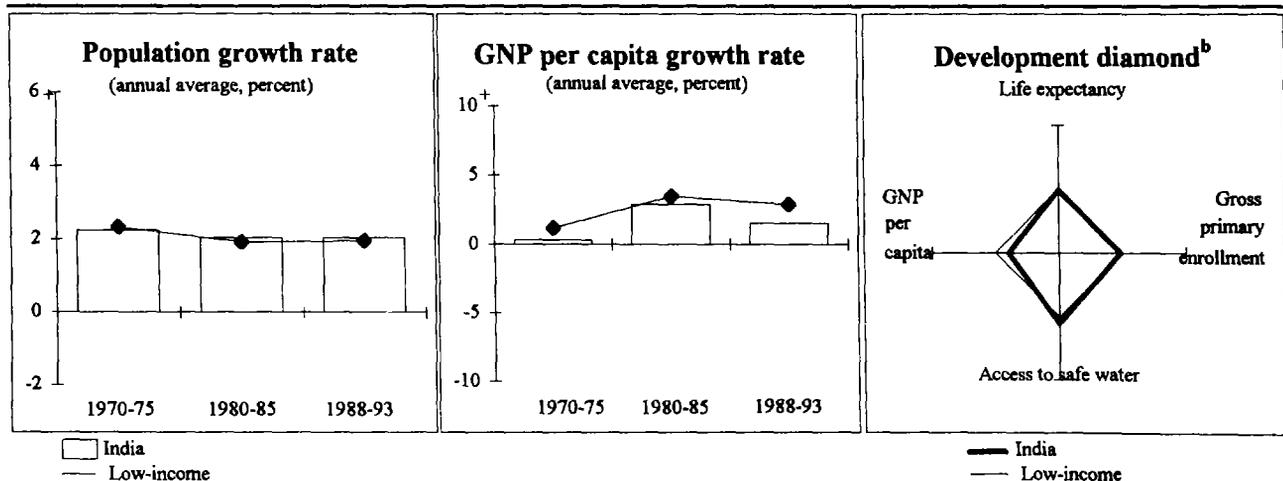
- Figures given cover all investment income (net). Major payments are interest on foreign loans and charges paid to IMF, and major receipts is interest earned on foreign assets.
- Figures given include workers' remittances but exclude official grant assistance which is included within official loans and grants, and non-resident deposits which are shown separately.
- Includes short-term net capital inflow, changes in reserve valuation and other items.
- Excluding gold.
- The exchange rate was reunified at the market rate in March 1993.
- Total exports (commerce); net of crude petroleum exports.

India

Indicator	Unit of measure	Latest single year		Most recent	Same region/income group		Next higher income group
		1970-75	1980-85	estimate 1988-93	South Asia	Low-income	
Priority Poverty Indicators							
POVERTY							
Upper poverty line	local curr.	..	..	..	..	..	..
Headcount index	% of pop.	43	..	..	28	19	..
Lower poverty line	local curr.	..	..	..	..	..	..
Headcount index	% of pop.	..	..	..	..	..	..
GNP per capita	US\$	180	280	310	310	380	1,590
SHORT TERM INCOME INDICATORS							
Unskilled urban wages	local curr.	..	..	..	..	..	..
Unskilled rural wages	"	..	..	..	..	..	..
Rural terms of trade	"	..	84	94	..	..	..
Consumer price index	1987=100	45	85	171	..	..	..
Lower income	"	..	..	..	..	..	..
Food ^a	"	27	..	..	..	..	..
Urban	"	..	83	176	..	..	..
Rural	"	..	..	..	..	..	..
SOCIAL INDICATORS							
Public expenditure on basic social services	% of GDP	..	..	..	..	..	..
Gross enrollment ratios							
Primary	% school age pop.	79	96	106	106	108	104
Male	"	94	111	118	118	116	..
Female	"	62	80	93	93	101	..
Mortality							
Infant mortality	per thou. live births	132.0	106.0	80.0	83.7	63.1	39.0
Under 5 mortality	"	..	..	122.0	123.9	101.4	61.5
Immunization							
Measles	% age group	..	..	85.8	85.8	87.3	77.6
DPT	"	..	41.0	90.2	90.2	89.9	82.2
Child malnutrition (under-5)	"	..	..	63.0	60.4	40.3	..
Life expectancy							
Total	years	50	55	61	60	62	67
Female advantage	"	-1.9	-0.3	0.1	0.4	2.1	5.9
Total fertility rate	births per woman	5.4	4.5	3.7	4.0	3.6	2.9
Maternal mortality rate	per 100,000 live births	..	460	420	420	..	..

Supplementary Poverty Indicators

Expenditures on social security	% of total gov't exp.	..	..	..	..	..	..
Social security coverage	% econ. active pop.	..	..	..	..	..	..
Access to safe water: total	% of pop.	31.0	56.3	74.5	69.5	67.0	..
Urban	"	80.0	76.0	79.0	73.8	78.7	..
Rural	"	18.0	50.0	73.0	67.2	62.0	..
Access to health care	"	..	75.0	100.0	95.8	..	..



a. See the technical notes, p.387. b. The development diamond, based on four key indicators, shows the average level of development in the country compared with its income group. See the introduction.

India

Indicator	Unit of measure	Latest single year		Most recent estimate	Same region/income group		Next higher income group
		1970-75	1980-85	1988-93	South Asia	Low-income	
Resources and Expenditures							
HUMAN RESOURCES							
Population (mre=1993)	thousands	620,701	762,875	898,200	1,193,503	3,091,764	1,096,665
Age dependency ratio	ratio	0.77	0.72	0.70	0.74	0.67	0.69
Urban	% of pop.	21.3	24.3	26.3	25.7	27.6	54.7
Population growth rate	annual %	2.2	2.0	2.0	2.1	1.9	1.6
Urban	"	3.7	3.0	3.0	3.5	3.9	2.9
Labor force (15-64)	thousands	243,481	293,193	341,460	437,138	1,442,452	459,196
Agriculture	% of labor force	71	70	..	..	..	..
Industry	"	13	13	..	..	..	..
Female	"	28	26	25	22	33	31
Females per 100 males							
Urban	number	81	88	..	..	..	..
Rural	"	96	94	..	..	..	..
NATURAL RESOURCES							
Area	thou. sq. km	3,287.59	3,287.59	3,287.59	5,133.49	39,091.96	40,682.67
Density	pop. per sq. km	188.80	232.05	267.69	227.55	77.60	26.52
Agricultural land	% of land area	60.83	60.86	60.89	59.03	52.82	39.61
Change in agricultural land	annual %	0.47	-0.07	0.03	0.00	0.03	-0.13
Agricultural land under irrigation	%	18.65	23.09	25.30	29.34	18.02	12.66
Forests and woodland	thou. sq. km	..	551.19	517.29	658.32	7,154.40	5,953.78
Deforestation (net)	annual %	..	..	0.63	..	..	..
INCOME							
Household income							
Share of top 20% of households	% of income	49	41	41	..	..	..
Share of bottom 40% of households	"	16	20	21	..	..	..
Share of bottom 20% of households	"	6	8	9	..	..	..
EXPENDITURE							
Food	% of GDP	43.6	35.3	..	..	..	..
Staples	"	20.6	12.4	..	..	..	..
Meat, fish, milk, cheese, eggs	"	6.5	7.4	..	..	..	..
Cereal imports	thou. metric tonnes	7,669	205	694	6,211	34,420	66,281
Food aid in cereals	"	1,582	304	276	1,624	8,334	5,477
Food production per capita	1987 = 100	95	104	113	111	113	101
Fertilizer consumption	kg/ha	19.3	47.0	67.5	70.2	59.9	48.0
Share of agriculture in GDP	% of GDP	36.6	29.5	28.2	27.4	26.3	15.7
Housing	% of GDP	4.4	7.1	..	..	..	..
Average household size	persons per household	5.2	..	..	..	..	..
Urban	"	4.8	..	..	..	..	..
Fixed investment: housing	% of GDP	2.3	2.8	..	..	..	..
Fuel and power	% of GDP	2.4	2.3	..	..	..	..
Energy consumption per capita	kg of oil equiv.	123	170	243	216	364	1,595
Households with electricity							
Urban	% of households	..	..	..	..	..	..
Rural	"	..	..	..	..	..	..
Transport and communication	% of GDP	4.7	5.1	..	..	..	..
Fixed investment: transport equipment	"	1.4	2.3	..	..	..	..
Total road length	thou. km	1,375	1,546	1,636	..	..	..
INVESTMENT IN HUMAN CAPITAL							
Health							
Population per physician	persons	4,958	2,515	2,446	2,850	..	3,277
Population per nurse	"	3,756	1,696	..	..	..	..
Population per hospital bed	"	1,720	1,296	1,364	1,638	1,016	604
Oral rehydration therapy (under-5)	% of cases	..	..	37	37	38	..
Education							
Gross enrollment ratio							
Secondary	% of school-age pop.	26	38	44	40	41	53
Female	"	16	26	32	29	34	..
Pupil-teacher ratio: primary	pupils per teacher	42	58	63	61	39	..
Pupil-teacher ratio: secondary	"	21	21	26	26	20	..
Pupils reaching grade 4	% of cohort	51	58	..	..	..	..
Repeater rate: primary	% of total enroll	17	..	..	..	..	..
Illiteracy	% of pop. (age 15+)	66	56	52	54	41	19
Female	% of fem. (age 15+)	..	71	66	69	53	..
Newspaper circulation	per thou. pop.	15	26	31	26	..	74

EXECUTIVE SUMMARY

The government's Economic Survey, 1994-95 (March 1995), reports and analyzes candidly and insightfully the accomplishments of the stabilization and reform efforts initiated since 1991. It also identifies several remaining challenges. That Survey is the point of departure of this Country Economic Memorandum (CEM). Chapters 1 and 2 cover recent developments and selected economic issues at the state level. Chapter 3 of this report reviews the enabling legal, regulatory and administrative framework for expanding private investment in infrastructure. Chapter 4 on Primary Education discusses the accomplishments and challenges in this extremely important area.

Highlights of Recent Developments

Four years ago in India, internal and external imbalances had reached crisis proportions. GDP growth (in 1991-92) had fallen to one percent. Investment in the most important areas of the economy was a public sector monopoly and foreign investment was negligible. The trade regime imposed pervasive licensing restrictions on imports of virtually all commodities, and extremely high import duties. The financial sector was dominated by public banks which had little commercial discretion in allocating their lending. The prudential regulations were inadequate. This made it difficult to assess the true quality of banks' portfolios or the true level of banks' profits. Financial markets were highly controlled. The tax system was based on highly distortionary taxes falling on a narrow base, and tax administration was very cumbersome.

The situation has changed dramatically since then, with further improvements during 1994-95. *While still a major obstacle to high economic growth*, the Central Government's fiscal deficit (which if not corrected would have exceeded 10 percent of GDP) was reduced to 5.9 percent of GDP in 1991-92, and 5.7 percent of GDP in 1992-93. It increased to 7.7 percent of GDP in 1993-94 against a target of 4.7 percent, reflecting revenue shortfalls and expenditure overruns. But it was reduced again to 6.7 percent of GDP in 1994-95.

The external accounts have strengthened considerably. The current account deficit contracted from 3.7 percent of GDP in 1990-91 to 0.3 percent in 1993-94. It is estimated at 0.7 percent of GDP in 1994-95. Following 20 percent growth in 1993-94, exports grew by 17 percent in dollar terms during April 1994-January 1995. Reflecting the economic recovery underway in 1994-95, imports rose sharply by 28 percent in dollar terms in contrast to a fall of one percent last year; non-oil imports (particularly imports of machinery, iron and steel) increased by 33 percent in dollar terms. The resulting trade deficit during the first ten months, at \$2 billion, was more than twice the level of the previous year. However, this was partially offset by increases in remittances. Meanwhile, foreign direct and portfolio investment flows contributed to a large surplus in the capital account and to further accretion of reserves to \$20.8 billion by end-March 1995. These reserves were equivalent to around 8.2 months of imports of goods.

At 5.3 percent in 1994-95, *growth* was the highest since the reform program started in July 1991. Growth was fastest in the industrial sector, within which manufacturing expanded by 9 percent. The capital goods sector, which had experienced negative rates of growth every year since 1991-92, expanded by 22 percent. Together with the aforementioned indications that imports of capital goods increased sharply, this suggests that investment began to recover and that industrial growth in 1994-95 was broad based.

The corporate sector appears now to be well positioned to sustain the growth recovery by investing in new capacity and competing successfully in a more liberalized environment. According to a survey of 800 companies carried out by the Industrial Credit and Investment Corporation of India, net corporate profits doubled in the first six months of 1994-95. This is explained by: (a) increased sales due to the industrial recovery--about 13 percent in real terms over the same period in 1993-94; (b) reduced interest costs as real interest rates declined and access improved to foreign capital markets; (c) lower corporate taxes; and (d) corporate restructuring.

Structural reforms have continued. In 1991, investments in most areas of the economy were reserved for the public sector. At present, there is hardly a sector from which domestic or foreign private investors are excluded. In 1994-95, with the liberalization of telecommunications and pharmaceuticals, and the further liberalization of the coal industry, the main investment restrictions remaining are for insurance and railways--the only sectors still reserved for the public sector. But even in railways, there have been efforts to involve the private sector in operations ('own-your-wagon' schemes), and maintenance (the maintenance of a number of railway stations has been contracted out). India's foreign *investment regime* now compares well with those prevailing in East Asian countries which have been successful at attracting foreign investment. In some cases, it is significantly more open than its competitors'.

Import licensing restrictions on intermediates and capital goods have been virtually eliminated. Tariffs also have been significantly reduced. For instance, the maximum *import tariff* was reduced from 85 percent to 65 percent at the beginning of 1994-95; it was 300 percent in 1990-91. In addition to reductions in tariffs below the maximum, this change brought the average tariff down to 33 percent in 1994-95, from 47 percent in 1993-94 and 87 percent in 1990-91. The 1995-96 Budget introduced further tariff reforms (such as further reducing the maximum tariff to 50 percent) which are expected to reduce the average tariff to about 27 percent. Separately, in August 1994, the rupee was made fully convertible for current account transactions and India achieved Article VIII status of the International Monetary Fund.

In the *financial sector*, barriers against the entry of private sector banks (domestic and foreign) have been eliminated, prudential regulations that meet international standards have been introduced, banks now have more discretion in their lending decisions, and financial markets have been liberalized. During 1994-95, to further improve *competition*, the authorities licensed 10 new banks, including three foreign institutions. In its Credit Policy Statement of October 1994, the Reserve Bank of India (RBI) removed the minimum lending rate applicable to commercial bank advances exceeding Rs 200,000. This was an important step in interest rate liberalization. To improve its capacity to enforce the new prudential guidelines, the RBI created a Board of

Financial Supervision which started functioning in December 1994. And as part of its strategy to strengthen and *broaden the ownership base of public banks*, the Government in 1994 provided \$3.3 billion in recapitalization to the 19 "nationalized" commercial banks directly owned by the Ministry of Finance. It also changed legislation to allow private ownership of these banks up to 49 percent of equity.

Progress likewise has been made in developing *money markets*. In March 1995, the RBI issued guidelines for creating a system of primary dealers in government securities. Together with the historic agreement (reached in 1994) between the Treasury and the RBI to phase out (over three years) the automatic monetization of the deficit, these developments established the basis for market-determined interest rates on Government paper, and for more flexible and independent implementation of monetary policy by the RBI.

Since 1991, the *tax regime* has been simplified and strengthened considerably. In the 1994-95 Budget, taxes on corporate income were unified at 40 percent, from 45 percent for widely held companies and 50 percent for others. A major reform of excises was implemented to make it more closely resemble a value-added tax and address its major problems. Meanwhile, the Government extended the coverage of MODVAT (a modified value-added tax) to include manufacturing sectors thus far excluded, and, for the first time, some services. Of particular importance also were the decisions to: (a) shift most excise rates from specific to ad-valorem to increase buoyancy; (b) reduce the number of rates; and (c) simplify the system by relying on invoices for value determination. These reforms considerably simplified and modernized India's tax system and made it possible for the Central Government to begin to focus its efforts on improving tax administration. The 1995-96 Budget further reduced peak excises. It did not reduce corporate tax rates further but it continued the emphasis on simplification, lower rates and greater buoyancy. To strengthen compliance, the authorities proposed tax deduction at source for fees for professionals, technical services and service contracts, and interest income on time deposits.

Clearly, all of the foregoing reforms, which are part of the program which has been articulated since 1991, need to be followed through to completion. *But there also needs to be a more focused effort on agriculture which historically has contributed substantially to poverty reduction.* Here the pace of reforms has been uneven and partial. The performance of agriculture still suffers from obstacles to domestic and international trade, and agro-processing. These obstacles not only limit the potential gains of a better integration of India's regional markets, but also the gains stemming from a better integration of India's agriculture with the rest of the world. Broader concerns arise from the inappropriate composition of public expenditures in the sector, particularly the large share of Central Government expenditures devoted to subsidies. One result is the inability of the public sector to contribute adequately to the needed gross capital formation in the sector. Similarly, the pace of public enterprise reform has yet to accelerate.

Selected Challenges in Economic Management

Overview. The achievements since 1991 notwithstanding, serious problems remain and the "unfinished agenda" is very challenging. From March 1994, the twelve-month inflation rate

climbed to around 12 percent--above the psychologically comfortable level of 10 percent--a level above which it remained until April 1995. As of 1993-94, total investment was about 3-4 percentage points of GDP below the level in the years just before 1991 (although gross fixed capital formation was only slightly lower). Even if private investment recovered somewhat in 1994-95, there are no indications that public sector investment did. In fact, because of its poor financial performance, the public sector does not have the resources to invest at adequate levels in public infrastructure and social services.

Public Savings. *The most important issue in current economic management in India is improving public savings appreciably and reducing the fiscal deficit.* India's private savings performance is strikingly comparable to that of Malaysia's and other successful East Asian economies. For instance, during the 1980s, it was 19 percent of GDP for Malaysia, a level which India marginally exceeded towards the end of that decade. In sharp contrast, India's public savings performance (that is, the excess of central and state government revenues over current expenditure plus the gross profits of public enterprises) has been much worse, and has been deteriorating. It was around three percent of GDP in the 1980s but has been declining since then. Now it is zero.

Correcting this situation is critical for restoring the capacity of the public sector to invest and for accommodating higher levels of private investment. Such levels of investment, particularly in infrastructure and social services, are needed to achieve and sustain rates of growth and poverty reduction comparable to high performing countries in Asia. *In addition, if the public sector savings performance is not reversed--permitting a sustained reduction in the public sector deficit--excessive monetary tightening will be required to reduce inflation. This would affect real interest rates, investment, and the necessary process of financial sector liberalization, and place India on a lower growth trajectory.*

Continuous improvements in the current account deficit of the balance of payments suggest that fiscal imbalances have not yet spilled over into the external accounts. However, this may have resulted from subdued levels of investment typical of the initial phases of structural adjustment programs and evident in India in recent years. A strong recovery would easily increase domestic investment to the levels prevailing in years such as 1990-91, and possibly higher. In this case, unless public savings increase, a strong investment recovery could have a strong destabilizing effect on the balance of payments.

Reversing the deterioration in public savings requires major improvements in the financial performance of the central and state governments, as well as public enterprises. At both the center and state levels, non-interest expenditure already has borne the brunt of fiscal adjustment and not much room is left for further reductions. At the same time, fiscal adjustment must proceed without jeopardizing public resources for human resource development and targeted anti-poverty programs. Containing food subsidies would help. This would depend, to a large extent, on effective management of the record level of stocks now in the godowns of the Food Corporation of India. Large and timely releases into the external market and the elimination of restrictions by the states on private traders' ability to hold stocks would reduce the significant carrying cost. Besides further reducing other subsidies, particularly for fertilizers, and readjusting oil prices, achieving further fiscal consolidation at the level of the Central Government will likely

need to rely on: (a) continuing the tax reform process, with full attention to improving tax administration and tax collections, extending the tax net, and increasing the role of personal income taxes (in 1992, about four million persons--equivalent to about 0.5 percent of the total population and 2 percent of the urban population--paid personal income taxes); and (b) more aggressive privatization of enterprises owned by the Central Government, primarily to improve efficiency (losses by central public enterprise are close to one percent of GDP), but also to retire debt. At the level of the states, further fiscal consolidation will need to rely on cost recovery (particularly in power and water); on strengthening tax efforts; and containing the growth of current expenditure.

Fiscal Adjustment and the 1995-96 Budget. The 1995-96 Budget of the Central Government meets only very partially the major challenge of fiscal consolidation. It aims to reduce the fiscal deficit to 5.5 percent of GDP, a significant decline of 1.2 percentage points of GDP in relation to 1994-95--mostly by contracting non-interest spending and accelerating disinvestment in public enterprises. However, some of the implicit assumptions underlying the budget may be overoptimistic. In particular, the budget assumes implicitly that: (a) the policy of monetary restraint in place since December 1994 will not significantly affect growth and thus tax revenues; (b) the recommendations of the Pay Commission will not increase expenditure on wages and salaries during 1995-96; (c) the government will be able to reduce grants and loans to the states even though general elections are due before May 1996; and (d) disinvestment of public enterprises can be accelerated in spite of the pressures typical in a pre-election year. Clearly, although possible, achieving the 1995-96 fiscal deficit target of 5.5 percent of GDP will be very difficult. But even if the target is achieved, the fiscal deficit would still need to be reduced further to stabilize interest payments on the Central Government's domestic debt, and to enable private investment to grow at the levels required to sustain more rapid growth.

Under reasonable assumptions, a deficit of 5.5 percent of GDP needs to be reduced by a further 1.5-2.5 percent of GDP to reach the government's inflation target of 5-6 percent and increase growth to 6.5 percent. In addition, with financial sector liberalization underway in India, and long-term international real interest rates projected to remain at around 4-5 percent, India's long-term real interest rates will be at least 5 percent. This implies that GDP growth rates lower than 5-6 percent will require primary surpluses just to stabilize the domestic debt in relation to GDP. Yet, the government has not been able so far to generate a primary surplus. Indeed, interest payments have claimed an increasingly large share of the Central Government's tax revenues--50 percent in 1990-91, but 70 percent in 1995-96. This means that for every Rs 1 of taxes collected, the government now has discretion over just one-third of it (before incurring a deficit). Unless this situation is reversed, the probability of the government eventually collecting taxes just to service its debt is more than marginal. If unchecked, such trends will undermine confidence in public sector financial management, with adverse consequences for India's financial markets.

These calculations capture the financial consequences of rising government debt, but the consequences for growth and development are at least equally serious. As interest payments rise, development expenditure will suffer inevitably. If the composition of expenditure is not improved

(in particular, if public savings do not increase to finance public investments with high returns), the foundation for further growth will weaken.

State Finances. Adjustments in state finances are equally important. The Central Government devolves to the states roughly 30 percent (40 percent) of the tax receipts it mobilizes (retains). In addition, the center provides loans and grants to states equivalent to about 25 percent of its total expenditures. In fact, the center has delivered over 90 percent of its contribution to plan expenditure under the Eighth Plan for the 1992-95. Meanwhile, the states have only met 28 percent of their contribution.

Over time, the indebtedness of the states to the center has increased despite periodic debt relief from the center. Because of the weak revenue performance of the states, the burden of the resulting debt service obligations to the center also has risen steadily, even though the effective interest rates on these loans have been relatively low. In response, the center has moderated the growth in its lending to states. One consequence, however, is that net loan transfers from the Central Government to the states are turning negative. Given the difficult financial position of many states, net negative loan transfers from the Central Government could weaken their ability to service their debt to the Central Government. This may have a strong impact on the Central Government revenues, even if the center is able to deduct some payments from the states at the source (of transfers).

There is also a need to review the system of transfers between the central and state governments. Traditionally, states have looked to moneys from the Central Government as the solution to their financial problems. Funds flow from the Central Government to the states through three principal channels. *First*, every five years the President of India appoints a Finance Commission, as mandated by the Constitution. This Commission makes recommendations for awarding transfers from the Central Government to the states from certain taxes collected nationwide, as well as grants. A major objective of the Finance Commission is to ensure broadly that the revenues collected are allocated between the Central Government and states in a way that enables each to carry out the public service responsibilities assigned to them under the Constitution. In keeping with this objective, Finance Commissions also seek to leave states with a surplus on recurrent account to assist in financing their capital expenditures. Transfers via the Finance Commission declined from 65 percent during 1969-74 to 58 percent of the total Central Government transfers to the states in 1992-93 because funds via the other major source increased much faster. That *second* but important channel through which the Central Government provides funds to the states is the allocations authorized by the Planning Commission for economic and social development. In recent years, about 50 percent of state deficits has been financed in this manner. *Third*, the Central Government has direct or indirect control over the way in which the remainder of these deficits is financed.

The current system may be discouraging fiscal discipline. The current system of intergovernmental transfers presents several problems of which the following are examples. *First*, because Finance Commissions traditionally have sought to fill the revenue shortfall of states, the latter have had little incentive to strengthen their effort to improve their revenues, for instance, through taxation or better cost recovery. *Second*, there is evidence at the aggregate level that

funding (including loans) for projects approved by the Planning Commission is spent, at least in part, on recurrent expenditure items. *Third*, in keeping with its regulations, the Planning Commission authorizes funding for the operating as well as the capital costs of new state programs for the first five years from their inception. This funding, which typically is 30 percent grant and 70 percent loan, encourages states to initiate new programs even when additional own revenue cannot be mobilized to finance the associated recurrent costs. The cumulative effect of this heavy subsidization of incremental programs has been to foster employment and expenditure growth, and weaken fiscal performance. *Fourth*, periodic Central Government loan forgiveness and refinancing, without conditionality, have created the expectation of future debt relief. Such relief has undermined financial discipline as an incentive for creditworthiness.

As the resources of the center have tightened, making the levels of transfers to states vulnerable, there is encouraging evidence that the dependence on transfer-based solutions may be changing. Some states are taking initiatives to improve their revenue and better manage their expenditures. Some states have even found ways to begin to address politically sensitive but important fiscal reforms. *Examples include the strengthening of property taxes (Andhra Pradesh); more efficient provision of public services (several states) involving private sector participation; and public enterprise reform (Uttar Pradesh).* It is especially welcome that many initiatives address the revenue side of the budget. Often in the past, most of the burden of adjustment has fallen disproportionately and almost entirely on (non-interest) expenditures.

Broader efforts are needed. However, a much broader and uniform reform effort within and across states is needed. Issues such as the unsustainable indebtedness of states, insufficient cost recovery, inadequate provisions for non-wage operations and maintenance (O&M), and the heavy burden of the wage bill, all remain to be addressed in most states.

An encouraging sign for reforming intergovernmental fiscal relations is the recent report submitted by the Tenth Finance Commission (TFC). The TFC has proposed a number of innovative and bold measures. The recommended move towards a mandated system of sharing the total tax revenue collected by the center (the proposed ratio is 71:29 between the center and the states), would contribute towards strengthening incentives for enhanced tax collection by the Central Government because it would reduce the Central Government's relative neglect of taxes shared with the states. The recommendation, tying debt forgiveness by the Central Government (of debts owed by the states) to better fiscal performance by states is a step in the right direction. So too is the proposal to also tie such forgiveness to the use by states of their privatization proceeds to retire their debt.

The Planning Commission, which at the conceptual level plays the role of a development bank, needs to make efforts to ensure that the transfers it authorizes are used for the intended purposes and that borrowed resources are utilized only for such expenditures that yield a return adequate to meet the cost of borrowing. Options for rationalizing its transfers could include: (a) doing away with the fixed (70 percent for major states) loan component of central assistance to state plans, and replacing this with specific purpose loans advanced on the basis of repayment capacity, with generous provision of technical assistance, particularly for states with weak implementation capacity; and (b) replacing the current system of thinly spread central resources

across many central schemes (covering all states and monitored by different central ministries), with a much smaller set of well targeted redistributive transfers focused on the needy states and monitored by the Planning Commission.

External Sector Management. Over the last two years, the challenge has been to prevent surpluses in the capital account from causing the nominal and real exchange rates to appreciate, and thereby, reduce export growth. The RBI has maintained the nominal exchange rate (in theory a float) constant at Rs. 31.37/US\$ by purchasing all excess foreign exchange at that rate. Foreign exchange dealers believe that in the absence of such interventions, the nominal exchange rate and thus also the real would have appreciated, probably by 20 percent. This would have prevented the rapid expansion of exports witnessed in the last two years. Nevertheless, the authorities are concerned over the impact of the exchange market interventions on the money supply, and thereby on inflation, the real exchange rate and export performance.

There has been no noticeable impact on exports yet mostly because of the depreciation of the US\$ vis-a-vis other currencies, and the reduction of the anti-export bias implicit in high tariffs. The authorities also have responded to capital account surpluses with several new measures. Guidelines stipulate that Indian firms should raise money abroad only for physical investment projects, and bring those funds on shore only when a clear use for them exists. Deposits by non-resident Indians (NRIs) have been made less attractive and their growth thus has been contained. Together with recent increases in US interest rates and adverse developments in emerging markets, these measures have helped to bring inflows to more manageable levels in recent months. It is evident, however, that the impact of developments in the capital account on the competitiveness of the real exchange rate and export growth will continue to be an area of concern for some time. The stance on fiscal policy, and its impact on interest rates will be a factor in determining the magnitude, direction and composition of the capital inflows.

If inflows return to the 1993-94 level, more active management of the capital account may be necessary. International experience indicates that the basic long-term strategy for managing capital inflows should be to increase the economy's capacity to absorb and allocate them efficiently to high return investments through market-based mechanisms. However, in the short-term, capital inflows, particularly if they may be reversed, can complicate domestic macroeconomic management. While the authorities have not articulated formally their policy stance on the capital account in the short- to medium-term, a number of policy statements and recent decisions suggest that the authorities intend to follow a three-pronged approach to managing inflows which seems appropriate to India's current circumstances: (a) relaxing some restrictions on capital outflows--the authorities have already relaxed conditions governing India's investment abroad and rules regarding the timing of repatriation of export and loan proceeds, and further steps in this direction are possible; and (b) introducing further prudential regulations on inflows. The last prong, as suggested by the RBI's Annual Report for 1993-94, is: (c) "[a]s part of the use of fiscal adjustment to neutralize the capital inflows, taxation of the capital inflows to discourage the inflows and to also bridge the fiscal gap." The RBI rightly argues for use of this instrument "... only if the capital inflows accelerate and other instruments are unable to contain the expansionary effects of the inflows."

Obviously, the overall management of the balance of payments will need to be calibrated to reflect domestic and external developments, some of which may be totally exogenous. Specifically, although the external accounts have improved since 1991 and remain manageable, several challenges may lie ahead. *First*, in spite of the more inviting approach towards foreign investors adopted in recent years, domestic oil production (40 percent of national consumption at present) will level off towards 1998 and oil imports will consequently increase rapidly thereafter. *Second*, of India's \$96 billion external debt (which includes \$4 billion of short-term debt), about \$24 billion is due to be repaid in the next four years with a peak of roughly \$7 billion in 1996-97. This is in addition to the rollover of the short-term debt and the rollover of NRI accounts. Added to the financing requirements of the current account deficit, this means that over the next four years India will need to mobilize about \$40 billion of external finance--excluding the rollover of short-term debt and NRI accounts.

Third, NRI foreign currency accounts continue to be a potential source of pressure since, in theory, they can be withdrawn on demand, subject to a small penalty, and create some vulnerability. *Fourth*, while India has enjoyed an unprecedented sequence of good monsoons the probability of a bad one has not changed. *Fifth*, recent developments in emerging capital markets have highlighted the macroeconomic turbulence that sudden changes in market sentiments can bring about. These vulnerabilities are tempered by India's strong liquidity position--\$20.8 billion of reserves versus short-term liabilities (including NRI deposits with remaining maturities of less than one year) roughly half that. In addition, portfolio investment in India has taken place in instruments that are costly to reverse. All this makes capital flight more costly and less likely, but cannot prevent it. International experience indicates that it would be ill-advised to attempt to prevent the exchange rate from depreciating were outflows to occur. At the same time, as *the authorities continue careful and cautious management of the balance of payments, improved access to concessional donor funding would be helpful.*

Poverty. The poverty reduction strategy of the authorities has two pillars. According to the Eighth Development Plan, the first pillar is "...increasing the productive employment opportunities in the process of growth itself." The second pillar is "... human resource development comprising better health and nutrition," with education as "... the catalytic factor." The strategy allows a supplementary role for "... specific poverty alleviation programs..." for sections of the population bypassed by the process of growth. In implementing this strategy, the Central Government in its 1995-96 Budget redoubled its efforts. While re-iterating that significant and sustained reduction in poverty could only be achieved through broad-based growth, the 1995-96 Budget introduced new anti-poverty programs. They include new schemes which direct the commercial banks to provide credit to small scale units, scheduled castes and tribes, enterprises in backward regions, and state governments to complete ongoing rural infrastructure projects.

The return of inflation to double digits raised concern in India over the impact of the economic program on the poor. International experience, and research on poverty in India up to the late 1980s, all suggest that inflation affects the poor adversely. However, no clear answers are possible at this stage about the more recent period in India. Since 1991, conditions known generally to be favorable and unfavorable to the poor have evolved. At present, about 80 percent

of India's poor reside in rural areas and their welfare is closely tied to the performance of the agricultural sector. Annual growth in the agricultural sector averaged 3.5 percent since 1991-92, when it contracted by 2.3 percent. Employment creation has accelerated also. The recent Economic Survey (1994-95) indicated that employment increased twice as fast between 1992 and 1994 than during 1985-92, at a rate of 6 million new jobs a year. In 1994-95, employment grew by approximately 7.8 million. Prior to the reforms initiated in 1991, industrial policies provided high effective protection for capital intensive manufacturing sectors. This had resulted in a four-fold decrease in the labor intensity of manufacturing during 1960 and 1986.

In addition, the Government has made deliberate efforts to ensure that the burden of fiscal adjustment does not fall on social programs that benefit the poor. Total central and state fiscal expenditures on anti-poverty programs approached 2 percent of GDP over 1992-93 to 1994-95. State spending on social services has remained largely unchanged at around 5.3 percent of GDP since 1991-92. The Central Government also has maintained or increased its expenditures on basic social services, particularly for those that have a strong impact on the poor's human capital development and living standards. Spending on disease control programs rose by 44 percent between 1992-93 and 1994-95, and is projected to increase by 17 percent over 1995-96. Expenditure on individual disease control programs was much higher than the aggregate. Spending on Tuberculosis, Leprosy Control, and Trachoma and Blindness programs rose by 59, 169, and 100 percent respectively over 1992-95.

Greater investments in human resources--and especially primary education--are essential for both generating higher rates of growth and reducing poverty in India. This will require a shift in public resources to the social sectors and within the social sectors, to provide basic social services. It will also require more effective implementation of India's social sector and anti-poverty programs. Given the importance of the states in the delivery of such services, the *failure to correct fiscal and institutional problems at the state level will jeopardize over time the capacity of the governments to provide the poor with the physical health, skills and opportunities needed to benefit from the growth process*. In this context, it is especially worrying that recent efforts include only limited attempts to improve the administration of existing programs. In addition, requiring that the banking sector fund some of the new anti-poverty initiatives, albeit from the shortfall in its priority sector lending, is a small step in the wrong direction.

Reducing poverty is unquestionably the most critical--and complex--development challenge that India faces. The structural reforms are an important step in establishing the enabling environment for more rapid poverty reduction by opening up the way for more rapid job growth. And the heightened attention to basic social services also points to a more favorable climate for poverty reduction. But more is needed on both fronts to establish the framework for accelerated poverty reduction. As indicated earlier, here a critical step is to extend the reform effort to the agricultural sector.

Selected Sectoral Issues

Overview. Along with the challenge of sound macroeconomic management comes the need to address issues brought to the forefront following progress in the earlier rounds of policy

reforms. Unless there is improvement in infrastructure--power, roads, irrigation and water, and telecommunications--and adequate investment in human capital development, India will not be able to achieve its medium- and longer-term objectives of higher and sustained rates of growth and poverty reduction.

Inadequate power supply is a well-known constraint to industrial growth. The Eighth Development Plan proposed 30,000 MW in new generating capacity over the planning period but only 20,000 MW is likely to be added. There is also: (a) continuing under-investment in transmission and distribution which will reduce the impact of any new generation capacity installed; and (b) insufficient advance preparation for new projects that would fall under the Ninth Development planning period. In consequence, power shortages have been a serious and recurring problem, and may continue for several years to come. At 50 percent, the share of India's paved roads is lower than it was in Malaysia (85 percent) and Thailand (67 percent) in 1971--a comparison that ignores the severe problems of congestion on India's roads. Meanwhile, in nearly all states irrigation networks, which had a major impact on agricultural growth and helped the sector to lead the reduction in rural poverty during the 1980s, are deficient and deteriorating. At present, telephones per 100 persons in India (around 1) are much fewer than in Korea (4) and Malaysia (2.5) in 1975, and well below what is needed.

Among social services, primary education stands out as an investment that is crucial for improving the country's human capital stock. Consistent with international experience, the authorities believe that human capital development is necessary to provide a vibrant modern economy with a labor force that has the requisite basic skills. They also recognize that it is equally important that individuals, at the very least, have requisite basic skills that would enable them to take full advantage of opportunities present in an expanding economy to grow out of poverty. But although a number of attempts have been made to make more resources available for primary education, public expenditures remain inadequate. This reflects the tightness of the Central Government's budget, the weakness of state finances, and ultimately, the paucity of public savings.

A strong case already has been made for improving the overall capacity of the public sector to invest in these areas by improving public savings and reducing fiscal deficits at the center and state levels. A number of other issues pertaining to these sectors also warrant attention. Two of the most important and related issues, pertaining variously to power, roads, irrigation and telecoms, are highlighted briefly below. They are: (a) redefining the role of government (central and state) in some cases; and (b) providing an appropriate legal, regulatory and administrative framework for private investment which must now assume the dynamic economic role played by public investment for over four decades. This summary is followed by a brief overview of selected issues in primary education.

Redefining the Role of Government. Like most key areas of infrastructure, the public sector dominated *power generation and distribution*. State governments own the State Electricity Boards (SEBs) and other power companies which together generate 75 percent of India's electricity supply and distribute more than 95 percent of it. Although SEBs have considerable operational and managerial autonomy under the Electricity Act of 1948, in practice

they must obtain state government approvals, often at the highest level, for the most important business decisions, including tariff adjustments. Such permission is seldom granted. As a result, most SEBs have been in a precarious financial situation for some time and have become a large financial burden on state finances, with subsidies equivalent to at least 1.5 percent of GDP. Addressing these issues requires more than a one time increase in tariffs. As the Government of Orissa is demonstrating, it requires changing fundamentally the role of the public sector, including: (a) privatizing power generation, transmission and distribution; (b) depoliticizing tariff adjustments and other major business decisions in the power sector; and (c) introducing competition. Several other state governments also are beginning the process of power sector reform.

To re-invigorate the power sector, the Electricity Act of 1948 was amended in September 1991 to permit private domestic and foreign investment. Many investors have come forward. However, they have sought counter-guarantees from the Central Government because the SEBs with whom they must deal are not considered to be bankable risks, and progress in reforming most of them has been slow. The Central Government understandably has been reluctant to provide counter-guarantees for power investments. The reasons are the dilution of accountability by the states and SEBs, and the potentially large contingent liabilities this creates for the Treasury. Indeed, after considering counter-guarantee for the first eight private power sector projects under the new legislation (at a potential cost of 1.3 percent of GDP per year), the Central Government recently announced that it will discontinue the policy. This is a welcome decision. Clearly, it needs to be followed by measures by states such as timely tariff adjustments and the extension of private participation beyond generation to transmission and distribution (as is contemplated in Orissa).

State Public Work Departments (PWDs) and small labor-intensive road constructors, who have monopolized *road* planning, design and construction in India for decades, do not have the capacity to build the expressway capacity now needed for the high density corridors. Many of the single and one-and-a-half lane state and major district roads need also to be upgraded to good two lane roads. To overcome the capacity constraints of PWDs, private professional engineering firms should be contracted to investigate and design large costly sections of road suitable for construction by machine intensive methods alone. Large contractors should be mobilized also. They should provide the full range of the requisite financial, managerial and engineering skills. In addition, they should have the capacity to supply equipment and material for rapid high standard road construction. Construction supervision would be undertaken by private professional consulting engineers representing the client PWD. These consulting engineers, many of whom will have to come from abroad initially to fill the skill gap locally, also would be responsible for the equitable treatment of the contractors through contract interpretation and progress payments.

The more machine intensive and efficient approach to high density road building will require downsizing in-house PWD engineering staff, especially those involved in the construction of main roads. This would be consistent with a smaller but very important role for state PWDs as the planner, administrator and maintainer of roads. The private sector would investigate and design roads, supervise construction and maintenance, and supply material and equipment. Such a division of responsibilities is common to developed countries and generally is very efficient.

In the *irrigation and water sector*, the challenge here involves both a redefinition of roles among governmental entities, as well as vis-a-vis the private sector. In India, planning, allocation and management of water resources are conducted at the state level with minimum recourse to price signals. State Irrigation Departments take the lead role in the sector, since irrigation is the largest user of water. Planning and management of water resources should be conducted along river basin lines and be based on the appropriate pricing of water, and encompass all users of water--urban, industrial, power and agriculture. This presents an additional level of complexity in the Indian context since river basins rarely fall neatly within existing state boundaries. In addition to negative externalities, the lack of coordination creates serious conflicts among water users. While some success in harmonizing inter-state riparian development has been achieved through cooperation and specific tribunals (for instance, in the sharing of Narmada, Krishna and Subernarekha waters according to tribunal awards), agreement is lacking or requires clearer definition in a number of basins. One example is the highly contentious inter-state dispute among Tamil Nadu, Karnataka and Kerala regarding the waters of the Cauvery, which has remained unresolved since 1974.

The Legal, Regulatory and Administrative Framework for Private Investment in Infrastructure. India's legal system--that is, its legal doctrines, instruments and institutions--is adequate to facilitate the objectives of the on-going economic reform program, including private sector investment in infrastructure. However, there is room to enhance the capacity of the system to support reform objectives by: (a) improving the efficiency of the administration of justice by measures such as providing an efficient legal information system; and, particularly for infrastructure, by (b) adjusting a limited number of specific laws affecting labor, taxes, land, the regulation of utilities and dispute settlement.

As India seeks to attract private investment in key areas of infrastructure --particularly, *power, transport and telecommunications--appropriate regulatory and administrative arrangements will be required.* These requirements will vary across sectors, and within sectors.

As a concurrent responsibility of the center and states, power sector investments require an enabling framework at both levels of government. Private investors face uncertainties in the governmental approval process because reasonably precise guidelines for approval are unavailable. Until recently, the process of inviting and assessing investment proposals was by memoranda of understanding, not competitive tendering. Compounding this situation has been a general lack of coordination among the various central and state level agencies involved in the process. Lack of reform of most SEBs has been a further, and possibly the major source of uncertainty. Haryana, Orissa and Uttar Pradesh are at various stages of developing or implementing reforms, Orissa being the most advanced; Rajasthan and Bihar will soon launch restructuring studies. And the World Bank, in response to a request by the Government of India, is developing a program for the use of World Bank guarantees in support of private investments in the power sector. Thus far, the proposed scheme, which would be contingent on the development of an overall framework that would ensure sectoral viability, is the only alternative to counter-guarantees that takes a long-term view of the problem.

In *trucking*, which has been deregulated substantially since the late 1980s, concerns focus on impediments to competition and efficiency arising from the way relevant laws are administered, not from the laws themselves. Police checkpoints and octroi (tax) collections before entering cities cause long waiting periods. Custom and port rules are a problem also for multimodal freight services which seek to provide door to door transportation for containerized cargo. Meanwhile, India's Multimodal Transport Document Rules are being reworked to meet internationally acceptable standards, particularly in its assignment of liability to carriers. Separately, Rajasthan, Tamil Nadu, Punjab and Madhya Pradesh have enacted legislation to permit tolls on *bridges, highways and overpasses* as part of their efforts to attract private sector participation in the development of this infrastructure. At the national level, the National Highway Authority (NHA) was re-constituted from February 1995, although its staffing needs are yet to be met adequately. As the nodal point for build-operate-transfer (BOT) operations in India, NHA plans to assist private investors in obtaining clearances from sub-national governments. In addition, the Government of India recognizes that land acquisition usually takes a long time. Accordingly, as already demonstrated for some projects, the Government is prepared to use the emergency provisions under the Land Acquisition Act (1894) to acquire land for projects pending final settlement of compensation. In the case of *ports*, where legal impediments are perceived to exist, the private sector has obtained more liberal policies under existing legislation.

In liberalizing the *telecommunications* sector, the Government of India has announced steps to assure transparency in the evaluation of potential new entrants and has indicated that it is establishing an independent Telecom Regulatory Authority. This Authority will be responsible *inter alia* for fixing tariffs, interconnect charges, resolution of disputes between licensees, and redressal of customer grievances. At present, the single most important issue for the sector is completing the establishment of the Regulatory Authority. This will: (a) reduce the bidding risks which result from the uncertainty related to tariffs, interconnection agreements and conditions of the license; and (b) enable the regulator to begin the necessary and unavoidable process of introducing, testing and refining the appropriate mechanisms for overseeing what could become one of the most complex telecommunications sectors in the world. In addition, time will be needed to develop and pass the necessary legislation. There is also a need to create an arms length relationship between the Department of Telecommunications' (DOT's) operational role, and the government's responsibility for making policy decisions and awarding licenses. This would free DOT to concentrate on preparing for competition and would also help to level 'the playing field' for DOT's competitors.

Primary Education. Adequate human capital development, especially a solid foundation in primary education, is essential for individuals to be able to participate fully in the growth process. In turn, such participation not only helps to achieve higher growth, but also to sustain it and reduce poverty by ensuring that the benefits of economic prosperity are distributed reasonably equitably. This said, primary education is especially vulnerable to the current fiscal problems, especially at the state level. Of all the services provided by state governments, education invariably consumes the largest proportion of the revenue budget. And primary education in turn consumes the largest proportion of the education budget. This is welcome because primary education also increases the effectiveness of investments in other services such as health and nutrition.

The Indian authorities expanded primary education and attained high gross enrollment rates in the 1980s. In addition, a substantial national reform effort was launched in 1992 by the Central Government--under the National Policy on Education of 1986 (as amended in 1992)--to address some of the financial and institutional weaknesses facing the sector. However, enormous challenges lie ahead. Universal primary enrollment will be achieved late in comparison with countries that have grown out of poverty quickly. And while most children enroll at the beginning of primary school, more than half of the rural students drop out before completing the cycle because of the poor quality of schooling and the pressures of poverty. Among those who drop out as well as those that stay, learning achievement is low. Furthermore, gender and caste disparities remain on most educational indicators despite some progress in reducing them. Wide disparities also exist between and within states.

The essential challenge for education authorities at the central, state and district levels is to improve the quality of education in rural primary schools. A three-pronged strategy is recommended for achieving this objective: (a) selecting the most cost-effective strategies; (b) increasing state financing; and (c) maintaining an effective and efficient Central Government role over the medium-term. This will require building on what is known about what affects learning. In India: (a) school factors that are associated with higher learning achievement vary by location; (b) the teachers' subject knowledge is more critical than years of pre-service training, and despite the relatively high level of formal education of teachers, many lack a strong foundation in the subject they are teaching; (c) even modest teaching tools--such as textbooks, libraries, and classroom instructional materials are significant determinants of achievement; and (d) some popular investments do not enhance primary education.

Given the role of location-specific factors in educational achievement, the government launched the District Primary Education Program (DPEP) in 1993. This is the most intensive effort to date by the Central Government to increase enrollment, retention and the quality of primary education. Through the program, the Government provides grants to states equivalent to 85 percent of the cost of approved investments, with the states providing the balance. Investment is targeted to districts with below average female literacy rates. Emphasis is placed on investments in the quality of primary instruction, including teacher in-service training, improved teaching learning materials, improved school facilities and strong community participation. Only a limited amount of new school construction is financed. In addition, DPEP differs from other centrally-sponsored schemes in ways which encourage careful project selection, performance-based resource allocation, and tangible results on the ground. This is a sound approach and a welcome beginning.

The next step toward greater cost-effectiveness in primary education could be taken by further expanding the on-going research effort to identify the actual implementation costs of interventions and systematically evaluating their on-the-ground impact over time. The DPEP monitoring and evaluation framework has considerable promise in this regard, but to realize the potential benefits, present objectives for capacity building at the national and state levels will remain a high priority.

Over the past two years, the Indian authorities--both at the center and state levels--frequently have reiterated their intention to ensure that the public resources for education increase to 6 percent of GNP over the period of the Ninth Plan (1997-2002). In 1992-93, total public expenditures on education, widely defined, was equal to 3.9 percent of GNP. This compares with 4.2 percent in 1989-90. Thus, both the center and the states need to increase significantly their allocations to the sector if universal primary education is to be achieved by the end of the Ninth Plan (1997-2002). As noted in this report, current fiscal trends indicate that this will be a major challenge unless the fiscal performance of the public sector improves substantially.

Recent attempts by the Central Government to raise expenditures in elementary education, by shifting its own priorities away from higher education and utilizing external sources of funding, have not been equally matched by the states. Expenditure on overall education by states as a group declined from 3.31 percent of GDP in 1989-90 to 3.05 percent in 1992-93 but rose in 1993-94 to 3.12 percent of GDP. This spending varied considerably among states. Moreover, as of 1992-93, about 97 and 96 percent of the government's expenditures in lower and upper primary education respectively were being spent on salaries. Notwithstanding their contribution to learning achievement, libraries, equipment and furniture received only 0.2 percent of the total. Clearly, additional resources will be required across all states, both to maintain or increase levels of access and to improve learning quality, retention and achievement. In turn, this will require major improvements in fiscal performance at the state level.

External Financing

Reflecting the remarkable improvement in India's external accounts in 1993-94, the last economic report presented to the India Development Forum (IDF) indicated that no additional fast-disbursing assistance needs were foreseeable at the time. The assessment of this report is the same. However, although the economy's capacity to attract private foreign investments has improved markedly, continued access to "high quality" long-term assistance, including a substantial concessional component--focused on spending for human resource development, small-scale agriculture, management of the environment and anti-poverty programs--remains critical. Last year, the bilateral and multilateral participants in the IDF responded to this need with pledges totaling \$6 billion. Although this was lower than the \$7.4 billion pledged the year before, the share of concessional commitments was 40 percent compared to 30 percent one year earlier.

At the same time, the government has taken steps to speed up its utilization of bilateral and multilateral assistance. They include: (a) advance release of funds to state governments; (b) disintermediation by the Center of loans to public enterprises; (c) adopting streamlined procedures for awarding contracts and procurement; and (d) creating a central Project Management Unit in the Department of Economic Affairs, Ministry of Finance, for better portfolio management and project implementation. As a result, India's disbursement ratio moved up from 10 percent in 1992-93 to 12 percent in 1993-94, with a further improvement to 19 percent during of 1994-95.

A key concern of this report is that investment in the economy is still well below the levels needed for India to grow at rates comparable to the high performing Asian economies. The

private sector continues to show a strong interest in investing in a number of areas of infrastructure, particularly in power and telecommunications. However, the scope for private investment in some key areas is very limited. Furthermore, necessary public investment in this and other strategic areas--including rural infrastructure, medium and major surface irrigation systems, and social services--has been minimal in recent years. Evidently, such investments are crucial for sustaining the economic recovery and equipping the poor to participate in the growth process.

The Bank, therefore, is of the view that support for these public investments, especially in the social sectors, should guide the deployment of available assistance. In this context, the members of the IDF should aim once again for "high-quality" official development assistance; that is, funding for sustainable development which directly supports priority public investments or catalyzes complementary private investments. Such assistance should be timely. It should also bear terms which are competitive and suited to the financial returns expected from the investment.

1

RECENT ECONOMIC DEVELOPMENTS: ACHIEVEMENTS AND CHALLENGES

INTRODUCTION

India has seen changes in domestic policies that have fundamentally altered its development strategy. Four years ago, internal and external imbalances had reached crisis proportions. Investment in the most important areas of the economy was a public sector monopoly and foreign investment was negligible. The trade regime imposed pervasive licensing restrictions on imports of virtually all commodities and extremely high tariffs. The financial sector was dominated by public banks which had little commercial discretion in allocating their lending. The prudential regulations were inadequate and made it difficult to assess the true quality of banks' portfolios or the true level of banks' profits, and financial markets were highly controlled. The tax system was based on highly distortionary taxes falling on a narrow base and tax administration was very cumbersome.

This situation has changed dramatically since then. While still a major obstacle to high economic growth, fiscal imbalances of the Central Government have been stabilized. The external accounts have strengthened considerably. Now, there is hardly a sector from which domestic or foreign private investors are excluded. Import licensing restrictions on intermediates and capital goods have been virtually eliminated, tariffs have been reduced significantly, and full convertibility has been established for current account transactions. In the financial sector, barriers against the entry of private sector banks (domestic and foreign) have been eliminated, prudential regulations that are on par with international standards have been introduced, banks now have more discretion in their lending decisions, and financial markets have been liberalized. Similarly, the tax regime has been simplified and improved markedly. And at 5.3 percent in 1994-95, GDP growth was much better than in stabilization and reform experiences elsewhere in the world and the highest since the reform program started in July 1991.

This said, and as amply discussed in the Ministry of Finance's annual report on the economy (The Economic Survey), developments in 1994-95 indicate also that serious problems remain and that the 'unfinished agenda' is very challenging.

On the macroeconomic front, notwithstanding some progress in stabilizing fiscal imbalances, the Economic Survey highlights that the public sector savings performance has continued to deteriorate. As discussed in this Chapter, without substantial improvements in public savings, the economy will not be able to accommodate higher levels of investment—public and private, physical and social—needed to accelerate and maintain growth, and reduce poverty. In addition, unless the public sector savings performance is improved significantly, monetary policy will bear the brunt of inflation reduction. This may affect real interest rates and investment and place India on a lower growth trajectory. Reversing this trend requires major improvements in the financial performance of

the central and state governments, as well as public enterprises. Finally, on the external front, the authorities will need *to continue to manage potentially volatile capital flows to ensure that they do not introduce instability within the real economy.*

On the structural side, the program launched in 1991 needs to be followed through to completion, with a more focused effort on agriculture which historically has contributed substantially to poverty reduction and for which the pace of reforms has been uneven and partial. Also, in an economy which was driven for four decades by increases in public investment, maintaining dynamic growth requires a dramatic increase in private investment in infrastructure. This will only be possible if the authorities address a number of specific legal, regulatory, and administrative issues which are now inhibiting private investment in infrastructure. Resolving these issues in many cases will depend on actions by state governments.

Chapter 1 of this report discusses the macroeconomic issues highlighted above as well as the main recent economic developments. Chapter 2 examines state-level financial and sectoral reform issues. Both are extremely important to improve public sector savings performance and enable the states to play the developmental role in the provision of key infrastructure and social services. One such service--primary education--to which the government has given special attention in the recent past, is the subject of Chapter 4 of this report. Meanwhile, Chapter 3 examines the legal, regulatory and administrative issues that need to be addressed if private investment is to flow into key areas from which it was excluded until recently.

RECENT MACROECONOMIC DEVELOPMENTS

The Fiscal Outturn

Reduction of fiscal imbalances has been a major objective of government policies since the start of the stabilization and reform program in July 1991. Substantial progress was made in the first two years mostly as a result of a contraction in non-interest spending. The Central Government's fiscal deficit, which if not corrected would have exceeded 10 percent of GDP, was reduced to 5.9 percent of GDP in 1991-92, and 5.7 percent of GDP in 1992-93. However, it increased to 7.7 percent of GDP in 1993-94 against a target of 4.7 percent (Tables 1.1 and 1.2). This was the result of expenditure overruns and a tax revenue shortfall due to stagnant industrial output. Imports were lower than expected and consequently, revenues from excises and import tariffs were one percent of GDP below the budget forecast. Considerably stronger external accounts suggested, however, that fiscal imbalances were not a short-term threat to macroeconomic stability. Thus, the government decided to moderate the pace of fiscal adjustment to stimulate the economy and set a relatively modest fiscal deficit target of 6 percent of GDP for 1994-95. In addition, the authorities introduced a wide range of tax measures aimed at reducing the user cost of capital.

Table 1.1: Selected Central Government Finances, 1990-96
(percentage of GDP)

	90-91	91-92	92-93	93-94	94-95 BE	94-95 RE	95-96 BE
A. Revenue	10.3	10.7	10.5	9.6	9.4	9.7	9.7
Tax revenue	8.1	8.1	7.7	6.8	6.9	7.1	7.1
Corporation tax	1.0	1.3	1.3	1.3	1.4	1.5	1.5
Income tax	1.0	1.1	1.1	1.2	1.2	1.2	1.3
Excise duties	4.6	4.6	4.4	4.0	4.0	4.1	4.1
Customs	3.9	3.6	3.4	2.8	2.8	2.9	2.8
Other	0.3	0.4	0.5	0.3	0.2	0.2	0.2
Less: States' share	2.7	2.8	2.9	2.8	2.7	2.7	2.8
Non-tax Revenue (Interest receipts)	2.2 1.6	2.6 1.8	2.9 1.8	2.8 1.9	2.6 1.8	2.6 1.8	2.5 1.8
B. Revenue expenditure^a	13.8	13.4	13.2	13.8	13.0	13.5	13.1
Interest payments	4.0	4.3	4.4	4.7	5.0	4.8	5.0
Subsidies	2.3	2.0	1.7	1.6	1.0	1.4	1.2
Food	0.5	0.5	0.4	0.7	0.4	0.6	0.5
Fertilizer	0.8	0.8	0.9	0.6	0.4	0.6	0.5
Others	1.0	0.7	0.4	0.4	0.2	0.3	0.2
Defense	2.0	1.9	1.7	1.9	1.8	1.8	1.7
Grants to states	2.6	2.7	2.5	2.7	2.1	2.3	2.1
Wages and salaries	2.0	1.9	1.8	1.9	1.7	1.7	1.6
Other	0.8	0.6	0.9	1.0	1.3	1.5	1.5
C. Capital expenditure	2.3	1.9	1.8	1.7	1.5	1.7	1.4
Defense	0.9	0.8	0.8	0.9	0.7	0.8	0.7
Economic Services	1.3	0.9	0.9	0.7	0.6	0.7	0.5
Others	0.2	0.2	0.2	0.1	0.2	0.2	0.2
D. Gross Loans	3.7	2.9	2.4	2.6	2.1	2.6	2.0
to states	2.6	2.0	1.7	1.8	1.5	2.0	1.6
to PEs	0.7	0.6	0.4	0.6	0.4	0.5	0.4
Others	0.5	0.3	0.2	0.2	0.1	0.1	0.1
E. Repayment of loans	1.1	1.0	0.9	0.8	0.7	0.7	0.6
F. Net lending (D-E)	2.6	1.9	1.4	1.8	1.3	1.9	1.4
G. Disinvestment in PEs	0.0	0.5	0.3	0.0	0.4	0.6	0.7
Fiscal Deficit (A-B-C+F+G)	8.4	5.9	5.7	7.7	6.0	6.7	5.5
Memo Items (Central Government)							
Total Expenditure (B+C+D)	19.7	18.1	17.4	18.0	16.6	17.8	16.5
Total Expenditure (B+C+F)	18.7	17.1	16.4	17.3	15.9	17.1	15.8
Education, etc.	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Health and Welfare	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Revenue (A+G)	10.3	11.2	10.8	9.6	9.9	10.4	10.3
Primary Deficit^b	4.4	1.6	1.3	3.0	1.0	1.9	0.5
Non-Interest spending^c	15.7	13.8	13.0	13.4	11.6	13.0	11.5

Note: BE= budget estimates; RE=revised estimates.
a. Revenue expenditure is the budget terminology for current expenditure.
b. Fiscal deficit minus interest payments.
c. B+C+D-interest.

Source: Government of India, Budget documents.

	(Percent of GDP)				
	1990-91	1991-92	1992-93	1993-94	1994-95 RE
1. Central Government					
Overall Deficit	8.4	5.9	5.7	7.7	6.7
Gross Primary Deficit	4.3	1.6	1.3	3.0	1.9
2. General Government					
Overall Deficit	9.9	7.3	7.5	9.6	8.6
Gross Primary Deficit	5.7	3.9	3.2	5.4	4.6
3. Non-Financial Public Sector					
Overall Deficit	10.5	9.0	8.4	11.0	10.4
4. Memo Item:					
RBI Financing to General Government (Net)	2.8	0.9	0.6	1.4	0.0

Source: Budget documents; RBI, IMF, and staff estimates.

The stimulus package worked well. Industrial growth recovered, and with it, tax revenue rose above target by 0.3 percentage points of GDP. In addition, disinvestment receipts were 0.2 percent of GDP higher than budgeted. Expenditure, however, was 1.2 percentage points of GDP above planned levels for three reasons. *First*, subsidies (food and fertilizer) were reduced by 0.2 percentage of GDP in relation to the previous year. But a further reduction, equivalent to 0.4 percentage points of GDP, was required to reach the budgeted level. *Second*, loans to states were 0.5 percentage points of GDP higher than budgeted. This was due to larger than anticipated deposits in Small Savings accounts (administered by the Post Office), 75 percent of which is automatically on-lent to the states. *Third*, the remaining expenditure overrun, equivalent to 0.3 percent of GDP, resulted from unplanned increases in Central Government grants to states, and other smaller items. In net, the 1994-95 fiscal deficit was 6.7 percent of GDP, one percentage point less than last year's fiscal deficit. Although this reduction was significant, the fiscal deficit remains too high. As discussed later in this Chapter, further fiscal deficit reduction is critical to ensure macroeconomic stability and strengthen the economy's growth prospects.

Monetary Policy and Inflation

Monetary Expansion Contributed Significantly to Inflation. Since the stabilization program started in July 1991, the authorities have sought to keep monetary growth at moderate levels. Accordingly, reserve money grew between 11-13 percent in the first two years of the program and interest rates were maintained at relatively high levels. Thus, inflation declined from a peak of 17 percent in June 1991 to around 7 percent in the second half of 1993, and throughout the first quarter of 1994. This monetary stance was radically changed in 1993-94, however, when the monetization of large surpluses in the capital account led reserve money to grow at annual rates (point-to-point) of around 25 percent (Table 1.3). This rate of growth persisted until late 1994 even though net RBI credit to the government remained virtually constant in nominal terms.

Table 1.3: Selected Monetary Indicators, 1990-95
(Rs. billion)

Money Aggregate	Stocks (End-March of each year)									
	1990-91		1991-92		1992-93		1993-94		1994-95p	
Sources of Reserve Money	878	(100)	995	(100)	1108	(100)	1387	(100)	1690	(100)
Net RBI credit to Government	888	(149)	940	(44)	984	(39)	993	(3)	987	(-2)
Net foreign exchange assets (RBI)	80	(19)	188	(93)	226	(34)	514	(103)	747	(77)
Other assets (net)	-91	(-68)	-133	(-37)	-103	(27)	-121	(-6)	44	(25)
Sources of Broad Money	2658	(100)	3170	(100)	3668	(100)	4344	(100)	5265	(100)
Net bank credit to Government	1402	(66)	1583	(35)	1762	(36)	2039	(41)	2196	(17)
Credit to commercial sector	1718	(58)	1880	(32)	2201	(65)	2378	(26)	2879	(58)
Net foreign exchange assets	106	(11)	212	(21)	250	(7)	537	(43)	747	(23)
Other assets (net)	-567	(-35)	-504	(12)	-545	(-8)	-610	(-10)	-557	(6)
Memo Items										
M3/Base Money	3.0		3.2		3.3		3.1		3.1	
M3/GDP	0.6		0.6		0.6		0.6		-	
Growth rates										
Reserve Money	13.1		13.4		11.3		25.2		21.9	
M3	15.1		19.3		15.7		18.4		21.2	
Nominal GDP (factor cost)	17.8		16.0		13.8		12.7		-	

Note: The flow as a percentage of the change in base money or the change in broad money stock is in parentheses. Increases in foreign assets following a devaluation are offset by declines in other assets.

Source: RBI.

The authorities subsequently took several measures to contain the impact of reserve money growth on broad monetary aggregates. They increased reserve requirements (the Cash Reserve Ratio, (CRR)) from 14 to 15 percent during June-August 1994, and introduced a CRR on Non-Resident Indians (NRIs) foreign currency accounts on which there were no reserve requirements previously. They also reduced maximum interest rates payable on such accounts both to contain growth in commercial banks' liquidity base and reduce the volatile component of India's external debt. This notwithstanding, broad money continued to rise at relatively high rates and inflation rose above 10 percent.

At first, the authorities did not take stronger steps to contain monetary expansion. Interest rates declined in nominal and real terms; call money rates reached historically low levels; and, from March 1994 onwards, interest rates on 364-Treasury Bills became negative or marginally positive (Table 1.4). Low interest rates did indeed contribute to the strong expansion in investment witnessed during the year, and to the recovery of the economy. From March 1994 onwards, however, inflation also accelerated--to around 12 percent, well above the psychologically comfortable level of 10 percent.

Table 1.4: Key Interest Rates, 1990-95 ^a								
	Call Money Rate (Bombay)	Treasury Bills			Minimum Lending Rate	Maximum ^{a/} Deposit Rate	Certificates of Deposit	Inflation ^{b/}
		364-day	182-day	91-day				
1990-91								
June	13.5	–	10.0	4.6	16.0	10.0	10.0 - 16.3	9.7
September	15.2	–	10.0	4.6	16.0	10.0	10.0 - 14.0	7.9
December	13.6	–	10.0	4.6	16.0	11.0	10.0 - 13.1	12.6
March	18.5	–	10.1	4.6	16.0	11.0	10.0 - 14.9	12.1
1991-92								
June	24.8	–	10.0	4.6	17.0	12.0	12.0 - 16.8	12.2
September	12.8	–	10.0	4.6	18.5	13.0	11.5 - 16.0	15.9
December	12.7	–	10.0	4.6	20.0	13.0	12.5 - 17.6	14.3
March	14.3	–	9.3	4.6	19.0	13.0	12.0 - 17.0	13.6
1992-93								
June	15.8	11.4	–	4.6	19.0	13.0	12.3 - 25.0	12.3
September	11.4	11.3	–	4.6	19.0	13.0	13.0 - 20.0	10.2
December	11.2	11.2	–	4.6	18.0	12.0	12.3 - 17.5	8.4
March	13.9	11.1	–	11.0	17.0	11.0	12.5 - 16.5	7.0
1993-94								
June	8.0	11.4	–	10.1	16.0	11.0	11.0 - 16.5	7.1
September	5.0	11.2	–	8.4	15.0	10.0	8.0 - 15.0	8.8
December	5.3	11.0	–	7.8	15.0	10.0	7.0 - 15.0	8.8
March	4.3	10.0	–	7.5	14.0 - 15.0	10.0	7.0 - 12.2	10.5
1994-95								
June	6.7	10.0	–	8.8	14.0 - 15.0	10.0	7.0 - 12.0	11.8
September	15.3	9.4	–	9.1	14.0 - 15.0	10.0	–	8.9
December	–	9.8	–	10.3	14.0 - 15.0	10.0	–	11.2
March	–	11.9	–	12.00	14.0 - 15.0	11.0	–	11.2
– Not available.								
Note: March 1995 is preliminary.								
a. Refers to rate on term deposit. Up to April 1992 rates were fixed for different maturities. Since April 1992 only a maximum deposit rate is specified.								
b. Wholesale price index, annual increase, point-to-point.								
Source: RBI Monthly Bulletin, various issues; RBI, Report on Currency and Finance; Center for Monitoring Indian Economy (CMIE), various issues.								

Since late 1994, the sources of monetary expansion and the monetary policy stance have changed. The authorities decided to take stronger steps to reduce inflation. In September 1994, the RBI and the Treasury signed a landmark agreement to limit and then to phase out by 1997 the automatic monetization of the Treasury's cash deficits. Henceforth, the Treasury will be obliged to meet the bulk of its borrowing requirements by issuing securities directly in the market. In fact, this has already happened in 1994-95 when the change in net RBI credit to the Central Government was slightly negative. Meanwhile, the balance of payments became less important as a source of monetary expansion while credit by commercial banks became more important. Helped by declines in the capital account surplus, the RBI was able to reduce the rate of money expansion and real interest rates began to rise. Inflation thus has been abating, and by end April 1995, stood at around 9 percent. In its most recent credit policy announcement (April 17, 1995), the RBI re-affirmed its commitment to a tighter

monetary stance to combat inflation. For 1995-96, it is targeting M3 growth of 15.5 percent against 17.6 percent for 1994-95, assuming an inflation of 8 percent and GDP growth of 5.5 percent. While the announcement assumes moderate capital inflows (and thus, less pressure on monetary aggregates from the accumulation of net foreign assets), it also took steps such as raising the maximum rate on term deposits from 11 to 12 percent.

The Economic Survey notes that other factors contributed to inflation in 1994-95. Among them were: (a) production shortfalls dating back to the previous year in items such as sugar and cotton which could not be imported; and (b) the pass-through of successively large increases in minimum support prices (which occurred until 1993-94) to primary products, wage goods and wages. To combat inflation during 1994-95, the authorities relaxed import restrictions on several goods that were in short supply. They included sugar, cotton and all major edible oils, except coconut. Evidently, continued trade reform aimed at further reducing quantitative restrictions and tariffs, as well as the liberalization of domestic agricultural markets (at present, for example, futures trading is banned for most key agricultural commodities) should help India to avoid the sharp gyrations in domestic prices of key products which were so frequent in 1994-95.

Recent GDP and Investment Growth

Real GDP Recovery Was Broad-Based. The package introduced in the 1994-95 Budget consisted essentially of actions: (a) to stimulate investment, including greater tariff reduction on imports of capital on other goods; reducing corporate income taxation; extending India's partial value-added tax to include capital goods, thus enabling firms to credit (against tax liabilities) taxes paid on the purchase of equipment; (b) measures to increase consumption such as reducing to more moderate levels (as part of tax reform) extremely high indirect taxes (excises) on a wide array of commodities; and (c) slowing the pace of fiscal adjustment. Coming on top of the cumulative effects of reforms, another good monsoon and an increase in foreign direct investment (Table 1.5), and supported by the decline in real interest rates, this package produced the intended results. Real GDP growth in 1994-95 was the highest since 1991. Growth was fastest in the industrial sector. Within the industrial sector, manufacturing expanded by 9 percent (Table 1.6). The capital goods sector, which had experienced negative rates of growth every year since 1991-92, expanded by 22 percent. Together with indications that imports of capital goods increased sharply, this suggests that investment began to recover and that industrial growth in 1994-95 was broad based.

Corporate Profits Rose, Strengthening the Prospects For Sustained Investment Recovery. The corporate sector appears to be well positioned to sustain the growth recovery by investing in new capacity and competing successfully in a more liberalized environment. According to a survey of 800 companies carried out by the Industrial Credit and Investment Corporation of India (ICICI), corporate net profits doubled in the first six months of 1994-95. This is explained by: (a) increased sales due to the industrial recovery--about 13 percent in real terms over the same period in 1993-94; (b) reduced interest costs as real interest rates declined, and as the elimination of restrictions on access to capital markets raised financing from this source to over 45 percent of total financing (from 18 percent in 1991-92); (c) lower corporate taxes; and (d) corporate restructuring.

Actual Inflows vs Approvals					
	1991	1992	1993	1994	Total (1991 to 1994)
Approvals					
US\$ billion	0.2	1.3	2.8	2.9	7.2
Actual Inflows					
US\$ billion	0.2	0.2	0.6	0.9	1.9
Actuals as % of Approvals	66	17	20	33	26
<i>Source: Ministry of Finance, Economic Survey 1994-95.</i>					

A recent poll found that about two-thirds of the manufacturing firms, under the pressure of increased competition, have gone through, or are going through, a process of restructuring. Another quarter expect to do so over the next two years. Actions include: (a) consolidating core competencies; (b) venturing into growth areas outside their core competencies, particularly in areas recently opened to the private sector such as telecommunications and power; (c) mergers and acquisitions (which increased

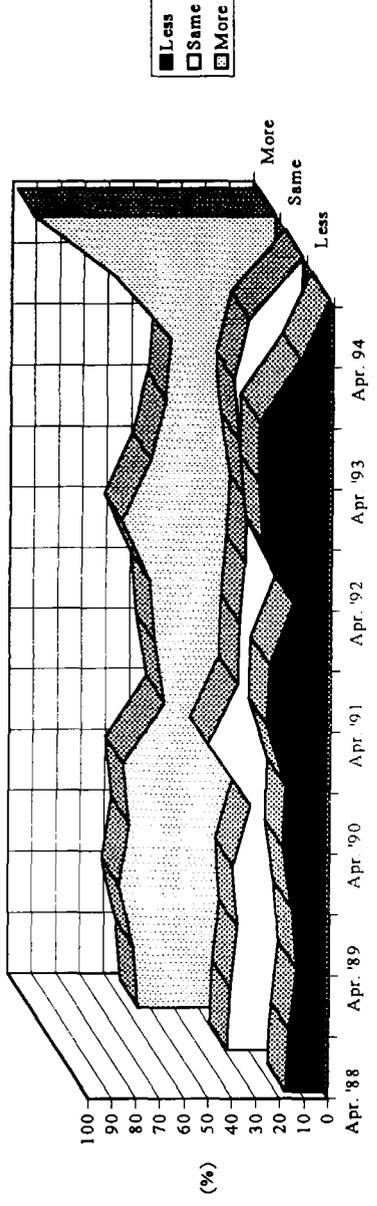
from 30 in 1991 to about 150 in 1993) to expand capacity quickly, consolidate market share and in some cases, meet rising export demand; (d) strategic alliances with foreign companies to acquire new technologies cheaply or marketing outlets, (e) financial restructuring, including retiring high cost debts early; (f) changing organizational structures and professionalizing their management; and (g) reducing excess workforce through arrangements such as voluntary retirement schemes.

In this context, there are good prospects for private investment to continue to recover and

reverse the declining trend witnessed in recent years (Table 1.7). Business surveys (Figures 1.1 and 1.2) show high levels of confidence not evident in any of these biannual assessments (by the Confederation of Indian Industries) obtained for the period 1985-86 to 1994-95. However, whether these prospects will be translated into higher and sustained investment growth, without threatening macroeconomic stability, will depend on improving the public sector's fiscal deficits, and its savings performance which has been deteriorating in recent years. This will determine also the public sector's capacity to raise significantly its outlays on efficient fixed investments and reverse the substantial declines observed in recent years (Figure 1.3).

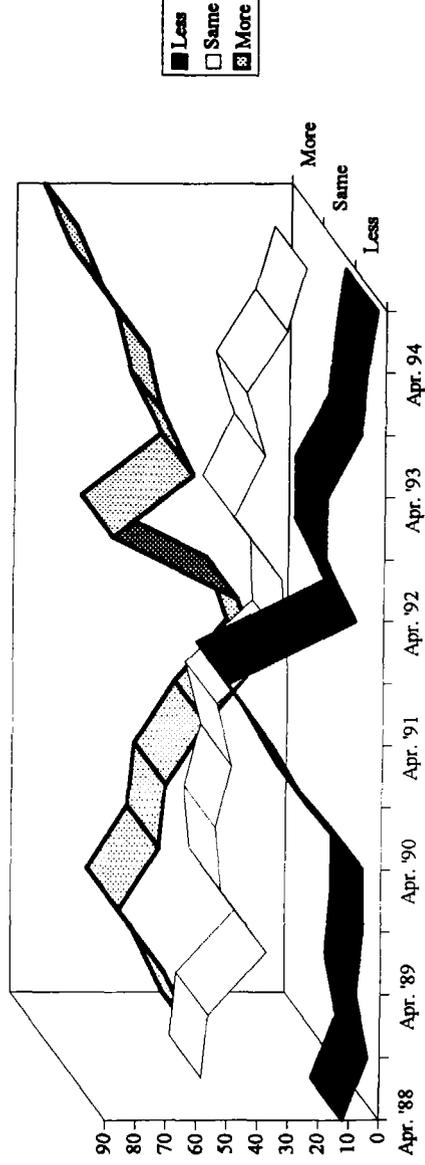
	1981-90	1990-91	1991-92	1992-93	1993-94	1994-95 ^a
GDP at Factor Cost	5.5	5.4	0.9	4.3	4.3	5.3
Agriculture	3.4	3.8	-2.3	5.1	2.9	2.4
Industry	6.9	7.2	-0.8	2.9	3.5	-
Mining & Quarrying	7.4	10.7	4.5	1.5	4.8	-
Manufacturing	7.2	6.1	-3.1	3.1	3.6	8.7
Registered	8.0	5.0	-1.8	2.3	3.2	-
Unregistered	6.1	7.9	-5.3	4.4	4.2	-
Electricity, Gas & Water	8.9	6.5	9.5	7.5	5.9	-
Construction	4.4	11.6	2.7	0.5	1.2	-
Services	6.6	5.2	4.7	4.8	5.9	5.6
<i>Note: a. Quick estimate.</i>						
<i>Source: CSO, National Accounts Statistics 1995.</i>						

Figure 1.1: Do you expect to authorize more or less capital expenditure in the next 12 months than you authorized in the last 12 months on buildings, plant and machinery?
(% of respondents)



Source: Confederation of Indian Industries.

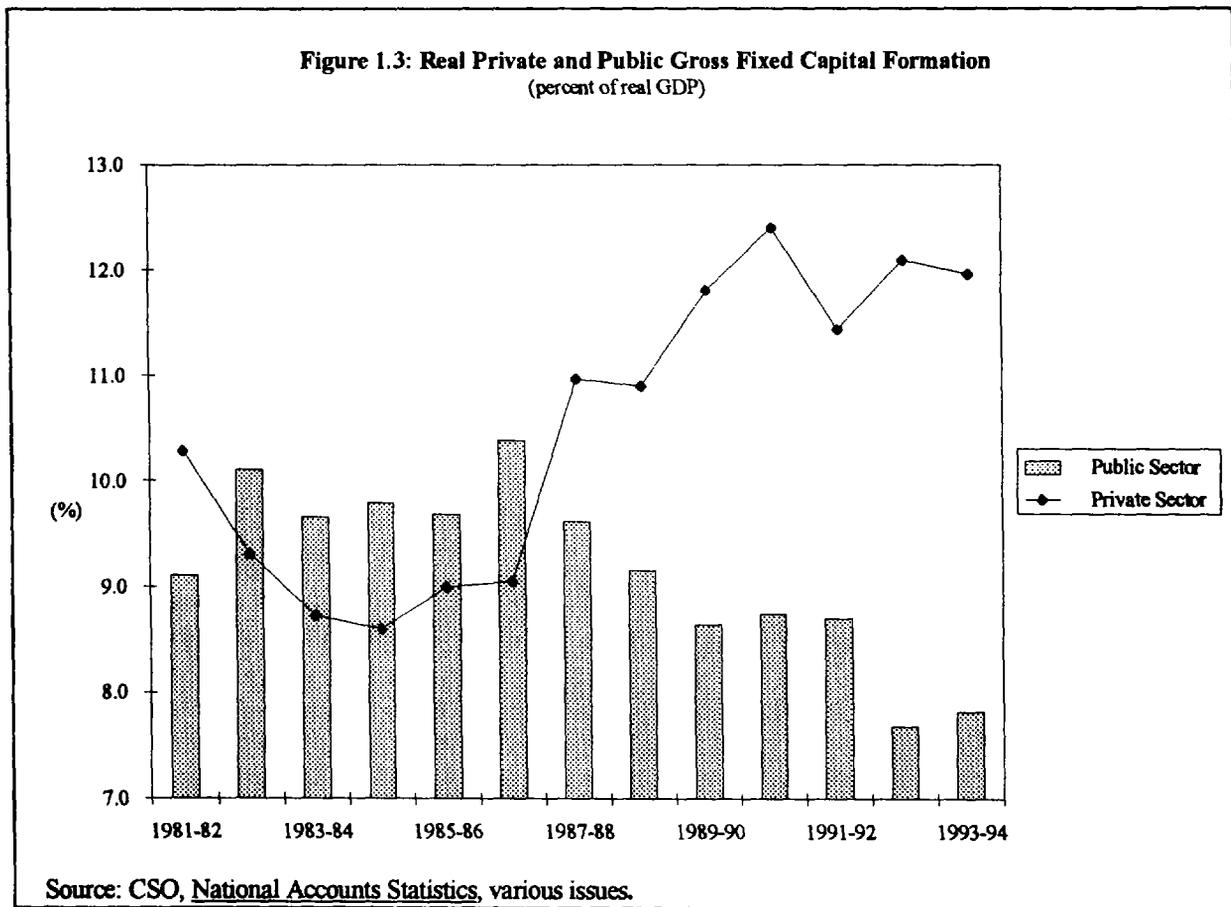
Figure 1.2: Are you more or less optimistic than you were six months ago about the general business situation in your country?
(% of respondents)



Source: Confederation of Indian Industries.

	1989-90	1990-91	1991-92	1992-93 ^a	1993-94 ^b
Gross Domestic Investment^c	24.3	25.6	22.9	23.3	21.3
Public	10.0	9.7	9.2	8.9	8.9
Private	14.3	15.9	13.7	14.4	12.4

a. Provisional.
b. Quick estimates.
c. Adjusted for errors and omissions.
Source: CSO, National Accounts Statistics 1995.



The Balance of Payments Outturn

The External Accounts Remained Strong. After a 20 percent growth in 1993-94, exports grew by 17 percent in dollar terms during April 1994-January 1995 (Table 1.8). Commodities that performed well were basically the same as in the past few years: coffee, electronic goods, handicrafts excluding carpets, textile, ready-made garments and marine products. Manufactured exports increased by 21 percent relative to the same period last year. Export markets have continued to diversify. For example, the share of exports to East Asian economies (Singapore, Thailand, Malaysia, Japan) increased from less than 10 percent in 1991-92 to 14 percent at present. These developments occurred even though the plague in September-October adversely affected seasonal exports such as gems and jewelry which lost their Christmas market, and even though the rupee appreciated vis-a-vis the US\$ (Table 1.9) in 1993-94. In 1994-95, because of the decline of the US\$ in relation to other currencies, the real effective exchange rate (that is, the weighted average of bilateral exchange rates in relation to India's trading partners weighted by their share in India's total trade) actually experienced some depreciation. In fact, this probably explains the robust export performance in 1994-95 despite relatively high domestic inflation and a fixed nominal exchange rate vis-a-vis the US\$. In addition, export performance probably benefited also from: (a) productivity gains brought about by the reform program, and (b) the reduction in the anti-export bias brought about by the liberalization of the trade regime. However, the authorities are legitimately concerned with the effect of inflation on the future of the real exchange rate and export performance.

Imports registered a sharp rise of 28 percent in dollar terms after stagnating the previous year. Non-oil imports rose by 33 percent in dollar terms as the domestic industrial recovery strengthened. Underlying the overall growth in non-oil imports was the rise in imports of sugar, edible oil, pulses, non-ferrous metal, metalliferous ores and scrap, iron and steel and chemicals. During April 1994-January 1995, imports of machinery and imports of iron and steel rose by 33 percent and 56 percent respectively over the same period one year ago. Meanwhile, the oil bill for the period remained relatively constant (one percent increase) reflecting higher volumes and lower prices. Additional production of crude oil by the Oil and Natural Gas Corporation Ltd. reduced the requirement of imported crude oil. Overall though, the trade deficit during the first ten months, at \$2 billion, was more than twice the level during last year. At the same time, workers remittance rose significantly and the resulting improvement in the surplus in the invisible account partly offset the widening of the trade deficit. Thus, the current account deficit is estimated to have risen only marginally from 0.3 percent of GDP to 0.7 percent in 1994-95 (Table 1.8).

As was the case last year, foreign direct and portfolio investment flows (Table 1.10) contributed to a large surplus in the capital account. They amounted to \$4.9 billion during April 1994-March 1995. As investment intentions were translated into actual flows, foreign direct investment (FDI) rose to an estimated \$1.3 billion during 1994-95. A major portion of FDI approvals was in the core sectors of power, oil refining, food processing, chemicals, and electrical equipment.

	Actuals			Estim.	Projected		
	91-92	92-93	93-94	94-95 ^a	95-96	96-97	97-98
Total exports of GNFS	23.3	23.6	28.9	33.8	39.3	43.7	48.6
Merchandise (FOB)	18.3	18.9	22.7	26.8	31.3	35.1	39.3
Non-factor services	5.0	4.7	6.2	7.1	8.0	8.6	9.3
Total imports of GNFS	24.9	26.8	29.4	37.9	43.7	49.2	54.9
Merchandise (CIF)	21.1	23.2	24.0	30.3	35.5	40.7	45.8
Non-factor services	3.8	3.6	5.4	7.6	8.2	8.5	9.1
Resource balance	-1.6	-3.2	-0.5	-4.1	-4.4	-5.5	-6.4
Net factor income	-3.8	-3.4	-4.0	-4.2	-4.7	-4.9	-4.9
Factor receipts	1.2	1.1	0.9	0.7	0.7	0.6	0.7
Factor payments	5.1	4.6	4.9	5.0	5.4	5.4	5.6
Interest (scheduled) ^b	5.0	4.5	4.7	4.4	4.6	4.5	4.5
of which interest payments on NRI	1.0	0.9	0.9	1.0	1.4	1.4	1.4
Other factor payments ^c	0.1	0.1	0.1	0.6	0.8	0.9	1.1
Net private current transfers	3.8	2.8	3.8	6.2	5.0	5.1	5.2
Current receipts	3.8	2.8	3.9	6.2	5.0	5.1	5.2
of which workers remittances	2.5	2.1	3.1	5.0	3.6	3.6	3.7
Current payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current account balance	-1.6	-3.9	-0.7	-2.1	-4.1	-5.3	-6.1
Official capital grants	0.5	0.4	0.4	0.4	0.4	0.3	0.3
Foreign investments	0.2	0.6	4.1	4.9	3.3	4.7	5.5
Direct foreign investments	0.2	0.3	0.6	1.3	1.8	1.9	2.3
Portfolio investments	0.0	0.2	3.5	3.6	1.5	2.8	3.2
Net long-term borrowing	5.2	0.6	3.0	3.1	1.4	1.1	2.6
Disbursements (net of NRI)	7.8	3.6	7.0	7.2	5.8	7.3	7.4
Repayments (scheduled) ^b	2.6	2.9	4.1	4.1	4.4	6.2	4.8
Other long-term inflows (net) ^d	0.3	2.0	0.9	0.8	0.5	0.0	0.0
Other capital flows	-1.9	0.1	0.8	-0.6	-0.7	-0.2	-0.1
Net short-term capital	-1.5	-0.7	-2.7	0.5	0.5	0.5	0.5
Capital flows n.e.i. ^e	-1.2	-0.9	-0.7	-1.1	-1.2	-0.6	-0.6
Errors and omissions	0.8	1.7	4.3	0.0	0.0	0.0	0.0
Changes in net international reserves ^f	-2.6	0.3	-8.5	-6.5	-0.6	-0.7	-2.3
IMF (net)	0.8	1.3	0.2	-1.1	-1.8	-1.0	-0.7
Change in Gross Reserves	-3.4	-1.0	-8.7	-5.3	1.1	0.3	-1.6
Memorandum items:							
Current Account Balance / GDP	-0.7	-1.6	-0.3	-0.7	-1.3	-1.6	-1.7
Gross Foreign Exchange Reserves	5.7	6.7	15.5	20.8	19.7	19.4	21.0
in months of imports (goods)	3.3	3.5	7.7	8.2	6.7	5.7	5.5
External Debt (percent of GDP)	33.4	37.1	36.7	32.8	30.9	29.1	28.0
Debt Service (% of total current receipts)	28.2	28.1	26.6	23.5	24.0	23.8	18.2

a. Preliminary estimate.
b. Although World Bank and Government of India sources show similar historic total debt service data, discrepancies exist in the share of interest and amortization. These discrepancies are under review.
c. Includes interest on military debt to the FSU and returns on foreign investments.
d. Net flows in NRI deposit schemes, except the non-repatriable NR(NR)D Scheme.
e. Servicing of the Russia debt.
f. (-) = indicates increase in assets.

Source: Government of India; RBI; Ministry of Commerce; World Bank Staff estimates.

Table 1.9: Real Exchange Rate of India's Main Trading Partners and Competitors 1981-94^a											
(end of period)											
	Export Share							1994			
		1981	1989	1990	1991	1992	1993	I	II	III	IV
India											
in US\$		0.93	1.05	1.00	1.26	1.17	1.28	1.25	1.20	1.19	1.17
in SDR		0.76	0.98	1.00	1.27	1.13	1.24	1.25	1.23	1.23	1.20
REER ^b		0.56	0.91	1.00	1.28	1.29	1.30	1.28	1.27	1.33	1.28
India's Main Market											
USA	20.0	1.20	1.05	1.00	1.02	1.01	1.00	0.99	0.99	0.98	0.97
Japan	12.2	1.47	1.10	1.00	0.98	0.97	0.88	0.85	0.84	0.81	0.82
Germany	8.0	1.69	1.18	1.00	1.03	1.03	1.12	1.10	1.06	1.00	1.01
United Kingdom	7.2	1.56	1.29	1.00	1.02	1.16	1.16	1.15	1.12	1.08	1.08
Belgium ^c	5.4	1.75	1.23	1.00	1.02	1.00	1.07	1.04	0.99	0.94	0.95
France ^c	2.8	1.75	1.21	1.00	1.03	1.01	1.08	1.05	1.01	0.96	0.98
Netherlands	2.4	1.64	1.18	1.00	1.01	1.00	1.08	1.07	1.02	0.97	0.97
India's Main Competitors											
Indonesia		0.81	1.11	1.00	1.06	1.06	1.06	1.06	1.04	1.02	1.00
Malaysia ^c		1.03	1.03	1.00	0.97	0.87	0.84	0.88	0.82	0.80	0.80
Philippines		0.99	0.93	1.00	0.84	0.74	0.75	0.72	0.69	0.65	0.61
Thailand		1.16	1.10	1.00	0.99	1.00	0.98	0.95	0.95	0.93	0.92
Korea		1.12	1.01	1.00	1.04	1.06	1.07	1.06	1.05	1.03	1.01
Singapore		1.06	1.15	1.00	1.08	1.10	1.10	1.10	1.04	1.02	1.00
Hong Kong ^c		1.39	1.11	1.00	0.91	0.82	0.76	0.75	0.73	0.71	0.69
- Not available.											
Note: Increase = depreciation.											
a. Index of a country's nominal exchange rate vis-a-vis the US\$ divided by this country's wholesale price index or, if not available, the consumer price index											
b. Based on the IMF's Information Notice System methodology. Trade weights are based on trade flows averaged over 1980-82.											
c. Uses CPI.											
Source: IMF, <i>International Financial Statistics</i> ; World Bank Staff estimates.											

Table 1.10: Foreign Direct and Portfolio Investment (US\$ billion)					
	1990-91	1991-92	1992-93	1993-94	1994-95
Direct Investment					
Foreign Direct Investment	0.2	0.2	0.3	0.6	1.3
Portfolio Investment					
Foreign Institutional Investment	0	0	0.1	3.5	3.6
Euro-issues/ GDR	0	0	0.1	1.7	1.5
Others ^a	0	0	0.1	1.5	1.8
Total Direct and Portfolio Investment	0.2	0.2	0.4	4.1	4.9
Memorandum item: (US\$ million)					
Foreign Currency Convertible Bonds (FCCB) ^b	0	0	0	914	103
Floating Rate Notes (FRN)	0	0	0	0	167
a. Includes NRI portfolio investments, offshore funds, and others.					
b. FCCB is treated as commercial borrowing before conversion into equity.					
Source: Reserve Bank of India; Ministry of Finance.					

Reserves increased by about \$4 billion between March and October 1994. Thereafter, they (excluding gold and SDRs) fluctuated between \$19-20 billion. This slowdown in the accretion of reserves reflected attempts by the authorities to discourage several foreign exchange accounts and to allow private companies to pre-pay their foreign loans. It also reflected the outflow of profits abroad because most of the FIIs completed their one year mandatory lock-in period during November-December 1994 which entitled them to the substantial concessions on capital gains tax. The inflow of GDR (global deposit receipts) into the country also slowed following policy changes which now allow companies to bring in such funds only when they are needed; the generally more cautious attitude of foreign investors following developments in Mexico; and increases in US interest rates. By March 1995, reserves began to rise again. They reached about \$20.8 billion--that is, \$5.3 billion over the level at end-March 1994 (Table 1.8).

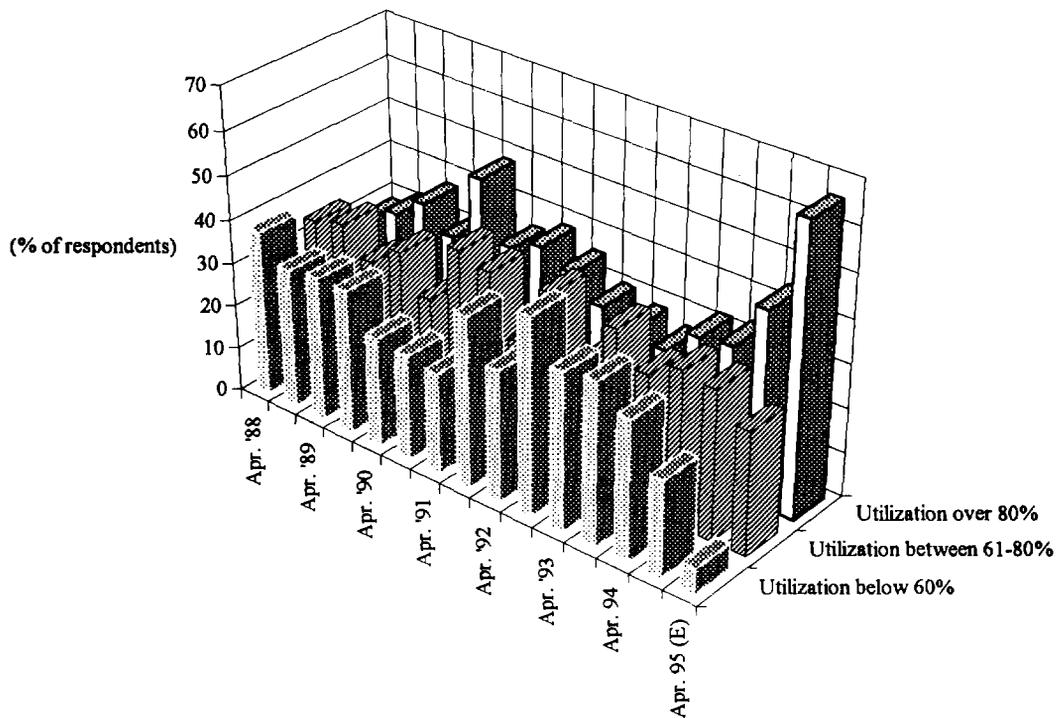
CURRENT ECONOMIC MANAGEMENT ISSUES AND THE 1995-96 BUDGET

The most important issue in current economic management in India is improving appreciably and urgently public savings and reducing the fiscal deficit. India's private savings performance is strikingly comparable to high performing East Asian economies (Table 1.11). In sharp contrast, its public savings performance (that is, the excess of central and state government revenues over current expenditure plus gross profit of public enterprises) has been much worse, and has been deteriorating.

Table 1.11: Public and Private Savings of High Performing Asian Economies and India		
	Public Savings	Private Savings
Indonesia		
1981-88	7.7	14.0
Japan		
1945-54	5.3	12.0
1955-70	6.2	17.2
1971-80	4.6	20.1
1981-88	5.1	15.8
Malaysia		
1961-80	3.2	18.7
1981-90	10.3	19.1
Singapore		
1974-80	5.5	22.6
1981-90	18.5	24.0
Thailand		
1980-85	14.3	4.7
1986-87	8.6	14.6
India		
1980-83	4.1	15.9
1983-86	3.1	15.9
1986-89	2.3	18.1
1989-91	1.3	21.7
1991-92	2.1	21.0
1992-93	1.5	18.5
1993-94	0.2	19.9

Source: World Bank, *the East Asian Miracle*, and Economic Survey, 1994-95.

Figure 1.4: India: Capacity Utilization in Selected Industries



Source: Confederation of Indian Industries.

Correcting this situation is critical for restoring the capacity of the public sector to invest, particularly in infrastructure and human resource development (including primary education). It is also critical if India is to accommodate the markedly higher levels of total investment--public and private--needed to achieve and sustain rates of growth and poverty reduction comparable to high performing countries in Asia. Indeed, capacity utilization in manufacturing already has reached unprecedented high levels (Figure 1.4) and other indicators suggest that India's infrastructure is stretched. Inadequate power supply is a well-known constraint to industrial growth. At 50 percent, the share of India's paved roads is lower than it was in Malaysia (85 percent) and Thailand (67 percent) in 1971--a comparison that ignores the severe problems of congestion on India's roads. Meanwhile, telephones per 100 persons in India (around 1) are much fewer than in Korea (4) and Malaysia (2.5) in 1975, and well below what is needed.

In addition, unless the public sector savings performance is reversed drastically, monetary policy will bear the brunt of inflation reduction. This may affect real interest rates and investment, and place India on a lower growth trajectory. So far very limited progress has been made on this issue, and prospects for a prompt resolution are not encouraging.

Fiscal Adjustment in the 1995-96 Budget

The 1995-96 Budget Meets Only Partially this Major Challenge. As indicated in the Eighth Plan documents and other government policy papers, a reduction in the Central Government fiscal deficit to 3-4 percent of GDP, and an increase in public sector savings to over 2 percent of GDP are critical for achieving the government's growth and inflation objectives--and would bring fiscal imbalances to sustainable levels. However, as emphasized in the Economic Survey (1994-95), the Central Government has been unable to meet its fiscal targets. Neither have state governments contributed to an increase in public savings (Chapter 2).

The 1995-96 Budget Envisages A Further Fiscal Adjustment But The Target May Be Overoptimistic. The 1995-96 Budget aims to reduce the fiscal deficit to 5.5 percent of GDP. This is a significant adjustment of 1.2 percentage points of GDP in relation to 1994-95--to be achieved mostly by contracting non-interest spending. Helped by faster disinvestment of public enterprises (equivalent to 0.2 percentage points of GDP), revenue is projected to remain relatively constant in relation to GDP in spite of further significant reductions in tariffs and excises. Interest payments are projected to increase by 0.2 percentage points of GDP. Non-interest expenditures are expected to decline by 1.3 percentage points of GDP mainly on account of reduced spending on defense (0.2), subsidies (0.2), grants to states (0.2), lending to states (0.4), and non-defense capital expenditure (0.2). Explicit assumptions underlying the budget forecast are that: (a) nominal GDP will grow by 15 percent; (b) import growth will offset the revenue impact of tariff reductions; and (c) improvements in tax administration will offset the impact of lower excise rates.

However, some of the implicit assumptions underlying the budget may be overoptimistic. In particular, the budget assumes implicitly that: (a) the policy of monetary restraint in place since December 1994 will not significantly affect growth and thus tax revenues; (b) the recommendations of the Pay Commission will not increase expenditure on wages and salaries during 1995-96; (c) the government will be able to reduce grants and loans to the states even though general elections are due

before May 1996; and (d) disinvestment of public enterprises can be accelerated in spite of the pressures typical in a pre-election year. Clearly, although possible, achieving the 1995-96 fiscal deficit target of 5.5 percent of GDP will be very difficult.

Table 1.12: Composition of the Public Debt of the Central Government							
	1980-81	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
						R.E.	B.E.
Debt Stocks:							
Internal Liabilities (Rs billion)	309	2398	2830	3177	3597	4260	4835
External Debt (Rs billion)	135	541	663	1097	1210	1278	1322
Internal Liabilities (percent of GDP)	22.7	52.5	53.1	51.6	51.2	54.2	53.0
External Debt (percent of GDP) ^a	8.3	11.8	12.4	17.8	17.2	16.3	14.5
Interest Rates							
On New Dated Securities	n.a.	11.0	11.0	11.5	12.4	13.2	12.0
On Internal Liabilities (Average)	n.a.	8.0	8.2	8.4	8.6	9.3	9.8
On External Liabilities	n.a.	3.0	3.0	3.1	3.1	3.1	3.2
Memo Item							
GDP Deflator	n.a.	8.3	11.0	14.6	8.9	8.1	10.5
<i>Note:</i> Figures are as of the end of March.							
a. Converted at current year exchange rates.							
<i>Source:</i> Ministry of Finance, <i>Economic Survey</i> , various issues; RBI, <i>Report on Currency and Finance</i> , various issues.							

Persistent High Fiscal Deficits Are A Major Threat to Macroeconomic Stability. Even if the 1995-96 target is achieved, the fiscal deficit would still need to be reduced further to stabilize interest payments on the Central Government domestic debt. After doubling between 1980-81 and 1990-91, the Central Government domestic debt as a percent of GDP has virtually stabilized since the start of the reform program in July 1991. However, this was partly the result of relatively high inflation which rendered average real interest rates on domestic debt low or even negative in some years (Table 1.12).

Table 1.13 Sustainable Primary Deficits of the Central Government (percent of GDP)						
Domestic Real Interest Rate	Real GDP Growth (%)					
	3.00	4.0	5.00	6.00	7.00	8.00
3.00	-0.1	0.6	1.3	1.9	2.6	3.2
4.00	-0.6	0.1	0.7	1.4	2.1	2.7
5.00	-1.1	-0.4	0.2	0.9	1.5	2.2
6.00	-1.6	-1.0	-0.3	0.4	1.0	1.7
7.00	-2.1	-1.5	-0.8	-0.1	0.5	1.2
8.00	-2.6	-2.0	-1.3	-0.7	0.02	0.7
<i>Note:</i> The calculations are based on the following assumptions:						
Foreign real interest rate: 0.035			Foreign debt stock/GDP: 0.15			
Rate of real depreciation: 0.00			Domestic debt stock/GDP: 0.51			
<i>Source:</i> Staff calculations.						

Under reasonable assumptions, a deficit of 5.5 percent of GDP would still not be consistent with the government's growth and inflation objectives. That is, because of the effect of the fiscal deficit on real interest rates and private investment, at that level and with the existing composition of expenditures, it will not be possible over the long term to: (a) reach the government's inflation targets of 5-6 percent; and (b) increase growth to between 7-8 percent. In addition, with financial sector liberalization underway in India, and long-term international real interest rates projected to remain at around 4-5 percent, India's long-term real interest rates will be at least 5 percent. *This implies that GDP growth rates lower than 5-6 percent will require primary surpluses just to stabilize the domestic debt in relation to GDP* (Table 1.13). Yet, the government has not been able so far to generate a primary surplus. Accordingly, interest payments have claimed an increasingly large share of government's tax revenues--50 percent in 1990-91, and possibly 70 percent in 1995-96. This means that for every Rs 1 of taxes collected, the government now has discretion over just one-third of it (without running a deficit). Unless this situation is reversed, the probability of the government eventually collecting taxes just to service its debt, is more than marginal.

These calculations only capture the financial consequences of a rising government debt, but the growth and development consequences are equally serious. As interest payments rise, development expenditure will inevitably suffer. If the composition of expenditure is not improved (in particular, if public savings do not increase to finance public investments with high returns), the foundation for further growth will weaken.

	1980-81	1985-86	1990-91	1991-92	1992-93	1993-94 R.E.	1994-95 B.E.
Payment of Interest to the Center	9	19	52	66	78	97	112
States' Payments of Principal to the Center	19	16	37	29	34	41	42
A. Subtotal	27	35	89	95	113	138	154
B. Central Government loans to states	28	90	136	123	121	144	138
C. Net Position (B-A)	0	55	47	29	9	6	-16
Memo items:							
Interest Payments from States (as a Percent of Central Government Revenue)	6.9	9.0	9.0	9.5	10.2	12.1	12.3
Effective Interest Rate	4.1	4.2	5.6	6.0	6.3	6.9	7.0
Total Debt Stocks of States(as a Percent of Total Revenue of States)	147.2	152.9	163.3	154.5	154.2	154.1	156.6
<i>Note:</i> RE = Revised estimates, BE = Budget estimates.							
<i>Source:</i> RBI, <u>Report on Currency and Finance</u> , various issues.							

The Fiscal Situation Raises Other Issues. According to central budget documents, roughly 30 percent (40 percent) of the tax receipts mobilized (retained) by the Central Government is devolved to the states. In addition, the center provides loans and grants to states equivalent to about 25 percent of its total expenditures. Over time, the indebtedness of the states to the center has increased despite periodic debt relief from the center. As discussed in Chapter 2, because of the weak revenue performance of the states, the burden of the resulting debt service obligations to the center has increased steadily, even though the effective interest rate on these loans has been relatively low (Table 1.14). In response, the center has moderated the growth in its gross lending to states. One consequence, however, is that net loan transfers from the Central Government to the states are turning negative. As discussed in Chapter 2, many states are in a difficult financial position and net negative loan transfers from the Central Government could reduce their ability to service their debt to the Central Government. This may have a strong impact on the Central Government revenues, even if the center is able to deduct some payments from the states at the source (of transfers).

Continuous improvements in the current account deficit of the balance of payments suggest that fiscal imbalances have not yet spilled over into the balance of payments. However, this may have resulted from subdued levels of investment typical of the initial phases of structural adjustment programs and evident in India in recent years (Table 1.7). A strong recovery would easily increase domestic investment to the levels prevailing in years such as 1990-91, and possibly higher. In this case, unless public savings increase, a strong investment recovery could have a strong destabilizing effect on the balance of payments.

As indicated earlier, non-interest expenditures already have borne the brunt of fiscal adjustment and not much room is left for further reductions. At the same time, fiscal adjustment must proceed without jeopardizing public resources for human resource development and targeted anti-poverty programs. Containing food subsidies would contribute to this adjustment. This would depend, to a large extent, on effective management of the record level of stocks now in the godowns of the Food Corporation of India. Large and timely releases into the external market and the elimination of restrictions by the states on private traders' ability to hold stocks would reduce the significant carrying cost. Besides further reducing other subsidies, particularly for fertilizers, and readjusting oil prices, achieving a further 2 percent of GDP fiscal consolidation will likely need to rely on: (a) continuing the tax reform process, with full attention to extending the tax net, improving tax administration and increasing the role of personal income taxes; and (b) more aggressive privatization, with proceeds going toward debt retirement.

In 1992, only about four million persons--equivalent to about 0.5 percent of the total population and 2 percent of the urban population--paid personal income taxes. And they declared only about one-third of taxable income. Following the recommendations of the Chelliah Tax Reforms Committee (which was set up in August 1991), successive recent budgets introduced and extended the coverage of the presumptive taxes, and rationalized personal income tax rates. Other recommendations to broaden the tax base and improve the efficiency of income taxes focused on issues such as the tax unit, exemptions and deductions, perquisites, fringe benefits, and the treatment of capital gains. In the crucial area of tax administration, the Committee put forward several detailed suggestions for streamlining tax administration that touched on issues such as penalties and

prosecutions, the Settlement Commission, computerization, effective tax identification numbers and summary assessments. Actions so far include commencement of extensive computerization, and the design of new tax identification numbers. Reform of corporate taxes, following the Committee's recommendations, has raised receipts from this source from 1.0 percent of GDP in 1990-91 to 1.5 percent in 1994-95. In contrast, receipts from personal income taxes rose from 1.0 percent of GDP to only 1.2 percent during the same period. This relatively modest improvement reflects the substantial ground still to be covered in reforming personal tax administration and expanding the base. There is scope at least to double the personal income tax receipts to around 2 percent of GDP.

Furthermore, the tax reforms introduced during 1993-95, particularly the reduction in exemptions, increased the buoyancy of excise duties from 0.9 to 1.0, custom duties from 0.8 to 1.0, and corporate taxes from 1.0 to 1.2. With the continuation of such tax reforms, including increased emphasis on personal income taxation, these improvements could raise total Central Government revenue to GDP by about 1.5 percentage points. If total expenditure were held constant in nominal terms, these revenue improvements would reduce the fiscal deficit of the Central Government correspondingly.

Table 1.15: Profitability Profile of Non-Departmental Central Government PEs, 1990-94 (Rs. billion)				
	1990-91	1991-92	1992-93	1993-94
Number of Operating Enterprises	236	237	239	240
Profitable	123	133	131	120
Loss-making	111	102	106	117
Profit of profit-making PEs	54	61	74	97
(Percent of GDP)	1.0	1.0	1.1	1.2
Loss of loss-making PEs	31	37	41	53
(Percent of GDP)	0.6	0.6	0.6	0.7
<u>Memo Item:</u>				
Profits of PEs in the Oil sector	23	18	23	39
(Percent of GDP)	0.4	0.3	0.3	0.5
<i>Source:</i> Ministry of Finance, <i>Economic Survey 1994-95</i> ; CMIE.				

These calculations assume no improvement in the performance of public enterprises (PEs). Evidently, if their performance improved, their contribution to fiscal adjustment would be significant through payments of larger dividends. At present, however, about 40 percent of central PEs are chronic loss makers. Their losses in 1993-94 were 30 percent higher than in the previous year; they amounted to Rs 53 billion, equivalent to 0.7 percent of GDP (Table 1.15). These losses put a substantial burden on the budget and the financial sector. They crowd out private investment and public spending in social sectors and infrastructure. In addition, the low quality and high cost inputs they provide the other companies, weaken India's position in international competition. Therefore,

acceleration in the PE reforms, including privatizations, would play a pivotal role in improving fiscal discipline and in strengthening the competitiveness of India's industry.

Balance of Payments and External Debt Management

For the past two years, a key issue for the authorities has been to avoid surpluses in the capital account, which at present is more open than China's and Korea's, from leading to a deterioration in export performance. Surpluses in the capital account have surged while the current account deficit remained negligible. This has put pressure on the nominal exchange rate to appreciate. The RBI has maintained the nominal exchange rate (in theory a float) constant at Rs. 31.37/US\$ by purchasing all the excess supply of foreign exchange at that rate. Foreign exchange dealers believe that in the absence of such interventions, the nominal exchange rate and thus also the real would have appreciated, probably by 20 percent. This would have prevented the rapid expansion of exports witnessed in the last two years. Because of the devaluation of the US\$ vis-a-vis major currencies, and the reduction in the anti-export bias, there has been no noticeable impact on exports. However, the authorities are legitimately concerned with the pressure of inflation on the real exchange rate and export performance that could re-emerge if capital inflows were to return to the levels witnessed in the last two years.

Accordingly, the authorities have responded to the surge in capital inflows through measures that seek to discourage three categories of inflows. *First*, following a procedure established at the time of the last IMF Stand-By (November 1992-May 1994), the authorities continue to set annual limits for *external commercial borrowing*. *Second*, new guidelines in May and October 1994, for Indian firms raising funds abroad, establish a maximum of one (two) issue(s) per year per company (group of companies); require that money raised abroad be for physical investment projects; and stipulate that these funds must not be brought into the country until a clear use for them exists. *Third*, as indicated earlier, *NRI deposits* have been made less attractive (Boxes 1.1 and 1.2) and their growth thus has been contained. Together with recent increases in US interest rates and adverse developments in emerging markets, these measures have helped to bring inflows to more manageable levels in recent months (and have created an opportunity for more restrictive monetary policies, which as indicated earlier, the RBI has seized). It is evident, however, that the impact of developments in the capital account on the competitiveness of the real exchange rate and export growth will continue to be an area of concern for sometime. The stance on fiscal policy, and its impact on interest rates will be a factor in determining the magnitude, direction and composition of the capital inflows.

The Eighth Plan (1992-1997) document anticipated a current account deficit in the balance of payments averaging 1.6 percent of GDP per annum. Assuming that the current account deficit increases to about 2 percent of GDP thereafter, this would reduce India's external debt from 33 percent of GDP at present to 25 percent of GDP by the end of the decade, and 22 percent of GDP by the year 2003. As a share of current account receipts, the debt service ratio would decline from 24 percent at present to 16 percent towards the end of the decade, and 14 percent by the year 2003. Key assumptions of this scenario are that: (a) GDP growth during 1997-2003 will average 6 percent per annum; (b) merchandise export and import growth will stabilize at about 11 percent per annum and 10

percent per annum respectively toward the end of the projection period; (c) foreign investments (including foreign institutional investment, foreign direct investment, and global deposit receipts) will rise from the current level of \$4.9 billion to as much as \$7 billion by 2003 (with foreign direct investment comprising an increasing share); and (d) gross reserve (net of gold) accumulation will reach \$22 billion by the end of decade, equivalent to 4.2 months of imports of goods.

Although the external accounts have improved since 1991, they remain vulnerable in several respects. *First*, in spite of the more welcoming approach toward foreign investors adopted in recent years, domestic oil production (40 percent of national consumption at present) will level off towards 1998 and oil imports will consequently increase rapidly thereafter. *Second*, of India's \$96 billion external debt (which includes \$4 billion of short-term debt) (Table 1.16), about \$24 billion is due to

Box 1.1: Non-Resident Indian Deposits Made Less Attractive

Since the 1990 crisis, the authorities have sought to reduce their reliance on foreign currency deposits from Non-Resident Indians (NRIs), which had reached 17 percent of India's external debt in March 1991. In addition to the potentially volatile nature of NRI deposits, they also imposed a high quasi-fiscal cost to the RBI which provided an exchange rate guarantee to a large share of them. A number of measures were taken during 1992 and 1993 to reduce India's dependence on such accounts. New kinds of accounts were created in June 1992 and May 1993, for which the commercial banks bear the foreign exchange risk. In addition (a) the guarantee on the Foreign Currency Non-Resident Account (FCNR(A)) has been discontinued since May 1993 for deposits with less than one year maturity; this was further extended to maturities up to three years in October 1993; and (b) since July 1993, the cost of the foreign exchange risk on FCNR(A) accounts has been shifted from the RBI to the Central Government—the cost of the guarantees is now an explicit budget item.

During 1994, further measures were taken to reduce India's dependence on NRI deposits. *First*, the FCNR(A) deposit scheme (of which only the three-year maturity remained) was withdrawn effective August 15, 1994. The existing FCNR(A) deposits were allowed to continue till maturity but no renewals will be permitted thereafter. *Second*, as of October 1, 1994, the interest accrued on Non-Resident (Non-Repatriable) Deposit Scheme NRNRD (but not the principal amount of the deposit) was made eligible for repatriation. *Third*, the Foreign Currency (Ordinary) Non-Repatriable (FCON) scheme, for which the principal amount of the deposit and the interest accrued are not eligible for repatriation, was abolished as of August 20, 1994. The existing deposits held under this scheme would not be renewed upon maturity. Interest accruing on existing FCON deposits from the quarter beginning October 1, 1994 will be eligible for repatriation up to the maturity date of the existing deposits. *Fourth*, in the context of a stable dollar-rupee rate, the term deposit rates for NREER accounts for maturity of 6 months to 3 years and above would be reduced from "not exceeding 10.0 percent per annum" to "not exceeding 8.0 percent per annum" effective October 18, 1994. The revised term deposits will be made applicable only to new deposits and upon renewal of maturing deposits. Effective November 1, 1994, the NREER savings deposit rate was reduced from 5.0 to 4.5 percent per annum. *Fifth*, at present FCNR(B) liabilities are totally exempt from reserve requirements. As the spreads under this scheme are extremely high and the forward cover charges are moderate under a stable dollar-rupee rate, effective October 29, 1994 scheduled commercial banks will be required to maintain a cash reserve ratio (CRR) of 7.5 percent on liabilities under the FCNR(B) scheme. As a result of this prescription, resources of scheduled commercial banks would be impounded to the extent of Rs 5500 million. Recently, the RBI further increased the cash reserve ratio on FCNR(B) from 7.5 to 15 percent. The RBI also imposed a CRR of 7.5 percent on the NRNRD. The CRR norms are applicable from January 20, 1995. This step was taken to control monetary expansion and the inflationary impact of such expansion. The immediate impact of the move was to withdraw about Rs 12 billion from the banking system.

Although inflows of NRI deposits are decreasing due to the active government action to make them less attractive, the share of NRI deposits in total external debt is still about 16 percent, down from 17 percent during the 1990-91 crisis. However, although this decline is very modest, the nature of the NRI deposits today (less costly and of longer maturity) suggests that the situation is not alarming. This is true despite the fact that all remaining NRI schemes are repatriable (except the principal amount on NRNRD).

Box 1.2: Non-Resident Deposits Characterized

Non-resident deposits includes net inflows under the six schemes in place and the terminated FCBOD scheme.

	Starting Date	Foreign Exchange Guarantee	Repatriability Principal	Repatriability Interest	SLR/ CRR Requirements	Interest Rates ^a	Outstanding Stock (US\$ billion) ^b
FCNR(A)	Nov. 1975	Yes	Yes	Yes	Yes	(a)	7.1
NR(E)RA	Feb. 1970	No	Yes	Yes	Yes	(b)	4.6
FCNR(B)	May 1993	No	Yes	Yes	Yes	(a)	3.0
NR(NR)RD	June 1992	No	No	Yes ^c	Yes	(c)	2.5
FCON	June 1991	No	No	Yes ^d	No	(c)	0.0
RFC	Feb. 1992	No	Yes	Yes	No	(c)	--
FCBOD							--

FCNR(A): Foreign Currency (Non-resident) Accounts in US\$, UK£, Yen, or DM. Withdrawn effective August 15, 1994.

NR(E)RA: Non-resident (External) Rupee Account; Rupee denominated.

FCNR(B): Foreign Currency (Non-resident) Accounts (Banks) Scheme in US\$, UK£, Yen or DM.

NR(NR)RD: Non-resident (Non-Repatriable) Deposit Scheme; Rupee denominated.

FCON: Foreign Currency (Ordinary Non-Repatriable) Deposit Scheme; in US\$. Abolished as of August 20, 1994.

RFC: Resident Foreign Currency Accounts (for citizens returning to India after working abroad); any currency.

FCBOD: Foreign Currency (Banks & Others) Deposits from corporations abroad. Discontinued since July 31, 1992.

-- Not available.

Note: All figures are inclusive of accrued interest.

a. (a) fixed by RBI; (b) ceiling of 11 percent; (c) banks determine the rate.

b. Preliminary, as of March 1995.

c. Applicable on interest accruing on deposits from the quarter beginning October 1, 1994.

d. Applicable on interest accruing on existing deposits from the quarter beginning October 1, 1994 up to the maturity date of existing deposits.

Source: Reserve Bank of India.

be repaid in the next four years with a peak of roughly \$7 billion in 1996-97. This is in addition to the rollover of the short-term debt and the rollover of NRI accounts. Added to the financing requirements of the current account deficit, this means that over the next four years India will need to mobilize about \$40 billion of external finance--excluding the rollover of short-term debt and NRI accounts.

Third, NRI foreign currency accounts continue to be a potential source of pressure since, in theory, they can be withdrawn on demand, subject to a small penalty, and create some vulnerability. *In practice, of course, this has not occurred.* *Fourth*, while India has enjoyed an unprecedented sequence of good monsoons the probability of a bad one is not believed to have changed. *Fifth*, recent developments in emerging capital markets have highlighted the macroeconomic turbulence that sudden changes in market sentiments can bring about. Portfolio investment in India has taken place in instruments that are costly to reverse, debt instrument are highly restricted, and the authorities have maintained foreign exchange reserves at a level sufficient to accommodate portfolio outflows.

However, there is always a risk of other outflows--such as NRI accounts. These vulnerabilities are tempered by India's strong liquidity position--\$20.8 billion of reserves versus short-term liabilities (including NRI deposits with remaining maturities of less than one year) roughly half that. All this makes capital flight more costly and less likely, but cannot prevent it. International experience indicates that it would be ill-advised to attempt to prevent the exchange rate from depreciating were outflows to occur.

	1990-91	1991-92	1992-93	1993-94	1994-95 ^a
Multilateral	21.8	24.0	26.1	27.8	29.1
Concessional	13.8	14.8	16.0	16.7	17.5
Non-Concessional	7.9	9.2	10.2	11.2	11.6
Bilateral (include. Rupee Debt)	26.7	25.6	27.9	28.0	29.1
Concessional	25.2	24.0	26.2	26.2	27.3
Non-Concessional	1.5	1.6	1.6	1.8	1.8
IMF	2.6	3.5	4.8	5.0	4.3
Export Credit	2.8	2.9	3.1	4.5	5.3
Supplier's Credit	0.4	0.4	0.6	0.8	1.0
Other Private	0.9	0.9	1.1	1.5	1.9
Private Non-Guaranteed	1.5	1.5	1.5	2.3	2.4
Commercial Borrowing	19.6	21.0	21.8	22.9	23.6
Commercial Banks	16.7	16.6	17.5	18.9	20.0
of which: NRI Deposits	10.2	10.1	11.1	12.7	13.0
Bonds	2.9	4.4	4.4	4.0	3.7
Short Term Debt	8.5	7.1	6.3	3.6	4.1
Total	82.0	84.0	90.1	91.9	95.6
<i>Source:</i> World Bank Debt Reporting System.					

For all these reasons, a significant revision in the anticipated current account deficit is not expected before the end of the Eighth Plan period in 1997-98 when the government will announce its macroeconomic targets for 1997-2002. At that time, it would not be unreasonable for the anticipated current account deficit to be revised upward, perhaps to around 2 percent of GDP especially as the economy absorbs large investments in infrastructure, and the capital goods imports associated with them. However, more important than setting targets for the current account deficit is to ensure that the macroeconomic and sector policy framework are such that foreign savings incrementally finance high return investments rather than consumption.

Openness Of India's Capital Account Already Comparable To Some High Performing Countries. The surge of capital inflows over the last two years was unexpectedly large. It led to the realization that India's capital account, while still more closed than Chile's, Mexico's or Indonesia's, is

already more open than Korea's and China's at present, or Japan's until the late 1970s. At present, India's *foreign direct investment* regime is comparable to those in the most open economies. In addition to being permitted in a wide range of sectors, with the amendment of the FERA (Act) in 1993 there is now no discrimination between firms with foreign equity and firms fully owned by Indian nationals. This means that once established in India, a foreign investor can invest in all areas of the economy under the same terms and conditions as a national investor. In addition, unlike a practice prevailing in a number of developing countries, there are no limits or restrictions on profit remittances. Conditions on portfolio investment by *foreign institutional investors* (FIIs) are much more liberal in India than in Korea (where there is a limit of 10 percent, recently increased to 15 percent, on the cumulative amount of equity that foreign institutional investors can hold in any given firm); and Taiwan, China, where the limit is 10 percent and where, in addition, there is a global ceiling on the aggregate amount of annual portfolio inflows allowed into the country.

At the same time, the conditions in India are considerably more restrictive than in Malaysia (where the only shareholding limits are for portfolio investment in banks and finance companies, and designated non-bank stocks); Indonesia (where the shareholding limit is 49 percent), and Mexico (where the shareholding limit is 100 percent, except for banks where it is 30 percent). And contrary to countries such as Argentina and Mexico, foreigners cannot hold India's government debt instrument, and can only purchase private firms debt instruments in the secondary market--which in India is relatively illiquid. Regarding *external borrowing*, India's regime is more liberal than in Korea (where in addition to an overall ceiling similar to that in effect in India, firms can only use proceeds exclusively for imports), but is less liberal than in most other countries. However, as has been the case in other countries (Box 1.3), and as witnessed last year, even this current degree of openness can be the source of considerable macroeconomic turbulence.

If Inflows Return To Last Year's Level, More Active Management Of The Capital Account May Be Necessary. International experience indicates that the basic long-term strategy for managing capital inflows should be to increase the economy's capacity to absorb and allocate them efficiently through market-based mechanisms. However, the short-term macroeconomic destabilizing effects of rapid accumulation of foreign assets are not unlike those stemming from excessive government spending. The exception is the fact that real returns on liquid foreign assets accumulated by the RBI are unlikely to be over 2-3 percent while returns on government spending, in theory at least, could be much higher. This highlights that the opening of the capital account should keep pace with the overall progress of stabilization and reforms in the economy. This is based on two familiar arguments articulated by Vittorio Corbo and Stanley Fisher in *Adjustment Lending Revisited*, 1992: "*First*, the speed of adjustment in the asset markets is much faster than in the commodity markets. To avoid large movements in capital inflows and the real exchange rate, controls on capital should limit the flows of capital to the rate at which the goods markets adjust to domestic deregulation and foreign trade liberalization. *Second*, because the prices of assets are determined by the expected present value of future income streams, distortions in the prices of goods and factors result in assets being traded at distorted prices. The consequence is a misallocation of investment."

Box 1.3: Malaysia Applied Administrative Controls Pragmatically

Beginning in 1989, Malaysia received large inflows of foreign direct investment (equivalent to between six and eight percent of GDP). Foreign commercial loans were also substantial (about six percent of GDP). Initially, the authorities depended heavily on open market operations, adjustments to the statutory reserve requirements and the transfer of government deposits from commercial banks to the Bank Negara Malaysia (the Central Bank), to contain monetary expansion and inflation. Meanwhile, strong fiscal adjustment continued throughout the period under review, with emphasis on enhancing revenue and containing subsidies and transfers. The overall balance of the federal government went from a deficit (4.5 percent of GNP in 1989) to a surplus estimated at 0.4 percent of GNP in 1994. Similar fiscal adjustment occurred among state and local governments, and statutory bodies. The economic liberalization program was also implemented steadily.

During the last quarter of 1993, there was a surge in capital inflows which raised the growth in the net foreign assets of the banking system from 37 percent in September 1993 to 64 percent in December 1993 and 72 percent in March 1994. These funds were perceived as 'betting' that the exchange rate would appreciate after December 1993, as had occurred one year earlier. As a result, the 12-month M3 growth jumped from 16 percent in 1992 to 23 percent in 1993 and 29 percent by March 1994. Inflation had fallen to 3 percent during the third quarter of 1993 after climbing from 3 percent in 1989 to 5 percent in 1992. But it soon began to rise again to 4 percent during the last quarter of 1993, and 5 percent during the first quarter of 1994.

The decision to adopt administrative measures must be seen in the context of the high priority Malaysian authorities placed on low inflation. Practitioners and researchers in other countries indicate that the various macroeconomic concerns raised by capital inflows were not always accorded equal importance overtime or across boundaries. For instance, Indonesian authorities were prepared to tolerate inflation up to the politically sensitive level of 10 percent. But they had the flexibility to devalue the rupiah in order to maintain competitiveness. In contrast, Malaysia adopted a zero-inflation stance in 1994 even though price increases during episodes of large capital inflows generally were below the rates prevailing among its trading partners.

With lower inflation as the primary target, and with empirical analysis suggesting that in Malaysia monetary aggregates have a much greater impact on inflation than the exchange rate, Bank Negara Malaysia adopted several administrative measures. It set ceilings on non-trade or non-investment related liabilities; prohibited residents from selling short-term monetary instruments to non-residents; required placement of all ringgit funds of foreign financial institutions in non-interest bearing (VOSTRO) accounts with Bank Negara; and de facto imposed negative interest on these funds by including them in the base of liabilities subject to the statutory liquidity requirement. The REER depreciated by 3 percent in January and again in February 1994, and monetary growth subsided. By May 1994, the net foreign assets position of the banking system had fallen back by 11 percent in US\$ dollar terms compared to April 1994 and by a little less relative to January 1994.

Concerns about the loss of foreign investor confidence following the imposition of administrative measures by the Bank Negara in early 1994 proved to be unjustified. During January-August 1994, the ringgit value of FDI applications was 67 percent higher than for the same period in 1993. An important reason was the authority's strong track record of market-friendly policies and sound macroeconomic management. Another reason was that once the limited objectives of the interventions were achieved, the measures were removed, mostly by August 1994.

While the authorities have not articulated formally what would be their policy stance on the capital account, a number of policy statements and recent decisions suggest that the authorities intend to follow a three-pronged approach which seems appropriate to India's current circumstances: (a) relaxing some restrictions on capital outflows--the authorities have already relaxed conditions governing India's investment abroad and rules regarding the timing of repatriation of export and loan proceeds, and further steps in this direction are possible; (b) introducing further prudential regulations on inflows. The last prong, as suggested by the RBI's Annual Report for 1993-94, may be: (c) "[a]s part of the use of fiscal adjustment to neutralize the capital inflows, taxation of the capital inflows to

discourage the inflows and to also bridge the fiscal gap. This instrument of policy is [to be] used only if the capital inflows accelerate and other instruments are unable to contain the expansionary effects of the inflows.”

POVERTY

A Major Objective Of The 1995-96 Budget Is To Increase The Anti-Poverty Orientation Of Government Policies. The pillars of the Government’s poverty reduction strategy are accelerated and sustained labor-intensive growth, and investment in human capital development. Anti-poverty programs have a supplementary role. However, although growth improved further in 1994-95, the return of inflation to double digits raised concern over the impact of the economic program on the poor. This has been accentuated by particularly large increases in food prices. For example, the price of common rice sold through the Public Distribution System (PDS) has risen by about 90 percent since July 1991, and the price of wheat has risen by about 70 percent. This is well above the 40 percent by which the Wholesale Price Index (WPI) has increased since that time.

Table 1.17: Annual Percentage Change in Real Wages for Unskilled Agricultural Labor by Selected States (percentage change for agricultural year (July to June over previous year))				
State	1990- 91	1991-92	1992-93	1993-94
Andhra Pradesh	-1.1	-11.4	1.6	8.7
Assam	5.4	-8.9	0.8	-6.7
Bihar	4.2	-4.5	-4.7	5.9
Gujarat	-0.8	-4.3	7.7	3.3
Karnataka	-3.1	-13.1	-14.4	41.3
Kerala	5.2	4.1	9.7	-2.9
Madhya Pradesh	6.8	-3.9	12.3	-3.7
Maharashtra	6.8	-14.7	0.5	26.1
Orissa	9.4	-3.5	10.7	-
Punjab	3.9	3.8	4.1	1.6
Rajasthan	0.7	5.6	-3.3	-7.6
Tamil Nadu	2.6	-5.1	13.4	11.3
Uttar Pradesh	-3.5	1.4	7.6	-7
West Bengal	-6.1	-6.2	24.3	-6.4
All India	1.1	-5.3	5.6	3.6
P-Provisional.				
Source: Ministry of Finance, Economic Survey 1994-95.				

In its 1995-96 Budget, the Central Government re-doubled its efforts to alleviate poverty. While re-iterating that significant and sustained reduction in poverty could only be achieved through broad-based growth, the 1995-96 Budget introduced new anti-poverty programs. New schemes direct the commercial banks to provide credit to small scale units, scheduled castes and tribes, enterprises in backward regions, and state governments to complete ongoing rural infrastructure projects. Other

schemes target the urban poor with subsidized housing, old age pension, maternity benefits, subsidized life insurance, lump-sum survivor benefits on the death of the primary bread earner, and mid-day meals for school children. The operational modalities and exact cost of most of the schemes are being worked out. The Budget also introduced lower excise duties and other measures aimed at increasing access to cheaper imports of essential items such as sugar, pulses and edible oils.

International experience, and research on poverty in India up to the late 1980s, all suggest that inflation affects the poor adversely. However, no clear answers are possible at this stage about the more recent period. The reason is that there are no definitive data on recent household expenditure and therefore, no definitive indications of the net impact of inflation and other developments since 1991 on poverty in India. Since 1991, conditions known generally to be favorable and unfavorable to the poor have evolved. Growth in the 1980s was not sustainable and was based on rapidly growing domestic and external imbalances. If not corrected, they would have led the economy to a cycle of rapid inflation, chronic balance of payments problems, and low growth--a situation in which the poor are particularly vulnerable. Thus, the rapid correction of the unsustainable domestic and external imbalances and the structural reforms, which are setting the economy on a higher growth trajectory, have improved prospects considerably for raising the living standards of the poor. In addition, India has avoided the sharp and prolonged declines in GDP growth which have been common in stabilization and reform experiences elsewhere in the world, and which tend to have a strong negative impact on the consumption levels of the poor.

Also on the positive side, annual growth in the agricultural sector averaged 3.5 percent since 1991-92, when it contracted by 2.3 percent (Table 1.6). At present, about 80 percent of India's poor reside in rural areas and their welfare is closely tied to the performance of the agricultural sector. When the sector contracted in 1991-92, the real average wage (nominal wage deflated by state-level consumer price index) of unskilled agricultural labor at the all-India level--an important indicator of the consumption levels of the poor--contracted in 1991-92. But the subsequent recovery more than compensated for this one year decline (Table 1.17).

Employment creation has accelerated. The recent Economic Survey (1994-95) indicated that employment increased twice as fast between 1992 and 1994 than during the 1985-92, at a rate of 6 million new jobs a year. In 1994-95, employment growth was approximately 7.8 million. Prior to the reforms initiated in 1991, industrial policies provided high effective protection for capital intensive manufacturing sectors. This had resulted in a four-fold decrease in the labor intensity of manufacturing during 1960 and 1986.

Contrary to some stabilization and reform experiences elsewhere in the world, the government has made deliberate efforts to ensure that the burden of fiscal adjustment does not fall on social programs that benefit the poor. India has several antipoverty programs, including: (a) the Public Distribution System (PDS) which provides to the poor basic foodstuffs at subsidized prices; (b) the Integrated Rural Development Program which helps the poor to acquire income-generating assets such as milk cows or bullock carts; (c) public works programs which aim to provide additional wage employment; and (d) the Integrated Child Development Scheme. Total central and state fiscal expenditures on these programs approached 2 percent of GDP over 1992-93 to 1994-95. In addition, a revamped PDS was launched in 1992. The authorities expanded the network of fair prices shops to

backward and remote blocks in tribal and dry land areas. An "Employment Assurance Scheme" also was introduced in 1993 in 1,752 backward blocks in drought-prone tribal and hill areas. The Central Government has also maintained or increased its expenditures on social services, particularly for those that have a strong impact on the living standards of the poor. Spending on disease control programs rose by 44 percent between 1992-93 and 1994-95 and is projected to increase by 17 percent over 1995-96. Expenditure on individual disease control program was much higher than the aggregate. Spending on Tuberculosis, Leprosy Control, and Trachoma and Blindness programs rose by 59, 169, and 100 percent respectively over 1992-95.

Meanwhile, state spending on social services has remained largely unchanged at around 5.3 percent of GDP since 1991-92. Evidently, *failure to correct fiscal and institutional problems at the state level, as discussed in Chapter 2, would jeopardize over time the capacity of the governments to provide the poor with the physical health, skills and opportunities to benefit from the growth process.*

While the intense focus on poverty reduction is welcome, it is of concern that the recent efforts do not include improvements in the administration of existing programs. To enhance the implementation and monitoring capacity of the rural and urban development ministries, the government added six new departments in 1995 and consolidated others to improve the coordination between different department heads. These changes are expected to correct the pervasive mis-targeting and supply mismanagement, particularly of foodgrains. Even if successful, this would be just a beginning. Another concern is that the initiatives announced in the 1995-96 Budget involve creating nine new programs. This could strain the delivery system and compound the fundamental inefficiencies in the existing arrangements. In addition, requiring that the banking sector fund some of the new anti-poverty initiatives, albeit from the shortfall in their priority sector lending, is a step in the wrong direction. Finally, with a large proportion of the rural poor directly dependent on agricultural growth, there is concern that several unresolved issues in the sector would undermine its contribution to poverty reduction.

PROGRESS IN STRUCTURAL REFORMS

Structural Reforms Continued In 1994-95. Over the last three years the Indian authorities have taken measures in a wide range of areas to push the economy into an incentive regime more conducive to rapid employment generating growth and poverty reduction. The last two Economic Surveys and the last three Economic Memoranda reviewed in detail the reforms introduced in the first three years of the government's structural reform program.

The reform process continued during 1994-95. On the *investment front*, the New Telecoms Policy of May 1994 allows private investment (including foreign investment up to 49 percent of equity) in the provision of basic telecommunication services. Value-added services were opened to private sector in July 1992 but private sector entry was blocked because of unclear guidelines on the award of licenses. These problems have now been addressed. In October 1994, private companies received licenses to operate cellular services in Bombay, Calcutta, Madras, and Delhi. By the end of 1996 cellular services are expected to be introduced in all telecom operating areas in India. In January 1995, the Government invited bids for licenses in basic services. Meanwhile, a new Drug Policy was introduced in September 1994. It permits foreign investment of up to 51 percent equity to receive

automatic approval, removes restrictions on production and imports for foreign companies, and frees the price of most drugs except the most basic ones. In December 1994, the government opened coal mining fully to the private sector in two stages. In the first stage, domestic and foreign companies will be allowed to form joint ventures as minority shareholders with Coal India Ltd. In the second stage, the Coal Mines Nationalization Act will be amended to allow private companies independently to mine and sell coal in the open market. Separately, the Government allowed 10 new banks to open operations, including three of foreign origin. Foreign investors can own up to 49 percent of small scale industries; but the products reserved for small scale enterprises have not been changed and this remains an obstacle to achieving economies of scale in the production of a number of industrial products.

In the 1995-96 Budget, the Minister of Finance reaffirmed the Government's commitment to the continuation of reforms of the *capital market* through the Securities and Exchange Board of India (SEBI) directives. As a part of the process of eliminating the administrative bottlenecks in the transfer procedures and as a move towards paperless trading, the Budget announced that legislation to establish a Central Depository Scheme will be introduced during the year. This follows several measures taken during the course of the 1994-95. A new National Stock Exchange (NSE) was inaugurated formally in July 1994. It is India's first entirely scripless stock exchange. It is viewed by the Government as an important step in providing efficient and transparent services to investors. During the year, the RBI instructed banks that all transactions in debt securities, previously handled by brokers in an unregulated telephone market, should be done solely through the NSE. Meanwhile, SEBI has taken several steps to strengthen the regulatory framework of India's capital markets. Actions include introducing regulations governing substantial acquisition of shares, guidelines governing disclosures and public offering of shares. In January 1995, the SEBI Act was amended to re-inforce SEBI's autonomy and capacity to respond quickly to market conditions; and provide regulatory powers (and penalties) over corporates in matters such as the issuance of capital. Starting January 1995, FIIs were allowed to borrow in Indian capital markets on registration with SEBI.

The much awaited decision to end the public sector monopoly of the insurance industry recommended last year by the government-appointed Malhotra Committee on Insurance has not yet been taken. However, in his recent budget speech, the Finance Minister announced a decision to set up an Insurance Regulatory Authority, on lines similar to SEBI--this is an essential first step for the liberalization of insurance and was an important recommendation of the Malhotra Committee. The government has also continued to encourage investment growth by lowering import and excise duties on the parts, components, and inputs for the capital goods industry, and raising the investment limit to Rs. 30 million from the present Rs. 20 million for excise exemptions for the small scale industry.

With these measures, the main investment restrictions remaining at present are for insurance and railways which are the only sectors of the economy still reserved for the public sector. The railways already have made increasingly large efforts to involve the private sector in operations ("own-your-wagon" schemes), and maintenance (the maintenance of a number of railway stations has been contracted out). India's foreign investment regime now compares well with those prevailing in East Asian countries which have been successful at attracting foreign investment. In some cases, it is significantly more open than its competitors' (telecommunications, power and mining). *However, as discussed in Chapter 3, the liberalization of the investment regime in infrastructure needs to be*

accompanied by considerable improvements in the institutions and regulations governing private investment in this area.

In *trade reform*, the maximum import tariff was reduced from 85 percent to 65 percent at the beginning of 1994-95; it was 300 percent in 1990-91. In addition to reductions in tariffs below the maximum, this change brought the average tariff down to 33 percent in 1994-95, from 47 percent in 1993-94 and 87 percent in 1990-91. The 1995-96 Budget introduced further tariff reforms which are expected to reduce the average tariff to about 27 percent (Table 1.18). The highest import duty is to be cut from 65 to 50 percent, with wide-ranging reductions of tariffs on inputs and outputs in key sectors, such as capital goods, electronics, textiles, chemicals and metal-based industries. Import duties on general machinery, machine tools, instruments and projects were unified at 25 percent. These tariff adjustments will remove some of the remaining anomalies in the duty structure such as multiplicity of rates on import of capital goods, and tariffs on imports of inputs for the capital goods industry higher than those for the final goods. Duties on inputs for electronics have been cut significantly along with items such as ferrous and non-ferrous metals, polyester fiber and polyester filament yarn, chemicals such as ethylene, benzene, soda ash and caustic soda, and paper.

Since 1991-92, the pervasive licensing restrictions on imports of intermediate and capital goods have been eliminated. In August 1994 the rupee was made fully convertible for current account transactions, earning India Article VIII status with the IMF. *Restrictions on imports of consumer goods and trade of agricultural commodities are still important obstacles to the full integration of India into the world economy.* However, during 1994-95, the government took additional measures to liberalize imports of consumer goods. Over the past few months, the government placed pulses, sugar, edible oil, butter oil and skimmed milk powder on the free import list.

Table 1.18: Tariff Structure, 1990-96
(in percent)

	Mean					Import Weighted Average					No. of Items
	1990-91	1992-93	1993-94	1994-95	1995-96	1990-91	1992-93	1993-94	1994-95	1995-96	
Whole Economy	128 (41)	94 (34)	71 (30)	55 (25)	42 (21)	87	64	47	33	27	5040
Agri. Products	106 (48)	59 (49)	39 (39)	31 (30)	26 (21)	70	30	25	17	15	268
Mining	n.a.	n.a.	71 (24)	48 (25)	37 (18)	n.a.	n.a.	33	31	30	100
Consumer Goods	142 (33)	92 (42)	76 (36)	59 (33)	43 (21)	164	144	33	48	39	1,347
Intermediates	133 (42)	104 (25)	77 (22)	59 (17)	45 (15)	117	55	40	31	24	2,337
Capital Goods	109 (32)	86 (26)	58 (24)	42 (20)	35 (13)	97	76	50	38	30	988

Note: Standard deviations are in parentheses. In 1990-91 and 1992-93, mining is included in intermediates.

Source: Ministry of Finance and Bank Staff estimates.

The most recent Exim Policy (April 1, 1995) further liberalized imports of consumer goods. The Special Import License (SIL) scheme, which enables importers of consumer goods to purchase the import license from exporters to which it is granted as a proportion of their exports, has been increased from 42 to 75. The new items include: computer systems, TV tubes, commercial refrigeration

equipment, battery and electrically-operated vehicles, refrigerated trucks, cash registers, and sewing machines. Several consumer items were also removed from the Negative list onto the (OGL) freely importable list. Among them are personal computers, CD rom, diskettes, coffee, fish, paper and paper products, cameras, sports goods, and some baby products. The import duty on the liberalized consumer goods will be 50 percent. Prior to these measures, in December 1994, the Government reached agreements on Market Access in Textiles with the European Union and the United States, which import about two thirds of India's textile exports. The agreements *inter alia* involve the phased liberalization of India's tariffs on certain items and a phased opening of India's market for imported textile products. As a first step, textile and garments were placed on the list of items that can be imported with SILs. All these measures are welcome steps towards eliminating non-tariff barriers to consumer goods imports. *However, they clearly are very partial steps and a bolder approach to liberalizing consumer goods is warranted.*

The recent Exim Policy also took several steps to enhance export incentives. They include extending the Export Promotion Capital Goods (EPCG) scheme. The scheme allows exporters to import capital goods at a concessional tariff of 15 percent, subject to an export obligation of four times the c.i.f. value of imports to be fulfilled within a period of five years from the date of issue of the import license. The extension allows duty-free imports of capital goods against export obligation in cases where the c.i.f. value is over Rs 200 million (about \$6 million). The export obligation is six times the c.i.f. value of imports in eight years. Duty-free imports apply to second-hand machinery too if the minimum residual life is at least 10 years. Unlike earlier, this scheme is now extended on the same conditions to both merchant exporters as well as the service sector. This will benefit particularly hotels and tourism industry, enabling them to import goods such as air conditioning systems, buses, cars, special kitchen equipment and furniture. In addition, supplies to all EPCG license holders and projects in the power, oil and gas sectors will be regarded as "deemed exports" (indirect exports). They will be eligible for a number of export benefits, including duty drawback. Duty-free importation of capital goods and extension of the EPCG scheme to the service sector also will strengthen the ongoing investment recovery. To further promote exports, the new Exim Policy also took the major decision to introduce back-to-back inland letters of credit to enable an Advance License (AL) holder to obtain his input from domestic suppliers. In addition, AL holders can now claim MODVAT credit on imports. And a green channel facility will be provided to certain categories of exporters and importers for faster custom clearance. Based on these policy improvements, the Ministry of Commerce expects a 20 percent increase in exports in 1995-96 in current dollars, almost the same rate realized in the past two years.

India has developed a financial system which has been highly successful at mobilizing financial savings. The financial savings rate is over 13 percent of GDP; financial instruments are well diversified; and measures of financial sector development (such as the ratio of M3 to GDP or the size of the stock market) are unusually high for a country with a per capita income of \$290. However, India's financial system has been less successful at allocating capital efficiently. Until very recently, prudential regulations were inadequate and made it difficult to assess the true quality of the banks' portfolios, or the true level of banks' profits. In addition, returns to financial assets were highly regulated, entry and competition were highly restricted, banks had little autonomy on how to conduct their operations, and public banks dominated the banking system.

To address these problems, the Government formulated a program of reforms which has six components: (a) liberalizing financial policies; (b) re-energizing competition in financial service industries; (c) restoring health to banking institutions; (d) broadening the ownership of public sector banks; (e) developing an active domestic market for government securities; and (f) initiating reform of the rural credit system.

In *liberalizing financial policies*, the RBI's Credit Policy Statement of October 1994 removed the minimum lending rate applicable to commercial bank advances exceeding Rs 200,000. This was a major step in interest rate liberalization. Earlier steps included reducing the number of bank lending rates; removing most restrictions on banks wishing to issue certificates of deposits; and liberalizing interest rates on debentures and most public sector bonds (other than tax-free bonds). The key remaining interest rate restriction is the ceiling on term deposits for maturities of 46 days and beyond. In timing the lifting of this ceiling, the authorities are conscious that the financial soundness of banks must first improve.

The Statutory Liquidity Ratio (SLR) was reduced from 38.5 percent of incremental deposits in 1991 to its present level of 25 percent. The authorities' target is to reach 25 percent on total deposits by March 1996. Similarly, the Cash Reserve Ratio (CRR) on incremental deposits was brought down from 25 percent in 1991 to its present level of 15 percent; deposits no longer earn interest. These measures are intended to increase the effectiveness and improve the flexibility of the CRR as a tool of monetary policy. But they also reduce preemption of bank assets.

To further improve *competition*, the authorities licensed ten new banks in 1994-95, including three foreign institutions. Earlier reforms had introduced greater competition through measures such as allowing reputable Indian corporations to tap Euro-markets and opening India's capital markets (with the exception of government securities) to foreign investments. In addition, over the last two years, the RBI raised the loan size above which consortium lending is mandatory; liberalized selective credit controls applicable to sensitive agricultural commodities; allowed banks more leeway to decide levels of collateral; and abolished limits on banks' purchases of bonds in public sector undertakings.

To *restore health to banking institutions*, new guidelines were issued in 1992 for income recognition, asset classification and provisioning requirements. They have been tightened progressively since then. The authorities also adopted capital adequacy standards of the Basle Accord to bring India's regulatory framework closer to international standards. To improve its capacity to enforce these guidelines, the RBI created a Board of Financial Supervision which started functioning in December 1994. The medium-term strategy for strengthening and restructuring banks includes improving loan recovery. Toward this end, the Recovery of Debts Due to Banks and Financial Institutions Act was passed in 1993. It establishes special tribunals for expediting adjudication and loan recovery. Five tribunals started functioning in Calcutta, Delhi, Jaipur, Ahmedabad and Bangalore, along with an appellate tribunal in Bombay. In addition, the RBI started circulating to commercial banks lists of large defaulters.

During 1994 the Government provided about \$3.3 billion in recapitalization to the 19 "nationalized" commercial banks directly owned by the Ministry of Finance as part of its strategy to strengthen the banks and *broaden the ownership base of public banks*. All the nationalized banks have

developed annual Memoranda of Understanding with the RBI, committing themselves to performance and development targets. Furthermore, legislative changes now permit partial privatization. One nationalized bank made a successful equity issue in private markets in October 1994. Another nationalized bank had done likewise in 1993. The remaining nationalized banks are planning substantial equity issues over the next three to four years.

The *development of India's "money" markets*, in particular the government-securities market, has been particularly strong over the past three years. One consequence is that the authorities are rapidly acquiring the means to manage monetary policy and public debt efficiently through open-market operations. Innovations of the late 1980s included: (a) introduction of new instruments, such as certificates of deposit (CDs), commercial paper (CP), and a 182-day treasury bill sold on an auction basis ("dated securities"--long-term treasury bonds--had long existed); (b) development of the inter-bank market; and (c) important institutional changes, including the establishment of the Discount Finance House of India to serve as a secondary market maker in public securities.

Since the early 1990s, the RBI has carried out institutional and market development of the government-securities market, and this effort has been successful. In 1992-93, the government decided henceforth to auction all its issues of dated securities. The RBI has carried out regular auctions of bills and dated securities since then, and they have generally worked smoothly. Several large financial institutions and corporations have issued floating-rate bonds linked to the 364-day auction cut-off rate. This is a welcome development because the financial markets had never previously adopted any reference rate, which prevented the development of floating-rate debt. In addition, in January 1994, the Treasury began issuing Five-Year zero-coupon bonds to manage better the Government's domestic debt. Finally, in March 1995, the RBI issued guidelines for the creation and establishment of a system of primary dealers in government securities. Together with the historic agreement (reached in 1994) between the Treasury and the RBI to phase out (over three years) the automatic monetization of the deficit, these developments established the basis for market-determined interest rates on Government paper, and for more flexible and independent implementation of monetary policy by the RBI.

While this progress is commendable, India has yet to embark on several other items on the reform agenda which constitute a wider vision of the financial sector. That vision could include a more developed financial system that is very competitive in resource mobilization and allocation (thus reducing the use of directed credit), provides a broader range of products to households and the business sector in rural and urban areas, and makes much better use of technology to deliver these services efficiently. That would mean, for instance, substantially upgrading India's payments systems to support the higher volumes of transactions that rapid economic growth is likely to generate. Inter-city payments by draft or check are subject to substantial cost and delay. India needs to develop its electronic funds-transfer capabilities. When used appropriately, such transactions are highly cost-efficient. They also can help to relieve the rapidly growing strain on check-processing facilities.

The *rural financial system and institutions* face particularly acute problems. Financial institutions specialized in rural operations, including financial cooperatives and rural regional banks (RRBs), have been severely weakened by excessive costs and regulation, and have deep-seated problems of asset quality and capital adequacy. Following the recommendations of the Government's Agricultural Credit Review Committee in 1989, a consensus has emerged within India on the need to

move toward a more market-driven system of promoting rural credit delivery, restructuring the RBBs, and improving the capability of cooperative banks to function as intermediaries. Several important measures already taken include: (a) lowering directed lending from 100 percent to 40 percent and greater freedom to rationalize branches; and (b) deregulating interest rates of rural/agricultural cooperative banks (subject to a minimum lending rate of 12 percent). Meanwhile, the RBI is to begin an ambitious program under which 49 RRBs will be selected for comprehensive restructuring, including recapitalization and managerial strengthening. Even if this program proves successful, the needs of the rural financial system are far larger: RRBs account for less than 10 percent of the nation's rural credit operations. Changes should be made also in the role and function of the National Bank for Rural Development (NABARD), cooperatives, and other financial institutions (including commercial banks) with extensive rural activities.

Tax reforms have been seeking to transform India's tax system from one with high (and highly differentiated) tax rates falling on a narrow base, into one with tax rates at moderate levels falling on a broad base. In the 1994-95 Budget, taxes on corporate income were unified at 40 percent, from 45 percent for widely held companies and 50 percent for others. A major reform of excises was implemented to make the system more closely resemble a value-added tax and address its major problems. Meanwhile, the Government extended the coverage of MODVAT (a modified value-added tax) to include manufacturing sectors thus far excluded, and, for the first time, some services. Of particular importance also were the decisions to: (a) shift most excise rates from specific to ad-valorem to increase buoyancy; (b) reduce the number of rates; and (c) simplify the system by relying on invoices for value determination. These reforms considerably simplified and modernized India's tax system and made it possible for the Central Government to focus its efforts on improving tax administration. The 1995-96 Budget further reduced peak-rates of excises. It did not reduce corporate tax rates further but it continued the emphasis on simplification, lower rates and greater buoyancy. In particular, to strengthen compliance, the authorities propose tax deduction at source for fees for professionals, technical services and service contracts, and interest income on time deposits. These efforts at tax reform need to be continued with forceful actions directed at improving markedly tax administration and enforcement.

Public enterprise (PE) reform has been one of the weakest elements in the reform process. Reforms have concentrated mainly in five areas. *First*, dereservation, delicensing and liberalization of trade have fostered competition. Public enterprises operating in the tradable sector are now subject to internal and external competition. State-owned banks are subject to competition from new private domestic and foreign banks, and among themselves. However, PE managers have not been given the authority to introduce measures essential for restructuring such as large scale retrenchment, corporate reorganization, closure or selling of units, or joint ventures with private investors. Thus, with few exceptions, the financial performance of PEs has failed to improve.

Second, to enable restructuring or liquidation of chronically loss making PEs, the Sick Industrial Companies Act was amended in December 1991 to bring these enterprises under the purview of the Board of Individual and Financial Restructuring (BIFR). So far, the results have been less than satisfactory. The main reason is that the BIFR process is biased against winding up and is very slow. About 140 PEs have been referred to BIFR. Winding up notices have been issued for three PEs, but so far none of these enterprises has been liquidated. Two of them are challenged in the high courts and

one awaits cabinet approval. BIFR can only order a wind up which then has to be implemented by the respective high courts after the state governments' clearances of winding up, retrenchment and sale of land. Because of social and political implications for the state, the state governments do not grant clearances. Concerned parties can challenge the BIFR order in the high courts. As a quasi-judicial body, however, BIFR cannot appear in court to argue its case. The Goswami Committee on Industrial Sickness and Corporate Restructuring made very useful recommendations in July 1993 to eliminate the procedural hurdles and streamline the process. The recommendations include establishment of five fast track Winding-up Tribunals situated in Bombay, Calcutta, Madras, Delhi, and Bangalore to speed up the closure process. The government has not yet acted on these proposals.

Third, a National Renewal Fund (NRF) was created in February 1992 to reduce excess employment in the public sector and provide a safety net for workers affected in the restructuring process. NRF has two windows: (a) the National Renewal Grant Fund which finances the voluntary retirement schemes (VRSs) for workers in PEs, and compensation of the affected workers in the closed or restructured public and private companies under BIFR; and (b) the Employment Generation Fund (EGF) for retraining and counseling for the affected workers. Implementation fell far short of expectations. So far only VRSs have been implemented. Programs regarding compensation of employees of BIFR companies and retraining of affected workers have not yet been made fully effective after over three years of operation of NRF. Regarding VRSs, the results have not been as good as expected. So far, about 90,000 workers have been released in about 40 PEs under VRSs which is far below the 263,000 target set in the business plan of NRF.

Fourth, budgetary support to PEs was to be reduced and PEs subjected to a hard budget constraint. Loans to PEs have declined from 0.7 percent of GDP in 1990-91 to 0.4 percent in 1992-93 but jumped to 0.6 percent in 1993-94. In addition, in the 1994-95 Budget, loans to a number of sick PEs were significantly increased. *Fifth*, only disinvestment up to 49 percent of selected profit making PEs has been allowed. Evidently, this leaves control in the hands of the public sector and helps to explain why performance has not improved substantially.

Future PE reform strategy would need to concentrate in three main areas. *First*, a more ambitious privatization program for the viable units needs to be put in place. Various privatization options could be considered depending on the nature of the sector and the enterprise, but the main objective should be to transfer the management to the private sector to enhance efficiency. *Second*, the unviable units need to be closed in a timely and orderly manner. As noted earlier, this requires amendments in the related legislation to turn BIFR into an effective bankruptcy process. To alleviate the social impact and defuse likely employee resistance, the safety net programs need to be strengthened. NRF also needs to be fully operationalized. *Third*, to date the Government has allowed disinvestment up to 49 percent of selected profit making enterprises. *The Rangarajan Committee on the Disinvestment of Shares in Public Sector Enterprises (April 1993) recommended inter alia privatization up to 74 percent of PEs in the sizable non-reserved sectors. As suggested earlier, the Government should consider acting on this recommendation not only because of efficiency gains but also as a one-time down payment on debt.*

Reforming the Agriculture Sector. While there have been a number of beneficial reforms in the agriculture sector in the last two to three years, the performance of the sector would benefit from the

removal of obstacles to domestic and international trade and agro-processing. These obstacles not only limit the potential gains of a better integration of India's regional markets, but also the gains stemming from a better integration of India's agriculture with the rest of the world. Developments in 1994-95 highlight some of the high costs of the existing restrictions. For example, a sizable share of the budget expenditure overrun on food subsidies in 1994-95 was related to the cost of maintaining the Food Corporation of India's extremely high stocks of grain. This resulted from a combination of interrelated factors, including the public sector monopoly on grain storage and the government's price support system. The cost could be significantly reduced if restrictions on private traders' storage activities, which change from time to time, were lifted and remained lifted long enough to attract viable private investments. Similarly, the significant variations witnessed during 1994-95 in the domestic price of some important food items such as sugar or oilseeds could have been mitigated by the development of future commodities' markets in India (which are now restricted), and more extensive integration of India's agricultural markets with world's markets.

A better integration of domestic regional markets, and a better integration of domestic and international markets, need not lead to short-term increases in the domestic prices of items consumed by the poor--and will likely lead to long-term increases in the consumption levels of the poor. *First*, in the case of most items, domestic price levels are now relatively in line with their international equivalent. *Second*, even in cases where domestic prices are below their international equivalent, export taxes would be a much more efficient instrument than the current export restrictions which, despite progress in the recent past, remain on a large number of agricultural commodities. Conversely, in cases where domestic prices are higher than international ones, import tariffs would be preferable instruments to the import restrictions that still remain.

Broader concerns arise from the inappropriate composition of public expenditures in the sector. The share devoted to agricultural services and subsidies (fertilizer, electricity, irrigation and credit) grew from 37 percent of Central Government expenditures on economic services in 1985-86 to more than 58 percent by 1992-93. Such agricultural subsidies are not fiscally sustainable, especially for state governments who are responsible for about 60 percent of public expenditures on agriculture. One result is the inability of the public sector to contribute adequately to the needed gross capital formation in the sector. For instance, public sector gross domestic capital formation in agriculture declined from 1.2 percent of GDP in 1981-82 to 0.6 percent in 1991-92.

Agricultural subsidies also are not conducive to the efficient and sustainable use of agricultural inputs and scarce natural resources such as water. Fertilizer subsidies have caused significant inefficiencies by promoting unbalanced nutrient and geographical consumption patterns. Recent research shows that an improved balanced consumption of fertilizer alone would increase total rice and wheat production by about 20 million tons. Irrigation subsidies, either from power tariffs in the case of underground exploitation or from low water charges and collection rates in the case of canal irrigation, contribute to the over-exploitation of scarce water resources, to waterlogging and salinity in command areas, and to saline ingress in coastal areas. They result also in inadequate operation, maintenance and water management of surface irrigation systems, and reduced average crop yields and cropping intensity. They also limit farmers' capacity to diversify into higher-valued crop enterprises.

The inappropriate mix of recurrent expenditures is reflected in the increasing share of resources devoted towards establishment costs (salaries) at the expense of non-wage O&M in a number of crucial public services such as Irrigation Departments (Chapter 2). It is reflected in the under-funding of expenditures with a demonstrated and strong effect on agricultural growth. For example, on average, other developing countries invest more than three times what India spends on agricultural research as a share of its agricultural GDP. Policy and institutional reforms in the irrigation sector will be particularly important if Indian agriculture is to achieve the much needed efficiency and sustainability improvements in resources use (Chapter 2).

EXTERNAL FINANCING

Reflecting the remarkable improvement in India's external accounts in 1993-94, the last economic report presented to the India Development Forum (IDF) indicated that no additional fast-disbursing assistance needs were foreseeable at the time. The assessment of this report is the same. However, although the economy's capacity to attract private foreign investments has improved substantially, continued access to "quality" long-term assistance, including a substantial concessional component, remains critical. Last year, the bilateral and multilateral participants in the IDF responded to this need with pledges totaling \$6 billion. Although this was lower than the \$7.4 billion pledged the year before, the share of concessional commitments was 40 percent compared to 30 percent the year before.

At the same time, the government has taken steps to speed up its utilization of bilateral and multilateral assistance. They include: (a) advance release of funds to state governments; (b) disintermediation by the Center of loans to public enterprises; (c) adopting streamlined procedures for awarding contracts and procurement; and (d) creating a central Project Management Unit in the Department of Economic Affairs, Ministry of Finance, for better portfolio management and project implementation. As a result, India's disbursement ratio moved up from 10 percent in 1992-93 to 12 percent in 1993-94, with a further improvement to 19 percent during 1994-95.

A key concern of this report is that investment in the economy is still well below the levels needed for India to grow at rates comparable to the high performing Asian economies. The private sector continues to show a strong interest in investing in a number of areas of infrastructure, particularly in power and telecommunications. However, the scope for private investment in some key areas such as roads is very limited. Furthermore, necessary public investment in this and other strategic areas--including rural infrastructure, medium and major surface irrigation systems, and social services--have been minimal in recent years. Evidently, such investments are crucial for sustaining the economic recovery and equipping the poor to participate in the growth process. The Bank, therefore, is of the view that support for these public investments, especially in the social sectors, should guide the deployment of available assistance. In this context, the members of the IDF should aim once again for "high-quality" official development assistance; that is, funding for sustainable development which directly supports priority public investments in physical infrastructure and human capital development or catalyzes complementary private investments. Such assistance should be timely. It should also bear terms which are competitive and suited to the financial returns expected from the investment.

2

SELECTED ISSUES IN STATE LEVEL REFORMS

INTRODUCTION

Attention to state level issues is a logical next step in the reform process in India. The reasons are two-fold. *First*, financial and institutional weaknesses at the state level are becoming a major constraint to the provision of infrastructure and social services. State governments account for 56 percent and 85 percent of the combined expenditures of the Center and states on social and economic services respectively. Reflecting this large and vital role in the institutional and financial framework of the country, they also account for about 53 percent of the total expenditure of the center and states combined.

Second, discrete changes in the policy regime by a *few* central ministries and departments *alone* (Finance, Commerce, Industry, Telecommunications) can no longer profoundly improve the enabling environment as occurred immediately after the 1991 crisis. Changing India's economic environment further, and ensuring that the liberalization of the economy leads to sustained increases in GDP and living standards of the population, will depend increasingly on sustained reform efforts in several areas, including ones in which state governments play a central role. Among the key areas are: (a) irrigation and road transport, which constitutionally are the exclusive responsibility of state governments; and (b) power and education, which constitutionally are responsibilities shared with the Central Government (Box 2.1).

This Chapter first discusses the recent fiscal performance of states. Specific financial and institutional constraints also operate in individual sectors. In some cases, institutional factors are equally or more significant. Accordingly, the Chapter also looks at each of the most important infrastructure sectors individually--power, roads and irrigation. (Primary education, a key social service, is the subject of Chapter 4).

FISCAL PERFORMANCE OF STATES

Indian states are diverse economic and social entities (Table 2.1). They receive about 60 percent of their total revenue from tax receipts, within which about one-third is the states' share in taxes collected by the Central Government. Total revenue over the period 1986-94 varied from 13.2 percent of GDP in 1986-87, to 12.6 percent in 1990-91 and 13.1 percent in 1993-94 (Table 2.2). The single most important and growing source, accounting for around 40 percent of tax receipts (or about one quarter of total revenue), is the state sales tax. Slightly more than half of the non-tax revenue of states (or close to 20 percent of total revenue) comprises grants from the center. Most years during 1986-94, these grants were equivalent to between 2.5 and 2.7 percent of GDP (Table 2.2).

The total expenditure of the states displayed two clear trends during 1986-94. *First*, recurrent expenditure, which generally was four times as much as capital expenditure, rose almost steadily in relation to GDP (from 13 percent to 13.9 percent of GDP). It followed the trend set by interest payments, which rose from 1.5 percent of GDP in 1986-87, to 2.2 percent of GDP in 1993-94. *Second*, capital expenditure in total fell during most of the same period, from 3.2 percent of GDP to 2.4 percent, and so did development expenditure, by 0.6 percentage points of GDP.

What is emerging in state finances is not a crisis of overspending. Unlike a number of other federal systems, state governments in India need the permission of the Central Government to borrow. The Central Government also exercises other direct and indirect controls on the level of state financing through the prevailing system of intergovernmental transfers. *What is evident, instead, is the absence of improvements in the own revenue efforts of states as a group. Also evident is a crisis of expenditure composition.* Growth-inducing and socially productive investments are being reduced while other items, particularly interest obligations, absorb a growing share of resources. Indeed, states as a group have been significantly slower (compared to the center) in meeting their obligations for plan outlays under the Eighth Development Plan (Table 2.3).

It is unlikely that states will be able to sustain their current patterns of expenditure. One indicator is the rising ratio of interest to total state revenue. For instance, in Andhra Pradesh, it rose from 6.9 percent in 1985-86 to a budget estimate of 15.2 percent in 1994-95. The numbers were 7.4 to 13 percent for Maharashtra; 6.1 to 13.2 percent for Tamil Nadu, 8.3 to 22.4 percent for Uttar Pradesh, 9.3 to 17.7 percent for Kerala; 13.2 to 16.4 percent for Rajasthan; and 12.5 percent to 32.7 percent for the Punjab. In general, these trends reflect rising interest rates (Figure 2.1) for a largely stable stock of total state debt to GDP. Evidently, as part of the effort to improve public savings, states should seek to reduce their fiscal deficits through a concerted effort on the revenue front.

Box 2.1: Responsibilities and Revenues in India are Divided Between the Center and the States

The Constitution of India lays out the division of powers between the center and states in three detailed lists called the Union List, the State List and the Concurrent List. Residual powers not specified in any of these lists are vested in the center. Article 254 of the Constitution further states that if any conflict were to arise between legislation passed by a state and by the Center, the central legislation would prevail over the state legislation.

The *Union List* includes defense and defense production, foreign relations and foreign loans, railways, shipping and navigation, banking and insurance, and scientific and technical training institutions. Among the responsibilities of state governments are policing, local government, public health and sanitation, water supply, agriculture and irrigation, and road transport. The *Concurrent List* includes education, social security, economic and social planning, and the supply of electric power.

Taxes assigned to the *Union List* include customs duties on external trade, excise duty on manufactures, central sales tax on inter-state trade and consignment, tax on capital assets and inheritance other than agricultural land, property taxation, personal income tax (non-agricultural) and the corporate profits tax. On the *State List* are land revenue and agricultural income tax, state sales tax on trade within states, state excise duty on alcoholic beverages, and taxes on motor vehicles.

Table 2.1: India - State Profiles 1991

State	Population (million)	Urban (% of pop.)	Per-Capita Income ^a (US\$)	Agriculture in State GDP (%) ^b	Female Literacy (%)
India	846	26	330	32	39
Andhra Pradesh	67	27	308	42	33
Assam	22	11	256	41	43
Bihar	86	13	161	46	23
Gujarat	41	34	351	30	49
Haryana	16	25	486	48	41
Karnataka	45	31	329	39	44
Kerala	29	26	257	36	86
Madhya Pradesh	66	23	244	41	29
Maharashtra	79	39	446	21	52
Orissa	32	13	213	51	35
Punjab	20	30	544	51	50
Rajasthan	44	23	245	53	20
Tamil Nadu	56	34	324	24	51
Uttar Pradesh	139	20	223	46	25
West Bengal	68	27	294	36	47
Others ^c	35	8-64 ^d	178-512 ^d	--	27-73 ^d
Low income economies	1,145	--	370	30	45

-- Not available.

Notes:

- Per-capita income data is based on per-capita net state domestic product at current rupees and converted to US\$ by the average exchange rate.
- In 1988-89.
- 10 states and 7 union territories each with populations less than 10 million.
- Minimum and maximum.
- Excluding China and India.

Source: Registrar General of India, Census 1991; Center for Monitoring the Indian Economy; Ministry of Finance, Economic Survey, various issues; Reserve Bank of India (RBI) and Bank staff estimates.

Table 2.2: State Government Finances, 1986-95
(percent of GDP)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
								R.E.	B.E.
Revenue receipts (A+B)	13.2	13.4	12.8	12.9	12.6	13.2	13.0	13.1	12.3
A. Tax revenue	8.6	8.7	8.4	8.6	8.4	8.6	8.6	8.6	8.4
Direct tax	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6
Indirect tax	5.1	5.2	5.1	5.0	5.1	5.2	5.1	5.1	5.1
State share in central taxes	2.9	2.9	2.7	2.9	2.7	2.8	2.9	2.8	2.7
B. Non-tax revenue	4.6	4.8	4.5	4.3	4.2	4.6	4.4	4.6	3.9
Grants from center	2.5	2.7	2.5	2.4	2.5	2.6	2.5	2.7	2.2
Revenue Expenditure (A+B+C)	13.0	13.6	13.2	13.2	13.5	14.0	13.7	13.9	13.6
A. Developmental	9.2	9.5	9.2	8.9	9.2	9.5	9.0	8.9	8.5
Social Services	5.2	5.3	5.2	5.3	5.2	5.1	4.9	5.0	4.9
Economic Services	4.0	4.2	4.0	3.7	3.9	4.5	4.1	3.9	3.6
Agri. and Allied Services	1.1	1.2	1.1	1.1	1.2	1.1	1.2	1.1	0.9
Rural Development	1.0	1.0	0.9	0.6	0.9	0.9	0.9	1.0	0.9
Irrigation	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.7
B. Non-Developmental	3.7	3.9	3.9	4.1	4.2	4.3	4.5	4.8	5.0
Interest Payments	1.5	1.6	1.6	1.7	1.7	1.8	2.0	2.2	2.2
To Center	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.2	1.2
To Others	0.6	0.6	0.7	0.7	0.8	0.7	0.9	0.9	1.0
C. Other Expenditure	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
Net Current Balance	0.2	-0.1	-0.4	-0.3	-0.8	-0.8	-0.7	-0.8	-1.3
Capital expenditure (A+B+C)	3.2	3.0	2.5	2.6	2.5	2.2	2.2	2.4	2.3
A. Developmental	2.1	1.9	1.7	1.7	1.7	1.6	1.5	1.5	1.5
Social services	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3
Economic services	1.7	1.6	1.4	1.4	1.4	1.3	1.2	1.2	1.3
B. Non-developmental	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1
C. Loans and advances (net)	1.1	1.0	0.7	0.8	0.8	0.5	0.7	0.9	0.7
Gross Fiscal Deficit	3.0	3.1	2.9	2.9	3.4	2.9	3.0	3.2	3.7
<u>Financing by Instrument:</u>									
Market Loans	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Loans from Center (Net)	1.6	1.8	1.7	1.7	1.8	1.5	1.2	1.3	1.0
Small Savings & Provident Funds	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5
Other	0.6	0.4	0.1	-0.1	0.5	0.4	0.7	0.9	1.6
<u>Memorandum Item</u>									
Revenue from Economic Services	1.1	1.1	0.9	1.0	0.8	0.8	0.9	0.8	0.8
Primary Fiscal Balance	-1.5	-1.6	-1.3	-1.2	-1.6	-1.2	-1.0	-1.0	-1.5
Total Debt Outstanding/GDP	20.3	20.6	20.1	20.4	20.4	20.2	20.0	20.2	-

-- Not available.

Note: BE=budget estimates; RE=revised estimates.

Source: Government of India, Budget Documents, various issues.

Table 2.3: Cumulative Progress in Resource Mobilization for Plan Outlays Under the Eighth Five Year Plan

	Target	Actual 1992-95	Actual/Target (percent)
	(Rs billion at 1991-92 prices)		
Mobilization by the Center ^a	667.4	609.0	91.3
Mobilization by the States ^a	386.5	109.3	28.3
Non-Special Category States (15) ^b	383.5	173.4	45.2
Special Category States (10) ^c	3.0	-64.1	n.a.

Note: n.a. = not applicable.

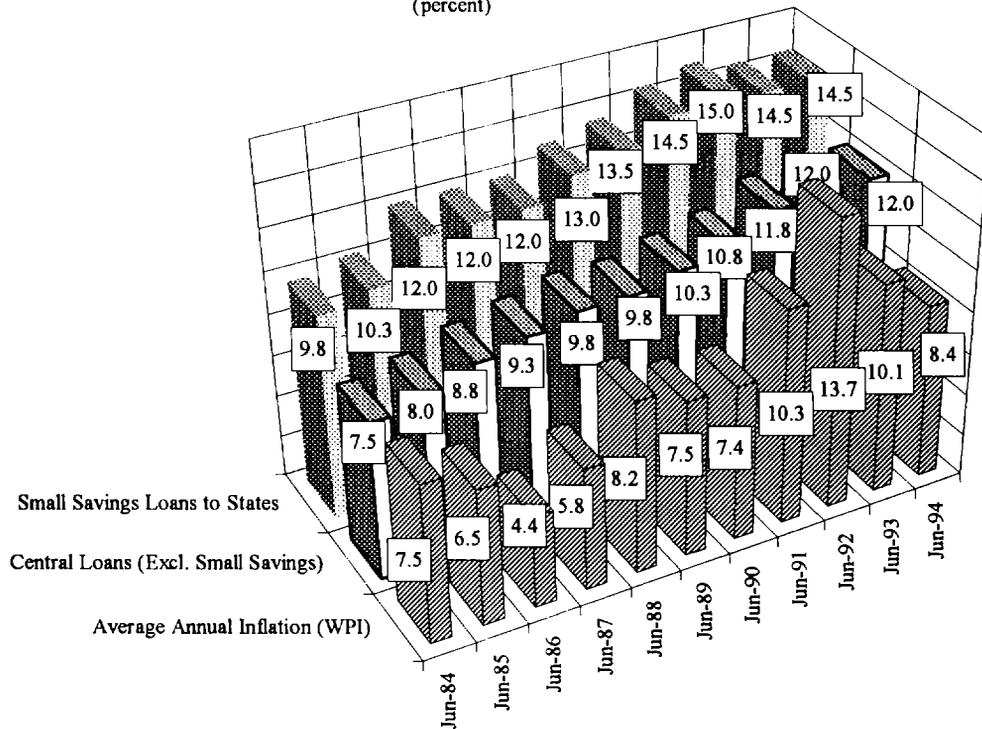
a. Prorated based on targets for 1992-97.

b. Refers to same 14 states in Tables 2.6 and 2.7 plus Goa.

c. Negative sign means that these states not only did not meet their targets but also received plan resources from the center beyond the center's original obligation.

Source: Central Planning Commission.

Figure 2.1: Nominal Interest Rates on New Loans to States, and Inflation 1984-1994 (percent)



Sources: RBI and CMIE.

THE SYSTEM OF INTERGOVERNMENTAL TRANSFERS

India has a complex system of intergovernmental transfers. It reflects the constitutional assignment of responsibilities and revenues between the national and sub-national governments. It also reflects the need to cater to vast differences among states in features such as population (of India's 25 states, 13 have populations in excess of 20 million people, 6 in excess of 60 million, 3 in excess of 80 million, and one with a population of 140 million), natural resources, economic and social performance, administrative capacity, and ethnic compositions (Table 2.1).

The system has three basic components, each with its own resource transfer mechanism. *First*, every five years the President appoints a Finance Commission, as mandated by the Constitution. This Commission makes recommendations for awarding transfers from the center to the states in the form of shared taxes and grants. A major objective of the Finance Commission is to create a better match (or a 'vertical balance') between the responsibilities assigned by the Constitution to the states and Central Government respectively, and the revenues generated at each level to carry out these responsibilities. Finance Commissions seek to leave states with a surplus on recurrent account to assist in financing their capital expenditures. So far, ten such Commissions have been constituted and have completed their work. Their recommendations invariably have been accepted by Parliament and implemented by the Government of India. Highlights of the recent Commission's report (December 1994) are presented later in Box 2.4.

Finance Commissions enjoy considerable respect as arbiters in fiscal conflicts between the states and the center. Traditionally, Finance Commissions have interpreted their mandates as making grant awards for filling gaps between projected "current account" revenues and expenditures of the states. The Ninth Finance Commission explored the use of indicators of fiscal capacity which were invariant to the actual tax effort but only adopted this approach to awards for special category states. Transfers via the Finance Commission declined from 65 percent during 1969-74 to 58 percent of total net transfers in 1992-93 (Table 2.4) because funds via the other major source increased much faster.

The *second* and quickly growing source is transfers authorized by the Planning Commission, a body not required by the Constitution, which was set up soon after Independence. Its mandate was and still is rooted in India's pursuit of a centrally planned development strategy. Its major responsibilities include formulating national five-year development plans as well as annual plans. Transfers authorized by the Planning Commission (Plan Transfers) are of three main types: (a) untied transfers in aid of state plans; their overall size is determined by the center but their distribution among states is predetermined by a formula (Table 2.5); (b) tied (specific purpose) transfers associated with externally-aided projects; and (c) tied (specific purpose) transfers associated with central plan and centrally sponsored development schemes, some of which are fully centrally funded. Others may require matching allocations by the states. Examples of specific purpose transfers include the Integrated Rural Development Program, a loan program intended to provide the poor with productive assets; crop development programs; family planning and health services; and the Integrated Child Development Service. A growing share of plan assistance for major states now takes the form of assistance for externally aided projects (that is, additional central assistance).

	Finance Commission Transfers	Planning Commission Transfers	Other Transfers	Total
Fourth Plan (1969-74)	64.6	24.4	11.0	100
Fifth Plan (1974-79)	67.3	29.4	3.3	100
Sixth Plan (1980-85)	62.1	34.3	3.6	100
Seventh Plan (1985-90)	61.0	35.1	3.9	100
1991-92	62.7	34.1	3.1	100
1992-93	58.9	38.3	2.7	100

a. Net of repayments and interest from states to the Center.
 Source: Indian Finance Statistics/Public Finance Statistics; Ministry of Finance, Government of India.

Items (Weights, %)	Original Formula ^a (1969)	Modified Formula (1980)	Latest Formula (1991)
Population	60	60	60
Tax Effort	10	10	-
Per Capita Income ^b	10	20	25
Subsistence	-	-	-
Irrigation and Power Projects	10	-	-
Special Problems	10	10	7.5
Performance:	-	-	-
(a) Tax Effort	-	-	-
(b) Fiscal Management	-	-	7.5
(c) Progress in Respect of National Objectives ^c	-	-	-
TOTAL	100	100	100

Notes:
 a. The Gadgil Formula. Population data are from 1971.
 b. Assistance going to States having a per capita income below the national average.
 c. Population control, child health and primary education, land reform & uptake of external assistance.

Third, the Center provides loans to finance the fiscal deficits of states. In recent years, about 50 percent of states' deficits has been financed in this manner. A major component of central loans to states is the fixed share (75 percent of net collections) of small savings which states receive automatically. This component suffered a sharp decline after 1991-92 and stagnated for a while. More diversified saving instruments for the public became available when the stock market boomed in 1991-92. The tax incentive attached to small savings (post office savings schemes) was also reduced. However, these savings rebounded in 1994-95.

The center also has direct or indirect control over the way in which the remainder of these state deficits is financed. State debt issues are not sold in an open capital market. To achieve SLR ratios set by the RBI, banks and insurance companies may hold such state bonds. In addition, state provident funds and PEs with savings are obliged to hold state debt issues. Reduction in the SLR in recent years has resulted in a small decline in center loans to states (Table 2.2) and in a lower allotment of market borrowing automatically held by commercial banks. Under the Central Government's banking policy reforms, the average SLR will be reduced to 25 percent of net demand and time deposits by early 1996.

Finance Commissions have been successful in prescribing relatively higher shares for the poorer states to reduce inequities. The Constitution recognizes that such inequities could arise because of differences in states' respective tax bases and in their costs of providing public services. In Table 2.6, the efforts of the Finance Commission in reducing inequities is captured by the negative rank correlation for 1992-93 between per-capita awards and per capita income. But the discretionary transfers authorized by the Planning Commission have neutralized partly these efforts by the Finance Commission to reduce horizontal imbalances across states. That is, the richer and relatively more developed states have received more plan transfers per capita than the poorer and less developed ones in spite of the inclusion of poverty-related criteria in the distribution of plan assistance (especially in the Gadgil formula) (Table 2.5). The reason is that many poor states are unable to provide matching funds to co-finance central schemes and externally-aided projects, or otherwise lack the capacity to absorb this funding.

Table 2.6: Transfers Relative to the Per Capita Ranking of Major States, 1992-93				
	Per-Capita Income	Per-Capita State Revenue	Per-Capita FC Transfers	Per-Capita PC Transfers ^a
Punjab	1	4	12	2
Haryana	2	1	14	6
Maharashtra	3	3	13	11
Gujarat	4	2	10	7
Karnataka	5	5	11	5
Tamil Nadu	6	6	7	8
West Bengal	7	11	8	12
Andhra Pradesh	8	8	9	10
Kerala	9	7	6	3
Rajasthan	10	9	2	4
Madhya Pradesh	11	10	5	13
Uttar Pradesh	12	12	4	9
Orissa	13	13	1	1
Bihar	14	14	3	14
Spearman's Rank Correlation (with Per-Capita Income)		0.92	-0.93	0.23
a. Includes externally aided projects.				
Source: Government of India, Budget Documents, various issues, and CSO.				

The Current System May Be Discouraging Fiscal Discipline. The current system of intergovernmental fiscal transfers presents other problems. *First*, the "gap filling" approach, adopted traditionally by Finance Commissions in determining grant awards, undermines fiscal discipline. This approach is not guided by the fiscal capacity of states. As a result, state governments use a number of strategies to increase their individual share of the transfers from the Finance Commission. One is to understate the projected growth rate of their own tax revenue. Since the projected rate is based on the past trend, some state governments attempt to show that past increases in revenue resulted from extraordinary and unsustainable efforts. States also frequently make commitments just prior to the appointment of the Commission. As the timing of the Commission's appointment is well known, state governments tend to incur liabilities in time to increase the gap between their recurrent revenues and expenditures. Some of the tactics used include advancing loans to cooperative institutions; public enterprises such as the State Electricity Boards (SEBs) and the State Road Transportation Corporation; and local bodies. Often these institutions are already in arrears on their payments of principal and interest to state governments before the additional loans are made. In response, Finance Commissions have been assuming that loans and interest due to the state government (from these bodies), would be repaid during the award period. Commissions thus have been adding these expected loan repayments to the projected revenue or capital receipts. Some state governments have reacted by converting unpaid loans and interest into equity or grants before presenting their revenue and expenditure forecasts.

	1990-91	1992-93
Andhra Pradesh	121.6	87.2
Bihar	99.6	134.9
Gujarat	81.9	62.3
Haryana	81.1	59.3
Karnataka	61.6	74.3
Kerala	111.2	161.6
Madhya Pradesh	83.6	50.5
Maharashtra	65.7	63.2
Orissa	103.1	62.9
Punjab	69.7	54.0
Rajasthan	90.5	63.2
Tamil Nadu	219.7	255.9
Uttar Pradesh	118.7	95.4
West Bengal	230.9	234.0
All States	108.8	87.0

Source: Government of India, Budget Documents, various issues.

Second, there is evidence at the aggregate level that funding (including loans) for projects approved by the Planning Commission is spent, at least in part, on recurrent expenditure items. Table 2.7 shows the ratio of plan loans from the center to actual plan spending. Ratios in excess of 100 percent are the strongest evidence that some percentage of the funds for capital spending is financing other expenditures. In the sample of major states in Table 2.7, this problem is most acute in West Bengal, Tamil Nadu, Kerala and Bihar. The situation is troubling because: (a) in effect, some states may be borrowing to finance items such as salaries and consumables; (b) growth-inducing investment expenditures are eroded; and (c) it may allow states to postpone structural budgetary reforms which are necessary

to improve the quality and impact of their expenditures in general.

Third, in keeping with its regulations, the Planning Commission authorizes for funding, the operating as well as the capital costs of new state programs for the first five years from their inception. This funding, which typically is 30 percent grant and 70 percent loan, encourages states to initiate new programs even when additional own revenue cannot be mobilized to finance

them. The cumulative effect of this heavy subsidization of incremental programs has been to foster employment and expenditure growth, and weaken fiscal performance.

Fourth, periodic Central Government loan forgiveness and refinancing, without conditionality, have created the expectation of future debt relief. Such relief has undermined financial discipline as an incentive for creditworthiness.

Fifth, the loans and grants for capital and other expenditures authorized by the Planning Commission are provided in fixed proportions irrespective of the nature of the activity to be financed or the degree of interstate spillover. The prevailing system of recurring loans from the center to the states is driven by the fixed 70:30 ratio of loans to grants in all plan assistance to major states. But loan recovery is not always pursued by the states. In Orissa, for example, which has the highest ratio of debt to state domestic product, the bulk of plan expenditures are for enhancing social services from which no costs are recovered. Yet 70 percent of all central and external assistance for the state's plan consists of loans. *Sixth*, the system contains perverse incentives for the center. For example, the center has weak incentive to be effective in collecting non-corporate and nonagricultural income taxes. The reason is the requirement for revenue sharing (85 percent in the case of income tax) with the states.

There are other problems with the current system of transfers. Under the Union system of creditable excise taxes (called MODVAT), the tax paid forms part of the sales tax base. In turn, the sales tax becomes part of the excise tax base in subsequent stages of production. This cascading effect has led to major efficiency losses. As an additional problem, most states have adopted a sales tax design which permits the exporting of tax burdens from the more developed states with large manufacturing sectors to the less developed states.

FISCAL REFORM INITIATIVES BY STATE GOVERNMENTS

Traditionally, many state governments have relied almost entirely on transfer-based solutions to their fiscal problems. Some states have taken a very opportunistic approach to maximize transfers without addressing their fundamental fiscal problems. However, there is encouraging evidence that this may be changing.

The Reform Mentality Is Percolating To The States. The initiatives taken have included actions on revenue and expenditure. Examples follow with illustrative states cited in brackets. On the revenue front, the measures include: reforming sales tax and simplifying administration to enhance revenue (Kerala, Maharashtra, Rajasthan, Punjab and Uttar Pradesh); abolishing sales tax exemptions as industrial incentives and preliminary steps toward harmonizing sales taxes (planned but not yet implemented in all states) (Box 2.2); privatizing octroi tax collections to ensure revenue buoyancy (Maharashtra, Rajasthan and Punjab); reforming property taxation (Andhra Pradesh); establishing new luxury taxes and modifying existing state excises (Punjab, Maharashtra, and Rajasthan); establishing new regulatory and tariff structures to achieve cost recovery for electric power (in Orissa); partial cost recovery programs in health and education (Punjab and Tamil Nadu); enabling legislation to permit tolls on bridges, highways and overpasses designed to attract private sector participation in public infrastructure development (Rajasthan,

Box 2.2: Several States Partially Reform Sales Tax Rates and Administration

One of the greatest challenges facing Indian states is the reform of their sales tax system. These tax systems typically have narrow bases, complex rate structures, and inefficient administrations. Basic design features, standards of enforcement, and administrative regulations differ greatly from state to state. And interstate tax competition has led some authorities to grant multi-year sales tax exemptions in return for new investment commitments and to establish concessional rates on commodities with high price elasticities of demand. Such strategies have produced inequitable rate structures. Consequently, effective tax rates vary widely across states and commodity groups, and much of the burden of states' sales taxes is routinely exported from high income, manufacturing states to low income states. The disharmony created by this patch work system of taxation is depriving Indian producers and consumers of much of the potential benefit of the common economic space.

In the past year, state governments have taken a number of steps to harmonize their sales taxes and to explore a possible replacement of the current system with a scheme of harmonized state Value Added Taxes (VATs). Committees of state officials are exploring ways in which the current system might be harmonized through the adoption of a simplified and uniform commodity classification structure with agreed floor rates. Northern Indian states have already announced an agreement to work for sales tax harmonization. Committees of state finance ministers have also investigated the experiences of European and Asian countries with VAT and are considering how states might adopt a VAT in stages.

Some states have initiated other reforms. Rajasthan, Punjab and Maharashtra are among the states which have recently compressed their sales tax rates to achieve simplification. They have lowered also the rates on intermediate inputs to reduce cascading. Further, Maharashtra announced, in its 1994 budget, administrative reforms which permit taxpayers to make sales tax payments through banks. The objective is to speed up collections and lessen the need for direct contact with the revenue authorities.

To simplify their administrations and to avoid costly disputes, some states, including both Kerala and Rajasthan, have permitted small producers and traders to opt out of the imposed assessment system based on an examination of books of accounts or estimation of turnover by tax collectors. Under a new presumptive tax option, the taxpayer will pay a compound tax calculated on a base of historical payments over the last three years, without reference to future turnover. Compounding factors on the historic base will increase over time to keep pace with inflation. The taxpayer has no obligation to present books of account. While such a measure is attractive to small producers who fear harassment by tax officials, it does not come to terms with the administrative weakness of state assessment and collection administrations. Moreover, the ceiling for participation has been set too high in some states. As an alternative to this stopgap reform, the authorities might investigate the feasibility of implementing a well-designed presumptive tax such as the forfait system used in West Africa and France. Under this system, assessments and collections are the responsibility of separate tax administration units. Assessments are based on a number of objectively observable characteristics of the taxpayer's business.

Tamil Nadu, Punjab and Madhya Pradesh); attempts to increase public financing through small savings (Punjab); enhancing resources for irrigation by earmarking income from locally-administered subscription funds for irrigation maintenance (Tamil Nadu); and extensive earmarking of taxes, perhaps to ensure income redistribution and improve taxpayer compliance (Maharashtra). This list is not a comprehensive one; but is indicative of the paths being pursued.

Selected Revenue Initiatives

Andhra Pradesh Overhauls Its Property Tax in Some Municipalities. Property taxes are an importance source of revenue for urban local bodies in India, and by extension, for the state government. Accordingly, a number of states have been reviewing the structure of these taxes to

improve their buoyancy substantially. Several committees appointed by the Government of India have also reviewed the system of property taxes and identified major defects. These reviews have concluded that there are too many large exemptions and that the classification of properties needs to be rationalized. But in recent years, revisions of this tax in many states have not been possible because of political pressure or stay orders obtained from courts. However, Andhra Pradesh successfully managed these difficulties and reformed the tax in medium-size towns.

Prior to 1989, property taxes in Andhra Pradesh could be levied by local bodies through a resolution. The basis of the tax was the annual rental value of lands and buildings, reflecting the actual rent received for the buildings. There was widespread under-reporting of rent in the case of buildings not covered by the Rent Control Act. For owner-occupied buildings, the annual rental value was determined on the basis of the likely rent. Here, considerable discretion was exercised. As a result, many anomalies developed and different rental values were determined for similar buildings in the same area. This arbitrariness in determining rental values led to much resentment and many complaints.

In 1989, the state government amended the Andhra Pradesh Municipalities Act and the Hyderabad Municipal Corporation Act to introduce a new, transparent basis for the tax. It seeks to reduce the discretion of municipal employees by simplifying the procedure of assessment. For the first time, the assessment of property tax was de-linked from the rent paid by the tenants of buildings covered by the Rent Control Act. Instead, the annual rental value is determined with reference to the location, type of construction, age, plinth area of the building and the purpose for which the building is used. Rules framed under the Andhra Pradesh Municipalities Act divide the entire municipal area into convenient territorial zones for the purpose of property tax assessment. Within each zone, attention is paid to factors such as: (a) the availability of civic amenities and location in relation to markets and shopping centers; (b) the type of building construction ; and (c) the purpose for which the property is used.

Within the Indian context, the deliberative and consultative way in which the legislation was implemented is instructive. After the state government finalized the rules under the Municipal Act, the Municipal Boards conducted sample surveys of 20 percent of the buildings in different categories in all the zones and prepared a draft notification giving the proposed monthly rental value. At that juncture, the district level advisory committees--comprising the District Magistrate, Superintending Engineering (Public Health), and the Regional Director (Municipal Administration)--were engaged to examine these proposals and make recommendations. After considering these recommendations, the Municipalities issued notifications demarcating the municipal areas into zones, and setting the rental value.

Subsequently, the Government received inputs from individuals and groups that had not had the opportunity to make adequate representations to the Municipal Commissioners. These inputs were forwarded to and considered by the District Advisory Committees which made additional recommendations. The final notifications were then issued by the Municipal Commissioners. The impact of the general property tax revisions was softened somewhat by limiting the extension of the increase. For instance, the increases for buildings assessed after 1983

were not to exceed 75 percent. A limit of two hundred percent was set for properties assessed before 1983.

Andhra Pradesh has not overcome all of the opposition to reforming its property tax system. The changes adopted by medium-size towns have been resisted so far by the three largest cities in the state--Hyderabad, Vijayawada and Vishakhapatnam. Even where adopted, the reforms do not contain any provision for periodic revision of the rate or take into account the rise in the property value and rents. Even with the reforms, the annual rental value is tied to the current use and is not based on the potential use of the land. Evidently, this should be reviewed and provision made for periodic survey and revision of the rental value every three to five years. Despite these shortcomings, Andhra Pradesh has made a commendable start in reforming this important tax. The collections from this tax have increased almost by 50 percent.

Some States Are Reforming Octroi Collection But Few Want To Abolish This Widely Criticized Tax. Nine Indian states continue to levy an indirect tax, known as octroi, on behalf of their municipalities. The base for octroi is the value, weight, or number of items entering a local jurisdiction (usually a municipality) for consumption, sale, or use in production. In India, the rate of octroi tax is usually defined in specific terms, rather than by value or weight, leading to a multiplicity of rates, arbitrary classification, and long transport delays as goods are assessed at city gates. Many government commissions have studied the tax and, almost universally, have recommended its abolition. However, octroi has continued to exist because many states believe its abolition would worsen the fiscal imbalances of municipalities and because increased reliance on property taxation is not seen as a viable alternative.

Several jurisdictions are reforming octroi collection to improve its buoyancy. The collection of octroi traditionally has been associated with rent-seeking behavior by collection officials. Consequently, revenue collections in many states have fallen far short of what should be collected given the estimated base.

To overcome this problem, the government of Maharashtra permitted, but did not require, municipal bodies to auction contracts to the private sector to collect octroi. Successful private bidders under the new system agree to provide municipal bodies with a guaranteed revenue stream. In return, they are given the right to retain tax receipts above this guaranteed revenue stream. Government estimates show that, for the 23 municipal councils in Maharashtra which privatized octroi collections, the total winning auction bids were at least 24 percent higher than the amounts collected in the three years prior to privatization.

Despite the potential for impressive revenue improvements, this reform should be seen as a palliative measure. It does not come to terms with the fundamental weaknesses of the octroi. These include the negative impact on trade and distortion of relative production prices. The tax also distorts decisions about the location of industries. For instance, establishments within the boundaries of large urban entrepôts, such as Bombay, often are exempt from paying octroi on their finished exports. This and other factors contribute to pollution and traffic congestion in these urban areas. Furthermore, private collectors may be tempted to harass firms in competition with the tax farmers' other business interests and to use proprietary information of taxpayers to

obtain an unfair advantage. Recent successful bidders in octroi auctions in India have included liquor wholesalers and general transport companies--enterprises that have a potential conflict of interest. In order to restrict potential abuses, state governments will need to monitor the performance of private collection agencies.

Uttar Pradesh abolished octroi in 1990 in all of its 228 municipal boards and eight municipal corporations. (It had abolished octroi in towns in 1979). The state government compensated these jurisdictions by providing grants based on their respective octroi proceeds in 1988-89. The grants are increased by 10 percent each year in nominal terms. To finance the loss from octroi, the rate of additional sales tax (the Trade tax) was raised from 10 to 25 percent. At present, this trade tax covers fully the loss of revenue from the abolition of the octroi.

Selected Expenditure Initiatives

On the expenditure side, reforms have been initiated in areas such as the restructuring of PEs through privatization (partial and complete), closure and reorganization (with Kerala having the most formally articulated strategy and Uttar Pradesh making the most progress on implementation); state level "renewal funds" to facilitate privatization and closures (in Punjab and Rajasthan); strong zero-based budgeting or other mechanisms for expenditure program review (in Kerala, Tamil Nadu and Maharashtra); formal policy statements on reform of SEBs including provision for private participation in power generation (in Punjab, Rajasthan and Maharashtra); a strategy of maintaining capital expenditures on infrastructure at high levels relative to overall expenditures (in Rajasthan and Maharashtra); and measures to compress operating costs without neglecting vital expenditures such as maintenance and medical supplies (Punjab, Tamil Nadu and Kerala). Some states and their major cities also have turned to the private sector to provide public services more cost-effectively (Box 2.3). Others are taking additional steps to exercise better control over the disbursement of their limited financial resources.

Kerala And Uttar Pradesh Pursue PE Reform Differently. The Governments of Kerala and Uttar Pradesh have adopted different approaches to the reform of PEs. Kerala controls 85 PEs, which is more than any other state. Its strategy for PE reform stands out for the formal nature of its strategic planning and its commitment to micro-level diagnosis of the problems of each enterprise. Starting in 1991, the Government of Kerala announced an industrial policy with strong support for the rehabilitation of weak industries and PEs restructuring. The review of these enterprises has been carried out by a semi-autonomous Public Sector Restructuring Board (PSRA), which has worked closely with outside management consultants, merchant bankers and other experts. The PSRA Board is attempting to use objective criteria, based on past performance and market prospects, to classify PEs into three categories: candidates to be shut down, PEs to be restructured as public sector activities, and candidates for complete or partial

Box 2.3: Management Contracts in Place for Public Services in Some Indian Cities

Service/Task	City
<i>Sanitation and Public Health:</i>	
* Conservancy/drain cleaning/sanitation maintenance	Guwahati, Bangalore, Jodhpur, New Bombay, Ludhiana
* Construction and maintenance of toilets	Fardabad, Delhi, Hubli-Dharwad, Aurangabad, Kalyan, Jaipur
* Mosquito Control	Cochin
<i>Solid Waste Management:</i>	
* Garbage collection/disposal street cleaning	Guwahati, Ahmedabad, Rajkot, Baroda, Bangalore, Cochin, Bombay, Pune, Jalandhar, Amritsar, Ludhiana, Jaipur Baroda, Kalyan
* Compost plant, solid waste conversion	
<i>Road and Streets</i>	
* Road construction	Ahmedabad, Cochin
* Road maintenance	Bangalore, Cochin, Jaipur
* Street lighting	Ranchi, Rajkot, Fardabad, Jodhpur, New Bombay
<i>Water Supply</i>	
* Maintenance of water supply system	New Bombay
<i>Tax Collection, etc.</i>	
* Collection of entry tax, other local taxes/charges	Guwahati, Bombay
* Parking lots/collection of charges	Guwahati, Pune
<i>Gardens and Parks:</i>	
* Development and maintenance of garden parks, playgrounds complex, swimming pool, planetarium, traffic islands	Rajkot, Baroda, Bombay, Fardabad, Hubli-Dharwad, Aurangabad, New Bombay, Kalyan, Pune, Amritsar, Ludhiana, Jalandhar, Jaipur Baroda, Rajkot
* Social forestry, tree planting	
<i>Others:</i>	
* Bus terminus/shelter	Ranchi, Cochin
* Ward security	Ahmedabad, Rajkot
* Market development	Ahmedabad, Kalyan
* Maintenance of vehicles	Rajkot
* Land development	Fardabad
* Maintenance of libraries	Fardabad
* Milk market	Hubli-Dharwad

Source: Government of India, Ministry of Urban Development.

privatization. The Board has consulted widely and sought the support of the representatives of affected PE employees. Based on these evaluations and consultations with national development agencies, the PSRA Board has designed restructuring plans for about a dozen large PEs. Some indications of improved performance in the public sector have been recorded as a result of the 1991 policy reforms: the number of profit-making units rose from 16 in 1991 to 31 in 1993.

However, in Kerala the cost of restructuring and reestablishing PEs as profitable units is large and funds for the exercise would probably have to be borrowed on commercial terms. This suggests the need for careful cost-benefit assessment on a case-by-case basis to ascertain whether rehabilitation is warranted.

In Uttar Pradesh, the state government stated that except for units which are socially beneficial, all PEs would be privatized in a phased manner. Of the roughly 50 enterprises owned by the state government, about 13 have been shut down to date. These undertakings were engaged in such diverse activities as operating rural cinemas, marketing horticultural products, and forestry. The state also controls 24 spinning mills for which it has sought buyers. Since little interest has been shown in outright purchase of these enterprises, a few units have been leased with the stipulation that management does not retrench the work force. The state government also owns many loss-making sugar mills. It has attempted to privatize them by entering into memoranda of understanding with successful bidders. This privatization has led to a legal challenge by state sugar employees. While the subsequent court ruling has upheld, in principle, the right of the state government to discontinue operations of commercial enterprises, it has also held that information presented by the state to the New Delhi-based BIFR, which approves privatization, was not complete and accurate. Therefore, the court voided the sales. This challenge and similar challenges in other states have led to costly delays in restructuring and may have discouraged potential purchasers of state PEs across India.

Uttar Pradesh's experience indicates that a state should have a coherent plan for choosing enterprises to be privatized, adopt procedures for valuation of assets consistent with previous court rulings, and adopt transparent procedures for finding credible buyers. While agreement for privatization with prospective purchasers in Uttar Pradesh contained provisions to protect the interests of employees, such provisions have often not been widely publicized nor have employees' representatives been consulted in the privatization process. By contrast, Kerala appears to have achieved some co-operation from its PE unions as a result of extensive consultation.

Some States Are Taking Additional Steps To Better Manage Limited Funds. The attempts by states to contain non-Plan expenditures include: (a) banning recruitment and the purchase of vehicles; (b) restricting expenditure on travel; (c) more closely managing the release of funds for sanctioned schemes; (d) and transferring funds to Public Ledger Accounts.

Andhra Pradesh, for example, passed legislation to prevent government officers, and boards of corporations and universities from employing additional workers. It is the first legislation of its kind in India. So far, it has not been enacted by another state or the center. The

Act prohibits any public agency other than the state government from creating a post. And it imposes a minimum penalty of six months on the employees of Boards of Management who violate its provisions. The Act also empowers the government to take disciplinary action and recover the pay of those who are appointed illegally. This landmark legislation was challenged in the Supreme Court but was upheld. The judges sided with the state government because it was pointed out that most of the revenue of the state is spent on wages and salaries.

Some states are attempting to better control expenditure by keeping all state moneys in a central account (the Public Ledger Account), and tightly managing outflows from that central account. The resources channeled into this Public Account include transfers from the central or centrally sponsored schemes; funds received but not spent on state plan schemes; and equity and loans en route to state corporations or state-aided institutions. These states are attempting to monitor and manage carefully the disbursement even of those funds which are already approved by the legislature. There are indications that this approach is producing some positive results. In Uttar Pradesh, the size of the Public Account increased almost 25 percent during 1991-92 and 1993-94 as its use and scrutiny increased. By the end of the period, it was equivalent to 73 percent of the revenue deficit of the state and was able to finance that deficit. It is most probable that previously, such unspent funds in the hands of individual spending agencies would have been depleted without lowering the (ex ante) unfunded deficit.

Table 2.8: Savings from Private Provision of Civic Services in Rajkot

Services	Extent of Privatization	Original Costs	Cost Savings	Estimated Cost Savings (% of the original cost)
	(%)	(Rs million)	(Rs million)	
Street Light	33	1.5	0.3	20
Primary Solid Waste Removal	5	1.7	0.3	15
Secondary Solid Waste Removal	70	18.7	4.3	23
Cleaning of Public Toilets	58	1.1	0.7	68
Local Solid Waste Removal	1	0.3	0.1	23
Gardening	17.5	0.9	0.6	73

Source: Government of India, Ministry of Urban Development.

Some States Mobilize The Private Sector To Provide Public Services More Cost-Effectively. In the current constrained budgetary environment, several states are turning to the private sector to provide services more cost-effectively. The range of arrangements include build-

operate-transfer (BOT); franchises; provision of services through voluntary organizations, community organizations and common interest groups. One example is the City and Industrial Corporation of Maharashtra which is responsible for planning and developing New Bombay. The Corporation involves private contractors in the maintenance of infrastructure and services such as roads, drainage, water supply, sewerage, street lighting and landscaping. In Rajkot, another example, the Municipal Corporation has started using private contractors for services such as maintaining street lights, removing solid waste, cleaning public toilets and providing transportation. Table 2.8 presents data on Rajkot which show the savings that these new arrangements are producing.

It is too early to attempt to assess the overall impact of these initiatives in revenue and expenditures on the fiscal performance of individual states, or all states combined. Several observations could be made, however. Some states have found ways to begin to address some politically sensitive but important fiscal reforms. Examples include strengthening property taxes (Andhra Pradesh); more efficient provision of civic services (several states); and public enterprise reform (Uttar Pradesh). It is especially welcome that so many of the initiatives address the revenue side of the budget. Often in the past, most of the burden of adjustment has fallen disproportionately and almost entirely on expenditures.

The foregoing discussion further suggests that the Indian system of intergovernmental fiscal relations, in its present form, may not embody institutional structures or incentives capable of reversing or arresting the crisis in state finances. While some states have recently taken initiatives on their own to overcome their problems, the fiscal impact of measures adopted to date has been inadequate relative to the size of the needed fiscal adjustment. A much broader and uniform reform effort within and among states is desirable. Issues such as the unsustainable indebtedness of states, insufficient cost recovery, inadequate provisions for non-wage operations and maintenance, all remain to be addressed in most states.

Many observers agree that the economic and political balance between the center and the states is shifting in the direction of greater autonomy for the states. This development has increased the scope for more fragmentary implementation of national policies involving state participation. In such an environment, the federal/state dialogue on fundamental reform of intergovernmental fiscal relations could be particularly protracted, unless the crisis in state finances deepens substantially over the short term. Nevertheless, the possibility for dramatic strides in federal/state dialogue on reform should not be completely discounted. The example of the recent agreement on state sales tax harmonization is instructive (Box 2.2). In this case, a consensus agreement on floor sales tax rates and abolition of sales exemptions as industrial incentives was reached. This occurred after open dialogue between the center and the states that focused on a limited set of reforms which promise unambiguous net gains.

What is needed *inter alia* is a system free of the perverse incentives discussed above. One of the encouraging signs of an emerging constituency for reforming intergovernmental fiscal relations is the recent report submitted by the Tenth Finance Commission (TFC). The TFC has proposed a number of innovative and bold measures (Box 2.4). The recommended move towards a mandated system of sharing the total tax revenue collected by the center (the proposed ratio is

Box: 2.4: The Tenth Finance Commission Urges Fundamental Changes in the System of Intergovernmental Transfers

Main Conclusion

- The current system of intergovernmental transfers gives both central and state authorities fiscal signals which misdirect revenue generation efforts and expenditure allocations. For instance, many states have devoted inadequate attention to such non-plan expenditures as maintenance, education and health, which are vital inputs into the growth process. States are under-funding these activities because of their desire to protect large plan outlays which are eligible for financing through loans and grants from the Planning Commission. Another example is the tendency to use borrowings to finance revenue expenditures. One reason is that the system "clubs revenue and capital components in one category designated as plan outlay" without adequate monitoring of end use.

Main Recommendations

- New incentive schemes should support states in taking responsibility for generating current account surpluses and reducing indebtedness, without looking to the Center for extraordinary relief or "gap filling" solutions. Transfer policies not consistent with this objective should be abolished or phased out. Specifically:
 - establish an alternative tax devolution scheme. Under this alternative system, the revenue from all major central taxes would be grouped into a single pool and 29 percent of this total would be devolved to states. The 29 percent share is equivalent to the share of the states in total Central tax revenues during 1993-94. The Commission proposed that the ratio be reviewed after 15 years. The proposed new devolution rule would be expected to increase the buoyancy of state revenues generated by shared taxes, and would provide the Center with a strong incentive to improve the administration of the income tax system;
 - for the next fiscal year (1995-96), increase from 45 to 47.5 percent the devolved share of MODVAT excise tax revenue going to states and reduce the devolved share of income tax from 85 to 77.5 percent;
 - in determining how funds from the devolved pool should be allocated among the states, adopt new criteria: (a) 20 percent on the basis of population; (b) 60 percent on distance of per capita income from the highest income major state; (c) 5 percent on the basis of infrastructure; (d) 5 percent on the basis of the area of states subject to certain normative limits; and (e) 10 percent on the basis of tax effort defined as the ratio of per capita own tax revenue to the square of per capita income. This formula differs from the present one by reducing (for income taxes) the weight of population; increasing the weight given to "distance" of per capita income; introducing a weight for infrastructure; and removing the "gap filling" weight;
 - create two new incentive schemes for debt relief of principal owed to the Center. Under the first scheme, write-offs of existing debt to the Center will be offered to states. The amount will be a proportion of the improvements in the state's actual ratio of total revenue receipts to total revenue expenditures over the preceding three years. Under the second scheme, the Center will match the amounts, from the proceeds of privatizing state public enterprises, which are used to retire state debts;
 - provide limited debt relief for specific states with the weakest financial positions and award special "upgradation grants" totaling Rs. 26 billion, including Rs. 7.6 billion for girls and all primary education; and create a new category of grants for local bodies totaling Rs. 53.8 billion in the area of civic amenities. Also improve facilities for health facilities, elementary education and drinking water in recognition of recent constitutional amendments which have provided more autonomy for local governments; and
- set up a permanent Finance Commission division within the Ministry of Finance to monitor and evaluate the utilization of upgraded grant awards and other Finance Commission recommendations.

71:29 between the center and the states), would contribute towards strengthening incentives for enhanced tax collection by state governments and the center. The recommendation that central debt forgiveness should be tied to states' own initiatives to retire their debt is a positive step in the direction of enhancing incentives for responsible fiscal behavior.

Reform of the Planning Commission could enhance the states' capacity to provide or supplement the provision of infrastructure effectively and efficiently. Effort should be made especially to ensure that borrowed resources are utilized only for such expenditures that yield a return adequate to meet the cost of borrowing. Options for rationalizing central plan transfers could include: (a) doing away with the fixed (70 percent for major states) loan component of central assistance to state plans, and replacing this with specific purpose loans advanced by a national development bank, with generous provision of technical assistance, particularly for states with weak implementation capacity; and (b) replacing the current system of thinly spread central resources across a multitude of central schemes (covering all states and monitored by different central ministries), with a more compact set of well targeted redistributive transfers focused on the needy states and monitored by the Planning Commission.

BROADER FISCAL REFORMS

Broader Efforts Are Needed. It is unclear whether the current system of intergovernmental transfers, even with the changes recommended by the TFC, and reform of the Planning Commission, would be enough to secure broad-based reforms in public finances at the state level. The Government might wish also to consider mobilizing resources--domestically and abroad--for a package of policy and performance-based support to selected states. Improved economic performance by participating states relative to non-participants probably would generate a strong demonstration effect and encourage more states to pursue reforms (Box 2.5).

Box 2.5: Argentina Pursues Broader Fiscal Reforms

Efforts by the Argentine Government to encourage reforms in its provinces may be instructive. Argentina's provinces account for about 50 percent of general government expenditures. By the early 1990s, the size and growth of federal transfers had reduced the pressures on these provinces to exercise fiscal discipline. Greater attention also needed to be paid to providing and maintaining public infrastructure. In August 1993, the Federal Government and all 22 provinces signed an open-ended offer (the "Pacto Fiscal") to any province wishing to participate in a program of provincial structural adjustment.

Reflecting the most pressing constraints, the terms of the agreement included: (a) reform of provincial tax policy and administration; (b) privatization and civil service reform by provinces; (c) refinancing of provincial debts by the Federal Government as well as assumption of financing for the Provincial Security System; and (d) the adoption of a new budgetary system. The Federal Government funded this policy package, partly from external sources. Additional commitments made by the Government included maintaining sustainable macroeconomic policy and providing additional federal discretionary transfers only to those states which had reform programs consistent with the "Pacto Fiscal."

TOWARDS MARKET-BASED DISCIPLINE FOR STATE BORROWING

Market-Based State Borrowing Needs To Be A Long-Term Objective. At present, the precarious condition of state finances indicates that the first priority should be to improve revenue performance and expenditure allocation. In the long run, however, an explicit objective of the system of intergovernmental transfers could be to encourage market-based fiscal discipline. Beyond seeking to improve their own revenue collections, cost recovery for economic services and expenditure efficiency, Indian states in the foreseeable future will have few other alternatives but to achieve better access to the domestic capital market (they are constitutionally barred from borrowing abroad). To access the domestic primary market, they will have to achieve substantial and sustained improvements in their finances.

Market-Based Discipline Usually Works When Four Known Conditions Prevail. International experience suggests that for market discipline to encourage better fiscal performance:

- States must want to maintain or establish creditworthiness in order to obtain funding on terms which are better suited--in maturity and interest rate-structure--to their investment priorities. They should not be guaranteed access to the market funds which are set aside as statutory reserves or to pension funds controlled by the government. One corollary is that the capital markets should be free to respond to the demand for loanable funds and the circumstances of the borrower.
- Adequate information on the borrower's creditworthiness, such as the stock of debt owed by government and government-controlled PEs, should be available to would-be lenders. This implies that rating agencies and potential lenders can identify off-budget liabilities and state loan guarantees. With imperfect information, a default or weak performance by one sub-national government may signal impending risk of default by other states in the same category.
- There should be a credible, no-bailout commitment for sub-national governments. If this condition cannot be met, then the commitment should state that the bailout will only be partial. The expectation of a complete bailout in the case of default lowers the incentive of lenders to monitor creditors.
- The borrowing government must respond to market signals such as widening interest rate spreads for their bonds or the threat that their credit rating would be downgraded--by reducing their fiscal imbalances.

Most of the evidence on market discipline and fiscal issues relates to the experience of jurisdictions in the United States and Canadian provinces. Market discipline is judged to have worked relatively well in Canada in the absence of binding restrictions on provincial deficit financing. There are noticeable spreads among provinces in bond yields which appear to be

correlated with relative fiscal performances. In addition, the need to preserve the provinces credit rating is frequently given by provincial authorities as a rationale for fiscal austerity. A recent econometric evaluation of the evidence from markets for US state debt suggests that the market does impose a default premia which increases in a nonlinear fashion with increased borrowing. Specifically, the econometric evidence shows that the debt to state GDP ratio is a significant explanatory variable determining the state-specific risk premium for state government bonds.

At present, the degree of creditworthiness of Indian states--as indicated by measures such as their primary deficits and the ratio of debt service to recurrent revenue--appears to be low. Most market loans to states (or their PEs) from the domestic capital market have an implicit guarantee by the Government of India because they finance the annual public sector investment expenditure sanctioned by the federal Planning Commission. These debt issues are not rated. It is probable that most non-guaranteed state securities would not be viewed by the market as high-yielding bonds if they were issued outside the SLR umbrella.

Nonetheless, the recent evolution of the Indian capital market indicates that it could become an important source of local currency financing for states. The Indian capital market for fixed income assets is evolving rapidly and is lengthening. Securities with seven years maturity are feasible although investors appear to prefer three to four year maturities. Transaction costs remain high and competitive behavior is not strong, but recent and contemplated financial sector reforms could bring about the needed improvements.

No state is likely to enjoy capital market access comparable to that of prime grade Indian companies. And there are very few cases of successful issues of state bonds without a Government of India guarantee. Recently, Rajasthan obtained a market rating for the state in order to place a bond issue for a canal and irrigation project which was not self-financing. In early 1994, an issue of Sardar Sarovar Nigar bonds with a de facto guarantee from the State of Gujarat was oversubscribed by a wide margin. The prevailing view in the Indian financial community is that only states like Maharashtra, Gujarat and potentially a few more could aspire to access the primary market for limited amounts, provided an appropriate premium is offered over primary securities.

The sharp reduction in SLRs will reduce the access of the financially weak states to market borrowings. The RBI in its 1992-93 Annual Report broached a proposal that a State Funding Corporation be established to raise funds at market-related interest rates and advance them to states at subsidized rates. However, this proposal does not give the states an incentive to achieve creditworthiness. And it could create an open-ended drain on Central Government resources. One approach, which holds greater promise of resolving the fundamental fiscal problems, is to require the more developed states to place their bonds in a competitive market for state debt issues with independent bond rating of the individual state. As discussed earlier, the TFC has proposed some incentives for debt retirement by states. An agency with central sponsorship, perhaps similar in design to the Australian Loan Council (Box 2.6), might be needed to intermediate the terms and supply of marketable debt to the non-creditworthy state. In return for the services provided to non-creditworthy states, the Council might insist on some degree of

Box 2.6: Australia Develops and Refines an Approach to Managing State Debt Through More Market-Based Discipline

The Australian Loan Council was conceived at a time when Australia did not have a fully developed financial market for long-term debt. In addition, the finances of the federation were characterized by large imbalances between the revenue and expenditures of the federal government and the states.

The Council was formed in 1923 to co-ordinate the borrowing of both the states and the Commonwealth (federal government) on a voluntary basis. The Council comprises one representative of the Commonwealth: the Prime Minister or his nominee; and one representative of each state, the state premier or his nominee. As a result of large debts incurred in the First World War, both levels of government faced the problem of high interest service expenses and high debt burdens. Moreover, due to the thinness of the domestic debt market and initial difficulty in placing debt issues overseas, the states and the Commonwealth engaged in a bidding competition on issue prices, interest rates and tax concessions to bond holders. Coordination appeared as a logical solution to what was perceived as a negative sum game. A subsequent agreement in 1927 formalized the rules of the institution and committed the members to a policy of joint decision-making responsibility.

Under the 1927 agreement: (a) the Commonwealth took over all existing state debt; (b) all future borrowing of both levels of government were to be arranged by the Commonwealth subject to the Council's approval; (c) the states were required to compensate the Commonwealth for interest and sinking fund payments on their debt; (d) the states were required to make annual payments to a sinking fund on their debt which was a small, fixed proportion of the debt outstanding; (e) the Council exerted no control over the uses to which the loans were put; (f) all states were charged interest at the same rate; and (g) the Commonwealth was given the power to enforce payments by states. When one state attempted to default during the 1930s, the courts upheld the right of the Commonwealth to withhold transfers from that state as a means of securing interest repayment.

Loan allocations during the first phase of the Council's life were based, not on a rigorous assessment of needs but on the size of past loan issues. As this system matured after the Second World War, many deficiencies became apparent. Individual state fiscal performance was not evaluated. And there were no restrictions on the use of loans. This meant that state governments received no reward, either in terms of cheaper borrowing rates or access to more debt for capital projects, for adopting a tighter fiscal stance on their current account or primary balances. Moreover, loan awards were not related to the states' evolving fiscal capacities or their relative expenditure needs.

New arrangements were adopted in 1985 which gave the states the freedom to borrow on their own in the private capital market at whatever terms they could arrange. The Council retained a mandate to set a global ceiling on the annual borrowing of all governments, including local governments and PEs, and to award state-specific borrowing ceilings. These state ceilings were awarded on the basis of population without accounting for fiscal capacity or other state circumstances. However, financial innovations, including the emerging derivative market, soon permitted states to circumvent their borrowing ceilings. This development resulted in the abolition of global limits in 1992-93.

In the most recent round of reforms (1993-94), the Council embraced two new policies: (a) a normative or indicative approach to assessing each government's expenditure needs, fiscal capacity and financial strategy; and (b) a commitment to evaluate borrowing intentions against Australia's macroeconomic policy needs. If an adjustment in the fiscal stance of the general government account is deemed appropriate by the Council, after its review of macroeconomic conditions, then the global adjustment and its allocation among member governments would be negotiated by Council members. If concern is raised about the fiscal strategy of a member government, further justification for its financing request may be required. The Council retains the power to ask a member to modify its request.

The new arrangements are intended to facilitate tighter surveillance and more objective assessment of public sector finances. A higher standard of financial reporting is required of members. In return, the states have been given greater freedom to determine their own financial requirements. Once targets are agreed upon by members for various fiscal indicators, members are required to give a formal explanation to the Council if outturns exceed a 3 percent tolerance level in either direction. This explanation will be made public.

In future, the Loan Council's *raison d'être* will be to serve as a voluntary forum for the coordination of public sector borrowing, with an emphasis on the need for a joint co-ordination of macroeconomic fiscal policy. However, there would appear to be a strong incentive for members to forge consensus agreements. If deadlock occurs, there is likely to be a downside risk in the form of market disapproval and higher risk premia on state borrowing. Failure to abide by performance targets might also be expected to lead to higher future borrowing costs.

conditionality in the form of state-specific fiscal adjustment measures. As a general principle, the terms and conditions of borrowing from this agency should not be so attractive that states would prefer to intermediate their debt through the agency rather than borrow directly in the market over the long-term. Such a transitional agency also might provide a forum for all states and the center to review their market financing needs in light of the prevailing macroeconomic conditions, as has been done by the Australian Loan Council since 1993-94.

SELECTED SECTORAL ISSUES

In addition to addressing issues of overall fiscal performance, state governments must also tackle several specific financial and institutional factors which prevent them from delivering better infrastructural and social services. Table 2.9 underscores the importance of investing in infrastructure in support of the growth process. Although financial problems abound in the sectors considered--power, roads, and irrigation--the rest of this Chapter also reasons that institutional factors often are an independent and even more important concern.

	1975	1980	1985	1990	1975-80 ^a
Power	1.45	1.39	1.5	1.51	1.54
Roads	0.95	0.86	0.86	0.82	0.98
Irrigation	0.88	0.9	0.86	0.71	0.90
Phone					
Mainlines	1.67	1.59	1.76	1.73	1.69

a. Covers 1960-90 for power and roads; 1965-90 for irrigation; and 1975-90 for phone mainlines.

Source: Gregory K. Ingram, and Marianne Fay, Valuing Infrastructure Stocks and Gains from Improved Performance, mimeo, May 1994.

Power

Overview. State governments own the SEBs and other power companies which together generate 75 percent of India's electricity supply and distribute more than 95 percent of it. The remaining 10 percent is distributed by private companies. The SEBs have considerable operational and managerial autonomy under the Electricity Act of 1948. In practice, however, they must obtain state government approvals, often at the highest level for the most important business decisions, including tariff adjustments. Such permission is seldom granted. As a result, most SEBs have been in a precarious financial situation for some time because they have been unable to generate sufficient resources to maintain and expand their power generation capacity in line with demand.

Table 2.10: Financial Performance of State Electricity Boards, 1991-95 (Rs billion)					
	1991-92	1992-93	1993-94	1994-95 R.E.	1995-96 A.P.
Gross subsidy on sales	74	94	114	133	150
to agriculture	59	72	89	101	112
to domestic consumers	13	19	24	30	35
inter-state	2	2	1	2	3
Subventions received from state governments	20	19	21	18	17
Surplus generated by sales to other sectors	22	33	35	53	59
Uncovered subsidies	32	41	59	62	74
<u>Memo item:</u>					
Gross subsidy on sales (percent of GDP market prices)	1.2	1.3	1.5	1.5	1.4
<i>Note:</i> RE = Revised estimates; AP = Annual plan projections. Subsidies are defined as the difference between tariffs that would enable the SEBs to cover their variable costs and tariffs actually charged. It thus does not include capital subsidies.					
<i>Source:</i> Ministry of Finance, <u>Economic Survey</u> , various issues.					

Capacity Shortfall May Persist. The Eighth Development Plan proposed 30,000 MW in new generating capacity over the planning period but only 20,000 MW is likely to be added at most. Some states have solicited private investment in diesel-based generation for quick capacity addition. But a careful evaluation of these solutions is warranted. There is also: (a) continuing under-investment in transmission and distribution which will reduce the impact of any new generation capacity installed; and (b) insufficient advance preparation for new projects that would fall under the Ninth Development planning period. In consequence, power shortages have been a serious and recurring problem, and may continue for several years to come. At the same time, the financial cost of power subsidies also has been a large burden on state finances. It now is equivalent to at least 1.5 percent of GDP (Table 2.10).

More Than Tariff Adjustment Is Required. Addressing these issues requires more than just raising tariffs. As the Government of Orissa is demonstrating, it requires reforming the power sector policy and institutional framework to: (a) allow private sector participation in distribution, generation and transmission; (b) depoliticize tariff adjustments and other major

Box 2.7: Orissa Makes Progress in Power Sector Reform

Orissa Power System. The Orissa State Electricity Board (OSEB) and the Department of Energy of the Government of Orissa own and operate Orissa's power generation plants (respectively 70 percent and 30 percent) which service about 1.1 million consumers. OSEB's operational performance has been the poorest among state electricity boards in India. The current power shortage is estimated at about 40 percent of peak demand and the energy deficit at about 20 percent. Both are more than twice India's average. This situation has developed in spite of significant investment in power which absorbed 20-25 percent of the state's investment program over the last decade. In addition, subsidies to the OSEB became an increasingly large burden on the budget, exceeding one percent of the state GDP in FY94. The main explanation is inadequate tariffs.

Orissa's Power Reform Program. A comprehensive power sector reform program was agreed with the Government of Orissa and the OSEB in November 1993. The Government of Orissa's objective is to withdraw from the power sector as an operator of utilities, having instead privately-managed utilities operating in a competitive and appropriately regulated power market. Power sector industry and market structures to be established under the power sector reform program have been defined for this purpose.

Successful completion of the program would eliminate power cuts and supply restrictions by 1998. It would also help to realize Orissa's power potential, based on vast coal and significant hydro resources. The Government of Orissa authorized four tariff adjustments from April 1992 to July 1994 which cumulatively increased power tariffs by 50 percent. This will help to restore the financial viability of the power sector and provide a sound financial base for the reform program. Further tariff adjustments of the same order are planned for the 1995-98 period to meet the financial targets of the new power companies (as per current legislation and tariff notifications).

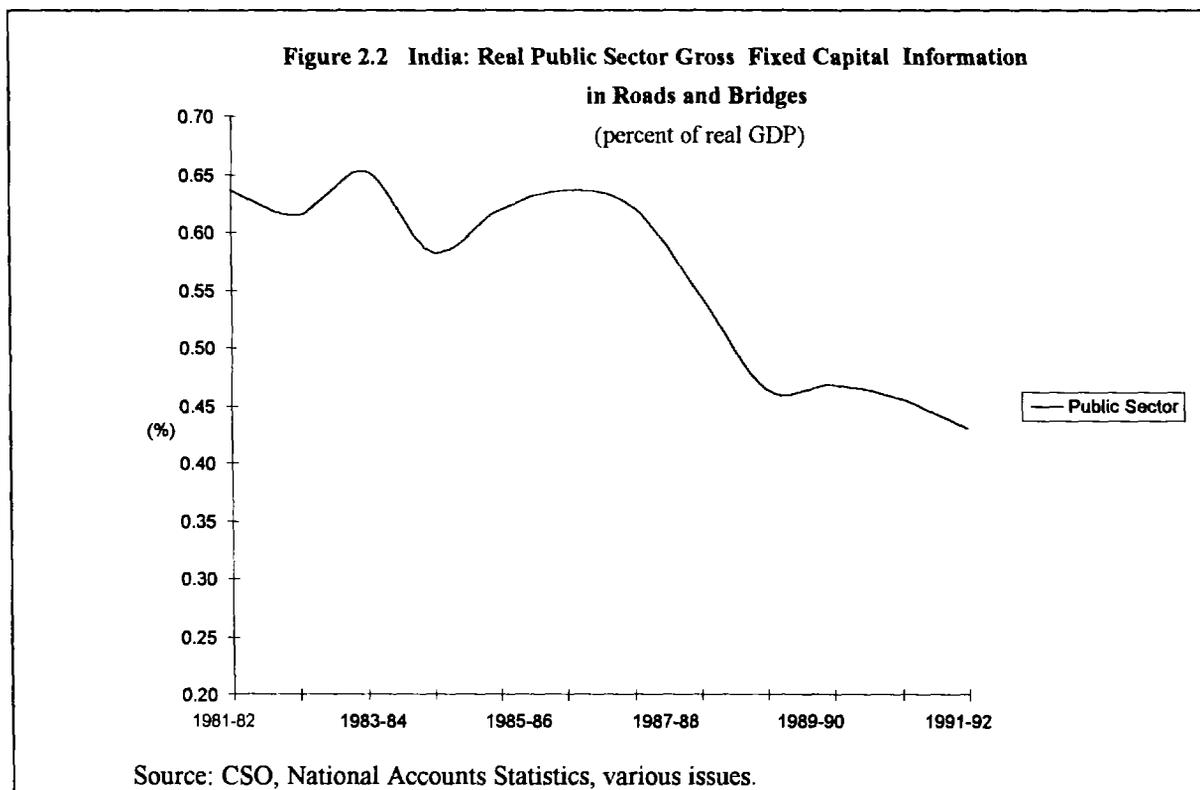
The Scope of the Program. The program involves: (a) unbundling and structural separation of generation, transmission and distribution into separate companies; (b) private sector participation in hydro-generation and privatization of thermal generation and distribution; (c) competitive bidding for new generation; (d) the establishment of a power sector regulatory agency (with no utility assets and no involvement in operations); and (e) electricity tariff reforms at bulk power, transmission and retail levels. The reform program is being supported by the World Bank and the International Finance Corporation.

business decisions in the power sector; and (c) introduce competition (Box 2.7). Several other state governments are beginning the process of power sector reform. A restructuring study is underway in Uttar Pradesh and Haryana, together with the creation of an organizational structure to manage the reform process. Critical actions in Uttar Pradesh will include: (a) tariff adjustments; (b) significantly improved collection of bills; and (c) payments by the Uttar Pradesh SEB to the state government and suppliers. The states of Rajasthan and Bihar will soon launch restructuring studies with assistance from the World Bank.

To overcome the power crisis, the Electricity Act of 1948 was amended in September 1991 to open fully the power sector to private domestic and foreign investment. The amendments also enabled state governments to guarantee rates of return on equity invested in generation (16 percent for a plant load factor of 68.5 percent, with a 0.7 percent increase in the rate of return for each one-percent increase in the load factor). This legislation does not promote competition or encourage minimization of capital costs. And the normative operational parameters are relatively easy to exceed. In addition, the efforts of the Central and state governments have focused on attracting private investment in generation rather than transmission and distribution. New plants, therefore, can only sell to the SEBs. Private investors have sought counter-guarantees from the Central Government because the SEBs with

whom they must deal are not considered to be bankable risks. Most states to which the SEBs belong also are in weak financial positions.

The Central Government understandably has been reluctant to provide counter-guarantees for power investments. The reasons are moral hazard and the potentially large contingent liabilities this creates for the Treasury. Indeed, after agreeing to provide counter-guarantee for the first eight private power sector projects under the new legislation (at a potential cost of 1.3 percent of GDP per year), the Central Government recently announced that it will discontinue the policy. This welcome decision needs to be accompanied by changes in procedures for allocating licenses on the basis of competitive bidding to the lowest cost producers (an approach that the state of Rajasthan has adopted already). In addition, tariffs should be adjusted early in the sectoral reform process, and private sector participation in power should extend to transmission and distribution (as is contemplated in Orissa). This will require the setting up of appropriate rules for competition and the establishment of independent regulators (Chapter 3).



Roads

State Public Works Departments (PWDs) are at the heart of the road sector in India, and of its problems. For decades they monopolized road planning, design, construction and supervision. They also have been strongly oriented towards labor-intensive construction technologies. Until recently, private contractors were used for the most part as labor contractors.

They did not provide engineering skills, materials, machinery or working capital; these came from the PWDs. This arrangement allowed many small labor contractors to build sections of a very large network at relatively low costs. The network consisted of one, one-and-a-half and two-lane roads with thin rough pavements.

Congestion Is The Overriding Concern. Traffic in excess of 30,000 vehicles per day currently use some of the core sections of India's road network. This has created the single overriding concern regarding India's infrastructure for surface transportation; that is, the extreme congestion on the core system and the impossible task of maintaining low standard roads under these circumstances. The system comprises about 10,000 kilometers of roads that account for about half the national road freight and passenger traffic. This core system is part of a larger system of state highways (128,000 km), major district roads (216,000 km), national highways (34,000 km) and major urban roads serving the four mega cities of Delhi, Bombay, Madras and Calcutta. Together, these categories of roads account for 95 percent of all national road traffic, and most of the engineered road construction in the country.

The extreme congestion is the result of population growth, increasing urbanization, expanding foreign and domestic trade, and the shift of private shippers from rail to road because of superior service characteristics. Such traffic requires four lane roads capable of carrying heavy axle loads. Much of the single and one-and-a-half lane State and Major District roads needs also to be upgraded to good two lane roads. But neither the PWDs nor the prevailing local engineering and construction industry has suitable technology and the related experience for the task.

PWDs Are The Major Constraint. The technological requirements for designing and constructing the core highway network are both large scale and machine-intensive. Hand labor cannot compact the earth or finish the pavement to specifications appropriate for high density heavy axle load traffic. However, it can be retained for the very extensive remainder of the network that is lightly trafficked, if done on a programmed and dedicated basis.

To overcome the capacity constraints of PWDs, private professional engineering firms should be contracted to investigate and design large costly sections of road suitable for construction by machine intensive methods alone. Large contractors should be mobilized also. They should provide the full range of the requisite financial, managerial and engineering skills. In addition, they should have the capacity to supply equipment and material for rapid high standard road construction. Construction supervision would be undertaken by private professional consulting engineers representing the client PWD. These consulting engineers also would be responsible for the equitable treatment of the contractors through contract interpretation and progress payments (Box 2.8).

India currently does not have enough large scale private domestic road engineering or road construction firms to undertake the task at hand. Little effective demand for such services existed in the past and it will take time to build such capacity. Local small and medium-size domestic engineering and construction firms need to acquire relevant experience before they can qualify for such large projects.

One possible solution to the transitional problem would be to make use of foreign engineering and construction services, at least initially, until the domestic capacity develops. There is also scope for joint venture arrangements between foreign and domestic firms. Such arrangements also could encourage the return of NRIs with the appropriate skills and experience.

The more-machine intensive and efficient approach to high density road building will require downsizing and re-training in-house PWD engineering staff, especially those involved in the construction of main roads. This would be consistent with a smaller but very important role for state PWDs as the planner, administrator and maintainer of roads. The private sector would investigate and design roads, supervise construction and maintenance, and supply material and equipment. Such a division of responsibilities is common to developed countries and generally is very efficient. In India, those states with PWDs that assume such a narrower role effectively will have good roads sooner than those that cannot or will not make the transition.

Finances Are A Separate But Surmountable Problem. The financial challenge for the government is how to provide a stable and dependable annual stream of \$2.5 billion resources for road improvement and conservation. Roughly \$1.5 billion is for investment; the rest would cover maintenance. Less than half of this requirement is provided for in India's current Eighth Five-Year Development Plan. The recommended allocation for National Highways under the Eighth Five-Year Plan is \$2.0 billion. For the state and major district roads, it is \$5.5 billion. Another \$1.0 billion per year is needed for maintenance. Only \$3.2 billion is provided. The current financial resources of the states and the Central Government are grossly inadequate to meet these investment and maintenance requirements.

Additional financing sources should better tap road users and direct the proceeds into road construction and maintenance. The engineering, construction and maintenance costs of roads largely are public costs. In contrast, the benefits of savings in travel time and vehicle operating costs mostly are private. At present, this private benefit stream is tapped through special central and state taxes on fuel, vehicles, passengers and octroi. User revenues currently total about \$5.4 billion annually, or about 3.5 times the total expenditures on roads for construction and maintenance. About one half of these revenues are collected at the central level. The remainder is

Box 2.8: PWD Reform Moves Forward in Selected States

A number of state PWDs and the Central MOST are beginning to move forward under this more mechanized and efficient approach. The large states of Andhra Pradesh, Tamil Nadu, Orissa, Haryana, Rajasthan and Gujarat are actively preparing state highway projects for upgrading their core road systems, in cooperation with the World Bank. Strategic options studies are being prepared in each state to analyze the road networks.

These studies are identifying for upgrading the corridors with high traffic volumes and congestion. This will be followed by the selection of project consultants to carry out the detailed feasibility and engineering studies. In turn, the consultants will prepare construction packages and associated tender documents suitable for international competitive bidding. Subsequently, private consultants will be retained by the states to supervise contract implementation. With this arrangement, the needed engineering and construction technology can be rapidly transferred to India and the work can be supported financially by bilateral and multilateral lenders.

collected at the state level and is growing at a faster pace. Clearly, there is no linkage--in terms of pragmatic quasi-cost recovery--between road user revenues and expenditures. Indeed, road projects with 40 percent returns are routinely passed over for those with returns of less than 10 percent such as railway electrification and railway gauge conversion.

One way of effecting a linkage between road users and new high quality road investments is to build toll roads--public and private. However, international experience and studies in India have shown that few of the intercity expressways proposed could be entirely financed and maintained by tolls. Among the reasons are the many free (albeit circuitous, rough and congested) alternatives to the toll facility, and the very low level of automobile ownership and use in India. Again based on experience in other developing countries, the best potential for private sector participation in road finance would be for bridges and urban bypasses. In most cases the free alternative routes to bridges are very circuitous, very congested and very unlikely to be improved because of problems of land acquisition. As such, it should be entirely feasible to finance the operation, maintenance and policing costs of most of these new facilities with tolls. Their access points could also be used to weigh and control truck axle loads. Private firms could then be given the franchise to operate and maintain the public toll facilities. This would remove significant administrative and financial burdens from the Central and state governments.

The fact remains, however, that most roads in India (and elsewhere in the world) will have to be financed entirely or largely with public funds. As indicated earlier, these allocations have been inadequate in India. And they are likely to continue to be insufficient given the intense competition for and limitation of general central and state revenues. One option would be to raise fuel taxes, (especially diesel fuel and leaded petrol taxes) and earmark them for road funds at the central, state, and municipal levels of government. These funds would be used exclusively for road maintenance, public toll road construction and, possibly, as a substitute for the congestion-inducing octroi tax.

Fuel Taxes Are Viable Options. In India, the price of a liter of gasoline is about \$0.60, similar to the average price of gasoline in the OECD countries in 1993. In contrast, the price of diesel fuel in India is about \$0.20, well below the OECD average of \$0.45. In Japan, the current price of gasoline is about \$1.11 per liter while diesel sells for \$0.66 per liter. Because diesel is relatively cheap in India, it combines with other factors--such as dated technology and weak or non-existent pollution controls--to create serious problems of pollution by road vehicles. Raising the price of diesel fuel in India to the OECD level of \$0.45 cents per liter could help to moderate diesel use and would generate additional annual revenues of about \$325 million. This is about one-third of the estimated current annual shortfall in the Government's spending on construction and maintenance.

A diesel tax would have other distinct benefits. It would be easy to collect. And if the increment in fuel taxes--essentially as a user charge--is earmarked for road funds and placed in specially created State Road Funds, there is likely to be less taxpayer resistance since the funds will benefit the road user directly. Fuel taxes currently account for only 21 percent of road user charges in India. This is one of the lowest ratios of fuel taxation to user charges of any petroleum importing country. A fuel tax also would leave room for unleaded gasoline, which has been

introduced recently in India, to be sold at a lower price than leaded gasoline. For instance, the price of unleaded gasoline could be set at the current leaded level. A five cent tax could then be levied on leaded fuel. This would raise about \$38 million in revenue. In addition, it would encourage the use of more fuel efficient and less polluting engines.

The final reform necessary to encourage taxpayer support is to set up Highway Boards in each state to preside over the State Road Fund. This by itself would change little unless such boards were comprised of private road user representatives as well as the state roads bureaucracy. Such boards would set the priorities and guidelines for the use of the funds and provide a quasi-commercial linkage between road users and road providers.

Irrigation and Water Resources

Irrigation is the largest user of water in India, accounting for about 83 percent of present gross water use. As a result, the condition of the water sector as a whole is linked very closely to that of the irrigation sub-sector. State Irrigation Departments operate public medium and major surface irrigation systems which accounted for 36 percent of the net irrigated area in India in 1990. The remainder of this area consists of private tubewell groundwater irrigation (49 percent); traditional tank irrigation schemes (7 percent); and other sources of irrigation (8 percent). The majority of the facilities in this last category are owned by the private sector (56 percent) and include surface flow and lift irrigation. Indeed, the expansion in the net irrigated area in India after 1950 was due largely to the spectacular growth in private tubewells. They increased from zero hectare to about 60 percent of the increase in total net irrigated area.

Expansion of irrigation networks has had a major impact on agricultural growth in India. Technical progress made possible by irrigation investments and its complementary inputs--high-yielding variety seeds and fertilizer--accounted for about 30 percent of the growth in agricultural output in the post Green Revolution period. Irrigation also helped the agriculture sector to lead the reduction in rural poverty during the 1980s. In fact, the incidence of rural poverty became lower in irrigated areas compared to rainfed areas. This is true across states, as well as within states, including those in which agriculture grew rapidly during 1980s. Given indications that India may be close to the ceiling of cultivable land, irrigation will become even more important as a potential contributor to technical progress, improved agricultural performance and poverty reduction.

Unfortunately, the upkeep of public irrigation infrastructure has been inadequate. Field observations by government officials and Bank staff reveal that in nearly all states, irrigation and drainage infrastructure is deficient and deteriorating. This situation is reflected partly in three related facts about the performance of the irrigation in India. *First*, the productivity of Indian irrigation is lower than, and in some cases half, the levels attained in other large Asian countries and elsewhere. For example, in 1989, irrigated paddy yields averaged 2.6 t/ha in India, compared with 5.5 t/ha in China and 4.2 t/ha in Indonesia. Furthermore, while yields in China and Indonesia improved between 1989 and 1992 (to 5.8 t/ha and 4.5 t/ha, respectively), yields in India remained the same. *Second*, farmers with access to water through private tubewells or dugwells generally have better yields than those utilizing public or shared facilities. These farmers also have greater

Box 2.9: Cost Recovery Potential in Irrigation Exists

Raising the rates charged to water users is a necessary action not only for cost recovery purposes but also to induce greater efficiency in the use of water resources. Water rates should be set at levels at least to cover the costs of efficient O&M. This should include an amount to cover essential numbers of personnel and exclude expenditures for excess personnel, unproductive items, and rehabilitation activities.

Research shows that full recovery of O&M cost could be easily borne by farmers in most cases, depending on crops grown and yields achieved. In Haryana, Bihar and Gujarat irrigation charges to cover recurrent O&M costs would account for no more than 4.5 percent of net additional benefits from irrigation or more than 2 percent of gross returns. Partial recovery of capital costs may also be possible. For instance, 25 percent coverage of capital costs would represent from 8 to 22 percent of net additional benefit from irrigation under low capital cost assumptions, and from 18 to 37 percent of net additional benefits under high capital cost assumptions. The share of these charges in gross returns to farmers is lower. The impact of higher charges, however, would be proportionately harder to bear where crop failures occur or farm yields are low. For instance, a review of farm budgets in Bihar under differing yield assumptions reveals that for farmers with low yields irrigation charges would represent 7 percent of net returns for wheat, and 28 percent of net returns for rice. This compares with 1.5 percent and 2.3 percent, respectively, for farmers with average yields. For this reason, actions to raise water charges need to be accompanied by an assessment of farm budgets and the likely impact on farm families.

Merely increasing water rates to full cost recovery levels, however, would not guarantee sufficient funds to sustain O&M activities, given the typically low collection ratios achieved. Years of inadequate attention to O&M activities have eroded the quality of irrigation service delivery, leaving little inducement for farmers to comply with water rate statutes. Achieving full cost recovery requires a multi-faceted approach, linking increased water rates to improved quality of services and greater participation of users in the operations and maintenance of infrastructure. Service quality should be enhanced through better management and full funding of maintenance works, and through rehabilitation and modernization of existing facilities. Participation of users should be fostered through greater consultation with farmers through water user associations (WUAs), and progressive turnover of facilities to such associations should be sought. Agreements with water users on the new schedule of rates and on design and rehabilitation plans, should be established prior to investment. In order to ensure adequate water rates over time, an institutional structure and analytical apparatus should be established for assessing service costs and fees, making annual recommendations on adjustments, and reviewing and approving such recommendations.

control over the water supply. *Third*, State Irrigation Departments appear to be falling behind in their efforts to improve water distribution in existing schemes, construct micro-networks, and complete ongoing projects. For instance, major preparation and implementation problems were encountered in most of the Bank-funded projects implemented in the 1970s and 1980s. In seven of the eight projects whose economic rates of return (ERRs) were re-estimated at completion, implementation problems were determined to be the primary influence on low ERRs although the decline in world rice prices in the mid-1980s was a very important contributor. Financial and institutional weakness in Irrigation Departments are at the heart of these problems.

Financial Problems Did Not Always Exist. In India prior to the 1950s, revenues from water charges levied on farmers exceeded the combined government expenditures for O&M and for imputed interest on the initial investments (except for drought relief irrigation works). By 1989-90, the subsidy to the sector, using the historical cost valuation method, was estimated to be Rs 26 billion, or equivalent to 0.6 percent of GDP. The main reasons for this poor financial performance included a failure to adjust water charges in line with rising costs of O&M, and failure to achieve high collection rates of water charges. For instance, water charges have remained unaltered since the mid-1970s in some states (for example, Punjab, Haryana and West

Bengal). They also have not been changed since the mid-1980s in most other states, even though the capacity to pay exists (Box 2.9).

O&M Is A Major Casualty. As with capital expenditures, funding allocations for O&M have lost ground to increases in establishment costs, and typically have fallen short of recommended levels. For instance, the average actual expenditure levels for O&M in Tamil Nadu were 78 percent of the average recommended levels in 1989-90, and 66 percent in 1992-93. In Orissa, they were 78 percent on average in 1990-91. Tamil Nadu and Orissa have now eliminated their O&M expenditure shortfalls, as part of their preparation of a Water Resource Consolidation Project (WRCP) but other states lag behind (Box 2.10). As recently as 1992-93, shortfalls in O&M expenditures for various irrigation schemes in Haryana ranged from 31 to 57 percent of the recommended levels, prior to implementation of its Bank-financed Water Resource Consolidation Project. Additional problems on the financial front typically include insufficient attention to monitoring and controlling of construction costs, and to construction quality. In fact, Irrigation Departments often do not have the relevant data to perform this function or the capabilities in financial analysis.

International experience suggests that granting financial autonomy to an irrigation department would be an important step toward greater financial discipline and efficiency. Due to the political deliberations and budgetary reforms this would entail in India, financial autonomy should be a long term vision towards which Irrigation Departments should strive. An immediate course of action could be to levy and collect charges, and earmark these irrigation revenues for O&M. Such a move toward full reliance on revenues from water charges, combined with the hard budget constraint that financial autonomy entails, would improve incentives in irrigation departments for maintaining viable operations.

Box 2.10: The Tamil Nadu WRCP Addresses Comprehensive Issues in Water Resource Management

The Tamil Nadu WRCP comprises comprehensive support to policy, institutional and expenditure reform in the sector. Tamil Nadu is severely short of water. The state's future development will depend on improved water planning and allocation for all uses of water, and more efficient use in agriculture, the largest user of water. The World Bank approved funding for the Tamil Nadu WRCP in FY95.

In Tamil Nadu, the WRCP would introduce water resources planning by river basins across all uses of water, improve agricultural productivity through modernization and completion of irrigation schemes, upgrade water management and farmer participation, and strengthen institutional and technical capabilities for managing water resources.

In preparation for the WRCP, Tamil Nadu: (a) created a new specialist state Water Resources Organization (WRO) from the former Public Works Department, including major reorganization of WRO to create a functionally specialized and decentralized management structure; (b) issued a State Water Policy consistent with India's National Water Policy and Bank policy; (c) created a new state apparatus to implement multisector water planning; (d) redefined expenditure priorities to emphasize maintenance, improved water management, modernization and scheme completion rather than new constructions; (e) doubled state allocations for maintenance to bring maintenance funding in line with WRO recommendations; (f) prepared a program to involve farmers in irrigation management and maintenance, including turnover of the lower levels of commands to farmer councils; (g) established procedures for annual review of water charges; (h) strengthened environmental management capabilities; and (i) approved new policies and created an institutional apparatus to handle resettlement and rehabilitation. The project would support funding of the associated physical and institutional investments to help implement Tamil Nadu's new state strategy and expenditure program for the irrigation and water sectors.

Institutional Constraints Are An Issue Of Boundaries. Among the most serious institutional challenges facing the irrigation and water resources sector are: (a) forging a coherent water resources policy and multi-sectoral state water plans; and (b) re-ordering government and private roles, and fostering greater private sector participation.

In India, planning, allocation and management of water resources are conducted at the state level. State Irrigation Departments take the lead role in the sector, since irrigation is the largest user of water. While some Irrigation Departments have responsibilities beyond the irrigation sub-sector, the typical situation is one of several independent departments or agencies responsible for different types of water use (for example, municipal water supply, power, transportation). There is, therefore, a lack of integrated management or holistic planning of water resources, to link sites and purposes of water to their respective unitary sources. Managing water in a fragmented manner generates significant negative externalities such as pollution stemming from domestic or industrial wastes, or decrease in water availability down stream due to the construction of reservoirs or irrigation canals. It also threatens the future availability of usable water. While some states are moving toward integrated planning and management of water, most states are not.

Planning and management of water resources should be conducted along river basin lines. This presents an additional level of complexity in the Indian context since river basins rarely fall neatly within existing state boundaries. In addition to negative externalities, the lack of coordination creates serious conflicts among water users. Nevertheless, the Government of India is committed to shifting toward river basin planning as detailed in its National Water Policy (NWP) of 1987. The NWP allows the Government of India to refer any water dispute for adjudication to a legal tribunal, whose findings would be final and legally binding. Over time, however, inadequate coordination of water planning and usage across states has become increasingly apparent. While some success in harmonizing inter-state riparian development has been achieved through cooperation and specific tribunals (for instance, in the sharing of Narmada, Krishna and Subernarekha waters according to tribunal awards), the more common situation is lack of agreement. One example is the highly contentious inter-state dispute among Tamil Nadu, Karnataka and Kerala regarding the waters of the Cauvery, which has remained unresolved since 1974.

In the Indian federal structure where state rights are the strong, use of Central Government power to lead the decision-making process toward river basin planning--as has been done in China, Indonesia and the Philippines--would not be easy. Accordingly, the NWP commenced a gradual shift toward river basin planning. It authorized the integration of the various water planning departments under one umbrella Department, the Ministry of Water Resources (MOWR). In turn, MOWR is coordinating state and Central Government discussions on objectives and strategies through its National Water Board (NWB) which was established in September 1990. The NWB approach is to effect the gradual shift to river basin planning, starting with improved collection and sharing of river basin data. This first step is to be followed successively by the establishment of river basin planning boards, encouragement of joint inter-state development projects, and possibly over time, whole-basin management. Additionally, the

Government may also wish to make greater use of Legal Tribunals (under the Inter-State Water Disputes Act of 1956) to adjudicate current or future water-sharing disputes. There is also a need to better coordinate the functions of the Government of India's Central Water Commission (which has purview over surface water) and the Central Groundwater Board to encourage holistic consideration of river basin resources.

State Governments in turn should:

- (a) prepare their own river-basin oriented State Water Policies fitting within the framework of the NWP;
- (b) establish State Water Resources Boards;
- (c) consolidate water planning functions in a single Water Resources Department, and reorganize planning and management along river basin lines;
- (d) and work toward establishing water sharing agreements with other states.

A very positive development is that these actions have already been initiated in the context of WRCP preparations in Tamil Nadu, Orissa, and Haryana.

Several functions currently performed by the financially and institutionally deficient State Irrigation Departments could be handled better by the private sector. Examples are maintenance and operation of the distributory canals, agricultural services, and seed production. Promotion, development and support of Water User Associations (WUA) should be pursued. They are likely to be the most effective vehicle, in the short and long term, for farmer participation and control of irrigation schemes (Box 2.11). Scheme level administration could then actively reach farmers through the WUAs to enlist them in widening circles of consultancy, participation, decision-making and cost recovery. Coordination between irrigation departments and farmers on management and maintenance of micro-networks is critical for improving efficient water use and sustainability of investments. It has the added advantage of being more cost effective when farmers are involved and are encouraged to acquire ownership of their micro-networks.

Box 2.11: Water Users Associations (WUAs) Have an Important Role

An encouraging recent development is the much greater interest in promoting WUAs now found at the state level. For instance, piloting of WUAs has been underway for several years in some states (for example, Tamil Nadu and Maharashtra, both assisted by Bank projects under implementation or preparation). West Bengal has transferred government tubewells to local Panchayats, and Orissa is initiating a program to establish the structure for WUAs. Experience in India and elsewhere indicates that the successful development of WUAs would depend on: (a) reliable and predictable water supply to the head of each minor canal (under an agreed operational plan); (b) common economic incentive for farmers to group together to secure tangible and reasonably early gains; (c) defined rights and obligations for government and WUAs, encompassing the agreed water delivery service to the minor head, WUA payments for the service, and respective WUA-government maintenance responsibilities including reduced payments where farmers handle maintenance and operations; (d) equitable participation and operational integrity; (e) assistance of NGOs, private consultants, social activists, and local leadership in organizing farmers; and (f) a grass-roots approach, progressively building farmer capabilities and responsibilities.

Additional features generally regarded as important to successful WUAs include: (a) regular meetings of the executive and general body; (b) periodic elections of committee officials including rules to limit the permissible tenure of committee officials; (c) annual elections for the committee with a vote for each WUA member; (d) measures to ensure representation in decision-making by every chak and including committee participation by minorities and women; and (e) procedures for outside auditing of accounts, all safeguarded under a written WUA constitution and by-laws.

The appropriate long-term role for the public sector is to: (a) support the private sector through groundwater monitoring (increasingly through river basin authorities); (b) planning surface irrigation development (with purview over topographic surveys and layout design) to facilitate conjunctive groundwater exploitation; (c) providing policy and legislative guidance, research and extension; and (d) channeling government funds (including supervision of contractors) for large public works. It should also assist in forming water user associations.

3

THE ENABLING FRAMEWORK FOR PRIVATE INVESTMENT IN INFRASTRUCTURE

INTRODUCTION

For over four decades after Independence, the public sector in India held a monopoly in the provision of most infrastructure. In 1991, when the current period of reforms started, electricity, the railways, ports, roads and telecommunications were among the sectors reserved for the public sector. Now, virtually all parts of the economy--including all infrastructure--are open to private investment. In addition to liberalizing the investment regime, the Government has been introducing reforms in the trade regime, the financial sector, taxes and public enterprise to create an overall policy environment more conducive to undertaking and operating these investments efficiently. This Chapter focuses on one critical aspect of that enabling environment, the legal, administrative and regulatory framework, and the challenges it faces in accommodating the new, broader role for the private sector in power, transport and telecommunications. *Given that these challenges are new for India, some experimentation and learning while doing are inevitable. However, there are actions that can and need to be taken, and identifying them is the purpose of this Chapter.*

The discussion which follows highlights that India's legal system--that is, its laws, instruments and institutions--is adequate to facilitate the objectives of the on-going economic reform program, including private sector investment in infrastructure. However, there is room to enhance the capacity of the system to support reform objectives by: (a) improving the efficiency of the administration of justice by measures such as providing an efficient legal information system; and, particularly for infrastructure, by (b) adjusting in a limited manner specific laws affecting labor, taxes, land, the regulation of utilities and dispute settlement. Within the *three* sectors which are reviewed below--*power, transport and telecommunications*--there are still administrative and regulatory issues which are impediments to private sector investment. These issues, which vary across sectors and within sectors, are set out in the rest of this Chapter.

INDIA'S LEGAL SYSTEM

Introduction

Unlike economies in transition in parts of Eastern Europe and East Asia, India has a highly developed and sophisticated legal system with an institutional and professional depth unparalleled

among developing countries. The system includes about 8,000 courts at various national and sub-national levels, a diverse and complex body of quasi-judicial and other administrative tribunals, about 500,000 lawyers, and a widely respected, independent and competent higher judiciary. The Constitution of India provides for the separation of the executive, legislative and judicial branches, as well as the protection of civil liberties by an independent judiciary along lines similar to the Bill of Rights in the Constitution of the United States. India's legal system also provides for the comprehensive protection of property and contractual rights and legal interests in economic transactions based on Anglo-American legal doctrines. As such, India's legal system is a valuable asset in its efforts to permanently alter the country's development paradigm and achieve sustained economic growth.

That said, there is room to enhance the capacity of the system to facilitate and support the Government's economic policy objectives in general, and private sector participation in infrastructure in particular, in two areas. These areas, identified through a participatory process involving private sector leaders and Government officials, are:

- reduction of delays in court proceedings, expansion of access to courts and enhancement of the efficiency of courts; and
- adjustments in specific areas of the law which are of greatest relevance to private sector participation in the funding, construction and operation of infrastructure--labor laws; indirect laws; utilities regulation; land law (land acquisition and collateral; urban land ceiling; and construction laws); and commercial dispute settlement.

As explained below, these issues are receiving priority attention from the Government.

Reducing Delays and Increasing Efficiency

The Old Role of Government Contributed to Delays. Long delays in final resolution of cases is the most significant challenge facing Indian courts. The conventional view is that these delays arise solely or mainly because of a shortage of courts, judges and lawyers; inefficient procedures, and a failure to use modern court management systems. However, past experience shows that sizable increases in the number of courts, judges and lawyers (including tribunals), and procedural changes and institutional upgrading have not achieved commensurate reductions in the backlog or delays. While failure to invest in and expand judicial infrastructure in line with the expanding economy undoubtedly is a contributing factor, recent research has pointed to a link, explained below, between court delays and the interventionist economic policies that were followed until mid-1991.

Delays are attributable in part to inefficiencies in procedures, a matter beyond the control of parties to litigation. Delays are also attributable to actions, or omissions, of the parties themselves. In litigation between private parties, delays attributable to acts or omissions of the parties are limited by the net economic and financial cost to the parties arising from such delay.

However, where government or a public sector entity is a litigant, this limitation is, by and large, not applicable for a variety of reasons: their ability to absorb the economic and financial costs of delay; the absence of penalties against the institutions or concerned individuals for incurring such costs; and distortions in institutional incentives. It is often safer for an official of such an institution involved in litigation to institute an appeal, even if the chance of success is very low. Data on the Bangalore area indicates, for example, that appeals filed by government agencies/public sector institutions have an extraordinarily low success rate of between five and six percent. Yet they occur routinely against decisions of courts and government appointed administrative tribunals. Such appeals constitute a significant proportion of the burden of the higher judiciary.

The extensive involvement of government agencies/public sector entities in litigation in India should be considered in the above light. Data on the Bangalore area indicate, on a preliminary basis, that the Government is a party (as plaintiff, defendant, appellant or respondent) to appeals in a large proportion of all Indian civil suits (that is, suits other than those pertaining to criminal offenses), estimated at about 60 percent. It appears therefore that the dominant presence of the government and public sector enterprises as litigants, is an important factor contributing to delays in courts.

What explains this extraordinary Government involvement in civil litigation in India? The policy of the Government, prior to July 1991, of direct intervention in and regulation of individual economic transactions required a legislative structure that conferred vast administrative discretion on government and contained detailed rules governing transactions at the micro-level. This situation was not dissimilar to the practices in a number of previously centrally-planned economies. What was unique in India, however, was that this centrally planned development strategy was implemented within a legal framework of Anglo-American origin. The core objectives of such a framework include the protection and maximization of individual choices in economic transactions and limiting government intervention in private transactions. As a result, courts became crowded with a large volume of litigation, with the Government as a party. Here the motive of private litigants was to question or alter the application of economic policy decisions of the Government to individual activities.

The on-going move away from centralized planning and the adoption of a market-based model of economic development should significantly reduce, however, the extent of government involvement in civil litigation. It should reduce the need for private economic agents to use courts to resist or modify the application of government laws to individual transactions. The Government and public sector entities could also productively reduce their involvement in litigation by reducing substantially the number of civil cases initiated by them, including appeals.

A reduced government presence in litigation will, in turn, reduce the distortion of the litigation system described above. It will also reduce government crowding out of private litigation. As the proportion of litigation involving only private parties increases, the economic and financial costs of delay should also operate as a powerful factor in favor of containing delays.

In addition to reducing ex ante discretionary controls and intervention policies, the Government has itself identified the need for "... a major overhaul [of the administration of justice], taking into account technological advances which have proved to be powerful tools for speedy management decisions in business firms."

The Government has reviewed the problem of delays extensively, particularly since 1991. The 1991 Malimath Committee Report identified causes for delays and suggested remedial measures. The Law Commission of India also has prepared a number of reports on the subject. These recommendations have been considered by Chief Justices, Chief Ministers and Law Ministers. Steps taken pursuant to this effort include the preparation and submission to Parliament of a new law governing arbitration. Other measures to strengthen courts and simplify procedures are being monitored by Government. One of the recommendation of the Law Ministers is that disputes between Government and public sector undertakings, or between public sector undertakings, should not go to courts or tribunals but should be settled between the parties out of court.

Reforming High Priority Laws

Of the priority reform areas identified above, five are directly relevant to the enabling environment for private investment in infrastructure, and are discussed further in this report: labor laws; indirect tax laws; utilities regulation; land laws (land acquisition and collateral, urban land ceiling, and construction laws); and commercial dispute settlement (the remaining issues are addressed in a paper, under finalization, on the legal framework for private sector development).

Labor Laws. *One priority issue requiring attention of policy makers is labor dispute settlement.* In seeking increased private investment in infrastructure, it is important to ensure also that necessary steps be taken to strengthen the mechanism for settlement of labor disputes so that workers in private enterprises will have adequate access to quick and efficient remedies to protect their rights. As a general matter, an efficient system for the settlement of labor disputes is essential for the development of a labor market.

The legal regime governing industrial relations in India is complex, with some 50 major pieces of legislation covering labor welfare and dispute settlement. These laws apply to the organized sector. The unorganized sector is not covered by labor laws. This labor dispute settlement system no longer offers adequate remedies to protect the rights of workers. Neither conciliation, compulsory adjudication nor arbitration--the three methods of dispute settlement available under Indian labor law--any longer provide employees a fair and expeditious method of labor dispute settlement. The final resolution of a labor dispute could take about 20 years if it is challenged in appeal by the concerned employer.

The employment relationship in a private enterprise is based upon a private, voluntary contract. However, once that contract is concluded for those who fall within the term 'workmen' in 'industries', *the terms of the employment contract are circumscribed by several detailed*

statutory provisions. In particular, those provisions pertain to changes in the nature of the job, termination and dispute settlement. Labor laws do not provide to the 'workman' adequate freedom to choose where and how to pursue disputes with his employers. In fact, employees can pursue grievances only after the government approves their planned course of action.

The establishment of an efficient system of labor dispute settlement is of high priority. The Government is in the process of reviewing such existing laws as the Industrial Disputes Act and the Trade Unions Act, with the same objective. On the issue of dispute settlement, the system should protect the rights of individual workmen to choose the forum and type of remedy to be used to protect rights. It should be based on an unambiguous legal framework defining the mutual rights and obligations of employers and employees. In addition to a system of labor courts, there should be improved opportunities for voluntary arbitration.

Tax Laws. There are a number of *legal barriers to the free inter-state movement of goods*, arising mainly from the legal framework governing indirect taxes imposed by states. Legal definitions regarding the incidence of taxes vary significantly from state to state. Legal procedures for compliance with state tax law are cumbersome and vary widely from state to state. Physical barriers such as check posts, as well as legal rights to stop vehicles to check on payment of indirect taxes, operate as major sources of delay in the flow of goods across state barriers. They also afford important rent-seeking opportunities for state officials. The national agitation by truck operators in August, 1993 that led to the abolition of one of these taxes ('path kar' or entry tax) demonstrates the extent of the frustration of the private sector with these barriers. The resolution of this issue will raise complex legal questions, including constitutional law aspects, that require careful consideration. However, legal reform in this area is necessary for India to function effectively as a single market.

The Indian Stamp Act and state stamp laws require payment of stamp duty for certain transactions. Stamp duty is an important source of state revenue and their rates have steadily increased. Excessive stamp duty rates have, in turn, resulted in widespread under valuation of transactions and a migration of transactions to jurisdictions with lower stamp duty. Rates of stamp duty also have had the unintended consequence of distorting the choice of legal instruments. For example, although registered mortgages offer greater legal protection to mortgagees, mortgage by deposit of title deeds is preferred because it carries little or no stamp duty. Further, an imprecise classification of categories also has generated considerable litigation over tax liability. A rationalization of stamp duty across various states will have an important positive impact on facilitating commercial transactions.

Land Laws (Including Tenancy, Urban Land Ceiling and Construction). Delays in obtaining reliable access to land and buildings are a significant constraint to private sector development. From a legal point of view, three issues require attention in this respect. *First*, the establishment of an effective *system of land titling* is necessary to support the development of a land market. It would assist also in creating mortgages required to facilitate lending. Without an effective system of land titling, title to land in India cannot be ascertained with adequate reliability.

This operates as a constraint on efficient and effective transfer of land, whether by way of sale or lease.

Second, the legal and policy framework governing the *leasing of land and buildings* requires re-examination. The main legal issue here is the lack of an effective and speedy method of dispute settlement for *tenancy disputes*. Again, the intervention of the government (for instance, through the office of rent controllers) in the lease contract, as well as in the settlement of disputes arising under lease contracts, has muddled the mutual rights and obligations of the parties, delayed the process of dispute settlement and created opportunities for rent seeking. *Third*, the legal requirements for obtaining *local government approval* for construction of buildings and land use have become highly cumbersome and inefficient, and are an important source of delay in project implementation. These procedures also generate a considerable amount of civil litigation.

Alternative Commercial Dispute Settlement. In addition to measures discussed above which would enhance 'judicial space' for commercial dispute settlement, the government could also consider measures to improve the availability and effectiveness of alternative dispute resolution mechanisms for commercial disputes. *Commercial arbitration* is not yet a popular method of commercial dispute settlement in India and is used infrequently. The recent introduction in parliament of a new Arbitration Act signals the importance now attributed to this matter by Government.

Three main reasons explain the low use of commercial arbitration. *First*, arbitration is subjected to *excessive review* by courts. *Second*, a series of court decisions in effect have made arbitration tribunals subject to nearly the same *procedural complexities* as the civil court system. Consequently, arbitration proceedings have become slower, more formal, and more *expensive* than they should be. *Third*, the legal and *institutional framework* for commercial arbitration is not adequately developed. Institutional arbitration is not currently available in India. A comprehensive plan could be developed to strengthen commercial arbitration in India covering: (a) updating the Arbitration Act, 1940 with particular reference to the judicial review of arbitration; (b) developing institutional arbitration including investment of necessary additional resources for training; (c) reducing costs and delays currently associated with commercial arbitration; and (d) involving the business community in the promotion of arbitration as a means of dispute settlement.

Competition Laws. A key regulatory challenge during the process of liberalization is the establishment of a legal framework for fostering competition. The provisions of the Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act) governing monopolistic and restrictive trade practices afford an initial basis for pursuing this objective. However, remedies to enforce laws against anti-competitive practices set out in the MRTP Act do not adequately include private remedies or provide for criminal liabilities. Consideration should be given to improving private remedies to those suffering economic injury from anti-competitive practices. The need to extend jurisdiction to civil courts over remedies under the MRTP Act to encourage private monitoring

and regulation of compliance with the law as well as provide enhanced access to consumers across the country, could also be considered.

Conclusion

Economic law reform has been approached cautiously by the Government and is generally preceded by careful systemic analysis of underlying issues. There are no quick solutions or short answers to some of the problems involved in redirecting one of the largest and most complex legal systems in the world to a path supportive of sustained and rapid economic growth.

POWER

Introduction

The electric power sector is a core component of India's infrastructure and its continued expansion is critical to the success of India's economic liberalization efforts. The system is complex and dynamic. It has grown from approximately 1,300 MW at independence in 1947 to almost 80,000 MW today. Despite this level of growth, the sector is beset with serious operational and financial problems, and its needs--which include additional generating capacity, higher levels of efficiency in generation, transmission and distribution, and greater financial stability-- are great.

The sector has a federal structure with significant central direction. In addition to state-owned SEBs, there are national entities such as the National Thermal Power Corporation (NTPC) which was established in 1985, the National Hydroelectric Power Corporation (NHPC) and the Power Grid Corporation of India Limited (Powergrid), and regional bodies such as regional electricity boards (Box 3.1). There also are several private distribution companies, most notably the Calcutta Electric Supply Corporation (CESC) Limited in Calcutta, the Bombay Suburban Electric Supply (BSES) Limited and Tata Electric Companies (TEC) in Bombay.

According to Indian constitutional law, electricity is one of the sectors on the "concurrent list." This means that both the central and state governments have the authority under the Constitution to legislate and regulate the sector. In practice, state legislatures have amended the core legislation, comprising the Indian Electricity Act 1910 (the "1910 Act") and the Electricity (Supply) Act 1948 (the "1948 Act"), over the last twenty years by issuing associated regulations. At the same time, the Central Government has made amendments to these Acts as recently as 1991 to reflect policy changes and the liberalization of generation.

At present, the function of regulation in the power sector is closely linked under these core statutes. Regulation is carried out by various departments of the Central Government such as the Ministry of Power and the Central Electricity Authority (CEA). In addition, the State governments and the SEBs themselves play an extensive role under the 1910 and 1948 Acts, which has given rise to significant degrees of overlapping jurisdiction with central authorities.

Box 3.1: Multiple Public Agencies Operate in the Power Sector

The Central Government currently owns: (a) several generating companies, including the National Thermal Power Corporation (NTPC) and the National Hydroelectric Power Corporation (NHPC); and (b) the Power Grid Corporation of India (POWERGRID), the new transmission grid operator. Tariff setting principles for the centrally-owned entities are approved by the Ministry of Power (MOP). Actual tariff proposals are reviewed by CEA as the regulatory authority and then are notified for implementation by the MOP. These tariffs are established on a cost of service basis, subject to basic performance standards. The Central Government also owns two power sector financial intermediaries, the Power Finance Corporation (PFC) and the Rural Electrification Corporation (REC). India's renewable energy program is administered by the Ministry of Non-Conventional Energy Sources, which covers mini-hydro, wind and solar as well as the decentralized needs of the rural sector.

States own their respective SEBs and State Generating Companies (SGCs) which together generate about 75 percent of the electricity supplied and most of the distribution to final users. The 1948 Act expressly requires the SEBs to operate "in the most efficient and economical manner". It also requires the SEBs to adjust their own tariffs so as to achieve a minimum (but no maximum) return after interest of three percent on average fixed assets in operation. The 1948 Act does allow a state to specify a higher minimum rate of return for its SEB, and to subordinate payment of interest on state loans until after meeting the minimum return requirement. However, most SEBs do not reach the 1948 Act's three percent minimum return. If the SEBs were allowed to meet the three percent minimum return specified in the law, most would be able to cover their operating costs and debt service (so long as rural electrification subsidies were fully paid and bill collections were reasonable) but would hardly contribute anything to capital expenditures.

Indian utilities are grouped into five regional interconnected power systems in the Eastern, Northern, North-Eastern, Southern and Western regions of India. In 1964, the Government of India created Regional Electricity Boards (REBs) to bring together the concerned SEBs and central and joint sector utilities, to coordinate system operations in their respective regional grids. The CEA also was entrusted with the development and operation of Regional Load Dispatch Centers (RLDCs) by an amendment to the 1910 and 1948 Acts requiring generating companies and licensees to follow their instructions. The transfer of the operational responsibilities of the RLDCs and CEA to POWERGRID (to be completed by December 31, 1995) was agreed in 1993. Thus far, three RLDCs have been taken over by POWERGRID in accordance with the planned timetable.

Autonomous regulation, as is found in other countries' power sectors and characterized by minimal political interference, is not present in India at this time. Some reforming states (notably Orissa) are making the first concrete steps towards establishing a new regulatory authority for the state through appropriate state-specific legislative amendment.

In the late 1980s, it became clear that more fundamental structural reform was needed if India's electricity sector was to meet the demand growth of 9 percent per annum. The Eighth Plan (1992-1997) initially envisioned additional generation capacity of some 48,000 MW (which was subsequently adjusted to 30,600 MW). In May 1994 it was estimated that India will need an additional 140,000 MW of electricity over the next 15 years, a level of demand which is second only to that of China.

In order to address the significant needs of the sector--not least the need to mobilize private capital to finance the sector's expansion and complement the rapidly dwindling public sector resources--in 1991 the Government of India announced a policy that would allow domestic and foreign private companies to invest in the power sector. (Box 3.2). Although privately-owned entities have been operating in the sector in the past, they have accounted for a small share of the sector's total output since the 1960s. Encouragement of private investment in power thus marked a significant break from past government policy. Most of the expressions of interest from the private sector since the announcement of the new policy have been for generation projects. Interest in distribution is more recent and clearly the result of other sectoral changes underway or under consideration in some states.

Box 3.2: Key Features of the Power Sector Reform Policy Introduced Starting 1991

- Private sector companies may construct, own and operate generating stations of any size and type (except for nuclear).
- Foreign equity is permitted in generation companies.
- A post-tax return on equity of 16 percent (at a plant load factor or "PLF" of 68.5 percent) is guaranteed based on a two part tariff formula which covers both fixed and variable costs.
- Additional return on equity is allowed where the PLF exceeds 68.5 percent.
- There is free repatriation of dividends and of interest on foreign equity and loans.
- A five year tax holiday is available for new generation and distribution companies.
- There is protection from exchange rate fluctuations.
- Depreciation rates on plant and machinery have been increased.
- Customs duty on imports of equipment has been reduced by 20 percent.
- A private power generator can sell power to anyone with the permission of the relevant state government.

The Invitation and the Negotiation of Entry

The Invitation. Under the 1991 amendment, private companies can build, own, and operate power stations pursuant to certain terms and conditions detailed in a *Notification*, dated March 13, 1992, from the Ministry of Power and Non-Conventional Energy Sources, Department of Power, as amended (Notification). Promoters of such projects are expected to negotiate power purchase agreements (PPAs), with the purchasing SEBs, that would reflect those terms and conditions.

The Notification itself has several shortcomings and ambiguities. Its implementation also has been rendered difficult by uncertainties in the approval process and a general lack of

coordination among the various central and state government agencies involved. Attempts have been made, from time to time, to clarify the policy and to correct its shortcomings, through the issue of amendments to the Notification and other guidelines.

The Notification deals only with the tariff and not with the host of other issues that need to be addressed in a PPA. These include the type of power station to be built, its performance characteristics, the extent to which it is to be subject to dispatch by the SEB, and the extent of the generating company's liability if the power station is not completed on time or fails to meet the specification in all respects. The Notification is also designed for a base load plant which is permitted to generate at full load whenever possible. Although the Notification acknowledges that a generating plant may from time to time be asked to reduce output by the Regional Electricity Board, it does not expressly recognize the right of an SEB to ask a contracted power station to do so. Nor does the Notification make any allowance for the additional fixed and variable costs that are incurred when a generating plant is slowed down. A PPA that requires an SEB to treat a generating plant as base load over a period of 20 to 30 years and does not allow the SEB to dispatch it in economic merit is likely to impose significant costs on the electricity system. The PPA should give the SEB the absolute right to require a generating company to back down its plant when necessary for the security and stability of the SEB's electrical system.

In order to adapt the Notification to deal with dispatchable plants, a number of changes would need to be made to its wording, though not necessarily to its underlying principles. For example, references to plant load factor would need to be changed to refer to availability, with some provisions being added to indicate how availability would be determined and to discourage generating companies from overstating their availability.

The Notification also has all the appearances of a cost-plus approach to tariff setting due to its frequent references to the costs actually incurred by the generating company. It has undoubtedly been interpreted in that way by many developers and SEBs. A cost-plus structure would have the highly undesirable consequence of encouraging the generating company to inflate its costs. It would place also on the SEB the responsibility for monitoring and approving the generating company's actual expenditures. In practice, the Central Government has interpreted the Notification as requiring the tariff payable under the PPAs to be calculated on the basis of the capital costs and the capital structure approved by CEA and the norms approved by the Notification. Adjustments are allowed to the extent necessary to reflect changes in cost elements such as interest and currency exchange rates that are treated as pass-through items in the Notification. The Notification should be revised to reflect this practice.

The Administration of Entry. In addition to the establishment of the Investment Promotion Cell (IPC), a High Powered Board (under the Chairmanship of the Minister of Power) was also established to facilitate project implementation by serving as "a single point forum for faster clearances of the proposals received within a definite time frame". In addition, common to all sectors, investments with substantial amounts of foreign participation are to be approved by the Foreign Investment Promotion Board (FIPB).

There has been considerable interest, since the new policy was announced, from both domestic and foreign parties to set up new ("greenfield") power stations, although to date only one project has reached financial closure. As of December 1994, there were approximately 108 expressions of interest for private power projects, amounting to about 35,000 MW of capacity (nearly half of the existing installed capacity). However, *actual progress in bringing the projects to fruition has been slow*. In addition, the process of negotiating the suite of contracts that make up the typical IPP is inherently complex. The close interdependencies between fuel supply, operation and maintenance, turnkey construction, and electricity offtake agreements and the financing arrangements inevitably, mean slow progress when one actor wishes to change certain parameters in the contractual matrix. Despite the inherent complexities in arranging and closing non- or limited recourse project financed IPPs, there are nonetheless additional reasons in India for the slow pace.

Apart from collecting clearances from various departments of the state government and CEA, a project generally need clearances from the Ministries of Power, Finance, Environment and Forests, Petroleum and Natural Gas or Coal, and possibly Railways, Shipping and Surface Transport. Other relevant entities include the Central Water Commission, the Directorate General of Civil Aviation, and the Reserve Bank of India for all the consents required under the Foreign Exchange Regulation Act, 1973 (FERA). The role that had originally been envisaged for IPC, that of a one-stop window for project developers, did not actually materialize. The reason was the split of responsibilities between the central and state governments, but also because of its inadequate institutional set-up. The number of clearances and the number of relevant bodies involved has limited the ability of the IPC to ensure that all clearances are granted expeditiously. In addition, although the states, through their SEBs and the state governments, have a variety of responsibilities for the implementation of the projects (such as assistance with the permit and clearance process, provision of construction power and water, grid connection), they have not carried out these responsibilities expeditiously in all circumstances. The investment, contracting, and approval processes could be facilitated by improvements at the state level as well.

There also has been uncertainty in the process, partly because it was (but is no longer) new, and also because of a failure to provide reasonably precise guidelines for promoters to follow for project approval. In some instances, contracts seeking Government of India's counter-guarantees have been reviewed by both CEA and the Ministry of Finance, with different results. In determining whether a PPA meets the requirements of the Notification, CEA uses a tariff model to identify the maximum price permitted by the Notification at different plant load factors and compares it to the corresponding price offered under the PPA. For projects seeking a Government of India counter-guarantee, the PPAs also are subject to review by the Ministry of Finance. Justifiably, the Ministry of Finance considers not only whether the PPA complies with the Notification, but also reviews the acceptability of the PPA documentation itself against its own guidelines. The Ministry of Finance guidelines were developed essentially to address the shortcomings of the Notification and ideally should have been issued in the early stage of the new policy initiative.

A number of PPAs reviewed by CEA and Ministry of Finance have had to be extensively renegotiated to conform to both the Ministry of Finance guidelines and the Notification before being approved. Although it has proven frustrating to the developers and the SEBs concerned, the modifications achieved in the process have brought the PPAs to the standards required of major contractual documents designed to last for 20 or 30 years. The modifications also have resulted in substantial savings to the SEBs through a more balanced allocation of risks. Essential to the latter is still the need to develop commercially enforceable contracts for the supply of Indian fuel, particularly coal, but also gas. The absence of such fuel contracts simply results in a reallocation of risks, since promoters are reluctant to take the fuel risk in such circumstances.

Commercially-enforceable coal supply contracts will be of critical importance to private power development. Such contracts require that coal producers and transporters provide power plants with adequate supplies of consistent quality fuel according to an agreed schedule and at a predictable price. The effective use of commercially enforceable contracts in the integrated coal energy chain (coal production, preparation, transportation and conversion) can achieve important increases in power sector efficiency. This integrated approach enables the power plant designer to minimize costs by integrating the selection of fuel source, fuel preparation, transportation, plant design and citing. It also provides the investor with assurances regarding fuel supply.

An integrated approach, including greater using of coal preparation facilities, can also improve the efficiency of the existing coal energy chain. For example, using increased volumes of prepared coal could improve the thermal efficiencies of many existing power plants. This would reduce generating costs per unit of electricity and increase output at existing power plants, thereby reducing requirements for new plants. Greater use of coal preparation would also reduce the volume of material that would be shipped on the railroads and thus help to reduce pressure on transportation capacity.

Coal India Limited is in the process of implementing a reform program that will enhance its ability to respond to commercial forces. But improvements in efficiency can also be achieved by allowing new privately-owned and privately-managed coal mine developments. Recognizing the potential benefits of competition and the need to find new sources of capital to finance a rapid growing coal supply, the Government of India is opening the coal sector to private investors. Thus, as well as private power generation, there can also be private supply of fuel to the new power plants. This will require a review and revision of the rules and regulations affecting the coal industry which will be critical to the decisions of private companies to enter into coal mining investments.

While a number of companies have expressed interested in entering the sector, they have so far been unable to secure access to the necessary coal reserves. The key barrier appears to be that the necessary mechanism has not been established for the provision and allocation of unexploited mining blocks to potential private sector investors. Mechanisms should be developed to return some of the coal-bearing lands presently held but not exploited by Coal India to the

government. Those areas can then be made available to interested private sector investors for exploration and development through the stewardship of an independent agency with well-defined licensing and operating procedures and requirements.

Different, as well as additional, issues arise with major hydroelectric projects and power plant refurbishment. While the former are addressed in the Notification, the latter are not. There is a growing interest in power plant refurbishment in which the private party makes the investment and sells power to the SEB pursuant to a PPA. For example, a competitive solicitation recently has begun in Uttar Pradesh for the Harduaganj coal-based power station. Such refurbishment should be vigorously encouraged. Most refurbishment is likely to present greater risks and contingencies to the private parties which will be reflected in the terms and conditions of the PPAs. Also, refurbishment raise the very difficult issues associated with the retention (or not) of existing SEB employees. As discussed earlier, the Notification contains certain norms for new thermal projects. Refurbishments, however, will vary significantly from project to project, depending upon the age and condition of the equipment, and so on. Thus, these are not easily amenable to a “normative” approach. Nonetheless, because these projects will generally exceed the Rs 1 billion standard that triggers CEA review, clarity is needed regarding the mode and scope of the center's review of plant refurbishments and associated PPAs.

The negotiation and approval process has been slowed down considerably by a general lack of understanding by most central and state authorities of the complexity of the contractual arrangements and a clear reluctance to seek and engage appropriate professional advice. As a result, SEBs and state governments often find themselves unwilling or unable to take control of the negotiation process and anxious that developers might drop their projects if the states pressed too hard during negotiations. Some developers could exploit this situation to their advantage and negotiate PPAs that are generally one-sided, ambiguous and insufficiently comprehensive. The Central Government ought to take an unequivocal stance on the need for the states to take professional advice for PPA negotiation.

Several problems encountered so far by the implementation of the new policy would have been greatly diminished if, from the very beginning, the SEBs had not only taken professional advice, but also sought investment proposals through a well-structured and fair system of competitive bidding. To date, negotiation and contracting have been conducted through Memoranda of Understanding (MOUs) in which there has been no competition among private sector firms or consortia. The lack of competition has made it difficult for the SEBs and state governments to justify the tariffs without also being able to claim that they were the best projects available (as evidenced by a fair competition). Recently, this has begun to change and some SEBs are in varying stages of competitive tendering processes. Examples include Andhra Pradesh, Rajasthan, Uttar Pradesh and Orissa. Competitive bidding more recently has been reinforced by the Ministry of Power's decision to make it official policy. Adequate safeguards need to be put in place now to ensure that the policy is appropriately implemented at the state level.

The Central Government should clarify the nature and scope of its review of competitively bid projects. One could envisage that, rather than involving a detailed scrutiny of the selected bid, such review could be limited to: (a) checking the fairness of the competition by which the PPA was awarded; and (b) evaluating the PPA against the guidelines of the Ministry of Finance to determine whether there is need for a project. The review should also ascertain whether there is a reasonable allocation of risk to the private developer to justify awarding the project to the private sector. At least one project, a lignite station and captive mine in Rajasthan (Barsingsar Project), has recently been put up for competitive bid in the real sense, after consultation with CEA regarding its review process. However, some important judgments had to be made in the preparation of the Request for Proposals (RFP) for the Barsingsar Project because CEA's review process has yet to be clearly articulated.

Conditions of Operation

Power Generation. The Notification currently is interpreted by developers and some SEBs as setting the appropriate tariff for private power projects. *The very existence of the Notification conditions developers to expect nothing less than the maximum permitted tariff.* For some power projects, *the norms contained in the Notification* (such as the normative heat rate of a coal plant) *are excessively generous* and allow independent power producers (IPPs) to make large profits in addition to the return on equity linked to the Plant Load Factor (PLF). The Notification should make clear that it sets a maximum tariff, and SEBs should be expected to negotiate a tariff which is substantially lower than the maximum.

The Notification places too much emphasis on restricting the profits to be earned by developers and too little on the tariffs to be paid by the SEB. The Notification provides that the tariff offered by the developer of a new power station shall be calculated so as to allow the developer to recover the fixed and variable costs of building and operating the power station. The operator should not make more than the prescribed rate of return on equity, assuming that the PLFs, the station heat rate, operation and maintenance expenses and insurance costs correspond to the normative levels set out in the Notification.

The most recent amendment to the Notification permits certain deviations from the norms; that is, provided the "overall per unit tariffs of electricity calculated on the basis of the norms in deviation does not exceed the per unit tariff calculated on the basis of the norm specified in this Notification." However, the SEBs are not permitted to deviate from the norms concerning operation and plant load factor. Consequently, tariffs still generally need to be structured according to the basic principles set out in the Notification if only to allow the CEA to compare the tariff under the PPA with the normative tariff.

The presence of financially weak SEBs in the operating environment is a major issue for private investors. The severe problems faced by the power sector at the state level are attributable to the poor operational performance of the SEBs, and more importantly, the political interference by state governments. While in the existing law the SEBs have considerable

Box 3.3: Orissa - An Example of New Public and Private Sector Roles in Power

The Government of Orissa's (GOO) ultimate objective is to limit its role to policy-making and regulation only. The program, which was endorsed by the Council of Ministers in April 1994, involves: (a) unbundling and separating the functions of generation, transmission and distribution into separate companies incorporated under the Indian Companies Act; (b) private sector participation in new hydro generation and transmission along with the privatization of thermal generation and distribution; (c) competitive bidding for new generation; (d) developing a new regulatory law and institution for the sector in Orissa; and (e) related tariff reforms for bulk power, transmission and retail sales.

The *new market structure* envisages the Orissa Hydro Power Corporation (OHPC) taking over the hydro generation facilities of GOO and the Orissa State Electricity Board (OSEB). Initially, the GOO intends OHPC to be state-owned, but in accordance with the GOO policy for the sector, private sector participation will be invited. Conversely, thermal generation is to be developed by the private sector directly. The Grid Corporation of Orissa (GRIDCO) will be responsible for transmission and system operations, and, initially, distribution. However, GRIDCO will privatize its distribution divisions in four stages by the year 2000 into four separate distribution companies, established under the Indian Companies Act. The "single buyer" model will be followed at first. GRIDCO will purchase power from OHPC and other generators for its own distribution and also for any new private distribution companies. In the interim, direct purchasing by private distributors from generators will not be possible under this construct.

The reform legislation creates a new entity, the Orissa Electricity Regulatory Commission (the Regulator), which will be responsible for regulation of the power sector in Orissa. It will ensure the operational, managerial and financial autonomy of the new utilities and companies in Orissa's power sector. The Regulator will regulate licensees (GRIDCO and the distributors), in the performance of their statutory and license obligations. This includes, *inter alia*: (a) the setting of retail tariffs for distribution companies and the bulk supply and transmission tariffs for GRIDCO; (b) setting and monitoring of performance standards in electricity supply; (c) setting and monitoring standards for promoting efficient use of electricity by consumers to be achieved by licensees; and (d) settling certain disputes between licensees. The reform legislation also permits the Regulator to vary the principles to be used in setting the tariffs from those contained in Schedule 6 of the 1948 Act. Such variation would seek to introduce incentives for better performance by limiting the principle of automatically passing through costs.

autonomy, in practice state government approval is required (often at the highest level) for most major decisions which include capital investments, tariffs, borrowing, salary and personnel policies. At a minimum, the reform process should give the SEBs genuine autonomy, both financially and operationally, which is already contemplated under the existing law. But to secure that autonomy, corporatization, followed by private sector participation, will be necessary. This should be coupled with regulatory reform. Immediate steps that need to be taken include: (a) financial restructuring to establish reasonable debt-equity structures and satisfactory financial objectives for the SEBs, including an increase in internal cash generation to make a reasonable contribution to future investment; (b) tariff adjustments to meet the financial objectives, including significant increases in agricultural tariffs; (c) improvements in billing, collection and payments to central utilities; (d) adjustments in investment programs to increase efficiency; and (e) contracting

with the private sector or NTPC for the rehabilitation and operation of poorly performing stations and other services. Orissa is making commendable efforts along these lines (Box 3.3).

To mitigate the risks associated with financially weak SEBs, the Central Government formulated a guarantee policy. It requires the state government to guarantee SEB payments. The Central Government then provides a counter-guarantee. This counter-guarantee policy is not sustainable as it imposes a significant contingent liability on the national balance sheet while providing limited assurance to the Central Government that, in return, states are taking appropriate steps to improve the creditworthiness of power entities. Thus, the Central Government has already announced that counter-guarantees would no longer be provided. A number of alternatives have been put forward. The alternatives consist of various forms of escrow arrangements which would provide for payments for power sales to be deposited in dedicated escrow accounts for the benefit of the private promoter. Direct sales to creditworthy industrial consumers is another scheme being considered. Such arrangements, which only take a short-term view of the problem, need to be carefully considered as they detract from the fundamental issue of SEB creditworthiness. They allow the private promoter to select the SEB's most creditworthy customers or give him "first call" on all SEB revenues. At best, such schemes would be feasible only at the margin and therefore could not be applied on any significant scale. Follow-on projects would become difficult to implement as subsequent lenders would have "subordinated" rights on SEB revenues or would have to rely for payment on an SEB with a less creditworthy customer base. Moreover, such arrangements tend to be technically difficult to administer.

The World Bank, in response to a request by the Government of India, is developing a program for the use of World Bank guarantees in support of private investments in the power sector. Thus far, the proposed scheme is the only alternative to counter-guarantees that takes a long-term view of the problem. It clearly links the provision of guarantees to tangible measures taken by the states to enhance the creditworthiness of their SEBs and state governments, whenever a minimum level has already been achieved (determined by a detailed credit assessment of the institutions). Other tangible measures include sectoral restructuring when this is considered the only avenue to enhance the financial standing of the concerned state institutions. Given the eligibility criteria that are being developed, states could be declared eligible for Bank guarantees under the following scenarios: (a) both the SEB and the state government are considered creditworthy; (b) because of the poor financial standing of the SEB and its government, the state has started to implement power sector reforms in a meaningful way, thus laying the ground for the establishment of creditworthy utilities in the state; and (c) in some circumstances, the project company which a Bank guarantee could support is contracting with a creditworthy distribution company in a state that has a record of sound sectoral and regulatory policies. In addition, the Bank would require that, before entering into negotiations with the project developer, the party(ies) representing the state government's interests engage a team of competent legal, financial and technical advisors to assist in the preparation and negotiation of the PPA.

Distribution. Although several distribution companies in India have been operating prior to 1991, the amendments to the 1910 and 1948 Acts were also designed to improve the incentives and encourage additional private sector participation in distribution. Since distribution is carried on primarily by the SEBs, reform in distribution necessarily requires state government support for the reform agenda. Moreover, the existing legal and constitutional position of the electricity sector functions as a limitation to interventions by the Government of India at the state level. Therefore, many of the key reforms require and point to the importance of reform efforts being targeted at the state level.

The amendment contemplates arrangements, not including outright purchases or long-term leases, in which the recovery of, and return on, investments are at issue. Other types of arrangements, such as short-term management contracts of either one or more distribution functions (such as meter reading and billing) or of the entire operation, are also possible and do not require licenses. These are straight fee-for-services arrangements in which the SEB retains both ownership and the responsibility for major investments. The smaller investments required for management contracting--computers, trucks and so on--may be recovered in the contract fee. Such arrangements are being tried out in Rajasthan for a number of distribution circles. They are likely, nevertheless, to be insufficient to address the fundamental weakness of the SEBs in the area of distribution.

There are a number of important issues that will have to be addressed in order for private companies to play a more significant role, and to undertake sizable investments (including lines, meters and substation equipment) in the Indian distribution business. Attracting the private sector into distribution--that is, beyond the existing private licensees--is more complex than it is for generation. The issues include:

- the appropriate designation of distribution territories, so as to satisfy technical, financial, and social criteria;
- the negotiation of meaningful performance standards;
- whether the performance standards can be met in all instances without taking control over generation;
- the means by which the retail tariffs will be set;
- how present employees are to be dealt with; and
- the creation of an independent regulator.

Distribution territories. Specific areas or territories will have to be designated for the private sector. While it is conceivable that a designated territory might in some instances be the entire area served by the SEB, it is much more likely to be a portion, at least at first. The

designation may happen as the result of a major restructuring effort, or the SEB may stay intact but for an area set aside for the private sector. An example of the latter is the NOIDA area, which Uttar Pradesh carved out a few years ago, although private operators do not consider this limited model as particularly successful. NOIDA is a relatively small (45 MW or so) area that is highly industrial. Thus, it is not a 'typical' area with a representative mix of customers. The NOIDA agreement--between Uttar Pradesh and CESC--has not worked satisfactorily and needs to be reconfigured if CESC is to continue to be involved. One of the main problems is that consumers are not willing to pay a higher tariff where their neighbors who are supplied by the SEB are getting power at a lower price. Uttar Pradesh currently is evaluating various restructuring options, including a more extensive privatization effort in distribution. The designated area must be sensible as a technical matter but, ideally, should also contain a mix of customers. Further, it should be large enough to permit technically feasible and measurable improvements in service and adequate tariffs. The private sector should not be allowed to select only the best customers as that would only make it more difficult to encourage involvement in the remaining distribution area.

Performance standards. The license or contract should contain performance expenses and investment expenditures on a cost-plus basis. The overall rate of return to the private entity should be partially dependent upon meeting certain objective criteria. As a strategic matter, it may be sensible to increase the performance requirements for distribution areas leased or sold to the private sector gradually, as the perceived risks associated with those investments diminish. This needs to be explored.

Vertical integration. It is important for long-term success that electricity customers experience improvements in service. Some potential licensees have questioned whether there can be long-term success if significant generation problems continue. They are concerned also about not obtaining fair power allocation where they do not own or directly contract with the power producers. There is concern among potential investors that their efforts would not be well received if customers continued to experience a substantial number (and length) of outages even if, as a technical matter, they could be attributed to generation (or transmission) problems. In other words, they see a benefit in some degree of vertical integration, on the assumption that it will allow for a more reliable power supply. Issues such as this are most important and need to be sorted out on a case-by-case basis.

Labor retrenchment. There are substantial problems associated with "excess" labor in SEB distribution (and in the SEBs generally). As noted earlier, this problem also arises in regard to private sector investments in power plant refurbishments. There are no simple answers to this problem. While it will be mitigated to some extent by attrition, it is evident that attrition alone will not suffice if private sector participation is even modestly robust in the near term. With expansion of the system due to larger investments in the sector, the employment opportunities are likely to grow. However, a large number of unskilled employees may not be able to take advantage of such opportunities as they may not be retrainable and redeployable.

Regulation. Establishing an independent regulator should be among the highest priorities for distribution. By “independent” regulation, is meant regulation that is as free as possible from government interference in its staffing, processes and decisions, and where appeals from adverse decisions are to the courts rather than the government. It also means, of course, that the regulator is granted, by legislation, the authority to render those decisions that are now the government’s to make. Independent regulation would provide a measure of comfort to both the private sector investors and the customers. The requirements for independent regulation vary with the structure of the sector and the terms and conditions of the licenses given to private sector companies. The scope of the regulatory mandate--what is reviewed, subject to approval, and so on--will depend upon a number of factors, including the license requirements themselves. The absence of independent regulation may therefore affect the extent to which, for example, significant performance standards can be built into the licenses.

The 1991 amendment to the 1910 and 1948 Acts, and the promulgation of the Notification by the Ministry of Power, preceded the recent restructuring programs in several states. At the time, the Government of India contemplated private sector involvement in those distribution areas--such as NOIDA--which were culled out of an SEB that otherwise would remain a vertically integrated whole (but for new private sector IPPs); this is no longer a tenable assumption for all states. Moreover, the restructuring efforts at the state level will affect the roles of both the state and Central Governments and will create additional pressures for changes in regulation and law. The privatization of distribution areas in India will thus take place in a different, and somewhat unknown, environment from that which prevails today

In summary, the foregoing discussion underlines the dynamic and changing nature of the environment within which private sector involvement in India’s power sector is contemplated. The sector clearly is in a state of transition and many of the changes under consideration are substantial. Solutions to the various issues raised above, in particular the establishment of a regulatory regime that will govern power sector’s operations, must be designed to allow for and facilitate appropriate modifications to the sector. At the same time, regulation will have to ensure that high quality electricity services are provided to consumers at fair and equitable prices, and that investors are given the opportunity to earn reasonable rates of return on their investments.

TRANSPORT: SELECTED ASPECTS

Introduction

The administrative and regulatory issues associated with providing transport in India (as in most large countries) are complicated, most obviously because of the heterogeneous nature of transport services--freight and passenger traffic on roads, railways and ocean. Each of these modes of transport has developed at different historical rates with ocean shipping, ports and railways ranking as the oldest established modes. These were followed by bus and truck operations on the highways and, most recently, commercial aviation. The laws and regulations for the older modes are generally rooted in the nineteenth century while those for road transport and

aviation generally are based in the twentieth century. At the Union level, the administration of these modes of transportation reside with three ministries. One ministry presides over the railways, and another ministry (the Ministry of Surface Transport (MOST)) presides over national highways, ports and ocean shipping. The Ministry of Civil Aviation presides over airports and air transport. But whereas the Constitution of India gives the Central Government authority over aviation, national highways, railways, ocean shipping and the principal ocean ports, state governments are given authority over state highways and district roads, urban and inter-city bus operations, and the smaller ocean ports. Trucking falls under the controls of both the Central and state authorities.

Despite the complexity of introducing and managing change in such an environment, a great deal of transport sector reform has been accomplished already in India with private services in trucking, bus and shipping, and steps toward the privatization of rail container transport. In fact, India already has set up a legal and administrative framework in which private domestic entrepreneurs are willing to finance, maintain and operate extremely mobile pieces of capital equipment--trucks, buses, flatcars and ships--in a competitive environment.

The discussion which follows below highlights *two* broad areas of administrative and regulatory challenge in the transport sector. The first is the development of effective regulations to promote competition and efficiency. Trucking and intermodal freight transport will be used to illustrate this issue. The second area is investment in *fixed* transport infrastructure where private investment currently is minimal, and which rapidly is generating physical bottlenecks to more efficient use of the generally adequate privately financed and operated equipment. The discussion here will center in roads, ports, highways and railway infrastructure.

Improving Competition and Efficiency

Trucking. The trucking fleet on Indian roads is almost entirely privately-owned. *The key issue facing the industry is administrative barriers to efficiency.* In a recent survey, truckers identified, as their most serious concern, delays caused by police check posts, sales tax barriers and octroi collections before entering cities. Generally, inadequate road widths and poor riding quality of roads were the second concern. Currently, trucking accounts for about 60 percent of all inter-city ton-kilometers. This share (based on the experience of other countries) could reach as high as 80 percent and then stabilize, depending on the ability of rail to offer competitive services. Few countries at India's stage of development have advanced trucking reforms so far, and many more developed countries have yet to do so.

Some states began levying tolls at their borders on out of state truckers for use of state roads but this was struck down recently by the Supreme Court. The Court ruled that, although toll roads are legal, the charges in question were not specific to a particular route, and discriminated between in-state and out-of-state truckers. Other states have imposed restrictions on the movement of food grains out of state, and all states tax trucking as a major source of general revenues. With an economy dominated by roads and road transport, it is increasingly

important that truckers, at least on the National Highways, have much the same rights as railways to travel interstate with a minimum of delays.

Another issue facing the trucking industry is that it has been effectively precluded from carrying container cargo, especially import cargo, over the road. This is because the Indian Customs Service had interpreted its rules and regulations in a manner that precluded trucks from competing with the railroad's Container Corporation (CONCOR). Customs regulations provided that transshipment of imported goods by motor vehicles should be allowed only after taking into consideration available alternate (public) means of transport; that is, rail, coastal vessel, or air craft. Use of this rule, and very high and administratively cumbersome bonding requirements, precluded trucks from competing. In December 1994, Indian Customs relaxed these constraints. It remains to be seen how customs officers actually interpret and implement the new regulation.

These were not serious problems until recently because India's foreign trade was not large and the benefits of containerization were not being pursued. The first International Standards Organization (ISO) containers arrived in Indian ports in the mid-1970s but the full benefits of door-to-door delivery were not obtained because the containers were not allowed inland. They had to be unloaded or loaded in the ports. Only in 1984 was the first inland container depot (ICD) established in Bangalore by Indian Railways. Today, about 35 percent of import/export general cargo for India moves in containers versus about 65-70 percent for other developing countries. Of the cargo that arrives/departs in containers, only 20 percent moves inland in containers even though 60-65 percent of the containerized cargo has origins/destinations inland. The potential for full blown, door-to-door, intermodal service with all its benefits is enormous.

CONCOR will not be able to handle it all efficiently. This is because Indian Railways does not have the track capacity necessary for high speed container trains and because, as a near monopoly, CONCOR need not do the job well. The effort should be supplemented with effective trucking competition. To do this, the Indian Customs Service needs to assure a level playing field for qualified truckers. This does not require a change of the law or even the regulations. It requires a change in attitudes and interpretation of the regulations which is now possible following the changes in December 1994.

Multimodal Freight Transport. The Multimodal Transportation of Goods Act (1993) constitutes the legal framework for the development and promotion of multimodal transport services (MTOs)--door-to-door transport services for domestic and foreign containerized trades in India. The Directorate General of Shipping, which is authorized to grant MTO status, so far has licensed 74 MTOs. Eight of these are foreign companies, of which three are shipping lines. However, the intended effect of creating a network of MTOs to facilitate freight transport marketing and raising the efficiency of container movement is materializing only slowly.

A principal shortcoming is deficiencies in the Multimodal Transport Document Rules which were issued in March 1994. The prescriptions embedded in the Rules have not been endorsed by the International Chamber of Commerce (ICC). ICC rules for the multimodal

transport documentation are widely accepted for international trade-related services transactions. The principal shortcoming of the Indian multimodal transportation legislation relates to the liability regime which specifies responsibilities for cargo damage or loss. ICC's review of the Rules pointed out that:

- sections 13, 14, 15 and 16 impose absolute liability on the carrier beyond the scope of the Hague Visby Rules;
- the definition of "carrier" was vague, and, in keeping with UNCTAD/ICC rules, needed to be amended to mean the persons who actually perform or undertake to perform the carriage or part thereof;
- the definition of goods was so broad that the liability for certain items would be imposed on the multimodal transport operator while sparing the shipowner who did the substantial part of the voyage; and
- six consecutive working days to make a written claim for losses or damage (that were not apparent at the time of delivery) was too long; three days was the desirable maximum.

Other concerns included:

- the loose definition of "multimodal transportation" which would make the Indian legislation applicable to different modes of transportation outside of Indian, and transport that had not originated in India;
- the absence of a procedure to appeal the refusal by the authorities to register applicants wishing to carry on or commence the business of multimodal transportation;
- the need to make licenses valid for a longer period--five years as opposed to one year--to reduce the clerical burden of frequent renewal;
- the absence of a timeframe for disposing of applications for registration and renewal, as well as appeals; and
- excessive details about the goods transported, especially in containerized cargo, that the multimodal operator is required to provide in the transport documents.

Attempts are now being made to solve these problems with appropriate revisions. After a good initial effort, it is important that these "loose ends" be tied as soon as possible.

Regulations derived from the Major Ports Trust Act (1963) and the Customs Act (1962) have generated a major problem in clearing containers, and moving them overland to and from the ports. Customs practices required a physical check of 10 percent of each consignment and 10

percent of the content of each box in containers. Only recently at the TKD facility in Delhi has this been changed to a random sample of containers (10-15 percent), as opposed to 10-15 percent of the contents of each container. In addition, because of inadequate inland transport and onerous documentary procedures, most import and export containers are still packed and unpacked in

Box 3.4: Existing Legislation Can Accommodate Private Sector Provision of Port Services

Major Ports Trusts Act (1963)

The Act empowers the Port Trust to provide the full range of facilities and services, including landing, shipping, transshipping of passengers and goods, piloting, hauling, mooring, removing, hooking or measuring vessels and other services in respect vessels (Section 42(1)).

It enables the Board of the Port Trust to authorize any person to perform any services mentioned on terms and conditions agreed upon. But sub-section (4) states that, in such an event, the authorized person shall not charge or recover for such services amounts in excess of the rates stipulated by the Board.

The Act also enables private parties to construct and provide—within the limits of the Port or Port approaches—the full range of port facilities (with their own funds).

It prevents the Board from leasing, farming, selling or alienating its power to levy rates under the Act, without the permission of the Government. Conversely, such leasing, farming, selling or alienating can be done with Governmental sanction.

The Indian Ports Act (1908)

The Act applies to all major and minor ports. The Act is regulatory in nature, covering issues such as the moving of vessels, pilotage, fire extinguishing apparatus for large vessels. It also gives power to the Government against acts of defaults of port vessels or pilots.

Dock Workers (Regulation of Employment) Act (1948)

The Act permits the creation of Boards. Boards are mandated under the Act to register dock workers (stevedore labor) and employers to ensure more regular employment. Such schemes detail the terms of employment and specify items such as recruitment and regulatory conditions of service. Registered employers make payments directly to the Board. In turn, the Board pays workers directly.

The application of these schemes, however, can be limited to particular groups of dock workers and employers. And private operators can engage their own laborers subject to other labor laws such as the Industrial Disputes Act (1947).

ports. Container movements by rail between Delhi and Bombay are now handled by CONCOR within 72 hours (against 14 days previously). In contrast, it takes approximately 30 hours on the average to then move the containers past the gate onto the port-controlled rail line within the state-of-the-art new port at Nhava Sheva (JNPT).

Box 3.5: Some Private Investment in Port Infrastructure is Occurring Under Existing Legislation

India's new policy of allowing the private sector into the petroleum product import business has led to a boom in the construction of new specialized port and terminal facilities for petroleum products. About 160 private companies have entered the field. New cryogenic terminals and petroleum handling facilities in eight ports now are being entirely financed with private capital. Here were cases where a serious infrastructure bottleneck existed that could not be relieved by the current port authorities. The pressure exerted by deregulation of the petroleum products industry made the initiatives possible. Also, these specialized facilities in no way impinge on the movement of the traditional dry bulk, general, and container cargoes in India's public ports.

There are other examples of marginal moves towards more liberal policies under existing legislation. Tata Iron and Steel has taken on lease several berths at Haldia port. Private stevedores have been authorized to load and unload cargo at Tuticorin port. Ship repair and dry dock facilities have been leased to private firms, and a large foreign carrier has negotiated and paid for a priority berthing right at the Bombay container terminal.

This is a start but the potential for much more exists. The state-of-the-art container facility at JNPT in New Bombay could easily be leased to a private consortium for rehabilitation, operation and maintenance. This would more than double the container throughput overnight. This initiative, unlike the railways BOLT proposals and the BOT proposals of MOST for roads, has less risk associated. The revenue stream is reasonably predictable, the up-front investment are not large and the equipment investments are both mobile and useable elsewhere. The legal authority exists as does the draft contract and several qualified groups are willing to bid. However, the proposal has been awaiting Cabinet consideration for about six months and no movement has taken place.

Progress was made recently to improve the rail transport system and to link the ports to a network of container depots. Customs also are more flexible, particularly with entities such as nationalized industries. Their export containers may be sealed at the factory and shipped directly; their import containers may enjoy green channel facilities. However, these arrangements usually are not extended to the private sector. The old port and customs regulations evidently need to be further adjusted to enable seamless intermodal transport of containers to and from quayside.

Facilitating Private Sector Investment in Fixed Transport Assets

Ocean Ports. The most difficult question for ports is the potential for private sector investment in civil works such as breakwaters, entrance channels, wharf facilities, and warehousing. A properly organized commercial port authority would be a financially self-sufficient real estate operation. It would be able to lease its land for privately financed and operated special purpose dry and liquid bulk loading, unloading and storage operations and container facilities. It would charge fees for jointly used facilities such as breakwater, channel, internal roads and wharves. It would be capable of raising capital to build jointly used facilities on the domestic or international market on the basis of its financial strength. To do this would require a Port Reorganization Act, as suggested by a recent study by the Asian Development Bank, that

would be tailored specifically to these ends and the abolition of the old enabling legislation. The Government is not pursuing such comprehensive new legislation at this time for ocean ports.

However, most legal experts agree, and case studies suggest, that several activities are possible without changing the existing major legislation--the Major Ports Trusts Act (1963), India Ports Act (1908), the Dock (Regulation of Employment) Workers Act (1948) (Boxes 3.4 and 3.5), and the Customs Act (1962).

Highways. *The major hurdle to relieving the absorptive capacity constraint in road building in India is in making the new National Highway Authority (NHA) fully operational.* The law bringing the NHA into existence was passed in 1988. NHA began operating in 1995 but several key staffing needs still have to be met. Currently, a study is being completed which will specify precisely the structure and role of NHA's new organization and how it will operate. NHA will preside over the existing 34,000 km National Highway System which is generally the most densely utilized. It will gradually take back from the state PWDs the responsibility for National Highway construction and maintenance. All new externally funded National Highway projects will be undertaken by the NHA with help from the private engineering and construction sector as discussed in Chapter 2. NHA plans to use the BOT mechanism to attract private (foreign and domestic) consortiums into designing, financing, building, operating and maintaining toll roads and bridges for a pre-specified period (say 30 years). After this, the facilities will be transferred from private ownership to the relevant public authority.

Despite the greater complexity of BOT road projects, the central MOST has attempted to develop a legal and administrative environment that will allow them to take place on national highways. Currently, MOST is drafting amendments to the National Highways Act of 1956 which will remove the most obvious obstacles that have kept even small BOT operations from moving ahead. The principal items are: (a) the right to let such concessions to the private sector; and (b) the right of the concession to collect and keep the tolls. Some of the lessons being learned from private electric power are directly transferable to the road sub-sector. Among them is the need to: (a) avoid politicizing rate setting; (b) exercise care in determining the allowable rates of return; (c) clarify the legal status of land on which the facility is built; and (d) provide arrangements for dispute resolution outside the courts. The road sub-sector also has characteristics that will require unique administrative and legal arrangements. Often toll roads: (a) compete with routes which are free of tolls; (b) require fencing and police power to limit access; (c) involve the purchasing of land from hundreds or thousands of land owners; (d) enhance the value of land, especially at intersection; and (e) generate substantial non-toll revenue from road related service facilities. The first characteristic of competition from alternative free routes generates uncertainty for private investors. This is because traffic and revenue projections depend critically on the level of tolls charged and the quality of competing facilities.

Empirically based diversion curves or actual survey through interviews can be used to estimate the traffic split between the new toll and the existing facility. The survey should consider both options, namely, 'with' free facility being improved and 'without' such an improvement in

the future. If the results indicate that the traffic would divert despite improvements in the free facility, then there is no question of any guarantee. Consistent with international experience, this has led many proponents of the concept to back only those facilities that have no effective competition. Examples include some bridges and urban bypasses where urbanization precludes the land acquisition necessary to expand competing free routes. Other than such natural monopolies, however, there are no legal or administrative measures that can reduce this uncertainty and the draft legislation being prepared by MOST does not attempt to do so.

Fencing and police power for limited access is essential. Toll authorities will want the right to exclude overweight, oversize, or very slow vehicles. In India, traffic is heterogeneous and accustomed to the right to access most public roads. The population is dense and villages are numerous. Unauthorized access to the toll roads by vehicles and pedestrians will take place inevitably. Encroachments in the rights-of-way also are a near certainty. If the private toll facility is not policed effectively, the service levels will degenerate. The legal and administrative questions of private or public police authority then loom large. The draft MOST legislation recognizes this problem and proposes a change in the NHA Act that will specify offenses and allow the Central Government to give some police power to the private concession, including traffic control. Matters concerning law and order, terrorist acts and investigation of crimes will be exempted.

Typically, non-toll formal revenues from restaurants and service stations within the right-of-way vary between 6-15 percent of total concession revenues. Frequently, however, the profits associated with land outside the right-of-way is the most attractive feature of the investment. Those land owners in the vicinity of major toll road intersections typically experience large windfall increases in land values the moment the locations of intersections are made public. Arrangements to obtain these profits can be either formal or informal. If formal, the commercial land may be purchased at the time the right-of-way is purchased by the public authorities and the land leased to the concession owner for development. Net revenues from the development of this land may then become a part of the formal revenue stream of the private investors. If the informal route is taken, the concession operators may, on their own account, make early private land purchases which may in turn influence the precise location of intersections.

The land development approach to toll road projects, formal or informal, has its own risks in India. It is unclear whether the public right to eminent domain acquisition of private land can be extended to those parcels of land that are not strictly needed for road right-of-way. It is not clear also whether the courts would approve of land acquired this way outside the right-of-way for purely commercial development, even though the profits from such a development would (transparently) help finance the cost of providing the road. Zoning and land use controls of state and local governments would come into play for such parcels. Indian Railways has been trying for some time to develop idle land for commercial use and to develop air rights over urban station sites. This has been blocked by state and local governments exercising their land use control powers.

To make the informal approach work, it is usually necessary to suppress the transparency of the exercise and operate through local political rather than public bureaucratic channels. In India, the press is free and elections take place regularly. Power shifts over time and informal arrangements that are enormously profitable can be easily upset. Toll road projects with financial viability based on informal real estate operations are unlikely to flourish in such an administrative, legal and political environment. It would be better, therefore, to utilize transparent operations based on user charges and explicit road-related real estate development. This approach should recognize that few such developments will be entirely self financing from tolls. This is the approach being taken in the MOST draft legislation.

The final special characteristic of toll roads in India is that the gestation period will be unusually long. Feasibility studies and preliminary engineering are costly and time consuming. The draft legal document for a potential project, prepared by consultants in 1992, was 60 single-spaced pages of text. Negotiating such an agreement takes much skill and time. The land acquisition process and relocation of utilities for a major facility can take several years especially if there are large populations (as is frequently the case in India) to be resettled. The land itself can be as much as five percent of project cost and the funds must be obtained from the government budget. Unlike a private power project which can come on stream four years after the decision to go forward, it would probably be closer to ten years for a major toll road facility.

As the appropriate framework evolves (at the national and state level) for such private sector participation in the sector, there is evidence that the authorities are forging ahead on several other fronts to encourage private investment (Box 3.6).

Railway Infrastructure. Railways, like highways, are seeking to attract private sector finance. In their case the appropriate acronym is BOLT--build-own-lease-transfer. Private consortiums would be allowed to build (or rebuild) a needed facility such as an electrified line or communication link. The consortia would own the facility for railway use in exchange for an annual lease payment which will cease after 20 years when the facility reverts to ownership by Indian Railways. This is a mechanism that has been used successfully in Germany to fund highway, rail and waterway projects associated with the reunification effort.

A lease contract is, however, a claim on future revenue streams and the private investor in a highly specialized and immobile railway investment must judge the future net revenue earning power of Indian Railways. However, there may be uncertainty about the financial soundness of Indian Railways, for it has many money losing low density lines, much surplus labor and low productivity. In the past, monopoly revenues from bulk government freight services have covered the money losing operations but this is not likely to continue much longer.

The BOLT schemes have been advertised recently and expressions of interest requested. Relevant infrastructural bid documents, including draft agreements, already have been on sale and bids for four projects of gauge conversion have either just closed or are about to close. The draft documents for rolling stock procurement on the BOLT basis have been finalized. The BOLT

Box 3.6: Efforts on Several Fronts to Encourage and Expedite Private Investment in BOT Projects

According to MOST, there is an immediate need to: (a) increase the length of national highways from 34,000 km to 66,000 km involving an expenditure of \$7 billion; (b) upgrade single lane national highways to two lane highways, and two lane highways to four lane highways in the heavy traffic corridors, at a cost of about \$17 billion; and (c) construct 10,000 km of expressways involving an expenditure of \$25 billion (at 1994 rates) in the next 20 years. Against this demand, the provision in the Annual Budget for national highways is only about \$250 million dollars. Therefore, the authorities wish to encourage private investment in this infrastructure and propose the following assistance:

- *Tax Incentives.* The Government of India has announced a 5 year tax holiday to all companies that invest in infrastructure projects after April 1, 1995. Income-tax exemption of 30 percent would be allowed for a further 5 years. However, these incentives must be used by the investors within 12 years after the facility becomes operational.
- *Land Acquisition.* MOST will acquire land for highway construction and give it to the private investor unencumbered and free of cost. Private investors will be free also to obtain possession of land by direct negotiations. The Government recognizes that the land acquisition process usually takes a long time. Accordingly, for highway projects, it will use the emergency provisions in Section 17 of the Land Acquisition Act 1894 and take possession of land for projects pending the final settlement of compensation. This was done recently for projects such as the Ahmedabad Vadodara Expressway.
- *Clearances from Sub-National Governments.* NHA, as the nodal point for BOT national highway projects in India, will interact with state and local governments to help the private investor secure all clearances required.
- *Funding for Preparation of Feasibility Reports.* To meet the initial cost of preparing feasibility reports and acquiring land (where necessary), NHA has proposed setting up a Rs. 10 billion revolving Infrastructure Fund for highways. At present, the proposal is at the conceptual stage.
- *Technical Assistance.* The Government of India will make use of foreign and Indian consultants to advise on the implementation of BOT projects. The authorities expect that, with the help of these consultants, the time taken to prepare feasibility and preliminary engineering studies can be reduced.

State governments also are making efforts to attract private investments in the sector. The governments of Maharashtra, Gujarat, Madhya Pradesh, Rajasthan and Haryana have successfully amended their laws to enable private sector participation and collection of tolls. Some states already are seeing results. In Rau-Pitnampura in the State of Madhya Pradesh, one company has successfully executed a BOT project. And West Bengal has entered into an MOU with an overseas firm for a BOT highway project.

scheme has worked in Germany because the government is making or guaranteeing the lease payments. In India, the success of this approach will depend much more on the financial condition of the railways rather than an enabling legal and administrative environment.

TELECOMMUNICATIONS

Introduction

The development of the telecommunications sector is key to the growing international competitiveness of India. At Independence, there were only 82,000 telephone lines throughout the country. Telecommunications expanded slowly thereafter reaching the first one million lines in 1972. By 1994, there were roughly 8 million telephone lines. Despite an impressive rate of growth of more than 15 percent per annum in recent years, there remains a large unmet demand (Box 3.7). The government has begun a program of reform aimed at promoting new competitive entry by experienced private operators and tapping private sources of financing.

The Present Framework. Under the Indian Constitution telecommunications is on the Union List, which means that only the Central Government can legislate on this important sector.

Box 3.7: A Large Unmet Demand for Telecommunication Services Exists

In March 1994, the number of telephone lines in India was 8.02 million. The waiting list indicated an immediate unsatisfied demand of a further 2.5 million customers. In addition, about 75 percent of India's population lives outside urban areas. These areas are not adequately served with telephones. For instance, there are about 436,000 villages without access to telephone services.

The Department of Telecommunications (DOT) has estimated that the total demand for telephone services by the end of the decade would be about 40 to 50 million. The investment needed to meet this demand would be about \$42 billion dollars, well outside the Government's financing capability. In addition, virtually no business oriented services are available. There is a small amount of packet data switching service. But paging mobile and Very Small Aperture Terminal services are only now in the process of being licensed to private operators.

There is scope also for improving the quality of the existing services. Over the last five years, call completion rates have improved significantly. But subscriber fault rates remain very high, averaging around two faults per line per year (about 10 times higher than international standards). Many telephone exchanges in outlying areas are out of order for long periods of time.

This classification differs from that of the power sector which is on the Concurrent List, giving both the Central and state governments power to legislate.

At present, sector-specific legislation comprises the Indian Telegraph Act of 1885 and the Indian Wireless Telegraph Act (1933), each as amended and supplemented by the Telecom Rules. Under the Indian Telegraph Act, the Central Government has the exclusive privilege of establishing, maintaining and working "telegraphs," but could license any person to establish, maintain or operate "telegraphs" within any part of India. However, until recently, the policy has been for the government to be the monopoly provider of telecommunication services through a government department.

The Ministry of Communications is responsible for providing telecommunication services through DOT. A Telecom Board, chaired by the Director General, provides guidance to DOT. In 1986, the government corporatized two operational divisions of DOT. The international telecommunications division was corporatized as Videsh Sanchar Nigam Limited. In addition, operational responsibility for providing telecommunications services in metropolitan Delhi and Bombay was spun off into a separate corporation named the Mahanagar Telephone Nigam Limited. The DOT retained responsibility for providing services throughout the remainder of the country.

In May 1989, the government replaced the Telecom Board by a Telecommunications Commission having a much broader mandate of responsibilities. These included telecoms policy, regulation, technical research and development, design and manufacture of equipment, and provision of telecommunications services. Five full time members of the Commission's board retained day-to-day responsibility for separate operational divisions within DOT. The Chairman of the Telecom Commission also was the Secretary of DOT. In effect, the functions of policy-making, regulation and operations were integrated. Because of the inseparability of the Telecommunications Commission and DOT's functions, the rest of the report refers only to DOT.

Sector Reform

Following an extended domestic debate and progress in liberalizing other sectors, the Government has liberalized also the telecommunications sector. The Telecom Policy statement of May 12, 1994:

- allows new entrants to provide basic telephone services to supplement DOT;
- maintains DOT's status as sole provider of long distance services and confirms that DOT would remain a government department;
- sets targets for providing all villages with access to a telephone by the end of 1997;
- endorses the existing policy whereby the private sector will be the main provider of value added services;
- encourages pilot projects which envision an inflow of new technology and management techniques, and generally involve foreign investments; and
- indicates that mechanisms will be set up to protect consumer interests and ensure fair competition.

Given the general nature of the new policy, the Government issued implementing guidelines in September 1994. In summary, these guidelines indicate that :

- a Telecom Regulatory Authority of India will be established as an autonomous body with a Chairman and two members;

- new entry for basic telephone services will be permitted as duopolies (that is, DOT and one other operator) in the 20 “Circles” into which the country has been divided;
- DOT will retain the long distance monopoly for five years after which the decision would be reviewed; and
- foreign ownership of telecom operators will be welcome up to 49 percent of equity.

The liberalization of the sector is a landmark for India and reflects sound international practice. In particular, the *principle of allowing new entrants to compete with DOT in providing basic telephone service is in line with best practices*. Competition in the local loop is viable under appropriate commercial and technical conditions. Furthermore, fair competition between new entrants and DOT will help to raise the quality of the existing service and encourage DOT to become more efficient. *Similarly, allowing the private sector to provide the value added services is now accepted international practice*.

The main objectives of the new telecom policy also are laudable. They include making available, as soon as possible, a wide range of quality telecommunications services for all, including village access to basic telephone services, at reasonable prices. The policy permits companies in India to supplement the services provided by DOT, but requires them to maintain a balanced coverage of service. Furthermore, it recognizes the need to take action to protect consumer interests and ensure fair competition.

Policy Implementation

Implementation of the new policy began in January 1995 when DOT issued tenders requesting bids for the operation of basic telephone services in 20 separate geographic regions (“circles”) throughout India. As indicated earlier, one new entrant per region will be licensed on a non-exclusive basis as a local operator to provide basic telephone services in competition with DOT.

The Tendering Process. The tendering process has two steps. Bidders are first short-listed. Next, the financial offers of short-listed bidders are opened. The process is an improvement on the arrangements for selecting the first mobile cellular licensees for the major cities in India. The tender outlines clearly the documentation required, defines the process, and proposes a reasonable two stage evaluation process. The essence of the bid process is as follows:

- **Bid Submission:** Bids for basic services were to be submitted not later than *March 30, 1995* but this deadline was extended to June 23, 1995. They are to include detailed documents, such as the Memorandum and Articles of Association of the bid company, net worth calculations and five years of Annual Reports of the bid company and its promoters, corporate profiles and detailed five year network and financial plans and funding sources.

- **Two Stage Bid Evaluation:** A technical and commercial evaluation will be carried out, giving due consideration to the bidders' conformity to the technical specifications as well as the commercial and eligibility conditions (which include minimum net worth of promoter companies and relevant experience). A short list of compliant bidders will be prepared. The financial offers of the short-listed bidders then will be opened in their presence and evaluated. The bidder offering the best financial bid for each area will be selected.
- **Award and Negotiation.** The License and Interconnection Agreements will be negotiated with the successful bidder.

In January 1995, the Government issued tender documents requesting bids for the operation of mobile cellular telephone services in 20 separate geographic regions throughout India. The bidding process is similar to that of basic services. Two private licensees will be selected to compete in each region; DOT will retain an option to operate a cellular mobile service.

The new Telecoms Policy also liberalized the provision of value added services except for packet switching and related data services for which DOT retains a monopoly. On application to DOT, licenses may be granted for the provision of E-Mail, Voice Mail, VSAT 64Kbs closed user group systems, Videotex Service and Video Conferencing. DOT has begun to license radio paging services through a tendering process similar to cellular services.

Clarifications. As the process of liberalizing the sector has unfolded, the Government has been taking further steps to clarify the policy, and maintain the strong interest demonstrated by domestic and foreign private investors. An important objective has been to assure the transparency of the process of selecting new entrants by making clear the evaluation criteria in the bidding process; and to create a competitive operating environment in which operations can be commercially viable and fairly regulated. Thus, at end-May 1995:

- Clarifications were issued for the Basic Services Tender which now closes on June 23, 1995. Some of the main clarifications were as follows: (a) access fees were reduced from Rs 0.64 and Rs 0.87 per unit for long distance and international calls, to Rs 0.50 and Rs 0.70 respectively; (b) weights to be applied during the evaluation of the bids were specified; and (c) the experience of a subsidiary or holding company of the foreign promoter company will be permitted where the promoter company has more than 10 percent equity in the bidder company.
- Clarifications were issued for the Mobile Cellular Tender which now closes on June 7, 1995. One of the main clarifications lifts restrictions and allows direct interconnection to other operators, including cellular operators in the same region, without going through DOT's network.

- The Government also announced that a Telecom Regulatory Authority of India is being established. It will have responsibility *inter alia* for fixing tariffs, interconnect charges, dispute resolution between licensees, and redressal of customer grievances.
- The announcement further stated that the Government has received the recommendations of a study on the role and structure of DOT. The study recommends the separation of the operations, policy and regulatory functions.
- The Government has set up an expert body to examine tariff policy for the sector.

These are important developments, and further announcements and actions aimed at maintaining the momentum of reform and the interest of private investors are expected. In further implementing these reforms, *two* particular areas will require the Government's attention: (a) the overall regulation of the sector; and (b) the role of DOT. In addition, the conditions of operation will require continued review in light of actual experience and investor response.

Summary and Recommendations

To summarize:

- The government's new telecoms policy and implementing guidelines are critically important steps towards rapidly building India's telecommunications infrastructure.
- A major step was taken toward implementing the new policy with the issue in January 1995 of tender documents for licensing: (a) new telephone service operators; and (b) cellular services (for cities other than four for which licenses have been issued already).
- In recent months the Government of India has provided clarifications on a number of key issues pertaining to the evaluation of tenders and the conditions of operation. An important objective of these clarifications has been to assure transparency in the evaluation of potential new entrants and to signal that the sector will have an independent regulator.
- This said, a number of issues require further attention. The single most important issue is setting up the independent regulatory authority. *Prompt* action in doing so will: (a) reduce the bidding risks which result from the uncertainty related to tariffs, interconnection agreements and conditions of the license; and (b) enable the regulator to begin the necessary and unavoidable process of introducing, testing and refining the appropriate mechanisms for overseeing what could become one of the most complex telecommunications sectors in the world. In addition, time will be needed to develop and pass the necessary legislation.
- There is a need also to create an arms length relationship between DOT's operational role and the government's responsibility for making policy decisions and awarding licenses.

This will free DOT and allow it to concentrate on preparing for competition. It would also help to level 'the playing field' for DOT's competitors.

- In addition, it will be necessary to subject the conditions of operation to continued review in light of actual experience and investor response.

In essence, while allowing new entrants to compete with DOT is an important and useful step, a balance is needed. Conditions of entry need to be reasonable enough to encourage investment, rigorous enough to prevent rent-seeking operations, and fair enough to promote balanced competition with DOT. At the same time, however, it is appropriate to allow DOT a period of adjustment to train and strengthen its staff, improve its operational procedures and practices, and generally increase its efficiency.

4

SUSTAINING PRIMARY EDUCATION REFORMS

INTRODUCTION

The development of physical infrastructure, and an enabling legal and regulatory framework for private investment, will be essential for the future expansion of the Indian economy and for allowing individuals to take advantage of an environment increasingly conducive to market-led growth. Similarly, increases in human capital, particularly those resulting from a broad development of primary education, will be essential for enabling individuals to translate market opportunities into reality and for ensuring that increases in economic growth are distributed reasonably equitably.

Chapter 2 of this report points out that in India, state governments are responsible for providing several of the key infrastructural and social services crucial for accelerated and sustained growth, and poverty reduction. Primary education is one such service. Constitutionally, it is a concurrent responsibility of the central and state governments. State governments fund almost all recurrent expenditures for primary education and around 63 percent of the plan expenditures. The Central Government is responsible for developing education policy in cooperation with the states and also finances the rest of plan expenditure. Virtually all central resources for primary education are channeled through the state governments. But there is increasing concern that the financial and institutional constraints at the state level, as discussed in Chapter 2, have eroded severely the capacity of the states to provide, or even supplement the provision of, these services.

This Chapter explains that primary education is especially vulnerable to these constraints. Of all the services provided by state governments, education invariably consumes the largest proportion of the revenue budget. And primary education in turn consumes the largest proportion of the education budget. This is welcome because primary education also increases the effectiveness of investments in other services such as health and nutrition. Thus, the Indian authorities expanded primary education and attained high gross enrollment rates in the 1980s. In addition, a substantial national reform effort was launched in 1992 by the Central Government--under the National Policy on Education of 1986 (as updated in 1992)--to address some of the financial and institutional constraints facing the sector.

However, as explained in the rest of this Chapter, enormous challenges lie ahead. Universal primary enrollment will be achieved late in comparison with countries that have grown out of poverty quickly. And while most children enroll at the beginning of primary school, more than half of the rural students drop out before completing the cycle because of the poor quality of schooling and the pressures of poverty. Among those who drop out as well as those that stay, learning achievement is low. Furthermore, gender and caste disparities remain on most

educational indicators despite progress in reducing them. Wide disparities also exist between and within states. The new District Primary Education Program (DPEP) is the latest attempt by the authorities to tackle the problems in the sector. This Chapter makes the case for sustaining such reform efforts through a three-fold strategy involving: (a) more cost-effective interventions; (b) larger expenditures by state governments; and (c) selective and strategic leadership by the Central Government.

BENEFITS AND PROGRESS

The Benefits of Primary Education

Primary education pays substantial returns to society world wide and India is no exception. In the short term, it: (a) raises the productivity and earnings of workers across the economy; (b) generates substantial additional social benefits in the form of improved family health and welfare; and (c) and contributes to lower fertility and slower rates of population growth. In the medium term, rising primary education leads increasingly well educated parents to send their children to school, with girls benefiting substantially. Lower rates of population growth reduce the size of the cohort of new school entrants. This generates budget savings that can be used to improve quality and to expand higher levels of the system.

In a sample of eight East Asia countries, increasing enrollments in primary education, and later secondary education, have been a significant factor in explaining sustained high levels of growth in export-led economies. Since 1960, these economies grew twice as fast as the rest of East Asia, three times as fast as Latin America, and faster than the industrial economies. Growth was accompanied by equitable distribution of benefits. As a result, poverty fell dramatically over the same period. Macroeconomic models indicate that primary education enrollment was the largest contributor to predicted economic growth rates in these countries. It was responsible for between 58 percent and 87 percent of predicted growth for Japan and Thailand, respectively. Physical capital accumulation was the second most important factor, responsible for between 35 and 49 percent of predicted growth. However, expanding enrollments alone is not sufficient. The quality of education counts. Efficient, flexible and responsive labor markets also matter.

Studies of the impact of primary education on wages and agricultural productivity in India are few, and most have used data from the 1960s and 1970s. However, the available research findings mirror international experience. Social rates of return ranged from 13 to 16 percent while the private returns range from 15 to 21 percent. Agricultural productivity and the wages of landless laborers were significantly increased by education. These positive effects on earnings of primary education hold for all caste groups, but scheduled castes seem to benefit the most.

In India, women who complete primary education are much more likely than illiterate women to use health services. For those who complete primary school, the likelihood of using family planning services is 50 percent higher than for those who did not. Primary education also improves the probability of having ante-natal check-ups from a physician and immunizing children completely (by 100 percent). It also increases three-fold the likelihood of a physician-assisted birth. The evidence further suggests that primary education reduces total fertility rates by about 25 percent.

Population trends in Indian states largely reflect the differences in primary education coverage at the state level. The annual rate of population growth (as measured from the 1991 census) ranges from 1.3 percent in Kerala to 2.5 percent in Uttar Pradesh. Between 1997 and 2003, the number of children in Kerala in the 7-12 age group will decline from 3.8 to 3.5 million. In Uttar Pradesh, the number will increase from 28.1 million to 32.1 million. Kerala should be able to invest a fixed share of budgetary resources but still improve the quality of primary education and expand secondary education. Uttar Pradesh will have to increase the share of primary education in the state budget just to keep pace with population growth.

Progress in Developing Primary Education

A principal asset to India for the development of human capital is its education system, which is the second largest in the world. In 1994, 108 million children were enrolled in 573,000 lower primary schools. Another 40 million were in 156,000 upper primary schools and 23 million in 88,000 secondary schools. Roughly five million students were enrolled in nearly 8,000 institutions at the tertiary level. Expansion of the system has contributed to an improved overall literacy rate, which increased from 18 percent in 1951 to 52 percent in 1991.

With the exception of a few southern states, notably Kerala and Tamil Nadu, rural primary education is almost exclusively public. In 1987, of 472,000 rural primary schools, 12,000 were government-aided private schools (usually receiving grants for teacher salaries) and fewer than 5,000 were private un-aided schools. In contrast, 40 percent of urban primary schools and more than half of all secondary schools were government-aided or fully private.

Universal Enrollment Achieved Later Than In Countries With Quick And Equitable Growth. Universal enrollment in primary education in India may be achieved before the end of the century. This will be about a decade later than in such countries as Indonesia and Malaysia, and three decades later than in Korea (Figure 4.1). Enrollment of girls also has progressed more slowly (Figure 4.2). The present overall literacy rate of 52 percent is an enormous accomplishment. But it is still lower than that of East Asian countries when they began to integrate their economies with the world market. For instance, the literacy rates in Korea and Thailand were 71 percent and 68 percent respectively in 1960.

Furthermore, while levels of education are rising among younger workers, the stock of adult labor remains poorly educated. A 1993 survey of workers in textile mills targeted for significant retrenchment found that 30 percent had less than complete primary education. Another 25 percent had 5-7 years of education, just enough to develop basic skills. This suggests low productivity and poses a significant barrier to work force adjustment in a changing economy.

Gender Inequities Have Fallen But Remain Substantial. Over the past forty years much has been achieved to improve equity between boys and girls in primary education. Gross enrollment ratios (GERs) increased from 82 percent for boys and 33 percent for girls in 1951, to 116 percent and 88 percent respectively in 1992. In the period 1981-91, primary female enrollments grew at 3.7 percent annually while those for boys grew at 2.5 percent. Gender differences in schooling may derive from differences in household investment decisions. In India, some families prefer to invest in the education of sons, for it is perceived that the returns to this

investment will remain with the family, while the returns to the investment in a daughter's education are perceived as flowing to her husband's family.

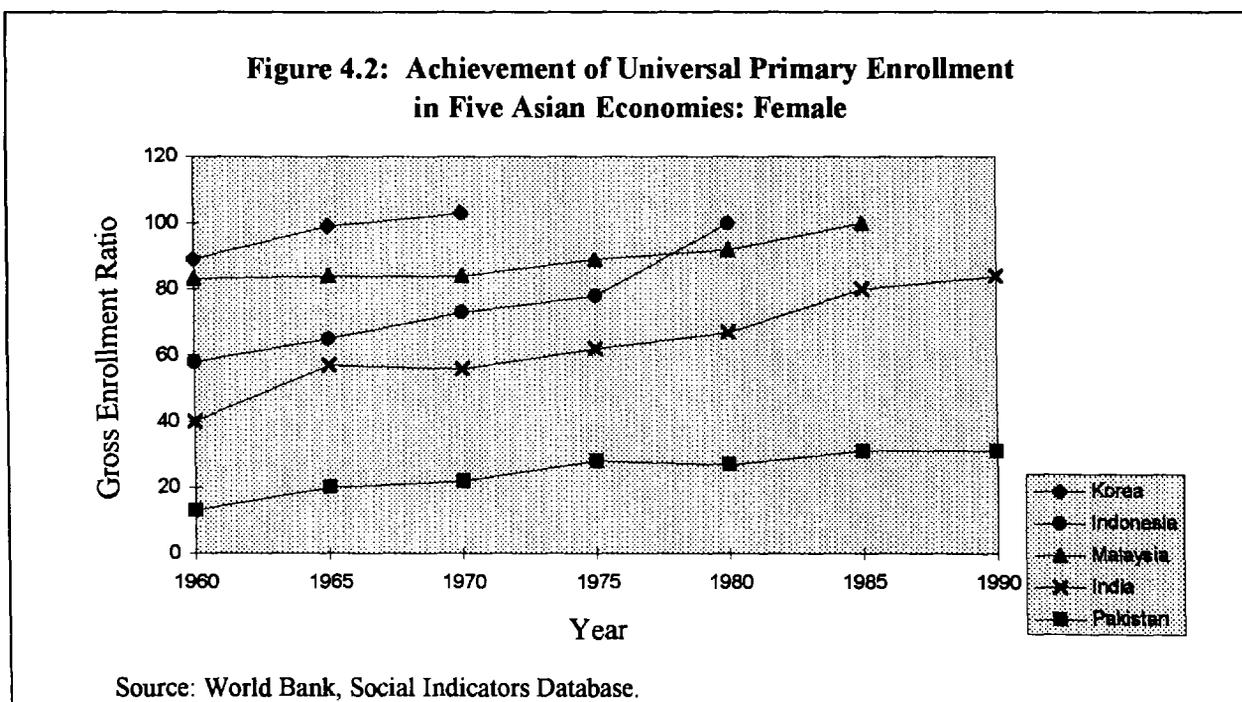
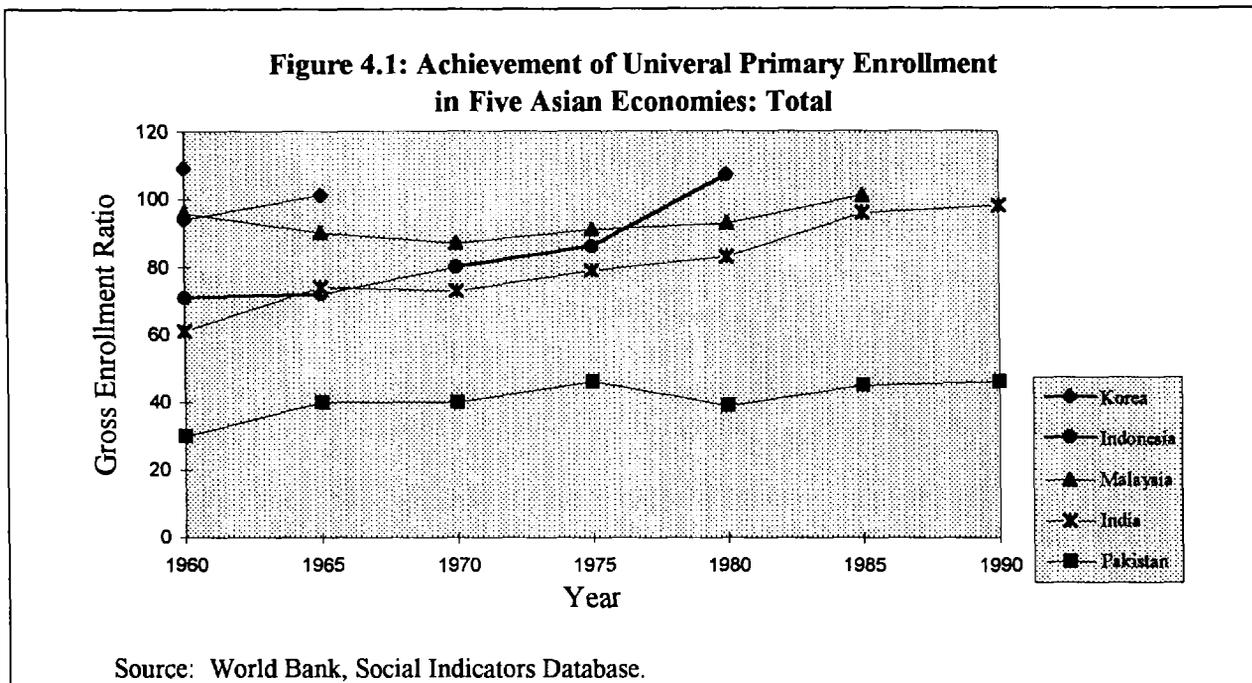


Table 4.1: Primary Gross Enrollment Ratios, Dropout Rates, and Literacy Rates for Major Indian States, By Gender						
	<i>GER</i>	<i>Male Drop Out</i>	<i>Literacy</i>	<i>GER</i>	<i>Female Drop Out</i>	<i>Literacy</i>
Kerala	104	0	94	99	0	86
Tamil Nadu	149	16	74	141	18	51
Maharashtra	124	24	77	115	32	52
Punjab	93	21	66	88	23	50
Gujarat	131	42	73	106	51	49
West Bengal	125	36	68	123	46	47
Karnataka	124	37	67	115	44	44
Haryana	110	02	69	95	07	40
Andhra Pradesh	116	42	55	100	42	33
Orissa	117	53	63	78	52	35
Madhya Pradesh	117	23	58	91	35	29
Uttar Pradesh	104	20	56	73	20	25
Bihar	96	62	52	54	66	23
Rajasthan	120	35	55	61	56	20
All-India Average	115	35	64	93	39	39

Source: Government of India, Department of Education. GER and dropout data are for 1993; literacy rates are from the 1991 census.

Enrollment And Completion Rates Diverge Substantially. Sixty five percent of all boys and 60 percent of all girls complete the first five-year cycle of primary schooling. Completion rates vary widely from virtually 100 percent in Kerala and 84 percent in Tamil Nadu to 40 percent in Bihar. Rural enrollment and drop out rates are higher than the national averages. Of the children who complete the first five-year cycle of primary schooling, 77 percent of boys and 69 percent of girls progress to upper primary school in the country as a whole (Table 4.1). This is equivalent to around 46 and 28 percent of the respective age and gender cohorts. Indeed, only 35 percent of children who enroll in primary class 1 are enrolled in class VIII eight years later.

Children from the poorest families, and rural girls, are most likely to be out of school. One third of the rural children aged 6-11 not in school, and one half of non-enrolled urban children, are from the poorest 20 percent of households. The Department of Education estimates that about 24 million children were not in school in 1987, representing 25 percent of their cohort (6-11 years of age). Almost 60 percent of these were female.

The increase in literacy rates has not been as dramatic as the recorded increases in primary enrollments because of the high drop out rates, India's high birth rate, and the past backlog of children who reached adulthood without attending school. The literacy rate for those aged seven years and above was 64 percent for males and 39 percent for females. This translated into 121 million illiterate males and 181 illiterate million females in 1981. The numbers for 1991 were 127 million males and 197 million females. In four of the major states (Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan), the overall rate was below 45 percent, and below 28 percent for females. In addition, each of these states had districts where the female literacy rate was below 10 percent. Even in the educationally more developed states, there were substantial differences in literacy

among districts (Table 4.2). For example, of Maharashtra's 30 districts, 21 had female literacy rates above the national average but the rates in nine districts were below. Only in Kerala were there no districts below the national average.

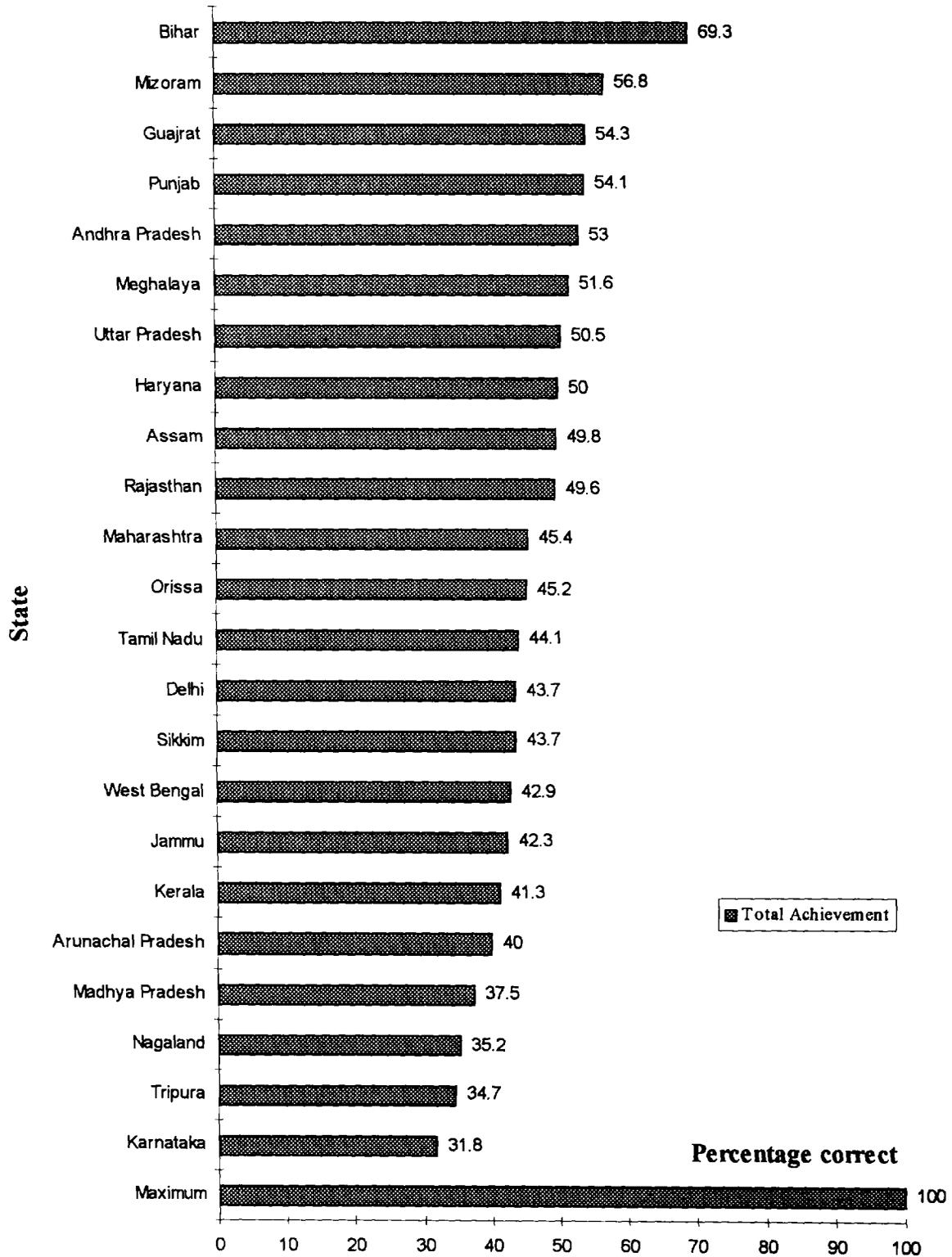
Table 4.2: Distribution of Districts by Female Literacy Rates, Major States, 1991			
	<i>Female Literacy</i>		
	<i>Less than 29 percent</i>	<i>30-39 percent</i>	<i>More than 39 percent</i>
Kerala	--	--	14
Tamil Nadu	--	3	18
Maharashtra	3	6	21
Punjab	--	3	9
Gujarat	2	1	16
West Bengal	4	4	8
Karnataka	2	7	11
Haryana	1	6	9
Andhra Pradesh	12	7	4
Orissa	5	4	4
Madhya Pradesh	29	10	6
Uttar Pradesh	45	12	6
Bihar	39	3	--
Rajasthan	26	1	--
Totals	168	67	126

Note: Average national female literacy rate (1991) is 39 percent.
Source: Bose 1991.

Learning Achievement Is Very Low. Children who reach the final year of lower primary school often have low learning achievement. In a 1991 study conducted in 23 states, the National Council of Education Research and Training (NCERT) found that the average achievement on curriculum based basic skills tests of arithmetic, reading comprehension and spelling, for a sample of 65,000 urban and rural grade 4 students, was 46.4 percent. Students answered correctly fewer than half the questions on an arithmetic test in 19 of the 23 states and fewer than half the questions on a reading comprehension test in 16 states. They spelled correctly fewer than half the words on a spelling test in 15 of 21 states. Yet all the skills tested were expected to be achieved by the end of grade 3.

Differences in learning achievement among states and districts are very large. In the 1991 study (Figure 4.3) students in the worst performing state (Karnataka) achieved only 45 percent of the total achievement of students in the highest achieving state (Bihar). A 1993 study of learning achievement in 39 low-literacy districts in eight states, carried out as part of the DPEP preparation studies program, tested pupils in the last class of the primary cycle (class 4 in some states, class 5 in others) on arithmetic skills and reading comprehension skills expected at the end of the previous year. Average achievement levels were poor with large differences between districts.

Figure 4.3: Total Achievement (arithmetic, reading and spelling) in 23 states, 1991 (average percentage correct)



Source: Shukla 1994.

Achievement Differs According To Gender, Household Socio-Economic And Scheduled Caste (SC)/Scheduled Tribe (ST) Status. Once in school, girls typically achieve at a level slightly below that of boys, but this difference is not found in all states or for all subjects (Table 4.3). Both household choices and school quality affect gender differences in achievement. To separate school effects from home background effects (Box 4.1), researchers have controlled for the effects of household decision making as measured by the student's socio-economic background, grade repetition, school attendance, and time spent on school homework and outside reading. Each of these measured characteristics of families affects learning achievement. But even after they are taken into account, gender differences remain, suggesting that some school or classroom characteristics may account for them.

Student learning also varies according to the student's family background, including parental education and occupation. In all states, the achievement of students was higher for children from higher socio-economic backgrounds. Parental education and occupation had stronger effects on language achievement than on arithmetic achievement, a finding that is consistent with international evidence (Figures 4.4a and 4.4b).

<i>Subject/Children</i>	<i>Assam*</i>	<i>Haryana</i>	<i>Karnataka*</i>	<i>Kerala*</i>	<i>Madhya Pradesh</i>	<i>Maharashtra*</i>	<i>Orissa</i>	<i>Tamil Nadu</i>
Arithmetic								
Boys	50.4	38.8	39.4	37.4	28.8	30.0	36.7	27.9
Girls	48.9	37.2	38.3	37.0	27.2	28.1	36.2	28.5
SC	57.6	35.3	35.2	32.8	26.4	28.3	36.9	27.9
ST	44.2	35.7	33.8	37.5	26.8	31.1	30.9	25.7
OBC	50.2	38.0	38.2	36.6	28.8	28.2	35.6	28.5
Other	50.2	39.2	43.5	41.9	28.3	29.5	39.5	28.2
ALL	49.7	38.0	38.9	37.2	28.1	29.2	36.5	28.2
Language								
Boys	49.1	43.8	41.5	46.5	38.3	39.3	47.8	36.8
Girls	47.4	44.5	41.8	47.5	36.3	35.7	47.5	35.8
SC	52.0	42.1	37.4	40.2	33.6	37.5	44.8	34.7
ST	44.6	43.8	36.8	42.8	36.1	41.7	43.7	35.7
OBC	49.3	43.9	40.7	46.1	38.3	36.0	32.4	36.8
Other	48.7	45.1	46.4	56.0	38.5	37.8	35.9	37.9
ALL	48.3	44.2	41.6	47.0	37.4	37.7	47.7	36.3
* Tests given to Grade 4 students.								
Source: NCERT, 1994.								

Figure 4.4a: Arithmetic Achievement (percent correct) in Low-Literacy Districts in Seven States, by Household Socio-Economic Status (SES) Quartiles

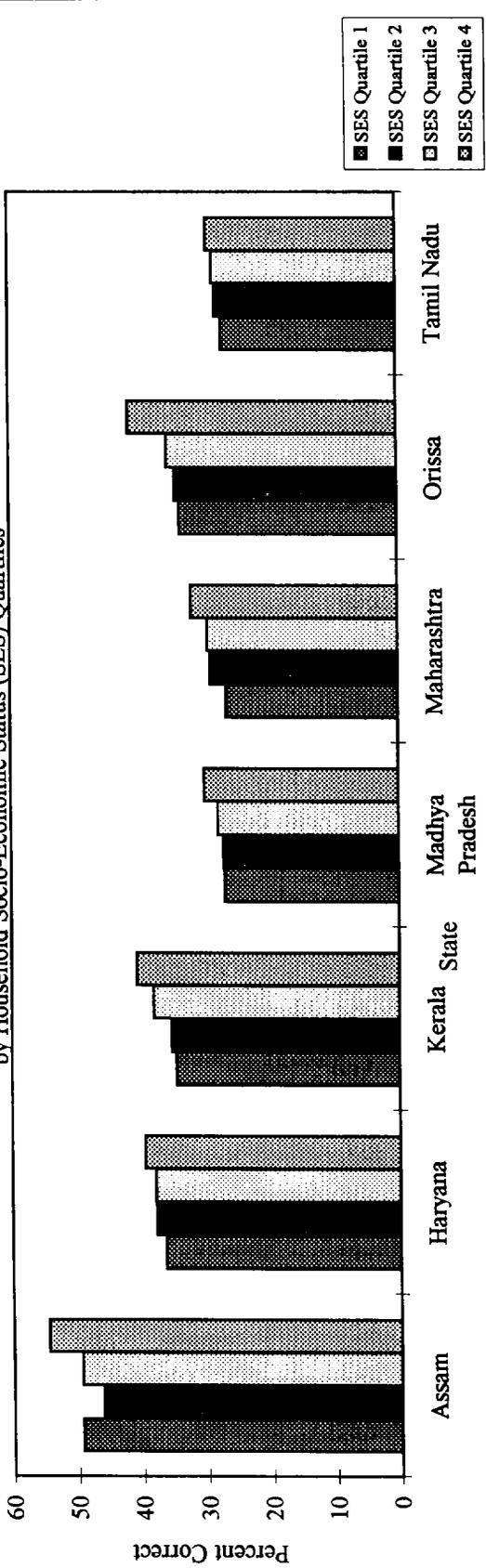
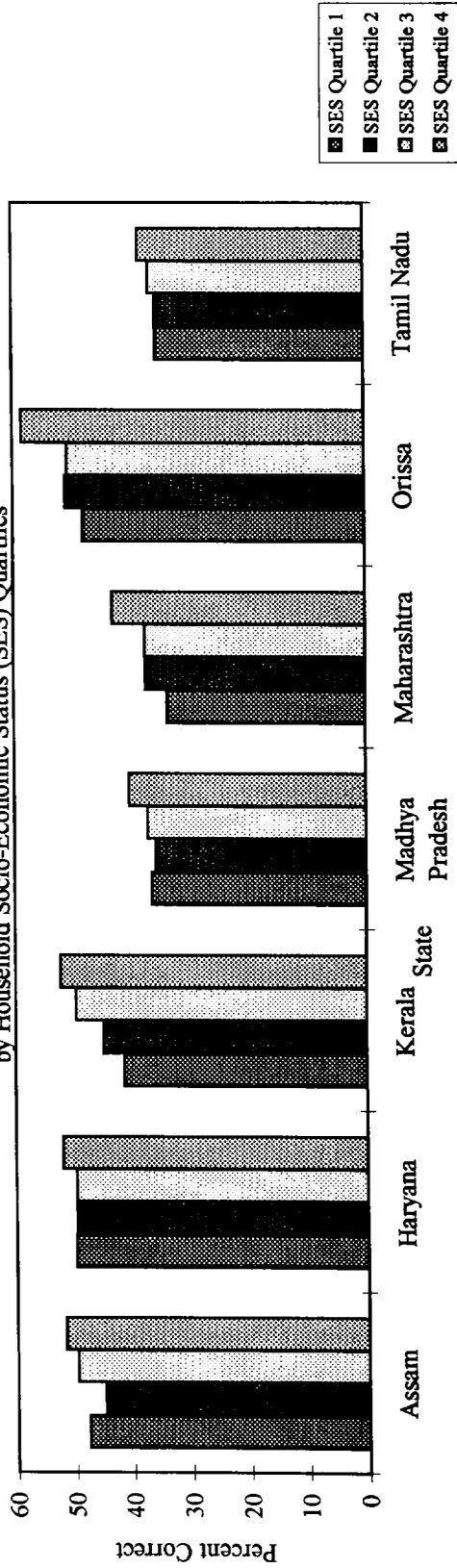


Figure 4.4b: Language Achievement (percent correct) in Low-Literacy Districts in Seven States, by Household Socio-Economic Status (SES) Quartiles



Source: NCERT 1994.

Box 4.1: Policy Analysis to Help Raise Learning and Reduce Gaps

For many countries, some schools are more effective than others in both *raising* the average achievement of their students and *reducing* the gap in achievement often associated with gender and social disadvantage. Researchers at NCERT, NIEPA and the Department of Education are collaborating with the World Bank on a synthesis of school level factors that raise learning and reduce gender, SC/ST and socio-economic differences in achievement. Using hierarchical linear modeling techniques, they have determined that *differences between schools account for 30-60 percent of the variation in mathematics achievement and 14-47 percent of variation in reading achievement between students*. Differences between students' family backgrounds account for the remainder.

Proportion of variance in mathematics and reading achievement attributable to differences between schools in low-literacy districts in 8 states, 1993

<u>State</u>	<u>Mathematics</u>	<u>Reading</u>
Assam	49	33
Haryana	29	24
Karnataka	60	47
Kerala	16	14
Madhya Pradesh	45	40
Maharashtra	43	39
Orissa	43	22
Tamil Nadu	33	35

Preliminary HLM analyses indicate that the packages of interventions needed to boost learning and reduce gaps would vary according to local conditions. Different school-level inputs raised achievement in different states (see Table 4.4). In addition, the analysis of school-level factors can help shape the design of district and state-level interventions to benefit girls, SC and ST students, and children from other disadvantaged backgrounds.

For instance, the HLM analysis found that the strong association between student gender and achievement varied according to the school the student attended. Researchers at NCERT have begun to explore what features of schools mitigate the relationship between gender and achievement. The gender gap in mathematics achievement was smaller in schools with a higher percent of qualified teachers (Maharashtra), a higher percentage of trained teachers (Orissa), higher average teacher experience (Maharashtra), more instructional time devoted to math (Madhya Pradesh), more emphasis on instructional improvement (Assam and Tamil Nadu), and more instructional supervision (Kerala). Other school characteristics increased the gender gap in mathematics, being more favorable to boys than girls. They include a higher percentage of qualified teachers (Kerala), more and better school facilities (Assam), and greater financial autonomy (Madhya Pradesh and Orissa).

SC and ST students scored about 5 percentage points lower on average on overall achievement in the 1991 survey relative to all students. In large part, differences between SC/ST students and non-SC/ST students are attributable to differences in socioeconomic status between the two groups rather than differences among schools. In the 1993 study, the gap between SC/ST and non SC/ST students did not vary much among schools and ranged broadly across states.

The 1993 survey also points to the impact of household investments in human capital formation. Students from families that permit regular school attendance (three states), allocate time for school homework (four states), encourage reading (seven states), and support the

Box 4.2: Government-Aided Primary Schools are More Cost-Effective than Other Schools in Tamil Nadu

In Tamil Nadu, government schools account for 68 percent, government-aided schools for 28 percent, and private unaided schools for 4 percent of primary enrollments. Each type of school follows the prescribed state primary education curriculum and syllabus. Which of the three sectors should be expanded?

A 1992 study of student learning achievement in Tamil language and mathematics in rural and urban primary schools found that government-aided primary schools were unambiguously more cost-effective in raising student learning achievement than either government managed schools or fully private unaided schools. Conducted with carefully drawn samples of schools and pupils, the study tested student learning achievement in mathematics and reading comprehension in grade 5. A principal first finding was that average achievement scores were very low in all schools, with pupils averaging 30-35 percent correct on achievement tests.

Raw test scores of students in private unaided schools were significantly higher than those in either government aided or government schools. A significantly higher proportion of students in private unaided schools mastered basic skills, in comparison with students in government-aided and government schools. However, when differences in home background and community characteristics were statistically controlled, students in government-aided schools outperformed those in both government and private unaided schools. School management practices in government-aided schools were found to be significantly associated with better learning achievement. Achievement in Tamil and mathematics in private unaided schools was, in turn, affected by the use of English as the medium of instruction -- a service which attracted both poor and not poor families to these schools.

Substantial variation in performance was found between schools. Leadership activities of the headteacher and teacher subject matter knowledge were found to be positively related to student achievement, but no relationship was found for such variables as the student/teacher ratio and teacher qualifications. Years of teacher experience had a negative effect on achievement, reflecting lower motivation and obsolescence of skills for older teachers. Difficult textbooks and lack of training for teachers in how to use them, also constrained achievement.

Using data on both direct and opportunity costs of pupils, the study further found that both government-aided and government schools were more cost-effective than private unaided schools, with aided schools being most cost-effective. The incremental direct costs of increasing learning achievement in the unaided sector, for example, were found to be 44 percent higher than in the public and publicly-aided schools.

The results would superficially indicate that expansion of the government-aided sector would be the best option for public policy. However, historical and institutional analysis showed that government-aided schools were most often established by particular communities in response to non-economic factors at a time when public education was scarce. Substantial voluntary assistance is provided to the schools. In the changed circumstances of Tamil Nadu today it is not clear that the motivations of new entrepreneurs would be similar and cost-effectiveness ratios maintained. Equally, a policy to restrict growth of the less cost-effective unaided sector on the basis of cognitive test scores would ignore the other outcomes of unaided schooling, including English language skills, in demand by segments of the population.

The study concludes that cost-effective policy options for improving achievement would include, for all three school types: (a) training of headteachers in instructional management; (b) improving textbooks; and (c) increasing resources for instructional materials, perhaps through reallocation away from such incentives as free school uniforms. Improvements in government schools through the measures identified would give the best prospects for equitable and cost-effective improvement in learning outcomes.

Source: Bashir 1994.

educational aspirations of the children (seven states) have significantly higher achievement than those from households that do not provide such support. Students who repeat classes, moreover, achieve significantly less than those who do not (seven states). These effects were observed after adjustments for the effects of family socio-economic status had been made.

Private and government-aided schools constitute a very small share of the rural primary education system in most states. The potential for mobilizing additional private resources for rural primary schooling remains to be explored. However, emerging research indicates that private primary schools may serve specialized markets and may not be as cost-effective as government-aided schools in improving student learning achievement (Box 4.2).

In summary, virtually all children in India enroll in class 1 of primary school. In states such as Kerala, Tamil Nadu and Punjab, progress toward universal access and completion of primary education is encouraging. Overall, however, India's annual expenditures on primary education are yielding low returns relative to the basic skills being acquired. This is partly because only sixty percent of the enrolled children complete primary schooling. At least half of those who finish master less than fifty percent of the curriculum. *Consequently, a substantial share of annual expenditures is being lost to inefficiency.*

The essential challenge for education authorities at the center, state and district levels is to improve the quality of education in rural primary schools. Providing better services also will increase the schools' attractiveness to children and parents alike, and improve learning achievement. Achieving acceptable levels of quality will require strategies that take into account variation in access to, completion of and learning achievement in primary education within and among states. It will also take account of the fact that girls, SC and ST students, and the poor tend to stay in school for the shortest period and score below average on achievement tests.

INFLUENCING EDUCATIONAL OUTCOMES

Varied Local Factors Are Highly Significant. Teachers, tools and time for teaching, standards for learning outcomes and guidelines for curriculum are necessary if not sufficient conditions for raising learning achievement. In addition, in India, the patterns of school factors that are associated with higher learning achievement vary by location. The 1991 study identified approximately 10 school-level determinants of learning, but only two--the presence of Operation Blackboard and of Parent Teacher Associations--were positively associated with higher levels of learning in at least one-third of the states. In the 1993 study, no school-level determinant of achievement was common to low-literacy districts in all states surveyed. Of 35 school-level characteristics tested, only four--teacher attendance, instructional time spent on language, emphasis on instructional improvement and instructional supervision--were positively related to learning achievement in at least three states surveyed (Table 4.4).

Teacher's Subject Knowledge Is More Critical Than Years Of Pre-Service Education. Indian experience and international research confirm that proxies for teacher knowledge, such as the type of certification and pre-service education, typically are unrelated to student learning achievement. What really matters is the teacher's knowledge of the subject. Despite the relatively high level of formal pre-service education of teachers in India, many teachers lack a strong foundation in the subject they are teaching. For example, in Tamil Nadu, only half of the

Table 4.4: School Characteristics Positively Related to Higher Levels of Mathematics or Reading Achievement in Low-Literacy Districts in Seven States, 1993

<i>Assam</i>	<i>Haryana</i>	<i>Kerala</i>	<i>Madhya Pradesh</i>	<i>Maharashtra</i>	<i>Orissa</i>	<i>Tamil Nadu</i>
Contribution in kind per pupil			Student incentives			Financial autonomy
School physical facilities	Instructional materials			Sufficient classrooms		
Instructional time on language			Instructional time on language		Instructional time on language	
Total instructional time			Total instructional time			
	Teacher attendance		Teacher attendance	Teacher attendance		
Emphasis on instructional improvement		Emphasis on instructional improvement				Emphasis on instructional improvement
		Instructional supervision			Instructional supervision	Instructional supervision
			Frequency of testing		Frequency of testing	
					Frequency of homework assigned	Frequency of homework assigned
Class size	Graded classrooms				Multi-grade classrooms	Graded classrooms
					Community involvement	

primary teachers who were tested could correctly answer 80 percent of the questions on a test of grade 4 mathematics knowledge (Bashir 1994). Investment in improving teachers is likely to improve learning outcomes. Greater attention to strategies for improving teacher knowledge (as opposed to investments in more levels of formal certification) may need to be a focus of future research.

Time Is Important. The amount of time for learning is consistently related to achievement in countries worldwide. Student achievement in India is higher in schools with more total instructional time and more instructional time spent on the subjects tested. Student achievement is higher for children who attend school regularly and who do school work at home, both of which increase the amount of time spent on learning. Achievement is also higher in schools with

higher rates of teacher attendance. Teacher absenteeism is widely reported in a number of states. This reduces the instructional time and, consequently, achievement.

In India, poor teacher compensation does not appear to be a major cause of teacher absenteeism and variations in teacher salaries were not associated with higher student learning. In fact, teacher salaries are comparable to those of public employees with similar qualifications. Furthermore, at 3.6 times average per capita income, primary school teachers' salaries in India are relatively better than those in such middle income countries as Chile, Costa Rica, and Thailand but worse than those in such low-income countries as Kenya, Malawi and Zambia (Lockheed and Verspoor, 1991).

Even Modest Teaching Tools Are Beneficial. Instructional materials include the entire range of teaching tools, from chalk to computers. International experience has demonstrated that such relatively modest teaching tools as textbooks, libraries, and classroom instructional materials are significant determinants of achievement in low and middle income countries. Most children have basic essential learning materials (Table 4.5, column 1), but relatively few schools are well equipped with adequate instructional materials (Table 4.5, column 2 and 3). For example, few schools in low-literacy districts had a complete set of 16 instructional materials. In Assam, Madhya Pradesh and Kerala, most schools on average had fewer than 10 of the 16 items. The available instructional materials vary considerably among states. For example, schools in low-literacy districts in Orissa and Tamil Nadu report having about twice the number of instructional materials as schools in Assam.

Table 4.5: Average Number of Instructional Materials Available in Low-Literacy Districts in Eight States, 1993			
State	Average Number of Learning Materials per Student (maximum = 7)	Average Number of Instructional Materials per School (maximum=16)	Number of School Facilities (Maximum=31)
Assam	6.62	6.98	8.91
Haryana	6.55	10.40	18.37
Karnataka	5.42	10.64	15.10
Kerala	6.16	9.85	16.15
Madhya Pradesh	6.11	7.87	12.89
Maharashtra	5.95	10.46	15.33
Orissa	5.75	12.28	8.68
Tamil Nadu	6.05	12.66	19.32

Note: The learning materials were: language text book, math text book, science/environmental/social science text book, any other book, notebooks, slate, and pencils/pens. The instructional materials were: blackboard, duster, chalk, teacher table, teacher chair, cupboard, teacher guides, dictionary, books apart from the children's textbooks (library), map, globe, charts, flash cards, science kit, mathematics kit, and other unspecified. The physical facilities of the schools were: maps, globes, charts, play materials and toys, games and equipment, primary science kit, mini tool kit, mathematics kit, reference books for library, children's books, magazines and journals, school bell, musical instruments, mats and furniture, chairs for teachers, tables for teachers, blackboard, pin-up board, chalk and duster, water pitcher, dust-bin, safe drinking water, toilet facilities, separate toilet facilities for girls, electricity, playground, annual medical check up for children, immunization facility, and first aid kits.

To correct these imbalances, the Department of Education established a scheme (Operation Blackboard) that sought to improve the instructional environment in three ways: by building an additional classroom, posting an additional teacher, and providing a package of teaching materials to the school. Small schools (1-2 teachers) participating in Operation

Blackboard had higher mathematics achievement in Assam and Orissa and higher language achievement in Assam and Madhya Pradesh in comparison with small schools not participating in Operation Blackboard. However, small schools participating in Operation Blackboard in Maharashtra and Haryana had lower mathematics and language achievement. This latter result again demonstrates how variations in existing conditions may determine the effectiveness of a particular intervention.

The most commonly available instructional material is the textbook. In most states most primary students have textbooks (Table 4.5). However, the production and instructional design quality of primary level textbooks is often poor, which makes them difficult to read and unattractive to children. One study of textbook readability found that the vocabulary used was too difficult (Sharma, 1994). The overlap between words used in primary textbooks and those used voluntarily by children was quite low. In general, fewer than 20 percent of textbook words were used by children in their normal speech. The textbooks also demonstrated poor instructional design, with only about 5 percent of words repeated 10 or more times, and more than 350 different words used only once. Clearly, improving the readability of textbooks is a prime area for investment.

Standards Matter. To bring primary level education standards in line with children's developmental capabilities, the DOE established "minimal levels of learning" (MLL) for language, mathematics and social/environmental studies in each of the five primary grades. The standards are expressed as competency statements for curricular domains and grade level. For instance, the understanding whole numbers competency statement for class 1 is that the student counts from 1 to 20 using objects and pictures; by class 4 the student should recognize and write numerals from 1,000 to 10,000 (NCERT, 1994). While neither states nor districts are under an obligation to adopt MLL standards, they have been widely disseminated. Model textbooks have been developed to support them. National surveys of achievement have used MLL standards as a basis for testing students.

Curricula Embody The Standards. There are no international curricula for primary education. However, most systems, worldwide, emphasize acquisition of arithmetic and language skills (reading and writing) as a core element of the curriculum. The curriculum defines the subjects to be taught and furnishes general guidance regarding the frequency and duration of instruction. In some cases, it is accompanied by a syllabus that specifies more precisely what is to be taught and what will be assessed. In India, responsibility for curriculum development in primary education resides with the states, although NCERT provides model materials for adaptation at state and district levels.

The District Primary Education Program (DPEP)

DPEP is the most intensive effort to date by the Central Government to increase enrollment, retention and the quality of primary education. It was established in 1993 by the Department of Education, in close consultation with the states, to implement the recommendations of the National Policy on Education, 1986 (updated in 1992) (Box 4.3). Through the program, the Government of India provides grants to states equivalent to 85 percent of the cost of approved investments, with the states providing the balance. Investment is targeted to districts with below average female literacy rates. Emphasis is placed on investments in the

quality of primary instruction, notably including teacher in-service training, improved teaching /learning materials, improved school facilities and strong community participation. Only a limited amount of new school construction is financed.

Under the policy, planning has been decentralized to districts, with significant popular participation. Community/school organizations are being strengthened. The Operation Blackboard approach of mass distribution of standardized materials is being replaced by grants to community/school organizations, and to teachers to purchase materials. State education support programs, including textbook development and publication, planning and management, research and evaluation, and teacher training are being enhanced.

Box 4.3: The National Policy on Education Is Adopted and Updated

The National Policy on Education (1986) set the stage for an increasingly important role for the Central Government in primary education. The policy explicitly recognized the need for a concerted effort to expand and improve basic education, including both formal and nonformal primary education as well as adult literacy education. At the primary level, the policy called for priority attention to reducing the disparities in enrollment for girls, and for scheduled caste and scheduled tribe students. To implement the policy, the Department of Education created a set of centrally-sponsored grant schemes to provide assistance to states with the development of basic education. Schemes included Operation Blackboard, the creation of District Institutes of Education and Training, Nonformal Education, Total Literacy campaigns, and the development of competency standards known as Minimum Levels of Learning.

A second set of initiatives comprised a series of donor-assisted state basic education projects. Building from experience with the Andhra Pradesh Education Project, which began in the early 1980s with the support of the Overseas Development Administration of the United Kingdom, projects were started in Bihar (UNICEF), Rajasthan (SIDA) and Uttar Pradesh (IDA) between 1990 and 1993. While the design of the projects vary substantially, they have in common the objectives and strategies of the 1986 policy. They focus on increasing female enrollment and improving educational outcomes. They feature strengthening community involvement with schools through village education committees, improved teaching/learning materials and substantially enhanced in-service teacher training. District Institutes of Education and Training play key roles. In each case, registered societies were created to receive and disburse funds, provide an umbrella organization, and closely collaborate with state education departments. In addition, the Uttar Pradesh project has a substantial capacity building component focused on key district and state agencies. It includes establishing a State Institute of Educational Management and Training.

In 1992 Parliament approved an updated National Policy on Education. The policy further sharpens priorities with respect to girls and improved quality in primary education. The policy calls for an integrated and decentralized approach to the development of primary education systems, with a focus on building the capacity of districts to plan and manage primary education.

The call to strengthen the capacity of districts paralleled the 1992 constitutional amendments that increase the responsibility and authority of local governments. These amendments give the control of primary, secondary, adult, non-formal, technical training and vocational education to Panchayati Raj bodies. The objective of transferring management authority to local bodies is twofold: (a) to improve the efficiency and effectiveness of schools; and (b) to promote further democratization at the local level. The Central Advisory Board of Education also issued a special report on how decentralization could be accomplished in education, and provides details on the structure, role and functions and powers of different local bodies in the management of education. Enabling legislation for the constitutional amendments has been passed in almost all states. The administrative guidelines for implementing decentralization are in the process of being issued.

Recent studies on the potential impact of decentralization on primary education suggest that it would increase local support for mobilization of resources, particularly for school construction and non-salary recurrent costs, improve supervision and control over schools and teachers, and increase school enrollments and reduce dropout. Further research will be needed to evaluate the impact of the legislation on these outcomes, as it is implemented in the different states.

DPEP differs from other centrally-sponsored schemes, which provide resources to states for the implementation of standard program designs, in five principal ways: (i) proposals for financing sub-projects are developed by each participating district and state; (ii) proposals are *appraised* by the DPEP Bureau of the national Department of Education against transparent technical, managerial and financial criteria; (iii) participating states must make DPEP grants *fully additional* to normal growth of education budgets; (iv) funds are made available to states and districts annually on the basis of *performance reviews* and proposals for the next year--and poorly performing sub-projects can be dropped from the program and replaced; and (v) *implementation support and technical assistance* are made available to states and districts through contracts with research and development agencies.

DPEP is managed at the national level by a newly created DPEP Bureau, serving as a financial and technical intermediary organization to appraise, finance, monitor and supervise state and district action programs. DPEP will be the mechanism through which all substantial external assistance to primary education will be channeled.

The DPEP was launched in seven states in 1994. Together with the four state projects, India has now initiated significant action to improve primary education in 11 of the largest states. At least three additional states are expected to join the program in 1995-96. The investment cost of reaching 300 districts through the DPEP is estimated at approximately \$3.5 billion over the remainder of the Eighth Plan, and the Ninth and Tenth Plan periods. Maintaining the value of these investments will, in turn, require that states substantially increase resources for primary education. As efficiency improves at that level, state will need to increase resources for upper primary and secondary education. The financial challenge to the states is large.

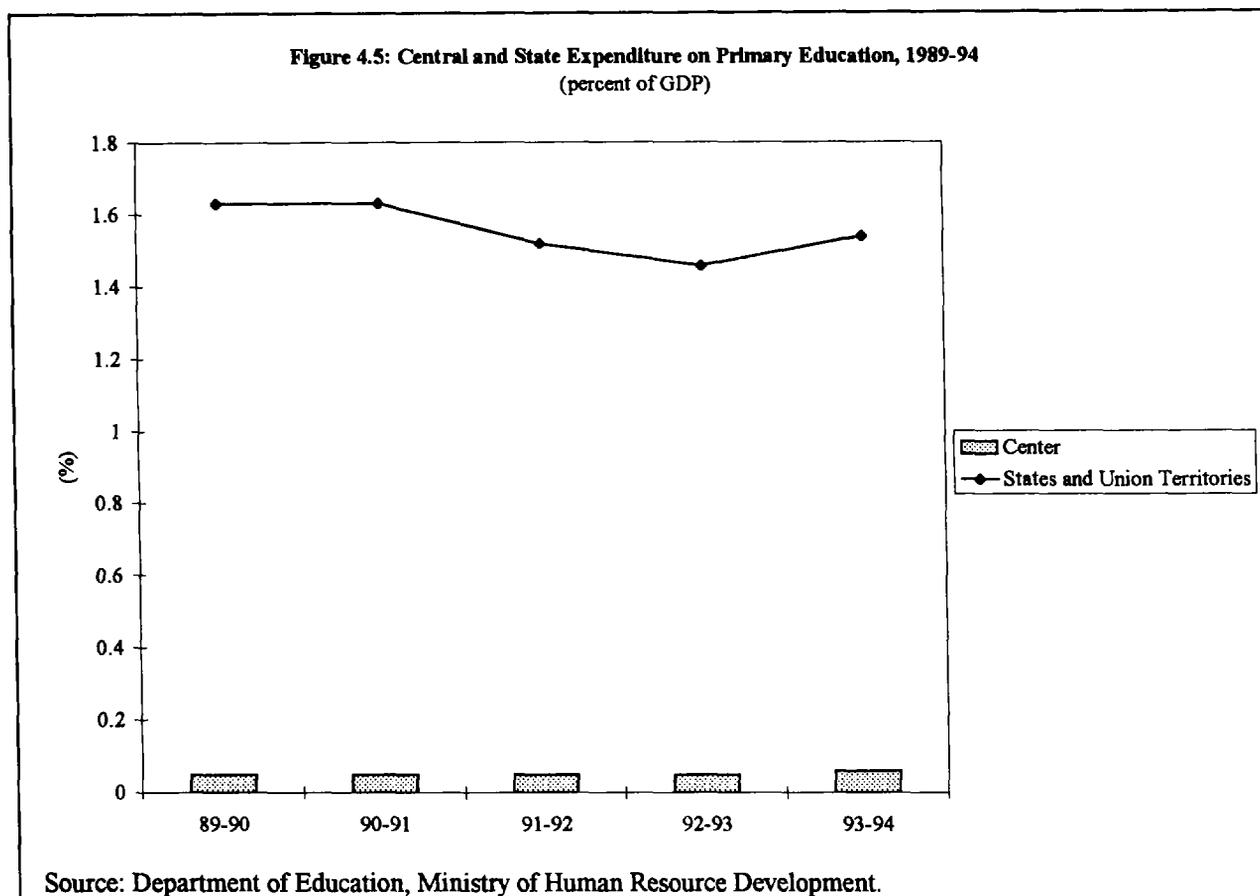
TRENDS AND PROSPECTS IN PRIMARY EDUCATION FINANCE

Two features dominate the structure of primary education finance (meaning in this context financing for elementary grades 1-8). *First*, the bulk of financial allocations and responsibility for the sector effectively lies with state governments, almost all of whom currently face serious financial weaknesses. *Second*, the level of primary education coverage varies widely across states. These variations broadly reflect the relative priority given to the sector within individual states. As India pursues universal enrollment and enhanced quality in primary education, all states will have to make a considerable financial effort. But many will need to make a substantially greater effort because they have spent very little on the sector in the past.

Overview of Expenditure on Primary Education

State governments, households and the Central Government are the main providers of primary education funding, in that order. The capacity of state governments to fund the sector derives from a mix of their own willingness and ability to raise own revenues, the transfers they receive from the Central Government via the Finance and Planning Commissions, and the priority given to primary education among competing demands for government resources. Household expenditures on primary education reflect the interplay between the level and distribution of income, the perceived adequacy of publicly provided services, complementary household expenditures required by the public system and, again, the priority given to competing demands.

The Central Government's direct funding of the sector is small; some additional funding is provided through tied grants for specific activities. Constitutionally, there is no limit to such transfers. Despite their relatively small size, direct Central transfers for elementary education have a catalytic and developmental effect by supplementing the state's own plan outlays.



Public expenditures on primary education in India increased during the 1980s to 1.68 percent of GDP in 1989-90. They fell in 1991-92 and 1992-93 to 1.57 percent and 1.51 percent respectively but recovered to 1.60 percent of GDP in 1993-94. During this period, the Central Government increased its share of the total (in relation to GDP), implying that the reductions reflected lower spending by state governments (in relation to GDP) (Figure 4.5). For the Central Government, this trend is part of a broader attempt to protect its overall spending on education in relation to GDP while seeking to reduce other expenditures as part of fiscal consolidation. Thus, although education expenditures remained constant as a share of GDP between 1990-91 and 1994-95, they increased as a share of total Central Government revenue expenditures from 1.28 percent to 1.48 percent.

In addition, the Central Government has been shifting education resources toward the primary level. This shift is a welcome step. Over the period 1989-94, the share for higher and technical education in total Central Government education expenditure fell from 54 to 43 percent while that for elementary and adult literacy increased from 20 to 31 percent. These shifts reflect differences in expenditure growth rates. In current prices, the average annual growth in elementary expenditures was 20.7 percent. It was 12.5 percent for secondary education and 3.7

percent for higher education. These trends continued in the 1995-96 budget: the allocation for elementary and adult literacy rose to 34 percent while it fell in nominal terms for higher education.

Expenditure on overall education by states as a group declined from 3.31 percent of GDP in 1989-90 to 3.05 percent in 1992-93 but rose in 1993-94 to 3.12 percent of GDP. The reason is that although the state education spending has held its share in total state development revenue spending, the latter has fallen in relation to GDP. If there is further contraction in the overall education budget at the state level in subsequent years, there will be even less room at this sub-national level to begin to correct the underfunding of primary education through a reallocation of the overall education budget away from higher education. Indeed, in 1993-94, 46 percent of public educational expenditure was allocated to elementary education and 31 percent to secondary. Higher and technical education combined received 17.0 percent. While the overall distribution is almost exactly the same as twenty years ago, the states' share for elementary education has fallen slightly while the Center's has increased.

But there are other reasons suggesting that the financial problems of primary education cannot be solved largely by redirecting resources from other education sub-sectors. *First*, overall public expenditures on education have not maintained their share of GNP in recent years and need to increase. Expenditures by all (center and state) departments of education in 1992-93 were equal to 3.34 percent of GNP. When expenditures across departments other than education were included, the share was 3.9 percent. This compares to 4.2 percent in 1989-90. *Second*, the share of total budgetary resources devoted to education in India is low compared to that in many other developing countries. While the share increased from 11.8 percent in 1986-87 to 12.8 percent in 1992-93, it is still below the average of 17.5 percent for all low income countries (omitting India and China). This situation reflects partly the breadth of government involvement in the Indian economy and the considerable budgetary subsidies in areas such as food, fertilizers and electricity.

There are other concerns about primary education. Both the center and the states need to increase significantly their allocations to the sector if universal primary education is to be achieved by the end of the Ninth Plan (1997-2002). As explained in Chapters 1 and 2 of this report, current fiscal trends indicate that this will be a major challenge unless the financial performance of the public sector improves substantially. Another concern is that the composition of public expenditures within primary education has been badly skewed. About 97.1 and 95.9 percent of total public expenditures on lower and upper primary education respectively were being spent on salaries. Combined expenditures on libraries, consumables, equipment and furniture were just 0.2 percent of the total. One caveat is that expenditures on primary education are incurred also by departments other than education. In most states scheduled caste, scheduled tribe and other backward caste children qualify for incentive programs such as free textbooks and school clothing. In some states attendance allowances are paid to girls. The costs of these programs are substantially above direct non-salary education expenditures. Analysis of their cost-effectiveness has to be undertaken.

Spending by state education departments also varies substantially, suggesting that a number of states may be spending much less on primary education than the already low average levels for the nation as a whole. For instance, per capita state spending on primary education has ranged from Rs 96, Rs 110 and Rs 113 in Uttar Pradesh, Bihar and Madhya Pradesh respectively, to Rs 168 in Karnataka and Rs 184 in Kerala. Likewise, as a share of state domestic product,

educational expenditure (and implicitly primary education spending) ranges between 3.1 and 7.2 percent across the fourteen major states. Some of the poorer states spend more per capita than some of the richer ones. Among the former are states such as Assam which are highly dependent on Central Government grants. In states like Tamil Nadu and Kerala, much more is spent on education but this occurs in the context of large revenue deficits which are financed through the accumulation of state debts. Neither of these situations is sustainable. Given the possibility that discretionary central transfers to states will decline because of tight central budgetary resources, those states which have neglected the sector in the past will now find it increasingly difficult to allocate additional resources. That is, unless there are significant changes to either their ability to generate additional own-revenues or to alter the structure of their overall expenditures.

A number of measures have been taken by the Central Government to make available additional funding in the short and medium term in an effort to increase state governments' expenditures. Central funding for new education programs at the state level now constitute half of all Central Government expenditure on education compared to a quarter in 1986. Currently, the most important new spending program supported by the Central Government is the DPEP which was initiated in mid 1994. Apart from a 15 percent requirement from the states involved, the program is planned to be externally funded through grants and loans. IDA, EEC and UKODA funding for the first phase of the program, over seven years, is pledged at around \$550 million. The 1994-95 allocation for the centrally sponsored Operation Blackboard, teacher training and non-formal schemes for elementary education is about \$135 million. The DPEP represents, roughly, a 55 percent hike. However, over time, these investments will require additional state recurrent funding.

Overall, the recent attempts to raise expenditures in elementary education by the Central Government through shifting its own priorities away from higher education and utilizing external sources of funding, has not so far been equally matched by the states. Variations in efforts by the latter are very wide but across many there is no evidence of an upward trend. The launch of the DPEP is a first step in reversing this situation.

SUSTAINING PRIMARY EDUCATION REFORMS - A THREE-FOLD STRATEGY

Achieving the objectives and sustaining the anticipated benefits of the primary education reform program during a period of changing center/state fiscal relationships and tight resources will be very difficult. However, efforts could be directed at: (a) selecting the most cost-effective strategies; (b) substantially increasing state financing; and (c) maintaining an effective and efficient Central Government role over the medium term.

Selective Interventions

Select Cost-Effective Interventions. High dropout rates and low levels of learning achievement make India's present primary education system highly wasteful, not only of public resources, but also of children's lives. National policy clearly recognizes that building more schools--without giving sustained and systematic attention to the factors that lead to good quality teaching and acceptable levels of learning--would simply lead to a larger inefficient system. At the

Box 4.4: Specific Interventions Improve the Cost-Effectiveness of Schools in Assam

Improving cost-effectiveness of schooling requires knowing which inputs are effective, how effective they are and what they cost. The baseline surveys of learning achievement can be used to determine the input mix that is most likely to boost achievement.

For example, in low-literacy districts in Assam, the average achievement of the top 25 percent of schools is 13.7 points above that of the bottom 25 percent of schools (26.35 and 12.66 points respectively). HLM analyses have identified five characteristics that separate "good" schools from "bad" schools: more instructional time, more hours on language teaching, more school facilities, more emphasis on instructional improvement, and more community contributions (see table below). Investments in these five, taken together, could turn "bad" schools to "good" schools, and could be high priority areas for improving schools in low-literacy districts in Assam.

Differences between Good and Bad Schools in Low-Literacy Districts in Assam on Five School Characteristics Significantly Related to Arithmetic Achievement (Z-Scores)

School Characteristic	Difference in means between top 25 percent and bottom 25 percent schools	Regression Coefficient in final HLM Model	Points gained by raising bottom schools to the level of top schools
Institutional time on language	0.45	1.22	0.55
School facilities	0.35	1.05	0.37
Instructional improvements	0.34	0.94	0.32
Total instructional time	0.45	0.68	0.31
Community contribution per pupil	0.26	0.88	0.23

Note: Variables are standardized with a mean of 0 and a standard deviation of 1. The top 25 percent schools (n=40) and bottom 25 percent schools (n=40) in Assam were identified in terms of arithmetic achievement. The analysis controlled for eight student background characteristics based on the Empirical Bayes (EB) residual associated with the intercept (school mean arithmetic achievement adjusted for student background variable). The EB residual is provided by the residual file associated with the unconditional model for arithmetic achievement. Other characteristics of schools, even those related to higher levels of learning, did not differentiate "good" schools from "bad" schools and hence would be lower priorities for investment.

same time, investment in the development of the quality of primary schooling will need to be as cost-effective as possible.

The DPEP research program is demonstrating that the factors associated with school quality vary substantially across India. The research gives India an unprecedented opportunity to identify, at the district level, the varying patterns of school factors that account for between 25 and 50 percent of variation in learning achievement. This base of empirical evidence provides the opportunity to select the interventions that are most likely to be effective in a given district, and avoiding investments in interventions that are less likely to make a difference (Box 4.4).

The next step toward greater cost-effectiveness in primary education could be taken by further expanding the research effort to identify the actual implementation costs of interventions and systematically evaluating their on-the-ground impact over time. The DPEP monitoring and evaluation framework has considerable promise in this regard, but to realize the potential benefits, present objectives for capacity building at national and state levels will need to remain a high priority.

State Financing

Increase State Financing For Primary Education. While the Central Government is important for overall policy direction in education and for encouraging national initiatives, the state governments provide almost 90 percent of the funding for the education system. The variations between states in past financial efforts to develop the primary education system are substantial. Consequently, the present ability of individual states to sustain past investments and support new initiatives varies as well. However, across all states, additional resources will be required both to maintain or increase levels of access and to improve learning quality, retention and achievement. The trends in revenue deficits across the major states (see Chapter 2) suggest that the required increases in budgetary resources for education in general and primary education in particular will entail significant changes in the conduct of fiscal policy. To enable the further development of the primary education system in the near future, state governments need to consider the following options:

- (a) develop a wider revenue base to improve resource mobilization;
- (b) implement, as a minimum, the share of plan expenditure for primary education as projected for the Eighth Plan period and prepare for increases in the shares under the Ninth Plan;
- (c) increase expenditure on education through a general restructuring of total expenditures. Currently, losses across all states in the state electricity corporations are equivalent to two and a half times the size of state plan expenditures on education;
- (d) develop policies for fee levels in government institutions and clarify the role of private institutions. Since the states share responsibilities for higher education with the Central Government and the University Grants Committee, it is important that they give adequate attention to these issues; and
- (e) develop financial arrangements for the envisaged third tier of district government which will ensure that: (i) adequate financing is devolved from state governments for their educational responsibilities and that there are incentives not to divert such funds; (ii) inequalities within states are addressed through policies which effect differential transfers between the state and individual lower level units of government; and (iii) local governments raise additional revenues from taxes which may be less available to state governments.

Central Government Leadership

The degree of involvement of Central Governments of federal countries in primary education varies significantly. In the United States, Canada and Australia, for instance, there is virtually none. In countries such as Brazil and Nigeria, however, the Central Government has been directly involved in influencing levels of funding through direct sectoral transfers or through

decrees setting minimum shares of state expenditure. The situation in India is currently between these positions.

The analyses in this chapter suggest that the Central Government will need to continue to play an important role in the medium term for three reasons: (a) the overall low level of educational resources and outcomes, and variations among states; (b) the importance at this stage of educational development of capacity building in states and districts to plan and manage education more effectively; and (c) the need for substantial research in order to select cost-effective strategies.

The Central Government plays a direct role in the provision of primary education through its responsibility for developing many aspects of policy and the funding of centrally sponsored plan schemes, and an indirect role through general financial transfers to states. Over the past two years, the Central Government has frequently reiterated its intention to ensure that public resources for education increase to 6 percent of GNP over the period of the Ninth Plan. As indicated earlier in this chapter and the rest of the document, adequate provision of such services will require significant improvements in both central and state finances. In addition, further consideration will need to be given to the most effective ways in which central transfers can trigger maximum additional state expenditures.

Implementing a gradually expanding DPEP, with careful attention given to cost-effectiveness, would appear to be an essential bridging mechanism during the medium term as states undergo fiscal reforms. In addition, the use of untied grants to states for educational development might be considered under terms which: (a) do not allow for substitution; (b) require a commitment from the state government either to increase its rate of growth of expenditures on education (if the state is a low spender such as Haryana), or to maintain education's share (if the state is a high spender such as Kerala) and generally to shift the pattern of its expenditures towards the social sectors.

Government may also wish to re-assess the issue of educational inequality across states more broadly by: (a) re-examining the criteria for the distribution of general transfers relying more on need but balanced by an increased emphasis on an equal fiscal effort across states; and (b) a further targeting of grants for the centrally sponsored schemes such that they do not penalize those states which have made strong efforts to raise revenues and allocate expenditures towards the social sectors. Conversely, such further targeting should not reward states with low tax efforts and/or expenditure patterns which discriminate against the social sectors. Options for the state and Central Governments with respect to primary education would, of course, have to be considered in the broader context of administrative decentralization and changing center-state fiscal relations. The high economic returns to investment in primary education, and its fundamental importance to economic growth with equity, suggest that deepening and sustaining the new reform efforts should have high priority in a changing India.

Recognizing the necessity of building on the progress made and facing the challenges ahead in the sector, the Chief Ministers of India's states, at their conference in February 1994, re-affirmed that:

- the highest priority would be given to primary and adult education;
- major efforts would be made to mobilize resources for education;
- optimal utilization of resources would be ensured;
- outlays for education would be increased to 6 percent of GNP;
- special attention would be focused on seven high population, low-literacy states which account for more than 70 percent of India's illiterate people; and
- a spirit of decentralization and community participation would become the basis for education development.

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National Accounts Summary
(Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
GDPfc	1224.27	2337.99	2600.30	2948.51	3527.06	4086.62	4777.97	5520.30	6276.34	7071.45
Agriculture	466.49	772.24	824.13	923.79	1140.73	1270.51	1480.01	1728.99	1933.32	2143.82
Industry	317.15	658.14	737.46	838.29	1000.73	1196.93	1400.25	1548.57	1768.01	1990.96
Mining	18.87	61.98	67.96	70.85	92.08	103.08	117.85	128.75	145.14	169.68
Manufacturing	216.44	417.75	461.66	528.65	628.63	770.76	891.60	968.81	1113.09	1222.62
Construction	61.14	129.47	152.17	176.11	206.77	235.86	286.16	323.97	358.33	398.47
Electricity	20.70	48.94	55.67	62.68	73.25	87.23	104.64	127.04	151.45	200.19
Services	440.63	907.61	1038.71	1186.43	1385.60	1619.18	1897.71	2242.74	2575.01	2936.67
Indirect Taxes	135.86	284.44	329.19	383.50	430.76	481.59	577.20	640.31	751.95	792.10
GDPmp	1360.13	2622.43	2929.49	3332.01	3957.82	4568.21	5355.17	6160.61	7028.29	7863.55
Resource Gap (M-X)	48.25	81.37	80.87	85.93	124.93	112.19	151.79	39.03	93.84	15.94
Imports (g+nfs)	137.17	237.67	255.25	296.23	388.59	465.46	565.11	610.00	776.72	923.40
Exports (g+nfs)	88.92	156.30	174.37	210.31	263.66	353.28	413.32	570.97	682.88	907.46
Total Expenditure	1408.38	2703.80	3010.36	3417.94	4082.75	4680.40	5506.96	6199.64	7122.13	7879.49
Consumption	1123.85	2069.38	2331.37	2669.12	3112.21	3572.49	4133.05	4791.00	5484.57	6203.96
General Gov't	130.84	291.74	346.25	408.43	473.31	542.03	617.79	694.59	785.86	910.52
Private	993.01	1777.64	1985.12	2260.69	2638.90	3030.46	3515.26	4096.41	4698.71	5293.44
Investment	284.53	634.42	678.99	748.82	970.54	1107.91	1373.91	1408.64	1637.56	1675.53
Fixed Investment	262.76	542.55	620.52	721.94	856.69	1027.75	1240.04	1367.76	1511.78	1643.79
Change in Stocks	21.77	91.87	58.47	26.88	113.85	80.16	133.87	40.88	125.78	31.74
Domestic Savings	236.28	553.05	598.12	662.89	845.61	995.72	1222.12	1369.61	1543.72	1659.59
Net Factor Income	2.81	-19.00	-26.16	-32.06	-38.12	-48.79	-67.34	-93.91	-99.11	-125.55
Current Transfers	22.57	27.01	29.75	34.99	38.42	38.01	37.14	92.75	80.29	120.00
National Savings	261.66	561.05	601.71	665.82	845.91	984.94	1191.91	1368.45	1524.90	1654.04
Foreign Savings	22.87	73.37	77.28	83.00	124.63	122.97	182.00	40.19	112.66	21.49
GDP per capita (Rs.)	2003.14	3473.42	3799.60	4228.44	4916.55	5557.43	6382.80	7196.97	8059.97	8855.35
Per capita private consumption	1462.46	2354.49	2574.74	2868.89	3278.13	3686.69	4189.82	4785.53	5388.43	5961.08
Average Exchange Rates:										
Rupees per US \$	7.893	12.237	12.787	12.968	14.477	16.663	17.949	24.519	28.954	31.373
Rupees per SDR	10.154	12.918	15.707	17.360	19.269	21.361	30.714	33.428	40.486	43.886
<u>Memo Items:</u>										
Priv. Consumption (CSO)	992.92	1777.58	1999.98	2240.61	2589.93	2900.72	3323.64	3847.99	4245.55	4795.86
Population (mill)	679	755	771	788	805	822	839	856	872	888

Source : CSO, National Accounts Statistics 1995.

Table A1.1 (b)
National Accounts Summary
(Rs. billion at 1980-81 prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
GDPfc	1224.27	1565.66	1632.71	1703.22	1884.61	2014.53	2122.76	2141.56	2234.38	2330.42
Agriculture	466.49	542.18	532.81	534.79	622.14	632.63	656.53	641.74	674.25	694.12
Industry	317.15	432.25	463.82	493.67	538.66	593.98	637.00	631.96	650.59	673.45
Mining	18.87	26.23	29.78	30.80	35.42	38.01	42.07	43.96	44.64	46.77
Manufacturing	216.44	303.20	324.45	348.18	378.65	422.85	448.63	434.54	448.05	464.21
Construction	61.14	71.83	75.37	77.77	83.79	88.07	98.33	100.95	101.43	102.65
Electricity	20.70	30.99	34.22	36.92	40.80	45.05	47.97	52.51	56.47	59.82
Services	440.63	591.23	636.08	674.76	723.81	787.92	829.23	867.86	909.54	962.85
Indirect Taxes	135.86	200.82	219.79	237.63	248.84	259.14	279.85	272.72	291.11	282.78
GDPmp	1360.13	1766.48	1852.50	1940.85	2133.45	2273.67	2402.61	2414.28	2525.49	2613.20
Terms of Trade Effect	0.00	16.36	24.62	14.83	23.63	22.90	8.94	7.61	10.44	15.05
Gross Domestic Income	1360.13	1782.84	1877.12	1955.68	2157.08	2296.57	2411.55	2421.89	2535.93	2628.25
Resource Gap (M-X)	48.25	61.97	62.10	55.88	71.77	53.47	61.45	12.45	27.19	4.34
Imports (g+nfs)	137.17	181.02	195.98	192.66	223.23	221.85	228.76	194.49	225.09	251.61
Capacity to import [Exports (g+nfs)]	88.92	119.05	133.88	136.78	151.47	168.38	167.31	182.05	197.90	247.27
[Exports (g+nfs)]	88.92	102.68	109.26	121.95	127.84	145.48	158.38	174.44	187.46	232.22
Total Expenditure	1408.38	1844.82	1939.22	2011.57	2228.84	2350.05	2472.99	2434.34	2563.12	2632.59
Consumption	1123.85	1446.35	1537.51	1593.71	1728.76	1839.60	1892.28	1925.42	2013.37	2104.37
General Gov't	130.84	189.24	208.49	226.60	238.68	252.15	260.59	259.25	267.69	288.32
Private	993.01	1257.11	1329.02	1367.11	1490.08	1587.45	1631.69	1666.17	1745.68	1816.05
Investment	284.53	398.47	401.71	417.86	500.08	510.45	580.71	508.92	549.75	528.22
Fixed Investment	262.76	329.74	359.97	399.55	428.00	465.10	511.17	490.63	498.25	516.96
Change in Stocks	21.77	68.73	41.74	18.31	72.08	45.35	69.54	18.29	51.50	11.26
Domestic Savings	236.28	336.50	339.61	361.98	428.31	456.98	519.26	496.47	522.56	523.88
Net Factor Income	2.81	-14.47	-20.08	-20.85	-21.90	-23.25	-27.26	-29.94	-28.72	-34.21
Current Transfers	22.57	20.57	22.85	22.76	22.07	18.12	15.03	29.57	23.27	32.70
National Savings	261.66	342.59	342.38	363.88	428.48	451.84	507.04	496.11	517.10	522.36
Foreign Savings	22.87	55.88	59.33	53.98	71.60	58.61	73.67	12.81	32.65	5.86
GDP per capita (Rs.)	2003.14	2339.71	2402.72	2463.01	2650.25	2766.02	2863.66	2820.42	2896.20	2942.79
Per capita private consumption	1462.46	1665.04	1723.76	1734.91	1851.03	1931.20	1944.81	1946.46	2001.93	2045.11
Rupee Deflators (1980-81=100):										
GDPmp	100.0	148.5	158.1	171.7	185.5	200.9	222.9	255.2	278.3	300.9
Imports(g+nfs)	100.0	131.3	130.2	153.8	174.1	209.8	247.0	313.6	345.1	367.0
Exports(g+nfs)	100.0	152.2	159.6	172.5	206.2	242.8	261.0	327.3	364.3	390.8
Total Expenditure	100.0	146.6	155.2	169.9	183.2	199.2	222.7	254.7	277.9	299.3
Govt. Consumption	100.0	154.2	166.1	180.2	198.3	215.0	237.1	267.9	293.6	315.8
Priv. Consumption	100.0	141.4	149.4	165.4	177.1	190.9	215.4	245.9	269.2	291.5
Fixed Investment	100.0	164.5	172.4	180.7	200.2	221.0	242.6	278.8	303.4	318.0
Total Investment	100.0	159.2	169.0	179.2	194.1	217.0	236.6	276.8	297.9	317.2

-- Not available.

Source: CSO, National Accounts Statistics 1995.

Table A1.2 (a)
Gross Domestic Product at Factor Cost - By Industry of Origin
(Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Agricultural Sector	466.49	772.24	824.13	923.79	1140.73	1270.51	1480.01	1728.99	1933.32	2143.82
Agriculture	424.66	699.64	744.05	835.15	1041.03	1154.47	1351.62	1594.27	1782.28	1977.29
Forestry & Logging	32.62	52.86	57.58	61.78	68.28	78.23	82.81	83.90	86.69	89.65
Fishing	9.21	19.74	22.50	26.86	31.42	37.81	45.58	50.82	64.35	76.88
Industry Sector	317.15	658.14	737.46	838.29	1000.73	1196.93	1400.25	1548.57	1768.01	1990.96
Mining & Quarrying	18.87	61.98	67.96	70.85	92.08	103.08	117.85	128.75	145.14	169.68
Manufacturing	216.44	417.75	461.66	528.65	628.63	770.76	891.60	968.81	1113.09	1222.62
Registered	122.81	258.06	282.54	322.07	390.50	483.69	555.53	611.04	692.64	759.80
Unregistered	93.63	159.69	179.12	206.58	238.13	287.07	336.07	357.77	420.45	462.82
Electricity, Gas & Water	20.70	48.94	55.67	62.68	73.25	87.23	104.64	127.04	151.45	200.19
Construction	61.14	129.47	152.17	176.11	206.77	235.86	286.16	323.97	358.33	398.47
Services Sector	440.63	907.61	1038.71	1186.43	1385.60	1619.18	1897.71	2242.74	2575.01	2936.67
Transport, Storage & Com.	57.24	140.98	165.37	199.38	238.72	277.31	339.13	410.64	491.45	575.44
Railways	11.24	31.36	37.65	43.56	47.51	55.75	64.33	73.42	84.46	102.06
Other Transport	36.80	91.00	105.10	124.68	152.29	177.85	223.11	275.81	331.17	375.42
Storage	1.22	2.60	2.80	3.17	3.34	3.88	4.45	4.78	4.98	5.27
Communication	7.98	16.02	19.82	27.97	35.58	39.83	47.24	56.63	70.84	92.69
Trade, Hotels etc.	147.13	310.50	345.51	384.33	452.22	529.10	618.66	705.33	814.79	919.78
Banking & Insurance	34.08	82.65	96.64	111.43	134.13	171.31	210.96	279.93	305.66	364.91
Real Estate etc.	73.83	116.17	126.45	136.13	148.43	164.46	178.06	195.41	215.84	233.33
Public Admin & Defence	57.94	125.11	149.33	179.48	208.58	241.33	271.09	314.41	362.07	406.02
Other Services	70.41	132.20	155.41	175.68	203.52	235.67	279.81	337.02	385.20	437.19
GDP at Factor Cost	1224.27	2337.99	2600.30	2948.51	3527.06	4086.62	4777.97	5520.30	6276.34	7071.45

Source: CSO, National Accounts Statistics 1995.

Table A1.2 (b)
Gross Domestic Product at Factor Cost - By Industry of Origin
(Rs. billion at 1980-81 prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Agricultural Sector	466.49	542.18	532.81	534.79	622.14	632.63	656.53	641.74	674.25	694.12
Agriculture	424.66	498.55	489.95	492.58	579.40	585.68	609.91	594.54	625.89	644.56
Forestry & Logging	32.62	31.81	30.90	29.86	29.40	31.95	31.05	30.83	30.95	31.09
Fishing	9.21	11.82	11.96	12.35	13.34	15.00	15.57	16.37	17.41	18.47
Industry Sector	317.15	432.25	463.82	493.67	538.66	593.98	637.00	631.96	650.59	673.45
Mining & Quarrying	18.87	26.23	29.78	30.80	35.42	38.01	42.07	43.96	44.64	46.77
Manufacturing	216.44	303.20	324.45	348.18	378.65	422.85	448.63	434.54	448.05	464.21
Registered	122.81	184.53	195.21	209.02	231.26	263.36	276.57	271.53	277.81	286.81
Unregistered	93.63	118.67	129.24	139.16	147.39	159.49	172.06	163.01	170.24	177.40
Electricity, Gas & Water	20.70	30.99	34.22	36.92	40.80	45.05	47.97	52.51	56.47	59.82
Construction	61.14	71.83	75.37	77.77	83.79	88.07	98.33	100.95	101.43	102.65
Services Sector	440.63	591.23	636.08	674.76	723.81	787.92	829.23	867.86	909.54	962.85
Transport, Storage & Com.	57.24	79.51	84.83	92.27	98.04	106.63	111.64	118.04	124.53	132.02
Railways	11.24	14.04	15.14	15.76	15.60	16.23	16.77	17.78	17.58	17.46
Other Transport	36.80	53.09	56.51	62.61	67.92	75.01	78.53	82.93	87.95	93.70
Storage	1.22	1.63	1.70	1.69	1.64	1.70	1.77	1.76	1.75	1.72
Communication	7.98	10.75	11.48	12.21	12.88	13.69	14.57	15.57	17.25	19.14
Trade, Hotels etc.	147.13	196.49	208.52	218.01	233.85	252.31	265.79	267.61	284.97	297.67
Banking & Insurance	34.08	58.28	66.92	73.99	86.23	102.69	111.69	129.22	132.83	149.93
Real Estate etc.	73.83	88.80	92.24	94.72	97.93	101.34	105.55	108.84	112.40	116.16
Public Admin & Defence	57.94	80.16	88.07	97.04	103.42	112.14	113.28	115.70	121.56	126.88
Other Services	70.41	87.99	95.50	98.73	104.34	112.81	121.28	128.45	133.25	140.19
GDP at Factor Cost	1224.27	1565.66	1632.71	1703.22	1884.61	2014.53	2122.76	2141.56	2234.38	2330.42

Source: CSO, National Accounts Statistics 1995.

Table A1.2 (c)
Implicit Price Deflators for GDP at Factor Cost
(1980-81=100)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Agricultural Sector	100.00	142.43	154.68	172.74	183.36	200.83	225.43	269.42	286.74	308.85
Agriculture	100.00	140.33	151.86	169.55	179.67	197.12	221.61	268.15	284.76	306.77
Forestry & Logging	100.00	166.17	186.34	206.90	232.24	244.85	266.70	272.14	280.10	288.36
Fishing	100.00	167.01	188.13	217.49	235.53	252.07	292.74	310.45	369.62	416.24
Industry Sector	100.00	152.26	159.00	169.81	185.78	201.51	219.82	245.04	271.75	295.64
Mining & Quarrying	100.00	236.29	228.21	230.03	259.97	271.19	280.13	292.88	325.13	362.80
Manufacturing	100.00	137.78	142.29	151.83	166.02	182.28	198.74	222.95	248.43	263.38
Registered	100.00	139.85	144.74	154.09	168.86	183.66	200.86	225.04	249.32	264.91
Unregistered	100.00	134.57	138.59	148.45	161.56	179.99	195.32	219.48	246.97	260.89
Electricity, Gas & Water	100.00	157.92	162.68	169.77	179.53	193.63	218.14	241.93	268.20	334.65
Construction	100.00	180.25	201.90	226.45	246.77	267.81	291.02	320.92	353.28	388.18
Services Sector	100.00	153.51	163.30	175.83	191.43	205.50	228.85	258.42	283.11	305.00
Transport, Storage & Com.	100.00	177.31	194.94	216.08	243.49	260.07	303.77	347.88	394.64	435.87
Railways	100.00	223.36	248.68	276.40	304.55	343.50	383.60	412.94	480.43	584.54
Other Transport	100.00	171.41	185.98	199.14	224.22	237.10	284.11	332.58	376.54	400.66
Storage	100.00	159.51	164.71	187.57	203.66	228.24	251.41	271.59	284.57	306.40
Communication	100.00	149.02	172.65	229.07	276.24	290.94	324.23	363.71	410.67	484.27
Trade, Hotels etc.	100.00	158.02	165.70	176.29	193.38	209.70	232.76	263.57	285.92	308.99
Banking & Insurance	100.00	141.82	144.41	150.60	155.55	166.82	188.88	216.63	230.11	243.39
Real Estate etc.	100.00	130.82	137.09	143.72	151.57	162.29	168.70	179.54	192.03	200.87
Public Admin & Defence	100.00	156.08	169.56	184.95	201.68	215.20	239.31	271.75	297.85	320.00
Other Services	100.00	150.24	162.73	177.94	195.05	208.91	230.71	262.37	289.08	311.86
GDP at Factor Cost	100.00	149.33	159.26	173.11	187.15	202.86	225.08	257.77	280.90	303.44

Source: Derived from Tables 1.2(a) and 1.2(b).

Table A1.3
Gross Savings and Investment
(Rs. billion)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
(At current prices)										
GROSS NATIONAL SAVINGS	261.66	561.05	601.71	665.82	845.91	984.94	1191.91	1368.45	1524.90	1654.04
Households	192.28	423.30	469.57	535.69	677.59	792.71	993.12	1046.20	1207.93	1323.07
Private corporate sector	22.84	53.18	52.12	57.90	87.31	118.00	144.43	194.90	208.04	311.53
Public sector	46.54	84.57	80.02	72.23	81.01	74.23	54.36	127.35	108.93	19.44
Foreign Savings	22.87	73.37	77.28	83.00	124.63	122.97	182.00	40.19	112.66	21.49
GROSS DOMESTIC INVESTMENT	284.53	634.42	678.99	748.82	970.54	1107.91	1373.91	1408.64	1637.56	1675.53
Change in stocks	21.77	91.87	58.47	26.88	113.85	80.16	133.87	40.88	125.78	31.74
GROSS FIXED CAPITAL FORMATION	262.76	542.55	620.52	721.94	856.69	1027.75	1240.04	1367.76	1511.78	1643.79
By Type of Asset:										
Construction	136.49	274.53	305.73	347.87	414.45	478.92	583.63	672.05	734.03	793.73
Machinery & Equipment	126.27	268.02	314.79	374.07	442.24	548.83	656.41	695.71	777.75	850.06
By Sector:										
Public sector	116.93	275.01	332.54	345.71	398.66	438.62	501.76	587.14	596.69	660.04
Private sector	145.83	267.54	287.98	376.23	458.03	589.13	738.28	780.62	915.09	983.75
GDPmp at current prices	1360.13	2622.43	2929.49	3332.01	3957.82	4568.21	5355.17	6160.61	7028.29	7863.55
(At 1980-81 prices)										
GROSS DOMESTIC INVESTMENT	284.53	398.47	401.71	417.86	500.08	510.45	580.71	508.92	549.75	528.22
Change in Stocks	21.77	68.73	41.74	18.31	72.08	45.35	69.54	18.29	51.50	11.26
GROSS FIXED CAPITAL FORMATION	262.76	329.74	359.97	399.55	428.00	465.10	511.17	490.63	498.25	516.96
By Type of Asset:										
Construction	136.49	139.60	145.90	150.45	164.23	170.69	187.58	192.10	192.91	191.17
Machinery & Equipment	126.27	190.14	214.07	249.10	263.77	294.41	323.59	298.53	305.34	325.79
By Sector:										
Public sector	116.93	170.80	192.31	186.60	195.39	196.51	206.01	210.03	193.50	204.40
Private sector	145.83	158.94	167.66	212.95	232.61	268.59	305.16	280.60	304.75	312.56

Source: CSO, National Accounts Statistics 1995.

Table A1.4
 Disposable Income and Its Uses
 (Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
GDPmp	1360.1	2622.4	2929.5	3332.0	3957.8	4568.2	5355.2	6160.6	7028.3	7863.6
Net Factor Income from abroad	2.8	-19.0	-26.2	-32.1	-38.1	-48.8	-67.3	-93.9	-99.1	-125.6
Other current transfers	22.6	27.0	29.8	35.0	38.4	38.0	37.1	92.8	80.3	120.0
Disposable income	1385.5	2630.4	2933.1	3334.9	3958.1	4557.4	5325.0	6159.5	7009.5	7858.0
Private disposable income	1208.1	2254.1	2506.8	2854.3	3403.8	3941.2	4652.8	5337.5	6114.7	6928.0
Public disposable income	177.4	376.3	426.3	480.7	554.3	616.3	672.2	821.9	894.8	930.0
Gross National Savings	261.7	561.1	601.7	665.8	845.9	984.9	1191.9	1368.5	1524.9	1654.0
Private savings	215.1	476.5	521.7	593.6	764.9	910.7	1137.6	1241.1	1416.0	1634.6
Public savings	46.5	84.6	80.0	72.2	81.0	74.2	54.4	127.4	108.9	19.4
Final Consumption	1123.8	2069.4	2331.4	2669.1	3112.2	3572.5	4133.1	4791.0	5484.6	6204.0
Private Consumption	993.0	1777.6	1985.1	2260.7	2638.9	3030.5	3515.3	4096.4	4698.7	5293.4
Public Consumption	130.8	291.7	346.3	408.4	473.3	542.0	617.8	694.6	785.9	910.5

Source : CSO, National Accounts Statistics 1995; World Bank Staff estimates.

Table A1.5 (a)
Gross Domestic Investment by Industry of Origin
(Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Agricultural Sector	48.6	76.1	77.8	91.8	99.8	111.1	128.5	142.3	159.7	173.7
Agriculture	46.4	70.4	70.8	83.9	90.6	100.3	115.9	128.4	144.6	156.4
Forestry & Logging	1.0	2.1	2.4	2.6	3.0	3.8	4.6	4.5	4.5	4.8
Fishing	1.3	3.7	4.5	5.4	6.3	7.1	8.1	9.4	10.5	12.5
Industry Sector	96.7	280.6	308.7	329.2	408.1	449.8	538.2	548.2	606.6	646.1
Mining & Quarrying	9.6	41.8	45.4	42.2	47.9	63.0	66.3	63.4	65.8	67.0
Manufacturing	48.4	153.6	156.2	170.9	235.9	244.4	305.8	277.1	332.3	345.9
Registered	29.2	110.4	107.8	118.7	175.4	167.2	218.7	194.5	229.2	235.8
Unregistered	19.2	43.2	48.4	52.2	60.5	77.2	87.1	82.6	103.1	110.1
Electricity, Gas & Water	31.7	72.4	96.3	103.8	113.0	123.4	144.1	189.0	186.8	210.9
Construction	7.0	12.8	10.8	12.4	11.3	18.9	22.1	18.8	21.7	22.4
Services Sector	112.6	246.8	309.6	274.1	384.2	416.1	538.7	575.9	701.5	698.1
Transport, Storage & Com.	29.1	64.1	79.8	80.6	106.4	128.2	143.3	160.5	197.5	220.7
Railways	8.1	16.9	23.1	21.5	26.4	26.4	30.8	33.2	49.2	52.1
Other Transport	17.5	37.4	45.3	44.0	57.9	73.6	83.3	94.4	97.6	107.3
Storage	0.2	0.6	0.8	0.8	0.8	0.9	0.7	0.7	0.7	0.8
Communication	3.2	9.2	10.7	14.3	21.4	27.3	28.6	32.1	50.0	60.6
Trade, Hotels etc.	23.3	46.0	68.4	17.1	72.1	66.2	115.5	90.1	150.2	85.9
Banking & Insurance	1.7	5.5	8.7	14.8	21.1	23.6	30.9	48.7	43.5	39.7
Real Estate etc.	31.4	68.8	80.9	90.1	101.6	118.1	147.4	168.2	185.1	208.5
Public Admin & Defence	21.6	48.3	55.5	55.1	62.2	55.8	75.1	82.3	95.8	108.5
Other Services	5.5	14.1	16.3	16.5	20.8	24.2	26.5	26.0	29.5	34.8
Gross Domestic Investment	257.9	603.5	696.1	695.2	892.1	976.9	1205.4	1266.3	1467.8	1517.9
Memo Items										
Gross Domestic Investment ^a	308.8	581.7	611.6	764.6	975.8	1142.5	1449.9	1454.1	1544.5	1606.4
Errors & Omissions	24.3	-52.8	-67.4	15.7	5.3	34.6	76.0	45.4	-93.1	-69.1
Gross Domestic Investment (unadjusted) ^b	284.5	634.4	679.0	748.8	970.5	1107.9	1373.9	1408.6	1637.6	1675.5

a. Refers to CSO's savings-based estimate of investment.

b. Refers to Gross Capital Formation unadjusted for errors and omissions, which is CSO's direct estimate of investment based on physical flows.

Source: CSO, National Accounts Statistics 1995.

Table A1.5 (b)
Gross Domestic Investment by Industry of Origin
(Rs. billion at 1980-81 prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Agricultural Sector	48.6	46.4	43.6	47.8	47.3	47.9	50.7	49.8	51.2	52.3
Agriculture	46.4	43.2	40.2	44.1	43.5	43.5	45.9	45.0	46.2	47.0
Forestry & Logging	1.0	1.2	1.3	1.2	1.3	1.5	1.7	1.4	1.3	1.2
Fishing	1.3	2.0	2.2	2.4	2.6	2.9	3.1	3.4	3.8	4.1
Industry Sector	96.7	171.1	177.6	192.2	219.5	217.8	239.6	207.9	212.7	216.1
Mining & Quarrying	9.6	26.5	27.7	24.3	25.5	29.9	28.5	23.8	22.2	21.2
Manufacturing	48.4	90.8	85.9	101.6	130.7	120.2	139.2	107.1	119.1	117.6
Registered	29.2	66.9	60.5	74.4	101.7	85.8	103.7	78.8	85.5	84.2
Unregistered	19.2	23.9	25.4	27.2	29.1	34.4	35.6	28.3	33.6	33.4
Electricity, Gas & Water	31.7	45.4	57.1	58.6	56.6	57.7	61.5	69.3	63.3	69.1
Construction	7.0	8.4	6.9	7.7	6.7	10.0	10.4	7.7	8.1	8.3
Services Sector	112.6	165.1	160.4	136.8	184.8	180.3	220.2	202.9	232.5	211.1
Transport, Storage & Com.	29.1	39.7	48.5	45.7	53.8	58.8	60.4	59.5	67.8	73.4
Railways	8.1	9.1	12.4	10.0	11.1	9.8	10.6	10.0	14.4	14.5
Other Transport	17.5	24.6	29.6	27.4	31.9	36.5	37.9	38.1	37.1	39.7
Storage	0.2	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.2
Communication	3.2	5.7	6.1	7.9	10.5	12.1	11.7	11.2	16.1	18.9
Trade, Hotels etc.	23.3	52.0	32.5	10.0	42.9	34.5	57.6	38.4	59.4	30.2
Banking & Insurance	1.7	3.4	5.2	8.8	11.3	11.4	13.7	19.1	15.6	13.6
Real Estate etc.	31.4	34.4	35.9	36.6	38.6	42.3	49.7	50.0	51.6	53.3
Public Admin & Defence	21.6	28.1	29.9	27.4	28.7	23.1	28.4	27.1	29.1	30.6
Other Services	5.5	7.5	8.4	8.4	9.6	10.2	10.3	8.8	9.1	10.1
Gross Domestic Investment	257.9	382.6	381.6	376.8	451.6	446.0	510.5	460.5	496.5	479.4
Memo Items										
Gross Domestic Investment ^a	308.8	366.4	362.6	426.6	502.7	526.1	612.0	525.2	519.1	506.5
Errors & Omissions	24.3	-32.1	-39.1	8.7	2.6	15.7	31.3	16.3	-30.7	-21.7
Gross Domestic Investment (unadjusted) ^b	284.5	398.5	401.7	417.9	500.1	510.5	580.7	508.9	549.8	528.2

a. Refers to CSO's savings-based estimate of investment.

b. Refers to Gross Capital Formation unadjusted for errors and omissions, which is CSO's direct estimate of investment based on physical flows.

Source : CSO, National Accounts Statistics 1995.

Table A1.5 (c)
Investment Deflators by Industry of Use
(1980-81=100)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Agricultural Sector	100.0	164.0	178.3	192.2	210.9	231.9	253.3	285.7	311.8	332.2
Agriculture	100.0	162.8	176.3	190.1	208.5	230.3	252.4	285.5	313.2	333.2
Forestry & Logging	100.0	173.1	194.4	206.5	234.1	252.3	272.5	318.6	357.5	389.3
Fishing	100.0	185.0	205.9	223.3	239.8	246.0	256.4	274.9	279.0	304.4
Industry Sector	100.0	164.0	173.8	171.3	186.0	206.5	224.7	263.7	285.2	299.0
Mining & Quarrying	100.0	157.5	163.7	173.3	188.0	210.7	232.9	266.2	296.4	316.6
Manufacturing	100.0	169.2	181.8	168.2	180.5	203.3	219.6	258.9	279.0	294.2
Registered	100.0	165.0	178.1	159.5	172.6	194.8	211.0	246.8	268.2	280.1
Unregistered	100.0	181.0	190.6	192.1	207.9	224.4	244.9	292.4	306.7	329.7
Electricity, Gas & Water	100.0	159.4	168.7	177.3	199.7	213.9	234.2	272.6	295.0	305.1
Construction	100.0	152.8	156.7	160.8	169.5	190.2	212.8	244.0	267.6	270.7
Services Sector	100.0	149.5	193.1	200.4	207.8	230.8	244.7	283.9	301.7	330.8
Transport, Storage & Com.	100.0	161.4	164.8	176.3	197.8	218.2	237.2	269.5	291.4	300.7
Railways	100.0	184.4	186.1	214.3	237.4	269.1	291.8	332.7	342.7	359.2
Other Transport	100.0	152.2	153.0	160.3	181.4	201.7	219.8	247.7	263.1	269.9
Storage	100.0	193.5	208.3	229.4	253.3	251.4	265.4	296.0	313.6	357.1
Communication	100.0	162.7	176.1	181.2	204.2	225.7	243.9	287.1	310.7	320.0
Trade, Hotels etc.	100.0	88.4	210.5	171.1	168.2	191.9	200.6	234.8	253.0	284.9
Banking & Insurance	100.0	161.9	166.9	168.3	186.2	206.7	225.1	255.7	279.3	292.8
Real Estate etc.	100.0	200.2	225.3	246.3	263.3	279.4	296.2	336.4	358.9	391.2
Public Admin & Defence	100.0	171.7	185.7	200.7	216.9	241.3	264.6	303.5	328.9	355.2
Other Services	100.0	189.4	193.6	198.1	216.9	236.9	257.0	297.0	323.2	343.9
Gross Domestic Investment	100.0	157.7	182.4	184.5	197.5	219.1	236.1	275.0	295.7	316.6
Memo Items										
Gross Domestic Investment ^a	100.0	158.7	168.7	179.2	194.1	217.2	236.9	276.9	297.5	317.2
Gross Domestic Investment (unadjusted) ^b	100.0	159.2	169.0	179.2	194.1	217.0	236.6	276.8	297.9	317.2

a. Refers to CSO's savings-based estimate of investment.

b. Refers to Gross Capital Formation unadjusted for errors and omissions, which is CSO's direct estimate of investment based on physical flows.

Source: CSO, National Accounts Statistics 1995.

Table A1.6 (a)
Gross Domestic Investment in Public Sector
(Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Agricultural Sector	18.92	28.42	29.36	33.03	34.41	33.54	36.26	36.54	41.92
Agriculture	17.96	26.42	27.01	30.57	31.61	29.89	31.91	32.28	37.62
Forestry & Logging	0.95	1.97	2.30	2.42	2.78	3.62	4.33	4.23	4.28
Fishing	0.01	0.03	0.05	0.04	0.02	0.03	0.02	0.03	0.02
Industry Sector	53.27	177.32	196.02	192.84	204.33	235.48	277.65	324.39	305.74
Mining & Quarrying	9.14	40.41	42.87	40.96	47.60	62.46	65.04	61.92	63.76
Manufacturing	11.70	64.88	61.38	50.73	51.72	54.66	71.45	84.68	83.67
Electricity, Gas & Water	29.51	69.12	90.87	98.81	105.62	117.55	137.69	174.11	154.53
Construction	2.92	2.91	0.90	2.34	-0.61	0.81	3.47	3.68	3.78
Services Sector	45.48	103.00	128.77	104.72	154.90	186.64	207.59	204.11	275.9
Transport, Storage & Com.	18.19	34.96	51.41	46.40	61.50	75.92	79.58	92.37	123.91
Railways	8.14	16.85	23.10	21.52	26.37	26.43	30.78	33.17	49.21
Other Transport	6.67	8.49	17.00	10.12	13.48	21.86	19.73	26.58	24.27
Storage	0.17	0.43	0.57	0.46	0.27	0.36	0.46	0.51	0.45
Communication	3.21	9.19	10.74	14.30	21.38	27.27	28.61	32.11	49.98
Trade, Hotels etc.	-0.30	3.55	1.17	-22.61	-2.99	17.48	14.55	-16.71	12.49
Banking & Insurance	1.10	3.20	4.98	9.49	14.82	16.99	17.98	23.52	18.18
Real Estate etc.	1.70	5.18	6.59	6.70	7.57	7.32	6.16	8.66	9.65
Public Admin & Defence	21.62	47.96	55.20	55.08	62.24	55.78	75.13	82.27	95.84
Other Services	3.17	8.15	9.42	9.66	11.76	13.15	14.19	14.00	15.83
Gross Domestic Investment	117.67	308.74	354.15	330.59	393.64	455.66	521.50	565.04	623.56

Source: CSO, National Accounts Statistics 1995.

Table A1.6 (b)
Gross Domestic Investment in Public Sector
(Rs. billion at 1980-81 prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Agricultural Sector	18.92	16.31	15.50	15.76	14.82	13.01	13.13	11.35	11.85
Agriculture	17.96	15.16	14.28	14.58	13.62	11.56	11.53	10.01	10.65
Forestry & Logging	0.95	1.13	1.18	1.16	1.19	1.43	1.59	1.33	1.19
Fishing	0.01	0.02	0.04	0.02	0.01	0.02	0.01	0.01	0.01
Industry Sector	53.27	108.31	111.07	110.85	105.93	111.40	120.36	121.06	105.09
Mining & Quarrying	9.14	25.64	26.17	23.59	24.76	29.63	27.85	23.21	21.4
Manufacturing	11.70	38.14	30.89	30.36	28.60	26.49	32.49	33.13	30.91
Electricity, Gas & Water	29.51	43.15	53.67	55.59	52.65	54.81	58.56	63.38	51.51
Construction	2.92	1.38	0.34	1.31	-0.08	0.47	1.46	1.34	1.27
Services Sector	45.48	57.54	69.27	50.73	72.20	81.98	82.39	67.92	87.55
Transport, Storage & Com.	18.19	20.19	29.79	24.34	28.90	32.74	31.14	31.72	39.42
Railways	8.14	9.14	12.41	10.04	11.11	9.82	10.55	9.98	14.36
Other Transport	6.67	5.18	11.00	6.21	7.22	10.69	8.68	10.37	8.82
Storage	0.17	0.22	0.28	0.20	0.10	0.15	0.18	0.18	0.15
Communication	3.21	5.65	6.10	7.89	10.47	12.08	11.73	11.19	16.09
Trade, Hotels etc.	-0.30	0.11	-1.39	-14.53	-1.94	9.56	7.19	-7.47	4.85
Banking & Insurance	1.10	1.94	3.02	5.71	8.05	8.26	8.03	9.27	6.59
Real Estate etc.	1.70	2.56	2.99	2.82	2.98	2.69	2.12	2.64	2.71
Public Admin & Defence	21.62	28.14	29.86	27.44	28.70	23.12	28.39	27.11	29.14
Other Services	3.17	4.60	5.00	4.95	5.51	5.61	5.52	4.65	4.84
Gross Domestic Investment	117.67	182.16	195.84	177.34	192.95	206.39	215.88	200.33	204.49

Source: CSO, National Accounts Statistics 1995.

Table A2.1
Balance of Payments^a
(US\$ million at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Exports of Goods and Non-Factor Services	11265	12773	13637	16217	18213	21201	23028	23287	23585	28925
Merchandise (fob)	8316	9463	10420	12646	14257	16955	18477	18266	18869	22700
Non-factor Services	2949	3310	3217	3571	3956	4246	4551	5021	4716	6225
Imports of Goods and Non-Factor Services	17378	19422	19962	22843	26843	27934	31485	24879	26826	29433
Merchandise (cif)	15862	17298	17740	19816	23618	24411	27914	21064	23237	23985
Non-factor Services	1516	2124	2222	3027	3225	3523	3571	3815	3589	5448
Trade Balance	-7546	-7835	-7320	-7170	-9361	-7456	-9437	-2798	-4368	-1285
Nonfactor Services Balance	1433	1186	995	544	731	723	980	1206	1127	777
Resource Balance	-6113	-6649	-6325	-6626	-8630	-6733	-8457	-1592	-3241	-508
Net Factor Income	356	-1553	-2046	-2472	-2633	-2928	-3752	-3830	-3423	-4002
Factor Service Receipts	1083	547	501	446	397	936	1221	1232	1142	855
Factor Service Payments ^b	727	2100	2547	2918	3030	3864	4973	5062	4565	4857
Net Current Transfers	2860	2207	2327	2698	2654	2281	2069	3783	2773	3825
Transfer Receipts	2874	2219	2339	2724	2670	2297	2083	3798	2784	3850
Transfer Payments	14	12	12	26	16	16	14	15	11	25
Current Account Balance	-2897	-5995	-6044	-6400	-8609	-7380	-10140	-1639	-3891	-685
Foreign Investment	8	160	208	181	287	350	165	158	587	4110
Direct Foreign Investment	8	160	208	181	287	350	165	150	341	620
Portfolio Investment	0	0	0	0	0	0	0	8	246	3490
Official Grant Aid	643	359	403	410	406	500	462	461	363	370
Net Medium & Long-Term Capital ^c	1345	2120	2490	3417	3846	3074	2821	5212	613	2954
Gross Disbursements	2439	5009	6605	7304	8123	7332	6754	8078	5553	7969
World Bank Staff estimates.	755	1310	2290	1895	1949	1963	2397	2576	2939	4075
Other LT Inflows (NRI)	339	1579	1825	1992	2328	2295	1536	290	2001	940
Capital Flows NEI	-798	2588	1837	1144	1520	1320	2357	-1871	65	848
Net Short-Term Capital	573	686	588	727	685	1143	1043	-1474	-730	-2714
Others ^d	-200	474	-102	-731	141	167	-1193	-1240	-878	-745
Capital flows n.e.i. ^e	-1171	1428	1351	1148	694	10	2507	843	1673	4307
Overall Balance	-1360	812	720	744	-222	158	-2799	2611	-262	8538
Net IMF Credit	1014	-264	-648	-1082	-1210	-1008	1028	773	1289	189
Change in Reserves (Excl. Gold) (- = increase)	346	-548	-72	338	1432	850	1771	-3384	-1027	-8727
Memorandum Items:										
End of Year Gross Reserves (Excl. Gold)	6858	6657	6729	6391	4959	4109	2338	5722	6749	15476
Reserves in Months of Imports	5.2	4.6	4.6	3.9	2.5	2.0	1.0	3.3	3.5	7.7
Current Account Deficit / GDP	1.7%	2.8%	2.6%	2.5%	3.1%	2.7%	3.4%	0.7%	1.6%	0.3%
Debt Service Ratio ^f	9.2%	22.7%	32.0%	29.4%	28.0%	27.6%	30.3%	28.2%	28.1%	26.6%

a. BOP based on revised treatment of non-custom imports as adopted by GOI from 1990-91 onwards.

b. Includes interest on military debt to FSU and returns on foreign investments.

c. Excluding non-resident deposits, shown below under Other LT Inflows (NRI).

d. Corresponds to bilateral balance or servicing of the Russia debt from 1990-91 onwards.

e. Residual item including reserve valuation changes, rupee trade imbalance, etc.

f. As proportion of gross current receipts.

Source: Government of India; Reserve Bank of India; Ministry of Commerce; Ministry of Finance, *Economic Survey*, various issues; World Bank Staff estimates.

Table A2.2 (a)
Merchandise Exports
(US\$ million at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Primary Exports	3399	3152	3279	3287	3254	3853	4354	4189	3940	4794
Fish	275	334	421	411	435	412	535	588	602	814
Rice	284	160	154	261	229	256	257	308	337	410
Cashews	177	184	256	243	191	221	249	276	259	334
Coffee	271	217	232	202	203	208	140	135	130	174
Tea	540	511	451	463	421	550	596	494	337	338
Spices	141	227	218	260	190	170	133	161	136	181
Iron Ore	384	473	428	427	465	557	584	585	381	438
Other Primary	1327	1046	1118	1020	1121	1478	1859	1641	1758	2105
Manufactured Exports	5106	5639	6457	8797	10693	12715	13781	13773	14603	17441
Chemicals	298	407	456	618	890	1288	1176	1591	1378	1813
Leather Manufactures	494	629	721	964	1051	1170	1448	1276	1278	1300
Textiles	1057	860	994	1407	1312	1598	2266	2164	2153	2536
Garments	697	872	1041	1403	1452	1936	2235	2211	2394	2586
Gems & Jewellery	783	1228	1622	2015	3033	3179	2923	2753	3072	3995
Engineering Goods	1048	779	886	1141	1558	1967	2157	2246	2458	3023
Petroleum Products	32	417	321	500	349	418	522	417	476	398
Other Manufactures ^a	697	447	416	750	1049	1159	1053	1115	1394	1791
TOTAL EXPORTS (Commerce) ^b	8506	8791	9736	12085	13948	16569	18136	17962	18542	22235
Statistical Discrepancy	-189	672	684	561	310	387	341	304	327	465
TOTAL EXPORTS (B.O.P.)	8316	9463	10420	12646	14257	16955	18477	18266	18869	22700

a. Including unclassified exports.

b. Net of crude petroleum exports.

Source : Ministry of Commerce (D.G.C.I.S); Reserve Bank of India; Ministry of Finance, Economic Survey, various issues; World Bank Staff estimates.

Table A2.2 (b)
Merchandise Exports
(US\$ million at 1980-81 prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Primary Exports	3399	3078	3184	3099	3220	3986	4499	4368	4530	5619
Fish	275	325	357	354	386	424	480	571	571	424
Rice	284	96	97	152	137	165	197	265	424	300
Cashews	177	204	236	229	202	266	305	288	344	404
Coffee	271	295	231	317	291	437	339	343	445	437
Tea	540	471	418	479	451	487	463	503	390	487
Spices	141	153	138	114	122	115	110	115	104	115
Iron Ore	384	497	468	461	541	578	530	490	344	578
Other Primary	1327	1037	1239	994	1090	1513	2075	1793	1909	2874
Manufactured Exports	5106	5875	6698	8414	9184	10418	11303	12678	14142	16997
Chemicals	298	377	463	542	847	1182	1585	2157	1333	1724
Leather Manufactures	494	781	770	899	958	962	980	957	1071	1151
Textiles	1057	669	757	1074	915	1123	1329	1873	2513	2267
Garments	697	837	917	1142	1137	1485	1641	1759	1823	1807
Gems & Jewellery	783	1021	1419	1602	2082	1909	1573	1646	2082	2640
Engineering Goods	1048	952	978	1391	1728	2221	2470	2514	3229	5018
Petroleum Products	32	535	645	986	694	784	917	980	1242	1336
Other Manufactures ^a	697	704	749	777	823	752	808	793	850	2390
TOTAL EXPORTS (Commerce) ^b	8506	8954	9883	11513	12403	14404	15802	17046	18673	22616
Statistical Discrepancy	-189	684	695	535	275	336	298	289	329	473
TOTAL EXPORTS (B.O.P.)	8316	9638	10577	12048	12679	14740	16100	17335	19001	23089

a. Including unclassified exports.

b. Net of crude petroleum exports.

Source: Ministry of Commerce (D.G.C.I.S); Reserve Bank of India; Ministry of Finance, Economic Survey, various issues; World Bank Staff estimates.

Table A2.2 (c)
Export Unit Value Indices
(US\$ terms: 1980-81 = 100)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Primary Exports	100.0	102.4	103.0	106.1	101.1	96.7	96.8	95.9	87.0	85.3
Fish	100.0	102.9	118.1	116.1	112.7	97.2	111.5	103.1	105.5	192.0
Rice	100.0	167.3	159.0	172.1	167.4	155.6	130.5	116.3	79.5	136.7
Cashews	100.0	90.2	108.6	106.3	94.5	82.9	81.7	95.8	75.2	82.7
Coffee	100.0	73.4	100.4	63.7	69.7	47.7	41.4	39.5	29.2	39.8
Tea	100.0	108.6	107.9	96.7	93.3	113.0	128.8	98.2	86.4	69.4
Spices	100.0	148.1	158.2	228.0	155.2	147.3	121.3	139.3	130.4	157.4
Iron Ore	100.0	95.1	91.4	92.7	85.9	96.4	110.2	119.4	110.8	75.8
Other Primary	100.0	100.8	90.3	102.6	102.9	97.7	89.6	91.5	92.1	73.2
Manufactured Exports	100.0	96.0	96.4	104.6	116.4	122.1	121.9	108.6	103.3	102.6
Chemicals	100.0	107.9	98.4	113.9	105.0	108.9	74.2	73.8	103.4	105.2
Leather Manufactures	100.0	80.6	93.6	107.2	109.8	121.7	147.9	133.4	119.3	112.9
Textiles	100.0	128.7	131.4	131.0	143.4	142.3	170.5	115.5	85.7	111.9
Garments	100.0	104.2	113.5	122.9	127.7	130.4	136.2	125.7	131.3	143.1
Gems & Jewellery	100.0	120.3	114.3	125.7	145.7	166.5	185.8	167.3	147.5	151.3
Engineering Goods	100.0	81.8	90.6	82.0	90.1	88.6	87.3	89.4	76.1	60.2
Petroleum Products	100.0	77.9	49.8	50.8	50.3	53.4	57.0	42.5	38.3	29.8
Other Manufactures ^a	100.0	63.5	55.6	96.4	127.4	154.0	130.3	140.5	164.1	74.9
TOTAL EXPORTS (Commerce) ^b	100.0	98.2	98.5	105.0	112.4	115.0	114.8	105.4	99.3	98.3
Statistical Discrepancy	100.0	98.2	98.5	105.0	112.4	115.0	114.8	105.4	99.3	98.3
TOTAL EXPORTS (B.O.P.)	100.0	98.2	98.5	105.0	112.4	115.0	114.8	105.4	99.3	98.3

a. Including unclassified exports.

b. Net of crude petroleum exports.

Source: Ministry of Commerce (D.G.C.I.S); Reserve Bank of India; Ministry of Finance, *Economic Survey*, various issues; World Bank Staff estimates.

Table A2.3 (a)
Merchandise Imports
(US\$ million at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Food	1348	1321	1068	1292	1203	714	690	424	702	550
Foodgrains	127	90	37	25	437	227	102	70	334	93
Edible Oils	865	600	479	709	503	127	182	101	58	53
Others	356	631	552	557	263	361	407	253	311	404
Other Consumer Goods	378	452	594	600	700	800	851	634	782	680
P.O.L.	6669	4054	2187	3148	2938	3766	6028	5364	6000	5453
Crude Petroleum ^a	4243	3013	1672	2395	1891	2455	3423	3194	3711	3406
Petroleum Products	2426	1041	515	753	1047	1311	2605	2170	2289	2047
Capital Goods ^b	2416	3503	5073	5064	4803	5304	5833	4233	3743	5312
Intermediate: PRIMARY	1277	2156	2474	2997	3800	4488	4653	3801	4553	4533
Fertilizer Raw Material	210	313	218	243	301	329	348	309	279	194
Gems	528	899	1170	1538	1984	2546	2082	1957	2442	2634
Other	539	944	1087	1217	1515	1613	2223	1534	1832	1705
Intermediate: MANUFACTURES	3781	4471	4316	4054	6053	6147	6018	5673	6297	6257
Fertilizer Manufactures	826	860	387	132	341	737	636	645	699	632
Iron & Steel	1080	1140	1134	982	1341	1383	1177	799	779	795
Non-Ferrous Metals	605	443	324	444	544	752	614	341	395	479
Others	1270	2028	2470	2496	3827	3275	3591	3888	4425	4351
TOTAL IMPORTS (Commerce) ^a	15869	15957	15712	17156	19497	21219	24073	20128	22078	22785
Statistical Discrepancy	-7	1341	2028	2660	4121	3192	3841	936	1159	1200
TOTAL IMPORTS ^a	15862	17298	17740	19816	23618	24411	27914	21064	23237	23985

a. Net of crude oil exports.

b. 1987-88 onwards Capital Goods includes Project Goods.

Source: Ministry of Commerce (D.G.C.I.S); Reserve Bank of India; Ministry of Finance, *Economic Survey*, various issues; World Bank Staff estimates.

Table A2.3 (b)
Merchandise Imports
(US\$ million at 1980-81 prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Food	1348	1454	1527	1710	1968	865	807	445	1014	612
Foodgrains	127	113	56	35	1021	310	126	77	662	165
Edible Oils	865	564	770	980	539	160	259	111	51	56
Others	356	777	701	695	409	395	422	256	302	391
Other Consumer Goods	378	471	567	513	555	643	647	472	558	483
P.O.L.	6669	5113	5065	5959	6748	7281	8284	9428	11415	11918
Crude Petroleum ^a	4243	3828	4053	4644	4665	5105	5422	6283	7660	7988
Petroleum Products	2426	1285	1012	1314	2083	2176	2862	3145	3755	3929
Capital Goods ^b	2416	3875	4703	4203	3702	4142	4311	2610	2594	3664
Intermediate: PRIMARY	1277	2461	3038	2419	2841	3363	3314	2646	3072	3075
Fertilizer Raw Material	210	140	197	161	178	157	174	151	147	121
Gems	528	977	1127	1262	1511	1965	1521	1400	1673	1796
Other	539	1344	1714	996	1151	1242	1619	1095	1251	1158
Intermediate: MANUFACTURES	3781	5468	4644	3529	4728	5057	4797	4335	4818	4926
Fertilizer Manufactures	826	1163	813	320	472	876	808	830	1117	989
Iron & Steel	1080	1319	1110	874	1275	1162	936	622	581	590
Non-Ferrous Metals	605	642	481	540	553	775	599	325	361	436
Others	1270	2344	2240	1795	2428	2244	2454	2557	2759	2911
TOTAL IMPORTS (Commerce) ^a	15869	18842	19543	18332	20542	21351	22160	19936	23471	24678
Statistical Discrepancy	-7	1583	2522	2842	4342	3212	3536	927	1232	1300
TOTAL IMPORTS ^a	15862	20426	22066	21175	24884	24563	25695	20863	24703	25977

a. Net of crude oil exports.

b. 1987-88 onwards Capital Goods includes Project Goods.

Source: Ministry of Commerce (D.G.C.I.S); Reserve Bank of India; Ministry of Finance, Economic Survey, various issues; World Bank Staff estimates.

Table A2.3 (c)
 Import Unit Value Indices
 (US\$ Terms: 1980-81 = 100)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Food	100.0	90.8	70.0	75.5	61.1	82.6	85.5	95.3	69.2	89.8
Foodgrains	100.0	79.6	66.1	72.0	42.8	73.1	80.6	91.4	50.4	56.4
Edible Oils	100.0	106.4	62.2	72.4	93.4	79.3	70.1	90.4	114.0	94.6
Others	100.0	81.1	78.8	80.2	64.5	91.4	96.4	98.6	102.9	103.3
Other Consumer Goods	100.0	95.9	104.8	117.1	126.1	124.5	131.5	134.3	140.2	140.8
P.O.L	100.0	79.3	43.2	52.8	43.5	51.7	72.8	56.9	52.6	45.8
Crude Petroleum	100.0	78.7	41.2	51.6	40.5	48.1	63.1	50.8	48.4	42.6
Petroleum Products	100.0	81.0	50.9	57.3	50.3	60.2	91.0	69.0	61.0	52.1
Capital Goods	100.0	90.4	107.9	120.5	129.7	128.1	135.3	162.2	144.3	145.0
Intermediate: PRIMARY	100.0	87.6	81.5	123.9	133.8	133.4	140.4	143.6	148.2	147.4
Fertilizer Raw Material	100.0	223.6	110.5	150.7	168.7	209.6	200.0	204.7	190.1	160.3
Gems	100.0	92.0	103.8	121.9	131.3	129.6	136.9	139.8	146.0	146.7
Other	100.0	70.2	63.4	122.2	131.6	129.9	137.3	140.2	146.4	147.2
Intermediate: MANUFACTURES	100.0	81.8	92.9	114.9	128.0	121.6	125.4	130.9	130.7	127.0
Fertilizer Manufactures	100.0	73.9	47.6	41.3	72.3	84.2	78.7	77.7	62.5	63.9
Iron & Steel	100.0	86.4	102.1	112.3	105.2	119.0	125.7	128.4	134.1	134.7
Non-Ferrous Metals	100.0	69.0	67.5	82.3	98.3	97.0	102.5	104.7	109.3	109.9
Others	100.0	86.5	110.3	139.1	157.6	145.9	146.3	152.1	160.4	149.5
TOTAL IMPORTS (Commerce)	100.0	84.7	80.4	93.6	94.9	99.4	108.6	101.0	94.1	92.3
Statistical Discrepancy	100.0	84.7	80.4	93.6	94.9	99.4	108.6	101.0	94.1	92.3
TOTAL IMPORTS	100.0	84.7	80.4	93.6	94.9	99.4	108.6	101.0	94.1	92.3

Source: Ministry of Commerce (D.G.C.I.S); Reserve Bank of India; Ministry of Finance, *Economic Survey*, various issues;
 World Bank Staff estimates.

Table A2.4
Invisibles on Current Account
(US\$ million)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
GROSS RECEIPTS	6906	6076	6057	6741	7023	7479	7855	10051	8642	10930
Non-Factor Services	2949	3310	3217	3571	3956	4246	4551	5021	4716	6225
of which:										
Transport	458	494	538	680	898	907	983	939	982	2327
Travel	1478	972	1256	1431	1419	1433	1456	1977	2098	2075
Others	1013	1844	1423	1460	1639	1906	2112	2105	1636	1823
Factor Income	1083	547	501	446	397	936	1221	1232	1142	855
Current Transfers ^a	2874	2219	2339	2724	2670	2297	2083	3798	2784	3850
GROSS PAYMENTS	2257	4236	4781	5971	6271	7403	8558	8892	8165	10330
Non-Factor Services	1516	2124	2222	3027	3225	3523	3571	3815	3589	5448
of which:										
Transport ^b	450	667	585	870	1027	1115	1093	1289	1485	2250
Travel	114	336	290	376	405	403	392	465	385	750
Others	952	1121	1347	1781	1793	2005	2086	2061	1719	2448
Factor Income	727	2100	2547	2918	3030	3864	4973	5062	4565	4857
Current Transfers	14	12	12	26	16	16	14	15	11	25
NET RECEIPTS	4649	1840	1277	770	752	76	-703	1159	477	600
Non-Factor Services	1433	1186	995	544	731	723	980	1206	1127	777
of which:										
Transport	8	-173	-47	-190	-129	-208	-110	-350	-503	77
Travel	1364	636	966	1055	1014	1030	1064	1512	1713	1325
Others	61	723	76	-321	-154	-99	26	44	-83	-625
Factor Income	356	-1553	-2046	-2472	-2633	-2928	-3752	-3830	-3423	-4002
Current Transfers	2860	2207	2327	2698	2654	2281	2069	3783	2773	3825

a. Excluding foreign grants, and including the Bhopal settlement in 1988-89.

b. Excluding freight included in c.i.f value of merchandise imports.

Source: Reserve Bank of India; World Bank, World Debt Tables, various issues.

Table A2.5
Decomposition of Recent Export Growth
(US\$ million at current prices - annual averages)

	1982-83 87-88	1988-89 93-94	Increase	Contribution to Growth
<u>Manufactured Exports</u>	6079	13834	7756	90%
Consumption goods	3964	8554	4590	53%
Leather	623	1254	631	7%
Gems (gross)	1369	3159	1790	21%
Garments	915	2136	1221	14%
Textiles	1057	2005	948	11%
Investment goods ^a	881	2235	1354	16%
Intermediate goods	1234	3046	1812	21%
Chemicals	428	1356	928	11%
Petroleum Prod.	330	430	100	1%
Others ^b	477	1260	783	9%
<u>Primary Exports</u>	3171	4064	893	10%
Fish	370	564	195	2%
Rice	176	300	124	1%
Cashews	187	255	68	1%
Coffee	200	165	-34	0%
Tea	492	456	-36	0%
Spices	182	162	-20	0%
Iron Ore	416	502	85	1%
Other Primary	1148	1660	512	6%
TOTAL EXPORTS (Customs) ^c	9249	17898	8649	100%
Discrepancy	713	356	-358	
TOTAL EXPORTS (BOP) ^c	9963	18254	8291	
Memo:				
Gems (Net) ^d	319	885	566	

a. Refers to engineering goods.

b. Including unclassified exports.

c. Total exports, f.o.b., net of crude oil.

d. Exports less imports of gems and jewellery.

Source: Ministry of Commerce, (D.G.C.I.S.); Reserve Bank of India.

Table A3.1(a)
External Debt Summary: Debt Outstanding and Disbursed
(US\$ million at current prices)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
A. Public & Publicly Guar. LT	20566	22769	24355	30284	37175	44379	48040	62775	69339	71886	77486	80985
1. Official Creditors	17787	18983	19236	22729	26396	30394	31221	43659	48440	49523	54037	55822
a. Multilateral	8562	9801	10462	12400	14268	16588	18060	19665	21768	23964	26130	27834
aa. of which IBRD	1395	1779	1688	2396	3475	4661	5590	6614	7685	8459	9067	9870
ab. of which IDA	6983	7820	8545	9750	10529	11615	12019	12521	13312	14203	15339	15978
b. Bilateral ^a	9225	9182	8774	10329	12129	13806	13161	23994	26672	25559	27907	27988
2. Private Creditors	2779	3786	5119	7555	10779	13985	16819	19116	20899	22363	23449	25163
a. Commercial Banks	2288	3228	3933	5728	7986	10934	13332	15076	16666	16576	17456	18911
b. Suppliers Credits	94	96	466	629	805	715	632	539	434	430	582	754
c. Bonds (including IDB)	11	30	259	657	1117	1317	1876	2577	2948	4436	4351	4027
d. Other Private	386	432	461	541	871	1019	979	924	851	921	1060	1471
B. Private Non-Guaranteed LT	1029	1185	1341	1497	1388	1652	1473	1551	1488	1545	1505	2269
C. Total LT DOD (A+B)	21595	23954	25696	31781	38563	46031	49513	64326	70827	73431	78991	83254
D. Use of IMF Credit	3446	4713	4456	4832	4768	4023	2573	1566	2623	3451	4799	5040
E. Short-Term Debt	2397	3338	3672	4358	4946	5673	6358	7501	8544	7070	6340	3626
F. Total External Debt (C+D+E)	27438	32004	33825	40971	48277	55727	58444	73393	81994	83952	90130	91921
<u>Memo item:</u>												
Total NRI Deposits	2023	2809	3265	4915	6595	8616	10482	12368	13953	12926	14523	14498

a. Data have been revised from March 1990 to include military debt to the former Soviet Union amounting to about \$10.0 billion as of March 1990, \$11.6 billion as of March 1991, \$9.2 billion as of March 1992, \$9.7 billion as of March 1993, and \$9.2 billion as of March 1994.

Source: World Bank, DRS data.

Table A3.1(b)
External Debt Summary: Disbursements
(US\$ million at current prices)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
A. Public & Publicly Guar. LT	3103	3329	3825	4506	6280	6956	7948	7092	6540	7769	5299	6849
1. Official Creditors	1947	1934	1836	2079	2265	3627	3642	3574	3578	4368	3653	3832
a. Multilateral	1458	1366	1144	1403	1314	2269	2625	2105	2210	2758	2424	2097
aa. IBRD	288	471	291	328	641	1295	1716	1445	1219	1231	852	1216
of which fast-disbursing	0	0	0	0	0	0	0	0	0	150	100	300
ab. IDA	1109	874	823	1047	656	917	755	566	762	953	1186	669
of which fast-disbursing	0	0	0	0	0	0	0	0	0	155	350	0
b. Bilateral	489	568	693	675	951	1358	1017	1469	1367	1611	1229	1735
2. Private Creditors	1156	1395	1989	2427	4015	3329	4306	3518	2962	3401	1645	3017
a. Commercial banks	776	1244	1258	1857	3057	3030	3416	2645	2358	1511	1170	2210
b. Suppliers Credits	40	41	405	193	283	5	16	3	8	77	221	259
c. Bonds (including IDB)	10	21	232	330	359	116	679	773	586	1644	0	0
d. Other Private	330	89	94	47	316	178	195	97	10	169	254	548
B. Private Non-Guaranteed LT	355	407	450	503	325	348	175	240	214	309	254	1120
C. Total LT Disbursements (A+B)	3458	3736	4275	5009	6605	7304	8123	7332	6754	8078	5553	7969
D. IMF	1968	1376	201	0	0	0	0	0	1754	1233	1623	323
E. Net Short-Term Capital	800	941	334	686	588	727	685	1143	1043	-1474	-730	-2714
F. Total Disbursements (C+D+E)	6226	6053	4810	5695	7193	8031	8808	8475	9551	7837	6446	5578

Source: World Bank, DRS data.

Table A3.1(c)
External Debt Summary: Principal Repayments
(US\$ million at current prices)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
A. Public & Publicly Guar. LT	714	825	786	947	1810	1606	1669	1641	2079	2303	2633	3822
1. Official Creditors	602	602	549	656	851	1121	991	1115	1223	1467	1658	2384
a. Multilateral	100	122	131	161	242	509	397	467	609	703	838	1000
aa. of which IBRD	72	87	87	104	174	430	303	352	472	527	634	758
ab. of which IDA	26	33	41	53	61	69	81	98	114	141	155	174
b. Bilateral	502	480	418	494	609	613	594	648	614	763	820	1384
2. Private Creditors	112	223	237	291	959	485	678	526	856	836	975	1438
a. Commercial Banks	64	154	178	200	773	284	409	278	331	391	545	871
b. Suppliers Credits	33	38	30	47	120	98	96	98	113	82	89	96
d. Bonds (including IDB)	0	2	0	0	0	6	14	27	282	244	211	343
e. Other Private	15	29	29	44	66	97	159	123	130	119	130	129
B. Private Non-Guaranteed LT	219	261	305	363	480	289	280	322	318	273	306	253
C. Total LT Repayments (A+B)	933	1086	1091	1310	2290	1895	1949	1963	2397	2576	2939	4075
D. IMF Repayments	0	70	134	264	648	1082	1210	1008	726	460	334	134
E. Total LT Repayments (C+D)	933	1156	1225	1574	2938	2977	3159	2971	3122	3036	3273	4209

Note: Historical amortization payments of the Debt Reporting System differ from numbers of the GOI. These discrepancies are currently under review.

Source: World Bank, DRS data.

Table A3.1(d)
External Debt Summary: Net Flows
(US\$ million at current prices)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
A. Public & Publicly Guar. LT	2389	2504	3039	3559	4470	5350	6279	5451	4461	5466	2666	3027
1. Official Creditors	1345	1332	1287	1423	1414	2506	2652	2459	2355	2901	1996	1448
a. Multilateral	1358	1244	1012	1242	1072	1761	2228	1639	1602	2054	1586	1098
aa. of which IBRD	217	384	203	224	467	865	1414	1094	747	703	218	458
ab. of which IDA	1083	841	782	994	595	848	675	468	648	812	1030	495
b. Bilateral	-13	88	275	181	342	745	423	820	753	847	409	351
2. Private Creditors	1044	1172	1752	2136	3056	2844	3628	2992	2106	2565	670	1579
a. Commercial Banks	712	1090	1080	1657	2284	2746	3007	2367	2027	1120	625	1339
b. Suppliers Credits	7	3	375	146	163	-93	-80	-95	-105	-5	132	163
c. Bonds (including IDB)	10	19	232	330	359	110	665	746	304	1400	-211	-343
d. Other Private	315	60	65	3	250	81	36	-26	-120	50	124	420
B. Private Non-Guaranteed LT	136	146	145	140	-155	59	-105	-82	-104	36	-52	867
C. Total LT Repayments (A+B)	2525	2650	3184	3699	4315	5409	6174	5369	4357	5502	2614	3894
D. Net IMF Credit	1968	1306	67	-264	-648	-1082	-1210	-1008	1028	773	1289	189
E. Net Short Debt Flows	800	941	334	686	588	727	685	1143	1043	-1474	-730	-2714
F. Total Net Flows (C+D+E)	5293	4897	3585	4121	4255	5054	5649	5504	6428	4801	3173	1370
<u>Memo item:</u>												
Total NRI Net Flows	671	938	814	1579	1825	1992	2328	2295	1536	290	2001	940

Source: Derived from Tables 3.1(b) and 3.1(c).

Table A3.1(e)
External Debt Summary: Interest Payments
(US\$ million at current prices)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
A. Public & Publicly Guar. LT	613	786	833	1120	1505	1845	2003	2870	3700	3797	3657	3957
1. Official Creditors	359	432	443	558	694	812	941	1352	1492	1513	1629	1715
a. Multilateral	148	218	239	282	388	479	581	640	738	799	899	945
aa. of which IBRD	101	158	169	209	296	378	474	529	615	646	708	721
ab. of which IDA	46	58	68	71	91	98	98	90	97	101	109	114
b. Bilateral	211	214	204	276	306	332	360	712	754	714	730	770
2. Private Creditors	254	354	390	562	811	1033	1062	1518	2208	2283	2028	2241
a. Commercial Banks	219	305	340	449	634	806	816	1240	1888	1950	1669	1752
b. Suppliers Credits	6	8	8	48	64	67	61	53	43	31	30	44
c. Bonds (including IDB)	0	3	3	17	55	85	111	150	207	223	258	361
d. Other Private	29	38	39	48	58	75	74	75	70	79	71	85
B. Private Non-Guaranteed LT	126	130	138	154	158	147	127	140	135	126	123	139
C. Total LT Interest (A+B)	739	916	971	1274	1663	1992	2130	3010	3835	3923	3780	4096
D. IMF Service Charges	144	277	374	360	317	297	233	184	134	203	271	271
E. Interest Paid on ST Debt	227	261	389	326	356	429	437	570	899	826	399	367
F. Total Interest Paid (C+D+E)	1110	1454	1734	1960	2336	2718	2800	3764	4868	4952	4450	4734
<u>Memo item:</u>												
Total NRI Interest Payments	195	243	291	400	524	715	609	1076	1282	1036	918	905

Note: Historical interest payments of the Debt Reporting System differ from numbers of the GOI. These discrepancies are currently under review.

Source: World Bank, DRS data.

Table A3.2
External Reserves
(US\$ million)

	Foreign Exchange	SDRs	Reserve Position in the Fund	Reserves excluding Gold	Gold ^a	Reserves including Gold	Use of IMF Credit	Net Reserves
1980-81	5850	603	405	6858	370	7228	327	6901
1981-82	3582	473	405	4460	335	4795	964	3831
1982-83	4281	291	393	4965	324	5289	2876	2413
1983-84	5099	230	518	5847	320	6167	4150	2017
1984-85	5482	145	483	6110	325	6435	3932	2503
1985-86	5972	131	554	6657	416	7073	4290	2783
1986-87	5924	179	626	6729	470	7199	4291	2908
1987-88	5618	97	676	6391	507	6898	3653	3246
1988-89	4226	103	630	4959	473	5432	2364	3067
1989-90	3368	107	634	4109	487	4596	1493	3102
1990-91	2236	102	--	2338	504	2842	2623	219
1991-92	5631	90	1	5722	542	6264	3451	2812
1992-93	6434	18	297	6749	557	7306	4798	2508
1993-94	15068	108	300	15476	583	16059	5040	11019
1994-95	20809	19	332	21160	695	21855	4312	17543
End of the Month								
1992								
March	5631	90	1	5722	542	6264	3451	2812
June	6221	115	1	6336	565	6901	3522	3379
September	5777	34	1	5812	582	6394	4183	2211
December	5461	4	292	5757	548	6305	4483	1822
1993								
March	6434	18	297	6749	557	7306	4798	2508
June	6553	187	298	7038	560	7598	5102	2495
September	7629	61	302	7992	569	8561	5109	3452
December	9807	100	292	10199	551	10750	4924	5826
1994								
March	15068	108	300	15476	583	16059	5040	11019
June	16372	45	308	16725	598	17323	4002	13321
September	18856	3	312	19171	606	19777	4055	15722
December	19386	2	310	19698	603	20301	4034	16267

Note: IMF Credit refers to Use of IMF credit within the General Resources Account (GRA) excluding Trust Fund, Structural Adjustment Facility (SAF), and Enhanced Structural Adjustment Facility (ESAF) loans.

a. Valued at 35 SDR's per fine troy ounce.

Source: IMF, International Financial Statistics, various issues.

Table A4.1
Central Government Finances Summary
(Rs billion at current prices)

	1990-91	1991-92	1992-93	1993-94	1994-95 B.E.	1994-95 R.E.	1995-96 B.E.
Revenue ^a	549.5	690.7	760.9	754.1	900.8	945.4	1077.9
Tax Revenue	429.8	500.7	540.4	534.5	627.4	649.9	743.7
Customs	206.4	222.6	237.8	221.9	252.0	264.5	295.0
Union Excise ^b	141.0	160.2	163.7	172.2	205.1	206.2	231.3
Income Tax ^b	12.5	16.3	18.3	13.5	27.2	24.4	37.7
Corporate Tax	53.4	78.5	89.0	100.6	124.8	132.5	155.0
Other	16.5	23.2	31.7	26.3	18.3	22.3	24.8
Non-Tax Revenue	119.8	190.0	220.5	219.6	273.4	295.5	334.1
Interest Receipts	87.3	109.3	124.9	150.6	159.8	162.4	184.2
Asset Sales	0.0	30.4	19.6	-0.5	40.0	57.7	70.0
Other	32.5	50.3	76.0	69.4	73.6	75.5	79.9
Expenditure ^c	995.9	1053.9	1162.6	1356.6	1450.0	1555.7	1654.2
Non-Plan Expenditure ^c	769.3	804.5	859.6	990.0	1051.2	1135.1	1236.5
Interest Payments	215.0	266.0	310.4	367.0	460.0	440.0	520.0
Defense	154.3	163.5	175.8	218.5	230.0	235.4	255.0
Subsidies	121.6	122.5	120.4	128.6	94.6	128.1	124.0
Other Non-Plan Expenditure	278.5	252.6	253.0	275.9	266.5	331.6	337.5
Plan Expenditure ^c	283.7	309.6	366.6	428.6	465.8	487.6	485.0
Less: Recovery of Loans	57.1	60.2	63.6	61.9	67.0	67.0	67.3
Gross Fiscal Deficit	446.3	363.3	401.7	602.6	549.2	610.4	576.3
<u>Financed by:</u>							
Reserve Bank of India (net) ^d	147.5	55.1	42.6	109.6	60.0	60.0	50.0
Marketable Securities (net) ^e	49.1	117.7	165.2	295.5	267.0	245.7	270.9
Other Domestic Borrowing (net)	218.0	136.3	140.8	146.7	179.4	265.2	210.9
External Borrowing (net)	31.8	54.2	53.2	50.7	42.8	39.5	44.6
<u>Memo:</u>							
GDPmp	5355.2	6160.6	7028.3	7863.6	9017.7	9109.7	10478.9
Fiscal Deficit / GDP	8.3%	5.9%	5.7%	7.7%	6.1%	6.7%	5.5%
Revenue / GDP	10.3%	11.2%	10.8%	9.6%	10.0%	10.4%	10.3%
Expenditure / GDP	18.6%	17.1%	16.5%	17.3%	16.1%	17.1%	15.8%

Note: BE = Budget estimates; RE = Revised estimates.

- Including sale of public assets (disinvestment).
- Net of states' share.
- Net of loan recoveries.
- Monetized deficit.
- T-Bills and dated securities, excluding those issued to RBI.

Source: Ministry of Finance, Union budget documents.

Table A4.2
Budgetary Classification of Central Government Finances
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 B.E.	1994-95 R.E.	1995-96 B.E.
Revenue receipts	330.83	370.37	435.91	499.96	549.54	660.30	741.28	754.53	860.84	887.70	1007.87
Tax revenue	243.19	280.15	337.51	383.49	429.78	500.69	540.44	534.49	627.42	649.88	743.74
Non-tax revenue	87.64	90.22	98.40	116.47	119.76	159.61	200.84	220.04	233.42	237.82	264.13
Interest from state governments	27.54	31.58	37.70	44.24	51.74	65.22	77.54	95.53	111.27	113.80	133.48
Revenue expenditure (A+B+C+D)	408.60	461.75	541.06	642.07	735.15	823.08	927.02	1081.69	1188.11	1229.02	1363.29
A. Developmental	102.85	114.25	140.36	184.15	196.01	198.17	208.60	243.68	260.85	306.78	325.20
1. Social services	16.75	19.35	22.43	24.99	27.53	30.57	34.30	40.97	45.93	47.72	53.57
2. Economic services	86.11	94.90	117.93	159.17	168.48	167.60	174.30	202.71	214.92	259.06	271.62
B. Non-developmental	220.10	244.59	287.69	335.47	391.00	450.34	521.58	613.17	720.83	709.06	810.66
Defence services	91.79	88.60	95.58	101.94	108.74	114.42	121.09	149.77	161.69	166.11	181.46
Interest payments	92.37	112.36	142.61	177.57	214.71	265.63	310.35	366.95	460.00	440.00	520.00
C. Grants-in-aid and contributions	78.59	93.49	102.08	109.36	134.39	159.53	180.54	211.11	200.30	206.75	220.47
Grants to state governments	73.53	91.36	100.15	107.44	132.02	157.00	178.30	213.77	196.27	202.63	215.44
D. Revenue expenditure of UTs	7.06	9.43	10.92	13.09	13.75	15.05	16.30	13.73	6.12	6.42	6.97
Net current balance	-77.77	-91.38	-105.15	-142.11	-185.61	-162.78	-185.74	-327.16	-327.27	-341.32	-355.42
Capital expenditure (A+B+C+D-E)	185.65	179.07	204.08	237.18	260.88	200.63	215.99	275.41	221.88	269.04	220.93
A. Developmental	75.62	56.67	60.03	70.95	69.23	58.26	73.82	55.60	63.20	75.47	62.34
1. Social services	3.90	2.80	3.51	3.21	2.47	2.39	2.59	3.32	4.15	7.25	6.21
2. Economic services	71.72	53.86	56.52	67.74	66.77	55.87	71.23	52.28	59.05	68.22	56.13
B. Non-developmental	14.58	33.39	40.76	45.27	49.56	52.32	58.88	73.92	75.58	75.89	81.13
Defence services	12.98	31.08	37.83	42.22	45.52	49.05	54.73	68.67	68.31	69.33	73.54
C. Capital expenditure of UTs	2.40	2.88	1.76	1.87	2.68	3.42	3.50	2.78	2.46	2.43	2.52
D. Loans and advances (net)	93.05	86.13	101.53	119.09	139.40	117.01	99.41	142.63	120.64	172.91	144.94
to States & UTs	49.87	58.51	67.30	79.55	98.69	94.18	86.97	100.72	95.50	143.00	115.27
to Others	43.18	27.62	34.23	39.55	40.71	22.83	12.44	41.92	25.15	29.91	29.67
E. Disinvestment of equity in PSEs	0.00	0.00	0.00	0.00	0.00	30.38	19.61	-0.48	40.00	57.67	70.00
Gross fiscal deficit (GOI Defn.)	263.42	270.45	309.22	379.30	446.50	363.41	401.74	602.57	549.15	610.36	576.35
Finance by instruments											
Market loans	55.32	58.62	84.18	74.04	80.01	75.10	36.76	289.28	147.00	207.00	227.00
Small savings	34.11	39.11	58.35	85.75	91.04	66.40	57.17	91.00	60.00	140.00	80.00
Provident funds	46.80	52.74	71.12	90.86	89.37	79.56	87.55	93.58	99.00	108.00	109.64
External loans	20.24	28.93	24.60	25.95	31.81	54.21	53.19	50.74	42.79	39.47	44.56
Treasury bills	88.62	56.52	62.44	109.11	117.69	68.87	117.73	119.82	60.00	36.50	49.99
Other	18.33	34.53	8.53	-6.41	36.58	19.27	49.33	-41.85	140.36	79.39	65.15

Note: BE = Budget estimates; RE = Revised estimates.

Source: Ministry of Finance, Union budget documents; Department of Expenditure, Finance Accounts.

Table A4.3
Budgetary Classification of State Government Finances
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 R.E.	1994-95 B.E. ^a
Revenue receipts	386.86	448.00	507.09	589.08	673.19	813.59	911.04	1031.77	1123.80
Tax revenue	251.88	289.20	330.70	392.27	448.80	529.53	603.90	673.27	767.02
Direct tax	16.77	19.85	24.13	30.06	33.75	39.59	42.28	46.71	57.31
Indirect tax	150.35	173.37	199.88	229.89	269.70	317.98	356.40	404.12	465.76
State share in central taxes	84.76	95.98	106.69	132.32	145.35	171.97	205.22	222.44	243.94
Non-tax revenue	134.98	158.80	176.38	196.81	224.39	284.06	307.14	358.51	356.78
Grants from centre	73.53	91.36	100.15	107.44	132.02	157.00	178.30	213.77	196.27
Revenue expenditure [A+B+C]	381.58	451.54	522.96	602.53	717.73	861.86	962.05	1091.58	1243.40
A. Developmental (1+2)	269.44	318.20	362.37	407.81	488.55	585.05	634.65	701.07	773.55
1. Social services	151.99	177.06	205.74	240.17	279.62	310.92	345.65	391.24	445.02
2. Economic services	117.45	141.14	156.63	167.64	208.92	274.13	288.99	309.83	328.53
B. Non-developmental	107.69	128.44	155.06	188.69	221.34	266.66	315.06	378.59	456.24
Interest payments	44.29	52.68	64.11	76.68	92.21	109.44	138.65	170.81	200.94
To centre	27.54	31.58	37.70	44.24	51.74	65.22	77.54	96.95	111.27
To others	16.75	21.10	26.41	32.44	40.47	44.23	61.11	73.86	89.67
C. Other expenditure ^b	4.46	4.91	5.53	6.03	7.84	10.16	12.35	11.92	13.61
Net current balance	5.28	-3.55	-15.87	-13.45	-44.54	-48.27	-51.01	-59.81	-119.60
Capital expenditure [A+B+C]	94.39	101.31	98.66	117.52	134.78	132.49	157.77	192.57	213.73
A. Developmental (1+2)	60.51	64.29	68.53	77.28	89.61	98.61	103.44	117.86	140.30
1. Social services	9.88	10.74	11.28	11.71	12.57	16.47	16.64	19.80	25.66
2. Economic services	50.63	53.55	57.25	65.57	77.03	82.14	86.80	98.06	114.64
B. Non-developmental	2.26	2.26	2.25	2.36	2.63	2.34	3.10	4.02	7.51
C. Loans and advances (net)	31.62	34.77	27.88	37.88	42.55	31.54	51.22	70.70	65.92
Gross fiscal deficit	89.11	104.85	114.53	130.96	179.32	180.77	208.78	252.38	333.33
<u>Finance by instrument:</u>									
Market loans	14.31	18.01	22.46	25.95	25.60	33.10	38.50	41.51	46.36
Loans from centre (Net)	48.22	58.31	67.07	79.30	98.39	93.75	86.60	101.97	92.82
Small savings & Provident funds	10.42	16.28	20.01	23.07	30.69	29.09	36.22	40.33	43.69
Other	16.16	12.26	4.98	2.65	24.63	24.82	47.45	68.58	150.46

Note: BE = Budget estimates; RE = Revised estimates.

a. Figure for 1994-95 includes Union Territory of Delhi.

b. Other expenditure include compensation and assignments to local bodies and panchayat raj institutions and reserve with the finance department.

Source: Ministry of Finance, Union budget documents; Reserve Bank of India, RBI bulletins on state finances.

Table A4.4
Budgetary Classification of General Government Finances
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 R.E. ^a	1994-95 B.E. ^b
Revenue receipts	616.62	695.43	805.15	937.36	1038.97	1251.67	1396.48	1476.99	1677.10
Tax revenue	495.07	569.35	668.21	775.76	878.58	1030.22	1144.34	1207.74	1394.44
Non tax revenue	121.55	126.08	136.94	161.60	160.39	221.45	252.13	269.25	282.66
Revenue expenditure [A+B+C+D]	689.12	790.35	926.17	1092.92	1269.12	1462.72	1633.23	1863.98	2123.97
A. Developmental	372.29	432.44	502.73	591.96	684.56	783.22	843.24	944.75	1034.40
1. Social services	168.73	196.40	228.17	265.15	307.16	341.49	379.95	432.22	490.95
2. Economic services	203.56	236.04	274.55	326.80	377.40	441.72	463.29	512.53	543.45
B. Non-developmental	300.25	341.45	405.05	479.92	560.60	651.78	759.10	896.23	1065.80
C. Revenue disbursements of UTs	7.06	9.43	10.92	13.09	13.75	15.05	16.30	13.73	6.12
D. Other expenditure ^c	9.52	7.04	7.46	7.95	10.21	12.68	14.59	9.27	17.65
Net current balance	-72.49	-94.93	-121.02	-155.56	-230.15	-211.05	-236.75	-386.99	-446.87
Capital expenditure [A+B+C+D-E]	230.17	221.87	235.44	275.15	296.97	238.95	286.80	367.26	340.11
A. Developmental (1+2)	136.14	120.95	128.56	148.23	158.84	156.87	177.26	173.46	203.50
1. Social services	13.78	13.54	14.79	14.92	15.04	18.86	19.23	23.12	29.81
2. Economic services	122.35	107.41	113.76	133.31	143.80	138.00	158.03	150.34	173.69
B. Non-Developmental	16.83	35.65	43.01	47.63	52.19	54.67	61.98	77.93	83.09
C. Loans and advances (net)	74.80	62.38	62.11	77.42	83.26	54.37	63.67	112.62	91.07
D. Capital disbursements of UTs	2.40	2.88	1.76	1.87	2.68	3.42	3.50	2.78	2.46
E. Disinvestment of equities in PSEs.	0.00	0.00	0.00	0.00	0.00	30.38	19.61	-0.48	40.00
Gross fiscal deficit	302.66	316.79	356.45	430.71	527.12	450.00	523.55	754.25	786.98
Finance by Instrument:									
Market Loans	69.63	76.63	106.64	99.99	105.61	108.20	75.26	330.79	193.36
Small Savings	34.11	39.11	58.35	85.75	91.04	66.40	57.17	91.00	60.00
Provident Funds	57.22	69.02	91.13	113.93	120.06	108.65	123.77	133.91	142.69
External Loans	20.24	28.93	24.60	25.95	31.81	54.21	53.19	50.74	42.79
Treasury Bills	88.62	56.52	62.44	109.11	117.69	68.87	117.73	119.82	60.00
Other	32.84	46.58	13.29	-4.02	60.90	43.66	96.43	28.00	288.14

Note: BE = Budget estimates; RE = Revised estimates.

a. Actuals for the center and revised estimates for the states.

b. Figure for 1994-95 includes Union Territory of Delhi.

c. Other expenditure include compensation and assignments to local bodies and panchayat raj institutions and reserve with the finance department.

Source: Ministry of Finance, Union budget documents; Reserve Bank of India, RBI bulletins on state finances; Dept. of Expenditure Finance Accounts.

Table A4.5
Tax Revenue - Center and States
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1994-95	1995-96
								R.E. ^a	B.E.	R.E.	R.E.
Central Government											
A. Gross tax revenue	328.38	376.66	444.74	516.36	575.76	673.61	746.37	757.44	871.36	898.31	1037.62
Corporation tax	31.60	34.33	44.07	47.29	53.35	78.53	88.99	100.60	124.80	132.50	155.00
Taxes on income	28.79	31.92	42.41	50.04	53.71	67.31	78.88	91.15	109.25	110.00	135.00
Customs	114.75	137.02	158.05	180.36	206.44	222.57	237.76	221.93	252.00	264.50	295.00
Union Excise Duties	144.70	164.26	188.41	224.06	245.14	281.10	308.32	316.97	367.00	369.00	427.80
Other	8.54	9.13	11.80	14.61	17.12	24.10	32.42	26.79	18.31	22.31	24.82
B. States Share of Tax Revenue	84.76	95.98	106.69	132.32	145.35	171.97	205.22	222.42	243.94	248.43	293.88
Income Tax	21.60	25.89	27.49	39.22	41.21	51.04	60.57	77.69	82.05	85.60	97.34
Estate Duty	0.10	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Union Excise Duties	63.06	70.03	79.19	93.10	104.14	120.93	144.65	144.73	161.89	162.83	196.54
C. Assignments of UT taxes to local bodies	0.43	0.53	0.54	0.55	0.63	0.95	0.71	0.53	0.00	0.00	0.00
Tax Revenue (net) [A-B-C]	243.19	280.15	337.51	383.49	429.78	500.69	540.44	534.49	627.42	649.88	743.74
State Government											
States own Tax Revenue	167.12	193.22	224.01	259.95	303.45	357.56	398.68	450.83	523.08		
Direct Tax	16.77	19.85	24.13	30.06	33.75	39.59	42.28	46.71	57.31		
Taxes on income	2.70	2.70	3.12	4.53	6.34	6.45	6.02	6.78	7.59		
Land revenue	3.82	4.48	5.94	6.90	6.07	6.36	6.17	5.55	10.78		
Stamps and registration fees	10.16	12.54	14.86	18.45	21.12	26.54	29.78	34.08	37.88		
Other	0.08	0.13	0.21	0.19	0.22	0.24	0.31	0.31	1.05		
Indirect Tax	150.35	173.37	199.88	229.89	269.70	317.98	356.40	404.12	465.76		
Sales Tax	96.40	111.85	131.22	150.60	176.67	210.64	233.49	270.12	318.51		
State excise	24.21	28.67	30.81	38.64	47.95	54.39	62.65	65.16	72.91		
Taxes on Vehicles	9.98	11.75	12.90	14.15	15.66	18.37	21.94	24.89	27.68		
Other	19.77	21.09	24.96	26.49	29.41	34.58	38.32	43.95	46.66		
State's Share of Central Taxes	84.76	95.98	106.69	132.32	145.35	171.97	205.22	222.44	243.94		
Tax revenue retained by states	251.88	289.20	330.70	392.27	448.80	529.53	603.90	673.27	767.02		

Note: BE = Budget estimates; RE = Revised estimates.

a. Actuals for the center and revised estimates for the states.

Source: Ministry of Finance, Union budget documents; Reserve Bank of India, RBI bulletins on state finances.

Table A4.6
Non-tax Revenue - Center and States
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 R.E. ^a	1994-95 B.E.	1994-95 R.E.	1995-96 R.E.
Central Government											
Non-tax revenue	87.64	90.22	98.40	116.47	119.76	159.61	200.84	220.04	233.42	237.82	264.13
Interest receipts	53.53	57.55	69.81	84.66	87.30	109.33	124.87	150.62	159.78	162.35	184.20
from state governments	27.54	31.58	37.70	44.24	51.74	65.22	77.54	95.53	111.27	113.80	133.48
Dividends and profits	5.07	6.05	4.75	7.16	7.74	10.58	24.93	24.48	27.93	27.21	29.46
Other general services	3.01	3.37	3.95	4.05	5.06	5.72	10.14	10.46	7.91	10.70	11.01
Social services	4.54	0.60	0.80	0.57	0.65	0.90	0.79	1.01	1.31	1.23	1.44
Economic services	11.49	12.73	8.93	5.45	8.60	21.46	17.86	13.26	14.68	16.46	19.08
Grants-in-aid and contributions	4.36	4.92	6.00	7.54	5.86	9.47	9.19	9.93	13.65	11.76	11.54
Other	5.64	5.00	4.16	7.04	4.55	2.15	13.06	10.28	8.16	8.11	7.40
State Government											
States own Non-tax revenue	61.45	67.44	76.24	89.37	92.37	127.06	128.84	144.74	160.51		
Interest receipts	16.88	19.47	23.87	26.34	24.03	53.20	39.38	44.01	48.81		
General services	7.04	7.54	9.51	11.40	19.13	17.28	18.44	29.92	31.29		
Social services	4.75	5.04	5.73	6.76	5.86	7.74	8.48	8.67	9.83		
Economic services	32.55	35.12	36.64	44.59	43.01	48.39	61.48	61.55	69.98		
Forestry and wild life	9.59	10.67	10.08	11.96	11.37	12.71	12.72	13.91	14.17		
Industries	8.50	9.11	12.08	14.31	12.23	15.37	23.17	23.38	28.29		
Other	14.46	15.33	14.48	18.32	19.41	20.31	25.59	24.26	27.52		
Other	0.23	0.28	0.49	0.28	0.34	0.45	1.06	0.59	0.61		
Grants from centre	73.53	91.36	100.15	107.44	132.02	157.00	178.30	213.77	196.27		
Non-tax revenue retained by state	134.98	158.80	176.38	196.81	224.39	284.06	307.14	358.51	356.78		

Note: BE = Budget estimates; RE = Revised estimates.

a. Actuals for the center and revised estimates for the states.

Source: Ministry of Finance, Union budget documents; Reserve Bank of India, RBI bulletins on state finances.

Table A4.7
Revenue Expenditure of the Central Government
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 B.E.	1994-95 R.E.	1995-96 B.E.
Revenue expenditure (A+B+C+D)	408.60	461.75	541.06	642.07	735.15	823.08	927.02	1081.69	1188.11	1229.02	1363.29
A. Developmental	102.85	114.25	140.36	184.15	196.01	198.17	208.60	243.68	260.85	306.78	325.20
1. Social services	16.75	19.35	22.43	24.99	27.53	30.57	34.30	40.97	45.93	47.72	53.57
Education, Sports, Art and Culture	7.08	10.13	11.12	11.41	12.74	13.72	14.97	18.37	20.80	21.52	22.19
Health and Family welfare	2.22	2.67	3.11	3.48	3.97	4.50	5.59	6.47	7.39	7.90	8.96
Information and Broadcasting	1.72	2.10	2.36	3.23	3.60	4.43	4.61	4.15	4.28	4.46	4.76
Water supply and Sanitation	0.80	0.13	0.51	0.78	0.93	0.64	0.63	0.84	1.26	0.90	3.98
Labour and labour welfare	2.34	1.64	2.43	2.64	2.78	3.00	3.29	5.11	4.81	4.82	5.07
Social security and welfare	1.86	1.92	1.96	2.36	2.25	2.81	3.44	3.71	5.10	5.24	5.43
Other	0.72	0.76	0.94	1.09	1.27	1.47	1.77	2.33	2.29	2.87	3.18
2. Economic services	86.11	94.90	117.93	159.17	168.48	167.60	174.30	202.71	214.92	259.06	271.62
Agriculture and allied services	5.10	5.55	7.45	7.75	22.92	19.25	21.26	18.73	18.11	35.19	35.35
Fertilizer Subsidy	18.98	21.64	32.01	45.42	43.89	51.85	61.36	51.94	40.00	51.66	54.00
Food Subsidy	20.00	20.00	22.00	24.76	24.50	28.50	28.00	55.37	40.00	51.00	52.50
Export Subsidy	7.85	9.62	13.86	20.14	27.42	17.58	8.19	6.65	3.00	5.60	3.15
Irrigation and Flood Control	0.84	0.76	0.85	0.81	0.89	1.20	1.07	1.68	1.70	1.44	1.77
Rural Development	2.91	3.13	3.61	3.70	3.77	3.57	4.06	16.25	42.26	41.57	57.00
Special Areas Programmes	0.12	0.06	0.05	0.07	0.12	0.19	0.17	0.20	0.25	8.10	8.10
Energy	3.16	3.94	5.59	6.90	7.49	5.37	2.67	5.48	5.26	4.52	5.62
Industry and Minerals	11.17	13.57	12.20	17.96	12.26	12.03	17.98	17.93	20.37	15.95	19.00
Transport and Communications	3.12	6.06	6.79	15.62	8.05	9.19	9.68	14.45	12.79	17.50	15.82
Science, Technology and Environme	6.10	7.57	9.34	10.40	11.27	12.87	13.68	15.86	17.88	17.77	18.76
General Economic Services	6.76	2.99	4.18	5.62	5.90	6.00	6.19	-1.84	13.31	8.76	0.55
B. Non-developmental	220.10	244.59	287.69	335.47	391.00	450.34	521.58	613.17	720.83	709.06	810.66
Defence services	91.79	88.60	95.58	101.94	108.74	114.42	121.09	149.77	161.69	166.11	181.46
Interest payments	92.37	112.36	142.61	177.57	214.71	265.63	310.35	366.95	460.00	440.00	520.00
on Internal Debt	47.63	55.14	69.13	82.73	96.22	109.09	129.89	154.83	213.31	193.91	232.83
on External Debt	7.66	9.77	12.42	14.94	17.78	25.69	34.51	37.92	41.61	41.10	43.09
on Small Savings, PFs. etc.	34.89	44.90	58.01	75.73	96.37	124.20	138.83	168.42	199.04	198.91	237.35
Other	2.19	2.56	3.06	4.17	4.34	6.66	7.12	5.78	6.04	6.07	6.73
Administrative Services	13.28	15.32	17.91	20.71	25.24	27.98	37.83	38.27	39.80	42.34	44.33
Fiscal Services	12.07	10.94	11.00	12.78	12.12	17.69	20.48	21.37	23.57	24.42	24.75
Pensions and misc. services	10.59	17.37	20.60	22.46	30.19	24.63	31.84	36.80	35.77	36.20	40.13
C. Grants-in-aid and contributions	78.59	93.49	102.08	109.36	134.39	159.53	180.54	211.11	200.30	205.75	220.47
Grants to State Governments	73.53	91.36	100.15	107.44	132.02	157.00	178.30	213.77	196.27	202.63	215.44
a. Non Plan	16.77	19.80	24.11	23.69	42.19	86.45	27.41	32.39	24.55	24.55	61.07
b. State Plan Schemes	26.64	34.43	35.59	35.38	38.78	70.55	82.80	102.39	97.88	109.09	84.03
c. Central and Centrally sponsored schemes	30.12	37.14	40.46	48.37	51.05	54.93	66.34	78.99	73.84	68.99	70.34
d. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grants to UTs. and Others	5.06	2.13	1.93	1.92	2.37	2.53	2.24	-2.65	4.04	4.12	5.03
D. Revenue Disbursements of UTs (net)	7.06	9.43	10.92	13.09	13.75	15.05	16.30	13.73	6.12	6.42	6.97
Memo Items:											
Total Subsidies	54.51	59.80	77.32	104.74	121.58	122.53	120.43	128.64	94.63	128.10	124.01
Major Subsidies	46.83	51.26	67.87	90.32	95.81	97.93	94.15	107.64	83.00	108.26	109.65
Other Subsidies	7.68	8.54	9.45	14.42	25.77	24.60	26.28	21.00	11.63	19.84	14.36
Rural Employment Programme	12.05	14.10	12.44	21.00	20.00	18.17	25.46	39.06	50.55	46.75	54.32
RLEGP	7.27	6.66	7.84	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NREP	4.78	7.45	4.60	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Rojgar Yojana	0.00	0.00	0.00	20.96	20.00	18.17	25.26	33.06	38.55	35.35	38.62

Note: BE = Budget estimates; RE = Revised estimates.

Source: Ministry of Finance, Union budget documents; Department of Expenditure, Finance Accounts.

Table A4.8
Revenue Expenditure of State Governments
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 R.E.	1994-95 B.E. ^a
Revenue expenditure (A+B+C)	381.58	451.54	522.96	602.53	717.73	861.86	962.05	1091.58	1243.40
A. Developmental (1+2)	269.44	318.20	362.37	407.81	488.55	585.05	634.65	701.07	773.55
1. Social services	151.99	177.06	205.74	240.17	279.62	310.92	345.65	391.24	445.02
Education, Sports, Art and Culture.	77.55	90.10	109.43	135.71	155.28	170.77	192.61	220.63	251.88
Health and Family Welfare.	25.54	30.53	34.77	39.64	45.86	50.54	56.62	64.81	72.92
Water supply and Sanitation	11.78	13.22	13.94	14.77	16.38	18.45	20.95	21.89	24.16
Welfare of SC, ST and BCs	9.08	11.84	13.18	14.69	17.90	20.71	23.01	27.25	29.77
Social security and welfare	9.24	8.23	9.70	11.07	13.62	14.77	16.63	19.30	22.08
Other	18.79	23.13	24.72	24.29	30.59	35.68	35.83	37.36	44.21
2. Economic services	117.45	141.14	156.63	167.64	208.92	274.13	288.99	309.83	328.53
Agriculture and Allied Services	33.25	38.98	42.65	48.29	62.67	69.81	84.34	83.27	85.94
Crop Husbandry	8.76	9.59	11.06	12.65	16.97	20.82	29.37	27.72	26.94
Food Storage and Warehousing	1.05	1.20	1.23	1.56	1.88	2.38	4.16	4.18	4.35
Forestry and Wild Life	7.61	8.69	9.46	10.28	11.75	13.42	14.90	15.93	17.31
Other	15.83	19.50	20.90	23.80	32.06	33.19	35.91	35.44	37.34
Rural Development	28.20	32.20	36.54	28.27	46.75	52.87	63.62	75.45	84.53
Special Areas Programmes	2.06	2.35	3.09	3.54	3.57	4.11	3.96	5.17	5.10
Irrigation and Flood Control	24.08	27.75	33.19	33.94	34.56	41.40	48.68	51.42	60.82
Energy	4.04	9.14	7.74	10.92	9.89	50.30	26.15	31.69	19.05
Industry and Minerals	6.67	7.33	8.69	12.17	11.65	12.71	13.56	14.98	17.55
Transport and Communications	13.78	16.01	17.35	19.22	23.36	27.59	31.28	30.73	34.16
Science, Technology and Environment	0.23	0.24	0.23	0.26	0.29	0.36	0.39	0.65	0.72
General Economic Services	5.15	7.14	7.15	11.02	16.18	14.98	17.01	16.48	20.66
B. Non-Developmental	107.69	128.44	155.06	188.69	221.34	266.66	315.06	378.59	456.24
Interest Payments	44.29	52.68	64.11	76.68	92.21	109.44	138.65	170.81	200.94
On loans from the centre	27.54	31.58	37.70	44.24	51.74	65.22	77.54	96.95	111.27
On the Internal Debt	7.06	8.95	10.42	13.41	15.68	21.70	24.67	31.61	38.71
On Small Savings, PFs.	6.01	7.63	10.58	12.70	17.03	21.17	24.73	30.01	34.38
Other	3.68	4.51	5.41	6.34	7.76	1.36	11.71	12.24	16.58
Administrative Services	37.18	44.18	50.31	59.74	70.18	78.10	93.44	103.88	133.54
Pensions and Miscellaneous Services	13.91	17.58	23.92	29.31	35.93	44.79	52.72	69.58	81.42
Other	12.31	13.99	16.72	22.96	23.01	34.33	30.24	34.32	40.33
C. Other expenditure ^b	4.46	4.91	5.53	6.03	7.84	10.16	12.35	11.92	13.61

Note: BE = Budget estimates; RE = Revised estimates.

a. Figure for 1994-95 includes Union Territory of Delhi.

b. Other expenditure include compensation and assignments to local bodies and panchayat raj institutions and reserve with the finance department.

Source: Reserve Bank of India, RBI bulletins on state finances.

Table A4.9
Capital Expenditure: Center and States
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 B.E.	1994-95 R.E.	1995-96 B.E.
Central Government											
Capital expenditure [A+B+C+D-E]	185.65	179.07	204.08	237.18	260.88	200.63	215.99	275.41	221.88	269.04	220.93
A. Developmental (1+2)	75.62	56.67	60.03	70.95	69.23	58.26	73.82	55.60	63.20	75.47	62.34
1. Social services	3.90	2.80	3.51	3.21	2.47	2.39	2.59	3.32	4.15	7.25	6.21
Education, Sports, Art etc.	0.68	0.05	0.13	0.08	0.06	0.04	0.05	0.06	0.15	2.30	0.12
Health and Family welfare	0.01	0.19	0.15	0.20	0.00	0.20	0.07	0.03	0.05	0.07	0.14
Housing	1.03	0.75	0.99	0.98	1.11	1.26	1.78	1.87	2.06	2.14	2.79
Information and Broadcasting	2.13	1.74	1.71	1.78	1.06	0.35	0.07	0.24	0.36	0.30	0.58
Other	0.05	0.08	0.52	0.18	0.24	0.53	0.62	1.12	1.53	2.44	2.58
2. Economic services	71.72	53.86	56.52	67.74	66.77	55.87	71.23	52.28	59.05	68.22	56.13
Agriculture and allied	2.32	0.54	0.55	0.45	0.45	0.49	0.47	0.48	1.57	3.09	4.48
Energy	21.25	18.46	19.05	26.07	27.09	19.91	16.21	17.69	19.72	22.92	13.22
Industry and Minerals	20.82	14.07	13.10	11.52	7.71	6.70	8.82	9.87	8.65	8.04	8.06
Transport & Communications	23.79	18.40	21.51	26.15	26.45	24.72	33.81	19.45	22.87	22.50	23.81
General Economic Services	1.09	0.65	0.00	1.26	2.52	2.57	9.07	1.58	2.27	7.37	2.37
Other	2.45	1.75	2.31	2.28	2.56	1.48	2.85	3.21	3.96	4.30	4.19
B. Non-developmental	14.58	33.39	40.76	45.27	49.56	52.32	58.88	73.92	75.58	75.89	81.13
Defence Services	12.98	31.08	37.83	42.22	45.52	49.05	54.73	68.67	68.31	69.33	73.54
Other	1.59	2.32	2.93	3.05	4.04	3.27	4.14	5.24	7.27	6.56	7.58
C. Capital Expenditure of UTs	2.40	2.88	1.76	1.87	2.68	3.42	3.50	2.78	2.46	2.43	2.52
D. Loans and Advances(Net)	93.05	86.13	101.53	119.09	139.40	117.01	99.41	142.63	120.64	172.91	144.94
To State Governments & UTs.	49.87	58.51	67.30	79.55	98.69	94.18	86.97	100.72	95.50	143.00	115.27
To Others	43.18	27.62	34.23	39.55	40.71	22.83	12.44	41.92	25.15	29.91	29.67
E. Disinvestment of equity in PSEs	0.00	0.00	0.00	0.00	0.00	30.38	19.61	-0.48	40.00	57.67	70.00
State Government											
Capital expenditure [A+B+C]	94.39	101.31	98.66	117.52	134.78	132.49	157.77	192.57	213.73		
A. Developmental (1+2)	60.51	64.29	68.53	77.28	89.61	98.61	103.44	117.86	140.30		
1. Social Services	9.88	10.74	11.28	11.71	12.57	16.47	16.64	19.80	25.66		
Education, Sports, Art etc.	1.20	1.29	1.68	2.64	2.84	2.78	3.02	3.23	4.21		
Health and Family welfare	1.89	1.88	2.04	1.84	2.37	2.76	2.63	3.31	3.71		
Water supply and Sanitation	3.39	4.00	4.04	3.37	3.54	4.99	5.49	7.01	8.53		
Housing	1.75	2.11	1.90	1.99	1.82	2.09	1.88	2.07	2.87		
Other	1.65	1.45	1.63	1.87	2.00	3.86	3.62	4.18	6.36		
2. Economic Services	50.63	53.55	57.25	65.57	77.03	82.14	86.80	98.06	114.64		
Agriculture and allied	2.60	2.17	2.69	5.91	6.11	8.32	7.85	8.87	7.61		
Irrigation and Flood control	27.11	29.66	32.66	32.91	36.56	38.52	42.93	46.46	55.63		
Transport	9.75	9.43	10.27	11.59	13.42	13.92	15.90	19.98	23.13		
Other	11.17	12.28	11.63	15.16	20.94	21.38	20.13	22.75	28.28		
B. Non-developmental	2.26	2.26	2.25	2.36	2.63	2.34	3.10	4.02	7.51		
C. Loans and advances(Net)	31.62	34.77	27.88	37.88	42.55	31.54	51.22	70.70	65.92		

Note: BE = Budget estimates; RE = Revised estimates.

Source: Ministry of Finance, Union budget documents; Reserve Bank of India, RBI bulletins on state finances.

Table A4.10
Transfers between Centre and States
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 B.E.	1994-95 R.E.	1995-96 B.E.
States' share in central taxes	84.76	95.98	106.69	132.32	145.35	171.97	205.22	222.42	243.94	248.43	293.88
Union excise duties	63.06	70.03	79.19	93.10	104.14	120.93	144.65	144.73	161.89	162.83	196.54
Income tax	21.60	25.89	27.49	39.22	41.21	51.04	60.57	77.69	82.05	85.60	97.34
Estate duty	0.10	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grants to States	73.53	91.36	100.15	107.44	132.02	157.00	178.30	213.77	196.27	202.63	215.44
Non-plan grants	16.77	19.80	24.11	23.69	42.19	86.45	27.41	32.39	24.55	24.55	61.07
State plan schemes	26.64	34.43	35.59	35.38	38.78	70.55	82.80	102.39	97.88	109.09	84.03
Central and Centrally sponsored schemes	30.12	37.14	40.46	48.37	51.05	54.93	66.34	78.99	73.84	68.99	70.34
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loans to States & UTs	75.13	86.98	99.15	109.16	135.66	123.30	121.41	139.85	137.92	186.55	162.81
Loan Repayments by States and UTs	25.27	28.47	31.85	29.62	36.97	29.12	34.44	39.13	42.43	43.54	47.54
Interest Payments by States	27.54	31.58	37.70	44.24	51.74	65.22	77.54	95.53	111.27	113.80	133.48
NET TRANSFER (Centre to States)	180.61	214.28	236.43	275.07	324.32	357.93	392.94	441.37	424.43	480.27	491.10

Note: BE = Budget estimates; RE = Revised estimates.

Source: Ministry of Finance, Union budget documents; Reserve Bank of India, RBI bulletins on state finances; Dept. of Expenditure, Finance Accounts.

Table A4.11
Explicit Subsidies in the Central Government Budget
(Rs. billion at current prices)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 B.E.	1994-95 R.E.	1995-96 B.E.
A. Major Subsidies	46.83	51.26	67.87	90.32	95.81	97.93	94.15	107.64	83.00	108.26	109.65
1. Food	20.00	20.00	22.00	24.76	24.50	28.50	28.00	55.37	40.00	51.00	52.50
2. Indigenous Fertilizers	17.00	20.50	30.00	37.71	37.30	35.00	48.00	38.00	35.00	40.00	37.50
3. Imported Fertilizers	1.98	1.14	2.01	7.71	6.59	13.00	9.96	7.62	5.00	11.66	16.50
4. Other Fertilizer Subsidy	0.00	0.00	0.00	0.00	0.00	3.85	3.40	6.32	0.00	0.00	0.00
5. Export Promotion and Market Development.	7.85	9.62	13.86	20.14	27.42	17.58	8.19	6.65	3.00	5.60	3.15
B. Debt relief to farmers	0.00	0.00	0.00	0.00	15.02	14.25	15.00	5.00	3.41	3.41	0.00
C. Other Subsidies	7.68	8.54	9.45	14.42	10.75	10.35	11.28	16.00	8.22	11.12	9.36
5. Railways	1.44	1.74	2.07	2.33	2.83	3.12	3.41	4.05	4.03	4.23	4.11
6. Mill-made cloth	0.36	0.23	0.27	0.10	0.10	0.15	0.15	0.00	0.00	0.00	0.01
7. Handloom Cloth	1.23	1.24	1.46	1.81	1.85	1.87	1.94	1.90	2.05	1.59	1.57
8. Import/Export of Sugar, Edible Oils etc.	0.76	0.05	0.40	0.00	--	0.00	0.00	0.00	0.00	0.00	0.00
9. Interest Subsidies	2.29	3.93	4.06	8.81	3.79	3.16	1.12	1.13	1.12	0.76	0.34
10. Other Subsidies	1.60	1.35	1.19	1.37	2.18	2.05	1.26	2.44	0.92	4.44	3.33
TOTAL - Subsidies	54.51	59.80	77.32	104.74	121.58	122.53	120.43	128.64	94.63	128.10	124.01

-- Not available.

Note: BE = Budget estimates; RE = Revised estimates.

Source: Ministry of Finance, Union Budget Documents.

Table A4.12
 Outstanding Debt of Central Government^a
 (Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 ^b
1. To Reserve Bank of India	152.78	380.47	451.38	516.97	582.00	720.13	884.44	943.48	976.21	989.69
a. Treasury bills	118.44	242.49	185.61	70.91	123.18	235.73	49.80	61.59	167.17	238.38
b. CG Securities	38.58	104.23	82.26	88.43	110.89	141.02	174.50	171.47	86.43	—
c. Special securities	5.85	51.87	198.67	371.77	369.87	368.81	671.01	720.47	720.47	720.47
d. Other liabilities	-2.92	-16.64	-6.95	-6.12	-11.69	-25.43	-10.87	-10.05	2.14	30.84
e. Cash balances and Dpts.	7.17	1.48	8.21	8.02	10.25	—	—	—	—	—
2. To commercial banks	73.64	151.90	202.10	241.46	287.66	333.85	388.13	460.46	531.12	—
a. Treasury bills	5.21	0.46	0.16	0.14	0.03	0.06	0.10	0.11	3.06	—
b. CG Securities	68.43	151.44	201.94	241.32	287.63	333.79	388.03	460.35	528.06	—
To Banking system	226.42	532.37	653.48	758.43	869.66	1053.98	1272.57	1403.94	1507.33	—
3. To Private Sector	258.09	660.94	808.99	964.95	1170.59	1344.52	1557.76	1773.20	2089.21	—
a. Small savings	79.76	214.49	247.25	283.58	338.33	417.91	501.00	557.55	601.28	672.85
b. Others	178.33	446.45	561.74	681.37	832.26	926.61	1056.76	1215.65	1487.93	—
4. External Debt	112.98	181.53	202.99	232.23	257.46	283.43	315.25	369.48	422.69	473.45
5. Total outstanding debt	597.49	1374.84	1665.46	1955.61	2297.71	2681.93	3145.58	3546.62	4019.24	4779.68

-- Not available.

- a. End of year stocks.
- b. Provisional.

Source: RBI, Report on Currency and Finance, various issues; Ministry of Finance, Union Budget & Indian Economic Statistics (Public Finance); Ministry of Finance, Economic Survey, various issues; World Bank Staff estimates.

Table A4.13
 Outstanding Debt of State Government^a
 (Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 ^b
1. To Reserve Bank of India	11.65	6.31	11.47	9.90	14.14	16.70	20.90	17.50	19.26	25.17
a. Gross	12.11	10.65	14.58	10.09	14.29	--	--	--	--	--
b. Cash balances and Dpts.	0.46	4.34	3.11	0.19	0.15	--	--	--	--	--
2. To commercial banks	19.11	44.53	55.25	75.37	89.92	100.83	125.32	182.01	245.28	--
a. SG Securities	16.81	47.74	56.18	69.47	85.02	103.49	122.90	150.12	171.82	--
b. Others	2.30	-3.21	-0.93	5.90	4.90	-2.66	2.42	31.89	73.46	--
To Banking System (1)+(2)	30.76	50.84	66.72	85.27	104.06	117.53	146.22	199.51	264.54	--
3. To Private Sector	45.00	108.06	106.36	119.05	150.40	189.33	219.89	234.90	236.46	--
a. Provident Fund	24.63	58.17	66.99	83.27	103.29	126.35	157.04	186.14	222.36	262.68
b. Others	20.37	49.89	39.37	35.78	47.11	62.98	62.85	48.76	14.10	--
4. To Central Govt. (a-b-c)	164.01	352.23	421.58	483.69	542.06	623.41	719.56	809.63	903.29	1005.23
a. Loans from Center	170.71	369.84	437.02	495.34	562.22	641.39	741.17	834.90	924.12	1028.19
b. States' holding of Trs. Bill	4.35	15.20	12.68	8.88	17.38	15.18	18.80	24.95	20.83	22.96
c. States' holding of CG Sec.	2.35	2.41	2.76	2.77	2.78	2.80	2.81	0.32	0.00	0.00
5. Total outstanding debt	239.77	511.13	594.66	688.01	796.53	930.27	1085.67	1244.04	1404.29	1588.53

-- Not available.

a. End of year stocks.

b. Provisional.

Source: RBI, Report on Currency and Finance, various issues; Ministry of Finance, Union Budget & Indian Economic Statistics (Public Finance); Ministry of Finance, Economic Survey, various issues; World Bank Staff estimates.

Table A4.14
 Outstanding Debt of Central and State Governments^a
 (Rs. billion at current prices)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 ^b
1. To Reserve Bank of India	164.43	386.78	462.85	526.87	596.14	736.83	905.34	960.98	995.47	1014.86
a. Centre	152.78	380.47	451.38	516.97	582.00	720.13	884.44	943.48	976.21	989.69
b. State	11.65	6.31	11.47	9.90	14.14	16.70	20.90	17.50	19.26	25.17
2. To commercial banks	92.75	196.43	257.35	316.83	377.58	434.68	513.45	642.47	776.40	1048.09
a. Centre	73.64	151.90	202.10	241.46	287.66	333.85	388.13	460.46	531.12	--
b. State	19.11	44.53	55.25	75.37	89.92	100.83	125.32	182.01	245.28	--
To Banking System (1)+(2)	257.18	583.21	720.20	843.70	973.72	1171.51	1418.79	1603.45	1771.87	2062.95
3. To Private Sector	296.39	751.39	899.91	1072.35	1300.84	1515.87	1756.04	1982.83	2304.85	2803.62
a. Small savings	79.76	214.49	247.25	283.58	338.33	417.91	501.00	557.55	601.28	672.85
b. Others	216.63	536.90	652.66	788.77	962.51	1097.96	1255.04	1425.28	1703.57	2130.78
4. External Debt	112.98	181.53	202.99	232.23	257.46	283.43	315.25	369.48	422.69	473.45
5. Total outstanding debt	666.55	1516.13	1823.10	2148.28	2532.02	2970.81	3490.08	3955.76	4499.41	5340.02
Loans to States from Centre	170.71	369.84	437.02	495.34	562.22	641.39	741.17	834.90	924.12	1028.19

-- Not available.

a. End of year stocks.

b. Provisional.

Source: RBI, Report on Currency and Finance, various issues; Ministry of Finance, Union Budget & Indian Economic Statistics (Public Finance); Ministry of Finance, Economic Survey, various issues; World Bank Staff estimates.

Table 4.15(a)
Projected and Actual Plan Outlays by Sectors
(Rs billion)

	Sixth Plan (80-81 - 84-85)		Seventh Plan (85-86 - 89-90)		Annual Plans		Eighth Plan		
	Proj.	Actuals	Proj.	Actuals	90-91 Actuals	91-92 Actuals	(92-93 - 96-97) Projected	92-93 Actuals	93-94 Revised
	A Agriculture & Allied Programs	119.15	152.02	222.34	315.10	85.44	90.59	636.43	132.54	160.21
Agriculture	56.95	66.24	105.24	127.93	33.96	38.51	224.67	49.13	58.46
Rural Development	53.64	69.97	89.06	152.46	41.21	41.42	344.25	70.13	86.27
Special Area Program	14.80	15.81	28.04	34.70	10.27	10.67	67.50	13.28	15.48
B Irrigation & Flood Control	121.60	109.31	169.79	165.91	38.37	42.32	325.25	50.06	64.95
Minor Irrigation	18.10	18.48	28.05	31.92	8.35	8.44	59.77	9.69	14.13
Major Irrigation	84.48	74.93	115.56	110.20	25.01	28.24	224.15	33.69	42.85
Flood Control	10.45	8.11	9.47	9.45	2.08	2.64	16.23	2.70	3.21
Command Area Development	8.56	7.79	16.71	14.33	2.93	3.00	25.10	3.97	4.76
C Industry and Minerals	150.18	169.50	221.08	290.99	82.40	65.64	469.22	105.88	125.66
Village & Small Scale	17.81	19.45	27.53	32.49	9.07	9.41	63.34	11.80	15.93
Large & Medium Industries	132.37	150.05	193.55	258.50	73.33	56.23	405.88	94.07	109.73
D Energy	265.35	307.51	551.29	618.20	179.98	197.34	1155.61	270.44	329.15
Power	192.65	182.98	342.74	378.95	113.34	145.18	795.89	137.02	184.55
Petroleum	43.00	84.82	129.35	161.31	41.30	33.40	240.00	106.60	113.87
Coal	28.70	38.08	74.01	71.22	23.92	17.10	105.07	24.21	27.81
E Transport	124.12	142.07	229.71	297.70	86.96	93.14	559.26	133.18	149.09
Railways	51.00	65.87	123.34	165.50	49.16	53.93	272.02	66.00	71.49
Roads & Road Transport	46.35	50.82	71.90	84.59	21.32	24.82	169.52	32.36	40.10
Ports & Shipping ^a	14.86	12.13	23.13	26.07	10.97	8.45	76.14	18.84	19.45
Civil Aviation	8.59	9.57	7.58	18.99	4.92	5.47	40.83	14.71	17.19
F Communication & Broadcasting	31.34	34.69	61.14	98.93	33.54	36.14	289.66	63.88	71.94
G Science & Technology	8.65	10.11	24.63	30.23	7.87	8.62	90.42	13.18	14.35
H Social Services	140.35	159.15	295.78	332.61	87.90	102.99	751.55	142.71	180.49
Education	25.24	29.78	63.83	76.85	20.63	23.75	196.00	32.59	44.00
Health & Family Welfare	28.31	34.12	64.49	68.09	17.46	19.48	140.76	27.09	32.49
Housing & Urban Development	24.88	28.38	42.30	48.36	12.53	13.52	105.50	21.36	26.89
Water Supply & Sanitation	39.22	39.97	65.22	70.92	18.45	22.46	167.11	41.08	35.89
Other Social Services	22.70	26.90	59.94	68.38	18.84	23.77	142.19	20.58	41.22
I Others	8.02	16.50	24.24	57.94	12.72	10.74	63.60	14.43	26.14
J TOTAL	975.0	1100.9	1800.0	2207.6	615.18	647.51	4341.00	926.29	1121.97

Note: The Plan totals are at base year prices for projections and at current prices for actuals.

a. Covers Major and Minor ports, Shipping, Lighthouses and Inland Water.

Source: Planning Commission.

Table 4.15(b)
 Projected and Actual Plan Outlays by Sectors
 (Annual averages at constant 1980-81 prices - Rs. billion)

	Sixth Plan (80-81 - 84-85)		Seventh Plan (85-86 - 89-90)		Annual Plans		Eighth Plan		
	Proj.	Actuals	Proj.	Actuals	90-91	91-92	92-93 - 96-97	92-93	93-94
					Actuals	Actuals	Projected	Actuals	Revised
A Agriculture & Allied Programs	26.8	24.8	30.3	33.7	36.1	32.7	46.0	44.5	50.5
Agriculture	12.8	10.8	14.3	13.7	14.4	13.9	16.2	16.5	18.4
Rural Development	12.1	11.4	12.1	16.3	17.4	15.0	24.9	23.5	27.2
Special Area Program	3.3	2.6	3.8	3.7	4.3	3.9	4.9	4.5	4.9
B Irrigation & Flood Control	27.3	17.8	23.1	17.7	16.2	15.3	23.5	16.8	20.5
Minor Irrigation	4.1	3.0	3.8	3.4	3.5	3.0	4.3	3.3	4.5
Major Irrigation	19.0	12.2	15.8	11.8	10.6	10.2	16.2	11.3	13.5
Flood Control	2.3	1.3	1.3	1.0	0.9	1.0	1.2	0.9	1.0
Command Area Development	1.9	1.3	2.3	1.5	1.2	1.1	1.8	1.3	1.5
C Industry and Minerals	33.7	27.6	30.1	31.1	34.8	23.7	33.9	35.5	39.6
Village & Small Scale	4.0	3.2	3.8	3.5	3.8	3.4	4.6	4.0	5.0
Large & Medium Industries	29.7	24.4	26.4	27.6	31.0	20.3	29.3	31.6	34.6
D Energy	59.6	50.1	75.2	66.0	76.1	71.3	83.5	90.8	103.8
Power	43.3	29.8	46.7	40.5	47.9	52.4	57.5	46.0	58.2
Petroleum	9.7	13.8	17.6	17.2	17.5	12.1	17.3	35.8	35.9
Coal	6.4	6.2	10.1	7.6	10.1	6.2	7.6	8.1	8.8
E Transport	27.9	23.1	31.3	31.8	36.8	33.6	40.4	44.7	47.0
Railways	11.5	10.7	16.8	17.7	20.8	19.5	19.7	22.2	22.5
Roads & Road Transport	10.4	8.3	9.8	9.0	9.0	9.0	12.2	10.9	12.6
Ports & Shipping ^a	3.3	2.0	3.2	2.8	4.6	3.1	5.5	6.3	6.1
Civil Aviation	1.9	1.6	1.0	2.0	2.1	2.0	3.0	4.9	5.4
F Communication & Broadcasting	7.0	5.6	8.3	10.6	14.2	13.1	20.9	21.4	22.7
G Science & Technology	1.9	1.6	3.4	3.2	3.3	3.1	6.5	4.4	4.5
H Social Services	31.5	25.9	40.3	35.5	37.2	37.2	54.3	47.9	56.9
Education	5.7	4.9	8.7	8.2	8.7	8.6	14.2	10.9	13.9
Health & Family Welfare	6.4	5.6	8.8	7.3	7.4	7.0	10.2	9.1	10.2
Housing & Urban Development	5.6	4.6	5.8	5.2	5.3	4.9	7.6	7.2	8.5
Water Supply & Sanitation	8.8	6.5	8.9	7.6	7.8	8.1	12.1	13.8	11.3
Other Social Services	5.1	4.4	8.2	7.3	8.0	8.6	10.3	6.9	13.0
I Others	1.8	2.7	3.3	6.2	5.4	3.9	4.6	4.8	8.2
J TOTAL	219.1	179.3	245.4	235.9	260.0	233.9	313.7	310.9	353.7
Memo Item: Investment Deflator	89.0	122.8	146.7	187.2	236.6	276.8	276.8	297.9	317.2

Note: See note to Table 4.15(a).

a. Covers Major and Minor ports, Shipping, Lighthouses and Inland Water.

Source: Planning Commission.

Table A4.15(c)
Projected and Actual Plan Outlays by Sectors
(percentage distribution and achievement rates)^a

	Sixth Plan (80-81 - 84-85)		Seventh Plan (85-86 - 89-90)		Annual Plans		Eighth Plan		
	% share ^b	Achieve- ment ^c	% share ^b	Achieve- ment ^c	90-91	91-92	(92-93 - 96-97)	92-93	93-94
					Achieve- ment ^c	Achieve- ment ^c	% share ^b	Achieve- ment ^c	Achieve- ment ^c
A Agriculture & Allied Programs	12.2	13.8	12.4	14.3	13.9	14.0	14.7	14.3	14.3
Agriculture	5.8	6.0	5.8	5.8	5.5	5.9	5.2	5.3	5.2
Rural Development	5.5	6.4	4.9	6.9	6.7	6.4	7.9	7.6	7.7
Special Area Program	1.5	1.4	1.6	1.6	1.7	1.6	1.6	1.4	1.4
B Irrigation & Flood Control	12.5	9.9	9.4	7.5	6.2	6.5	7.5	5.4	5.8
Minor Irrigation	1.9	1.7	1.6	1.4	1.4	1.3	1.4	1.0	1.3
Major Irrigation	8.7	6.8	6.4	5.0	4.1	4.4	5.2	3.6	3.8
Flood Control	1.1	0.7	0.5	0.4	0.3	0.4	0.4	0.3	0.3
Command Area Development	0.9	0.7	0.9	0.6	0.5	0.5	0.6	0.4	0.4
C Industry and Minerals	15.4	15.4	12.3	13.2	13.4	10.1	10.8	11.4	11.2
Village & Small Scale	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.3	1.4
Large & Medium Industries	13.6	13.6	10.8	11.7	11.9	8.7	9.3	10.2	9.8
D Energy	27.2	27.9	30.6	28.0	29.3	30.5	26.6	29.2	29.3
Power	19.8	16.6	19.0	17.2	18.4	22.4	18.3	14.8	16.4
Petroleum	4.4	7.7	7.2	7.3	6.7	5.2	5.5	11.5	10.1
Coal	2.9	3.5	4.1	3.2	3.9	2.6	2.4	2.6	2.5
E Transport	12.7	12.9	12.8	13.5	14.1	14.4	12.9	14.4	13.3
Railways	5.2	6.0	6.9	7.5	8.0	8.3	6.3	7.1	6.4
Roads & Road Transport	4.8	4.6	4.0	3.8	3.5	3.8	3.9	3.5	3.6
Ports & Shipping ^d	1.5	1.1	1.3	1.2	1.8	1.3	1.8	2.0	1.7
Civil Aviation	0.9	0.9	0.4	0.9	0.8	0.8	0.9	1.6	1.5
F Communication & Broadcasting	3.2	3.2	3.4	4.5	5.5	5.6	6.7	6.9	6.4
G Science & Technology	0.9	0.9	1.4	1.4	1.3	1.3	2.1	1.4	1.3
H Social Services	14.4	14.5	16.4	15.1	14.3	15.9	17.3	15.4	16.1
Education	2.6	2.7	3.5	3.5	3.4	3.7	4.5	3.5	3.9
Health & Family Welfare	2.9	3.1	3.6	3.1	2.8	3.0	3.2	2.9	2.9
Housing & Urban Development	2.6	2.6	2.4	2.2	2.0	2.1	2.4	2.3	2.4
Water Supply & Sanitation	4.0	3.6	3.6	3.2	3.0	3.5	3.8	4.4	3.2
Other Social Services	2.3	2.4	3.3	3.1	3.1	3.7	3.3	2.2	3.7
I Others	0.8	1.5	1.3	2.6	2.1	1.7	1.5	1.6	2.3
J TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a. Derived from Table 4.15(a).

b. Percentage share in total plan outlay.

c. Actual outlay as a percentage of target outlay for the Plan.

d. Covers Major and Minor ports, Shipping, Lighthouses and Inland Water.

Source: Planning Commission.

Table A.5.1
Money Supply and Sources of Change, 1980-81 - 1993-94
(Rs. billion)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 ^a
BROAD MONEY SUPPLY (M3)	557.74	1193.99	1416.42	1642.79	2002.41	2309.48	2658.28	3170.49	3668.25	4344.10	5264.78
Narrow Money Supply (M1)	234.24	440.99	515.22	585.59	711.01	810.58	928.92	1144.06	1240.66	1507.81	1870.73
Currency with Public	134.26	250.59	283.82	335.59	380.71	463.00	530.48	610.98	682.73	823.01	1008.7
Deposit Money (total)	95.87	187.50	228.30	246.00	323.40	341.60	391.70	524.23	544.80	659.52	862.03
Time Deposits with Banks	323.50	753.00	901.20	1057.20	1291.40	1498.90	1729.36	2026.43	2427.59	2836.29	3394.05
SOURCES OF CHANGE											
Net Bank Domestic Credit	623.59	1411.24	1667.61	1918.57	2300.36	2688.57	3119.62	3462.56	3963.73	4416.92	5074.81
To Government	257.18	583.21	720.20	843.70	973.73	1171.53	1401.93	1582.63	1762.38	2039.18	2195.91
From Reserve Bank of India (RBI)	164.43	386.78	462.85	526.87	596.15	736.83	888.48	940.16	984.49	993.00	987.37
From Other Banks	92.75	196.43	257.35	316.83	377.58	434.70	513.45	642.47	777.89	1046.18	1208.54
To Commercial Sector	366.41	828.03	947.41	1074.87	1326.63	1517.04	1717.69	1879.93	2201.35	2377.74	2878.9
From Reserve Bank of India	17.00	30.52	33.94	37.90	55.24	63.49	63.42	72.60	62.20	64.45	65.93
From Other Banks	349.41	797.51	913.47	1036.97	1271.39	1453.55	1654.27	1807.33	2139.15	2313.29	2812.97
Net Foreign Exchange Assets of Banking Sector	47.30	38.72	48.15	56.72	68.00	66.51	105.81	212.05	250.14	537.27	746.86
Government's Currency Liabilities to the Public	6.19	9.40	11.92	13.80	14.75	15.55	16.21	17.04	18.24	19.90	21.04
Net Non-Monetary Liabilities of Reserve Bank of India	119.34	265.37	311.26	346.30	380.70	461.15	583.36	521.37	563.24	619.01	589.97
of Reserve Bank of India	53.60	107.07	134.44	142.25	169.36	175.36	270.22	274.15	282.46	260.37	266.16
of Other Banks	65.74	158.30	176.82	204.05	211.34	285.79	313.14	247.22	280.78	358.64	323.81
Broad Money Supply (M3)	557.74	1193.99	1416.42	1642.79	2002.41	2309.48	2658.28	3170.49	3668.25	4344.10	5264.78
GDP at market prices	1360.13	2622.43	2929.49	3332.01	3957.82	4568.21	5355.17	6160.61	7028.29	7863.55	--

Note: Upto 1992-93, as of March 31 on the basis of the closure of government accounts; 1994-95 numbers are provisional data from RBI as of March 31.

a. The data for 1994-95 are not strictly comparable with those of the previous years, as M3 data for 1994-95 include scheduled commercial banks' data for 27 fortnights while for the previous years they include 26 fortnights.

Source: Ministry of Finance, *Economic Survey*, various issues; Reserve Bank of India, RBI Bulletin (Weekly Statistical Supplement).

Table A 5.2
Base Money Supply and Sources of Change, 1980-81 - 1993-94
(Rs. billion)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95 ^a
TOTAL BASE MONEY SUPPLY	194.52	381.66	448.08	534.90	629.59	775.91	877.79	995.05	1107.79	1386.72	1689.74
Currency with Public	134.26	250.59	283.82	335.59	380.71	463.00	530.48	610.98	682.73	823.01	1008.7
Other Deposits with RBI	4.11	2.89	3.09	3.97	6.94	5.98	6.74	8.85	13.13	25.25	33.5
Cash with Banks	8.81	14.65	15.31	15.63	19.72	19.86	22.34	26.40	30.53	30.95	35.36
Bank Deposits with RBI	47.34	113.53	145.86	179.71	222.22	287.07	318.23	348.82	381.40	507.51	612.18
SOURCES OF CHANGE											
RBI Claims	194.19	441.92	524.39	609.18	722.18	875.03	1051.97	1063.78	1145.54	1112.97	1188
On Government (net)	164.43	386.78	462.85	526.87	596.15	736.83	888.48	940.16	984.49	993.00	987.37
On Banks	12.76	24.62	27.60	44.41	70.79	74.71	100.07	51.02	98.85	55.52	134.7
On Commercial Sector	17.00	30.52	33.94	37.90	55.24	63.49	63.42	72.60	62.20	64.45	65.93
Net Foreign Exchange Assets of RBI	47.75	37.41	46.21	54.17	62.02	60.69	79.83	188.38	226.47	514.22	746.86
Government's Currency Liabilities to the Public	6.19	9.40	11.92	13.80	14.75	15.55	16.21	17.04	18.24	19.90	21.04
Net Non-Monetary Liabilities of Reserve Bank of India	53.60	107.07	134.44	142.25	169.36	175.36	270.22	274.15	282.46	260.37	266.16
Total Base Money Supply	194.52	381.66	448.08	534.90	629.59	775.91	877.79	995.05	1107.79	1386.72	1689.74
GDP at market prices	1360.13	2622.43	2929.49	3332.01	3957.82	4568.21	5355.17	6160.61	7028.29	7863.55	--

Note: Upto 1992-93, as of March 31 on the basis of the closure of government accounts; 1994-95 numbers are provisional data from RBI as of March 31.

a. The data for 1994-95 are not strictly comparable with those of the previous years, as M3 data for 1994-95 include scheduled commercial banks' data for 27 fortnights while for the previous years they include 26 fortnights

Source: Ministry of Finance, *Economic Survey*, various issues; Reserve Bank of India, RBI Bulletin (Weekly Statistical Supplement).

Table A5.3
Selected Monetary Policy Instruments

Year & Month	Bank Rate	Minimum Cash Reserve ^a Ratio	Statutory Liquidity ^b Ratio
1981 July 31	10	6.5	34.0
August 21	10	7.0	34.0
September 25	10	7.0	34.5
October 30	10	7.0	35.0
November 27	10	7.3	35.0
December 25	10	7.5	35.0
1982 January 29	10	7.8	35.0
April 10	10	7.3	35.0
June 11	10	7.0	35.0
1983 May 28	10	7.5	35.0
July 30	10	8.0	35.0
August 27	10	8.5	35.0
November 12	10	Incremental CRR of 10% over November 11, 1983	35.0
1984 February 4	10	9.0	35.0
July 28	10	9.0	35.5
September 1	10	9.0	36.0
October 30	10	9.0	36.0
1985 June 8	10	9.0	36.5
July 6	10	9.0	37.0
1987 February 28	10	9.5	37.0
April 25	10	9.5	37.5
October 24	10	10.0	37.5
1988 January 2	10	10.0	38.0
July 2	10	10.5	38.0
July 30	10	11.0	38.0
1989 July 1	10	15.0	38.0
1990 September 22	10	15.0	38.5
1991 July 4	11	15.0	38.5
1991 October 9	12	15.0	38.5
1992 April 1	12	15.0	30.0
1993 April 17	12	14.5	30.0
1993 May 15	12	14.0	30.0
1993 September 17	12	14.0	25.0
1994 June 11	12	14.5	25.0
1994 July 9	12	14.8	25.0
1994 August 6	12	15.0	25.0

Note: Dates given are those on which the announced measures take effect.

- a. Minimum cash reserves to be deposited with the RBI as % of net demand and time liabilities (NDTL).
- b. The ratio of liquid assets, exclusive of those under (a), to aggregate demand and time liabilities upto March 28, 1985 and net demand and time liabilities with effect from March 29, 1985.

Sources: Reserve Bank of India, Report of the Committee to Review the Working of the Monetary System, 1985; Reserve Bank of India, Annual Report, various issues.

Table A5.4
Structure of Short-term and Long-term Interest Rates
(percent per annum)

	1980-81	1985-86	1990-91	1991-92	1992-93	1993-94	1994-95
A. SHORT-TERM RATES							
Reserve Bank Rate	9.0	10.0	10.0	12.0	12.0	12.0	12.0
Treasury Bills:							
91-day ^a	4.6	4.6	4.6	4.6	8.8-10.7	7.1-11.1	7.21-11.99
182-day			10.0-10.1	8.8-10.1	7.8-8.4		
364-day					9.9-10.3	10.0-11.4	9.41-12.21
Call Money Rate (Bombay)	7.1	10.0	15.9	19.6	14.4	7.0	
Commercial Bank Rates:							
Maximum Deposit Rate ^b	10.0	11.0	11.0	13.0	11.0	10.0	11.0
Minimum Lending Rate	13.5		16.0	19.0	17.0	15.0	14.0
B. LONG-TERM RATES							
I.D.B.I. Prime Lending Rate	14.0	14.0	14.0-15.0	18.0-20.0	17.0-19.0	14.5-17.5	
Company Deposit Rates: ^c							
Private Sector Companies ^d							
(i) 1 year	9.0-13.5	10.0-15.0	10.5-14.0	10.5-15.0	12.0-15.0	12.0-14.0	
(ii) 2 years	10.0-14.5	12.0-15.0	12.0-14.0	12.0-15.0	13.0-15.0	13.0-14.0	
(iii) 3 years	13.0-15.5	13.0-15.0	13.5-14.0	14.0-15.0	15.0	14.0	
Public Sector Companies							
(i) 1 year	11.0	11.5-12.0	10.5-12.0	10.5-15.0	13.0	12.0-15.0	
(ii) 2 years	12.0	12.0-13.0	11.5-13.0	11.5-15.0	14.0	13.0-15.0	
(iii) 3 years	13.5	13.5-14.5	13.0-14.0	13.0-15.0	15.0	14.0-15.0	
Average Yield - Ordinary Shares	5.9	3.2	2.6	2.1	1.7	2.2	
Redemption Yield - Government of India Securities							
(i) Short-term (1-5 years)	4.7-6.0	5.4-9.8	7.0-21.7	8.4-26.3	9.1-23.8	11.9-12.9	
(ii) Medium-term (5-15 years)	5.8-6.8	6.5-9.5	9.4-12.7	9.5-13.4	9.5-14.8	12.7-13.3	
(iii) Long-term (above 15 years)	6.4-7.5	8.4-11.5	10.9-12.0	9.9-12.4	8.8-12.5	12.9-13.4	

Note: 1994-95 is preliminary.

a. Effective 8 January, 1993, a new auction system for 91-day Treasury Bills was introduced.

b. Effective 22 April, 1992, a single 'maximum deposit rate' has been for deposits of various maturities.

Earlier different rates were prescribed for different deposit maturities.

c. Deposits accepted from the public.

d. Well-established private sector companies.

Source: Reserve Bank of India, *Report on Currency and Finance*, various issues.

Table A5.5
Sectoral Deployment of Gross Bank Credit
(Rs billion - change during year)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	April-July	
											1993-94	1994-95
Gross Bank Credit	35.69	72.57	73.56	76.91	154.68	169.43	153.48	79.86	211.34	96.97	11.07	19.15
Public Food Procurement Credit	-3.41	-1.30	-4.31	-29.14	-14.21	12.37	25.00	1.64	20.73	41.64	28.08	11.02
Gross Non-Food Credit	39.10	73.87	77.87	106.05	168.89	157.06	128.48	78.22	190.61	55.33	-17.01	8.13
Priority Sectors	17.74	31.57	34.84	40.20	51.49	61.64	25.32	25.10	44.07	40.43	0.21	5.60
Agriculture	8.17	13.98	15.12	14.39	19.41	25.76	2.24	14.07	18.06	12.45	1.59	0.16
Small Scale Industries	5.94	12.04	12.92	17.12	23.15	24.08	16.38	9.69	18.76	25.94	0.83	0.94
Other Priority Sectors	3.63	5.55	6.80	8.69	8.93	11.80	6.70	1.34	7.25	2.04	-2.21	4.50
Industry (Medium & Large)	16.91	24.83	29.34	37.97	70.32	60.87	62.46	25.82	115.46	-7.64	-9.69	-3.23
Wholesale Trade (other than food procurement)	0.79	4.17	0.14	5.18	11.69	7.05	4.38	2.44	8.15	3.65	-4.21	-2.30
Other Sectors	3.66	13.30	13.55	22.70	35.39	27.60	36.32	24.86	22.93	18.89	-3.32	8.06
Export Credit (included in Gross Non-Food Credit)	0.09	0.74	7.37	7.71	22.24	21.04	9.41	11.08	50.62	17.38	10.91	15.39
Priority Sector advances as percent of net bank credit ^a	35.00	40.80	42.20	44.10	43.20	42.40	39.20	38.70	35.10	35.30	34.60	35.00

a. In the last month of each period, advances include Participation Certificates.

Source : Ministry of Finance, Economic Survey, various issues.

Table A6.1
Production of Major Crops

	1980-81	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Total Foodgrains	129.6	152.4	145.5	150.4	143.4	140.4	169.9	171.0	176.4	168.4	179.5	182.1
Kharif	77.6	89.2	84.5	85.3	80.2	74.6	95.6	101.0	99.4	91.6	101.5	99.4
Rabi	51.9	63.1	61.0	65.2	63.2	65.8	74.3	70.0	77.0	76.8	78.0	82.7
Total Cereals	119.0	139.5	133.6	137.1	131.7	129.4	156.1	158.2	162.1	156.4	166.6	169
Kharif	73.9	83.9	79.8	80.7	76.0	70.2	90.0	95.5	94.0	87.2	95.8	93.9
Rabi	45.1	55.6	53.8	56.4	55.7	59.2	66.1	62.7	68.1	69.2	70.8	75.1
Rice	53.6	60.1	58.3	63.8	60.6	56.9	70.5	73.6	74.3	74.7	72.9	79
Kharif	50.1	55.0	53.8	59.4	53.6	49.0	63.4	65.9	66.3	66.4	65.3	69.4
Rabi	3.5	5.0	4.6	4.4	7.0	7.8	7.1	7.7	8.0	8.3	7.6	9.6
Wheat	36.3	45.5	44.1	47.0	44.3	46.2	54.1	49.8	55.1	55.7	57.2	59.1
Barley (Jowar)	10.4	11.9	11.4	10.2	9.2	12.2	10.2	12.9	11.7	8.1	12.8	11.5
Kharif	7.5	8.7	7.8	7.3	6.5	8.6	7.1	9.2	8.3	5.7	9.4	7.5
Rabi	2.9	3.3	3.6	2.9	2.7	3.6	3.1	3.7	3.4	2.4	3.4	4
Maize	7.0	7.9	8.4	6.6	7.6	5.7	8.2	9.7	9.0	8.1	10.0	9.5
Bajra	5.3	7.7	6.0	3.7	4.5	3.3	7.8	6.6	6.9	4.7	8.9	5
Total Pulses	10.6	12.9	12.0	13.4	11.7	11.0	13.8	12.8	14.3	12.0	12.8	13.1
Kharif	3.8	5.4	4.8	4.5	4.2	4.4	5.6	5.5	5.4	4.4	5.6	5.5
Rabi	6.9	7.5	7.2	8.8	7.5	6.6	8.2	7.3	8.9	7.6	7.2	7.6
Gram	4.3	4.8	4.6	5.8	4.5	3.6	5.1	4.2	5.4	4.1	4.4	4.9
Tur	2.0	2.6	2.6	2.4	2.3	2.3	2.7	2.7	2.4	2.1	2.3	2.7
Total Oilseeds^a	9.4	12.7	12.9	10.8	11.3	12.6	18.0	16.9	18.6	18.6	20.1	21.5
Kharif	5.0	7.2	7.0	5.9	6.4	6.4	10.5	9.6	9.8	9.3	12.0	12.2
Rabi	4.4	5.5	5.9	4.9	4.9	6.2	7.5	7.3	8.8	9.3	8.1	9.3
Groundnut	5.0	7.1	6.4	5.1	5.9	5.8	9.7	8.1	7.5	7.1	8.6	7.8
Kharif	3.7	5.3	4.7	3.8	4.4	4.2	7.5	6.1	5.1	5.0	6.7	5.6
Rabi	1.3	1.8	1.7	1.4	1.4	1.7	2.2	2.0	2.4	2.1	1.9	2.2
Rapeseed & Mustard	2.3	2.6	3.1	2.7	2.6	3.4	4.4	4.1	5.2	5.9	4.8	5.4
Sugarcane	154.3	174.1	170.3	170.6	186.1	196.7	203.0	225.6	241.0	254.0	228.0	227.1
Cotton	7.0	6.4	8.5	8.7	6.9	6.4	8.7	11.4	9.8	9.7	11.4	10.7
Jute & Mesta	8.2	7.7	7.8	12.6	8.6	6.8	7.9	8.3	9.2	10.3	8.6	8.5
Jute	6.5	6.3	6.5	10.9	7.3	5.8	6.7	7.1	7.9	8.9	7.5	7.4
Mesta	1.6	1.4	1.3	1.8	1.3	1.0	1.2	1.2	1.3	1.4	1.1	1.1
Potato	9.7	12.1	12.6	10.4	12.7	14.1	14.9	14.8	15.2	16.4	15.2	17.6

Notes: Units of measurement of all commodities is million tonnes, except in the case of cotton, jute and mesta where production is in terms of millions of bales.
Figures for 1993-94 are provisional.

a. Includes groundnuts, rapeseeds and mustard, sesame, linseed, castorseed, nigerseed, safflower, sunflower and soybean.

Source: Ministry of Finance, *Economic Survey*, various issues.

Table A6.2
Irrigated Area Under Different Crops
(million hectares)

	1980-81	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Total Foodgrains	37.6	38.4	40.2	40.1	40.6	41.7	40.5	42.9	43.7	44.5	45.0
Total Cereals	35.6	36.6	38.5	38.4	38.5	39.5	38.5	40.8	41.4	42.0	42.5
Rice	16.3	16.0	17.4	17.7	17.7	18.2	17.0	18.7	19.2	19.2	19.6
Jowar	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8
Bajra	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.6
Maize	1.2	1.2	1.0	1.0	1.1	1.3	1.2	1.2	1.2	1.2	1.3
Wheat	15.5	17.0	17.9	17.5	17.5	17.7	17.9	18.6	18.7	19.4	19.4
Barley	0.9	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.5	0.5	0.6
Total Pulses	2.0	1.8	1.7	1.8	2.1	2.2	2.0	2.0	2.2	2.6	2.5
Other Crops											
Oilseeds ^a	2.3	2.6	3.1	3.5	3.4	3.3	4.3	4.4	4.6	5.6	6.5
Cotton	2.1	2.3	2.3	1.9	2.2	2.2	2.3	2.3	2.7	2.5	2.6
Sugarcane	2.3	2.8	2.6	2.6	2.5	2.8	2.9	3.0	3.0	3.3	3.3

a. Oilseeds include groundnuts, rapeseed and mustard, linseed, sesame, and others.

Source: Ministry of Finance, Economic Survey, various issues.

Table A 6.3
Yield Per Hectare of Major Crops
(kgs. per hectare)

	1980-81	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Total Foodgrains	1023	1102	1149	1175	1128	1173	1331	1349	1380	1382	1457	1487
Kharif	933	1060	1041	1042	985	996	1166	1241	1231	1174	1302	1308
Rabi	1195	1343	1341	1410	1382	1468	1628	1544	1635	1751	1725	1781
Total Cereals	1142	1296	1285	1324	1266	1315	1493	1530	1571	1574	1654	1690
Kharif	1015	1148	1129	1140	1074	1082	1270	1366	1357	1305	1440	1456
Rabi	1434	1608	1617	1718	1673	1763	1964	1875	2010	2126	2068	2116
Rice	1336	1457	1417	1552	1471	1465	1689	1745	1740	1751	1744	1879
Kharif	1303	1413	1374	1514	1393	1368	1627	1677	1670	1676	1677	1797
Rabi	2071	2205	2274	2329	2563	2640	2548	2678	2671	2720	2653	2814
Wheat	1630	1844	1870	2046	1916	2002	2244	2121	2281	2394	2327	2373
Barley (Jowar)	660	726	715	633	576	762	697	869	814	655	982	894
Kharif	737	851	820	761	665	892	789	1053	969	757	1230	1084
Rabi	520	522	563	447	437	568	550	604	582	496	632	672
Maize	1159	1352	1456	1146	1282	1029	1395	1632	1518	1376	1676	1583
Bajra	458	652	519	344	401	378	646	610	658	465	836	527
Total Pulses	473	548	526	547	505	515	598	549	578	533	573	584
Kharif	361	483	453	412	392	435	504	480	471	393	495	476
Rabi	571	605	589	658	604	587	686	616	672	672	654	696
Gram	657	663	661	742	649	629	753	652	712	739	684	761
Tur	689	801	819	767	722	685	779	763	673	588	652	754
Total Oilseeds ^a	532	679	684	570	605	629	824	742	771	719	797	801
Kharif	492	655	633	516	554	559	805	691	698	604	804	753
Rabi	588	713	758	651	687	720	851	822	872	886	786	875
Groundnut	735	940	898	719	841	855	1132	930	904	818	1049	926
Kharif	629	835	779	602	733	737	1066	824	751	687	969	799
Rabi	1444	1484	1518	1549	1540	1425	1442	1532	1611	1501	1473	1591
Rapeseed & Mustard	560	674	771	686	700	748	906	831	904	895	776	856
Sugarcane	57844	55974	57673	60000	60000	60000	61000	65000	65000	66000	64000	67000
Cotton	152	141	196	197	169	168	202	252	225	216	257	248
Jute & Mesta	1129	1323	1242	1524	1454	1274	1540	1646	1634	1662	1658	1713
Jute	1245	1417	1411	1710	1647	1496	1748	1879	1833	1837	1857	1907
Mesta	828	869	764	910	865	680	909	956	988	1019	955	1016
Potato	13256	15206	14806	12000	15000	16000	16000	16000	16000	16000	15000	--

-- Not available.

Note: Figures for 1993-94 are provisional.

a. Includes groundnuts, rapeseeds and mustard, sesame, linseed, castorseed, nigerseed, safflower, sunflower and soybean.

Source: Ministry of Finance, Economic Survey, various issues.

Table A 6.4
Net Availability, Procurement and Public Distribution of Foodgrains ^a
(million tonnes)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
Net Production	113.4	131.6	125.5	122.8	148.7	149.7	154.3	147.3	157.5	159.3
Net Imports	0.7	-0.5	-0.2	3.8	1.2	1.3	-0.1	-0.4	2.6	0.5
Change in Government Stocks	-0.2	-1.6	-9.5	-4.6	2.6	6.2	-4.4	-1.5	10.3	4.0
Net Availability	114.3	133.8	134.8	130.8	147.2	144.8	158.6	148.4	149.8	155.8
Procurement	13.0	19.7	15.7	14.1	18.9	24.0	19.6	17.9	28.0	25.9
Public Distribution	13.0	17.3	18.7	18.6	16.4	16.0	20.8	18.8	16.4	14.1

a. Production figures relate to agricultural year. Figures for procurement and public distribution relate to calendar years.

Source: Ministry of Finance, Economic Survey, various issues.

Table A6.5
New Index of Industrial Production
(1980-81=100)

	Weight	Index								1992-93	1993-94
		1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	over 1991-92	over 1992-93
General Index	100.00	155.1	166.4	180.9	196.4	212.6	213.9	218.9	225.6	2.3	3.1
Mining and Quarrying	11.46	177.9	184.6	199.1	211.6	221.2	222.5	223.7	228.3	0.5	2.1
Electricity Generated	11.43	168.1	181.0	198.2	219.7	236.8	257.0	269.9	289.8	5.0	7.4
Manufacturing Index	77.11	149.7	161.5	175.6	190.7	207.8	206.2	210.7	215.7	2.2	2.4
Food products	5.33	133.2	139.0	148.5	150.9	169.8	178.0	175.3	157.7	-1.6	-10.0
Beverages, tobacco, etc.	1.57	98.5	84.9	92.1	103.0	104.8	107.3	113.7	137.8	5.9	21.2
Cotton textiles	12.31	112.5	111.2	107.8	112.3	126.6	139.0	150.1	155.5	8.0	3.6
Jute textiles	2.00	101.1	91.0	101.9	97.4	101.6	90.8	87.0	103.1	-4.2	18.5
Textile products	0.82	87.1	91.7	134.2	151.7	103.2	97.2	75.8	74.2	-22.0	-2.2
Wood & wood products	0.45	246.1	161.7	171.7	176.0	197.2	185.0	190.5	198.7	3.0	4.3
Paper & paper products	3.23	163.2	166.3	171.3	181.5	198.0	203.0	210.9	224.7	3.9	6.5
Leather & leather products	0.49	177.7	185.5	177.4	188.3	194.3	181.3	187.7	199.2	3.5	6.1
Rubber, plastic & petroleum prod.	4.00	149.6	155.1	168.3	173.5	174.0	172.0	174.6	176.6	1.5	1.1
Chemical & chemical products	12.51	175.5	200.9	233.4	247.6	254.1	261.2	276.9	298.1	6.0	7.6
Non-metallic mineral products	3.00	160.3	158.1	184.6	189.9	193.1	205.2	209.0	216.6	1.8	3.6
Basic metal & alloy products	9.80	126.8	135.6	144.9	143.7	158.8	167.8	168.5	177.5	0.4	5.4
Metal products	2.29	124.5	129.6	133.5	142.6	143.1	133.1	124.6	126.5	-6.4	1.5
Machinery & machine tools	6.24	141.8	139.2	161.2	171.9	186.9	183.3	181.1	190.0	-1.2	4.9
Electrical machinery	5.78	254.7	335.2	346.0	459.2	563.6	493.7	483.6	450.9	-2.0	-6.8
Transport equipment	6.39	144.9	151.9	171.3	181.1	192.5	191.1	200.6	212.3	5.0	5.8
Miscellaneous products	0.90	235.4	272.1	306.3	333.2	321.8	269.9	281.3	264.7	4.2	-5.9

Note: Figures for 1993-94 are provisional.

Source: Ministry of Finance, Economic Survey, various issues.

Table A6.6
Production, Imports and Consumption of Fertilizers
(000' nutrient tons)

(April-March)	Nitrogenous ^a			Phosphatic ^b			Potassic		Total		
	Production	Imports	Consumption	Production	Imports	Consumption	Imports	Consumption	Production	Imports	Consumption
1980-81	2163.9	1510.2	3678.1	841.5	452.1	1213.6	796.8	623.9	3005.4	2759.1	5515.6
1981-82	3143.3	1055.1	4068.7	950.0	343.2	1322.9	643.8	676.2	4093.3	2042.1	6067.8
1982-83	3429.7	424.6	4242.5	983.7	63.4	1432.7	643.7	726.3	4413.4	1131.7	6401.5
1983-84	3491.5	656.1	5204.4	1064.1	142.6	1730.3	556.4	775.4	4555.6	1355.1	7710.1
1984-85	3917.3	2008.6	5486.1	1317.9	745.2	1886.4	871.0	838.5	5235.2	3624.8	8211.0
1985-86	4328.0	1680.0	5661.0	1428.0	816.0	2005.0	903.0	808.0	5756.0	3399.0	8474.0
1986-87	5410.0	1103.0	5716.0	1660.0	255.0	2079.0	952.0	850.0	7070.0	2310.0	8645.0
1987-88	5466.0	175.0	5717.0	1665.0	0.0	2187.0	809.0	880.0	7131.0	984.0	8784.0
1988-89	6712.0	219.0	7251.0	2252.0	407.0	2721.0	982.0	1068.0	8964.0	1608.0	11040.0
1989-90	6747.0	523.0	7386.0	1796.0	1311.0	3014.0	1280.0	1168.0	8543.0	3114.0	11568.0
1990-91	6993.0	414.0	7997.0	2052.0	1016.0	3221.0	1328.0	1328.0	9045.0	2758.0	12546.0
1991-92	7301.0	566.0	8046.0	2562.0	967.0	3321.0	1236.0	1361.0	9863.0	2769.0	12728.0
1992-93	7430.0	1160.0	8426.0	2306.0	746.0	2842.0	1082.0	884.0	9736.0	2988.0	12152.0
1993-94	7231.0	1564.0	8986.0	1816.0	722.0	2884.0	880.0	963.0	9047.0	3166.0	12833.0
1994-95 ^c	7820.0	1518.0 ^d	9890.0	2300.0	--	3110.0	--	1060.0 ^d	10120.0	1518.0 ^d	14060.0

-- Not available.

a. Excludes nitrogen meant for non-agricultural purposes.

b. Excludes data in respect of bonemeal and rockphosphate.

c. Anticipated.

d. Incorporates import of Urea in nutrient terms, the only controlled fertiliser imported on Government account.

Source: The Fertilizer Association of India, *Fertilizer Statistics*, various issues; Ministry of Finance, *Economic Survey*, various issues.

Table A6.7
Indian Railways - Freight and Passenger Traffic

Year	Revenue Earning Freight Traffic			Passenger Traffic					
	Originating tonnage (mln.tons)	Net tons-kilometers (million)	Average lead (kilometers)	Non-Suburban			Suburban ^a		
				Passenger originating (million)	Passenger-kilometers (million)	Average lead (kilometers)	Passenger originating (million)	Passenger-kilometers (million)	Average lead (kilometers)
1980-81	195.9	147652	754	1613	167472	103.9	2000	41086	20.5
1981-82	221.2	164253	743	1640	176822	107.8	2064	43965	21.3
1982-83	228.8	167781	733	1626	181142	111.4	2029	45789	22.6
1983-84	230.1	168849	734	1491	180808	121.3	1834	42127	23.0
1984-85	236.4	172632	730	1449	182318	125.8	1884	44264	23.5
1985-86	258.5	196600	760	1549	195175	126.0	1884	45439	24.1
1986-87	277.8	214100	771	1610	208057	129.0	1970	48411	24.6
1987-88	290.2	222528	767	1637	217632	133.0	2171	51859	23.9
1988-89	302.1	222374	736	1495	211819	141.6	2022	52023	25.7
1989-90	310.0	229602	741	1544	226045	76.9	2129	54933	25.8
1990-91	318.4	235785	741	1599	236066	147.6	2281	59724	26.2
1991-92	338.0	250238	740	1637	251174	153.4	2436	63543	26.1
1992-93	350.1	252388	721	1467	239655	163.3	2298	60547	26.4
1993-94	358.7	252411	704	1406	233200	165.9	2318	63147	27.2
1994-95	373.0	259810	697	1451	243798	168.0	2359	63275	26.8
1995-96	398.0	278766	700	1509	253549	168.0	2454	65806	26.8

Note : Figures for 1994-95 and 1995-96 are revised estimates and budget estimates respectively.

a. Passengers booked between stations within the suburban areas of Bombay; From 1988/89 onwards Suburban passenger traffic include Metro Railway, Calcutta.

Source: Ministry of Railways, Railway Budget.

Table A6.8
Petroleum Summary
Commodity Balance of Petroleum and Petroleum Products
(million tonnes)

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 ^a
A. CRUDE PETROLEUM														
1. Refinery Throughput	25.8	30.2	33.2	35.3	35.6	42.9	45.7	47.7	48.8	51.9	51.8	51.4	53.5	54.3
2. Domestic Production	10.5	16.2	21.1	26.0	29.0	30.2	30.5	30.4	32.0	34.1	33.0	30.4	27.0	27.0
(a) On-shore	5.5	8.2	8.2	8.6	8.9	9.4	9.9	10.2	10.9	12.4	11.8	11.4	11.2	11.7
(b) Off-shore	5.0	8.0	12.9	17.4	20.1	20.8	20.6	20.2	21.1	21.7	21.2	19.0	15.8	15.3
3. Imports	16.2	15.3	16.9	16.0	13.7	15.1	15.5	18.0	17.8	19.5	20.7	24.0	29.2	30.8
4. Exports	--	0.8	4.5	5.5	6.5	0.5	--	--	--	--	--	--	--	--
5. Net Imports (3-4)	16.2	14.5	12.4	10.5	7.2	14.6	15.5	18.0	17.8	19.5	20.7	24.0	29.2	30.8
B. PRODUCTS														
1. Domestic Consumption ^b	30.9	32.5	34.7	35.8	38.5	40.8	43.4	46.4	50.1	54.1	55.0	57.0	58.9	60.8
of which:														
(a) Naphtha	2.3	3.0	3.0	2.8	3.1	3.1	3.2	2.9	3.4	3.4	3.4	3.5	3.4	3.2
(b) Kerosene	4.2	4.7	5.2	5.5	6.0	6.2	6.6	7.2	7.7	8.2	8.4	8.4	8.5	8.7
(c) High Speed Diesel	10.3	10.8	12.0	12.6	13.7	14.9	16.0	17.7	18.8	20.7	21.1	22.7	24.3	25.9
(d) Fuel oils	7.5	7.2	7.3	7.6	7.9	7.9	7.9	8.1	8.5	8.8	9.0	9.2	9.3	9.2
2. Domestic Production	24.1	28.2	31.1	32.9	33.2	39.9	42.8	44.7	45.7	48.7	48.6	48.3	50.4	51.1
(a) Naphtha	2.1	3.0	3.0	3.6	3.5	5.0	5.6	5.5	5.4	5.2	4.9	4.5	4.6	4.7
(b) Kerosene	2.4	2.9	3.4	3.5	3.4	4.0	4.9	5.1	5.2	5.7	5.5	5.3	5.2	5.3
(c) High Speed Diesel	7.4	9.0	9.8	10.9	11.1	14.6	15.5	16.3	16.7	17.7	17.2	17.4	18.3	18.8
(d) Fuel oils	6.1	6.9	8.0	8.0	7.9	8.0	8.0	8.5	8.9	9.0	9.4	9.6	10.4	10.3
3. Imports	7.3	4.9	5.0	4.3	6.1	3.9	3.1	3.9	6.5	6.6	8.7	9.4	11.3	12.1
4. Exports ^c	--	0.1	0.8	1.5	0.9	2.0	2.5	3.4	2.3	2.6	2.6	2.9	3.7	4.0
5. Net Imports	7.3	4.8	4.2	2.8	5.2	1.9	0.6	0.5	4.2	4.0	6.1	6.5	7.6	8.1

-- Not available.

a. Provisional.

b. Excludes refinery fuel consumption.

c. Excludes supplies of POL products to Nepal.

Source: Ministry of Finance, *Economic Survey*, various issues.

Table A6.9
Generation and Consumption of Electricity
(in '000 GWH)

	1980-81	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94 *
A. GENERATION OF ELECTRICITY BY SOURCE AND REGION										
1. Thermal ^b										
Northern	13.69	25.73	29.80	37.74	41.24	48.82	52.13	60.44	66.17	71.48
Western	25.37	48.94	54.58	61.80	63.39	73.08	76.95	84.33	88.50	96.27
Southern	9.22	20.45	24.10	28.07	30.53	34.03	35.76	40.39	44.31	51.06
Eastern	12.53	18.37	19.31	20.77	21.40	21.55	20.39	22.40	24.56	28.44
North-Eastern	0.50	0.87	1.06	1.24	1.15	1.22	1.31	1.19	1.23	1.08
All-India	61.30	114.35	128.85	149.61	157.71	178.70	186.55	208.75	224.77	248.33
2. Hydro										
Northern	15.08	19.49	22.02	20.86	23.57	25.01	27.16	27.21	25.45	24.33
Western	7.81	6.18	6.15	5.06	7.54	6.87	8.31	8.16	7.27	8.72
Southern	20.28	21.15	21.08	17.35	21.64	24.54	29.17	29.63	30.70	30.72
Eastern	2.96	3.17	3.67	3.19	3.76	4.11	5.34	5.87	4.52	4.46
North-Eastern	0.41	1.03	0.92	0.97	1.36	1.58	1.66	1.89	1.93	2.20
All-India	46.54	51.02	53.84	47.44	57.87	62.12	71.64	72.76	69.87	70.43
3. Nuclear										
Northern	1.23	1.28	1.32	1.39	1.87	1.73	2.16	1.66	2.77	1.53
Western	1.77	1.96	2.00	1.61	1.90	1.55	1.90	1.71	1.97	2.48
Southern	-	1.74	1.70	2.04	2.05	1.35	2.07	2.16	1.98	1.39
All-India	3.00	4.98	5.02	5.04	5.82	4.63	6.14	5.53	6.72	5.40
4. Utilities- All India (1 + 2 + 3)	110.84	170.35	187.71	202.09	221.40	245.44	264.33	287.03	301.36	324.16
5. Self-Generation in Industry and Railways	8.42	13.04	13.57	16.89	19.91	23.23	25.11	28.60	31.35	32.10
6. Total- All India (4 + 5)	119.26	183.39	201.28	218.98	241.31	268.66	289.44	315.63	332.71	356.26
B. CONSUMPTION OF ELECTRICITY BY SECTORS										
1. Mining & Manufacturing ^c	55.35	78.30	81.98	82.97	92.05	100.40	105.38	110.62	116.17	121.28
2. Transport	2.31	3.08	3.23	3.62	3.77	4.07	4.11	4.52	5.07	5.54
3. Domestic	9.25	17.26	19.32	22.12	24.77	29.58	31.98	35.85	39.72	43.14
4. Agriculture	14.49	23.42	29.44	35.27	38.88	44.06	50.32	58.56	63.33	70.69
5. Others	8.30	12.26	13.66	15.42	17.02	17.01	19.74	21.42	22.38	24.25
6. Total	89.70	134.32	147.64	159.40	176.49	195.12	211.53	230.97	246.67	264.90

a. Data for 1993-94 are provisional.

b. Includes steam, diesel, wind and gas.

c. Includes industrial power from utilities plus net generation in the non-utilities.

Source: Central Electricity Authority, Power Data Bank & Information Directorate.

Table A6.10
New Index Numbers of Wholesale Prices - by Years
(Base 1981-82=100)

	Weights	82-83	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	% change ^a
TOTAL FOOD ARTICLES	17.386	111.1	134.1	147.8	161.1	177.1	179.3	200.6	241.1	271.0	284.4	313.8	10.3
Food Grains	7.917	109.1	124.5	129.4	141.3	161.8	165.4	179.2	216.4	242.4	260.8	293.0	12.4
Other Food	9.469	112.8	142.1	163.2	177.7	189.9	190.9	218.5	261.8	294.9	304.2	331.1	8.9
INDUSTRIAL RAW MAT.	14.909	101.6	115.9	124.4	142.8	140.3	145.3	166.6	192.3	192.2	211.8	247.1	16.7
Non-Food Articles	10.081	100.8	120.4	134.1	163.0	160.2	166.0	194.2	229.2	228.7	249.1	297.0	19.2
Minerals	4.828	103.3	106.5	104.2	100.5	98.6	102.2	109.0	113.5	116.1	133.9	142.9	6.7
FUEL, POWER & LUB.	10.663	106.5	129.8	138.6	143.3	151.2	156.6	175.8	199.0	227.1	262.4	280.0	6.7
MANUF. PRODUCTS	57.042	103.5	124.5	129.2	138.5	151.5	168.6	182.8	203.4	225.6	243.2	268.5	10.4
Food Products	10.143	97.4	117.2	129.1	140.5	147.8	165.4	181.7	206.3	223.8	246.7	269.9	9.4
Beverage & Tobacco	2.149	100.2	123.2	133.0	155.0	180.7	207.7	242.1	265.7	293.7	306.6	341.2	11.3
Textiles	11.545	104.8	119.5	116.0	126.6	139.6	158.2	171.2	188.0	201.3	219.9	255.4	16.1
Chemicals and Chemical Products	7.355	103.5	118.3	124.6	131.9	135.8	140.1	147.9	168.4	192.6	207.8	231.5	11.4
Basic metals and Products	7.632	104.5	139.7	141.3	149.7	176.4	205.6	219.9	234.8	256.6	276.6	298.7	8.0
Machinery and Machine Tools	6.268	102.8	121.4	127.3	132.3	150.8	166.2	180.2	208.3	230.6	237.9	260.7	9.6
Transport Eqpt.	2.705	103.6	123.0	129.6	135.5	148.9	166.2	181.3	202.5	218.1	223.9	238.2	6.4
ALL COMMODITIES	100.0	104.9	125.4	132.7	143.6	154.3	165.7	182.7	207.8	228.7	247.8	274.5	10.8

Note: This WPI series based 1981-82 was introduced as of July 1989. Data for 1994-95 are provisional.

a. Refers to percent change in fiscal year 1994-95 over 1993-94.

Sources: Ministry of Industry, Office of the Economic Adviser, Centre for Monitoring Indian Economy.

Table A6.11
 Contribution of Selected Commodities to
 Increase in WPI in Calendar Year 1994^a

	Weights	1993	1994	1994 over 1993 Percent Change	% Contribution to change in WPI
Agriculture	27.47	265.9	296.9	11.7	34.2
Food	17.39	281.8	304.5	8.1	15.8
Cereals	6.82	245.2	275.6	12.4	8.3
Pulses	1.09	286.3	355.9	24.3	3.1
Others	9.47	307.7	319.4	3.8	4.5
Non-Food	10.08	238.5	283.9	19.0	18.4
Minerals	4.83	128.5	141.1	9.8	2.4
Fuel and Power	10.66	254.3	278.1	9.4	10.2
Coal	1.26	337.8	359.4	6.4	1.1
Mineral oils	6.67	220.7	234.0	6.0	3.6
Electricity	2.74	297.5	348.0	17.0	5.6
Manufactured Products	57.04	238.0	261.1	9.7	52.9
Food products	10.14	240.1	263.7	9.8	9.6
Sugar	4.06	197.5	228.9	15.9	5.1
Edible oils	2.45	253.1	269.0	6.3	1.6
Other food products	3.64	278.9	299.0	7.2	2.9
Textiles	11.55	212.7	246.4	15.8	15.6
Cement	0.92	208.4	225.4	8.2	0.6
Iron and Steel	2.44	247.0	266.1	7.7	1.9
Capital goods	6.27	--	--	--	--
Others	25.73	306.7	331.1	7.9	25.2
ALL COMMODITIES	100.00	242.1	267.0	10.3	100.0
of which					
Agriculture-based	37.61	258.9	288.0	11.2	43.8
Non-Agricultural	62.39	231.9	254.4	9.7	56.2

-- Not available.

a. Weighted share of each commodity in total absolute change in Wholesale Price.

Source : Ministry of Industry, Office of the Economic Adviser.

Table A 6.12
Consumer Price Index Numbers for Industrial Workers, Urban Non-Manual
Employees and Agricultural Laborers

Year (April-March)	Industrial Workers		Urban Non-Manual Employees	Agricultural Laborers ^a
	Food Index (1982=100)	General Index (1982=100)	(1984-85=100)	General Index (1960-61=100)
1980-81	84	81	69	409
1981-82	96	91	78	448
1982-83	102	99	84	481
1983-84	117	111	92	522
1984-85	122	118	100	525
1985-86	128	126	107	555
1986-87	141	137	115	578
1987-88	154	149	126	650
1988-89	169	163	136	724
1989-90	177	173	145	752
1990-91	199	193	161	830
1991-92	230	219	183	1007
1992-93	254	240	202	1073
1993-94	272	258	216	1147
Average of weeks				
1992				
March	241	229	192	1046
June	251	236	197	1068
September	258	243	204	1112
December	256	243	205	1067
1993				
March	252	243	205	1053
June	262	250	210	1057
September	275	259	217	1113
December	281	264	221	1166
1994				
March	281	267	222	1175
June	294	277	230	1189
September	309	288	238	1251
December	--	289	240	1297
1995				
March	--	293	244	1300
Percentage Change in Index over the corresponding month of previous year				
1993				
March	4.6	6.1	6.8	0.7
June	4.4	5.9	6.6	-1.0
September	6.6	6.6	6.4	0.1
December	9.8	8.6	7.8	9.3
1994				
March	11.5	9.9	8.3	11.6
June	12.2	10.8	9.5	12.5
September	12.4	11.2	9.7	12.4
December	--	9.5	8.6	11.2
1995				
March	--	9.7	9.9	10.6

-- Not available.

a. Indices relate to Agricultural Years (July-June).

Source: Ministry of Labor, Labor Bureau, Simla; Central Statistical Organization; Ministry of Finance,
Economic Survey, various issues.

Table A 6.13
Evolution of the Wholesale Price Index, 1991-95
(index and twelve months point-to-point increase)

	Weight	June 1991		June 1992		June 1993		June 1994		Mar. 1995		% Contrib.
		Index	%									
WPI	100.00	100.0	11.2	113.0	13.0	120.9	7.0	135.1	11.8	143.1	10.2	43.1
Primary Articles	32.30	100.0	8.3	112.6	12.6	116.7	3.7	133.8	14.6	141.9	13.7	13.5
Food	17.39	100.0	0.6	119.3	19.3	121.6	2.0	136.7	12.4	139.5	12.7	6.9
Food grains	7.92	100.0	18.6	126.9	26.9	124.9	-1.6	146.1	17.0	157.6	8.2	4.6
Non-Food	10.08	100.0	10.1	103.5	3.5	107.5	3.8	131.2	22.0	149.5	17.2	5.0
Minerals	4.83	100.0	6.4	103.3	3.3	122.2	18.2	126.4	3.5	132.3	6.4	1.6
Fuel, Power, Lubricants	10.66	100.0	9.2	113.0	13.0	133.7	18.3	146.7	9.8	148.5	1.2	5.2
Manufactured Products	57.04	100.0	9.4	113.1	13.1	120.8	6.9	133.7	10.6	142.8	10.1	24.4
Food products	10.14	100.0	12.0	110.6	10.6	121.9	10.2	134.3	10.2	136.4	8.4	3.7
Textiles	11.55	100.0	5.1	109.2	9.2	116.3	6.5	137.2	18.0	152.2	13.7	6.0
Chemicals	7.36	100.0	6.5	116.1	16.1	129.1	11.3	141.1	9.2	153.5	12.0	3.9
Metal and Metal Products	7.63	100.0	8.7	110.8	10.8	116.0	4.7	126.8	9.3	136.8	9.7	2.8
Machinery	6.27	100.0	9.5	114.7	14.7	119.2	3.9	128.0	7.4	140.1	13.1	2.5
<u>Memo Items</u>												
Administered Prices:	15.93	100.0		111.7		131.7		143.9		145.8	2.9	7.3
Petroleum crude & natural gas	4.27	100.0		101.5		123.4		127.1		130.3	5.0	1.3
Petroleum products	6.67	100.0		109.3		129.9		138.5		138.3	0.0	2.6
Coal	1.26	100.0		127.4		146.9		154.1		158.1	5.2	0.7
Electricity	2.74	100.0		113.0		134.3		160.4		163.4	3.0	1.7
Urea	0.99	100.0		130.0		127.9		148.4		155.3	21.4	0.5
Decontrolled Prices:												
Iron and steel	2.44	100.0		113.3		116.6		128.3		134.9	6.9	0.9
Phosphatic fertilizers	0.18	100.0		130.0		307.7		302.7		306.7	0.1	0.4
Super phosphate	0.06	100.0		130.0		295.3		282.2		292.7	0.1	0.1
Ammonium phosphate	0.12	100.0		130.1		315.4		315.4		315.4	0.0	0.3
Lubricating oil	0.45	100.0		118.5		160.3		171.0		168.7	0.2	0.3

Note: The last column indicates each item contribution to the WPI increase, that is the index item percentage change in March 1995 times the weight of the item in the WPI.

Source: Ministry of Finance, Economic Survey, various issues.

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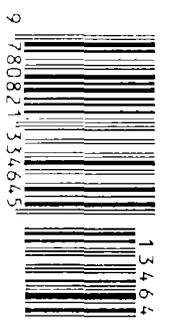
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